355 EXTERIOR STREET SITE 355 EXTERIOR STREET BRONX, NEW YORK

REMEDIAL INVESTIGATION WORK PLAN

SUBMITTED TO:



New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway Albany, New York 12233-7020

PREPARED FOR:

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P.W. GROSSER CONSULTING, INC. PROJECT No. LST1802

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REMEDIAL INVESTIGATION WORK PLAN **355 EXTERIOR STREET SITE**

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ACRONYM	DEFINITION
6:2 FTS	6:2 Fluorotelomer sulfonate
8:2 FTS	8:2 Fluorotelomer sulfonate
μg/m³	Microgram per cubic meter
APR	Air Purifying Respirator
ASP	Analytical Services Protocol
AWQS	Ambient Water Quality Standards
bgs	below ground surface
CAMP	Community Air Monitoring Plan
CFR	Code of Federal Regulations
COPC	Contaminants of Potential Concern
DER	Division of Environmental Remediation
DER-10	Technical Guidance for Site Investigation and Remediation
DUSR	Data Usability Summary Report
EDD	Electronic Data Delivery
EIMS	Environmental Information Management System
ELAP	Environmental Laboratory Accreditation Program
EM	Electromagnetic
ESA	Environmental Site Assessment
FOSA	Perfluroroctanesulfonamide
GPR	Ground Penetrating Radar
GV	Guidance Value
HASP	Health and Safety Plan
HDPE	High-density Polyethylene
HSM	Health and Safety Manager
IDLH	Immediately Dangerous to Life and Health
IDW	Investigative Derived Waste
in. of Hg	inches of mercury
MDL	Method Detection Limit
mg/kg	milligram per kilogram
mL	milliliter
mL/min	milliliter per minute
MS/MSD	Matrix Spike / Matrix Spike Duplicate
N-EtFOSAA	N-ethyl perfluorooctanesulfonamidoacetic acid
NIOSH	National Institute for Occupational Safety and Health
N-MeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid
NTU	Nephelometric Turbidity Units
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
PFAS	Perfluoroakyl and Polyfluoroakyl Substances
PFBA	Perfluorobutanoic acid
PFBS	Perfluorobutanesulfonic acid
PFDA	Perfluorodecanoic acid
PFDoA	Perfluorododecanoic acid
PFDS	Perfluorodecanesulfonic acid
PFHpA	Perfluoroheptanoic acid

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PFHpS	Perfluoroheptanesulfonic acid
PFHxA	Perfluorohexanoic acid
PFHxS	Perfluorohexanesulfonic acid
PFNA	Perfluorononanoic acid
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanessulfonic acid
PFPeA	Perfluoropentanoic acid
PFTA/PFTeDA	Perfluorotetradecanoic acid
PFTriA/PFTrDA	Perfluorotridecanoic acid
PFUA/PFUdA	Perfluoroundecanoic acid
PID	Photo-ionization Detector
PM-10	10 micrometers in size
PPE	Personal Protective Equipment
ppm	parts per million
PVC	Polyvinyl Chloride
PWGC	P.W. Grosser Consulting, Inc.
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance / Quality Control
QEP	Qualified Environmental Professional
REC	Recognized Environmental Condition
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RL	Reporting Limit
RRU	Restricted-Residential Use
SCBA	Self-contained Breathing Aparatus
SCG	Standards, Criteria, and Guidance
SCO	Soil Cleanup Objective
SDG	Sample Delivery Group
sf	square-feet
SOP	Standard Operating Procedure
SVOC	Semi-volatile Organic Compound
TOGS 1.1.1	Division of Water Technical and Operation Guidance Series (1.1.1)
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
UU	Unrestricted Use
VOC	Volatile Organic Compound



CERTIFICATION

I, <u>Derek Ersbak, PG</u>, certify that I am currently a Qualified Environmental Professional (QEP) as defined in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 and that this Remedial Investigation Work Plan (RIWP) was prepared in accordance with applicable statutes and regulations and in substantial conformance with the New York State Department of Environmental Conservation's (NYSDEC's) Division of Environmental Remediation's (DER's) Technical Guidance for Site Investigation and Remediation (DER-10).

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

Signature Date

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.



1.0 INTRODUCTION

P.W. Grosser Consulting, Inc. (PWGC) has prepared the following RIWP to outline procedures and a scope of work intended to delineate impacted areas of concern at the site located at 355 Exterior Street, Bronx, New York. The proposed Remedial Investigation (RI) is intended to obtain additional subsurface quality data, delineate areas of concern within the property boundary and evaluate whether offsite adjacent properties may be impacted.

1



2.0 SITE DESCRIPTION AND HISTORY

2.1 Site Description

The site is located at 355 Exterior Street in the Mott Haven section of the Bronx, New York and is identified as Block 2349 and Lots 0046 and 0047 on the New York City Tax Map. The site is approximately 62,500-square feet (sf) and is bounded by commercial properties to the north and south, Exterior Street to the east, and the East River to the west. The site contains an asphalt paved parking lot and an approximately 31,850-sf warehouse building. The property is currently unoccupied.

A Vicinity Map is included as **Figure 1**. A Site Plan is included as **Figure 2**.

2.2 Site History

Historical usage of the subject property indicates that it was first developed in the early 1900s and was used as a freight train support facility and lumber supply building until circa 1966. The infrastructure supporting the freight train operation was removed from the site at which time the use of the property transitioned to commercial use and parking. Between 1966 to current day, the site appears to have been utilized for mixed commercial use including lumber distribution, a roofing company and Borax Paper Products. To the best of PWGC's knowledge, no remedial activities are known to have previously taken place at the site.

2.3 Regional Geology/Hydrogeology

The geologic setting of New York City is well documented. Manhattan Island and the Bronx are underlain by tightly folded, metamorphic rocks. Erosion of these formations has resulted in the formation of northeast trending hills which are prominent in the northern sections of Manhattan. The bedrock beneath most of Manhattan and the Bronx is the Manhattan schist. The Inwood limestone does underlie two small areas in the northern half of the Manhattan island and a narrow belt of limestone is also present on the southeastern portion of the island near the East River. The Fordham gneiss also outcrops in a few locations on the northern half of the island. In most areas of Manhattan and the Bronx, bedrock is overlain by thin deposits of Pleistocene age glacial outwash deposits (sand and gravel).

2.4 Site Geology/Hydrogeology

Generally, soil consisted of brown sand and gravel with fill material (brick, asphalt, and wood) from grade to approximately ten feet below grade. Below the fill layer was typically grey silty sand or grey clay which extended within groundwater which was typically encountered around eight to ten feet below grade.



2.5 Site Features

The project site elevation is approximately 5 feet above mean sea level and is generally level. The site is improved with an asphalt paved parking lot and a 31,850-sf warehouse building. The property is currently unoccupied.

2.6 Current and Future Site Use

The site is currently unoccupied and improved with an at grade parking lot and 31,850-sf storage building. Development plans for the site consist of the demolition of the existing structure, and construction of a mixed-use building, open landscaped areas, access roads, and sidewalks. The current zoning designation is R7-2 residential. The proposed use is consistent with existing zoning for the property. The goal of the cleanup at the site is to achieve Track 2 status; however, it is understood that the project may achieve Track 4.

2.7 Previous Environmental Reports

2.7.1 Phase I Environmental Site Assessment (December 2018)

PWGC prepared a Phase I Environmental Site Assessment (ESA) in December 2018. The Phase I ESA identified the following Recognized Environmental Conditions (RECs) associated with the subject property:

- The site has been assigned an E-Designation for Air, Hazardous Materials, and Noise by the New York City Department of Planning.
- The site has been historically utilized for commercial and industrial purposes that likely included the storage and use of hazardous substances and/or petroleum products at the site.
- Potential vapor encroachment related to historical use of the site.

2.7.2 Phase II Environmental Site Assessment (May 2019 through July 2019)

Based on the findings of the December 2018 Phase I ESA, PWGC performed a Phase II ESA for the site between May 2019 and July 2019. The Phase II ESA is summarized below; data generated as part of the Phase II ESA will be incorporated into the RI Report (RIR) for the site. The Phase II ESA is included as **Appendix A**.

Site Inspection

An inspection was performed to evaluate the site. The inspection consisted of the interior portions of the building, the roof, and the asphalt parking lot. According to the current building manager, the building is heated via natural gas. No chemical storage or waste generation and storage beyond municipal waste was identified. No potentially polychlorinated biphenyl (PCB) containing equipment was identified. Two



interior drain pits were identified with no determinate discharge point. No determination could be made in the field regarding the nature of these pits or what purpose they may have served. No staining or other evidence of spills was noted in the vicinity of the drain pits.

Geophysical Survey

A geophysical survey to identify potential underground storage tanks (USTs) and/or other subsurface anomalies that may warrant additional investigation was performed. The area surveyed included the parking lot adjacent to the onsite building. Access to the interior of the building was not available at the time of this survey. Most of the parking lot was accessible but several rental trucks were present and were unable to be moved during the survey. The survey did not identify the presence of subsurface anomalies in the areas accessible during the initial investigation. It should be noted that due to reinforced concrete in the parking lot, the effectiveness of the survey was limited, and several proposed boring locations were relocated based on this information. Subsurface anomalies may exist beyond the capability of the equipment utilized due to interference or other factors.

Soil Borings and Sampling

To characterize soil quality, soil borings were installed throughout the subject property in three separate events. PWGC installed SB007 through SB010 including all SB009 step out samples on May 9 and 10, 2019. PWGC returned to the site to collect SB016 and SB017 and additional deeper intervals at SB008 on June 6, 2019. Once PWGC gained access to the interior of the building, borings SB018 through SB023 were collected on July 5, 2019. Boring locations were focused in areas of potential concern as identified by the Phase I ESA and in areas where visual impact was observed during this investigation. A total of 16 soil borings were installed during the investigation.

Generally, soil consisted of brown sand and gravel with fill material (brick, asphalt, and wood) from grade to approximately ten feet below grade. Below the fill layer was typically grey silty sand or grey clay which extended within groundwater which was typically encountered around eight to ten feet below grade. Discolored soil with a slight petroleum odor and low level photo-ionization detector (PID) detections were observed in four of the sixteen soil borings (SB009, SB009_E, SB009_W and SB016). The presence of potential petroleum contamination was observed at the soil/water table interface (approximately eight to ten feet below surface grade) in each of these four soil borings. Potential contamination was not observed in the shallower intervals above the soil/water table interface. SB009 contained the highest PID readings therefore additional "step out" samples were conducted to determine a potential source location and



approximate extent of petroleum impact. Soil borings were installed approximately 25 feet from SB009 to the east (SB009_E), north (SB009_N) and west (SB009_W). Due to the presence of petroleum impact within SB009_W, an additional step out sample approximately 25 feet to the west was installed (SB009_W2). No additional delineation could be completed to the south of SB009 due to the presence of the on-site building and the lack of access to the interior of the building during the initial field work. In addition to original boring location SB009, visual petroleum impact and elevated PID readings were observed within SB009_E and SB009_W. Due to the visual and olfactory presence of petroleum contamination, the NYSDEC was notified and spill # 19-01885 was assigned to the site.

Semi-volatile organic compounds (SVOCs) and/or metals were detected above both Unrestricted Use (UU) Soil Cleanup Objectives (SCOs) and Restricted-Residential Use (RRU) SCOs in the majority of the soil samples analyzed. Impact exceeding RRUSCOs was predominantly limited to samples collected from within the top ten feet of the site. However, there was a significantly elevated concentration of arsenic (22.1 milligrams per kilogram (mg/kg)) and mercury (5.38 mg/kg) in SB007 at a depth of 12 to 14 feet below ground surface (bgs).

Volatile organic compounds (VOCs) were detected above RRUSCOs in one of the six soil samples analyzed. SB009_E (8-10') contained 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene above their respective RRUSCOs. These exceedances within this sample confirm the visual observations which indicated petroleum impact. SB009 (8-10') did not contain VOC exceedances, but there were several VOC compounds detected above their method detection limit (MDL) along with observed visual impact and elevated PID readings (80.1 parts per million (ppm)). The SB009 step out samples to the north and west did not show petroleum impact therefore it is likely that the source originates to the east of SB009. The VOCs detected are commonly found in fuel oils, gasoline, stoddard solvent, etc.

Pesticides and PCBs were not detected above RRUSCOs.

Groundwater Sampling

To characterize groundwater quality, groundwater samples were collected throughout the subject property. Groundwater sampling locations were selected based on field observations. A total of two groundwater samples were collected during the investigation.

VOCs were detected above Ambient Water Quality Standards (AWQS) or Guidance Values (GVs) in one of the two groundwater samples. The VOC impact was noted in MW004, which was installed in SB009 where visual impact was noted. The presence of VOCs in soils collected from SB009_E, the visual identification of



petroleum impact in SB009 and the groundwater sample collected from MW004 is likely related to a historic petroleum release which resulted in the NYSDEC spill number.

SVOCs were detected above AWQS or GVs in both groundwater samples. The SVOCs detected in the groundwater samples were also observed at elevated concentrations in the soil samples with the exception of phenol. Phenol was detected in the groundwater at MW004 but was not detected in site soils. This could be a likely laboratory contaminant based on the presence within the groundwater but not within the soils.

Several metals were detected above AWQS or GVs. In general, metals were reduced in the dissolved (lab filtered) samples. Dissolved metals in excess of AWQS or GVs were limited to magnesium, selenium, and sodium. The magnesium and sodium are high within the groundwater samples due to the known salinity of the adjacent East River which intrudes onto the site.

Pesticides and PCBs were not detected above laboratory MDLs.

Soil Vapor Sampling

To evaluate potential vapor intrusion at the subject property, a soil vapor intrusion investigation was performed.

Several VOCs were detected above laboratory method detection limits. Tetrachloroethene, 2-butanone (methyl ethyl ketone), carbon disulfide, cyclohexane, benzene, propylene, toluene among others were detected above their laboratory MDLs. Several of these compounds were also detected above their MDL within MW004. Petroleum related VOCs may be present in the soil vapor sample due to presence of petroleum along the water table interface.



3.0 STANDARDS, CRITERIA, AND GUIDANCE (SCGS)

Based on previous investigations at the site, the primary chemicals of potential concern (COPC) to be encountered at the site are VOCs, SVOCs, metals and grossly contaminated media.

Applicable regulations at NYSDEC 6 NYCRR Part 375 provide SCOs for UU, or Restricted Use based on the intended usage of the property. Restricted Use SCOs include: Residential, Restricted Residential (single family houses not permitted), Commercial, or Industrial. The goal of the cleanup at the site is to achieve Track 2 status, therefore soil sample results will be compared to the RRUSCOs.

Groundwater sample results will be compared to the NYSDEC Class GA AWQS or GVs as specified in the Technical Operation and Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values.

Soil vapor results will be compared to the Soil Vapor / Indoor Air Matrices provided in the New York State Department of Health (NYSDOH) Guidance document.



4.0 OBJECTIVES, SCOPE AND RATIONALE

The primary objectives of the additional work detailed in this plan will be to collect the information and field data necessary to address data gaps pertaining to onsite issues. The Scope of Work includes the following tasks:

- 1. Geophysical Survey
- 2. Additional characterization of onsite soils
- 3. Additional characterization of onsite groundwater
- 4. Additional characterization of onsite soil vapor
- 5. Confirmation of site-specific groundwater flow direction
- 6. Onsite and offsite qualitative human health exposure evaluation

4.1 Geophysical Survey

The effectiveness of the geophysical survey performed as part of the historical investigation was limited due to the presence of reinforced concrete. In addition, the survey was not performed within the interior of the building.

To determine if subsurface anomalies are present at the site and to determine the discharge location of two interior subsurface pits, a geophysical survey will be performed. Alternative equipment and procedures shall be utilized to account for the presence of reinforced concrete.

4.1.1 Electromagnetic Survey

The electromagnetic (EM) method uses the principle of EM induction to measure the variability of electrical conductivity of subsurface materials and the presence of buried metal objects. Significant contrasts in the electrical properties between non-indigenous materials and surrounding soil enable accurate delineation of buried waste materials, fill, and air spaces. The large EM response to metal makes this technique particularly well suited to identify buried objects such as USTs, metallic wastes, buried drums, pipelines, reinforced building foundations, or other metal components of buried structures. It is, however, equally sensitive to metal objects on the ground surface, and it is important to take careful field notes that indicate the position of surface metal to avoid mis-interpretation.

A Geonics EM-61 high-resolution time domain metal detector, or equivalent, will be used to conduct the first phase of the investigation. The EM-61 is used to detect both ferrous and non-ferrous metals buried in the upper 10 feet of the subsurface. A powerful transmitter generates a pulsed primary magnetic field, which induces eddy currents in nearby metal objects. The decay of these currents is measured by upper



and lower receiver coils mounted in the coil assembly. The responses are recorded and displayed by an integrated data logger as two-channel information. The bottom channel is more sensitive to metallic objects in the shallow (upper few feet) subsurface, and the differential response is more sensitive to metal objects from 3 to 10 feet bgs. The EM-61 can detect a single 55-gallon drum at a depth of more than 10 feet beneath the instrument, yet it is relatively insensitive to interference from nearby surface metal such as fencing, buildings, and automobiles. The instrument is pulled along the ground surface by a single operator, and measurements are collected at desired intervals along the ground surface. The terrain at the site may limit the areas where the EM-61 survey can be completed.

A survey of the area will also be performed using a hand-held split-box metal detector (Fisher Model TW-6). The TW-6 is a split-box electromagnetic metal detector that is very sensitive to near surface ferrous metal objects and is very useful in detecting the surface expression of subsurface ferrous objects. This instrument is commonly used to identify buried storage tanks and other metallic objects.

Anomalies detected during the EM surveys will be marked on the ground and further investigated using ground-penetrating radar (GPR).

4.1.2 Ground Penetrating Radar Survey

The GPR survey will be performed in areas of anomalies detected by the EM survey. The GPR method is based upon the transmission of repetitive, radio-frequency EM pulses into the subsurface. When the transmitted energy of down-going wave contacts an interface of dissimilar electrical character, part of the energy is returned to the surface in the form of a reflected signal. This reflected signal is detected by a receiving transducer and is displayed on the screen of the GPR unit as well as being recorded on the internal hard-drive.

The received GPR response remains constant as long as the electrical contrast between media is present and constant. Lateral or vertical changes in the electrical properties of the subsurface result in equivalent changes in the GPR responses. The system records a continuous image of the subsurface by plotting two-way travel time of the reflected EM pulse versus distance traveled along the ground surface. Two-way travel time values are then converted to depth using known soil velocity functions. Each radar profile will be examined for characteristic GPR signatures that may indicate the presence of buried targets.

Following the geophysical survey, exploratory test pits may be conducted in the vicinity of anomalies in order to determine their origin.



4.1.3 Exploratory Test Pits

Exploratory test pits may be performed in areas of anomalies identified during the geophysical survey. Test pits will be excavated utilizing a mini-excavator or equivalent. During excavation, soil types, changes in lithology, and wastes (if any) encountered in the test pit will be documented.

If subsurface anomalies such as USTs, buried drums, etc. are identified during performance of test pit activities, their location will be recorded with a gps and they will be addressed later as part of the remedial activities to be performed at the site.

4.2 Additional Characterization of Onsite Soils

Soil sampling will be performed in accordance with DER-10.

To further characterize subsurface conditions, soil borings will be installed throughout the property. A minimum of eight soil borings will be installed to delineate the extent of grossly contaminated media and a minimum of six soil borings will be installed to supplement the overall subsurface conditions. Proposed soil boring locations are shown on **Figure 3**.

Soil borings will be installed utilizing a Geoprobe® direct-push drill rig outfitted with a macro-core sampler and dedicated acetate liners. Soils will be collected continuously from ground surface to 15 feet below grade. Soils will be field screened for the presence of volatile organic vapors using a PID.

4.2.1 Grossly Contaminated Media Delineation

During the Phase II ESA, grossly contaminated media consisting of discolored soils with a slight petroleum odor were observed at the soil/water table interface in several soil borings (see **Figure 3**). Grossly contaminated media was not observed in the unsaturated soils. A minimum of eight soil borings will be installed around the area where grossly contaminated media was observed to delineate the extent and attempt to locate a source. Additional soil borings may be installed based upon field conditions.

A soil sample will be collected from each soil boring at the interval exhibiting the greatest signs of contamination. If contamination is not observed, the interval directly above the soil/water table interface will be collected. Soil samples will be analyzed for:

- VOCs by United States Environmental Protection Agency (USEPA) Method 8260 (Part 375 List)
- SVOCs by USEPA Method 8270 (Part 375 List)



4.2.2 Supplemental Site Characterization

To supplement the existing subsurface soil quality data, a minimum of six additional soil boring will be installed throughout the site. The soil borings will be placed in areas not previously characterized to obtain additional site data. Additional soil borings may be installed based upon field conditions.

A minimum of two soil samples will be collected from each soil boring. A soil sample will be collected from a two-foot interval within the historic fill material and a two-foot interval will be collected from immediately beneath the historic fill material. The two-foot interval within the historic fill material will be biased towards the interval that exhibits the highest concentration of urban fill material. In the event, field screening identifies the potential presence of petroleum impact, an additional sample shall be collected from the two-foot interval exhibiting the highest degree of potential petroleum impact. Additional soil intervals may be collected based upon field conditions. The soil samples will be analyzed for:

- VOCs by USEPA Method 8260 (Part 375 List)
- SVOCs by USEPA Method 8270 (Part 375 List)
- Pesticides/PCBs by USEPA Method 8081/8082 (Part 375 List)
- Trivalent & Hexavalent Chromium by USEPA Method 7196
- Total Cyanide by USEPA Method 9012
- Metals by USEPA Method 6010/7471 (Part 375 List)
- Silvex by USEPA Method 8151

Soil samples collected for VOCs will be discrete samples (non-composite and non-homogenous) collected in tera-core sampling devices to minimize VOC loss.

4.3 Characterization of Onsite Groundwater

Groundwater sampling will be performed in accordance with DER-10.

To characterize groundwater quality beneath the site a minimum of four permanent monitoring wells will be installed. Proposed monitoring well locations are illustrated in **Figure 4**.

4.3.1 Monitoring Well Construction

Monitoring wells will be installed using a drill rig outfitted for hollow stem augers. Monitoring wells will be constructed of two-inch diameter, schedule 40 polyvinyl chloride (PVC) casing and screen with 0.010-inch slot. The wells will be constructed with a minimum 10-foot screen section and riser to grade unless precluded by hydrogeologic conditions. The well annulus will be filled with #2 morie sand (or equivalent),



to two feet above the well screen. The screen will be set with a minimum of seven (7) feet into and three (3) feet above the water table at the time of installation. A two-foot fine sand layer will be installed above the screen followed by a two-foot bentonite seal. Above the bentonite layer, the annulus around the well will be filled with a cement/bentonite grout. A concrete surface pad (2 feet by 2 feet by 6-inch) will be installed. The wells will be finished with flush mount curb boxes. Monitoring well construction logs will be prepared for each monitoring well. These shallow groundwater monitoring wells are often referred to as water table wells.

4.3.2 Monitoring Well Development

Following installation, monitoring wells will be developed by over-pumping to restore the hydraulic properties of the aquifer. Well development will continue until the turbidity of the groundwater is less than or equal to 50 Nephelometric Turbidity Units (NTUs), or when pH, temperature, and conductivity measurements stabilize. Stabilization is considered achieved when three consecutive readings of these field parameters are within five percent of each other over a period of 15 minutes. Monitoring well development water will be containerized for offsite disposal. New monitoring wells will be surveyed relative to an arbitrary onsite datum.

4.3.3 Monitoring Well Sampling

Groundwater samples will be collected in compliance with the USEPA Low Stress (Low Flow) Purging and Sampling Procedure for The Collection of Groundwater Samples From Monitoring Wells (September 2017). A copy of the procedure is included as **Appendix B**.

Groundwater samples will be analyzed for:

- VOCs by USEPA Method 8260 (Full List)
- SVOCs by USEPA Method 8270 (Full List)
- Pesticides/PCBs by USEPA Method 8081/8082
- Metals by USEPA Method 6010/7471 (filtered and unfiltered) (Target Analyte List)

4.4 Determination of Site-Specific Groundwater Flow Direction

All monitoring wells top of casings and top of manways will be surveyed to a relative datum for the purposes of determining site-specific groundwater flow direction. This information will be utilized on groundwater contour maps generated for the Remedial Investigation Report.



4.5 Soil Vapor Characterization

To determine whether soil vapor intrusion may be a potential concern for the proposed redevelopment of the property, a total of three soil vapor sampling points will be installed. Proposed soil vapor sampling points are illustrated in **Figure 5**.

Soil vapor sampling point installation and sample collection will be performed in accordance with the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006), and USEPA Standard Operating Procedure (SOP) 2042, *Soil Gas Sampling*.

Sampling points will be installed using a Geoprobe® direct-push drill rig or manually driven rods to a depth comparable to the depth of the future development's foundation footings or at least one foot above the water table. Preliminary designs indicate development footings will likely extend to the water table interface, so the sample interval shall be set to one foot above the water table. Sampling points will be constructed of a dedicated stainless-steel screen fitted with inert tubing (e.g. polyethylene or Teflon®) to grade. Porous, inert backfill material (e.g., glass beads, washed #1 crushed stone, etc...) will be added to create a sampling zone 1 to 2 feet in length. The sampling point will be sealed above the sampling zone with bentonite slurry for a minimum distance of 3 feet to prevent outdoor air infiltration and the remainder of the borehole will be backfilled with clean material.

Prior to sampling approximately two to three probe volumes will be purged at a flow rate less than 0.2 liters per minute. VOC concentrations will be recorded during purging utilizing a PID. As part of the vapor intrusion evaluation, a tracer gas will be used in accordance with NYSDOH protocols to serve as a quality assurance/quality control (QA/QC) device to verify the integrity of the soil vapor probe seal. Helium will be used as the tracer gas and a box will serve to keep it in contact with the probe during testing. A portable monitoring device will be used to analyze a sample of soil vapor for the tracer prior to sampling. If the tracer sample results show a significant presence of the tracer, the probe seals will be adjusted to prevent infiltration. At the conclusion of the sampling round, tracer monitoring will be performed a second time to confirm the integrity of the probe seals.

Soil vapor samples will be collected using one-liter SUMMA® canisters fitted with a pre-set flow regulator (approximately 8.3 milliliter per minute (mL/min)). The laboratory will provide certified-clean canisters with an initial vacuum of approximately 26 inches of mercury (in. of Hg) for sample collection and flow regulators pre-set to provide uniform sample collection over an approximate 2-hour sampling period. Sample collection will be ceased (i.e., the valve on the canister closed) when approximately 2 in. of Hg



vacuum remains in the canister, leaving a vacuum in the canister as a means for the laboratory to verify the canister did not leak while in transit. Soil vapor samples shall be analyzed for VOCs by USEPA Method TO-15 (Full List).

4.6 Onsite and Offsite Qualitative Human Health Exposure Evaluation

A Qualitative Human Health Exposure Assessment will be completed for the site, characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport. The Qualitative Human Health Exposure Assessment will follow DER-10, appendix 3B and Section 3.3 (b) 8.

4.7 Emerging Contaminant Sampling

In accordance with NYSDEC requirements, a portion of the soil samples and each groundwater sample collected during this RI will be analyzed for 1,4-dioxane and perfluoroakyl and polyfluoroakyl substances (PFAS). The compounds are collectively referred to as "emerging contaminants". Half of the soil samples collected from within the historic fill and one soil sample collected from the native soil and each groundwater sampling location will be analyzed for emerging contaminants.

Based on the historical usage of the site (see Section 2.2), there is no reason to believe that 1,4-dioxane or PFAS are or were stored/used at the site in significant quantities.

During groundwater sampling described in Section 4.2, samples for emerging contaminants will be collected in accordance with the following NYSDEC guidance documents:

- Groundwater Sampling for Emerging Contaminants (July 2018)
- Collection of Groundwater Samples for Per- and Polyfluoroalkyl Substances (PFAS) from Monitoring Wells Sample Protocol (August 9, 2018)

Soil and groundwater samples will be analyzed for PFAS by USEPA Method 537 (modified) with a target analyte list as specified in the NYSDEC guidance documents specified above, and for 1,4-dioxane by USEPA Method 8270 (SIM Mode). In accordance with NYSDEC guidance, PFAS analysis will include the following compounds:

Compound Name	Acronym	CAS Number
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluoroheptanesulfonic acid	PFHpS	375-92-8
Perfluorooctanessulfonic acid	PFOS	1763-23-1
Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluorobutanoic acid	PFBA	375-22-4



Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorononanoic acid	PFNA	375-95-1
Perfluorodecanoic acid	PFDA	335-76-2
Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluorotridecanoic acid	PFTriA/PFTrDA	72629-94-8
Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7
6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluroroctanesulfonamide	FOSA	754-91-6
N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6

QA/QC procedures for emerging contaminant sampling are included in Section 5.0.



5.0 QUALITY ASSURANCE PROJECT PLAN

This Quality Assurance Project Plan (QAPP) presents the objectives, functional activities, methods, and QA/QC requirements associated with sample collection and laboratory analysis for characterization activities. The QAPP follows requirements detailed in DER-10, Section 2.

5.1 Project Organization

The investigative efforts defined in this RIWP will be implemented by PWGC on behalf of 355 Exterior Street Associates LLC. The following identifies the responsibilities of various organizations supporting the RI:

- The NYSDEC Project Manager (To Be Assigned) will be responsible for reviewing and approving this work plan, coordinating approval of requested modifications, and providing guidance on regulatory requirements.
- The PWGC Program Manager (James Rhodes and/or Paul Boyce) will provide technical expertise for review of the project plans, reports and ongoing field activities.
- The PWGC QA Manager (Andrew Lockwood) will confirm the quality of work associated with the project is in accordance with all project plans.
- PWGC Project Manager (Derek Ersbak) will be responsible for the day-to-day project management, task leadership, and project engineering support and for the planning and implementation of RI activities. The Project Manager is responsible for ensuring that the requirements of this RI work plan are implemented. The project manager will also act as the Site Health and Safety Manager (HSM).
- PWGC Field Team Leader (Kaitlyn Crosby or designee) will be responsible for sample collection, oversight of subcontractor personnel, and coordination of daily field activities. The Field Team Leader will act as the Site Health and Safety Officer ensuring implementation of the Site Health and Safety Plan.
- A NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Alpha Analytical Laboratories of Westborough, Massachusetts ELAP ID 11148 and 11627) will be contracted to perform required analyses and reporting, including Analytical Services Protocol (ASP) Category B Deliverables, which will allow for data validation.
- An independent third-party data validator (Laboratory Data Consultants of Carlsbad, California) will be contracted to perform data validation in accordance with Section 5.7.
- Subcontractors will perform surveying, drilling, and/or sampling at the direction of the Field Team Leader in accordance with this work plan.



Qualifications for the project team are included in Appendix C.

5.2 Laboratory Analysis

Requirements for sample analysis are described below. All samples will be submitted to a NYSDOH ELAP certified laboratory (Alpha Analytical) for analysis. Analytical methods, preservation, container requirements, and holding times are summarized below:

ANALYTICAL METHODS (SOIL)

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Estimated Number of Samples to be Collected
TAL Metals	Soil	USEPA 6010D	1 x 4oz, glass	Cool ≤ 4 °C	180 days	180 days	12
Mercury	Soil	USEPA 7471B	1 x 4oz, glass	Cool ≤ 4 °C	28 days	28 days	12
TCL VOCs	Soil	USEPA 8260C	3 x 40 ml VOA, glass vial	1 x Methanol 2 x DI H ₂ O Cool <u><</u> 4 °C	48 hours	14 Days	20
TCL SVOCs	Soil	USEPA 8270D	1 x 4 oz, glass	Cool <u><</u> 4 °C	14 days	40 days	20
PCBs	Soil	USEPA 8082A	1 x 4 oz, glass	Cool ≤ 4 °C	14 days	40 Days	12
Cyanide	Soil	USEPA 9010C/9012B	1 x 4oz, glass	Cool ≤ 4 °C	14 days	14 days	12
Cr+6	Soil	USEPA 7196A	1 x 4oz, glass	Cool ≤ 4 °C	30 days	30 days	12
Pesticides	Soil	USEPA 8081B	1 x 4 oz, glass	Cool ≤ 4 °C	14 days	40 days	12
PFAS	Soil	USEPA 537 (modified)	1 x 8 oz, glass	Cool ≤ 4 °C	28 days	28 days	4
1,4-dioxane*	Soil	USEPA 8270 (SIM)	1 x 4oz, glass	Cool ≤ 4 °C	14 days	40 days	4



ANALYTICAL METHODS (SOIL VAPOR)

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Estimated Number of Samples to be Collected
VOCs	Soil Vapor	USEPA TO-15	2.7L/6L SUMMA Canister	None	None	30	3

ANALYTICAL METHODS (GROUNDWATER)

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Estimated Number of Samples to be Collected
Metals	Water	USEPA 6020B	1 x 250 ml plastic	HNO3 Cool ≤ 4 °C	180 days	180 days	4
Mercury	Water	USEPA 7470A	1 x 250 ml plastic	HNO3 Cool ≤ 4 °C	28 days	28 days	4
VOCs	Water	USEPA 8260C	3 x 40 ml VOA Vials	HCl Cool <u><</u> 4 ∘C	None	14 Days	4
SVOCs	Water	USEPA 8270D	2 x 250 ml, amber glass	Cool ≤ 4 °C	7 days	40 days	4
PCBs	Water	USEPA 8082A	2 x 120 ml, amber glass	Cool ≤ 4 °C	7 days	40 Days	4
Pesticides	Water	USEPA 8081B	2 x 120 ml, amber glass	Cool ≤ 4 °C	7 days	40 days	4
PFAS	Water	USEPA 537 (modified)	4 x 250 ml HDPE, unlined cap	Trizma Cool < 4 °C	14 days	28 days	4
1,4-Dioxane*	Water	USEPA 8270D SIM Mode	2 x 250 ml, Glass	Cool ≤ 4 °C	7 days	40 days	4

Laboratory MDLs and Reporting Limits (RLs) for PFAS analysis are detailed in the tables below:

PFAS MDLs & RLs (SOIL)

Analyte	CAS Number	RL (ng/g)	MDL (ng/g)
Perfluorobutanoic Acid (PFBA)	375-22-4	1	0.0213
Perfluoropentanoic Acid (PFPeA)	2706-90-3	1	0.01035
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	1	0.0635
Perfluorohexanoic Acid (PFHxA)	307-24-4	1	0.064
Perfluoroheptanoic Acid (PFHpA)	375-85-9	1	0.064
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	1	0.057

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Analyte	CAS Number	RL (ng/g)	MDL (ng/g)
Perfluorooctanoic Acid (PFOA)	335-67-1	1	0.04105
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2	1	0.198
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	1	0.136
Perfluorononanoic Acid (PFNA)	375-95-1	1	0.083
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	1	0.1205
Perfluorodecanoic Acid (PFDA)	335-76-2	1	0.072
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4	1	0.275
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	1	0.103
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	1	0.056
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	1	0.097
Perfluorooctanesulfonamide (FOSA)	754-91-6	1	0.1025
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	1	0.09
Perfluorododecanoic Acid (PFDoA)	307-55-1	1	0.086
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	1	0.062
Perfluorotetradecanoic Acid (PFTA)	376-06-7	1	0.07
PFOA/PFOS, Total		1	0.04105

PFAS MDLs & RLs (GROUNDWATER)

Analyte	CAS Number	RL (ng/L)	MDL (ng/L)	
Perfluorobutanoic Acid (PFBA)	375-22-4	2	0.3732	
Perfluoropentanoic Acid (PFPeA)	2706-90-3	2	0.464	
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	2	0.38	
Perfluorohexanoic Acid (PFHxA)	307-24-4	2	0.492	
Perfluoroheptanoic Acid (PFHpA)	375-85-9	2	0.372	
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	2	0.436	
Perfluorooctanoic Acid (PFOA)	335-67-1	2	0.46	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2	2	0.194	
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	2	0.52	
Perfluorononanoic Acid (PFNA)	375-95-1	2	0.436	
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	2	0.56	
Perfluorodecanoic Acid (PFDA)	335-76-2	2	0.62	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4	2	0.2908	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	2	0.2504	
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	2	0.424	

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Analyte	CAS Number	RL (ng/L)	MDL (ng/L)
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	2	0.386
Perfluorooctanesulfonamide (FOSA)	754-91-6	2	0.556
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	2	0.3728
Perfluorododecanoic Acid (PFDoA)	307-55-1	2	0.592
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	2	0.314
Perfluorotetradecanoic Acid (PFTA)	376-06-7	2	0.988
PFOA/PFOS, Total		2	0.46

The laboratory standard operating procedures for PFAS analysis are included in **Appendix D**.

5.2.1 Soil Samples

Soil samples will be collected as described in Section 4.1. Analysis will conform to NYSDEC ASP Category B data deliverables in accordance with NYSDEC DER-10, Appendix 2B, 1.0 (b), including calibration standards, surrogate recoveries, and chromatograms.

5.2.2 Groundwater Samples

Groundwater samples will be collected as described in Section 4.2. Analysis will conform to NYSDEC ASP Category B data deliverables in accordance with NYSDEC DER-10, Appendix 2B, 1.0 (b), including calibration standards, surrogate recoveries, and chromatograms.

5.2.3 Soil Vapor Samples

Soil vapor samples will be collected as described in Section 4.4. Analysis will conform to NYSDEC ASP Category B data deliverables in accordance with NYSDEC DER-10, Appendix 2B, 1.0 (b), including calibration standards, surrogate recoveries, and chromatograms.

5.3 Field/Laboratory Data Control Requirements

QC procedures will be followed in the field and at the laboratory to facilitate that reliable data are obtained. When performing field sampling, care shall be taken to prevent the cross-contamination of sampling equipment, sample bottles, and other equipment that could compromise sample integrity. QC samples will include the following:

- Blind Duplicates one per 20 environmental samples for each matrix sampled.
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) one per 20 environmental samples for each matrix sampled.
- Equipment Blank one per day for each matrix sampled.



- Field Blank one per day when PFAS samples are collected.
- Trip Blank one per day.

ESTIMATED QA/QC SAMPLE FREQUENCY

QA/QC Sample Type	Est. Total Soil Samples	Est. Days of Soil Sampling	Est. Total Soil QA/QC Samples	Est. Total Groundwater Samples	Est. Days of Groundwater Sampling	Est. Total Groundwater QA/QC Samples
Blind Duplicate	20	2	1	4	1	1
MS/MSD	20	2	1	4	1	1
Equipment Blank	NA	2	2	4	1	1
Field Blank	4	1	1	4	1	1
Trip Blank	20	2	2	4	1	1

QA/QC Sample analysis will conform to NYSDEC ASP Category B data deliverables in accordance with NYSDEC DER-10, Appendix 2B, 1.0 (b), including calibration standards, surrogate recoveries, and chromatograms.

5.4 Special Sampling Considerations for PFAS Sampling

There are several potential sources of PFAS that could contribute to the cross-contamination of environmental samples collected during the RI. Weatherproof clothing, pens, logbooks, cosmetics, personal hygiene products, insect repellents, and sampling equipment could contain PFAS that could lead to false positive sampling results.

To ensure that the analytical results obtained during the RI are representative of the actual site conditions several measures should be taken:

- Collection of appropriate field QA/QC samples (blanks, duplicates, equipment rinseate samples, etc.) as detailed in Section 5.3.
- Analysis by the analytical laboratory using established laboratory QA/QC procedures and methods as detailed in Section 5.3.
- During decon, non-dedicated equipment to be used for PFAS sampling will be rinsed with PFAS free water supplied by the laboratory. Equipment will be allowed to fully air dry before use.
- New high-density polyethylene (HDPE) tubing shall be used at each sample location.
- Groundwater samples will be collected in laboratory supplied HDPE containers.
- New nitrile gloves shall be worn between each sample interval.



- Only clean cotton or synthetic clothes shall be worn preferably washed more than six times, and without the use of fabric softeners. No waterproof or insecticide treated clothing, boots or rain jackets made or treated with Teflon products shall be used at the collection site. This includes all Gore-Tex® and Tyvek® products.
- Do not apply moisturizers or hand creams to hands or face on the day of sampling. No sunblock or insect repellants. Do not bring packaged food to the work site or use aluminum foil.
- Field notes shall be taken using a computer tablet or by using ink pens on non-water proof plain paper attached to a metal clipboard. Do not use Sharpies or markers. Transcribe field notes to Chain-of-Custody forms and official field books when back in the office after the collection process.
- For groundwater samples use only laboratory supplied 250 ml polypropylene sample bottles. Sample bottles should be pre-preserved by the laboratory, if dictated by the analysis method.
- Print labels before going into the field and apply to the sample containers.
- Use only laboratory supplied PFAS-free water for trip, field and equipment blanks.
- Place each sample container in a separate polypropylene zip-lock bag.
- For the shipping coolers, use only regular crushed ice packaged in polypropylene zip-lock plastic bags.
- Use only laboratory supplied shipping coolers that were used to ship sample containers for this project. Tape the cooler shut before shipping samples to the laboratory.

5.5 **Sample Identification**

Each sample will be identified with a set of information relating individual sample characteristics. Required information consists of Sample Designation, Depth, Date, Time, and Matrix. Examples of sample IDs are shown below.

- SB001(0-2') (soil sample, boring 001 from 0 to 2 feet)
- MW004 (groundwater sample, permanent monitoring well 004)
- SV001 (temporary soil vapor point 001)

Sample frequency, locations, depths, and nomenclature may change subject to field decisions and professional judgment.

Chain-of-Custody, Sample Packaging and Shipment

A chain-of-custody/request for analysis form will be completed and submitted to the laboratory with samples to be analyzed. A copy of the chain-of-custody will be retained by the Project Manager. The chain-



of-custody will include the project name, sampler's signature, sample IDs, date and time of sample collection, and analysis requested.

Samples will be packaged and shipped in a manner that maintains sample preservation requirements during transport (i.e., ice to keep samples cool until receipt at the laboratory), ensures that sample holding times can be achieved by the laboratory, and prevents samples from being tampered with.

If a commercial carrier ships samples, a bill of lading (waybill) will be used as documentation of sample custody. Receipts for bills of lading and other documentation of shipment shall be maintained as part of the permanent custody documentation. Commercial carriers are not required to sign the chain-of-custody as long as it is enclosed in the shipping container and evidence tape (custody seal) remains in place on the shipping container.

5.7 Data Usability and Validation

The main purpose of the data is for use in defining the extent of contamination at the site, to aid in evaluation of potential human health and ecological exposure assessments, and to support remedial action decisions. Based upon this, data usability and validation will be performed as described below. Complete data packages will be archived in the project files, and if deemed necessary additional validation can be performed using procedures in the following sections.

Data collected as part of the Phase II ESA will be validated in accordance with Sections 5.7.1 and 5.7.2.

5.7.1 Data Usability and Validation Requirements

Data usability and validation are performed on analytical data sets, primarily to confirm that sampling and chain-of-custody documentation are complete, sample IDs can be tied to specific sampling locations, samples were analyzed within the required holding times, and analyses are reported in conformance with NYSDEC ASP, Category B data deliverable requirements as applicable to the method utilized.

5.7.2 Data Usability and Validation Methods

A designee of the PWGC Project Manager will complete a data usability evaluation for the data collected during the RI and a data usability summary report (DUSR) will be prepared. The DUSR will be prepared in accordance with NYSDEC DER-10, Appendix 2B.

Independent third-party data validation will be performed on 5% of the sample data, or on one sample from each sample delivery group (SDG), whichever is greater. Data validation will be performed by Laboratory Data Consultants.



5.8 Field Equipment Calibration

Equipment will be inspected and approved by the Field Team Leader before being used. Equipment will be calibrated to factory specifications, if required. Monitoring equipment will be calibrated following manufacturers recommended schedules. Daily field response checks and calibrations will be performed as necessary (i.e. PID calibrations) following manufacturers standard operating procedures. Equipment calibrations will be documented in a designated field logbook.

5.9 Equipment Decontamination

In order to minimize the potential for cross-contamination, non-dedicated drilling and sampling equipment shall be properly decontaminated prior to and between sampling/drilling locations.

5.9.1 General Procedures

Drilling equipment will be decontaminated in a designated area. Sampling equipment and probes will be decontaminated in an area covered with plastic sheeting near the sampling location. Waste material generated during decontamination activities will be containerized, stored and disposed of in accordance with the procedures detailed in Section 5.9. Decontamination of sampling equipment shall be kept to a minimum, and wherever possible, dedicated sampling equipment shall be used. Personnel directly involved in equipment decontamination shall wear appropriate personal protective equipment (PPE).

5.9.2 Drilling Equipment

Drilling equipment shall be decontaminated prior to performance of the first boring/excavation and between all subsequent borings/excavations. This shall include hand tools, casing, augers, drill rods, temporary well material and other related tools and equipment. Water used during drilling and/or steam cleaning operations shall be from a potable source.

5.9.3 Sampling Equipment

Sampling equipment (i.e., trowels, knives, split-spoons, bowls, hand augers, etc...) will be decontaminated prior to each use as follows:

- Laboratory-grade glassware detergent and tap water scrub to remove visual contamination
- Generous tap water rinse
- Distilled water rinse

5.9.4 Meters and Probes

All meters and probes that are used in the field (other than those used solely for air monitoring purposes, e.g., PID meters) will be decontaminated between uses as follows:



- Laboratory-grade detergent and tap water solution wash
- Tap water rinse
- Distilled water rinse (triple rinse)

5.10 Management of Investigation Derived Waste

Waste materials generated from the field operations may consist of soil and rock cuttings, purge water, and miscellaneous solid materials such as PPE and supplies. Investigative derived waste (IDW) generated during field operations will be disposed of in accordance with applicable regulations.

Soil cuttings generated from soil boring and well installation activities will be stored in 55-gallon drums. Drums will be labeled to indicate the source of the material and will be stored in a designated area onsite. Soil and/or rock cores and cuttings will be field screened using a PID, while performing drilling operations. Drummed material will be disposed of at an offsite disposal facility. Following receipt of the analytical results, recommendations for disposition of the drummed material will be provided to the NYSDEC.

Development and purge water generated during the field activities will be stored in a portable holding tank and/or 55-gallon drums. Drums will be labeled to indicate the source of the fluid and will be stored in a designated area onsite. Drummed groundwater will be sampled to determine if discharge to the surface of the site is appropriate or offsite disposal is required. Following receipt of the groundwater sampling results, recommendations for disposition of the water will be provided to NYSDEC.

5.11 Field Documentation

Documentation will take place on either appropriate forms or in a dedicated site logbook. Permanent black or blue ink will be used to record information in the logbook. Errors in field documentation will be lined through, initialed, dated, and corrected. Forms will be kept by the PWGC Field Team Leader during the field activities. Field activities will be documented in the field logbook. The logbook will contain pages that are consecutively numbered and be permanently bound with a hard cover. Upon completion of daily activities, unused portions of pages will be lined-through and initialed.

The primary purpose of the field logbook is to document the daily field activities and to provide descriptions of each activity. All entries in the field logbook will be recorded and dated by person making the entry.



6.0 REMEDIAL INVESTIGATION REPORT PREPARATION

The RIR will incorporate the methods and findings of the investigation activities performed as outlined in this work plan. The report will identify specific contamination concentrations throughout each media (e.g. soil, groundwater, etc.), delineate the extent of contamination in soil and groundwater, evaluate potential exposure pathways, and provide conclusions and recommendations for additional investigation and/or remedial action. Electronic copies of the Investigation Report will be submitted to the NYSDEC along with hard copies. Analytical results of the investigation will be submitted in the electronic data delivery (EDD) format through the Department's environmental information management system (EIMS).



7.0 HEALTH AND SAFETY

7.1 Statement of Commitment

Onsite employees may be exposed to chemical contaminants of concern identified within the soil/fill during the planned remedial investigation activities to be performed on the 355 Exterior Street, Bronx, New York project site. PWGC's policy is to minimize the possibility of work-related exposure through awareness and qualified supervision, health and safety training, use of appropriate PPE, and the following activity specific safety protocols contained in this Health and Safety Plan (HASP). PWGC has established a guidance program to implement this policy in a manner that protects personnel to the maximum reasonable extent.

This HASP describes emergency response procedures for actual and potential chemical hazards. Persons are to acknowledge that they understand the potential hazards and the contents of this Health and Safety policy by signing off on receipt of their individual copy of the document. Contractors and suppliers are retained as independent contractors and are responsible for ensuring the health and safety of their own employees as it relates to general construction practices.

7.2 Introduction and Site Entry Requirements

This document describes the health and safety guidelines developed by PWGC at the request of 355 Exterior Street Associates LLC for the proposed RI to be performed at the 355 Exterior Street, Bronx, New York site to protect on-site personnel, visitors, and the public from exposure to potential hazardous materials or wastes. In accordance with the Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) Part 1910.120 Hazardous Waste Operations and Emergency Response Final rule, this HASP, including the attachments, addresses safety and health hazards relating to each phase of site operations and is based on the best information available. The HASP may be revised by PWGC at the request of 355 Exterior Street Associates LLC upon receipt of new information regarding site conditions. Changes will be documented by written amendments.

7.2.1 Site Safety Plan Acceptance, Acknowledgment and Amendments

The project superintendent and the site safety officer are responsible for informing personnel entering the work area of the contents of this plan and ensuring that each person signs the safety plan acknowledging the on-site hazards and procedures required to minimize exposure to adverse effects of these hazards. A copy of the Acknowledgement Form is included below.



SITE SAFETY PLAN ACKNOWLEDGMENT FORM

I have been informed and understand the procedures set forth in the HASP and amendments:

Printed Name	Signature	Representing	Date



Site conditions may warrant an amendment to the HASP. Amendments to the HASP are acknowledged by completing form on the next page.



SITE SAFETY PLAN AMENDMENT FORM

Site Safety Plan Amendment #::	
Site Name:	
Reason for Amendment:	
Alternative Procedures:	
Required Changes in PPE:	
Trequired ondriges in 1 1 2.	
Project Superintendent	Date
Health & Safety Consultant	Date
Site Safety Officer	 Date



7.2.2 Daily Safety Meetings

Each day before work begins; the site safety officer will hold safety (tailgate or tool box) meetings to ensure that onsite personnel understand the site conditions and operating procedures and to address safety questions and concerns. Meeting minutes and attendance will be recorded. Project staff will discuss and remedy health and safety issues at these meetings.

7.2.3 Key Personnel – Roles and Responsibilities

The following key personnel are planned for this project:

- Project Manager Mr. Derek Ersbak, P.G. or alternate
- Site Safety Officer Ms. Kaitlyn Crosby or alternate

The project manager is responsible for overall project administration and, with guidance from the site safety officer, for supervising the implementation of this HASP. The site safety officer will conduct daily (tail gate or tool box) safety meetings at the project site and oversee daily safety issues. Each subcontractor and supplier (defined as an OSHA employer) is also responsible for the health and safety of its employees. If there is any dispute about health and safety or project activities, on-site personnel will attempt to resolve the issue. If the issue cannot be resolved at the site, then the project manager will be consulted.

The site safety officer is responsible for the following:

- 1. Educating personnel about information in this HASP and other safety requirements to be observed during site operations, including, but not limited to, designation of work zones and levels of protection and emergency procedures dealing with fire and first aid.
- 2. Coordinating site safety decisions with the project manager.
- 3. Monitoring the condition and status of known on-site hazards specified in this HASP.
- 4. Maintaining records of safety problems, corrective measures and documentation of chemical exposures or physical injuries (the site safety officer will document these conditions in a bound notebook and maintain a copy of the notebook on-site).

The person who observes safety concerns and potential hazards that have not been addressed in the daily safety meetings should immediately report their observations/concerns to the site safety officer or appropriate key personnel.



7.3 Chemical Hazards

Soil analytical results detected concentrations of VOCs, SVOCs and metals in exceedance of RRUSCOs in several of the boring locations. The majority of contaminants were located in the shallow intervals where historic fill was observed and at the water table interface. No PCBs or Pesticides were detected at concentrations in excess of the RRUSCOs.

VOCs:

Soil concentrations of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene exceeded RRUSCOs.

SVOCs:

Soil concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene exceeded RRUSCOs.

Metals:

Soil concentrations of arsenic, copper, lead, and mercury exceeded RRUSCOs.

Appendix E includes information sheets for the known and suspected chemicals that may be encountered at the site.

7.4 Personal Protective Equipment

PPE shall be selected in accordance with OSHA 29 CFR 1910.120(c), (g), and 1910.132. Protective equipment shall be National Institute for Occupational Safety and Health (NIOSH) approved and respiratory protection shall conform to OSHA 29 CFR Part 1910.133 and 1910.134 specifications; head protection shall conform to 1910.135; eye and face protection shall conform to 1910.133; and foot protection shall conform to 1910.136. The only true difference among the levels of protection from D thru B is the addition of the type of respiratory protection. It is anticipated that work will be performed in Level D PPE.

7.4.1 Level D

Level D PPE shall be donned when the atmosphere contains no known hazards and work functions preclude splashes, immersion, or the potential for inhalation of, or contact with, hazardous concentrations of harmful chemicals. Level D PPE consists of:

- standard work uniform, coveralls, or Tyvek*, as needed;
- steel toe work boots;
- hard hat:



- gloves, as needed;
- safety glasses;
- hearing protection;
- equipment replacements are available as needed.

*Tyvek shall not be worn when sampling for PFAS.

7.4.2 Level C

Level C PPE shall be donned when the concentrations of measured total organic vapors in the breathing zone exceed background concentrations (using a portable PID, or equivalent), but are less than 5 ppm. The specifications on the air purifying respirator (APR) filters used must be appropriate for contaminants identified or expected to be encountered. Level C PPE shall be donned when the identified contaminants have adequate warning properties and criteria for using APR have been met. Level C PPE consists of:

- chemical resistant or coated Tyvek* coveralls;
- steel-toe work boots;
- chemical resistant over boots or disposable boot covers;
- disposable inner gloves (surgical gloves);
- disposable outer gloves;
- full face APR fitted with organic vapor/dust and mist filters or filters appropriate for the identified or expected contaminants;
- hard hat;
- splash shield, as needed; and,
- ankles/wrists taped with duct tape.

*Tyvek shall not be worn when sampling for PFAS.

The site safety officer will verify if Level C is appropriate by checking organic vapor concentrations using compound and/or class-specific detector tubes.

7.4.3 Level B

Level B PPE shall be donned when the contaminants have not been identified and/or the concentrations of unknown measured total organic vapors in the breathing zone exceed 5 ppm (using a portable PID, or equivalent). Level B PPE shall be donned if the Immediately Dangerous to Life and Health (IDLH) of a known contaminant is exceeded. If a contaminant is identified or is expected to be encountered for which



the NIOSH and/or OSHA recommend the use of a positive pressure self-contained breathing apparatus (SCBA) when that contaminant is present, Level B PPE shall be donned even though the total organic vapors in the breathing zone may not exceed 5 ppm. Level B shall be donned for confined space entry, and when the atmosphere is oxygen deficient (oxygen less than 19.5%) or potentially oxygen deficient. If Level B PPE is required for a task, at least three people shall be donned in Level B at any one time during that task. PPE shall only be donned at the direction of the site safety officer. Level B PPE consists of:

- supplied air SCBA or air line system with five minute egress system;
- chemical resistant coveralls;
- steel-toe work boots;
- chemical resistant over boots or disposable boot covers;
- disposable inner gloves;
- disposable outer gloves;
- hard hat; and,
- ankles/wrists taped.

The exact PPE ensemble is decided on a site-by-site basis by the PWGC Health and Safety Officer with the intent to provide the most protective and efficient worker PPE.

7.5 Contingency Plan

Site personnel must be prepared in the event of an emergency. Emergencies can take many forms: illnesses, injuries, chemical exposure, fires, explosions, spills, leaks, releases of harmful contaminants, or sudden changes in the weather.

Emergency telephone numbers and a map to the hospital (**Figure 6**) will be posted in the command post. Site personnel should be familiar with the emergency procedures, and the locations of site safety, first aid, and communication equipment.

7.5.1 Emergency Equipment Onsite

Private telephones: Site personnel.

Two-way radios: Site personnel where necessary.

Emergency Alarms: Onsite vehicle horns*.

First aid kits: Onsite, in vehicles or office.

Fire extinguisher: Onsite, in office or on equipment.



* Horns: Air horns will be supplied to personnel at the discretion of the project superintendent or site safety officer.

7.5.2 Emergency Telephone Numbers

General Emergencies	911
New York City Police	911
Lincoln Medical Center	1-718-579-5000
NYSDEC Spills Division	1-800-457-7362
NYSDEC Hazardous Waste Division	1-718-482-4996
NYCDEP	1-212-639-9675
NYC Department of Health	1-212-788-4711
NYC Fire Department	911
National Response Center	1-800-424-8802

Poison Control 1-212-764-7667

A copy of this page shall be posted in the office.

7.5.3 Personnel Responsibilities During and Emergency

The project manager is primarily responsible for responding to and correcting any emergency situations. However, in the absence of the project manager, the site safety officer shall act as the project manager's onsite designee and perform the following tasks:

- Take appropriate measures to protect personnel;
- Ensure that appropriate federal, state, and local agencies are informed and emergency response plans are coordinated. In the event of fire or explosion, the local fire department should be summoned immediately. If toxic materials are released to the air, the local authorities should be informed in order to assess the need for evacuation;
- Ensure appropriate decontamination, treatment, or testing for exposed or injured personnel;
- Determine the cause of incidents and make recommendations to prevent recurrence; and,
- Ensure that all required reports have been prepared.

7.5.4 Medical Emergencies

A person who becomes ill or injured, first aid will be administered while waiting for an ambulance or paramedics. A Field Accident Report (**Appendix F**) must be filled out for any injury.



A person transporting an injured/exposed person to a clinic or hospital for treatment will take the directions to the hospital and information on the chemical(s) to which they may have been exposed.

7.5.5 Fire or Explosion

In the event of a fire or explosion, the local fire department will be summoned immediately. The site safety officer or his designated alternate will advise the fire commander of the location, nature and identification of the hazardous materials on-site. If it is safe to do so, site personnel may:

- use fire fighting equipment available on site; or,
- remove or isolate flammable or other hazardous materials that may contribute to the fire.

7.5.6 Evacuation Routes

Evacuation routes established by work area locations for each site will be reviewed prior to commencing site operations. As the work areas change, the evacuation routes will be altered accordingly, and the new route will be reviewed.

Under extreme emergency conditions, evacuation is to be immediate without regard for equipment. The evacuation signal will be a continuous blast of a vehicle horn, if possible, and/or by verbal/radio communication. When evacuating the site, personnel will follow these instructions:

- Keep upwind of smoke, vapors, or spill location.
- Exit through the decontamination corridor if possible.
- If evacuation through the decontamination corridor is not possible, personnel should remove contaminated clothing once they are in a safe location and leave it near the exclusion zone or in a safe place.
- The site safety officer will conduct a head count to ensure that all personnel have been evacuated safely. The head count will be correlated to the site and/or exclusion zone entry/exit log.
- If emergency site evacuation is necessary, all personnel are to escape the emergency situation and decontaminate to the maximum extent practical.



8.0 COMMUNITY AIR MONITORING PLAN (CAMP)

Real-time air monitoring for volatile organic vapors and particulate levels at the perimeter of the work area will be performed. Continuous monitoring will be performed for ground intrusive activities. Ground intrusive activities include, but are not limited to, test pit excavation or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for volatile organic vapors will be performed during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. 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 bailing/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, in the midst of a public park, or adjacent to a school or residence. Exceedances of action levels observed during performance of the CAMP will be reported to the NYSDEC Project Manager and included in the Daily Report.

8.1 Volatile Organic Vapor Monitoring, Response Levels, and Actions

Volatile organic vapors will be monitored at the downwind perimeter of the immediate work area on a continuous basis during invasive work. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. 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. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 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 of the work area 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 of the work area 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.

15-minute readings must be recorded and be available for NYSDEC personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

8.2 Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the work area at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\mu g/m^3$) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 $\mu g/m^3$ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 $\mu g/m^3$ above the upwind level, work will be stopped, and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu g/m^3$ of the upwind level and in preventing visible dust migration.

Readings will be recorded and be available for NYSDEC personnel to review.



8.3 Odor and Dust Control

8.3.1 Odor Control

Necessary means will be employed to prevent on and offsite odor nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; and (c) use of foams to cover exposed odorous soils. If odors develop and cannot otherwise be controlled, additional means to eliminate odor nuisances will include: (d) use of chemical odorants in spray or misting systems.

This odor control plan is capable of controlling emissions of nuisance odors. If nuisance odors are identified, work will be halted, and the source of odors will be identified and corrected. Work will not resume until nuisance odors have been abated. NYSDEC will be notified of odor complaint events. Implementation of odor controls will be the responsibility of the contractor.

8.3.2 Dust Control

Dust management during invasive on-site work will include, at a minimum:

- Use of a dedicated water spray methodology for roads, excavation areas and stockpiles.
- Exercise extra care during dry and high-wind periods.
- Use of gravel or RCA on egress and other roadways to provide a clean and dust-free road surface.

This dust control plan is capable of controlling emissions of dust. If nuisance dust emissions are identified, work will be halted, and the source of dusts will be identified and corrected. Work will not resume until nuisance dust emissions have been abated. NYSDEC will be notified of dust complaint events. Implementation of dust controls will be the responsibility of the contractor.



9.0 PROJECT SCHEDULE

The preliminary schedule for the major project milestones is presented in **Table 1**. Field work is anticipated to be completed in March 2019, following approval of this RIWP by NYSDEC. A draft RI Report should be submitted to the NYSDEC by April 2019.



10.0 REFERENCES

NYSDEC, Division of Environmental Restoration, 6 NYCRR Part 375 Subpart 6, Remedial Program Soil Cleanup Objectives

NYSDEC, Division of Environmental Remediation, May 2010, Draft DER-10, Technical Guidance for Site Investigation and Remediation.

NYSDEC, Division of Water, June 1998, Addendum April 2000, Technical and Operational Guidance Series 1:1:1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.

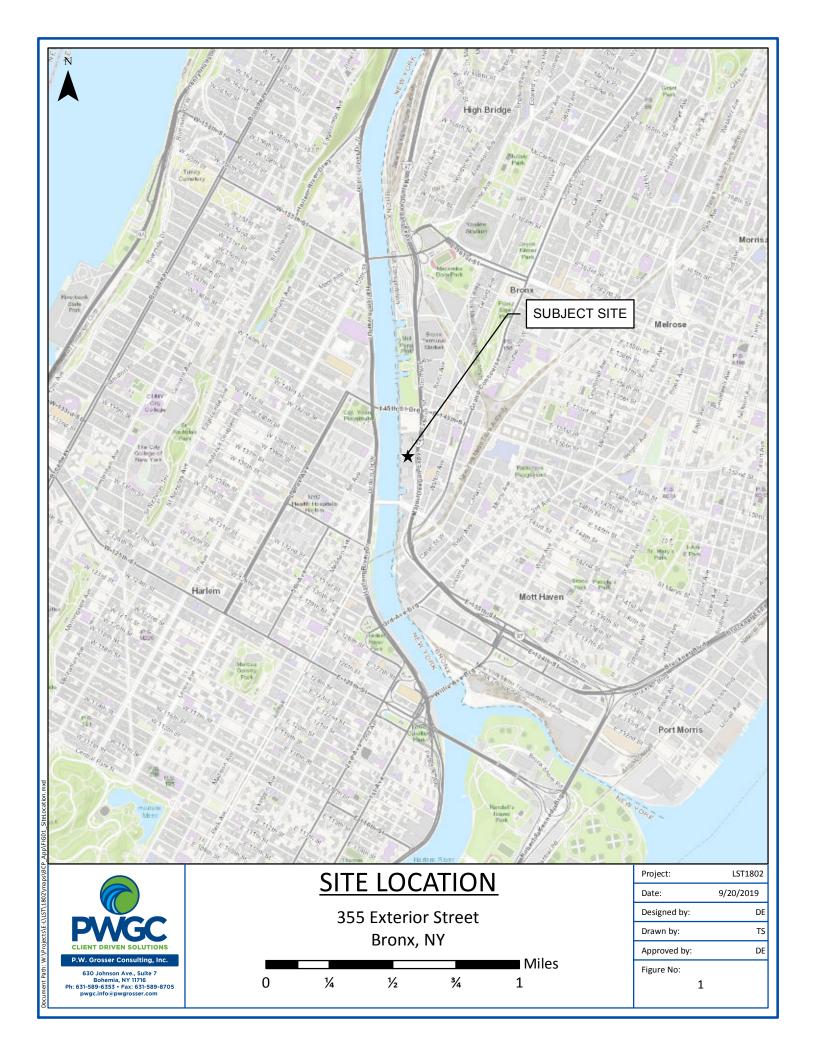
NYSDOH, October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

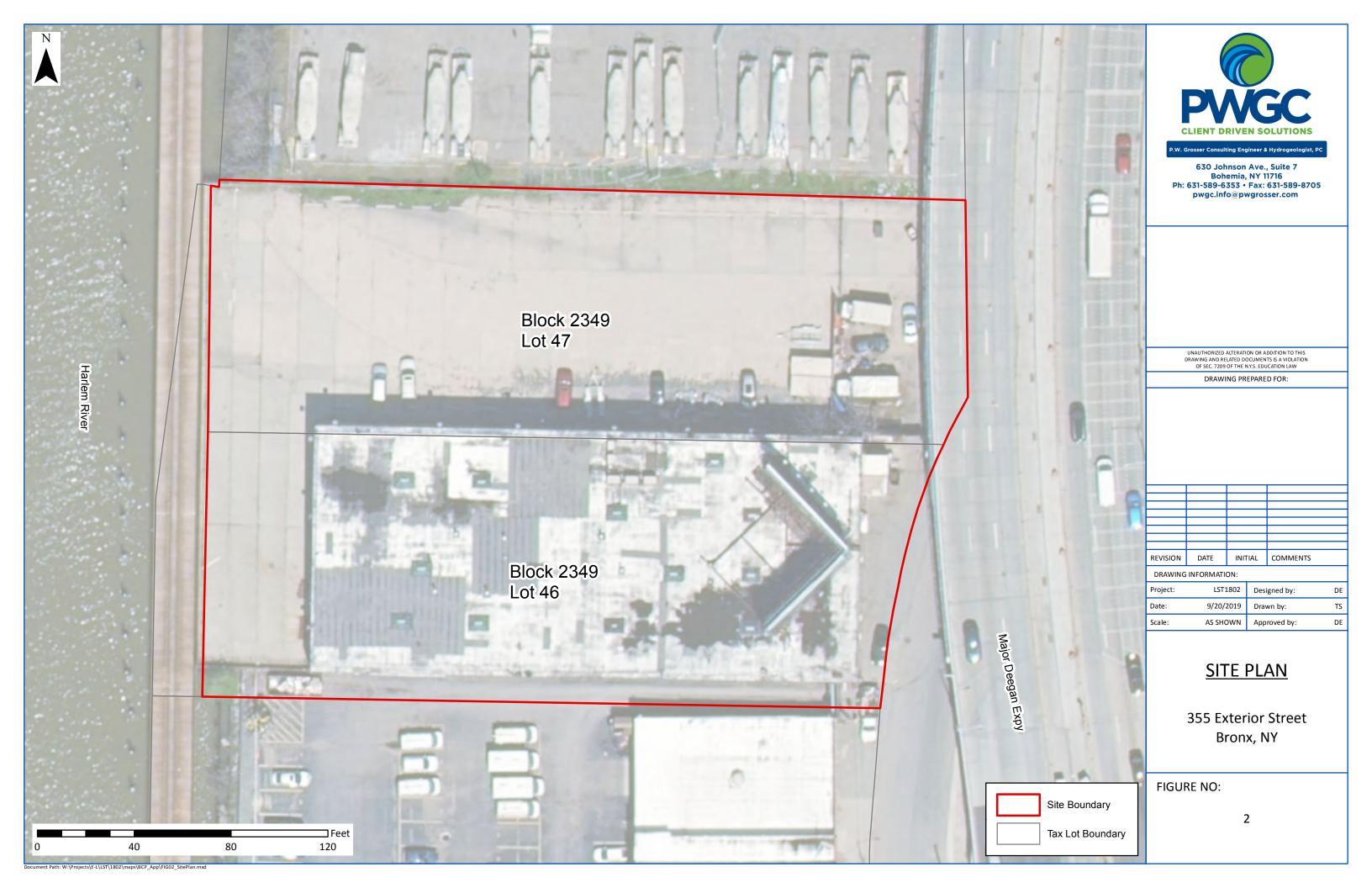
NYSDOH, May 2017, Update to Soil Vapor / Indoor Air Matrices.

USEPA, September 2017, Low Street (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells.



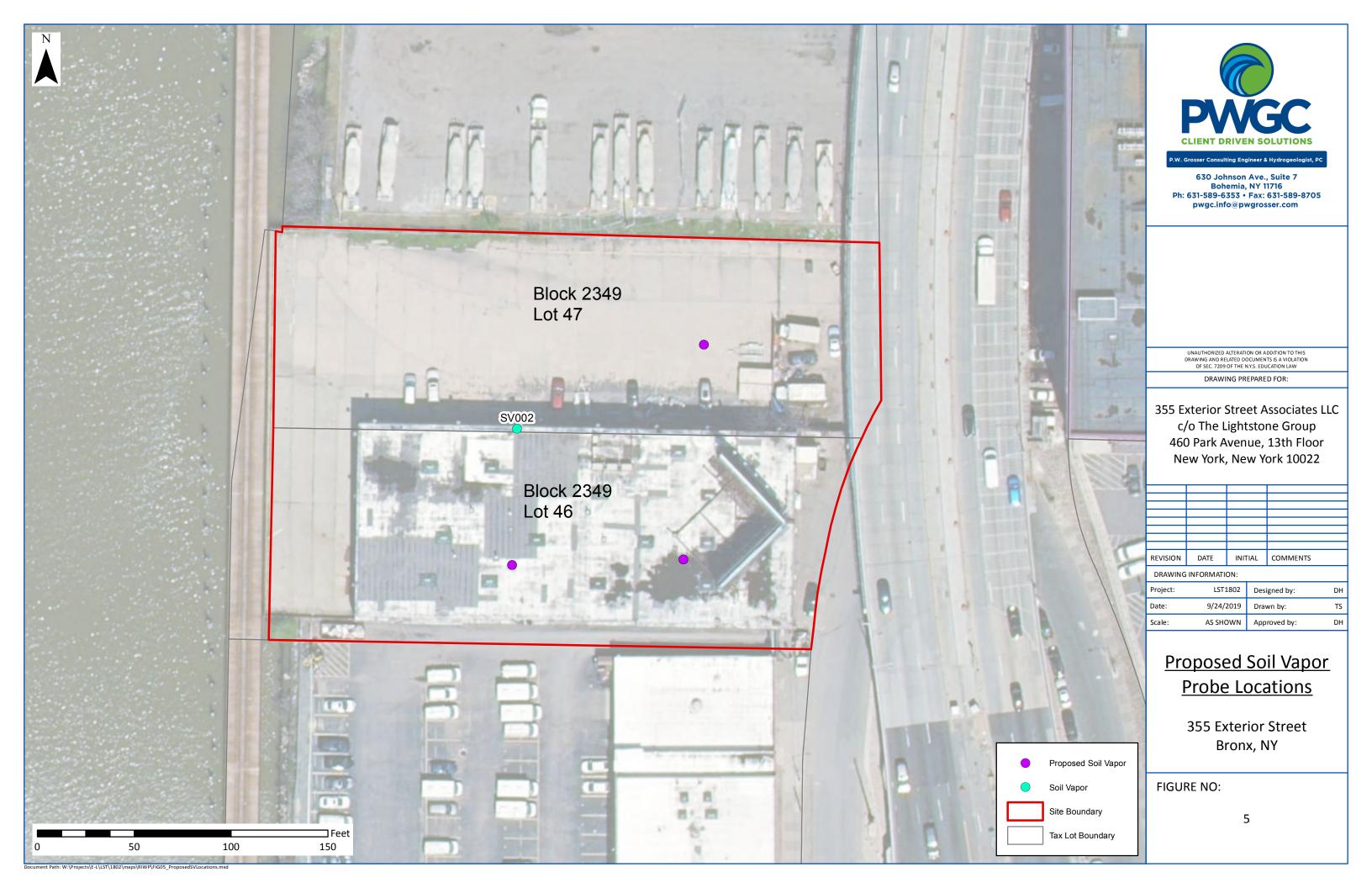
FIGURES

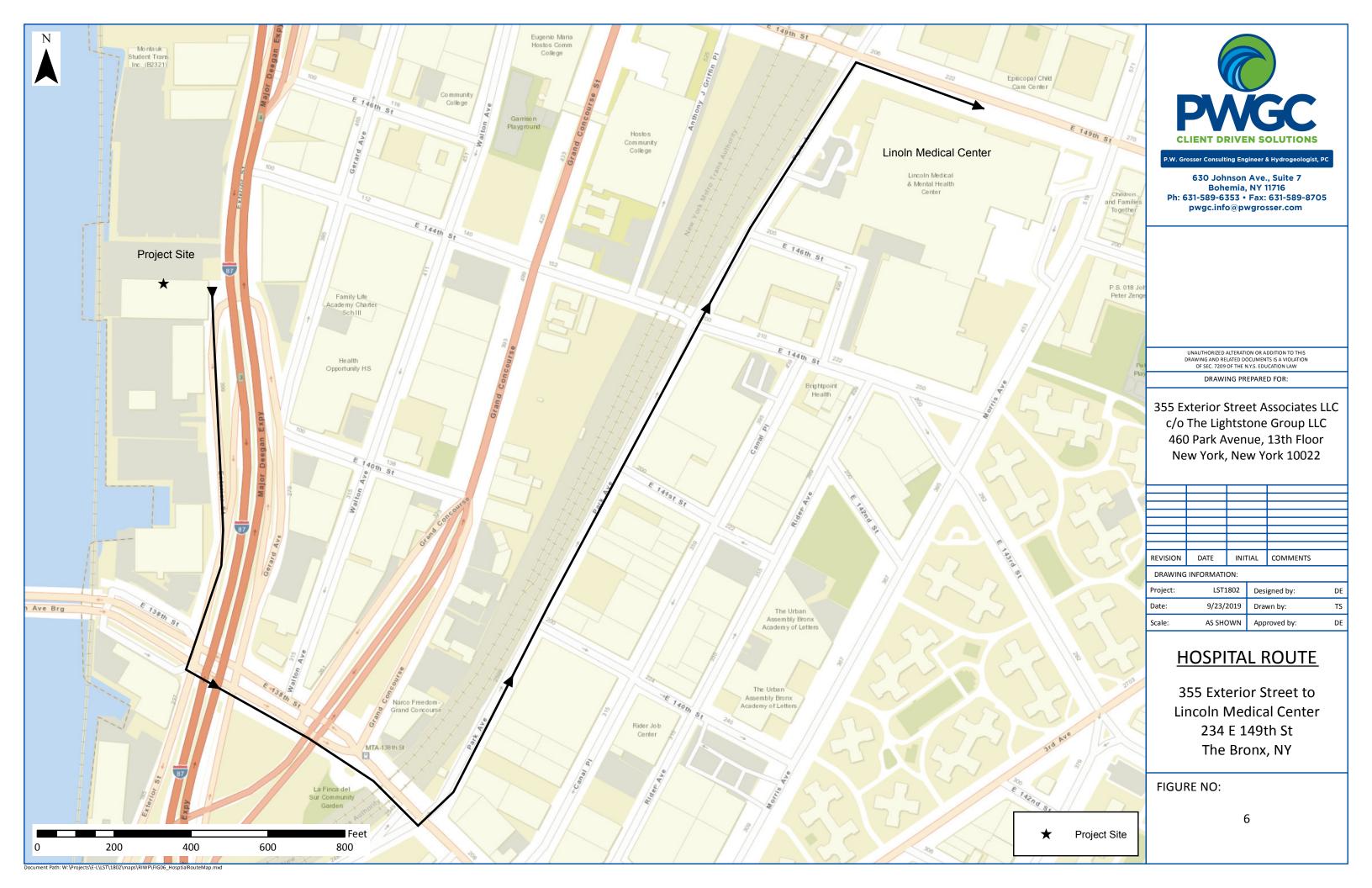














TABLE

Table 1
Project Schedule - Remedial Investigation

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Task																				
30 Day Public Comment Period																				
NYSDEC Approval of RIWP																				
Field Activities																				
Laboratory Analysis																				
Data Validation																				
Preparation of RI Report																				
Submission of Draft RI Report to NYSDEC																		-		
NYSDEC Interal Review of RI Report & 30 Day Public Comment Period																				



APPENDIX A PHASE II ESA REPORT

355 EXTERIOR STREET BRONX, NEW YORK BLOCK 2349, LOTS 46 AND 47

PHASE II ENVIRONMENTAL SITE ASSESSMENT (ASTM 1903-11)

PREPARED FOR:

355 Exterior Street Associates LLC c/o The Lighstone Group 460 Park Avenue, 13th Floor New York, New York 10022

PREPARED BY:



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PWGC Project Number: LST1802

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PHASE II ENVIRONMENTAL SITE ASSESSMENT 355 EXTERIOR STREET, BRONX, NEW YORK

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PHASE II ENVIRONMENTAL SITE ASSESSMENT 355 EXTERIOR STREET, BRONX, NEW YORK

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ACRONYM	DEFINITION
ASP	Analytical Services Protocol
ASTM	American Society for Testing and Materials
AWQS	Ambient Water Quality Standards
c/o	care of
Coastal	Coastal Environmental Solutions, Inc.
Delta	Delta Geophysics Inc.
DER	Department of Environmental Remediation
DER-10	Technical Guidance for Site Investigation and Remediation
ELAP	Environmental Laboratory Approval Program
EM	Electromagnetic
ESA	Environmental Site Assessment
GPR	Ground Penetrating Radar
MDL	Method Detection Limit
MG/KG	Milligrams Per Kilogram
NGVD	National Geodetic Vertical Datum
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCB	Polychlorinated Biphenyl
PID	Photo-ionization Detector
PPM	Parts Per Million
PVC	Polyvinyl Chloride
PWGC	P.W. Grosser Consulting, Inc.
QA/QC	Quality Assurance / Quality Control
REC	Recognized Environmental Condition
RRU	Restricted Residential Use
SCO	Soil Cleanup Objective
SVOC	Semi-volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
TOGS	Technical Operation and Guidance Series
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
UU	Unrestricted Use
VEC	Vapor Encroachment Condition
VOC	Volatile Organic Compound



1.0 INTRODUCTION

355 Exterior Street Associates LLC, care of (c/o) The Lightstone Group (Client) retained P.W. Grosser Consulting, Inc. (PWGC) to prepare a Phase II Environmental Site Assessment (ESA) for the property located at 355 Exterior Street, Bronx, New York. The purpose of the Phase II ESA was to further evaluate recognized environmental conditions (RECs) identified in the Phase I ESA to obtain sound, scientifically valid data concerning actual property conditions.

Work was conducted in accordance with the American Society for Testing and Materials (ASTM) Standard E 1903-11 (Standard Practices for Environmental Site Assessment: Phase II Environmental Site Assessment Process) and in substantial conformance with the New York State Department of Environmental Conservation's (NYSDEC's) Division of Environmental Remediation's (DER's) Technical Guidance for Site Investigation and Remediation, May 2010 (DER-10).



2.0 BACKGROUND

2.1 Site Description and Features

The subject property consists of two parcels located at 355 Exterior Street in the Mott Haven Neighborhood of the Bronx, New York. The property is identified in the New York City Tax Map as Block 2349, Lots 46 and 47. A site location map is included as **Figure 1**.

The subject property measures approximately 1.4 acres and is occupied by one commercial-use building and an asphalt parking area.

2.2 Physical Setting

The topography of the site and surrounding area was reviewed from the United States Geological Survey (USGS) 7.5-minute series topographic map for the Manhattan, New York quadrangle. The property elevation is approximately five feet above the National Geodetic Vertical Datum (NGVD).

2.3 Site History and Land Use

Historical usage of the subject property indicates that it was first developed in the early 1900s and was used as a freight train support facility and lumber supply building until circa 1966. Infrastructure supporting the freight train operation was removed from the site at which time the use of the property transitioned to commercial use and parking. Between 1966 to current day, the site appears to be utilized for mixed commercial use including lumber distribution, a roofing company and Borax Paper Products.

2.4 Adjacent Property Land Use

Review of historical information reviewed for the properties surrounding the subject property indicate that the area has been developed since at least 1922. Development was primarily commercial to the present-day extent.

2.5 Summary of Previous Assessments

2.5.1 Phase I Environmental Site Assessment Report (December 2018)

A Phase I ESA was prepared for 355 Exterior Street in December of 2018 by PWGC. The Phase I ESA identified the following RECs associated with the property.

• The site has been assigned an E-Designation for Air, Hazardous Materials, and Noise by the New York City Department of Planning.



- The site has been historically utilized for commercial and industrial purposes that likely included the storage and use of hazardous substances and/or petroleum products at the site.
- Potential vapor encroachment related to historical use of the site.

The Phase I ESA recommended that a Phase II ESA be performed at the subject property.



3.0 WORK PERFORMED AND RATIONALE

3.1 Scope of Assessment

The Phase II ESA included the following tasks:

- Site Inspection
- Geophysical Survey
- Soil Quality Investigation
- Groundwater Quality Investigation
- Soil Vapor Intrusion Investigation

3.2 Site Inspection

During the Phase I ESA in December 2018, PWGC was unable to access the site. The limited access to the site was identified as a data gap. During the Phase II ESA, PWGC was granted access to the site. Mr. Michael Gaul of PWGC performed a visual inspection on May 14, 2019. The inspection consisted of the interior portions of the building, the roof, and the asphalt parking lot. According to the current building manager, the building is heated via natural gas. No chemical storage or waste generation and storage beyond municipal waste was identified. No potentially polychlorinated biphenyl (PCB) containing equipment was identified. Two interior drain pits were identified with no determinate discharge point. No determination could be made in the field regarding the nature of these pits or what purpose they may have served. No staining or other evidence of spills was noted in the vicinity of the drain pits. The site inspection did not identify any deficiencies within the proposed Phase II ESA scope of work therefore no additional sample locations were required.

3.3 Geophysical Survey

On May 9, 2019, PWGC and Delta Geophysics Incorporated (Delta) of Catasauqua, Pennsylvania mobilized to the subject property to perform a geophysical survey. The purpose of the geophysical survey was to determine the absence/presence of subsurface anomalies at the subject property. The area surveyed included the parking lot adjacent to the on-site building. Access to the interior of the building was not available at the time of this survey. Most of the parking lot was accessible but several rental trucks were present and were unable to be moved during the survey. Descriptions of the geophysical methods are described below.



3.3.1 Electromagnetic Survey

Delta utilized a radio detection RD7000 precision utility locator electromagnetic (EM) instrument. The RD7000 uses the principle of EM induction to measure the variability of electrical conductivity of subsurface materials and the presence of buried metal objects. Significant contrasts in the electrical properties between non-indigenous materials and surrounding soil enable accurate delineation of buried waste materials, fill, and geologic features. The large EM response to metal makes this technique particularly well suited to identifying buried metal objects such as underground storage tanks (USTs), metallic wastes, buried drums, pipelines, reinforced building foundations, and other metal components of buried structures. It is, however, equally sensitive to metal objects on the ground surface.

3.3.2 Ground Penetrating Radar Survey

Following the electromagnetic survey, Delta utilized a Geophysical Survey Systems, Inc. SIR-3000 cart mounted Ground Penetrating Radar (GPR) unit with a 400 millihertz antenna to further investigate the metallic anomalies. The GPR utilizes high frequency radio signals that are transmitted into the ground and returned to the received unit which displays the signals on a digital display. The computer unit within the GPR then measures the time taken for a pulse to travel to and from the target which indicates the approximate depth and location. The GPR is commonly utilized to depict potential USTs, locations of former USTs, subsurface piping and additional non-metallic subsurface anomalies.

3.3.3 Survey Findings

The survey did not identify the presence of subsurface anomalies in the areas accessible during the initial investigation. It should be noted that due to reinforced concrete in the parking lot, the effectiveness of the survey was limited, and several proposed boring locations were relocated based on this information. Subsurface anomalies may exist beyond the capability of the equipment utilized due to interference or other factors.

The complete Geophysical Survey, including further detail regarding the methodology and findings, is included in **Appendix A**.

3.4 Soil Quality Investigation

To characterize soil quality, soil borings were installed throughout the subject property in three separate events. PWGC installed SB007 through SB010 including all SB009 step out samples on May 9 and 10, 2019. PWGC returned to the site to collect SB016 and SB017 and additional deeper intervals at SB008 on June 6,



2019. Once PWGC gained access to the interior of the building, borings SB018 through SB023 were collected on July 5, 2019. Boring locations were focused in areas of potential concern as identified by the Phase I ESA and in areas where visual impact was observed during this investigation. A total of 16 soil borings were installed during the investigation. Soil boring locations are illustrated on **Figure 2**.

3.4.1 Soil Boring Protocol

Coastal Environmental Solutions, Inc (Coastal) of Medford, New York provided environmental drilling services during the investigation. A Geoprobe was utilized to install the environmental soil borings. Soils were collected continuously from ground surface to an approximate depth of 15 feet below surface grade or to depth of refusal.

The soil cores were placed on a decontaminated table in the order they came out of the ground. The acetate liners were cut open and the soil core was screened for the presence of volatile organic vapors, which are commonly associated with petroleum products and industrial solvents, utilizing a photo-ionization detector (PID). Each soil core was classified by a hydrogeologist using the Unified Soil Classification System (USCS). A soil boring log was developed for each location (**Appendix B**) and includes the characterization and screening data.

Generally, soil consisted of brown sand and gravel with fill material (brick, asphalt, and wood) from grade to approximately ten feet below grade. Below the fill layer was typically grey silty sand or grey clay which extended within groundwater which was typically encountered around eight to ten feet below grade. Discolored soil with a slight petroleum odor and low level PID detections were observed in four of the sixteen soil borings (SB009, SB009_E, SB009_W and SB016). The presence of potential petroleum contamination was observed at the soil/water table interface (approximately eight to ten feet below surface grade) in each of these four soil borings. Potential contamination was not observed in the shallower intervals above the soil/water table interface. SB009 contained the highest PID readings therefore additional "step out" samples were conducted to determine a potential source location and approximate extent of petroleum impact. Soil borings were installed approximately 25 feet from SB009 to the east (SB009_E), north (SB009_N) and west (SB009_W). Due to the presence of petroleum impact within SB009_W, an additional step out sample approximately 25 feet to the west was installed (SB009_W2). No additional delineation could be completed to the south of SB009 due to the presence of the on-site building and the lack of access to the interior of the building during the initial field work. In addition to original boring location SB009, visual petroleum impact and elevated PID readings were observed within SB009_E



and SB009_W. Due to the visual and olfactory presence of petroleum contamination, the NYSDEC was notified and spill # 19-01885 was assigned to the site.

PWGC returned to the site on June 6, 2019 to collect two additional exterior soil borings (SB016 and SB017) to supplement the existing data set. SB016 was as an additional sample to further delineate the petroleum impact observed in the SB0009 E step out sample collected. During this event, several box trucks were moved to allow access to this boring location. Additionally, deeper samples were collected from the 8'-10' and 10'-12' interval of SB008 which was originally sampled in May of 2019.

PWGC performed another supplemental subsurface investigation once access to the interior of the building was coordinated with the building owner. SB018 through SB023 were conducted from the subsurface within the on-site building following the same protocols as the previous samples collected. No soil or groundwater sample could be collected within 25 feet south of SB009 due to access restrictions within the building (limited height along northern portion of building interior).

3.4.2 Sample Collection Protocol

To characterize subsurface soil conditions, a total of 35 soil samples were collected from 16 soil borings and depth intervals spread out throughout the site during the initial investigation and supplemental interior subsurface investigation.

Samples collected for volatile organic analysis were collected directly from the acetate liners utilizing terracore sampling devices. The remaining sample volumes were transferred to a stainless-steel bowl and homogenized. Once homogenized, samples were transferred to laboratory supplied glassware and packed in a cooler with ice and shipped under proper chain-of-custody procedures to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory, for analysis individually following NYSDEC Analytical Services Protocol (ASP)-Category B Deliverables.

Soil samples were analyzed for the following:

- Target Compound List (TCL) Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260;
 - SB009 (2-4'), SB009 (6-8'), SB009_N (8-10'), SB009_W (8-10'), SB009_E (8-10') and SB016 (6-8').
- TCL Semi-Volatile Organic Compounds (SVOCs) by USEPA Method 8270;
- Organochlorine Pesticides & PCBs by USEPA Methods 8081/8082;
 - SB016 (6-8'), SB017 (6-8'), SB018 (0-3'), SB020 (0-3') and SB022 (0-3').



Target Analyte List (TAL) Metals by USEPA Methods 6010/7471

Samples which were collected and analyzed for VOCs were determined within the field to have the highest potential for petroleum impact (visual and/or PID readings). SVOCs and metals were analyzed within every soil sample collected to address the RECs identified within the Phase I ESA. Organochlorine pesticides and PCBs were collected and analyzed in several samples through the site to address the RECs identified in the Phase I ESA. Several deeper interval samples were submitted to the lab on hold and analyzed if specific compounds exceeded their respective Restricted-Residential Use Soil Cleanup Objectives (RRUSCOs). These samples were submitted to determine the approximate depth of exceedances including specific metals or SVOCs. Some of these were analyzed by the lab once the initial data was reviewed as summarized in **Table 1** and **Table 2**.

3.4.3 Soil Analytical Results

Soil analytical results were compared to the NYSDEC's Title 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 and Final Commissioner Policy, CP-51 SCOs for Unrestricted Use (UU) and RRU.

SVOCs and/or metals were detected above both UUSCOs and RRUSCOs in the majority of the soil samples analyzed. Impact exceeding RRUSCOs was predominantly limited to samples collected from within the top ten feet of the site. However, there was a significantly elevated concentration of arsenic (22.1 milligrams per kilogram (mg/kg)) and mercury (5.38 mg/kg) in SB007 at a depth of 12 to 14 feet bgs.

VOCs were detected above RRUSCOs in one of the six soil samples analyzed. SB009_E (8-10') contained 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene above their respective RRUSCOs. These exceedances within this sample confirm the visual observations which indicated petroleum impact. SB009 (8-10') did not contain VOC exceedances but there were several VOC compounds detected above their method detection limit (MDL) along with observed visual impact and elevated PID readings (80.1 parts per million (ppm)). The SB009 step out samples to the north and west did not show petroleum impact therefore it is likely that the source originates to the east of SB009. The VOCs detected are commonly found in fuel oils, gasoline, stoddard solvent, etc.

Pesticides and PCBs were not detected above RRUSCOs.

Analytical results are detailed in **Table 1** and **Table 2**, summarized on **Figure 2**, and complete laboratory analytical reports are included in **Appendix C**.



3.5 Groundwater Quality Investigation

To characterize groundwater quality, groundwater samples were collected throughout the subject property. Groundwater sampling locations were selected based on field observations. A total of two groundwater samples were collected during the investigation. Groundwater sampling locations are illustrated on **Figure 3**.

3.5.1 Sampling Collection Protocol

Following the completion of the soil borings at SB008 and SB009, Coastal installed a prepacked 2" polyvinyl chloride (PVC) temporary well point in each borehole. MW003 was installed within the boring for SB008 and MW004 was installed within the boring for SB009. MW004 was installed at SB009 to potential document if petroleum impacts noted at the water table interface have resulted in groundwater impacts. Groundwater was encountered at approximately nine feet below surface grade. The screen was set from 5 to 15 feet below surface grade in each borehole. Disposable polyethylene tubing was inserted into the water bearing zone of the screen point sampler. The end of the tubing was connected to a peristaltic pump with dedicated silicone tubing. Four casing volumes of water were purged from the temporary sampling point prior to the collection of samples.

Samples were transferred to laboratory supplied glassware and packed in a cooler with ice and shipped under proper chain-of-custody procedures to a NYSDOH ELAP certified laboratory for analysis following NYSDEC ASP-Category B Deliverables. Groundwater samples were analyzed for the following compounds to address typical issues associated with industrial site operations as discovered in the Phase I ESA.

- TCL VOCs by USEPA Method 8260;
- TCL SVOCs by USEPA Method 8270;
- Organochlorine Pesticides & PCBs by USEPA Methods 8081/8082; and
- TAL Metals by USEPA Methods 6010/7471 (Total and Dissolved).

3.5.2 Groundwater Analytical Results

Groundwater sample results were compared to the NYSDEC Class GA Ambient Water Quality Standards (AWQS) as specified in the Technical Operation and Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values.

VOCs were detected above AWQS in one of the two groundwater samples. The VOC impact was noted in MW004, which was installed in SB009 where visual impact was noted. The presence of VOCs in soils



collected from SB009_E, the visual identification of petroleum impact in SB009 and the groundwater sample collected from MW004 is likely related to a historic petroleum release which resulted in the NYSDEC spill number.

SVOCs were detected above AWQSs in both groundwater samples. The SVOCs detected in the groundwater samples were also observed at elevated concentrations in the soil samples with the exception of phenol. Phenol was detected in the groundwater at MW004 but was not detected in site soils. This could be a likely laboratory contaminant based on the presence within the groundwater but not within the soils.

Several metals were detected above AWQSs. In general, metals were reduced in the dissolved (lab filtered) samples. Dissolved metals in excess of AWQSs were limited to magnesium, selenium, and sodium. The magnesium and sodium are high within the groundwater samples due to the known salinity of the adjacent east river which intrudes onto the site.

Pesticides and PCBs were not detected above laboratory method detection limits.

Analytical results are detailed in **Tables 3 through 6**, summarized on **Figure 3**, and the complete laboratory analytical report is included in **Appendix C**.

3.6 Soil Vapor Intrusion Investigation

To evaluate potential vapor intrusion at the subject property, a soil vapor intrusion investigation was performed. No pre-sampling inspection was required as the soil vapor sample collected was located outside of the on-site building approximately 4 feet below the asphalt. The sample was collected at this depth to address potential concerns below the existing slab.

3.6.1 Sampling Protocol

Sampling was conducted in accordance with the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in New York State," (NYSDOH Guidance) October 2006. The sample was collected into 2.7-liter Summa® vacuum canisters fitted with a two-hour flow controller. The sampler was batch certified clean by the laboratory. Proper quality assurance (QA) / quality control (QC) protocol was followed during the collection of the soil gas sample to ensure that cross-contamination in the field did not occur. The sample was submitted to the lab for analysis of VOCs by USEPA Method TO-15.

The temporary soil vapor probe was installed approximately four feet below the asphalt along the exterior of the property in accordance with procedures specified in the NYSDOH Guidance. Prior to sampling, the integrity of the sampling port seal was tested using tracer gas analysis. The environment surrounding the



seal was enriched with the tracer gas, helium, as readings were collected through the sampling probe with a portable helium detector. Tracer gas readings collected from the soil vapor probe were acceptable indicating the seals were intact and the sampling probe was acceptable for sample collection.

After the initial tracer gas test was performed, one to three volumes of the sample tubing were purged prior to collecting the sample. Flow rates for both purging and collecting did not exceed 0.2 liters per minute. No indoor or ambient samples were collected as part of this sampling event.

3.6.2 Analytical Results

Analytical results for the sub-slab vapor air sample is shown on **Table 7** and summarized on **Figure 4**. The laboratory data report is included as **Appendix C**. Several VOCs were detected above laboratory method detection limits. Tetrachloroethene, 2-butanone (methyl ethyl ketone), carbon disulfide, cyclohexane, benzene, propylene, toluene among others were detected above their laboratory method detection limits. Several of these compounds were also detected above their MDL within MW004. Petroleum related VOCs may be present in the soil vapor sample due to presence of petroleum along the water table interface.



4.0 CONCLUSIONS AND RECOMMENDATIONS

PWGC has performed a Phase II ESA in conformance with the scope and limitations of ASTM Practice E1903-11 for the subject property. The Phase II ESA consisted of the following tasks:

- Site Inspection
- Geophysical Survey
- Soil Quality Investigation
- Groundwater Quality Investigation
- Soil Vapor Intrusion Investigation

4.1 Conclusions

Based on the results of the Phase II ESA, PWGC offers the following conclusions:

- The site inspection identified two interior pits with no distinguishable discharge point. An interior geophysical survey should be conducted to determine the discharge of these pits as well as any additional subsurface anomalies.
- Subsurface anomalies were not identified as part of this investigation. However, reinforced concrete limited the effectiveness of the geophysical survey and anomalies beyond the limitations of the equipment may exist.
- SVOCs and metals are present in the fill material at the site. Metals extend deeper than the fill material in at least one sample. Visual observations and the detection of VOCs confirm the presence of petroleum contamination in the subsurface soils located near SB009. Spill # 19-01885 was assigned to the site. An on-site source was not identified as part of this investigation.
- With the exception of VOCs and the one SVOC, groundwater conditions appear to be at typical levels for an industrial area. The detected VOCs and SVOC appear to be related to petroleum contamination identified at the soil/water table interface. An on-site source was not identified as part of this investigation.
- The soil vapor sample collected identified contaminants of concern including tetrachloroethene and several petroleum related compounds. VOCs in soil vapor may be attributed to the VOCs detected on-site and further investigation to determine a source is warranted.

4.2 Recommendations

Based on the conclusions detailed above, PWGC offers the following recommendations for the subject property:



- A geophysical survey within the inside of the building should be conducted to determine the discharge point of the two identified pits.
- A supplemental investigation should be performed to delineate the extent of petroleum contamination and identify the source of contamination.
- Future construction activities at the site should take into consideration the quality of the fill material and native soils at the site.



5.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 code of federal regulations (CFR) 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

Derek Ersbak, PG

Senior Project Manager

Report Completion Date: 2019.09.27



6.0 REFERENCES

NYSDEC, Division of Environmental Restoration, 6 NYCRR Part 375 Subpart 6, Remedial Program Soil Cleanup Objectives

NYSDEC, Division of Environmental Remediation, May 2010, Draft DER-10, Technical Guidance for Site Investigation and Remediation.

NYSDEC, Division of Water, June 1998, Addendum April 2000, Technical and Operational Guidance Series 1:1:1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations

NYSDOH October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York.

NYSDOH May 2017: Updates to Soil Vapor / Indoor Air Decision Matrices.

Standard practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process, ASTM Standard E 1903-11.



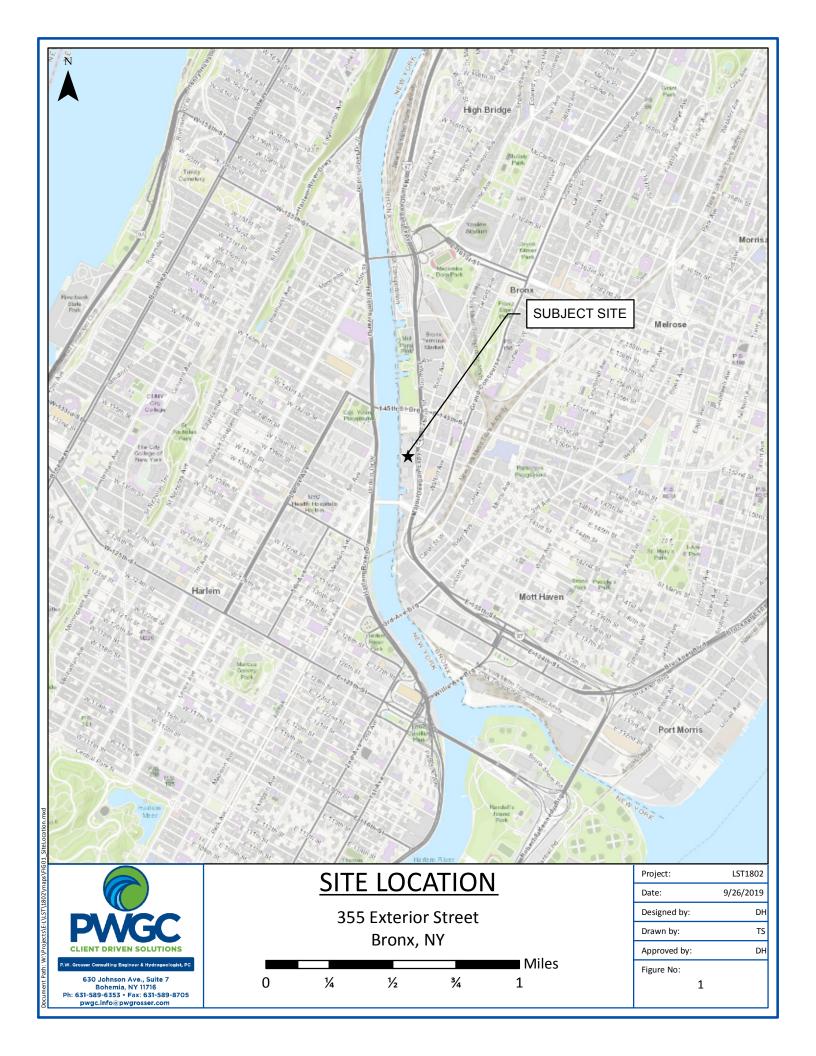
7.0 LIMITATIONS

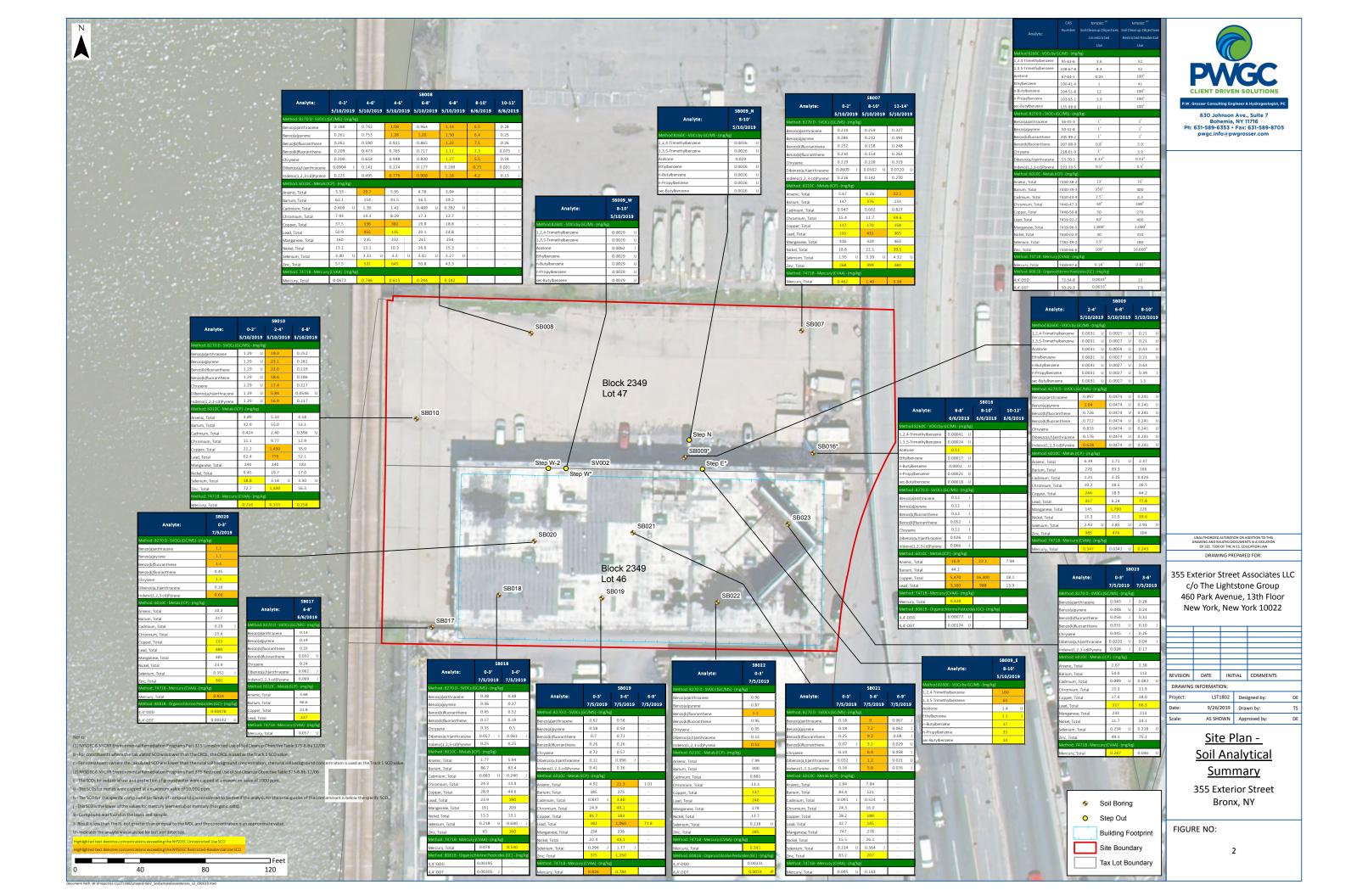
The conclusions presented in this report are professional opinions based on the data described in this report. These opinions have been arrived at in accordance with currently accepted engineering and hydrogeologic standards and practices applicable to this location, and are subject to the following inherent limitations:

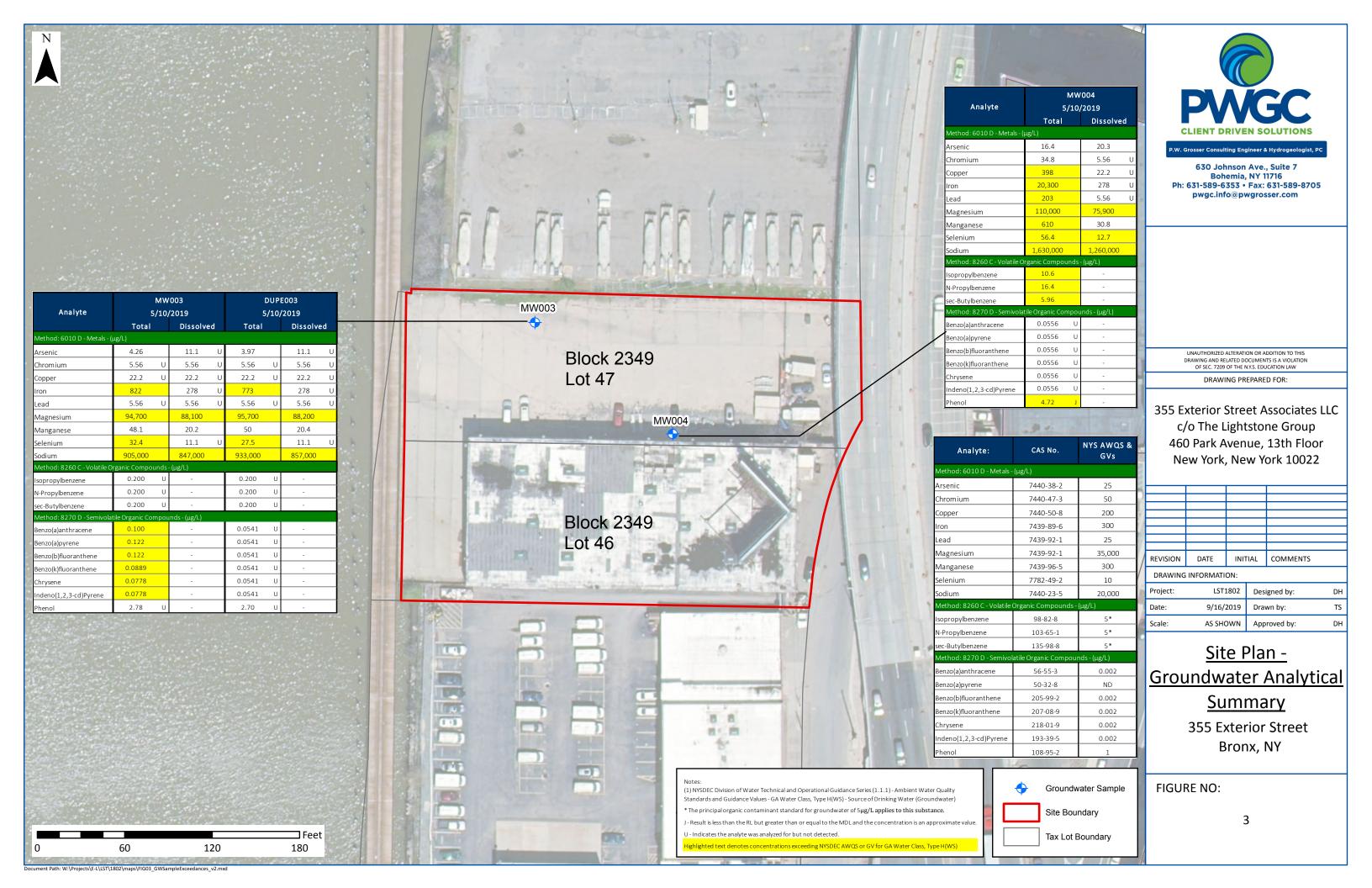
- 1. The data presented in this report are from visual inspections and examination of records prepared by others. The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration of the site, analysis of data, and re-evaluation of the findings, observations, and conclusions presented in this report.
- 2. The data reported and the findings, observations, and conclusions expressed are limited by the scope of work. The scope of work was defined by the request of the client.
- 3. No warranty or guarantee, whether expressed or implied, is made with respect to the data reported, findings, observations, or conclusions. These are based solely upon site conditions in existence at the time of the investigation, and other information obtained and reviewed by PWGC.
- 4. The conclusions presented in this report are professional opinions based on data described in this report. They are intended only for the purpose, site location, and project indicated. This report is not a definitive study of contamination at the site and should not be interpreted as such.
- 5. This report is based, in part, on information supplied to PWGC by third-party sources. While efforts have been made to substantiate this third-party information, PWGC cannot attest to the completeness or accuracy of information provided by others.

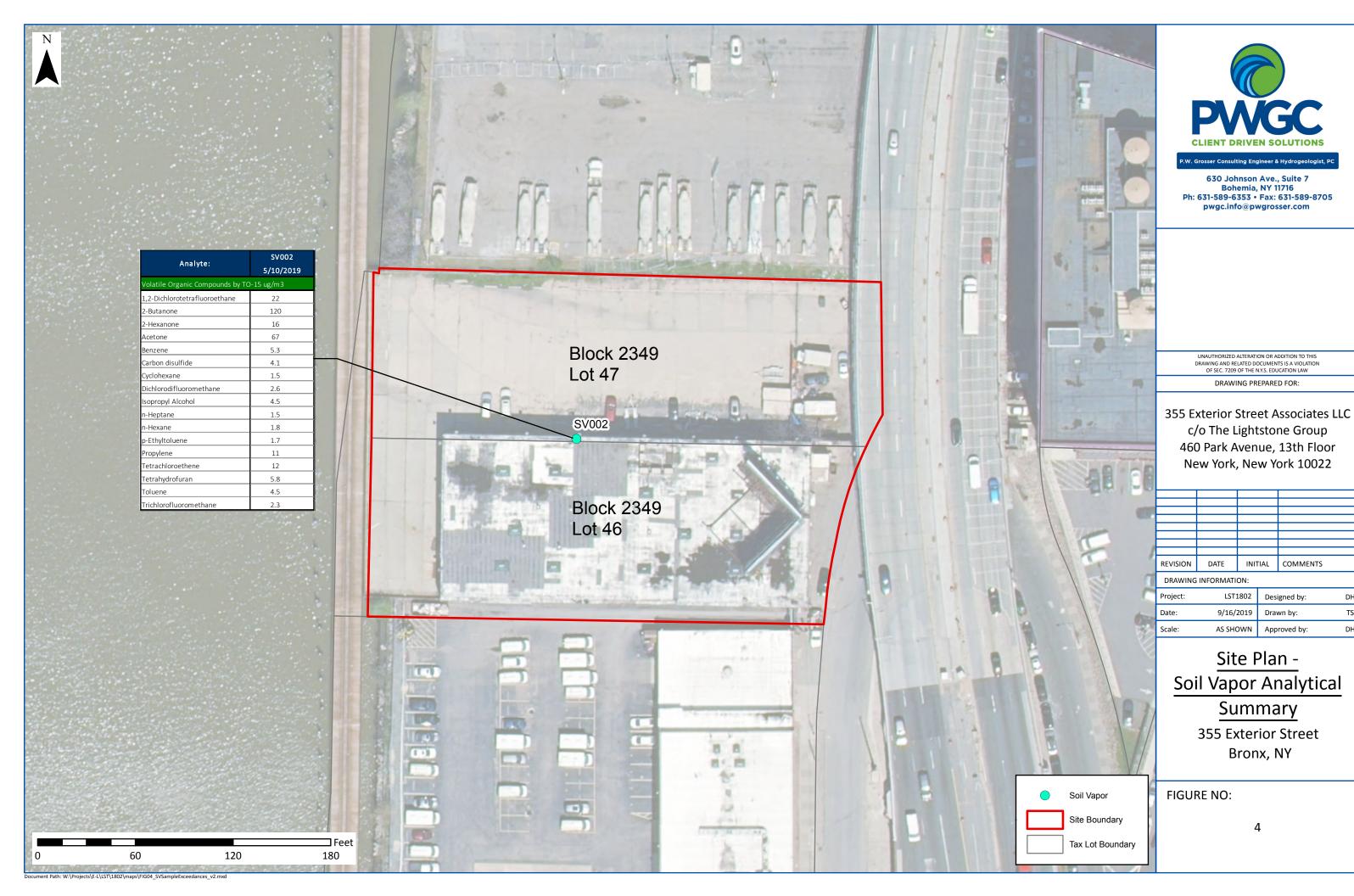


FIGURES











TABLES

Table 1Soil Analytical Summary Tables for Volatile Organic Compounds

	CAS	NYSDEC (1)	NYSDEC (2)			355-399 Ex	terior Street - Broi	ıx. New York		
	Number	Soil Cleanup Objectives	Soil Cleanup Objectives	SB009	SB009	SB009	SB009_N	SB009_W	SB009_E	SB016
Analyte:		Unrestricted Use	Restricted-Residential Use	2-4' 5/10/2019	6-8' 5/10/2019	8-10' 5/10/2019	8-10' 5/10/2019	8-10' 5/10/2019	8-10' 5/10/2019	6-8' 6/6/2019
		USE	USE	19E0591-26	19E0591-25	19E0591-27	19E0591-39	19E0591-40	19E0591-38	L1924473-21
Method 8260C - Volatile Organic Compo		5, 5,	NC	0.0021	0.0027	0.21	0.0022	0.0024	0.70	0.00016
1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane	630-20-6 71-55-6	NS 0.68	NS 100 ^a	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00016 U 0.0002 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.0002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NS NG	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	
1,1,2-Trichloroethane 1,1-Dichloroethane	79-00-5 75-34-3	NS 0.27	NS 26	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00033 U 0.00018 U
1,1-Dichloroethylene	75-35-4	0.33	100 ^a	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00029 U
1,1-Dichloropropylene	563-58-6	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.0002 U
1,2,3-Trichlorobenzene 1,2,3-Trichloropropane	87-61-6 96-18-4	NS NS	NS NS	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00039 U 0.00016 U
1,2,4,5-Tetramethybenzene	95-93-2	NS	NS	-	-	-	-	-	-	0.00023 U
1,2,4-Trichlorobenzene	120-82-1	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00033 U
1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane	95-63-6 96-12-8	3.6 NS	52 NS	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	160 0.70 U	0.00041 U 0.0012 U
1,2-Dibromoethane	106-93-4	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00034 U
1,2-Dichlorobenzene	95-50-1	1.1	100°	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00018 U
1,2-Dichloroethane 1,2-Dichloropropane	107-06-2 78-87-5	0.02° NS	3.1 NS	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00032 U 0.00015 U
1,3,5-Trimethylbenzene	108-67-8	8.4	52	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	63	0.00013 U
1,3-Dichlorobenzene	541-73-1	2	49	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00018 U
1,3-Dichloropropane 1,4-Dichlorobenzene	142-28-9	NS 2	NS 12	- 0.0031 U	- 0.0027 U	- 0.21 U	- 0.0033 U	- 0.0034 U	- 0.70 U	0.0002 U 0.00021 U
1,4-Dioxane	106-46-7 123-91-1	2 0.1 ^b	13 13	0.0031 U 0.061 U	0.0027 U 0.054 U	0.21 U	0.0033 U 0.065 U	0.0034 U 0.068 U	0.70 U	0.00021 U 0.043 U
2,2-Dichloropropane	594-20-7	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00025 U
2-Butanone	78-93-3	0.12	100 ^a	0.0031 U	0.0027 U	0.21 U	0.0088	0.0034 U	0.70 U	0.019
2-Chlorotoluene 2-Hexanone	95-49-8 591-78-6	NS NS	NS NS	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00023 U 0.0014 U
4-Chlorotoluene	106-43-4	NS NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00013 U
4-Methyl-2-pentanone	108-10-1	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.0016 U
Acetone Acrolein	67-64-1 107-02-8	0.05 NS	100 ^a NS	0.0061 U 0.0061 U	0.0059 J 0.0054 U	0.43 U 0.43 U	0.037 0.0065 U	0.0074 J 0.0068 U	1.4 U 1.4 U	0.11
Acrylonitrile	107-13-1	NS	NS NS	0.0031 U	0.0034 U	0.43 U	0.0033 U	0.0034 U	0.70 U	0.0014 U
Benzene	71-43-2	0.06	4.8	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.0002 U
Bromobenzene	108-86-1	NS NG	NS NG	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00018 U 0.00025 U
Bromochloromethane Bromodichloromethane	74-97-5 75-27-4	NS NS	NS NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U 0.0034 U	0.70 U	0.00025 U 0.00013 U
Bromoform	75-25-2	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.0003 U
Bromomethane	74-83-9	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00071 U
Carbon disulfide Carbon tetrachloride	75-15-0 56-23-5	NS 0.76	NS 2.4	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.0056 U 0.00028 U
Chlorobenzene	108-90-7	1.1	100°	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00016 U
Chloroethane	75-00-3	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00055 U
Chloroform Chloromethane	67-66-3 74-87-3	0.37 NS	49 NS	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00017 U 0.0011 U
cis-1,2-Dichloroethene	156-59-2	0.25	100 ^a	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00021 U
cis-1,3-Dichloropropene	10061-01-5	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00019 U
Cyclohexane Dibromochloromethane	110-82-7 124-48-1	NS NS	NS NS	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00017 U
Dibromomethane	74-95-3	NS NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00017 U
Dichlorodifluoromethane	75-71-8	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.0011 U
Ethyl Ether Ethylbenzene	60-29-7 100-41-4	NS 1	NS 41	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	- 1.1 J	0.00042 U 0.00017 U
Hexachlorobutadiene	87-68-3	NS	NS NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00017 U
Isopropylbenzene	98-82-8	NS	NS	0.0031 U	0.0027 U	0.24 J	0.0033 U	0.0034 U	13	0.00013 U
Methyl Acetate Methyl tert butyl ether	79-20-9 1634-04-4	NS 0.93	NS 100 ^a	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	- 0.00036 J
Methylcyclohexane	108-87-2	0.93 NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	4.2	
Methylene chloride	75-09-2	0.05	100°	0.0068 J	0.0054 U	0.43 U	0.0065 U	0.010 J	1.4 U	0.0028 U
Naphthalene n-Butylbenzene	91-20-3	12	100 ^a	- 0.0031 U	- 0.0027 U	0.63	- 0.0033 U	- 0.0034 U	- 17	0.0008 U 0.0002 U
n-Butylbenzene n-Propylbenzene	104-51-8 103-65-1	12 3.9	100°	0.0031 U	0.0027 U	0.63 0.39 J	0.0033 U	0.0034 U	33	0.0002 U 0.00021 U
o-Xylene	95-47-6	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.81 J	0.00036 U
p/m-Xylene	179601-23-1	NS NS	NS NG	0.0061 U	0.0054 U	0.43 U	0.0065 U	0.0068 U	1.4 U	0.00069 U 0.00022 U
p-Diethylbenzene p-Ethyltoluene	105-05-5 622-96-8	NS NS	NS NS	-	-	-	-	-	-	0.00022 U 0.00047 U
p-Isopropyltoluene	99-87-6	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	19	0.00017 U
sec-Butylbenzene	135-98-8	11 NG	100 ^a	0.0031 U	0.0027 U	1.5	0.0033 U	0.0034 U	24 0.70 H	0.00018 U
Styrene tert-Butyl alcohol	100-42-5 75-65-0	NS NS	NS NS	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00024 U
tert-Butylbenzene	98-06-6	5.9	100 ^a	0.0031 U	0.0027 U	0.40 J	0.0033 U	0.0034 U	2.0	0.00014 U
Tetrachloroethene	127-18-4	1.3	19	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00024 U
Toluene trans-1,2-Dichloroethene	108-88-3 156-60-5	0.7 0.19	100 ^a	0.0031 U 0.0031 U	0.0027 U 0.0027 U	0.21 U 0.21 U	0.0033 U 0.0033 U	0.0034 U 0.0034 U	0.70 U 0.70 U	0.00067 U 0.00017 U
trans-1,3-Dichloropropene	10061-02-6	0.19 NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00017 U
trans-1,4-Dichloro-2-butene	110-57-6	NS	NS	-	-	-	-	-	-	0.0017 U
Trichloroethene	79-01-6	0.47	21 NC	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.00017 U 0.00085 U
Trichlorofluoromethane	75-69-4	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U 0.0034 U	0.70 U	
	108-05-4	NS	NS	0.0031 U	0.0027 U	0.21 U	0.0033 U	0.0034 U	0.70 U	0.0026 U
Vinyl acetate Vinyl chloride	108-05-4 75-01-4 1330-20-7	NS 0.02 0.26	0.9 100 ^a	0.0031 U	0.0027 U	0.21 U	0.0033 U 0.0033 U 0.0098 U	0.0034 U	0.70 U 0.70 U 2.1 U	0.0026 U 0.00041 U

Notes:

- (1) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleanup Objective Table 375-6.8a 12/06
- $b For \ constituents \ where \ the \ calculated \ SCO \ was \ lower \ than \ the \ CRQL, the \ CRQL \ is \ used \ as \ the \ Track \ 1 \ SCO \ value.$
- $c For \ constituents \ where \ the \ calculated \ SCO \ was \ lower \ than \ the \ rural \ soil \ background \ concentration, the \ rural \ soil \ background \ concentration \ is \ used \ as \ the \ Track \ 1 \ SCO \ value.$
- (2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Restriced Use of Soil Cleanup Objective Table 375-6.8b 12/06 a The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm.
- U Indicates the analyte was analyzed for but not detected.

Highlighted text denotes concentrations exceeding the NYSDEC Unrestricted Use SCO

Highlighted text denotes concentrations exceeding the NYSDEC Restricted-Residential Use SCO

Table 2ASoil Analytical Summary Tables for Semi-Volatile Organic Compounds and Metals

						Soil Analytical S	ımmary Tables f	or Semi-Volatile	Organic Compou	ınds and Metals									
	CAS Number	NYSDEC (1) Soil Cleanup Objectives	NYSDEC ⁽²⁾ Soil Cleanup Objectives	SB007	SB007	SB007	SB008	SB008	DUPE002	SB008	55-399 Exterior St DUPE001	reet - Bronx, New '	York SB008	SB009	SB009	SB009	SB010	SB010	SB010
Analyte:		Unrestricted Use	Restricted-Residential Use	0-2' 5/10/2019	8-10' 5/10/2019	12-14' 5/10/2019	0-2' 5/10/2019	4-6' 5/10/2019	4-6' 5/10/2019	6-8' 5/10/2019	6-8' 5/10/2019	8-10' 6/6/2019	10-12' 6/6/2019	2-4' 5/10/2019	6-8' 5/10/2019	8-10' 5/10/2019	0-2' 5/10/2019	2-4' 5/10/2019	6-8' 5/10/2019
			use	19E0591-21	19E0591-19	19E0591-20	19E0591-23	19E0591-24	19E0591-36	19E0591-22	19E0591-35	L1924473-06	0/0/2019	19E0591-26	19E0591-25	19E0591-27	19E0591-28	19E0591-30	19E0591-29
Method: 8270 D - Semivolatile Organic C 1,1-Biphenyl	ompounds (GC/MS) - (mg/k 92-52-4	(g) NS	NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0532 U	0.0568 U	0.0544 U	-	-	0.0485 U	0.0474 U	0.241 U	1.29 U	0.551	0.0546 U
1,2,4,5-Tetrachlorobenzene	95-94-3	NS	NS	0.0977 U 0.0490 U	0.112 U 0.0562 U	0.144 U 0.0720 U	0.113 U 0.0566 U			0.113 U 0.0568 U	0.109 U 0.0544 U	0.02 U 0.022 U	0.024 U	0.0967 U 0.0485 U	0.0946 U 0.0474 U	0.480 U 0.241 U	2.57 U 1.29 U	0.105 U 0.0526 U	0.109 U 0.0546 U
1,2,4-Trichlorobenzene 1,2-Dichlorobenzene	120-82-1 95-50-1	NS NS	NS NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U		0.022 U	0.026 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	
1,2-Diphenylhydrazine	122-66-7	NS	NS NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U		0.0566 U	0.0551 U 0.0551 U	0.0523 U 0.0523 U	0.0568 U 0.0568 U	0.0544 U 0.0544 U	0.034 U	0.039 U	0.0485 U 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	0.0526 U 0.0526 U	0.0546 U 0.0546 U
1,3-Dichlorobenzene 1,4-Dichlorobenzene	541-73-1 106-46-7	NS NS	NS NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U		0.034 U	0.04 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0546 U
1,4-Dioxane 2,3,4,6-Tetrachlorophenol	123-91-1 58-90-2	0.1 ^b NS	13 NS	- 0.0977 U	0.112 U	0.144 U	0.113 U	0.110 U	0.106 U	0.113 U	0.109 U	0.009 U	0.01 U	0.0967 U	0.0946 U	0.480 U	2.57 U	0.105 U	0.109 U
2,4,5-Trichlorophenol	95-95-4	NS	NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U	0.0544 U	0.038 U	0.044 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0546 U
2,4,6-Trichlorophenol 2,4-Dichlorophenol	88-06-2 120-83-2	NS NS	NS NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U 0.0523 U	0.0568 U		0.037 U 0.032 U	0.043 U 0.037 U	0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U	0.0526 U	
2,4-Dimethylphenol	105-67-9	NS	NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U	0.0544 U	0.065 U	0.076 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0546 U
2,4-Dinitrophenol 2.4-Dinitrotoluene	51-28-5 121-14-2	NS NS	NS NS	0.0977 U 0.0490 U	0.112 U 0.0562 U		0.113 U 0.0566 U	0.110 U 0.0551 U	0.106 U 0.0523 U	0.113 U 0.0568 U	0.109 U 0.0544 U	0.092 U 0.039 U	0.11 U	0.0967 U 0.0485 U	0.0946 U 0.0474 U	0.480 U 0.241 U	2.57 U	0.105 U 0.0526 U	0.109 U 0.0546 U
2,6-Dinitrotoluene	606-20-2	NS	NS	0.0490 U	0.0562 U		0.0566 U	0.0551 U	0.0523 U	0.0568 U		0.034 U	01001	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0010
2-Chloronaphthalene 2-Chlorophenol	91-58-7 95-57-8	NS NS	NS NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0566 U	0.0551 U 0.0551 U	0.0523 U 0.0523 U	0.0568 U 0.0568 U	0.0544 U 0.0544 U	0.02 U 0.023 U	0.023 U 0.027 U	0.0485 U 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	0.0526 U 0.0526 U	0.0546 U 0.0546 U
2-Methylnaphthalene	91-57-6	NS	NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0740 J	0.0551 U	0.0000	0.0824 J 0.0568 U	0.109 0.0544 U	0.34	0.028 U	0.0485 U	0.0474 U	0.241 U	1.29 U	1.14	0.0546 U
2-Methylphenol 2-Nitroaniline	95-48-7 88-74-4	0.33 ^b NS	100° NS	0.0490 U 0.0977 U	0.0562 U		0.0566 U 0.113 U	0.0551 U 0.110 U	0.0523 U 0.106 U	0.0568 U 0.113 U		0.03 U 0.038 U		0.0485 U	0.0474 U 0.0946 U	0.241 U 0.480 U	2.57 U	0.0526 U 0.105 U	0.0546 U 0.109 U
2-Nitrophenol	88-75-5	NS	NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U		0.074 U	0.086 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	
3+4-Methylphenol 3,3'-Dichlorobenzidine	106-44-5 91-94-1	100° NS	100° NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0566 U	0.0551 U 0.0551 U	0.0523 U 0.0523 U	0.0568 U 0.0568 U	0.0544 U 0.0544 U	0.13 J 0.052 U	0.57 0.061 U	0.0485 U 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	0.0526 U 0.0526 U	0.0546 U 0.0546 U
3-Nitroaniline	99-09-2	NS	NS	0.0977 U	0.112 U	0.144 U	0.113 U	0.110 U	0.106 U	0.113 U	0.109 U	0.037 U	0.043 U	0.0967 U	0.0946 U	0.480 U	2.57 U	0.105 U	0.109 U
4,6-Dinitro-o-cresol 4-Bromophenyl phenyl ether	534-52-1 101-55-3	NS NS	NS NS	0.0977 U 0.0490 U	0.112 U 0.0562 U	0.144 U 0.0720 U	0.113 U 0.0566 U	0.110 U 0.0551 U	0.106 U 0.0523 U	0.113 U 0.0568 U		0.094 U 0.03 U	0.11 U 0.035 U	0.0967 U 0.0485 U	0.0946 U 0.0474 U	0.480 U 0.241 U	2.57 U 1.29 U	0.105 U 0.0526 U	0.201 0
4-Chloro-3-methylphenol	59-50-7	NS NC	NS NC	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0566 U	0.0551 U	0.0523 U 0.0523 U	0.0568 U 0.0568 U	0.0544 U 0.0544 U	0.029 U 0.036 U	0.034 U 0.042 U	0.0485 U	0.0474 U 0.0474 U	0.241 U	1.29 U 1.29 U	0.0526 U 0.0526 U	0.0546 U 0.0546 U
4-Chloroaniline 4-Chlorophenyl phenyl ether	106-47-8 7005-72-3	NS NS	NS NS	0.0490 U 0.0977 U	0.0562 U 0.112 U		0.0566 U	0.0551 U 0.110 U	0.0523 U 0.106 U	0.0568 U 0.113 U		0.036 U 0.021 U	0.042 U	0.0485 U 0.0967 U	0.0474 U 0.0946 U	0.241 U 0.480 U	1.29 U 2.57 U	0.0526 U	0.0546 U 0.109 U
4-Nitroaniline	100-01-6	NS NC	NS NC	0.0490 U 0.0977 U	0.0562 U 0.112 U	0.0720 U 0.144 U	0.0566 U 0.113 U	0.0551 U		0.0568 U 0.113 U	0.0544 U	0.081 U 0.08 U	0.095 U	0.0485 U	0.0474 U 0.0946 U		1.29 U 2.57 U	0.0526 U 0.105 U	
4-Nitrophenol Acenaphthene	100-02-7 83-32-9	NS 20	NS 100°	0.0977 U 0.0490 U	0.112 U 0.0562 U	0.144 U 0.0720 U	0.113 U 0.0566 U	0.110 U 0.105 J	0.106 U 0.108	0.113 U 0.139	0.109 U 0.108 J	0.08 U	0.094 U 0.032 J	0.0967 U 0.0485 U	0.0946 U 0.0474 U	0.480 U 0.241 U	2.57 U 1.29 U	0.105 U 3.12	0.109 U 0.0546 U
Acenaphthylene	208-96-8 98-86-2	100°	100° NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U		0.0731 J 0.0566 U	0.0551 U	0.0523 U 0.0523 U	0.0568 U 0.0568 U	0.162 0.0544 U	0.67 0.024 U	0.035 U 0.028 U	0.0727 J 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U	0.186 0.0526 U	0.0546 U 0.0546 U
Acetophenone Aniline	98-86-2 62-53-3	NS NS	NS 100°	0.196 U	0.0562 U 0.224 U		0.226 U	0.0551 U 0.220 U	0.0523 U 0.213 U	0.0568 U 0.227 U		0.024 U	u.u28 U	0.0485 U 0.194 U	0.0474 U 0.189 U	0.241 U 0.962 U	5.15 U	0.0526 U 0.210 U	0.0546 U 0.218 U
Anthracene	120-12-7	100°	100°	0.0490 U 0.0490 U	0.0797 J 0.0562 U	0.120 J 0.0720 U	0.0566 U	0.386 0.0551 U	0.515 0.0523 U	0.359 0.0568 U	0.304 0.0544 U	3	0.086 J	0.144 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	6.72 0.0526 U	0.0819 J 0.0546 U
Atrazine Benzaldehyde	1912-24-9 100-52-7	NS NS	NS NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U		-	-	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	
Benzidine	92-87-5	NS	NS	0.196 U 0.214	0.224 U 0.259	0.287 U 0.327	0.226 U 0.188	0.220 U 0.742	0.213 U	0.227 U 0.964	0.217 U	-	0.28	0.194 U 0.897	0.189 U 0.0474 U	0.962 U	5.15 U 1.29 U	0.210 U	0.218 U 0.252
Benzo(a)anthracene Benzo(a)pyrene	56-55-3 50-32-8	1°	1' 1'	0.214	0.239	0.327	0.261	0.753	1.28	1.20	1.50	6.4	0.25	1.04	0.0474 U	0.241 U	1.29 U	23.1	0.252
Benzo(b)fluoranthene	205-99-2 191-24-2	1° 100	1 [']	0.252 0.196	0.158 0.114	0.248	0.261 0.182	0.590 0.457	0.921	0.865 0.798	1.22	7.5 3.9	0.26 0.14 I	0.726 0.581	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	22.0	0.219 0.196
Benzo(ghi)perylene Benzo(k)fluoranthene	207-08-9	0.8°	3.9	0.210	0.154	0.263	0.209	0.473	0.765	0.717	1.11	2.3	0.075 J	0.712	0.0474 U	0.241 U	1.29 U	18.6	0.186
Benzoic Acid Benzyl Alcohol	65-85-0 100-51-6	NS NS	NS NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0566 U	0.0551 U 0.0551 U	0.0523 U 0.0523 U	0.0568 U 0.0568 U	0.0544 U 0.0544 U	0.2 U 0.06 U	0.23 U	0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	0.0526 U	0.0546 U 0.0546 U
Biphenyl	92-52-4	NS	NS	-	-	-	-	-	-	-	-	0.15 J	0.053 U		-	-	-	-	-
Butyl benzyl phthalate Bis(2-chloroethoxy)methane	85-68-7 111-91-1	NS NS	NS NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0566 U	0.0551 U	0.0523 U 0.0523 U	0.0568 U	0.0544 U 0.0544 U	0.05 U 0.02 U	0.058 U	0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	0.0526 U	0.0546 U 0.0546 U
Bis(2-chloroethyl)ether	111-44-4	NS	NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U	0.0544 U	0.027 U	0.031 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0546 U
Bis(2-chloroisopropyl)ether Bis(2-Ethylhexyl)phthalate	108-60-1 117-81-7	NS NS	NS NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0101.00	0.0566 U	0.0551 U	0.0523 U 0.0523 U	0.0568 U 0.0568 U	0.0544 U 0.0544 U	0.034 U 0.068 U	0.039 U 0.079 U	0.0485 U 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	0.0526 U 0.0526 U	0.0546 U 0.0546 U
Caprolactam	105-60-2	NS	NS	0.0977 U 0.0490 U	0.112 U 0.0562 U	0.144 U 0.0720 U	0.113 U 0.0566 U	0.110 U 0.0551 U	0.106 U 0.0523 U	0.113 U 0.111 J	0.109 U 0.246	1.1	- 0.022 U	0.0967 U 0.0485 U	0.0946 U 0.0474 U	01100 0	2.57 U 1.29 U	0.105 U 1.57	0.109 U 0.0546 U
Carbazole Chrysene	86-74-8 218-01-9	NS 1°	NS 3.9	0.0490 0	0.0362 0	0.0720 0	0.200	0.654	0.0523 0	0.830	1.27	5.5	0.022 0	0.833	0.0474 U	0.241 U 0.241 U	1.29 U	1.57	0.227
Dibenzo(a,h)anthracene Dibenzofuran	53-70-3 132-64-9	0.33 ^b	0.33° 59	0.0609 J 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0604 J 0.0566 U	0.141 0.0799 I	0.214 0.0815 I	0.177 0.0598 I	0.269 0.128	0.75	0.031 J 0.022 U	0.176 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	5.84 2.24	0.0546 U 0.0546 U
Diethyl phthalate	84-66-2	NS	NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U	0.0544 U	0.018 U	0.021 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0546 U
Dimethyl phthalate Di-n-butylphthalate	131-11-3 84-74-2	NS NS	NS NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0566 U	0.0551 U	0.0523 U 0.0523 U	0.0568 U 0.0568 U	0.0511 0	0.041 U 0.037 U	0.048 U 0.043 U	0.0485 U 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	0.0526 U	0.0546 U 0.0546 U
Di-n-octylphthalate	117-84-0	NS	NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U	0.0544 U	0.067 U	0.078 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0546 U
Fluoranthene Fluorene	206-44-0 86-73-7	100° 30	100° 100°	0.362 0.0490 U	0.501 0.0562 U	0.555 0.0720 U	0.281 0.0566 U	1.49 0.122	2.23 0.138	1.80 0.129	2.83 0.169	23 0.95	0.4 0.03	1.30 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	41.6 2.42	0.459 0.0546 U
Hexachlorobenzene	118-74-1	0.33 ^b	1.2	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U	0.0544 U	0.022 U	0.026 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0546 U
Hexachlorobutadiene Hexachlorocyclopentadiene	87-68-3 77-47-4	NS NS	NS NS	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0566 U	0.0551 U	0.0523 U 0.0523 U	0.0568 U		0.029 U 0.18 U	0.031	0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	0.0526 U	
Hexachloroethane	67-72-1 193-39-5	NS 0.5°	NS 0.5 ^f	0.0490 U 0.216	0.0562 U 0.142	0.0720 U 0.270	0.0566 U 0.225	0.0551 U 0.495	0.0523 U	0.0568 U	0.0544 U	0.032 U	0.037 U	0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	0.0526 U	0.0546 U 0.217
Indeno(1,2,3-cd)Pyrene Isophorone	78-59-1	NS NS	NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U	0.0544 U	0.026 U	0.03 U	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0546 U
Naphthalene Nitrobenzene	91-20-3 98-95-3	12 NS	100°	0.0490 U 0.0490 U	0.0562 U 0.0562 U	0.0720 U 0.0720 U	0.0566 U	0.0676 J 0.0551 U	0.0611 J 0.0523 U	0.0568 U 0.0568 U		1.1 0.029 U	0.078 J 0.034 U	0.0485 U 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U 1.29 U	7.85 0.0526 U	0.0546 U
N-Nitrosodimethylamine	62-75-9	NS	NS	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U	0.0544 U	-	-	0.0485 U	0.0474 U	0.241 U	1.29 U	0.0526 U	0.0546 U
n-Nitrosodi-n-propylamine NitrosoDiPhenylAmine(NDPA)/DPA	621-64-7 86-30-6	NS NS	NS NS	0.0490 U 0.0490 U		0.0720 U 0.0720 U	0.0566 U	0.0551 U 0.0551 U					0.035 U 0.026 U	0.0485 U 0.0485 U			1.29 U 1.29 U	0.0526 U 0.0526 U	
Pentachlorophenol	87-86-5	0.8 ^b	6.7	0.0490 U	0.0562 U	0.0720 U	0.0566 U	0.0551 U	0.0523 U	0.0568 U	0.0544 U	0.043 U			0.0474 U	0.241 U	1.29 U	0.0526 U	
Phenanthrene Phenol	85-01-8 108-95-2	100 0.33 ^b	100° 100°	0.133 0.0490 U		0.171 0.0720 U	0.131 0.0566 U	0.999 0.0551 U	1.39 0.0523 U	1.35 0.0568 U	1.99 0.0544 U	17 0.075 J	0.27 0.035 U	0.447 I 0.0485 U	0.0474 U 0.0474 U	0.241 U 0.241 U	1.29 U	0.0526 U	0.315 0.0546 U
Pyrene Pyridine	129-00-0 110-86-1	100 NS	100° NS	0.305 0.196 U	0.561 0.224 U	0.731 0.287 U	0.257 0.226 U	1.42 0.220 U	1.95 0.213 U	1.63 0.227 U	2.22 0.217 U	21	0.5	1.38 0.194 U	0.0474 U 0.189 U		1.29 U 5.15 U		0.383 0.218 U
Pyridine Method: 6010C - Metals (ICP) - (mg/kg)													-						
Aluminum, Total	7429-90-5 7440-36-0	NS NS	NS NS	11,900 2.95 U	6,780 3.39 U	21,400 4.32 U	4,130 3.40 U	5,780 3.31 U	5,370 3.2 U	12,700 3.41 U	9,690 3.27 U			4,740 2.92 U	10,900 2.85 U	17,900 2.91 U	3,580 3.12 U	5,660 3.18 U	5,830 3.30 U
Antimony, Total Arsenic, Total	7440-38-2	13 ^c	16 ^f	5.67	8.26	22.1	3.53	29.7	5.95	4.78	3.94	-	-	6.39	1.71 U	2.37	3.89	5.33	4.18
Barium, Total Beryllium, Total	7440-39-3 7440-41-7	350° 7.2	400 72	147 0.320	376 0.712	133 0.704	62.1 0.208	154 0.199	41.5 0.101	56.5 0.258	39.2 0.325	-	-	278 0.282	93.3 0.057 U	166 0.058 U	32.9 0.062 B	55.0 0.084 B	53.1 0.066 U
Cadmium, Total	7440-43-9	2.5°	4.3	0.947	0.602	0.827	0.409 U	1.30	1.42	0.409 U	0.392 U	-	-	1.21	2.25	0.426	0.424	2.40	0.396 U
Calcium, Total Chromium, Total	7440-70-2 7440-47-3	NS 30°	NS 180 ^h	11,000 15.4	9,660 11.7	3,400 59.6	34,200 7.93	15,500 14.3	16,500 8.29	15,900 17.3	6,000 12.7	-	-	8,070 10.2	16,200 18.5	12,400 26.5	73,600 11.1	16,900 9.77	2,900 12.9
Cobalt, Total	7440-48-4	NS	NS	8.65	12.0	16.1	5.62	6.25	4.98	8.83	7.92	-	-	8.13	11.9	20.9	4.43	5.11	8.36
Copper, Total Iron, Total	7440-50-8 7439-89-6	50 NS	270 NS	117 18,000	170 10,300	158 39,800	37.5 10,600	336 13,400	381 10,100	19.8 17,300	18.8 15,600	-	-	244 10,100	18.9 16,900	44.2 29,700	21.2 10,900	1,430 13,500	35.0 10,600
Lead, Total	7439-92-1	63°	400	101	431	365	50.9	455	135	20.1	24.8	-	-	357	6.24	77.8	62.4	779	52.1
Magnesium Manganese, Total	7439-92-1 7439-96-5	NS 1,600°	NS 2,000 ^f	2,920 416	913 329	8,990 463	3,390 160	5,280 235	8,910 232	7,310 261	3,730 254	-	-	1,370 145	14,700 1,760	15,100 226	39,200 240	7,550 240	3,060 183
Nickel, Total	7440-02-0	30	310	18.8	22.1	39.5	13.1	13.1	10.3	16.6	15.3	-	-	15.3	21.5	39.6	9.45	19.7	17.0
Potasium, Total Selenium, Total	7440-09-7 7782-49-2	NS 3.9°	NS 180	1,580 2.95 U	1,060 3.39 U	4,460 4.32 U	752 3.40 U	850 3.31 U	800 3.2 U	1,630 3.41 U	1,060 3.27 U	-	-	560 2.92 U	3,240 2.85 U	8,920 2.91 U	847 18.8	923 3.18 U	1,260 3.30 U
Silver, Total	7440-22-4	2	180	0.590 U	0.679 U 1.950	0.864 U 2.780	0.681 U	0.661 U				-	-	0.584 U	0.307 0		0.623 U	0.636 U	0.660 U 290
Sodium, Total Thallium, Total	7440-23-5 7440-23-5	NS NS	NS NS	2.95 U	3.39 U	4.32 U	214 3.40 U	296 I 3.31 U	273 3.2	284 3.41 U	207 3.27 U	<u> </u>	-	217 2.92 U	267 2.85 U	801 2.91 U	156 3.12 U	3.18 U	3.30 U
Vanadium, Total Zinc, Total	7440-62-2 7440-66-6	NS 109°	NS 10,000 ^d	23.1 268	26.3	51.0 280	11.9 57.5	19.0 531	16.1 645	26.4 50.8	16.8 43.3	-	-	22.8 385	28.0 474	46.3 104	14.7 72.7	15.4 1,430	19.1 56.3
Zinc, Total Method: 7471B - Mercury (CVAA) - (mg/	/44U-bb-b /kg)																		
Mercury, Total	7439-97-6	0.18 ^c	0.81 ^j	0.462	1.40	5.38	0.0673	0.746	0.613	0.244	0.142		-	0.347	0.0342 U	0.243	0.216	0.315	0.258

- Notes:

 (1) NYSDEC 6 YVCRR Environmental Remediation Programs Part 375 Unrestricted Use of Soil Cleamup Objective Table 375-6.8s 12/06
 a-The SCOs for unrestricted use were capped at a maximum value of 100 ppm.
 b- For constituents where the calculated SCO was lower than the CRQL, the Left (RQL) is used as the Track 1 SCO value.
 c- For constituents where the calculated SCO was lower than the CRQL the Left (RQL) is used as the Track 1 SCO value.
 c- The SCOs for indistricting and endought in Left (RQL) is used as the Track 1 SCO value.
 c- The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.
 (2) NYSDEC 6 NYCRR Environmental Remediation Programs Part 375 Restricted Use of Soil Cleamup Objective Table 375-6.8s 12/06
 a- The SCOs for residential, restricted residential and ecological resources us were capped at a maximum value of 100 ppm.
 c- The SCOs for indistriating an analysis of groundwater were capped at a maximum value of 100 ppm.
 e- For constituents where the calculated SCO was lower than the CRQL, the CRQL is used as the SCO value.
 f- For constituents where the calculated SCO was lower than the trust of sub-forground concentration, as determined by the department and department of health rural soil background concentration is used as the Track 2 SCO value for this use of the stee.
 h- The SCO for the specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

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Table 2B
Soil Analytical Summary Tables for Semi-Volatile Organic Compounds, Metals, Pesticides and PCBs

					Soil	Analytical Summa	ry rables for Sen	ni-Volatile Organic Compou	is, meurs, restitues a	nu rens						
Analyte:	CAS Number	NYSDEC ⁽¹⁾ Soil Cleanup Objectives Unrestricted Use	NYSDEC ^[1] Soil Cleanup Objectives Restricted-Residential Use	SB016 6-8' 6/6/2019 L1924473-21	SB016 8-10° 6/6/2019 L1924473-22	SB016 10-12' 6/6/2019 L1924473-23	58017 6-8* 6/6/2019 L1924473-01	SB018 SB1 0-3' 3: 7/5/2019 7/5/ 1.1929439-01 1.1929	0-3' 019 7/5/2019	355-399 Exterior S SB019 3-6' 7/5/2019 4 L1929439-05	58019 6-9' 7/5/2019 L1929439-06	York SB020 0-3* 7/5/2019 L1929439-07	SB021 0·3' 7/5/2019 L1929439·08	SB021 3-6' 7/5/2019 L1929439-09	SB021 6-9' 7/5/2019 L1929439-10	SB022 SB023 0-3' 0-3' 7/5/2019 7/5/2019 0 L1929439-11 L1929439-12
od: 8270 D - Semivolatile Organic liphenyl .S-Tetrachlorobenzene	92-52-4 95-94-3	NS NS	NS NS	0.024			0.021 U			U 0.02		0.019	0.019	U 0.019	U 0.019	U 0.019 U 0.02 U
Trichlorobenzene ichlorobenzene	120-82-1 95-50-1	NS NS	NS NS	0.026 U			0.023 U 0.036 U	0.02 U 0.02 0.031 U 0.03	U 0.021	U 0.022 U 0.035		0.021	U 0.021 U 0.032	U 0.02 U 0.032	U 0.021 U 0.033	U 0.021 U 0.022 U U 0.033 U 0.035 U
Nphenylhydrazine Nchlorobenzene Nchlorobenzene	122-66-7 541-73-1 106-46-7	NS NS	NS NS	0.039 t			0.035 U	0.03 U 0.03 0.03 U 0.03		U 0.034 U 0.034		0.031 0.032	0.031 0.032	U 0.031 U 0.031	U 0.032	U 0.031 U 0.034 U U 0.032 U 0.034 U
Noxane ,6-Tetrachlorophenol	123-91-1 58-90-2	0.1 ^b NS	13 NS	0.01 t		:	0.0093 t	0.008 U 0.008		U 0.0091 I		0.0084	0.0083	0.0082	U 0.0084	U 0.0084 U 0.009 U
-Trichlorophenol -Trichlorophenol Nchlorophenol	95-95-4 88-06-2 120-83-2	NS NS	NS NS	0.044 t 0.043 t 0.037 t			0.039 t 0.038 t 0.033 t	0.034 U 0.03 0.033 U 0.03 0.028 U 0.02	U 0.035	U 0.038 U 0.037 U 0.032		0.035 0.035 0.029	U 0.035 U 0.034 U 0.029	U 0.034 U 0.034 U 0.029	U 0.035 U 0.035 U 0.03	U 0.035 U 0.037 U U 0.035 U 0.037 U U 0.029 U 0.031 U
Dimethylphenol Dinitrophenol	105-67-9 51-28-5	NS NS	NS NS	0.075 t			0.067 t 0.095 t	0.058 U 0.06 0.082 U 0.08	U 0.06 U 0.085	U 0.065 U 0.092		0.06	U 0.06 U 0.084	U 0.059 U 0.083	U 0.061 U 0.086	U 0.06 U 0.064 U U 0.085 U 0.091 U
Dinitrotoluene Dinitrotoluene hloronaphthalene	121-14-2 606-20-2 91-58-7	NS NS	NS NS	0.046 t 0.039 t 0.022 t	1		0.041 t 0.035 t 0.02 t	0.035 U 0.03 0.03 U 0.03 0.017 U 0.01	U 0.036 U 0.031 U 0.018	U 0.039 U 0.034 U 0.02		0.036 0.031 0.018	U 0.036 U 0.031 U 0.018	U 0.036 U 0.03 U 0.018	U 0.037 U 0.032 U 0.018	U 0.036 U 0.039 U U 0.031 U 0.033 U U 0.018 U 0.019 U
hlorophenol lethylnaphthalene	95-57-8 91-57-6	NS NS	NS NS	0.027 t		:	0.024 t	0.021 U 0.02 0.021 U 0.09	U 0.022 J 0.032	U 0.023 I		0.022 0.12	0.021 0.039	U 0.021 J 0.78	U 0.022 0.022	U 0.022 U 0.023 U U 0.071 J 0.024 U
Vethylphenol Vitroaniline Vitrophenol	95-48-7 88-74-4 88-75-5	0.33 ^b NS NS	100° NS NS	0.035 t 0.044 t 0.086 t		:	0.031 t 0.039 t 0.076 t	0.027 U 0.02 0.034 U 0.03 0.066 U 0.06	U 0.028 U 0.035 U 0.069	U 0.03 U 0.038 U 0.074		0.028 0.035 0.069	U 0.028 U 0.035 U 0.068	U 0.028 U 0.034 U 0.067	U 0.028 U 0.035 U 0.069	U 0.028 U 0.03 U U 0.035 U 0.038 U U 0.069 U 0.073 U
1-Methylphenol '-Dichlorobenzidine	106-44-5 91-94-1	100° NS	100° NS	0.077 0.06	:		0.032 t 0.054 t	0.027 U 0.02 0.046 U 0.04	U 0.029 U 0.048	U 0.031 U 0.052		0.028 0.048	U 0.028 U 0.048	U 0.028 U 0.047	U 0.029 U 0.049	U 0.029 U 0.03 U U 0.049 U 0.052 U
Vitroaniline i-Dinitro-o-cresol Gromonhenyl phenyl ether	99-09-2 534-52-1 101-55-3	NS NS	NS NS	0.043 U 0.11 U 0.035 U		:	0.038 U 0.097 U 0.031 U	0.033 U 0.03 0.084 U 0.08 0.027 U 0.02	U 0.034 U 0.088 U 0.028	U 0.037 U 0.095 U 0.03		0.034 0.088 0.028	U 0.034 U 0.087 U 0.028	U 0.034 U 0.086 U 0.027	U 0.035 U 0.088 U 0.028	U 0.034 U 0.037 U U 0.088 U 0.094 U U 0.028 U 0.03 U
Chloro-3-methylphenol Chloroaniline	59-50-7 106-47-8	NS NS	NS NS	0.034 t		:	0.03 t 0.037 t 0.022 t	0.026 U 0.02 0.032 U 0.03 0.019 U 0.03	U 0.027 U 0.033 U 0.02	U 0.029 U 0.036		0.027 0.033 0.02	U 0.027 U 0.033 U 0.019	U 0.026 U 0.032 U 0.019	U 0.027 U 0.033	U 0.027 U 0.029 U U 0.033 U 0.035 U U 0.02 U 0.021 U
hlorophenyl phenyl ether Fitroaniline Fitrophenol	7005-72-3 100-01-6 100-02-7	NS NS	NS NS	0.024 t 0.094 t 0.093 t			0.022 U 0.084 U 0.083 U	0.019 U 0.02 0.072 U 0.07 0.071 U 0.07	U 0.076	U 0.021 U 0.082 U 0.08	J -	0.02 0.076 0.074	U 0.019 U 0.075 U 0.074	U 0.019 U 0.074 U 0.073	U 0.02 U 0.076 U 0.075	U 0.02 U 0.021 U U 0.076 U 0.081 U U 0.074 U 0.08 U
enaphthene enaphthylene	83-32-9 208-96-8	20 100°	100°	0.024 t 0.035 t		:	0.021 t	0.023 J 0.09 0.088 J 0.08	J 0.026 J 0.33	J 0.061 0.06	:	0.12 0.19	0.019 0.042	U 1 J 0.22	0.019	U 0.1 J 0.02 U U 0.11 J 0.03 U
tophenone line thracene	98-86-2 62-53-3 120-12-7	NS NS 100°	NS 100 ³ 100 ³	0.028 t		:	0.025 t	0.022 U 0.02 	U 0.023 - 0.16	U 0.024 I		0.022	0.022	U 0.022	U 0.023 - 0.036	U 0.023 U 0.024 U
azine izaldehyde	1912-24-9 100-52-7	NS NS	NS NS			:			:		:			:	:	
zidine zo(a)anthracene zo(a)zvrene	92-87-5 56-55-3 50-32-8	NS 1 ^c	NS 1 ^f	0.12 0.12			0.14 0.19	0.38 0.48 0.36 0.33	0.62 0.58	0.58 0.54		1.2	0.18 0.18	9 7.2	0.067 0.062	
zo(a)pyrene zo(b)fluoranthene zo(ghi)perylene	205-99-2 191-24-2	1° 100	1 ^f 100 ^a	0.12		:	0.16 0.16	0.45 0.52 0.24 0.25	0.7 0.42	0.71 0.33	:	1.4 0.62	0.25 0.13	9.2 J 5.6	0.08 0.041	J 1.1 0.056 J J 0.5 0.028 J
zo(k)fluoranthene zoic Acid zvl Alcohol	207-08-9 65-85-0 100-51-6	0.8° NS NS	3.9 NS NS	0.052 0.23 t 0.07 t		:	0.032 t 0.2 t 0.062 t	0.17 0.19 0.18 U 0.18 0.054 U 0.05	0.26 U 0.18 U 0.056	0.26 U 0.2 U 0.06		0.45 0.18 0.056	0.072 0.18 0.055	U 0.18 U 0.054	0.029 U 0.19 U 0.056	U 0.95 0.031 U U 0.18 U 0.2 U U 0.056 U 0.06 U
nenyl yl benzyl phthalate	92-52-4 85-68-7	NS NS	NS NS	0.053 t 0.057 t	:	:	0.047 t 0.051 t	0.041 U 0.04 0.044 U 0.04	U 0.042 U 0.046	U 0.046 U 0.05		0.042 0.046	U 0.042 U 0.046	U 0.13 U 0.045	J 0.043 U 0.046	U 0.042 U 0.045 U U 0.046 U 0.049 U
2-chloroethoxy methane 2-chloroethyl]ether 2-chloroisopropyl]ether	111-91-1 111-44-4 108-60-1	NS NS	NS NS	0.023 U 0.031 U 0.039 U			0.02 t 0.028 t 0.035 t	0.018 U 0.01 0.024 U 0.02 0.03 U 0.03	U 0.018 U 0.025	U 0.02 U U 0.027 U U 0.034		0.018 0.025 0.031	U 0.018 U 0.024 U 0.031	U 0.018 U 0.024 U 0.03	U 0.018 U 0.025 U 0.031	U 0.018 U 0.02 U U 0.025 U 0.026 U U 0.031 U 0.033 U
2-chloroisopropyljether 2-Ethylhexyl]phthalate rolactam	117-81-7 105-60-2	NS NS	NS NS	0.079			0.07 t	0.06 U 0.06	U 0.49	0.17		0.063	0.062	0.062	U 0.064	U 0.063 U 0.067 U
nazole ysene mzo(a,h)anthracene	86-74-8 218-01-9 53-70-3	NS 1° 0.33 ^b	NS 3.9 0.33°	0.022 U 0.12 0.026 U			0.02 t 0.24 0.062	0.038 J 0.09 0.35 0.5 0.057 J 0.06	J 0.045 0.72 J 0.11	J 0.067 0.57 0.096	:	0.13 1.2 0.16	0.018 0.19 0.032	0.31 6.9	0.018 0.058 0.021	U 0.1 J 0.0149 U J 0.95 0.045 J U 0.12 0.022 U
enzofuran chyl phthalate	132-64-9 84-66-2	7 NS	59 NS	0.022 t		-	0.019 t	0.019 J 0.11 0.016 U 0.01	J 0.024 U 0.017	J 0.03 U 0.018		0.14 0.017	J 0.017 J 0.017	U 0.47 U 0.016	0.017 U 0.017	U 0.056 J 0.018 U U 0.017 U 0.018 U
ethyl phthalate -butylphthalate -octylphthalate	131-11-3 84-74-2 117-84-0	NS NS NS	NS NS	0.048 t 0.043 t 0.077 t	-		0.043 U 0.038 U 0.069 U	0.037 U 0.01 0.05 J 0.12 0.062 U 0.06	U 0.038 J 0.035 U 0.062	U 0.041 U 0.054 U 0.067		0.038 0.035 0.062	U 0.038 U 0.034 U 0.061	U 0.037 U 0.034 U 0.06	U 0.039 U 0.035 U 0.062	U 0.038 U 0.041 U U 0.043 J 0.037 U U 0.062 U 0.066 U
ranthene rene	206-44-0 86-73-7	100° 30	100°	0.21 0.022 t			0.11 0.02 t	0.68 1.2 0.017 U 0.13	0.85 J 0.018	0.78 U 0.044		2.1 0.15	0.27 J 0.018	16 U 0.94	0.12 0.018	1.7 0.078 J U 0.093 J 0.019 U
achlorobenzene achlorobutadiene achlorocyclopentadiene	118-74-1 87-68-3 77-47-4	0.33 ^b NS NS	1.2 NS	0.025 U 0.033 U 0.21 U		-	0.023 U 0.03 U 0.18 U	0.02 U 0.02 0.026 U 0.02 0.16 U 0.01	U 0.02 U 0.027	U 0.022 U 0.029 U 0.18		0.02 0.027 0.16	U 0.02 U 0.026 U 0.16	U 0.02 U 0.026 U 0.16	U 0.02 U 0.027 U 0.17	U 0.02 U 0.022 U U 0.027 U 0.028 U U 0.16 U 0.18 U
achiorocyciopentamene achioroethane no(1,2,3-cd)Pyrene	67-72-1 193-39-5	NS 0.5°	NS NS 0.5 ^f	0.037 t 0.066			0.033 t	0.028 U 0.3 0.25 0.25	U 0.03 0.41	U 0.032 I		0.03	0.029	U 0.029 5.8	U 0.03	U 0.03 U 0.032 U J 0.52 0.028 J
horone hthalene	78-59-1 91-20-3	NS 12	NS 100°	0.03 t 0.039		:	0.026 t	0.023 U 0.02 0.031 J 0.13	U 0.024 J 0.058	U 0.026 I J 0.072		0.024 0.22	0.023 0.031	U 0.023 J 0.78	U 0.024 0.022	U 0.024 U 0.025 U U 0.096 J 0.024 U
obenzene itrosodimethylamine itrosodi-n-propylamine	98-95-3 62-75-9 621-64-7	NS NS NS	15 NS NS	0.034			0.03 t	. 0.026 U 0.02 		U 0.029 I		0.027	U 0.027 U 0.028	U 0.026 U 0.028	U 0.027 U 0.028	U 0.027 U 0.029 U U U 0.028 U 0.03 U
osoDiPhenylAmine(NDPA)/DPA tachlorophenol	86-30-6 87-86-5	NS 0.8 ^b	NS 6.7	0.026 t			0.023 t 0.045 t	0.02 U 0.02 0.038 U 0.04	U 0.021 U 0.04	U 0.022 I		0.021	U 0.02 U 0.04	U 0.02 U 0.039	U 0.021 U 0.04	U 0.021 U 0.022 U U 0.04 U 0.043 U
manthrene mol ene	85-01-8 108-95-2 129-00-0	100 0.33 ^b 100	100° 100° 100°	0.13 0.034 0.22			0.054 0.031 U 0.17	0.35 1.1 0.026 U 0.02 0.65 1	0.41 U 0.028 0.91	0.5 U 0.03 1 0.71		1.6 0.028 2	0.15 U 0.027 0.29	10 U 0.027 16	0.077 U 0.028 0.12	J 1.1 0.039 J U 0.028 U 0.029 U 1.6 0.07 J
fdine thod: 6010C - Metals (ICP) - (mg/kg	110-86-1	NS .	NS													
minum, Total imony, Total enic, Total	7429-90-5 7440-36-0 7440-38-2	NS NS 13 ^c	NS NS 16 ^f	16.9	22.1	7.99	3.68	10,700 4,88 0.322 U 0.83 1.77 5.94	10,700 J 1.46 4.92	6,900 J 9.27 21.3	1.01	7,440 5.49 10.2	11,400 0.315 2.84	8,250 U 1.18 7.84		5,680 7,720 4.29 9.20 7.99 2.67
ium, Total yllium, Total	7440-39-3 7440-41-7	350° 7.2	400 72	44.2			66.6	86.7 83.4 0.279 J 0.23	185 J 0.410	275 J 0.373		217 0.29	83.4 J 0.315	121 J 0.288		300 54.0 0.22 J 0.309 J
mium, Total rium, Total omium, Total	7440-43-9 7440-70-2 7440-47-3	2.5° NS 30°	4.3 NS 180 ^b					0.083 U 0.24 1,920 14,50 24.3 13.6		J 3.40 15,100 49.1	:	0.932 11,400 25.4	0.091 2,790 24.3	J 0.524 11,300 16.0		0.881 0.089 U 9,490 14,300 13.3 15.3
alt, Total per, Total . Total	7440-48-4 7440-50-8 7439-89-6	NS 50 NS	NS 270 NS	5,470	16,300	18.1	21.8	9.65 5.81 28.9 44.6 19,200 12,20	9.68 81.7 19,800	7.63 183 28,200	:	11 133 39,000	12.1 28.2 20,800	8.08 189 26,300	- :	6.76 7.14 137 17.4 24,100 12,600
i, Total d, Total mesium	7439-89-6 7439-92-1 7439-92-1	63 ⁴ NS	400 NS	3,160	988	13.9	227	23.9 190 3,580 6,74	182	1,060 4,060	71.8	389 4,350	32.7 3,820	145 3,480		240 317 4,450 4,600
nganese, Total kel, Total	7439-96-5 7440-02-0	1,600° 30	2,000° 310	:		:		191 205 13.5 13.1	234 22.4	236 43.1	:	385 23.9	747 15.5	278 26.1		279 233 13.7 11.7
isium, Total nium, Total er, Total	7440-09-7 7782-49-2 7440-22-4	NS 3.9° 2	NS 180 180					4,310 1,04 0.218 U 0.64 0.24 U 0.25	3,220 J 0.296 U 0.247	1,280 J 1.77 U 0.680		2,090 0.227 0.352	5,110 U 0.214 U 0.234	1,960 U 0.364 U 0.651	I .	1,120 2,530 0.218 U 0.234 U 0.24 U 0.257 U
ium, Total Ilium, Total	7440-23-5 7440-23-5	NS NS	NS NS	:		:		228 201 0.267 U 0.28	150 U 0.274	J 334 U 0.302 I		288 0.277	249 U 0.261	320 U 0.266		120 J 109 J 0.267 U 0.286 U
adium, Total ; Total hod: 7471B - Mercury (CVAA) - (m	7440-62-2 7440-66-6 2/kg)	NS 109 ^c	NS 10,000 ^d	:		•		34.8 17.4 65 160	49.1 375	82.2 1,250	:	30 360	33.4 83.2	20.5 207		24.9 19.5 285 49.1
cury, Total hod: 8081B - Organochlorine Pesti	7439-97-6 cides (GC) - (mg/kg)		0.81 ⁱ					0.078 0.53	0.826	0.784		0.924	0.045	U 0.143		0.341 0.247
DDD DDE DDT	72-54-8 72-55-9 50-29-3	0.0033 ^b 0.0033 ^b	13 8.9 7.9	0.000772 U 0.0005 U 0.00174 U			0.000682 U 0.000442 U 0.00154 U	0.000385 U -		-		0.00478 0.00318 0.00142	P -		-	0.00231 - 0.00228 P - 0.0074 IP -
in na-BHC	309-00-2 319-84-6	0.005° 0.02	0.097 0.48	0.000762 U 0.000256 U		:	0.000673 U 0.000226 U	0.000586 U - 0.000197 U -	i	- :	:	0.000623 0.00021	J -	:	÷	0.000596 U - 0.0002 U -
a-Chlordane -BHC rdane, total	5103-71-9 319-85-7 57-74-9	0.094 0.036 NS	4.2 0.36 NS	0.000754 t 0.00082 t 0.00717 t			0.00633 U	0.000631 U - 0.00551 U -		-		0.00108 0.000671 0.00586				0.00059 U - 0.000642 U - 0.00561 U -
a-BHC drin	319-86-8 60-57-1	0.04 0.005°	100° 0.2	0.000424 U		÷	0.000374 U 0.000597 U	0.000326 U - 0.00177 -		- 1	:	0.000347 0.000553		÷	÷	0.000331 U - 0.00172 IP -
rin rin aldehyde rin Ketone	72-20-8 7421-93-4 53494-70-5	0.014 NS NS	NS NS	0.00037 t 0.000947 t 0.000557 t			0.000326 U 0.000836 U 0.000492 U	0.000284 U - 0.000728 U - 0.000428 U -	-	-	:	0.000302 0.000774 0.000456	J .		-	0.000289 U - 0.00074 U - 0.000436 U -
ma-BHC (Lindane) ma-Chlordane	58-89-9 5566-34-7	0.1 NS	1.3 NS	0.000403		÷	0.000356 U	0.00031 U -		- 1	:	0.00033		÷	÷	0.000315 U -
tachlor tachlor epoxide hoxychlor	76-44-8 1024-57-3 72-43-5	0.042 NS NS	2.1 NS NS	0.000485 t 0.00122 t 0.00126 t			0.00111 U	0.000373 U - 0.000936 U - 0.00097 U -	-			0.000397 0.000996 0.00103	J .			0.000379 U - 0.000952 U - 0.000987 U -
sphene s-Chlordane	8001-35-2 5103-74-2	NS NS	NS NS	0.0114 U		:	0.01 t 0.00343 II	0.00873 U - 0.000549 U -	:	1	:	0.00929 0.000584		- :	1	0.00888 U - 0.000558 U -
osulfan II osulfan II osulfan sulfate	959-98-8 33213-65-9 1031-07-8	NA NA NA	NA NA NA	0.000511 U 0.000723 U 0.000429 U			0.000638 U	0.000393 U - 0.000556 U - 0.00033 U -				0.000418 0.000592 0.000351				0.0004 U - 0.000568 JIP - 0.000336 U -
	enyls (PCBs) by Gas Chroma	2.4 ^d stography - (mg/kg)	24	0.000723			0.000638 U	0.000556 U -				0.000592				0.000568 µР -
osulfan (Sum) nod: 8082A - Polychlorinated Biph	12674-11-2	NS NS NS	NS NS NS	0.00403 t 0.00455 t 0.00963 t				0.00308 U - 0.00348 U - 0.00737 U -		-		0.00318 0.00359 0.0076				0.00318 U - 0.00359 U - 0.0076 U -
osulfan (Sum) hod: 8082A - Polychlorinated Biph clor 1016 clor 1221	11104-28-2 11141-16-5		NS NS	0.00612 U			0.00542 U 0.00603 U	0.00468 U - 0.00521 U -	- :	- 1	:	0.00484			- :	0.00483 U - 0.00538 U -
osulfan (Sum) hod: 8082A - Polychlorinated Biph clor 1016 clor 1221 clor 1232 clor 1242 clor 1254	11141-16-5 53469-21-9 11097-69-1	NS NS		-			0.0044 t	0.0038 U - 0.00642 U -			1	0.0585	1 :			0.0408 P -
osulfan (Sum) hod: 8082A - Polychlorinated Biph clor 1016 clor 1221 clor 1232 clor 1242	11141-16-5 53469-21-9		NS NS NS	0.00497 0 0.0084 0 0.00577 0			0.00743 t 0.00511 t	0.00842 U -	-			0.00456				0.0194 J - 0.00455 U -

Client Sample ID: Sampling Date:	CAS No.	NYS AWQS & GVs June 1998 ⁽¹⁾	MW003 5/10/2019	DUPE003 5/10/2019	MW004 5/10/2019
Laboratory ID:		1998 💛	19E0591-33	19E0591-37	19E0591-34
Method: 8260 C - Volatile Organic Compounds - (μg/L)	(20.20.6	F*	0.200 U	0.200 U	0.200 U
1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane	630-20-6 71-55-6	5* 5*	0.200 U 0.200 U	0.200 U	0.200 U
1,1,2,2-Tetrachloroethane	79-34-5	5*	0.200 U	0.200 U	0.200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5*	0.200 U	0.200 U	0.200 U
1,1,2-Trichloroethane	79-00-5	1	0.200 U	0.200 U	0.200 U
1,1-Dichloroethane	75-34-3	5*	0.200 U	0.200 U	0.200 U
1,1-Dichloroethene	75-35-4	5* 5*	0.200 U 0.200 U	0.200 U 0.200 U	0.200 U 0.200 U
1,1-Dichloropropylene 1,2,3-Trichlorobenzene	563-58-6 87-61-6	5*	0.200 U	0.200 U	0.200 U
1,2,3-Trichloropropane	96-18-4	0.04	0.200 U	0.200 U	0.200 U
1,2,4-Trichlorobenzene	120-82-1	5*	0.200 U	0.200 U	0.200 U
1,2,4-Trimethylbenzene	95-63-6	5*	0.200 U	0.200 U	0.200 U
1,2-Dibromo-3-chloropropane	96-12-8	0.04	0.200 U 0.200 U	0.200 U 0.200 U	0.200 U
1,2-Dibromoethane 1,2-Dichlorobenzene	106-93-4 95-50-1	0.0006 3**	0.200 U 0.200 U	0.200 U 0.200 U	0.200 U 0.200 U
1,2-Dichloroethane	107-06-2	0.6	0.200 U	0.200 U	0.200 U
1,2-Dichloropropane	78-87-5	1	0.200 U	0.200 U	0.200 U
1,3,5-Trimethylbenzene	108-67-8	5*	0.200 U	0.200 U	0.200 U
1,3-Dichlorobenzene	541-73-1	3**	0.200 U	0.200 U	0.200 U
1,3-Dichloropropane	142-28-9	5*	0.200 U	0.200 U 0.200 U	0.200 U
1,4-Dichlorobenzene 1,4-Dioxane	106-46-7 123-91-1	3** NS	0.200 U 40.0 U	0.200 U 40.0 U	0.200 U 40.0 U
2,2-Dichloropropane	594-20-7	NS 5*	0.200 U	0.200 U	0.200 U
2-Butanone	78-93-3	50	0.200 U	0.200 U	0.200 U
2-Chlorotoluene	95-49-8	5*	0.200 U	0.200 U	0.200 U
2-Hexanone	591-78-6	50	0.200 U	0.200 U	0.200 U
4-Chlorotoluene	106-43-4	5*	0.200 U	0.200 U	0.200 U
4-Methyl-2-pentanone Acetone	108-10-1 67-64-1	NS 50	0.200 U 1.00 U	0.200 U 1.000 U	0.200 U 1.80 J
Acrolein	107-02-8	5*	0.200 U	0.200 U	0.200 U
Acrylonitrile	107-13-1	5*	0.200 U	0.200 U	0.200 U
Benzene	71-43-2	1	0.200 U	0.200 U	0.200 U
Bromobenzene	108-86-1	5*	0.200 U	0.200 U	0.200 U
Bromochloromethane	74-97-5	5*	0.200 U	0.200 U	0.200 U
Bromodichloromethane Bromoform	75-27-4 75-25-2	50 50	0.200 U 0.200 U	0.200 U 0.200 U	0.200 U 0.200 U
Bromomethane	74-83-9	5*	0.200 U	0.200 U	0.200 U
Carbon Disulfide	75-15-0	60	0.200 U	0.200 U	0.450 J
Carbon Tetrachloride	56-23-5	5	0.200 U	0.200 U	0.200 U
Chlorobenzene	108-90-7	5*	0.200 U	0.200 U	0.200 U
Chloroethane	75-00-3	5* 7	0.200 U 0.200 U	0.200 U 0.200 U	0.200 U 0.200 U
Chloroform Chloromethane	67-66-3 74-87-3	5*	0.200 U	0.200 U	0.200 U
cis-1,2-Dichloroethylene	156-59-2	5*	0.200 U	0.200 U	0.200 U
cis-1,3-Dichloropropylene	10061-01-5	0.4***	0.200 U	0.200 U	0.200 U
Cyclohexane	110-82-7	NS	0.200 U	0.200 U	0.200 U
Dibromochloromethane	124-48-1	50	0.200 U	0.200 U	0.200 U
Dibromomethane Dichlorodifluoromethane	74-95-3 75-71-8	5* 5*	0.200 U 0.200 U	0.200 U 0.200 U	0.200 U 0.200 U
Ethyl Benzene	100-41-4	5*	0.200 U	0.200 U	0.200 U
Hexachlorobutadiene	87-68-3	0.5	0.200 U	0.200 U	0.200 U
Isopropylbenzene	98-82-8	5*	0.200 U	0.200 U	10.6
Methyl acetate	79-20-9	NS	0.200 U	0.200 U	0.200 U
Methyl tert-butyl ether (MTBE)	1634-04-4	10 NC	0.200 U	0.200 U	0.200 U
Methylcyclohexane Methylene chloride	108-87-2 75-09-2	NS 5*	0.200 U	0.200 U	0.260 J 1.00 U
n-Butylbenzene	104-51-8	5*	0.200 U	0.200 U	1.64
N-Propylbenzene	103-65-1	5*	0.200 U	0.200 U	16.4
o-Xylene	95-47-6	5*	0.200 U	0.200 U	0.200 U
p- & m- Xylenes	179601-23-1	5*	0.500 U	0.500 U	0.500 U
p-Isopropyltoluene	99-87-6	5* F*	0.200 U 0.200 U	0.200 U 0.200 U	0.200 U 5.96
sec-Butylbenzene Styrene	135-98-8 100-42-5	5* 5*	0.200 U	0.200 U	0.200 U
tert-Butyl alcohol (TBA)	75-65-0	NS NS	0.200 U	0.500 U	0.200 U
tert-Butylbenzene	98-06-6	5*	0.200 U	0.200 U	1.91
Tetrachloroethene	127-18-4	5*	0.200 U	0.200 U	0.200 U
Toluene	108-88-3	5*	0.200 U	0.200 U	0.200 U
trans-1,2-Dichloroethylene	156-60-5	5*	0.200 U	0.200 U	0.200 U
trans-1,3-Dichloropropylene Trichloroethene	10061-02-6 79-01-6	0.4*** 5*	0.200 U 0.200 U	0.200 U 0.200 U	0.200 U 0.200 U
Trichloroethene	79-01-6 75-69-4	5* 5*	0.200 U	0.200 U	0.200 U
Vinyl acetate	108-05-4	NS NS	0.200 U	0.200 U	0.200 U
Vinyl Chloride	75-01-4	2	0.200 U	0.200 U	0.200 U
Xylenes, Tital	1330-20-7	5*	0.600 U	0.600 U	0.600 U

Notes:
(1) NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) - Ambient Water Quality Standards and Guidance Values - GA Water Class, Type H(WS) - Source of Drinking Water (Groundwater)

* The principal organic contaminant standard for groundwater of 5µg/L applies to this substance.

** - Applies to the sum of 1,2-, 1,3- and 1,4-xylene

*** - Applies to the sum of cis- and trans-1,3-dichloropropylene.

U - Indicates the analyte was analyzed for but not detected.

Highlighted text denotes concentrations exceeding NYSDEC AWQS or GV for GA Water Class, Type H(WS)

 $[\]label{eq:concentration} \textbf{J} - \textbf{Result} \ \textbf{is} \ \textbf{less} \ \textbf{than} \ \textbf{the} \ \textbf{RL} \ \textbf{but} \ \textbf{greater} \ \textbf{than} \ \textbf{or} \ \textbf{equal} \ \textbf{to} \ \textbf{the} \ \textbf{MDL} \ \textbf{and} \ \textbf{the} \ \textbf{concentration} \ \textbf{is} \ \textbf{an} \ \textbf{approximate} \ \textbf{value}.$

Client Sample ID: Sampling Date: Laboratory ID:	CAS No.	NYS AWQS & GVs June 1998 ⁽¹⁾	MW003 5/10/2019 19E0591-3		DUPE003 5/10/2019 19E0591-37	MW004 5/10/2019 19E0591-34
Method: 8270 D - Semivolatile Organic Compounds - (μg/L)						
1,1-Biphenyl	92-52-4	5* 5*	2.78	U	2.70 U 2.70 U	
1,2,4,5-Tetrachlorobenzene 1,2,4-Trichlorobenzene	95-94-3 120-82-1	5*	2.78	U	2.70 U	
1,2-Dichlorobenzene	95-50-1	3	2.78	U	2.70 U	
1,2-Diphenylhydrazine	122-66-7	ND	2.78	U	2.70 U	2.78 U
1,3-Dichlorobenzene	541-73-1	3	2.78	U	2.70 U	
1,4-Dichlorobenzene	106-46-7	3	2.78	U	2.70 U	
2,3,4,6-Tetrachlorophenol	58-90-2	NS	2.78	U	2.70 U	
2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	95-95-4 88-06-2	NS NS	2.78	U	2.70 U 2.70 U	
2,4-Dichlorophenol	120-83-2	5*	2.78	U	2.70 U	
2,4-Dimethylphenol	105-67-9	50	2.78	U	2.70 U	
2,4-Dinitrophenol	51-28-5	10	2.78	U	2.70 U	2.78 U
2,4-Dinitrotoluene	121-14-2	5*	2.78	U	2.70 U	
2,6-Dinitrotoluene	606-20-2	5*	2.78	U	2.70 U	
2-Chloronaphthalene	91-58-7	10	2.78	U	2.70 U	
2-Chlorophenol	95-57-8	NS	2.78	U	2.70 U 2.70 U	
2-Methylnaphthalene 2-Methylphenol	91-57-6 95-48-7	NS NS	2.78	U	2.70 U	
2-Nitroaniline	88-74-4	5*	2.78	U	2.70 U	
2-Nitrophenol	88-75-5	NS NS	2.78	U	2.70 U	
3- & 4-Methylphenols	65794-96-9	NS NS	2.78	U	2.70 U	
3,3-Dichlorobenzidine	91-94-1	5*	2.78	U	2.70 U	
3-Nitroaniline	99-09-2	5*	2.78	U	2.70 U	
4,6-Dinitro-2-methylphenol	534-52-1	NS	2.78	U	2.70 U	
4-Bromophenyl phenyl ether	101-55-3	NS	2.78	U	2.70 U	
4-Chloro-3-methylphenol	59-50-7	NS	2.78	U	2.70 U	
4-Chloroaniline	106-47-8	5*	2.78	U	2.70 U	
4-Chlorophenyl phenyl ether	7005-72-3	NS F*	2.78	U U	2.70 U 2.70 U	
4-Nitroaniline 4-Nitrophenol	100-01-6 100-02-7	5* NS	5.56	U	5.41 U	
Acenaphthene	83-32-9	20	0.0556	U	0.0541 U	
Acenaphthylene	208-96-8	NS	0.0556	U	0.0541 U	
Acetophenone	98-86-2	NS	2.78	U	2.70 U	
Aniline	62-53-3	5*	2.78	U	2.70 U	2.78 U
Anthracene	120-12-7	50	0.0556	U	0.0541 U	
Atrazine	1912-24-9	7.5	0.556	U	0.541 U	
Benzaldehyde	100-52-7	NS	2.78	U	2.70 U	
Benzidine	92-87-5	5*	5.56 27.8	U	5.41 U 27.0 U	
Benzoic acid	65-85-0 100-51-6	NS NS	2.78	U	2.70 U	
Benzyl alcohol Benzo(a)anthracene	56-55-3	0.002	0.100	0	0.0541 U	
Benzo(a)pyrene	50-32-8	ND	0.122		0.0541 U	
Benzo(b)fluoranthene	205-99-2	0.002	0.122		0.0541 U	0.0556 U
Benzo(ghi)perylene	191-24-2	NS	0.100		0.0541 U	0.0556 U
Benzo(k)fluoranthene	207-08-9	0.002	0.0889		0.0541 U	
Benzyl butyl phthalate	85-68-7	50	2.78	U	2.70 U	
Bis(2-chloroethoxy)methane	111-91-1	5*	2.78	U	2.70 U	
Bis(2-chloroethyl)ether	111-44-4	1.0	1.11 0.556	U	1.08 U 0.541 U	
Bis(2-ethylhexyl)phthalate Bis(2-chloroisopropyl)ether	117-81-7 108-60-1	5 5*	2.78	U	2.70 U	
Caprolactam	105-60-2	NS NS	2.78	U	2.70 U	
Carbazole	86-74-8	NS	2.78	U	2.70 U	
Chrysene	218-01-9	0.002	0.0778		0.0541 U	0.0556 U
Dibenzo(a,h)anthracene	53-70-3	NS	0.0556		0.0541 U	0.0556 U
Dibenzofuran	132-64-9	NS	2.78	U	2.70 U	2.78 U
Diethyl phthalate	84-66-2	50	2.78	U	2.70 U	
Dimethyl phthalate	131-11-3	50	2.78	U	2.70 U	
Di-n-butyl phthalate	84-74-2	50	2.78	U	2.70 U 2.70 U	
Di-n-octyl phthalate	117-84-0	50	0.167	U	0.0541 U	
Fluoranthene Fluorene	206-44-0 86-73-7	50 50	0.0556	U	0.0541 U	
Hexachlorobenzene	118-74-1	0.04	0.0222	U	0.0216 U	
Hexachlorobutadiene	87-68-3	0.5	0.556	U	0.541 U	
Hexachlorocyclopentadiene	77-47-4	5*	5.56	U	5.41 U	
Hexachloroethane	67-72-1	5*	0.556	U	0.541 U	
Indeno(1,2,3-cd)Pyrene	193-39-5	0.002	0.0778		0.0541 U	
Isophorone	78-59-1	50	2.78	U	2.70 U	
Naphthalene	91-20-3	10	0.0556	U	0.0541 U	
Nº		0.4	0.278	U	0.270 U 2.70 U	
Nitrobenzene	98-95-3	MC		U	4./U U	
N-nitrosodi-n-propylamine	621-64-7	NS 50	2.78	П		2 78 11
N-nitrosodi-n-propylamine N-Nitrosodiphenylamine	621-64-7 86-30-6	50	2.78 2.78 0.556	U U	2.70 U 0.541 U	
N-nitrosodi-n-propylamine N-Nitrosodiphenylamine N-Nitrosodimethylamine	621-64-7		2.78	_	2.70 U	0.556 U
N-nitrosodi-n-propylamine N-Nitrosodiphenylamine	621-64-7 86-30-6 62-75-9	50 NS	2.78 0.556	U	2.70 U 0.541 U	0.556 U 0.278 U
N-nitrosodi-n-propylamine N-Nitrosodiphenylamine N-Nitrosodimethylamine Pentachlorophenol	621-64-7 86-30-6 62-75-9 87-86-5	50 NS 1	2.78 0.556 0.278	U	2.70 U 0.541 U 0.270 U	0.556 U 0.278 U 0.300
N-nitrosodi-n-propylamine N-Nitrosodiphenylamine N-Nitrosodimethylamine Pentachlorophenol Phenanthrene	621-64-7 86-30-6 62-75-9 87-86-5 85-01-8	50 NS 1 50	2.78 0.556 0.278 0.122	U	2.70 U 0.541 U 0.270 U 0.0541 U	0.556 U 0.278 U 0.300 4.72 J 0.0778

Notes:

- (1) NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values GA Water Class, Type H(WS) Source of Drinking Water (Groundwater)
- *The principal organic contaminant standard for groundwater of 5µg/L applies to this substance.
- J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
- U Indicates the analyte was analyzed for but not detected.

Table 5Groundwater Analytical Data Summary
Metals (Total and Dissolved)

Client Sample ID: Sampling Date: Laboratory ID:	CAS No.	NYS AWQS & GVs June 1998	5	7003 72019 591-33	5		E003 /2019 91-37	5/10	MW004 5/10/2019 19E0591-34	
			Total		Dissolved	Total		Dissolved	Total	Dissolved
Method: 6010 D - Metals - (μg/L)										
Aluminum	7429-90-5	NS	536		55.6 U	492		72.8	17,800	82.2
Antimony	7440-36-0	3	1.38		11.1 U	1.34		11.1	J 1.25	11.1 U
Arsenic	7440-38-2	25	4.26		11.1 U	3.97		11.1	J 16.4	20.3
Barium	7440-39-3	1,000	39.5		34.6	40		35.0	271	93.7
Beryllium	7440-41-7	3	0.333	U	3.33 U	0.333	U	3.33	J 0.333 U	3.33 U
Cadmium	7440-43-9	5	0.556	U	5.56 U	0.556	U	5.56	J 2.31	5.56 U
Calcium	7440-70-2	NS	80,600		77,500	81,200		77,900	202,000	103,000
Chromium	7440-47-3	50	5.56	U	5.56 U	5.56	U	5.56	J 34.8	5.56 U
Cobalt	7440-48-4	NS	4.44	U	4.44 U	4.44	U	4.44	J 17	4.44 U
Copper	7440-50-8	200	22.2	U	22.2 U	22.2	U	22.2	J 398	22.2 U
Iron	7439-89-6	300	822		278 U	773		278	20,300	278 U
Lead	7439-92-1	25	5.56	U	5.56 U	5.56	U	5.56	J 203	5.56 U
Magnesium	7439-92-1	35,000	94,700		88,100	95,700		88,200	110,000	75,900
Manganese	7439-96-5	300	48.1		20.2	50		20.4	610	30.8
Nickel	7440-02-0	100	11.1	U	11.1 U	11.1	U	11.1	J 29.5	11.1 U
Potassium	7440-09-7	NS	33,700		31,200	34,200		31,300	80,900	70,600
Selenium	7782-49-2	10	32.4		11.1 U	27.5		11.1	J 56.4	12.7
Silver	7440-22-4	50	5.56	U	5.56 U	5.56	U	5.56	J 5.56 U	5.56 U
Sodium	7440-23-5	20,000	905,000		847,000	933,000		857,000	1,630,000	1,260,000
Thallium	7440-23-5	0.5	1.11	U	11.1 U	1.11	U	11.1	J 1.11 U	11.1 U
Vanadium	7440-62-2	NS	11.1	U	11.1 U	11.1	U	11.1	J 47.9	20.2
Zinc	7440-66-6	2,000	29.4		27.8 U	27.9		27.8	J 933	27.8 U
Method: 7473 - Mercury - (μg/L)										
Mercury	7439-97-6	0.7	0.20	U	0.20 U	0.20	U	0.20	J 0.20 U	0.20 U

Notes:

- (1) NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values GA Water Class, Type H(WS) Source of Drinking Water (Groundwater) NS No Standard
- U The analyte was analyzed for, but was not detected above the reported sample quantification limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Highlighted text denotes concentrations exceeding NYSDEC AWQS or GV for GA Water Class, Type H(WS)

Groundwater Analytical Data Summary Pesticides

EPA Method 8081 PCBs EPA Method 8082

Client Sample ID: Sampling Date:	CAS No.	NYS AWQS & GVs June 1998	MW003 5/10/2019	DUPE003 5/10/2019	MW004 5/10/2019
Laboratory ID: Method: 8081 B - Pesticides - (μg/L)			19E0591-33	19E0591-37	19E0591-34
Method: 8081 B - Pesticides - (μg/L) 4.4'-DDD	72-54-8	0.3	0.00432 U	0.00444 U	0.00432 U
4.4'-DDE	72-55-9	0.3	0.00432 U	0.00444 U	0.00432 U
4,4'-DDT	50-29-3	0.2	0.00432 U	0.00444 U	0.00432 U
Aldrin	309-00-2	ND	0.00432 U	0.00444 U	0.00432 U
Alpha-BHC	319-84-6	0.01	0.00432 U	0.00444 U	0.00432 U
Alpha-Chlordane	5103-71-9	NS	0.00432 U	0.00444 U	0.00432 U
Beta-BHC	319-85-7	0.04	0.00432 U	0.00444 U	0.00432 U
Delta-BHC	319-86-8	0.04	0.00432 U	0.00444 U	0.00432 U
Dieldrin	60-57-1	0.004	0.00432 U	0.00222 U	0.00432 U
Endosulfan I	959-98-8	NS	0.00432 U	0.00222 U	0.00432 U
Endosulfan II	33213-65-9	NS	0.00432 U	0.00444 U	0.00432 U
Endosulfan sulfate	1031-07-8	NS	0.00432 U	0.00444 U	0.00432 U
Endrin	72-20-8	ND	0.00432 U	0.00444 U	0.00432 U
Endrin aldehyde	7421-93-4	5*	0.0108 U	0.0111 U	0.0108 U
Endrin ketone	53494-70-5	5*	0.0108 U	0.0111 U	0.0108 U
gamma-BHC (Lindane)	58-89-9	0.05	0.00432 U	0.00444 U	0.00432 U
gamma-Chlordane	5566-34-7	NS	0.0108 U	0.0111 U	0.0108 U
Heptachlor	76-44-8	0.04	0.00432 U	0.00444 U	0.00432 U
Heptachlor epoxide	1024-57-3	0.03	0.00432 U	0.00444 U	0.00432 U
Methoxychlor	72-43-5	35	0.00432 U	0.00444 U	0.00432 U
Toxaphene	8001-35-2	0.06	0.108 U	0.111 U	0.108 U
total Chlordane	57-74-9	0.05	0.216 U	0.222 U	0.216 U
Method: 8082 A - PCBs - (μg/L)					
Aroclor 1016	12674-11-2	0.09	0.0541 U	0.0556 U	0.0541 U
Aroclor 1221	11104-28-2	0.09	0.0541 U	0.0556 U	0.0541 U
Aroclor 1232	11141-16-5	0.09	0.0541 U	0.0556 U	0.0541 U
Aroclor 1242	53469-21-9	0.09	0.0541 U	0.0556 U	0.0541 U
Aroclor 1248	12672-29-6	0.09	0.0541 U	0.0556 U	0.0541 U
Aroclor 1254	11097-69-1	0.09	0.0541 U	0.0556 U	0.0541 U
Aroclor 1260	11096-82-5	0.09	0.0541 U	0.0556 U	0.0541 U

Notes:

(1) NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) - Ambient Water Quality Standards and Guidance Values - GA Water Class, Type H(WS) - Source of Drinking Water (Groundwater)

NS - No Standard

U - The analyte was analyzed for, but was not detected above the reported sample quantification limit.

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

Highlighted text denotes concentrations exceeding NYSDEC AWQS or GV for GA Water Class, Type H(WS)

^{*} The principal organic contaminant standard for groundwater of $5\mu g/L$ applies to this substance.

Client Sample ID: Laboratory ID: Sampling Date:	Cas No.	SV002 19E0578-02 5/10/2019			
Volatile Organic Compounds by TO-15 ug/	′m3				
1,1,1,2-Tetrachloroethane	630-20-6	2.1	U		
1,1,1-Trichloroethane	71-55-6	1.7	U		
1,1,2,2-Tetrachloroethane 1,1,2-Trichlorotrifluoroethane	79-34-5 76-13-1	2.1	U		
1,1,2-Trichloroethane	79-00-5	1.7	U		
1,1-Dichloroethane	75-34-3	1.3	U		
1,1-Dichloroethene	75-35-4	0.31	U		
1,2,4-Trichlorobenzene	120-82-1	2.3	U		
1,2,4-Trimethylbenzene	95-63-6	1.5	U		
1,2-Dibromoethane	106-93-4	2.4	U		
1,2-Dichlorobenzene	95-50-1	1.9	U		
1,2-Dichloroethane	107-06-2	1.3	U		
1,2-Dichloropropane	78-87-5	1.4	U		
1,2-Dichlorotetrafluoroethane	76-14-2 108-67-8	22 1.5	U		
1,3,5-Trimethylbenzene 1,3-Butadiene	106-99-0	2.1	U		
1,3-Dichlorobenzene	541-73-1	1.9	U		
1,3-Dichloropropane	142-28-9	1.4	U		
1,4-Dichlorobenzene	106-46-7	1.9	U		
1,4-Dioxane	123-91-1	2.2	U		
2-Butanone	78-93-3	120			
2-Hexanone	591-78-6	16			
3-Chloropropene	107-05-1	4.9	U		
4-Methyl-2-pentanone	108-10-1	1.3	U		
Acetone	67-64-1	67			
Acrylonitrile	107-13-1	0.68	U		
Benzene Benzyl Chloride	71-43-2 100-44-7	5.3 1.6	U		
Bromodichloromethane	75-27-4	2.1	U		
Bromoform	75-25-2	3.2	U		
Bromomethane	74-83-9	1.2	U		
Carbon disulfide	75-15-0	4.1			
Carbon tetrachloride	56-23-5	0.49	U		
Chlorobenzene	108-90-7	1.4	U		
Chloroethane	75-00-3	0.82	U		
Chloroform	67-66-3	1.5	U		
Chloromethane	74-87-3	0.64	U		
cis-1,2-Dichloroethylene	156-59-2	0.31 1.4	U		
cis-1,3-Dichloropropene Cyclohexane	10061-01-5 110-82-7	1.5	U		
Dibromochloromethane	124-48-1	2.7	U		
Dichlorodifluoromethane	75-71-8	2.6			
Ethyl acetate	141-78-6	2.2	U		
Ethylbenzene	100-41-4	1.4	U		
Hexachlorobutadiene	87-68-3	3.3	U		
Isopropyl Alcohol	67-63-0	4.5			
Methyl methacrylate	80-62-6	1.3	U		
Methyl Tert Butyl Ether	1634-04-4	1.1	U		
Methylene chloride n-Heptane	75-09-2 142-82-5	2.2 1.5	U		
n-нерсапе n-Hexane	110-54-3	1.8			
o-Xylene	95-47-6	1.4	U		
p-&m-Xylenes	179601-23-1	2.7	U		
p-Ethyltoluene	622-96-8	1.7			
Propylene	115-07-1	11			
Styrene	100-42-5	1.3	U		
Tetrachloroethene	127-18-4	12			
Tetrahydrofuran	109-99-9	5.8			
Toluene	108-88-3	4.5			
trans-1,2-Dichloroethylene	156-60-5	1.2	U		
trans-1,3-Dichloropropene	10061-02-6	1.4	U		
Trichloroethene Trichlorofluoromethane	79-01-6 75-69-4	0.42 2.3	U		
Vinyl acetate	108-05-4	1.1	U		
	100-03-4	1.1	U		
Vinyl bromide	593-60-2	1.4	U		

Notes:

Carbon tetrachloride - Refer to Matrix A of NYSDOH Guidance for Evaluating Soil Vapor Intrusion in 1,1,1-Trichloroethane - Refer to Matrix B of NYSDOH Guidance for Evaluating Soil Vapor Intrusion in Vinyl Chloride - Refer to Matrix C of NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the Sta U - Indicates the analyte was analyzed for but not detected.



APPENDIX A GEOPHYSICAL SURVEY



GEOPHYSICAL INVESTIGATION REPORT

SITE LOCATION:

355 and 399 Exterior Street Bronx, New York

PREPARED FOR:

PW Grosser 630 Johnson Ave, Suite 7 Bohemia, New York

PREPARED BY:

Brian Halvorsen Delta Geophysics Inc. 738 Front Street Catasauqua, PA 18032

May 23rd, 2019

Delta Geophysics, Inc. (Delta) is pleased to provide the results of the geophysical survey conducted at 355 and 399 Exterior Street, Bronx, New York.

1.0 INTRODUCTION

On May 9th, 2019 Delta Geophysics personnel performed a limited geophysical investigation at 355 and 399 Exterior Street, Bronx, New York. The area of interest was all accessible areas of the properties around client proposed boring locations. The subject properties contained mostly unoccupied parking lots. Subsurface conditions were unknown at the time of survey. Surface conditions consisted of concrete and asphalt.

2.0 SCOPE OF WORK

The survey was conducted to clear client proposed boring locations and mark all detectable utilities around proposed boring locations.

3.0 METHODOLOGY

Selection of survey equipment is dependent site conditions and project objectives. For this project the technician utilized the following equipment to survey the area of concern:

- Geophysical Survey Systems Inc. SIR-3000 cart-mounted Ground Penetrating Radar (GPR) unit with a 400 Mhz antenna.
- Radiodetection RD7000 precision utility locator.
- Fisher M-Scope TW-6 pipe and cable locator.

Ground penetrating radar (commonly called GPR) is a geophysical method that has been developed over the past thirty years for shallow, high-resolution, subsurface investigations of the earth. GPR uses high frequency pulsed electromagnetic waves (generally 10 MHz to 1,000 MHz) to acquire subsurface information. Energy is propagated downward into the ground and is reflected back to the surface from boundaries at which there are electrical property contrasts. GPR is a method that is commonly used for environmental, engineering, archeological, and other shallow investigations.

The GSSI SIR-3000 GPR can accept a wide variety of antennas which provide various depths of penetration and levels of resolution. The 400 MHz antenna can achieve depths of penetration up to about 20 feet, but this depth may be greatly reduced due to site-specific conditions. Signal penetration decreases with increased soil conductivity. Conductive materials attenuate or absorb the GPR signal. As depth increases the return signal becomes weaker. Penetration is the greatest in unsaturated sands and fine gravels. Clayey, highly saline or saturated soils, areas covered by steel reinforced concrete, foundry slag, of other highly conductive materials significantly reduces GPR depth of penetration.

The GPR was configured to transmit to a depth of approximately 10 feet below the subsurface, but actual signal penetration was limited to approximately 1-3 feet below ground surface (bgs). The limiting factor was signal attenuation from near surface soils.

The RD7000 precision utility locator uses radio emission to trace the location of metal bearing utilities. This radio emission can be active or passive. Active tracing requires the attachment of a

radio transmitter to the utility, passive tracing uses radio emissions that are present on the utility. Underground electrical utilities typically emit radio signals that this device can detect.

The TW-6 is designed to find pipes, cables and other metallic objects such as underground storage tanks. One surveyor can carry both the transmitter and receiver together, making it ideally suited for exploration type searches of ferrous metal masses. Metal detectors of this type operate by generating a magnetic field at the transmitter which causes metallic objects in the subsurface to generate a secondary magnetic field. The induced secondary field is detected by the receiver, which generates an audible tone equal to the strength of the secondary field.

4.0 SURVEY FINDINGS

All accessible areas throughout the survey location around client proposed boring locations were examined during this investigation. The proposed boring locations were examined with the RD7000 for potential subsurface utilities then surveyed with GPR and TW-6 for other potential anomalies. Based on the data gathered all borings were cleared for sampling.

Utility Survey

Delta performed a utility survey around client proposed boring locations. The following utilities were identified: electric. All utilities were marked onsite with appropriate colors.

5.0 SURVEY LIMITATIONS

GPR depth of penetration was limited to approximately 1-3 feet bgs. The limiting factor was due to conductive soils and reinforced concrete. The parking lot of 355 Exterior Street consisted of reinforced concrete, limiting use of TW-6 and effectiveness of GPR imaging.

6.0 WARRANTIES AND DISCLAIMER

As with any geophysical method, it must be stressed that caution be used during any excavation or intrusive testing in proximity to any anomalies indicated in this report. In addition, the absence of detected signatures does not preclude the possibility that targets may exist. To the extent the client desires more definitive conclusions than are warranted by the currently available facts; it is specifically Delta's intent that the conclusions stated herein will be intended as guidance.

This report is based upon the application of scientific principles and professional judgment to certain facts with resultant subjective interpretations. Professional judgments expressed herein are based on the facts currently available within the limit or scope of work, budget and schedule. Delta represents that the services were performed in a manner consistent with currently accepted professional practices employed by geophysical/geological consultants under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this agreement, or in any report, document, or otherwise.

This report was prepared pursuant to the contract Delta has with the Client. That contractual relationship included an exchange of information about the property that was unique and between Delta and its client and serves as the basis upon which this report was prepared. Because of the importance of the understandings between Delta and its client, reliance or any use of this report by anyone other than the Client, for whom it was prepared, is prohibited and therefore not foreseeable to Delta.

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APPENDIX B SOIL BORING LOGS

PROJECT #:	LST1802			DIA	IGC
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York				
BORING ID:	SB007	15	EPTH (FT)		CORE LENGTH (FT):
WELL ID:		BORING D	DIAMETER	(IN):	WELL DIAMETER (IN): 2
DRILLING CONTRACTO	Coastal Environmental Solutions, Inc.	DATE STA 05/10/2			DATE FINISHED: 05/10/2019
DRILLING METHOD:	Direct Push	TIME STA 12:30	RTED:		TIME FINISHED: 12:45
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE	:		LONGITUDE:
SAMPLING METHOD:	Macrocore		MANAGER	₹:	N/A LOGGED BY:
		Dan Ha		WELL OF	Janelle Cooley
DEPTH (feet) SAMPLE INTERVAL USCS KEY RECOVERY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	DETAI	DNSTRUCTION LS AND/OR IG REMARKS
1- 2- 3 3- 4- 5- 6- 7- 3 8- 5	Brown, fine to medium SAND, some Gravel and Brick; dry and no odor.	0	0 1- 2- 3- 3- 4- 5- 6- 7- 8-		
9-	Brown, fine to medium SAND, some Gravel and Brick; wet and no odor.	0	9-		
11- 12- 4	Grey, fine SAND; wet and no odor.	0	11-		
13-	Grey, CLAY; wet no odor.	0	13— - 14— - 15		
P.W. Grosser Cons	ulting End of Boring Depth (feet): 15	Water 1	able Syı	mbol: 🔽	Page 1 of 1

PROJECT #:	LST1802			DAK	
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York	_		PWC	
BORING ID:	SB008	BORING D	EPTH (F		ORE LENGTH (FT): /A
WELL ID:	MW003	BORING D	IAMETE		ELL DIAMETER (IN):
DRILLING CONTRACTOR	Coastal Environmental Solutions, Inc.	DATE STA 05/09/2		DA	TE FINISHED: 5/09/2019
DRILLING METHOD:	Direct Push	TIME STA 13:30	RTED:	TIN	ME FINISHED: 3:45
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE N/A	:	LC N	NGITUDE:
SAMPLING METHOD:	Macrocore	PROJECT Dan Ha		ER: LC	ogged by: anelle Cooley
DEPTH (feet) SAMPLE INTERVAL USCS KEY (Feet) (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONS DETAILS DRILLING I	STRUCTION AND/OR
0	Aspahlt	0	0 -		
2 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Dark Brown, fine to medium SAND, some Gravel, little brick; moist no odor.	0	2- 3- 4- 5-		
7— 3	Light Brown, fine SAND and SILT; wet and no odor.	0	6- 7-		
8	Dark Brown to Orange Brown, medium to coarse SAND and GRAVEL; wet no odor.	0	9- 10- 11- 12- 13- 14-		
15 P.W. Grosser Consu	Ilting End of Boring Depth (feet): 15	Water 1	- 15	symbol: ▼	Page 1 of 1

PROJECT #:	LST1802			DIA	GC
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York				
BORING ID:	SB009	15	EPTH (FT)		CORE LENGTH (FT): N/A
WELL ID:	MW004	BORING D	DIAMETER	(IN):	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR	Coastal Environmental Solutions, Inc.	DATE STA 05/09/2			DATE FINISHED: 05/09/2019
DRILLING METHOD:	Direct Push	TIME STARTED:			TIME FINISHED: 12:45
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE N/A	:		LONGITUDE: N/A
SAMPLING METHOD:	Macrocore	PROJECT	PROJECT MANAGER: Dan Haug		LOGGED BY: Janelle Cooley
DEPTH (feet) SAMPLE INTERVAL USCS KEY RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	DETAI	INSTRUCTION LS AND/OR IG REMARKS
0 1- 2	Aspahlt		1-2-		
3 3 4 5 6 7 7 8	Dark Brown, fine to medium SAND, some Brick and little gravel; dry and no odor.	0	3- 4- 5- 6- 7- 8-		
9-	Dark Brown, fine to medium SAND, some Brick and little gravel; dry and petroleum odor.	80.1	9-		
11-	Dark Grey, medium to coarse SAND, some Gravel; wet and petroleum odor.	131.2	11— - 12—		
13-	Dark Grey, CLAY; wet and no odor.	10.2	13—		
15			15		

PROJE	ECT #:			LST1802			DIA	CC
SITE A	ADDRE	SS:		355-399 Exterior Street, Bronx, New York			PW	
BORIN	IG ID:			SB009_E	BORING I	DEPTH (F		CORE LENGTH (FT): N/A
WELL	ID:				BORING I	DIAMETER	R (IN):	WELL DIAMETER (IN):
DRILLI	ING CO	ONTRA	CTOR:	Coastal Environmental Solutions, Inc.	DATE STA 05/09/2			2 DATE FINISHED: 05/09/2019
		ETHOD		Direct Push	TIME STA	RTED:		TIME FINISHED:
		QUIPME			14:20	:		14:35 LONGITUDE:
		Coopieso 0010			N/A PROJECT	MANAGE	R:	N/A LOGGED BY:
SAIVIP	MPLING METHOD: Macrocore				Dan Ha	aug		Janelle Cooley
DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	DETAIL	NSTRUCTION LS AND/OR G REMARKS
0						0		
1-				Aspahlt	0	1-		
2-	_		4			2-		
3-			4			3-		
4-	-					4-		
5-	-			Dark Brown, fine to medium SAND, some Brick and little gravel; dry and no odor.	0	5—		
6-	-			illile graver, dry and no odor.		6-		
7-	_		4			7-		
8-						8-		
9-	-			Dark Brown, fine to medium SAND, some Brick and little gravel; dry and petroleum odor.	72.1	9-		
10-						10-		
11-	-			Dark Grey, medium to coarse SAND, some Gravel; wet and slight petroleum odor.	0	11-		
12-			4	and slight perioleum odor.		12-		
13-	-					13—		
14-	-			Dark Grey, CLAY; wet and no odor.	0	14-		
15						15		
P.W.	Gros	ser C	onsul	ting End of Boring Depth (feet): 15	Water 7	Table Sy	/mbol: ▼	Page 1 of 1

PROJECT #:			LST1802			DIA	rcc .				
SITE ADDRESS:				355-399 Exterior Street, Bronx, New York		PWG					
BORIN	IG ID:			SB009_N	BORING DEPTH (FT): 15			CORE LENGTH (FT):			
WELL ID:					BORING I	DIAMETE	R (IN):	WELL DIAMETER (IN):			
DRILL	ING CC	NTRA	CTOR:	Coastal Environmental Solutions, Inc.	DATE STA 05/09/2			DATE FINISHED: 05/09/2019			
DRILL	ING ME	THOD	:	Direct Push	TIME STARTED: 13:35			TIME FINISHED: 13:45			
DRILL	DDULING FOUNDMENT. Cooperate //10							LONGITUDE:			
SAMP	SAMPLING METHOD: Magrages						N/A N/A PROJECT MANAGER: LOGGED BY: Dan Haug Janelle Cooley				
				DESCRIPTION	PID		WELL CO	ONSTRUCTION			
DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	NAME (USCS): color, moist, plasticity, gravel, odor	Reading (ppm)	DEPTH (feet)	DETA	ILS AND/OR NG REMARKS			
0						0					
1-	-			Aspahlt	0	1-					
2-	-		3			2-					
3-	-					3-					
4-	-					4-					
5-	-				0	5—					
6-	-			Dark Brown, fine to medium SAND, some Brick and little gravel; dry and no odor.		6-					
7-	-		4			7-					
8-	-					8-					
9-	-				0	9—					
10-	2000000					10-					
11-	-			Dark Grey, medium to coarse SAND, some Gravel; wet and no odor.	0	11-					
12-	_		2			12-					
13-			5			13—					
14-	-			Dark Grey, CLAY; wet and no odor.	0	14-					
15		أالل				15		D 1.11			
P.W.	Gros	ser C	onsu	Iting End of Boring Depth (feet): 15	Water	Table S	ymbol: 🔽	Page 1 of 1			

PROJECT #:			LST1802		PWGC				
SITE ADDRESS:				355-399 Exterior Street, Bronx, New York				5 C	
BORIN	IG ID:			SB009_W	BORING DEPTH (FT): 15			ORE LENGTH (FT):	
WELL	ID:				BORING DIAMETER (IN):			/ELL DIAMETER (IN):	
DRILLING CONTRACTOR:				Coastal Environmental Solutions, Inc.	DATE STARTED: 05/09/2019			ATE FINISHED:	
				Direct Push	TIME STA	RTED:	Т	5/09/2019 IME FINISHED:	
					13:50 LATITUDE:			4:00 ONGITUDE:	
				Geoprobe 6610	PROJECT MANAGER: L			J/A OGGED BY:	
SAMPLING METHOD:				Macrocore			anelle Cooley		
DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	DETAILS	STRUCTION S AND/OR REMARKS	
0						0			
1-				Aspahlt	0	1-			
2-			3			2-			
3-						3-			
4-						4-			
5-				Dark Brown, fine to medium SAND, some Brick and little gravel; dry and no odor.	0	5—			
6-				intile graver, dry and no odor.		6-			
7-			4			7-			
8-						8—			
9-				Dark Brown, fine to medium SAND, some Brick and little gravel; dry and petroleum odor.	49.8	9-			
10-		***				10-			
11-				Dark Grey, medium to coarse SAND, some Gravel; wet and slight petroleum odor.	0	11-			
12-			3	22 3g.n. pod 0.02 0001.		12-			
13-						13-			
14-				Dark Grey, CLAY; wet and no odor.	0	14-			
15 D W	Grac		oncii	Iting End of Paring Donth (fact): 15	\\\/-4 · · · ¬	15 S	Samela et .	Dago 1 of 1	
P.W.	Gros	ser C	บทรน	Iting End of Boring Depth (feet): 15	Water	able S	Symbol: 🔽	Page 1 of 1	

PROJECT #: LST1802			LST1802			DAAA	CC			
SITE A	DDRE	SS:		355-399 Exterior Street, Bronx, New York			PW			
BORIN	G ID:			SB009_W2	BORING DEPTH (FT): 15			CORE LENGTH (FT):		
WELL	ID:				BORING DIAMETER (IN): WELL DIAMETER (IN): 2					
						DATE STARTED: DATE FINISHED 05/09/2019 05/09/2019				
DRILLING METHOD. BL & B &						RTED:	-	TIME FINISHED: 14:15		
DDILLING FOLUDATATE CO / / 10						14:05				
SAMPLING METHOD: Magragara						PROJECT MANAGER: LOGGED BY:				
Macrocord				Dan Ha			Janelle Cooley			
DEPTH (feet)	DEPTH (feet) SAMPLE INTERVAL USCS KEY RECOVER)		RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	Reading DET		DETAIL	NSTRUCTION S AND/OR S REMARKS		
0			_			0				
1-				Aspahlt	0	1-				
2-			2			2-				
3-			5			3—				
4-					0	4-				
5-						5—				
6-				Dark Brown, fine to medium SAND, some Brick and little gravel; dry and no odor.		6-				
7-			4			7-				
8-			5			8-				
9—					0	9—				
10-						10-				
11-				Dark Grey, medium to coarse SAND, some Gravel; wet	0	11-				
12-			4	and no odor.		12-				
13-			7			13—				
-										
14-				Dark Grey, CLAY; wet and no odor.	0	14-				
15						15				
P.W.	Gros	ser C	onsul	ting End of Boring Depth (feet): 15	Water 7	Table S	ymbol: 🔽	Page 1 of 1		

PROJECT #:	LST1802				
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York	PWGC			GC
BORING ID:	SB010				CORE LENGTH (FT):
WELL ID:		BORING DIAMETER (IN):		ER (IN):	WELL DIAMETER (IN):
DRILLING CONTRACTOR	Coastal Environmental Solutions, Inc.	DATE STARTED:		DATE FINISHED: 05/10/2019	
DRILLING METHOD:	Direct Push				TIME FINISHED:
DRILLING EQUIPMENT:	C		:	I	LONGITUDE:
SAMPLING METHOD:	Macrocore	PROJECT MANAGER: LOGGED BY			LOGGED BY: Janelle Cooley
DEPTH (feet) SAMPLE INTERVAL USCS KEY RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID 보유 WELL C		WELL CON DETAIL	NSTRUCTION S AND/OR G REMARKS
0	Dark Brown to Dark Grey, fine to medium SAND, some Gravel, little brick; dry and no odor.	0	0 - 1— 2— 3— 4— 5— 6— 7— 8—		
9-	Dark Brown to Dark Grey, fine to medium SAND, some Gravel, little brick; wet and no odor.	0	9-		
10-			10-		
11-			11-		
12-	Dark Brown to Dark Grey, fine to medium SAND and	0	12-		
13-	some Gravel; wet and no odor.		13-		
14-			14-		
P.W. Grosser Consu	Iting End of Boring Depth (feet): 15	Water 1	15 able \$	Symbol: ▼	Page 1 of 1

PROJE	ECT #:		LST1802	2			DIA	IGC	
SITE A	DDRESS:		355-399	Exterior Street, Bronx, New York					
BORIN	G ID:		SB016		BORING 12	DEPTH (F	T):	CORE LENGTH (FT):	
WELL	ID:				BORING 2	BORING DIAMETER (IN):		WELL DIAMETER (IN):	
DRILLING CONTRACTOR: Coastal				Environmental Solutions, Inc.	DATE ST 06/06/			DATE FINISHED: 06/06/2019	
DRILLING METHOD: Direct					TIME ST. 13:00	ARTED:		TIME FINISHED:	
DRILLI	NG EQUIP	MENT:	Geoprob		LATITUD N/A	E:	LONGITUDE:		
SAMPL	LING METH	IOD:	Macroco			T MANAGE	LOGGED BY:		
	ц Т	~					Janelle Cooley WELL CONSTRUCTION		
DEPTH (feet)	SAMPLE INTERVAL USCS	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor		PID Reading (ppm)	ading DETA		CONSTRUCTION AILS AND/OR LING REMARKS	
0		3		ne to medium SAND, some Gravel and Bricl dry and no odor.	C 0	0 1- 2- 3- 4- 5- 6- 7- 8-			
9—			Dark Gr	ey, fine SAND, some medium Sand; wet and petroleum odor.	2.6	9-			
11—		2		Grey, CLAY; wet and petroleum odor.	1.4	11-			
	Grosser	Consu	ulting	End of Boring Depth (feet): 12	Water Table Symbol: ▼ Page 1 of 1				

PROJE	CT #:		LST1802			DIA	IGC
SITE AI	DDRESS:	:	355-399 Exterior Street, Bronx, New York				
BORING	G ID:		SB017	BORING D			CORE LENGTH (FT):
WELL II	D:			BORING D	DIAMET	ER (IN):	WELL DIAMETER (IN):
DRILLIN	DRILLING CONTRACTOR: Coastal Environmental Solution:			DATE STA 06/06/2			DATE FINISHED: 06/06/2019
	NG METH		Direct Push	TIME STA 14:00	RTED:		TIME FINISHED:
DRILLIN	NG EQUIF	PMENT:	Geoprobe 6610	LATITUDE N/A	::		LONGITUDE:
SAMPL	ING MET	HOD:	Macrocore	PROJECT Dan Ha		GER:	LOGGED BY: Janelle Cooley
_	Z Z Z	R		PID		WELL CO	ONSTRUCTION
DEPTH (feet)	SAMPLE INTERVAL USCS	KEY RECOVERY (feet)	NAME (USCS): color, moist, plasticity, gravel, odor	Reading (ppm)	DEPTH (feet)	DETA	ILS AND/OR NG REMARKS
0		X			0 _		
1—		8			1-		
1-					1-		
2—					2-		
		8			_		
2-					2-		
3-					3-		
3-		8			3-		
4-					4-		
4—					4-		
5—					5—		
5—		X	Dark Brown to Dark Grey, fine to medium SAND, some	0	5—		
-			Gravel, little brick; dry and no odor.		_		
6-					6-		
6-					6-		
7— -					7-		
7-		X 1			7-		
8-	X	× 5			8-		
8-					8-		
9-					9_		
9—					9—		
10-					10-		
10		\otimes			10		
	Grosser	Cons	End of Boring Depth (feet): 10	Water T		Symbol: 🔽	Page 1 of 1

PROJECT #:	LST1802				
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York			PW	
BORING ID:	SB018	BORING D	DEPTH (ORE LENGTH (FT): /A
WELL ID:		BORING D	DIAMET	ER (IN): W	ELL DIAMETER (IN):
DRILLING CONTRACTOR	Coastal Environmental Solutions, Inc.	DATE STARTED:		D/	ATE FINISHED:
DRILLING METHOD:	Direct Push	07/05/2 TIME STA	RTED:	TI	7/05/2019 ME FINISHED:
DRILLING EQUIPMENT:		09:00 LATITUDE	:	LC	9:45 DNGITUDE:
	Geoprobe 6610	N/A PROJECT	MANA		/A DGGED BY:
SAMPLING METHOD:	Macrocore	Dan Ha	aug	D	aniel Haug
DEPTH (feet) SAMPLE INTERVAL USCS KEY KEY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONS DETAILS DRILLING	AND/OR
0	Dark Brown, medium SAND, some Gravel, little brick; dry and no odor.	0	0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
P.W. Grosser Consu	Ilting End of Boring Depth (feet): 10	Water 1	able \$	Symbol: 🔽	Page 1 of 1

PROJECT #:	LST1802			PW	rc .		
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York		W				
BORING ID:	SB019	BORING D			CORE LENGTH (FT): N/A		
WELL ID:		BORING D		R (IN):	WELL DIAMETER (IN): 2		
DRILLING CONTRACTOR	Coastal Environmental Solutions, Inc.	DATE STARTED: 07/05/2019			DATE FINISHED: 07/05/2019		
DRILLING METHOD:	Direct Push	TIME STAI 10:10	RTED:		TIME FINISHED: 10:35		
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE N/A	:		LONGITUDE:		
SAMPLING METHOD:	Macrocore	PROJECT Dan Ha		IR:	LOGGED BY: Daniel Haug		
DEPTH (feet) SAMPLE INTERVAL USCS KEY RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	(feet)	DETAI	INSTRUCTION LS AND/OR G REMARKS		
- ω 1- 1- 2- 2- 3- 3- 5- 5- 5- 6-	Dark Brown, fine to medium SAND, some Gravel, some brick; dry and no odor.	0	0				
6	Dark Brown to Grey, fine to medium SAND, little Gravel, little brick; dry and no odor Litting End of Boring Depth (feet): 10	0	6— 7— 7— 8— 8— 9— 10— 10 Table Sy		Page 1 of 1		

PROJECT #:	LST1802			DIAK	
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York			PW	
BORING ID:	SB020	BORING D	DEPTH (ORE LENGTH (FT): /A
WELL ID:		BORING D	DIAMET	ER (IN): W	ELL DIAMETER (IN):
DRILLING CONTRACTO	R: Coastal Environmental Solutions, Inc.	DATE STA 07/05/2		D/	ATE FINISHED: 7/05/2019
DRILLING METHOD:	Direct Push	TIME STA	RTED:	TI	ME FINISHED:
DRILLING EQUIPMENT		10:45	:	LC	1:05 DNGITUDE:
SAMPLING METHOD:	Macrocore	N/A PROJECT		GER: LO	/A DGGED BY:
		Dan Ha			aniel Haug
DEPTH (feet) SAMPLE INTERVAL USCS KEY RECOVERY	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONS DETAILS DRILLING	AND/OR
0_			0_		
1-			1-		
1-			1-		
			-		
2-			2-		
2-			2-		
3-			3-		
3 5			3-		
			-		
			4-		
4-			4-		
5-			5-		
5 5	Dark Brown, medium SAND, some Gravel, little brick;	0	5-		
	dry and no odor.		_		
6-]			6-		
6-			6-		
7-			7-		
,					
7-			7-		
8-] 4			8-		
8-] 💥			8-		
9-			9-		
			-		
9 9			9-		
10-			10-		
10			10		
P.W. Grosser Cons	ulting End of Boring Depth (feet): 10	Water 1	Table \$	Symbol: 🔽	Page 1 of 1

PROJECT #:	LST1802			BAK	20
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York			PW	5 C
BORING ID:	SB021	BORING D	EPTH (ORE LENGTH (FT):
WELL ID:		BORING D	DIAMET	ER (IN): W	ELL DIAMETER (IN):
DRILLING CONTRACTOR	Coastal Environmental Solutions, Inc.	DATE STA	DATE STARTED:		ATE FINISHED:
DRILLING METHOD:	Direct Push	07/05/2 TIME STA	RTED:	TI	7/05/2019 ME FINISHED:
		11:20 LATITUDE	:	LC	2:00 DNGITUDE:
DRILLING EQUIPMENT:	Geoprobe 6610	N/A PROJECT	MANA		/A DGGED BY:
SAMPLING METHOD:	Macrocore	Dan Ha			aniel Haug
DEPTH (feet) SAMPLE INTERVAL USCS KEY KEY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)		STRUCTION AND/OR REMARKS
0	Dark Brown, medium SAND, some Gravel, little brick; dry and no odor.	0	0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
3 8- 5 8- 9- 9- 10-			- 8- 8- 9- - 9- - 10-		
P.W. Grosser Consu	Ilting End of Boring Depth (feet): 10	Water 1	10 able \$	Symbol: 🔽	Page 1 of 1

PROJECT #:	LST1802			DIAK	
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York			PWC	
BORING ID:	SB022	BORING D	DEPTH (FT): CC	PRE LENGTH (FT):
WELL ID:		BORING D	DIAMETE	ER (IN): WE 2	ELL DIAMETER (IN):
DRILLING CONTRACTOR	Coastal Environmental Solutions, Inc.	DATE STA 07/05/2	TE FINISHED: 1/05/2019		
DRILLING METHOD:	Direct Push	TIME STA 12:20		TIN	ME FINISHED: 2:50
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE N/A	:	LO N/	NGITUDE:
SAMPLING METHOD:	Macrocore	PROJECT Dan Ha		SER: LO	GGED BY: aniel Haug
지					
DEPTH (feet) SAMPLE INTERVAL USCS KEY KEY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONS DETAILS DRILLING F	AND/OR
0 _			0 _		
1-			1-		
1-			1-		
2—			2-		
2-	Dark Brown, medium SAND, some Gravel, little brick;	0	2—		
	dry and no odor.		_		
3 4			3-		
3			3-		
4-			4-		
4-			4-		
5-			5—		
			_		
5 \$			5—		
6-]			6-		
6-			6-		
7-			7-		
7-	Dark Brown to Grey, fine to medium SAND, little	0	- 7—		
	Gravel, little brick; dry and no odor		-		
8 4			8-		
8-			8-		
9-			9—		
9-]			9—		
10-			10-		
10			10		
P.W. Grosser Consu	Ilting End of Boring Depth (feet): 10	Water 1		Symbol: 🔽	Page 1 of 1

PROJECT #:	LST1802			DIA	GC
SITE ADDRESS:	355-399 Exterior Street, Bronx, New York				
BORING ID:	SB023	BORING D			CORE LENGTH (FT):
WELL ID:		BORING D	DIAMETE	ER (IN):	WELL DIAMETER (IN): 2
DRILLING CONTRACTOR	Coastal Environmental Solutions, Inc.	DATE STA 07/05/2			DATE FINISHED: 07/05/2019
DRILLING METHOD:	Direct Push	TIME STA 13:15	RTED:		TIME FINISHED: 14:05
DRILLING EQUIPMENT:	Geoprobe 6610	LATITUDE N/A	:		LONGITUDE:
SAMPLING METHOD:	Macrocore	PROJECT Dan Ha		ER:	LOGGED BY: Daniel Haug
DEPTH (feet) SAMPLE INTERVAL USCS KEY RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	DETAI	DNSTRUCTION LS AND/OR IG REMARKS
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Dark Brown, medium SAND, some Gravel, little brick; dry and no odor. Dark Brown to Grey, fine to medium SAND, little Gravel, little brick; dry and no odor	0	0		
10— 10 P.W. Grosser Consi	ulting End of Boring Depth (feet): 10	Water 1	10— 10 able S	symbol: ▼	Page 1 of 1



APPENDIX C LABORATORY ANALYTICAL REPORTS



Technical Report

prepared for:

P.W. Grosser Consulting 630 Johnson Avenue, Suite 7 Bohemia NY, 11716 Attention: Daniel Haug

Report Date: 05/20/2019

Client Project ID: LST 1802

York Project (SDG) No.: 19E0578

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

Report Date: 05/20/2019 Client Project ID: LST 1802 York Project (SDG) No.: 19E0578

P.W. Grosser Consulting

630 Johnson Avenue, Suite 7 Bohemia NY, 11716

Attention: Daniel Haug

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 14, 2019 and listed below. The project was identified as your project: **LST 1802**.

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

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

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

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

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

York Sample ID	Client Sample ID	<u>Matrix</u>	Date Collected	Date Received
19E0578-01	SV001	Soil Vapor	05/10/2019	05/14/2019
19E0578-02	SV002	Soil Vapor	05/10/2019	05/14/2019

General Notes for York Project (SDG) No.: 19E0578

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

8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:

Benjamin Gulizia Laboratory Director **Date:** 05/20/2019



Client Sample ID: SV001 York Sample ID: 19E0578-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0578LST 1802Soil VaporMay 10, 2019 12:00 am05/14/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

					Reported to)			Date/Time	Date/Time	
CAS No	o. Parameter	Result	Flag	Units	LOQ	Dilution	Reference	Method	Prepared	Analyzed	Analys
530-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.1	1.607	EPA TO-15 Certifications:		05/17/2019 09:00	05/17/2019 19:46	AS
71-55-6	* 1,1,1-Trichloroethane	ND		ug/m³	0.88	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
79-34-5	* 1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
76-13-1	* 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.2	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
79-00-5	* 1,1,2-Trichloroethane	ND		ug/m³	0.88	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 (12058,NJDEP-Queens	05/17/2019 19:46 s	AS
75-34-3	* 1,1-Dichloroethane	ND		ug/m³	0.65	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 (12058,NJDEP-Queens	05/17/2019 19:46 s	AS
75-35-4	* 1,1-Dichloroethylene	ND		ug/m³	0.16	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
20-82-1	* 1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
5-63-6	* 1,2,4-Trimethylbenzene	12		ug/m³	0.79	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
							Certifications:	NELAC-NY	Y12058,NJDEP-Queen		
106-93-4	* 1,2-Dibromoethane	ND		ug/m³	1.2	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
95-50-1	* 1,2-Dichlorobenzene	ND		ug/m³	0.97	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
07-06-2	* 1,2-Dichloroethane	0.78		ug/m³	0.65	1.607	EPA TO-15	NEV LC NE	05/17/2019 09:00	05/17/2019 19:46	AS
					0.54	1.605	Certifications:	NELAC-N	Y12058,NJDEP-Queen		
78-87-5	* 1,2-Dichloropropane	ND		ug/m³	0.74	1.607		NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens		AS
76-14-2	* 1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.1	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
08-67-8	* 1,3,5-Trimethylbenzene	3.2		ug/m³	0.79	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
							Certifications:	NELAC-N	Y12058,NJDEP-Queen	18	
106-99-0	* 1,3-Butadiene	ND		ug/m³	1.1	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
541-73-1	* 1,3-Dichlorobenzene	ND		ug/m³	0.97	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
42-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.74	1.607	EPA TO-15 Certifications:		05/17/2019 09:00	05/17/2019 19:46	AS
06-46-7	* 1,4-Dichlorobenzene	ND		ug/m³	0.97	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
23-91-1	* 1,4-Dioxane	ND		ug/m³	1.2	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queens	05/17/2019 19:46 s	AS
8-93-3	* 2-Butanone	12		ug/m³	0.47	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
							Certifications:	NELAC-NY	Y12058,NJDEP-Queen	IS	
591-78-6	* 2-Hexanone	ND		ug/m³	1.3	1.607	EPA TO-15 Certifications:		05/17/2019 09:00	05/17/2019 19:46	AS

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Client Sample ID: SV001 **York Sample ID:** 19E0578-01

York Project (SDG) No. 19E0578

Client Project ID LST 1802

Matrix Soil Vapor

Collection Date/Time May 10, 2019 12:00 am Date Received 05/14/2019

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result F	lag Units	Reported to LOQ	Dilution	Reference N	Method Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	* 3-Chloropropene	ND	ug/m³	2.5	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
108-10-1	* 4-Methyl-2-pentanone	18	ug/m³	0.66	1.607	EPA TO-15	05/17/2019 09:00	05/17/2019 19:46	AS
						Certifications:	NELAC-NY12058,NJDEP-Que	eens	
67-64-1	* Acetone	96	ug/m³	0.76	1.607	EPA TO-15	05/17/2019 09:00	05/17/2019 19:46	AS
						Certifications:	NELAC-NY12058,NJDEP-Que	eens	
107-13-1	* Acrylonitrile	ND	ug/m³	0.35	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
71-43-2	* Benzene	3.5	ug/m³	0.51	1.607	EPA TO-15	05/17/2019 09:00		AS
						Certifications:	NELAC-NY12058,NJDEP-Que	eens	
100-44-7	* Benzyl chloride	ND	ug/m³	0.83	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
75-27-4	* Bromodichloromethane	ND	ug/m³	1.1	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
75-25-2	* Bromoform	ND	ug/m³	1.7	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
74-83-9	* Bromomethane	ND	ug/m³	0.62	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
75-15-0	* Carbon disulfide	ND	ug/m³	0.50	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
56-23-5	* Carbon tetrachloride	0.71	ug/m³	0.25	1.607	EPA TO-15	05/17/2019 09:00	05/17/2019 19:46	AS
						Certifications:	NELAC-NY12058,NJDEP-Qu	eens	
08-90-7	* Chlorobenzene	ND	ug/m³	0.74	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
75-00-3	* Chloroethane	ND	ug/m³	0.42	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
7-66-3	* Chloroform	ND	ug/m³	0.78	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
4-87-3	* Chloromethane	2.0	ug/m³	0.33	1.607	EPA TO-15	05/17/2019 09:00	05/17/2019 19:46	AS
						Certifications:	NELAC-NY12058,NJDEP-Que	eens	
56-59-2	* cis-1,2-Dichloroethylene	0.25	ug/m³	0.16	1.607	EPA TO-15	05/17/2019 09:00	05/17/2019 19:46	AS
						Certifications:	NELAC-NY12058,NJDEP-Que	eens	
10061-01-5	* cis-1,3-Dichloropropylene	ND	ug/m³	0.73	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
10-82-7	* Cyclohexane	2.5	ug/m³	0.55	1.607	EPA TO-15	05/17/2019 09:00	05/17/2019 19:46	AS
						Certifications:	NELAC-NY12058,NJDEP-Que	eens	
24-48-1	* Dibromochloromethane	ND	ug/m³	1.4	1.607	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Que		AS
5-71-8	* Dichlorodifluoromethane	4.7 T	O-CC ug/m³	0.79	1.607	EPA TO-15	05/17/2019 09:00	05/17/2019 19:46	AS
			V, O-LC S-H			Certifications:	NELAC-NY12058,NJDEP-Qu	eens	
41-78-6	* Ethyl acetate	20	ug/m³	1.2	1.607	EPA TO-15 Certifications:	05/17/2019 09:00	05/17/2019 19:46	AS
00-41-4	* Ethyl Benzene	7.6	ug/m³	0.70	1.607	EPA TO-15	05/17/2019 09:00	05/17/2019 19:46	AS
	-		-				NELAC-NY12058,NJDEP-Que	eens	
120 RES	EARCH DRIVE	STRATFORD, CT 06	615	132	2-02 89th A	WENUE	RICHMOND HI	LL, NY 11418	

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Client Sample ID: SV001 **York Sample ID:** 19E0578-01

York Project (SDG) No. 19E0578

Client Project ID LST 1802

Matrix Soil Vapor

Collection Date/Time May 10, 2019 12:00 am Date Received 05/14/2019

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:	Sam	ole	No	tes
		_		

CAS No	. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	* Hexachlorobutadiene	ND		ug/m³	1.7	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queen	05/17/2019 19:46 s	AS
67-63-0	* Isopropanol	36		ug/m³	0.79	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
							Certifications:	NELAC-N	Y12058,NJDEP-Queer	ns	
80-62-6	* Methyl Methacrylate	ND		ug/m³	0.66	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queen	05/17/2019 19:46 s	AS
1634-04-4	* Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.58	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queen	05/17/2019 19:46 s	AS
75-09-2	* Methylene chloride	22		ug/m^3	1.1	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
							Certifications:	NELAC-N	Y12058,NJDEP-Queer	ns	
142-82-5	* n-Heptane	19		ug/m³	0.66	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
							Certifications:	NELAC-N	Y12058,NJDEP-Queer		
110-54-3	* n-Hexane	6.8		ug/m³	0.57	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
05.45.4	4 V 1						Certifications:	NELAC-N	Y12058,NJDEP-Queer		
95-47-6	* o-Xylene	9.3		ug/m³	0.70	1.607	EPA TO-15 Certifications:	NEL AC N	05/17/2019 09:00 V12058 NIDER Output	05/17/2019 19:46	AS
179601-23-1	* p- & m- Xylenes	20		110/ma3	1.4	1.607	EPA TO-15	NELAC-N	Y12058,NJDEP-Queer 05/17/2019 09:00	05/17/2019 19:46	AS
1/9001-25-1	p- & m- Aylenes	30		ug/m³	1.4	1.607	Certifications:	NELAC-N	Y12058,NJDEP-Queer		As
622-96-8	* p-Ethyltoluene	9.7		ug/m³	0.79	1.607	EPA TO-15	TIELE I	05/17/2019 09:00	05/17/2019 19:46	AS
	P,	<i>7.1</i>		-6	0.17	1.007	Certifications:				
115-07-1	* Propylene	3.4	TO-CC	ug/m³	0.28	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
			V,				Certifications:				
			TO-LC								
100 42 5	* Stronge	• •	S-H	/3	0.60	1.605	EDA TO 15		05/17/2010 00:00	05/17/2010 10:46	AC
100-42-5	* Styrene	2.1		ug/m³	0.68	1.607	EPA TO-15 Certifications:	NEL AC-N	05/17/2019 09:00 Y12058,NJDEP-Queer	05/17/2019 19:46	AS
127-18-4	* Tetrachloroethylene	5.6		ug/m³	0.27	1.607	EPA TO-15	NEE/IC-IV	05/17/2019 09:00	05/17/2019 19:46	AS
127 10 4	Tetraemor veen y tene	3.0		ug/m	0.27	1.007	Certifications:	NELAC-N	Y12058,NJDEP-Queer		715
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.95	1.607	EPA TO-15 Certifications:		05/17/2019 09:00	05/17/2019 19:46	AS
108-88-3	* Toluene	120		ug/m³	0.61	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
							Certifications:	NELAC-N	Y12058,NJDEP-Queer	ns	
156-60-5	* trans-1,2-Dichloroethylene	ND		ug/m³	0.64	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queen	05/17/2019 19:46 s	AS
10061-02-6	* trans-1,3-Dichloropropylene	ND		ug/m³	0.73	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queen	05/17/2019 19:46 s	AS
79-01-6	* Trichloroethylene	0.43		ug/m³	0.22	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
							Certifications:	NELAC-N	Y12058,NJDEP-Queer	ns	
75-69-4	* Trichlorofluoromethane (Freon	2.0		ug/m³	0.90	1.607	EPA TO-15		05/17/2019 09:00	05/17/2019 19:46	AS
	11)						Certifications:	NELAC-N	Y12058,NJDEP-Queer	ns	
108-05-4	* Vinyl acetate	ND		ug/m³	0.57	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queen	05/17/2019 19:46 s	AS
593-60-2	* Vinyl bromide	ND		ug/m³	0.70	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queen	05/17/2019 19:46 s	AS
75-01-4	* Vinyl Chloride	ND		ug/m³	0.10	1.607	EPA TO-15 Certifications:	NELAC-NY	05/17/2019 09:00 /12058,NJDEP-Queen	05/17/2019 19:46 s	AS
120 RESI	EARCH DRIVE	STRATFORD, CT	Г 06615		1 32	-02 89th A	VENUE	F	RICHMOND HIL	L, NY 11418	

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Client Sample ID: SV001 **York Sample ID:** 19E0578-01

Client Project ID Matrix Collection Date/Time Date Received York Project (SDG) No. LST 1802 19E0578 Soil Vapor May 10, 2019 12:00 am 05/14/2019

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

460-00-4

Log-in Notes: Sample Notes:

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

Surrogate Recoveries Result Acceptance Range

98.3 % Surrogate: SURR: 70-130 $p\hbox{-}Bromofluor obenzene$

Sample Information

SV002 **Client Sample ID: York Sample ID:** 19E0578-02

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0578 LST 1802 Soil Vapor May 10, 2019 12:00 am 05/14/2019

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result	Flag Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND	ug/m³	2.1	3.112	EPA TO-15 Certifications:		05/17/2019 09:00	05/17/2019 21:53	AS
71-55-6	* 1,1,1-Trichloroethane	ND	ug/m³	1.7	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
79-34-5	* 1,1,2,2-Tetrachloroethane	ND	ug/m³	2.1	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53	AS
76-13-1	* 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	ug/m³	2.4	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
79-00-5	* 1,1,2-Trichloroethane	ND	ug/m³	1.7	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
75-34-3	* 1,1-Dichloroethane	ND	ug/m³	1.3	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
75-35-4	* 1,1-Dichloroethylene	ND	ug/m³	0.31	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
120-82-1	* 1,2,4-Trichlorobenzene	ND	ug/m³	2.3	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
95-63-6	* 1,2,4-Trimethylbenzene	ND	ug/m³	1.5	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
106-93-4	* 1,2-Dibromoethane	ND	ug/m³	2.4	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
95-50-1	* 1,2-Dichlorobenzene	ND	ug/m³	1.9	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
107-06-2	* 1,2-Dichloroethane	ND	ug/m³	1.3	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
78-87-5	* 1,2-Dichloropropane	ND	ug/m³	1.4	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
76-14-2	* 1,2-Dichlorotetrafluoroethane	22	ug/m³	2.2	3.112	EPA TO-15		05/17/2019 09:00	05/17/2019 21:53	AS
						Certifications:	NELAC-N	NY12058,NJDEP-Queer	1S	
108-67-8	* 1,3,5-Trimethylbenzene	ND	ug/m³	1.5	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queen	05/17/2019 21:53 s	AS
120 RES	SEARCH DRIVE	STRATFORD, C	T 06615	132	2-02 89th A	AVENUE		RICHMOND HILI	L, NY 11418	

120 RESEARCH DRIVE

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Client Sample ID: SV002

York Sample ID: 19

19E0578-02

York Project (SDG) No. 19E0578 Client Project ID LST 1802 Matrix Soil Vapor Collection Date/Time May 10, 2019 12:00 am Date Received 05/14/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:	Sample Notes:

Sample Prepar	red by Method: EPA TO15 PREP				D				Date/Time	Date/Time	
CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Prepared	Analyzed	Analyst
106-99-0	* 1,3-Butadiene	ND		ug/m³	2.1	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
541-73-1	* 1,3-Dichlorobenzene	ND		ug/m³	1.9	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	1.4	3.112	EPA TO-15 Certifications:		05/17/2019 09:00	05/17/2019 21:53	AS
106-46-7	* 1,4-Dichlorobenzene	ND		ug/m³	1.9	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
123-91-1	* 1,4-Dioxane	ND		ug/m³	2.2	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
78-93-3	* 2-Butanone	120		ug/m³	0.92	3.112	EPA TO-15		05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-N	IY12058,NJDEP-Queen	S	
591-78-6	* 2-Hexanone	16		ug/m³	2.5	3.112	EPA TO-15		05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:				
107-05-1	* 3-Chloropropene	ND		ug/m³	4.9	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
108-10-1	* 4-Methyl-2-pentanone	ND		ug/m³	1.3	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
67-64-1	* Acetone	67		ug/m³	1.5	3.112	EPA TO-15		05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-N	IY12058,NJDEP-Queen	S	
107-13-1	* Acrylonitrile	ND		ug/m³	0.68	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
71-43-2	* Benzene	5.3		ug/m³	0.99	3.112	EPA TO-15		05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-N	IY12058,NJDEP-Queen	S	
100-44-7	* Benzyl chloride	ND		ug/m³	1.6	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
75-27-4	* Bromodichloromethane	ND		ug/m³	2.1	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
75-25-2	* Bromoform	ND		ug/m³	3.2	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
74-83-9	* Bromomethane	ND		ug/m³	1.2	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
75-15-0	* Carbon disulfide	4.1		ug/m³	0.97	3.112	EPA TO-15		05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-N	IY12058,NJDEP-Queen	S	
56-23-5	* Carbon tetrachloride	ND		ug/m³	0.49	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
108-90-7	* Chlorobenzene	ND		ug/m³	1.4	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
75-00-3	* Chloroethane	ND		ug/m³	0.82	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
67-66-3	* Chloroform	ND		ug/m³	1.5	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
74-87-3	* Chloromethane	ND		ug/m³	0.64	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
156-59-2	* cis-1,2-Dichloroethylene	ND		ug/m³	0.31	3.112	EPA TO-15 Certifications:	NEL AC N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS

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Client Sample ID: SV002

Client Project ID Date Received York Project (SDG) No. Matrix Collection Date/Time 19E0578 LST 1802 Soil Vapor May 10, 2019 12:00 am 05/14/2019

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

York Sample ID:

19E0578-02

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-01-5	* cis-1,3-Dichloropropylene	ND		ug/m³	1.4	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53	AS
10-82-7	* Cyclohexane	1.5		ug/m³	1.1	3.112	EPA TO-15	05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-NY12058,NJDEP-Quee	ns	
24-48-1	* Dibromochloromethane	ND		ug/m³	2.7	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53 ns	AS
5-71-8	* Dichlorodifluoromethane	2.6	TO-CC	ug/m³	1.5	3.112	EPA TO-15	05/17/2019 09:00	05/17/2019 21:53	AS
			V, TO-LC S-H				Certifications:	NELAC-NY12058,NJDEP-Quee	ns	
41-78-6	* Ethyl acetate	ND		ug/m³	2.2	3.112	EPA TO-15 Certifications:	05/17/2019 09:00	05/17/2019 21:53	AS
100-41-4	* Ethyl Benzene	ND		ug/m³	1.4	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53 ns	AS
37-68-3	* Hexachlorobutadiene	ND		ug/m³	3.3	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53 ns	AS
67-63-0	* Isopropanol	4.5		ug/m³	1.5	3.112	EPA TO-15	05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-NY12058,NJDEP-Quee	ns	
80-62-6	* Methyl Methacrylate	ND		ug/m³	1.3	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53 ns	AS
634-04-4	* Methyl tert-butyl ether (MTBE)	ND		ug/m³	1.1	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53 ns	AS
75-09-2	* Methylene chloride	ND		ug/m³	2.2	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53 ns	AS
42-82-5	* n-Heptane	1.5		ug/m³	1.3	3.112	EPA TO-15	05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-NY12058,NJDEP-Quee		
10-54-3	* n-Hexane	1.8		ug/m³	1.1	3.112	EPA TO-15	05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-NY12058,NJDEP-Quee		
95-47-6	* o-Xylene	ND		ug/m³	1.4	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53 ns	AS
79601-23-1	* p- & m- Xylenes	ND		ug/m³	2.7	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53 ns	AS
522-96-8	* p-Ethyltoluene	1.7		ug/m³	1.5	3.112	EPA TO-15 Certifications:	05/17/2019 09:00	05/17/2019 21:53	AS
15-07-1	* Propylene	11	TO-CC V, TO-LC S-H	ug/m³	0.54	3.112	EPA TO-15 Certifications:	05/17/2019 09:00	05/17/2019 21:53	AS
100-42-5	* Styrene	ND		ug/m³	1.3	3.112	EPA TO-15 Certifications:	05/17/2019 09:00 NELAC-NY12058,NJDEP-Queen	05/17/2019 21:53 ns	AS
27-18-4	* Tetrachloroethylene	12		ug/m³	0.53	3.112	EPA TO-15	05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-NY12058,NJDEP-Quee	ns	
09-99-9	* Tetrahydrofuran	5.8		ug/m³	1.8	3.112	EPA TO-15 Certifications:	05/17/2019 09:00	05/17/2019 21:53	AS
08-88-3	* Toluene	4.5		ug/m³	1.2	3.112	EPA TO-15	05/17/2019 09:00	05/17/2019 21:53	AS
							Certifications:	NELAC-NY12058,NJDEP-Quee	ns	

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Client Sample ID: SV002

York Sample ID: 19E0578-02

 York Project (SDG) No.
 Client Project ID

 19E0578
 LST 1802

Matrix Soil Vapor Collection Date/Time May 10, 2019 12:00 am Date Received 05/14/2019

Volatile Organics, EPA TO15 Full List

 $p\hbox{-}Bromofluor obenzene$

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-60-5	* trans-1,2-Dichloroethylene	ND		ug/m³	1.2	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
10061-02-6	* trans-1,3-Dichloropropylene	ND		ug/m³	1.4	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
79-01-6	* Trichloroethylene	ND		ug/m³	0.42	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
75-69-4	* Trichlorofluoromethane (Freon 11)	2.3		ug/m³	1.7	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 IY12058,NJDEP-Queen	05/17/2019 21:53	AS
108-05-4	* Vinyl acetate	ND		ug/m³	1.1	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
593-60-2	* Vinyl bromide	ND		ug/m³	1.4	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
75-01-4	* Vinyl Chloride	ND		ug/m³	0.20	3.112	EPA TO-15 Certifications:	NELAC-N	05/17/2019 09:00 Y12058,NJDEP-Queens	05/17/2019 21:53	AS
	Surrogate Recoveries	Result		Accepta	nce Range						
460-00-4	Surrogate: SURR:	88.3 %		70	0-130						

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Analytical Batch Summary

Batch ID: BE90934	Preparation Method:	EPA TO15 PREP	Prepared By:	AS	
YORK Sample ID	Client Sample ID	Preparation Date			
19E0578-01	SV001	05/17/19			
19E0578-02	SV002	05/17/19			
BE90934-BLK1	Blank	05/17/19			
BE90934-BS1	LCS	05/17/19			
BE90934-DUP1	Dunlicate	05/17/19			



Volatile Organic Compounds in Air by GC/MS - Quality Control Data York Analytical Laboratories, Inc.

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

lank (BE90934-BLK1)				Prepared & Analyzed: 05/17
1,1,2-Tetrachloroethane	ND	0.69	ug/m³	
1,1-Trichloroethane	ND	0.55	"	
1,2,2-Tetrachloroethane	ND	0.69	"	
1,2-Trichloro-1,2,2-trifluoroethane (Freon	ND	0.77	II .	
3)	1,2	0.77		
,2-Trichloroethane	ND	0.55	"	
-Dichloroethane	ND	0.40	"	
-Dichloroethylene	ND	0.099	"	
2,4-Trichlorobenzene	ND	0.74	"	
,4-Trimethylbenzene	ND	0.49	"	
-Dibromoethane	ND	0.77	"	
2-Dichlorobenzene	ND	0.60		
-Dichloroethane	ND	0.40	"	
2-Dichloropropane	ND	0.46		
2-Dichlorotetrafluoroethane	ND	0.70	"	
3,5-Trimethylbenzene	ND	0.49	u .	
-Butadiene	ND	0.66	"	
3-Dichlorobenzene	ND	0.60	"	
-Dichloropropane	ND	0.46	"	
-Dichlorobenzene	ND	0.60	"	
-Dioxane	ND	0.72	II .	
Sutanone	ND	0.72	II .	
Iexanone	ND ND	0.29	II .	
Thloropropene	ND ND	1.6	"	
lethyl-2-pentanone	ND ND		"	
	ND ND	0.41	"	
etone rylonitrile		0.48	"	
-	ND ND	0.22	"	
nzene nzyl chloride		0.32	11	
omodichloromethane	ND	0.52	"	
	ND	0.67	"	
omoform	ND	1.0	"	
omomethane	ND	0.39	"	
rbon disulfide	ND	0.31		
rbon tetrachloride	ND	0.16	"	
lorobenzene	ND	0.46	"	
loroethane	ND	0.26	"	
loroform	ND	0.49	"	
loromethane	ND	0.21	"	
-1,2-Dichloroethylene	ND	0.099	"	
-1,3-Dichloropropylene	ND	0.45	"	
clohexane	ND	0.34	"	
promochloromethane	ND	0.85	"	
chlorodifluoromethane	ND	0.49	"	
nyl acetate	ND	0.72	"	
nyl Benzene	ND	0.43	"	
exachlorobutadiene	ND	1.1	II .	
ppropanol	ND	0.49	II .	
ethyl Methacrylate	ND	0.41	"	
ethyl tert-butyl ether (MTBE)	ND	0.36	"	
ethylene chloride	ND	0.69	"	

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Volatile Organic Compounds in Air by GC/MS - Quality Control Data York Analytical Laboratories, Inc.

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

Blank (BE90934-BLK1)						Prepared & Analyzed: 05/17/2019
i-Heptane	ND	0.41	ug/m³			, v
i-Hexane	ND	0.35	"			
-Xylene	ND	0.43	"			
- & m- Xylenes	ND	0.87	"			
-Ethyltoluene	ND	0.49	"			
ropylene	ND	0.17	"			
yrene	ND	0.43	"			
etrachloroethylene	ND	0.17	"			
etrahydrofuran	ND	0.17	"			
bluene	ND	0.38	,,			
ans-1,2-Dichloroethylene	ND ND	0.40	,,			
ans-1,3-Dichloropropylene	ND ND	0.45	"			
richloroethylene			"			
richlorofluoromethane (Freon 11)	ND ND	0.13	"			
inyl acetate	ND	0.56	"			
inyl acetate inyl bromide	ND ND	0.35	"			
inyl bromide Inyl Chloride		0.44	"			
<u> </u>	ND	0.064				
rrogate: SURR: p-Bromofluorobenzene	8.47		ppbv	10.0	84.7	70-130
CS (BE90934-BS1)						Prepared & Analyzed: 05/17/2019
1,1,2-Tetrachloroethane	10.8		ppbv	10.0	108	70-130
1,1-Trichloroethane	11.1		"	10.0	111	70-130
1,2,2-Tetrachloroethane	11.9		"	10.0	119	70-130
1,2-Trichloro-1,2,2-trifluoroethane (Freon 3)	10.5		"	10.0	105	70-130
1,2-Trichloroethane	10.4		"	10.0	104	70-130
1-Dichloroethane	10.8		"	10.0	108	70-130
1-Dichloroethylene	10.3		"	10.0	103	70-130
2,4-Trichlorobenzene	7.93		"	10.0	79.3	70-130
,2,4-Trimethylbenzene	11.9		"	10.0	119	70-130
2-Dibromoethane	11.0		"	10.0	110	70-130
2-Dichlorobenzene	11.9		"	10.0	119	70-130
2-Dichloroethane	10.1		"	10.0	101	70-130
2-Dichloropropane	10.9		"	10.0	109	70-130
2-Dichlorotetrafluoroethane	11.2		"	10.0	112	70-130
3,5-Trimethylbenzene	11.6		"	10.0	116	70-130
,3-Butadiene	12.0		"	10.0	120	70-130
3-Dichlorobenzene	11.7		"	10.0	117	70-130
3-Dichloropropane	10.7		"	10.0	107	70-130
4-Dichlorobenzene	12.0		"	10.0	120	70-130
4-Dioxane	10.9		"	10.0	109	70-130
Butanone	11.1		"	10.0	111	70-130
Hexanone	12.0		"	10.0	120	70-130
Chloropropene	11.5		"	10.0	115	70-130
Methyl-2-pentanone	11.8		,,	10.0	113	70-130
cetone	10.3		"	10.0	103	70-130
crylonitrile			"			
-	10.8		"	10.0	108	70-130 70-130
enzene enzyl chloride	10.3		"	10.0	103	70-130
	9.76		"	10.0	97.6	70-130
romodichloromethane romoform	11.0 12.5			10.0	110	70-130

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Volatile Organic Compounds in Air by GC/MS - Quality Control Data York Analytical Laboratories, Inc.

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

LCS (BE90934-BS1)					Pre	pared & Analyzed: 05/17/2019
Bromomethane	11.6	ppbv	10.0	116	70-130	
Carbon disulfide	11.3	"	10.0	113	70-130	
Carbon tetrachloride	10.2	"	10.0	102	70-130	
Chlorobenzene	11.1	"	10.0	111	70-130	
Chloroethane	11.6	"	10.0	116	70-130	
Chloroform	10.8	"	10.0	108	70-130	
Chloromethane	8.23	"	10.0	82.3	70-130	
eis-1,2-Dichloroethylene	9.99	"	10.0	99.9	70-130	
eis-1,3-Dichloropropylene	12.0	"	10.0	120	70-130	
Cyclohexane	11.4	"	10.0	114	70-130	
Dibromochloromethane	10.9	"	10.0	109	70-130	
Dichlorodifluoromethane	15.6	"	10.0	156	70-130	High Bias
Ethyl acetate	12.2	"	10.0	122	70-130	
Ethyl Benzene	11.5	"	10.0	115	70-130	
Hexachlorobutadiene	11.1	"	10.0	111	70-130	
sopropanol	10.8	"	10.0	108	70-130	
Methyl Methacrylate	11.8	"	10.0	118	70-130	
Methyl tert-butyl ether (MTBE)	11.4	"	10.0	114	70-130	
Methylene chloride	10.2	"	10.0	102	70-130	
n-Heptane	11.2	"	10.0	112	70-130	
n-Hexane	11.3	"	10.0	113	70-130	
-Xylene	12.2	"	10.0	122	70-130	
o- & m- Xylenes	23.8	"	20.0	119	70-130	
-Ethyltoluene	12.6	"	10.0	126	70-130	
Propylene	14.8	"	10.0	148	70-130	High Bias
Styrene	12.4	"	10.0	124	70-130	
Tetrachloroethylene	10.2	"	10.0	102	70-130	
Tetrahydrofuran	11.3	"	10.0	113	70-130	
Toluene	10.7	"	10.0	107	70-130	
rans-1,2-Dichloroethylene	11.2	"	10.0	112	70-130	
rans-1,3-Dichloropropylene	11.1	"	10.0	111	70-130	
Trichloroethylene	10.7	"	10.0	107	70-130	
Trichlorofluoromethane (Freon 11)	10.6	"	10.0	106	70-130	
Vinyl acetate	11.4	"	10.0	114	70-130	
Vinyl bromide	11.7	"	10.0	117	70-130	
Vinyl Chloride	11.1	"	10.0	111	70-130	

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Surrogate: SURR: p-Bromofluorobenzene

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10.2

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102

70-130

10.0

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

York Analytical Laboratories, Inc.

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

Batch BE90934 - EPA TO15 PREP	Ratch	RE90934 -	EPA	TO15	PREP
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*Source sample: 19F	20278-01 (27	V UU I)		Prepared & Analyzed: 05/17/2	2019	
ND	1.1		ND		25	
ND		"	ND		25	
ND		"	ND		25	
ND	1.2	"	ND		25	
ND	0.88	"	ND		25	
ND	0.65	"	ND		25	
ND	0.16	"	ND		25	
ND	1.2	"	ND			
11	0.79	"	12	6.67		
ND	1.2	"	ND		25	
ND	0.97	"	ND		25	
0.78	0.65	"	0.78	0.00	25	
ND	0.74	"	ND		25	
ND	1.1	"	ND		25	
2.8	0.79	"	3.2	10.5	25	
ND	1.1	"	ND		25	
ND	0.97	"	ND		25	
ND	0.74	"	ND		25	
ND	0.97	"	ND		25	
ND	1.2	"	ND		25	
11	0.47	"	12	5.93	25	
ND	1.3	"	ND		25	
ND	2.5	"	ND		25	
16	0.66	"	18	13.0	25	
92	0.76	"	96	4.68	25	
ND	0.35	"	ND		25	
3.5	0.51	"	3.5	1.46	25	
ND	0.83	"	ND		25	
ND	1.1	"	ND		25	
ND	1.7	"	ND		25	
ND	0.62	"	ND		25	
ND	0.50	"	ND		25	
0.81	0.25	"	0.71	13.3	25	
ND	0.74	"	ND		25	
ND	0.42	"	ND		25	
ND		"			25	
		"		14.0	25	
		"		40.0	25	Non-
		"				
		"		6.74		
		"				
		"		1.68		
		"				
		"				
		"		,.02		
		"		4 88		
		"		7.00		
				7.61		
18	0.66	"	19	6.66	25 25	
	ND N	ND	ND 1.1 ug/m³ ND 0.88 " ND 1.1 " ND 1.2 " ND 0.65 " ND 0.16 " ND 0.16 " ND 1.2 " 11 0.79 " ND 1.2 " ND 0.74 " ND 0.97 " ND 1.1 " ND 0.97 " ND 1.2 " 11 0.47 " ND 1.3 " ND 0.35 " 3.5 0.51 " ND 0.83 " ND 1.1 " ND 0.62 " ND 0.50 " 0.81 0.25 " ND 0.50 " 0.81 0.25 " ND 0.74 " ND 0.74 " ND 0.74 " ND 0.74 " ND 0.75 " 1.8 0.33 " 0.38 0.16 " ND 0.73 " 2.4 0.55 " ND 1.7 " ND 0.79 " ND 1.7 " ND 1.7 " ND 0.79 " 19 1.2 " 7.0 0.70 " ND 1.7 " ND 0.66 " ND 0.58 "	ND 1.1 ug/m² ND ND ND 0.88 " ND ND 1.1 " ND ND ND 1.2 " ND ND ND 0.65 " ND ND ND 0.16 " ND ND ND 0.16 " ND ND 1.2 " ND ND ND 0.74 " ND ND 0.74 " ND ND ND 1.1 " ND ND ND 0.74 " ND ND ND 1.1 " ND ND ND 0.74 " ND ND ND 0.75 " ND ND ND 0.75 " ND ND 0.75 " ND ND 1.2 " ND ND 1.2 " ND ND 1.3 " ND ND 1.2 " ND ND 1.3 " ND ND 1.3 " ND ND 1.3 " ND ND 0.35 " ND ND 1.3 " ND ND 0.35 " ND 0.35 " ND 0.35 " ND 0.83 " ND ND 0.35 " ND 0.83 " ND ND 0.81 0.25 " ND ND 0.74 " ND ND 0.75 " ND 0.75 " ND 0.74 " ND ND 0.75 " ND 0.74 " ND ND 0.75 " ND 0.75 " ND 0.74 " ND ND 0.75 " ND 0.75 " ND 0.77 " ND ND 0.78 " ND 0.78 " ND 0.78 " ND 0.79 "	ND	ND

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

York Analytical Laboratories, Inc.

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

Ratch	BE90934 -	EPA	TO15	PREP

Duplicate (BE90934-DUP1)	*Source sample: 19E	0578-01 (SV	7001)		Prepared & Analyzed: 05/17/2	2019
n-Hexane	6.9	0.57	ug/m³	6.8	1.65	25
o-Xylene	8.7	0.70	"	9.3	7.00	25
p- & m- Xylenes	29	1.4	"	30	4.22	25
p-Ethyltoluene	9.0	0.79	"	9.7	7.59	25
Propylene	3.4	0.28	"	3.4	0.00	25
Styrene	2.0	0.68	"	2.1	3.39	25
Tetrachloroethylene	4.9	0.27	"	5.6	12.5	25
Tetrahydrofuran	ND	0.95	"	ND		25
Toluene	110	0.61	"	120	11.2	25
trans-1,2-Dichloroethylene	ND	0.64	"	ND		25
trans-1,3-Dichloropropylene	ND	0.73	"	ND		25
Trichloroethylene	0.35	0.22	"	0.43	22.2	25
Trichlorofluoromethane (Freon 11)	2.1	0.90	"	2.0	4.44	25
Vinyl acetate	ND	0.57	"	ND		25
Vinyl bromide	ND	0.70	"	ND		25
Vinyl Chloride	ND	0.10	"	ND		25
Surrogate: SURR: p-Bromofluorobenzene	9.69		ppbv	10.0 96.9	70-130	

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Sample and Data Qualifiers Relating to This Work Order

TO-LCS-H The result reported for this compound may be biased high due to its behavior in the analysis batch LCS where it recovered greater

than 130% of the expected value.

TO-CCV The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30%)

Difference from initial calibration).

QR-01 Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted

based on LCS and/or LCSD QC results.

Definitions and Other Explanations

* Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.

ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)

RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.

LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is

based upon NELAC 2009 Standards and applies to all analyses.

LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably

detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.

MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA

600 and 200 series methods.

Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located

above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and

semi-volatile target compounds only.

NR Not reported

RPD Relative Percent Difference

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

Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note

that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias

conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take

note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias

conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is

outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet

and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

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9:38am Compared to the following Regulation(s): (please fill in) 8/0AM **Turn-Around Time** YORK Reg. Comp. Sampling Media 6 Liter Canister 00 Standard (5-7 Day) RUSH - Three Day 14/3 RUSH - Next Day RUSH - Four Day Tedlar Bag ppmv YORK Project No. RUSH - Two Day THE STATE OF THE PERSON OF THE Analysis Requested Reporting Units: ug/m³ X ppbv NJDEP SRP HazSite Standard Excel EDD LST 1802 EQuis (Standard) NYSDEC EQUIS YOUR Project Number Field Chain-of-Custody Record - AIR YOUR Project Name LS T1802 NYSDEC V1 Limits **Detection Limits Required** Mallowah Report / EDD Type (circle selections) NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. signature binds you to YORK's Standard Terms & Conditions. Flow Cont. ID NJDEP Reduced Deliv. YOUR PO#: CT RCP DQA/DUE シスピ Routine Survey NJDKQP ≤ 1 ug/m̃ 5 529 Please enter the following REQUIRED Field Data Canister ID NY ASP B Package Summary Report S/13/R 5,0 QA Report Invoice To: 0.H. Samples From Canister Vacuum Before Sampling (in Hg) Pennsylvania 0,92 -29.5 Connecticut New Jersey New York Other | Al - Indoor Ambient Air AO - Outdoor Amb. Air AS - Soil Vapor/Sub-Slab Air Matrix Codes AE - Vapor Extraction Well/ Process Gas/Effluent 33999 AS Air Matrix Report To: 0 132-02 89th Ave Queens, NY 11418 Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved. $\int \zeta(\gamma - \xi | \gamma) \langle \xi | \gamma \rangle = 0$ Date/Time Sampled York Analytical Laboratories, Inc. 2/1/1/1/S न्यक्रम 5/B/A clientservices@yorklab.com 5)10)15 5110115 Individual www.yorklab.com Proposal front/29/19 DHaug@pMGWOSkr.10m 120 Research Drive Stratford, CT 06615 Certified Canisters: Batch 12015 Secreteral Room 630 Johnson Ame Bonemica NY 11716 Sample Identification 031 - 584- 6353 YOUR Information Dan Hava 5,0001 2/00/2 Comments: Page 20 of 20



Technical Report

prepared for:

P.W. Grosser Consulting 630 Johnson Avenue, Suite 7 Bohemia NY, 11716 Attention: Daniel Haug

Report Date: 05/30/2019

Client Project ID: LST 1802

York Project (SDG) No.: 19E0591

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

Report Date: 05/30/2019 Client Project ID: LST 1802 York Project (SDG) No.: 19E0591

P.W. Grosser Consulting

630 Johnson Avenue, Suite 7 Bohemia NY, 11716 Attention: Daniel Haug

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 13, 2019 and listed below. The project was identified as your project: **LST 1802**.

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

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

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

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

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

York Sample ID	Client Sample ID	<u>Matrix</u>	Date Collected	Date Received
19E0591-01	SB001 (0-2)	Soil	05/10/2019	05/13/2019
19E0591-02	SB001 (2-4)	Soil	05/10/2019	05/13/2019
19E0591-03	SB001 (4-6)	Soil	05/10/2019	05/13/2019
19E0591-04	SB002 (4-6)	Soil	05/10/2019	05/13/2019
19E0591-05	SB002 (6-8)	Soil	05/10/2019	05/13/2019
19E0591-06	SB002 (0-2)	Soil	05/10/2019	05/13/2019
19E0591-07	SB003 (6-8)	Soil	05/10/2019	05/13/2019
19E0591-08	SB003 (10-12)	Soil	05/10/2019	05/13/2019
19E0591-09	SB003 (0-2)	Soil	05/10/2019	05/13/2019
19E0591-10	SB004 (0-2)	Soil	05/10/2019	05/13/2019
19E0591-11	SB004 (4-6)	Soil	05/10/2019	05/13/2019
19E0591-12	SB004 (2-4)	Soil	05/10/2019	05/13/2019
19E0591-13	SB005 (2-4)	Soil	05/10/2019	05/13/2019
19E0591-14	SB005 (0-2)	Soil	05/10/2019	05/13/2019
19E0591-15	SB005 (8-10)	Soil	05/10/2019	05/13/2019
19E0591-16	SB006 (0-2)	Soil	05/10/2019	05/13/2019
19E0591-17	SB006 (4-6)	Soil	05/10/2019	05/13/2019
19E0591-18	SB006 (6-8)	Soil	05/10/2019	05/13/2019
19E0591-19	SB007 (8-10)	Soil	05/10/2019	05/13/2019
19E0591-20	SB007 (12-14)	Soil	05/10/2019	05/13/2019
19E0591-21	SB007 (0-2)	Soil	05/10/2019	05/13/2019
19E0591-22	SB008 (6-8)	Soil	05/10/2019	05/13/2019

York Sample ID	Client Sample ID	<u>Matrix</u>	Date Collected	Date Received
19E0591-23	SB008 (0-2)	Soil	05/10/2019	05/13/2019
19E0591-24	SB008 (4-6)	Soil	05/10/2019	05/13/2019
19E0591-25	SB009 (6-8)	Soil	05/10/2019	05/13/2019
19E0591-26	SB009 (2-4)	Soil	05/10/2019	05/13/2019
19E0591-27	SB009 (8-10)	Soil	05/10/2019	05/13/2019
19E0591-28	SB010 (0-2)	Soil	05/10/2019	05/13/2019
19E0591-29	SB010 (6-8)	Soil	05/10/2019	05/13/2019
19E0591-30	SB010 (2-4)	Soil	05/10/2019	05/13/2019
19E0591-31	MW001	Water	05/10/2019	05/13/2019
19E0591-32	MW002	Water	05/10/2019	05/13/2019
19E0591-33	MW003	Water	05/10/2019	05/13/2019
19E0591-34	MW004	Water	05/10/2019	05/13/2019
19E0591-35	DUPE001	Soil	05/10/2019	05/13/2019
19E0591-36	DUPE002	Soil	05/10/2019	05/13/2019
19E0591-37	DUPE003	Water	05/10/2019	05/13/2019
19E0591-38	SB009 (8-10) E	Soil	05/10/2019	05/13/2019
19E0591-39	SB009 (8-10) N	Soil	05/10/2019	05/13/2019
19E0591-40	SB009 (8-10) W	Soil	05/10/2019	05/13/2019
19E0591-41	FB001	Water	05/10/2019	05/13/2019
19E0591-42	EB001	Water	05/10/2019	05/13/2019
19E0591-43	FB002	Water	05/10/2019	05/13/2019
19E0591-44	EB002	Water	05/10/2019	05/13/2019
19E0591-45	FB003	Water	05/10/2019	05/13/2019
19E0591-46	EB003	Water	05/10/2019	05/13/2019
19E0591-47	TB001	Water	05/10/2019	05/13/2019
19E0591-48	TB002	Water	05/10/2019	05/13/2019

General Notes for York Project (SDG) No.: 19E0591

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

Approved By:

Benjamin Gulizia Laboratory Director **Date:** 05/30/2019





<u>Client Sample ID:</u> SB001 (0-2) <u>York Sample ID:</u> 19E0591-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 9:15 am05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	d by Method: EPA 3550C											
CAS No		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,NJDEP,PADEI	05/22/2019 17:03	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.522	1.04	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 Y10854,NJDEP,PADEI	05/22/2019 17:03	КН
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,PADEP	05/22/2019 17:03	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,NJDEP,PADEI	05/22/2019 17:03	КН
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,PADEP	05/22/2019 17:03	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,PADEP	05/22/2019 17:03	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.522	1.04	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,NJDEP,PADEI	05/22/2019 17:03	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.522	1.04	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	КН
95-48-7	2-Methylphenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	КН
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.522	1.04	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	КН
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	КН
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.261	0.522	10	EPA 8270D		05/20/2019 08:10	05/22/2019 17:03	KH

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Certifications:

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CTDOH,NELAC-NY10854,NJDEP,PADEP

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Client Sample ID: SB001 (0-2)

York Sample ID: 19E0591-01

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 9:15 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3550C									
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Metl	Date/Time Date/ ood Prepared Ana	Time lyzed Analyst
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: NEL	05/20/2019 08:10 05/22/20 AC-NY10854,NJDEP,PADEP	019 17:03 KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.522	1.04	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 DH,NELAC-NY10854,NJDEP,PADEP	019 17:03 KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.522	1.04	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 DH,NELAC-NY10854,NJDEP,PADEP	019 17:03 KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 DH,NELAC-NY10854,NJDEP,PADEP	019 17:03 KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 DH,NELAC-NY10854,NJDEP,PADEP	019 17:03 KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 DH,NELAC-NY10854,NJDEP,PADEP	19 17:03 KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 DH,NELAC-NY10854,NJDEP,PADEP	119 17:03 KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.522	1.04	10	EPA 8270D Certifications: CTD	05/20/2019 08:10	019 17:03 KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.522	1.04	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 DH,NELAC-NY10854,NJDEP,PADEP	019 17:03 KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 DH,NELAC-NY10854,NJDEP,PADEP	019 17:03 KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 DH,NELAC-NY10854,NJDEP,PADEP	19 17:03 KH
98-86-2	Acetophenone	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: NELL	05/20/2019 08:10 05/22/20 AC-NY10854,NJDEP,PADEP	019 17:03 KH
62-53-3	Aniline	ND		mg/kg dry	1.04	2.09	10	EPA 8270D Certifications: NEL	05/20/2019 08:10 05/22/20 AC-NY10854,NJDEP,PADEP	019 17:03 KH
120-12-7	Anthracene	0.459	J	mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 OH,NELAC-NY10854,NJDEP,PADEP	019 17:03 KH
1912-24-9	Atrazine	ND		mg/kg dry	0.261	0.522	10	EPA 8270D		019 17:03 KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.261	0.522	10	EPA 8270D		019 17:03 KH
92-87-5	Benzidine	ND		mg/kg dry	1.04	2.09	10	EPA 8270D	05/20/2019 08:10 05/22/20	019 17:03 KH
56-55-3	Benzo(a)anthracene	1.59		mg/kg dry	0.261	0.522	10	EPA 8270D	OH,NELAC-NY10854,PADEP 05/20/2019 08:10 05/22/20	019 17:03 KH
50-32-8	Benzo(a)pyrene	1.64		mg/kg dry	0.261	0.522	10	Certifications: CTE EPA 8270D	OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10	019 17:03 KH
								Certifications: CTE	OH,NELAC-NY10854,NJDEP,PADEP	
205-99-2	Benzo(b)fluoranthene	1.42		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 OH,NELAC-NY10854,NJDEP,PADEP	019 17:03 KH
191-24-2	Benzo(g,h,i)perylene	1.03		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: CTD	05/20/2019 08:10 05/22/20 OH,NELAC-NY10854,NJDEP,PADEP	19 17:03 KH
207-08-9	Benzo(k)fluoranthene	1.24		mg/kg dry	0.261	0.522	10	EPA 8270D	05/20/2019 08:10 05/22/20	019 17:03 KH
									OH,NELAC-NY10854,NJDEP,PADEP	
65-85-0	Benzoic acid	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications: NEL	05/20/2019 08:10 05/22/20 AC-NY10854,NJDEP,PADEP	019 17:03 KH

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Client Sample ID: SB001 (0-2)

<u>York Sample ID:</u> 19E0591-01

York Project (SDG) No. 19E0591

Sample Prepared by Method: EPA 3550C

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:15 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 10854,NJDEP,PADEP	05/22/2019 17:03	КН
85-68-7	Benzyl butyl phthalate	0.413	CCV-E,	mg/kg dry	0.261	0.522	10	EPA 8270D		05/20/2019 08:10	05/22/2019 17:03	KH
			J					Certifications:	CTDOH,NE	ELAC-NY10854,NJDI	EP,PADEP	
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	0.492	CCV-E,	mg/kg dry	0.261	0.522	10	EPA 8270D		05/20/2019 08:10	05/22/2019 17:03	KH
			J					Certifications:	CTDOH,NE	ELAC-NY10854,NJDI	EP,PADEP	
105-60-2	Caprolactam	ND		mg/kg dry	0.522	1.04	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 10854,NJDEP,PADEP	05/22/2019 17:03	KH
86-74-8	Carbazole	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
218-01-9	Chrysene	1.40		mg/kg dry	0.261	0.522	10	EPA 8270D		05/20/2019 08:10	05/22/2019 17:03	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJDI	EP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	0.325	J	mg/kg dry	0.261	0.522	10	EPA 8270D		05/20/2019 08:10	05/22/2019 17:03	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJDI	EP,PADEP	
132-64-9	Dibenzofuran	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
206-44-0	Fluoranthene	2.98		mg/kg dry	0.261	0.522	10	EPA 8270D		05/20/2019 08:10	05/22/2019 17:03	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJDI	EP,PADEP	
86-73-7	Fluorene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 10854,NJDEP,PADEP	05/22/2019 17:03	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	1.27		mg/kg dry	0.261	0.522	10	EPA 8270D		05/20/2019 08:10	05/22/2019 17:03	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJDI	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJDE	05/22/2019 17:03 P,PADEP	КН

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Client Sample ID: SB001 (0-2) **York Sample ID:** 19E0591-01

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:15 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

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Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:03 EP,PADEP	КН
98-95-3	Nitrobenzene	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDF	05/22/2019 17:03 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDF	05/22/2019 17:03 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDF	05/22/2019 17:03 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:03 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
85-01-8	Phenanthrene	1.58		mg/kg dry	0.261	0.522	10	EPA 8270D		05/20/2019 08:10	05/22/2019 17:03	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.261	0.522	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:03 EP,PADEP	KH
129-00-0	Pyrene	2.40		mg/kg dry	0.261	0.522	10	EPA 8270D		05/20/2019 08:10	05/22/2019 17:03	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	1.04	2.09	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:03 EP,PADEP	KH
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	60.6 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	64.8 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	71.6 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	67.6 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	72.0 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	68.8 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	o. Paramete	r Result	Flag Units	Reported to LOQ Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00205 5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/22/2019 21:49 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00205 5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/22/2019 21:49 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00205 5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/22/2019 21:49 EP,PADEP	CM
309-00-2	Aldrin	ND	mg/kg dry	0.00205 5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/22/2019 21:49 EP,PADEP	CM
319-84-6	alpha-BHC	ND	mg/kg dry	0.00205 5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/22/2019 21:49 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00205 5	EPA 8081B Certifications:	05/20/2019 08:00 NELAC-NY10854,NJDEP	05/22/2019 21:49	СМ

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Client Sample ID: SB001 (0-2)

York Sample ID: 19E0591-01

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:15 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-85-7	beta-BHC	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 21:49 EP,PADEP	СМ
319-86-8	delta-BHC	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDF	05/22/2019 21:49 EP,PADEP	CM
60-57-1	Dieldrin	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDF	05/22/2019 21:49 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 21:49 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854	05/22/2019 21:49	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDF	05/22/2019 21:49 EP,PADEP	СМ
72-20-8	Endrin	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 21:49 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 21:49 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 21:49 EP,PADEP	СМ
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDF	05/22/2019 21:49 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 08:00 Y10854,NJDEP	05/22/2019 21:49	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDF	05/22/2019 21:49 EP,PADEP	СМ
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 21:49 EP,PADEP	СМ
72-43-5	Methoxychlor	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 21:49 EP,PADEP	СМ
8001-35-2	Toxaphene	ND		mg/kg dry	0.205	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDF	05/22/2019 21:49 EP,PADEP	СМ
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0410	5	EPA 8081B Certifications:		05/20/2019 08:00	05/22/2019 21:49	CM
	Surrogate Recoveries	Result		Acceptanc	e Range						
2051-24-3	Surrogate: Decachlorobiphenyl	125 %		30-1	50						
877-09-8	Surrogate: Tetrachloro-m-xylene	56.9 %		30-1	50						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	0.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016		ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 /10854,CTDOH,NJDE	05/23/2019 00:13 EP,PADEP	SR
11104-28-2	Aroclor 1221		ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 710854,CTDOH,NJDE	05/23/2019 00:13 EP,PADEP	SR

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Client Sample ID: SB001 (0-2)

York Sample ID: 19E0591-01

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:15 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 /10854,CTDOH,NJDE	05/23/2019 00:13 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 710854,CTDOH,NJDE	05/23/2019 00:13 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 710854,CTDOH,NJDE	05/23/2019 00:13 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 710854,CTDOH,NJDE	05/23/2019 00:13 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 710854,CTDOH,NJDE	05/23/2019 00:13 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:		05/20/2019 08:00	05/23/2019 00:13	SR
	Surrogate Recoveries	Result		Acceptance	e Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	72.5 %		30-1.	20						
2051-24-3	Surrogate: Decachlorobiphenyl	70.0 %		30-1.	20						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes: Sample Notes:

CAS N	0.	Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analys
429-90-5	Aluminum		7890	mg/kg dry	6.30	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND	mg/kg dry	3.15	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:13 EP,PADEP	KML
440-38-2	Arsenic		5.08	mg/kg dry	1.89	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-39-3	Barium		144	mg/kg dry	3.15	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		ND	mg/kg dry	0.063	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:13 EP,PADEP	KML
440-43-9	Cadmium		1.68	mg/kg dry	0.378	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-70-2	Calcium		26100	mg/kg dry	6.30	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-47-3	Chromium		16.2	mg/kg dry	0.630	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-48-4	Cobalt		7.25	mg/kg dry	0.504	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-50-8	Copper		188	mg/kg dry	2.52	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
439-89-6	Iron		16700	mg/kg dry	31.5	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
439-92-1	Lead		962	mg/kg dry	0.630	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: SB001 (0-2) **York Sample ID:** 19E0591-01

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:15 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	8540	mg/kg dry	6.30	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	300	mg/kg dry	0.630	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	17.6	mg/kg dry	1.26	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1590	mg/kg dry	6.30	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.15	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJDE	P,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.630	1	EPA 6010D	OTTO OVENIE	05/20/2019 14:50	05/20/2019 20:13	KML
	a						CTDOH,NE	ELAC-NY10854,NJDE	, and a second	
7440-23-5	Sodium	314	mg/kg dry	63.0	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.15	1	EPA 6010D	CEDOUAN	05/20/2019 14:50	05/20/2019 20:13	KML
							CTDOH,NE	ELAC-NY10854,NJDE	, and a second	
7440-62-2	Vanadium	23.7	mg/kg dry	1.26	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD		
7440-66-6	Zinc	370	mg/kg dry	3.15	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:13	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in	Notes:

Sample Notes:

CAS N	No.	Parameter	Result Flag Units			Reported t LOQ	Reported to LOQ Dilution			ethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.502		mg/kg dry	0.0378		1 E	EPA 7473		05/22/2019 09:03	05/22/2019 12:16	SY
								(Certifications: C	TDOH NJ	DEP NELAC-NY108	54 PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

Log-in Notes:

Sample Notes:

CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	Reported to LOQ Dilution		Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		79.4		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB001 (2-4)			York Sample ID:	19E0591-02
York Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 9:25 am	05/13/2019

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Client Sample ID: SB001 (2-4)

York Sample ID: 19E0591-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 9:25 am05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Flepan	ed by Method: EPA 3550C				Reported to					Date/Time	Date/Time	
CAS N	o. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference	Method	Prepared	Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 / 10854,NJDEP,PADEP	05/22/2019 17:32	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0966	0.193	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 /10854,NJDEP,PADEP	05/22/2019 17:32	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 710854,PADEP	05/22/2019 17:32	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 /10854,NJDEP,PADEP	05/22/2019 17:32	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 /10854,PADEP	05/22/2019 17:32	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 /10854,PADEP	05/22/2019 17:32	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0966	0.193	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 /10854,NJDEP,PADEP	05/22/2019 17:32	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0966	0.193	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0966	0.193	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
38-75-5	2-Nitrophenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 P,PADEP	КН
55794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32	KH
01-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D	NELAC-NY	05/20/2019 08:10	05/22/2019 17:32	КН

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Client Sample ID: SB001 (2-4)

York Sample ID: 19E0591-02

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 9:25 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0966	0.193	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJD	05/22/2019 17:32 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0966	0.193	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJD	05/22/2019 17:32 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJD	05/22/2019 17:32 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJD	05/22/2019 17:32 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJD	05/22/2019 17:32 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJD	05/22/2019 17:32 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0966	0.193	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJD	05/22/2019 17:32 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0966	0.193	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJD	05/22/2019 17:32 EP,PADEP	KH
33-32-9	Acenaphthene	0.111		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJI	05/22/2019 17:32 DEP,PADEP	KH
208-96-8	Acenaphthylene	0.226		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJE	05/22/2019 17:32 DEP PADEP	КН
98-86-2	Acetophenone	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 NELAC-NY10854,NJDEP,PADE	05/22/2019 17:32	KH
62-53-3	Aniline	ND		mg/kg dry	0.193	0.387	2	EPA 8270D Certifications:	05/20/2019 08:10 NELAC-NY10854,NJDEP,PADE	05/22/2019 17:32	KH
20-12-7	Anthracene	0.334		mg/kg dry	0.0484	0.0966	2	EPA 8270D	05/20/2019 08:10	05/22/2019 17:32	КН
								Certifications:	CTDOH,NELAC-NY10854,NJI		
912-24-9	Atrazine	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 NELAC-NY10854,NJDEP,PADE	05/22/2019 17:32 P	KH
00-52-7	Benzaldehyde	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 NELAC-NY10854,NJDEP,PADE	05/22/2019 17:32 P	KH
92-87-5	Benzidine	ND		mg/kg dry	0.193	0.387	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,PAD	05/22/2019 17:32 EP	KH
6-55-3	Benzo(a)anthracene	1.11		mg/kg dry	0.0484	0.0966	2	EPA 8270D	05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
0-32-8	Benzo(a)pyrene	1.16		mg/kg dry	0.0484	0.0966	2	EPA 8270D	05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI		
05-99-2	Benzo(b)fluoranthene	0.949		mg/kg dry	0.0484	0.0966	2	EPA 8270D	05/20/2019 08:10	05/22/2019 17:32	KH
01 24 2	D(- h-!)d	. =		4 1				Certifications:	CTDOH,NELAC-NY10854,NJI		1/11
91-24-2	Benzo(g,h,i)perylene	0.798		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 CTDOH,NELAC-NY10854,NJI	05/22/2019 17:32 DED DA DED	KH
07-08-9	Benzo(k)fluoranthene	0.902		mg/kg dry	0.0484	0.0966	2	EPA 8270D	05/20/2019 08:10	05/22/2019 17:32	KH
07 00 7	Denzo(k) nuor unenene	0.902		mg/kg ury	0.0464	0.0900	2	Certifications:	CTDOH,NELAC-NY10854,NJI		KII
55-85-0	Benzoic acid	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	05/20/2019 08:10 NELAC-NY10854,NJDEP,PADE	05/22/2019 17:32	КН
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D	05/20/2019 08:10 NELAC-NY10854,NJDEP,PADE	05/22/2019 17:32	КН

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Client Sample ID: SB001 (2-4)

York Sample ID: 19E0591-02

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:25 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:
Log-m Notes:	Samble Notes:

CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	КН
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	КН
105-60-2	Caprolactam	ND		mg/kg dry	0.0966	0.193	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 /10854,NJDEP,PADE	05/22/2019 17:32 P	KH
86-74-8	Carbazole	0.105		mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD		
218-01-9	Chrysene	0.991		mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD		
53-70-3	Dibenzo(a,h)anthracene	0.212		mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10	05/22/2019 17:32	KH
	D11 6							Certifications:	CTDOH,N.	ELAC-NY10854,NJD		
132-64-9	Dibenzofuran	0.0564	J	mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	CTDOH,N.	ELAC-NY10854,NJD		
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
206-44-0	Fluoranthene	2.13		mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	0.105		mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	NELAC-N	Y10854,NJDEP,PADE	EP .	
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.890		mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 17:32 EP,PADEP	KH
91-20-3	Naphthalene	0.0571	J	mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:		05/20/2019 08:10 ELAC-NY10854,NJD	05/22/2019 17:32	КН
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Client Sample ID: SB001 (2-4) **York Sample ID:**

19E0591-02

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:25 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 EP,PADEP	KH
85-01-8	Phenanthrene	1.28		mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0484	0.0966	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDF	05/22/2019 17:32 EP,PADEP	KH
129-00-0	Pyrene	1.66		mg/kg dry	0.0484	0.0966	2	EPA 8270D		05/20/2019 08:10	05/22/2019 17:32	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.193	0.387	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 17:32 EP,PADEP	КН
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	62.0 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	64.6 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	68.6 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	64.4 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	72.1 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	66.6 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS I	No. Para	meter Result	Flag Units	Reported to LOQ Dil	lution	Reference M	Date/Time Iethod Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00192		EPA 8081B Certifications: C	05/20/2019 08:00 TDOH,NELAC-NY10854,NJDH	05/22/2019 22:04 EP,PADEP	СМ
72-55-9	4,4'-DDE						05/20/2019 08:00 TDOH,NELAC-NY10854,NJDH	05/22/2019 22:04 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00192		EPA 8081B Certifications: C	05/20/2019 08:00 TDOH,NELAC-NY10854,NJDH	05/22/2019 22:04 EP,PADEP	CM
309-00-2	Aldrin	ND	mg/kg dry	0.00192		PA 8081B Certifications: C	05/20/2019 08:00 TDOH,NELAC-NY10854,NJDI	05/22/2019 22:04 EP,PADEP	CM
319-84-6	alpha-BHC	ND	mg/kg dry	0.00192		PA 8081B Certifications: C	05/20/2019 08:00 TDOH,NELAC-NY10854,NJDI	05/22/2019 22:04 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00192		PA 8081B Certifications: N	05/20/2019 08:00 WELAC-NY10854,NJDEP	05/22/2019 22:04	CM
319-85-7	beta-BHC	ND	mg/kg dry	0.00192		PA 8081B Certifications: C	05/20/2019 08:00 TDOH,NELAC-NY10854,NJDI	05/22/2019 22:04 EP,PADEP	CM
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Client Sample ID: SB001 (2-4)

York Sample ID: 19E0591-02

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:25 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C	
	Reported to

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854	05/22/2019 22:04	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	NELAC-NY	05/20/2019 08:00 710854,NJDEP	05/22/2019 22:04	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.192	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDE	05/22/2019 22:04 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0384	5	EPA 8081B Certifications:		05/20/2019 08:00	05/22/2019 22:04	CM
	Surrogate Recoveries	Result		Acceptance Range							
2051-24-3	Surrogate: Decachlorobiphenyl	116 %		30-150	· ·						
877-09-8	Surrogate: Tetrachloro-m-xylene	61.3 %		30-15	0						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	0.	Parameter R	esult Flag	Units	Reported to LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	NI)	mg/kg dry	0.0194	1	EPA 8082A Certifications: NI	05/20/2019 08:00 ELAC-NY10854,CTDOH,NJD	05/23/2019 00:26 EP,PADEP	SR
11104-28-2	Aroclor 1221	NI)	mg/kg dry	0.0194	1	EPA 8082A Certifications: NI	05/20/2019 08:00 ELAC-NY10854,CTDOH,NJD	05/23/2019 00:26 EP,PADEP	SR
11141-16-5	Aroclor 1232	NI)	mg/kg dry	0.0194	1	EPA 8082A Certifications: NI	05/20/2019 08:00 ELAC-NY10854,CTDOH,NJD	05/23/2019 00:26 EP,PADEP	SR

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Client Sample ID: SB001 (2-4)

York Sample ID: 19E0591-02

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:25 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Sample Prepared by Method: EPA 3550C

og-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0194	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 Y10854,CTDOH,NJDE	05/23/2019 00:26 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0194	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 Y10854,CTDOH,NJDE	05/23/2019 00:26 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0194	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 Y10854,CTDOH,NJDE	05/23/2019 00:26 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0194	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 Y10854,CTDOH,NJDE	05/23/2019 00:26 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0194	1	EPA 8082A Certifications:		05/20/2019 08:00	05/23/2019 00:26	SR
	Surrogate Recoveries	Result		Acceptance	Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	68.0 %		30-12	0						
2051-24-3	Surrogate: Decachlorobiphenyl	64.0 %		30-12	0						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
429-90-5	Aluminum		10000		mg/kg dry	5.83	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
440-36-0	Antimony		ND		mg/kg dry	2.91	1	EPA 6010D Certifications:	CTDOH,NF	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:15 EP,PADEP	KML
440-38-2	Arsenic		4.53		mg/kg dry	1.75	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
440-39-3	Barium		115		mg/kg dry	2.91	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
440-41-7	Beryllium		ND		mg/kg dry	0.058	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:15 EP,PADEP	KML
440-43-9	Cadmium		1.36		mg/kg dry	0.350	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
440-70-2	Calcium		14700		mg/kg dry	5.83	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
440-47-3	Chromium		15.6		mg/kg dry	0.583	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
440-48-4	Cobalt		8.83		mg/kg dry	0.466	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
440-50-8	Copper		52.5		mg/kg dry	2.33	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
439-89-6	Iron		15900		mg/kg dry	29.1	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
439-92-1	Lead		1280		mg/kg dry	0.583	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
439-95-4	Magnesium		5720		mg/kg dry	5.83	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	

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Client Sample ID: SB001 (2-4)

York Sample ID: 19E0591-02

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:25 am <u>Date Received</u> 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No	o. P	arameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	Manganese		279		mg/kg dry	0.583	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel		16.3		mg/kg dry	1.17	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium		2510		mg/kg dry	5.83	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium		ND		mg/kg dry	2.91	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver		ND		mg/kg dry	0.583	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDE	EP,PADEP	
7440-23-5	Sodium		432		mg/kg dry	58.3	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		mg/kg dry	2.91	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDE	P,PADEP	
7440-62-2	Vanadium		23.9		mg/kg dry	1.17	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc		639		mg/kg dry	2.91	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:15	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-	in	No	tes:

Sample Notes:

CAS No.		Parameter	Result Flag Units		Reported to LOQ	Dilution	Reference Method		Date/Time Prepared	Date/Time Analyzed	Analyst	
7439-97-6	Mercury		0.425	1	mg/kg dry	0.0350	1	EPA 7473		05/22/2019 09:03	05/22/2019 12:25	SY
								Certifications:	CTDOH N	IDEPNEL AC-NV108	54 PADEP	

Total Solids

Log-in Notes:

Sample Notes:

	CAS No.	Parameter	Result	Flag	Units	Reported LOQ	Reported to LOQ Dilution			Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		85.8		%	0.100		1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
									Certifications:	CTDOH			

Sample Information

Client Sample ID: SB001 (4-6)			York Sample ID:	19E0591-03
York Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 9:20 am	05/13/2019

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Log-in Notes:

Client Sample ID: SB001 (4-6)

York Sample ID: 19E0591-03

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil

Sample Notes:

Collection Date/Time May 10, 2019 9:20 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 Y10854,NJDEP,PADEP	05/22/2019 18:01	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.511	1.02	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 Y10854,NJDEP,PADEP	05/22/2019 18:01	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 Y10854,PADEP	05/22/2019 18:01	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 Y10854,NJDEP,PADEP	05/22/2019 18:01	КН
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 Y10854,PADEP	05/22/2019 18:01	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 Y10854,PADEP	05/22/2019 18:01	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.511	1.02	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 Y10854,NJDEP,PADEP	05/22/2019 18:01	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.511	1.02	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	КН
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	КН
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	КН
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	КН
95-48-7	2-Methylphenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	КН
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.511	1.02	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE		KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	КН
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 P,PADEP	КН
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 Y10854,NJDEP,PADEP	05/22/2019 18:01	KH

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Client Sample ID: SB001 (4-6)

York Sample ID: 19E0591-03

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 9:20 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepar	red by Method: EPA 3550C							Sumple 149cest				
CAS N		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.511	1.02	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 18:01 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.511	1.02	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 18:01 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 18:01 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 18:01 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 18:01 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 18:01 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.511	1.02	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 18:01 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.511	1.02	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 18:01 EP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJDI	05/22/2019 18:01 EP,PADEP	KH
208-96-8	Acenaphthylene	0.919		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH N	05/20/2019 08:10 IELAC-NY10854,NJD	05/22/2019 18:01	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:		05/20/2019 08:10 Y10854,NJDEP,PADE	05/22/2019 18:01	КН
62-53-3	Aniline	ND		mg/kg dry	1.02	2.05	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,NJDEP,PADE	05/22/2019 18:01 P	КН
120-12-7	Anthracene	0.698		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 08:10 IELAC-NY10854,NJD	05/22/2019 18:01 EP,PADEP	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,NJDEP,PADE	05/22/2019 18:01 P	КН
100-52-7	Benzaldehyde	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,NJDEP,PADE	05/22/2019 18:01 P	KH
92-87-5	Benzidine	ND		mg/kg dry	1.02	2.05	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,PAD	05/22/2019 18:01 EP	KH
56-55-3	Benzo(a)anthracene	3.12		mg/kg dry	0.256	0.511	10	EPA 8270D		05/20/2019 08:10	05/22/2019 18:01	KH
50-32-8	Benzo(a)pyrene	3.51		mg/kg dry	0.256	0.511	10	Certifications: EPA 8270D	CTDOH,N	IELAC-NY 10854, NJD 05/20/2019 08:10	05/22/2019 18:01	KH
	(w)p	0.01			0.230	0.511	10	Certifications:	CTDOH,N	IELAC-NY10854,NJD		
205-99-2	Benzo(b)fluoranthene	3.20		mg/kg dry	0.256	0.511	10	EPA 8270D		05/20/2019 08:10	05/22/2019 18:01	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJD		
191-24-2	Benzo(g,h,i)perylene	2.33		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH N	05/20/2019 08:10 IELAC-NY10854,NJD	05/22/2019 18:01	KH
207-08-9	Benzo(k)fluoranthene	2.68		mg/kg dry	0.256	0.511	10	EPA 8270D	CTDOII,N	05/20/2019 08:10	05/22/2019 18:01	KH
20, 00)		2.00			0.230	0.511	10	Certifications:	CTDOH,N	IELAC-NY10854,NJD		
65-85-0	Benzoic acid	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 08:10 Y10854,NJDEP,PADE	05/22/2019 18:01 P	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	NEL AC-N	05/20/2019 08:10 Y10854,NJDEP,PADE	05/22/2019 18:01	KH

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Client Sample ID: SB001 (4-6)

York Sample ID: 19E0591-03

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 9:20 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Date/Time	KH KH
OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01	KH KH
OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01	КН
OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01	КН
OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01	
OH,NELAC-NY 10854,NJDEP,PADEP	KH
05/20/2019 08:10 05/22/2019 18:01 AC-NY10854,NJDEP,PADEP	КН
05/20/2019 08:10	KH
05/20/2019 08:10 05/22/2019 18:01 OOH,NELAC-NY10854,NJDEP,PADEP	КН
05/20/2019 08:10 05/22/2019 18:01	КН
05/20/2019 08:10	КН
05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP	КН
05/20/2019 08:10	KH
OOH,NELAC-NY10854,NJDEP,PADEP	
05/20/2019 08:10 05/22/2019 18:01 AC-NY10854,NJDEP,PADEP	КН
05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP	KH
05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP	KH
05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP	КН
05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP	KH
05/20/2019 08:10 05/22/2019 18:01 DOH,NELAC-NY10854,NJDEP,PADEP	KH
05/20/2019 08:10	КН
05/20/2019 08:10	KH
	OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 AC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OOH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OOH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OOH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OOH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10 05/22/2019 18:01 OOH,NELAC-NY10854,NJDEP,PADEP

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Client Sample ID: SB001 (4-6)

York Sample ID: 19E0591-03

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:20 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 EP,PADEP	КН
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 EP,PADEP	КН
85-01-8	Phenanthrene	2.01		mg/kg dry	0.256	0.511	10	EPA 8270D		05/20/2019 08:10	05/22/2019 18:01	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.256	0.511	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 EP,PADEP	КН
129-00-0	Pyrene	3.45		mg/kg dry	0.256	0.511	10	EPA 8270D		05/20/2019 08:10	05/22/2019 18:01	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	1.02	2.05	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 ELAC-NY10854,NJDE	05/22/2019 18:01 EP,PADEP	КН
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	48.8 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	59.4 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	64.0 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	64.8 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	21.6 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	68.0 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	vo. Para	neter Result	Flag Units	Reported to LOQ D	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/21/2019 20:07 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/21/2019 20:07 EP,PADEP	СМ
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/21/2019 20:07 EP,PADEP	СМ
309-00-2	Aldrin	ND	mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/21/2019 20:07 EP,PADEP	СМ
319-84-6	alpha-BHC	ND	mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/21/2019 20:07 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00203	5	EPA 8081B Certifications:	NELAC-NY	05/20/2019 08:00 10854,NJDEP	05/21/2019 20:07	СМ
319-85-7	beta-BHC	ND	mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/21/2019 20:07 EP,PADEP	СМ

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Client Sample ID: SB001 (4-6)

York Sample ID: 19E0591-03

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:20 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported t	O Dilution	Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	СМ
959-98-8	Endosulfan I	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854	05/21/2019 20:07	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 08:00 Y10854,NJDEP	05/21/2019 20:07	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.203	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:07 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0405	5	EPA 8081B Certifications:		05/20/2019 08:00	05/21/2019 20:07	CM
	Surrogate Recoveries	Result		Accepta	ince Range						
2051-24-3	Surrogate: Decachlorobiphenyl	64.3 %		3	0-150						
877-09-8	Surrogate: Tetrachloro-m-xylene	41.4 %		3	0-150						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	0.	Parameter Re	sult Flag	Units	Reported to LOQ	Dilution	Reference M	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0205	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 10854,CTDOH,NJDE	05/22/2019 11:05 P,PADEP	SR
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0205	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 10854,CTDOH,NJDE	05/22/2019 11:05 P,PADEP	SR
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0205	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 10854,CTDOH,NJDE	05/22/2019 11:05 P,PADEP	SR

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Client Sample ID: SB001 (4-6)

York Sample ID: 19E0591-03

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:20 am <u>Date Received</u> 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Sample Prepared by Method: EPA 3550C

Log-in	Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0205	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 08:00 Y10854,CTDOH,NJDE	05/22/2019 11:05 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0205	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 08:00 Y10854,CTDOH,NJDH	05/22/2019 11:05 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0205	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 08:00 Y10854,CTDOH,NJDE	05/22/2019 11:05 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0205	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 08:00 Y10854,CTDOH,NJDE	05/22/2019 11:05 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0205	1	EPA 8082A Certifications:		05/20/2019 08:00	05/22/2019 11:05	SR
	Surrogate Recoveries	Result		Acceptan	ce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	68.5 %		30-	120						
2051-24-3	Surrogate: Decachlorobiphenyl	71.0 %		30-	120						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		9650		mg/kg dry	6.16	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.08	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:17 EP,PADEP	KML
7440-38-2	Arsenic		4.98		mg/kg dry	1.85	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJDI	EP,PADEP	
7440-39-3	Barium		100		mg/kg dry	3.08	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-41-7	Beryllium		ND		mg/kg dry	0.062	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:17 EP,PADEP	KML
7440-43-9	Cadmium		0.963		mg/kg dry	0.370	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-70-2	Calcium		16700		mg/kg dry	6.16	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJDI	EP,PADEP	
7440-47-3	Chromium		17.7		mg/kg dry	0.616	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJDI	EP,PADEP	
7440-48-4	Cobalt		9.92		mg/kg dry	0.493	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJDI	EP,PADEP	
7440-50-8	Copper		50.6		mg/kg dry	2.47	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJDI	EP,PADEP	
7439-89-6	Iron		17600		mg/kg dry	30.8	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJDI	EP,PADEP	
7439-92-1	Lead		464		mg/kg dry	0.616	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJDI	EP,PADEP	
7439-95-4	Magnesium		6990		mg/kg dry	6.16	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:17	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	

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Client Sample ID: SB001 (4-6)

York Sample ID:

19E0591-03

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:20 am <u>Date Received</u> 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	No. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference 1	Date/Time Method Prepared	Date/Time Analyzed	Analyst
7439-96-5	Manganese	487	mg/kg dry	0.616	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:17	KML
						Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
7440-02-0	Nickel	18.8	mg/kg dry	1.23	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:17	KML
						Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
7440-09-7	Potassium	2230	mg/kg dry	6.16	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:17	KML
						Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.08	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:17	KML
						Certifications:	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.616	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:17	KML
						Certifications:	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
7440-23-5	Sodium	234	mg/kg dry	61.6	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:17	KML
						Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.08	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:17	KML
						Certifications:	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
7440-62-2	Vanadium	25.7	mg/kg dry	1.23	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:17	KML
						Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
7440-66-6	Zinc	410	mg/kg dry	3.08	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:17	KML
						Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-	<u>in</u>	Notes:

Sample Notes:

CAS No	0.	Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference M	Date/Time lethod Prepared		Analyst
7439-97-6	Mercury		0.708	mg/kg dry	0.0370	1	EPA 7473	05/22/2019 09:0	3 05/22/2019 12:34	SY
							Certifications: (CTDOH NIDEP NELAC-NY	10854 PADEP	

<u>Total Solids</u>

Log-in Notes:

Sample Notes:

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CAS No).	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		81.1		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB002 (4-6)			York Sample ID:	19E0591-04
York Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 8:30 am	05/13/2019

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Client Sample ID: SB002 (4-6)

York Sample ID: 19E0591-04

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 8:30 am05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		e/Time epared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 NELAC-NY10854,NJ	019 08:10 DEP,PADEF	05/22/2019 15:36	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	2.66	5.32	10	EPA 8270D Certifications:	05/20/20 NELAC-NY10854,NJ	019 08:10 DEP,PADEF	05/22/2019 15:36	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 NELAC-NY10854,PA	019 08:10 .DEP	05/22/2019 15:36	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 NELAC-NY10854,NJ	019 08:10 DEP,PADEF	05/22/2019 15:36	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 NELAC-NY10854,PA	019 08:10 .DEP	05/22/2019 15:36	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 NELAC-NY10854,PA	019 08:10 .DEP	05/22/2019 15:36	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	2.66	5.32	10	EPA 8270D Certifications:	05/20/20 NELAC-NY10854,NJ	019 08:10 DEP,PADEF	05/22/2019 15:36	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	2.66	5.32	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	2.66	5.32	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 CTDOH,NELAC-NY	019 08:10 10854,NJDE	05/22/2019 15:36 EP,PADEP	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	05/20/20 NELAC-NY10854,NJ	019 08:10 DEP,PADEF	05/22/2019 15:36	KH



Client Sample ID: SB002 (4-6)

York Sample ID: 19E0591-04

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:30 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

					Reported to				Date/Time Date/T	ime
CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Me		
99-09-2	3-Nitroaniline	ND		mg/kg dry	2.66	5.32	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	2.66	5.32	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10) 15:36 KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	2.66	5.32	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	2.66	5.32	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
83-32-9	Acenaphthene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
208-96-8	Acenaphthylene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
98-86-2	Acetophenone	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: NE	05/20/2019 08:10 05/22/201 ELAC-NY10854,NJDEP,PADEP	9 15:36 KH
62-53-3	Aniline	ND		mg/kg dry	5.34	10.7	10	EPA 8270D Certifications: NE	05/20/2019 08:10 05/22/201 ELAC-NY10854,NJDEP,PADEP	9 15:36 KH
120-12-7	Anthracene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
1912-24-9	Atrazine	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: NE	05/20/2019 08:10 05/22/201 ELAC-NY10854,NJDEP,PADEP	9 15:36 KH
100-52-7	Benzaldehyde	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: NE	05/20/2019 08:10 05/22/201 ELAC-NY10854,NJDEP,PADEP	9 15:36 KH
92-87-5	Benzidine	ND		mg/kg dry	5.34	10.7	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 DOH,NELAC-NY10854,PADEP	9 15:36 KH
56-55-3	Benzo(a)anthracene	3.13		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 FDOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
50-32-8	Benzo(a)pyrene	3.00		mg/kg dry	1.34	2.66	10	EPA 8270D	05/20/2019 08:10	9 15:36 KH
205-99-2	Benzo(b)fluoranthene	2.30	J	mg/kg dry	1.34	2.66	10	Certifications: C1 EPA 8270D	TDOH,NELAC-NY10854,NJDEP,PADEP 05/20/2019 08:10	9 15:36 KH
	D (10 1								TDOH,NELAC-NY10854,NJDEP,PADEP	
191-24-2	Benzo(g,h,i)perylene	1.94	J	mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 FDOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
207-08-9	Benzo(k)fluoranthene	2.30	J	mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: CT	05/20/2019 08:10 05/22/201 FDOH,NELAC-NY10854,NJDEP,PADEP	9 15:36 KH
65-85-0	Benzoic acid	ND		mg/kg dry	1.34	2.66	10	EPA 8270D	05/20/2019 08:10 05/22/201 ELAC-NY10854,NJDEP,PADEP	9 15:36 KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D	05/20/2019 08:10 05/22/201	9 15:36 KH

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Client Sample ID: SB002 (4-6) **York Sample ID:** 19E0591-04

York Project (SDG) No. Client Project ID 19E0591 LST 1802

Matrix Collection Date/Time Soil May 10, 2019 8:30 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

	atiles, 8270 Comprehensive				<u>Log-in</u>	Notes:		Sam	ple Notes	<u>s:</u>		
CAS No		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:		05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	2.66	5.32	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 10854,NJDEP,PADE	05/22/2019 15:36 P	KH
86-74-8	Carbazole	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
218-01-9	Chrysene	2.68		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJE	05/22/2019 15:36 DEP,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
206-44-0	Fluoranthene	5.15		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJE	05/22/2019 15:36 DEP,PADEP	KH
86-73-7	Fluorene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 08:10 10854,NJDEP,PADE	05/22/2019 15:36 P	КН
118-74-1	Hexachlorobenzene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	2.15	J	mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 08:10 ELAC-NY10854,NJE	05/22/2019 15:36 DEP,PADEP	KH
78-59-1	Isophorone	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:		05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36	КН
91-20-3	Naphthalene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications:		05/20/2019 08:10 LAC-NY10854,NJD	05/22/2019 15:36	КН

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Client Sample ID: SB002 (4-6) **York Sample ID:**

19E0591-04

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:30 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-	in [Not	tes:	

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time lethod Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: C	05/20/2019 08:10 TDOH,NELAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: C	05/20/2019 08:10 TDOH,NELAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: C	05/20/2019 08:10 TDOH,NELAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	КН
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: C	05/20/2019 08:10 TDOH,NELAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: C	05/20/2019 08:10 TDOH,NELAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	КН
85-01-8	Phenanthrene	2.68		mg/kg dry	1.34	2.66	10	EPA 8270D	05/20/2019 08:10	05/22/2019 15:36	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	1.34	2.66	10	EPA 8270D Certifications: C	05/20/2019 08:10 TDOH,NELAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	КН
129-00-0	Pyrene	4.79		mg/kg dry	1.34	2.66	10	EPA 8270D	05/20/2019 08:10	05/22/2019 15:36	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	5.34	10.7	10	EPA 8270D Certifications: C	05/20/2019 08:10 TDOH,NELAC-NY10854,NJD	05/22/2019 15:36 EP,PADEP	KH
	Surrogate Recoveries	Result		Acce	ptance Rang	e					
367-12-4	Surrogate: SURR: 2-Fluorophenol	48.0 %			20-108						
4165-62-2	Surrogate: SURR: Phenol-d5	51.0 %			23-114						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	66.0 %			22-108						
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	68.0 %			21-113						
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	69.0 %			19-110						
1718-51-0	Surrogate: SURR: Terphenyl-d14	74.0 %			24-116						

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	vo. P	arameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	Ν	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/22/2019 22:19 P,PADEP	СМ
72-55-9	4,4'-DDE	Ν	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/22/2019 22:19 P,PADEP	CM
50-29-3	4,4'-DDT	N	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/22/2019 22:19 P,PADEP	СМ
309-00-2	Aldrin	Ν	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/22/2019 22:19 P,PADEP	СМ
319-84-6	alpha-BHC	Ν	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/22/2019 22:19 P,PADEP	СМ
5103-71-9	alpha-Chlordane	Ν	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	NELAC-NY	05/20/2019 08:00 10854,NJDEP	05/22/2019 22:19	СМ
319-85-7	beta-BHC	Ν	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 LAC-NY10854,NJDE	05/22/2019 22:19 P,PADEP	СМ

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Client Sample ID: SB002 (4-6)

York Sample ID: 19E0591-04

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:30 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	No. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
60-57-1	Dieldrin	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854	05/22/2019 22:19	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	NELAC-NY	05/20/2019 08:00 Y10854,NJDEP	05/22/2019 22:19	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.212	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 08:00 ELAC-NY10854,NJDI	05/22/2019 22:19 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0425	5	EPA 8081B Certifications:		05/20/2019 08:00	05/22/2019 22:19	CM
	Surrogate Recoveries	Result		Accepta	nce Range						
2051-24-3	Surrogate: Decachlorobiphenyl	108 %		3(0-150						
877-09-8	Surrogate: Tetrachloro-m-xylene	62.5 %		30	0-150						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	0.	Parameter R	esult Flag	Units	Reported to LOQ	Dilution	Reference M	ate/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	NE		mg/kg dry	0.0214	1	EPA 8082A Certifications: N	20/2019 08:00 4,CTDOH,NJDE	05/23/2019 00:40 P,PADEP	SR
11104-28-2	Aroclor 1221	NE		mg/kg dry	0.0214	1	EPA 8082A Certifications: N	20/2019 08:00 4,CTDOH,NJDE	05/23/2019 00:40 P,PADEP	SR
11141-16-5	Aroclor 1232	NE		mg/kg dry	0.0214	1	EPA 8082A Certifications: N	20/2019 08:00 4,CTDOH,NJDE	05/23/2019 00:40 P,PADEP	SR

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Client Sample ID: SB002 (4-6)

York Sample ID: 19E0591-04

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:30 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0214	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 /10854,CTDOH,NJDE	05/23/2019 00:40 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0214	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 /10854,CTDOH,NJDE	05/23/2019 00:40 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0214	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 710854,CTDOH,NJDE	05/23/2019 00:40 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0214	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 08:00 710854,CTDOH,NJDE	05/23/2019 00:40 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0214	1	EPA 8082A Certifications:		05/20/2019 08:00	05/23/2019 00:40	SR
	Surrogate Recoveries	Result		Acceptance	Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	69.5 %		30-12	20						
2051-24-3	Surrogate: Decachlorobiphenyl	68.5 %		30-12	20						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepa	red by Method: EPA	3050B										
CAS I	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		5850		mg/kg dry	6.45	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.23	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:50 ELAC-NY10854,NJDI	05/20/2019 20:20 EP,PADEP	KML
7440-38-2	Arsenic		7.26		mg/kg dry	1.94	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		245		mg/kg dry	3.23	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.113	В	mg/kg dry	0.065	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
		•						Certifications:	CTDOH,NELAC-NY10854,NJI		EP,PADEP	
7440-43-9	Cadmium		1.18		mg/kg dry	0.387	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		19900		mg/kg dry	6.45	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		17.0		mg/kg dry	0.645	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		8.27		mg/kg dry	0.516	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		151		mg/kg dry	2.58	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		16400		mg/kg dry	32.3	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		459		mg/kg dry	0.645	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: SB002 (4-6)

York Sample ID:

19E0591-04

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:30 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	7800	mg/kg dry	6.45	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	266	mg/kg dry	0.645	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	18.9	mg/kg dry	1.29	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1500	mg/kg dry	6.45	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.23	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	P,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.645	1	EPA 6010D	CERON N	05/20/2019 14:50	05/20/2019 20:20	KML
							CIDOH,NI	ELAC-NY10854,NJDE	,	
7440-23-5	Sodium	292	mg/kg dry	64.5	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.23	1	EPA 6010D	CERON N	05/20/2019 14:50	05/20/2019 20:20	KML
	**						CIDOH,NI	ELAC-NY10854,NJDE	,	
7440-62-2	Vanadium	25.7	mg/kg dry	1.29	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	<i>'</i>	
7440-66-6	Zinc	446	mg/kg dry	3.23	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:20	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in	Notes:

Sample Notes:

C	AS No.		Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97	-6 Me	ercury		0.616		mg/kg dry	0.0387	1	EPA 7473		05/22/2019 09:03	05/22/2019 13:33	SY
									Certifications:	CTDOH N	IDEPNELAC-NY108	54 PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

T ~~ :	Mataga
Log-in	notes:

Sample Notes:

	CAS No.	Parameter	Result	Flag	Units	Reported LOQ	Reported to LOQ Dilution		Reference Method		Date/Time Analyzed	Analyst
soli	ds * % Solids		77.5		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB002 (6-8)			York Sample ID:	19E0591-05
York Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 8:50 am	05/13/2019

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Client Sample ID: SB002 (6-8)

York Sample ID: 19E0591-05

Date Received

05/13/2019

York Project (SDG) No.Client Project IDMatrixCollection Date/Time19E0591LST 1802SoilMay 10, 2019 8:50 am

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEP	05/22/2019 20:56	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	mg/kg dry	0.102	0.203	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEP	05/22/2019 20:56	KH
120-82-1	1,2,4-Trichlorobenzene	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	КН
95-50-1	1,2-Dichlorobenzene	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,PADEP	05/22/2019 20:56	КН
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEP	05/22/2019 20:56	КН
541-73-1	1,3-Dichlorobenzene	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,PADEP	05/22/2019 20:56	KH
106-46-7	1,4-Dichlorobenzene	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,PADEP	05/22/2019 20:56	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg/kg dry	0.102	0.203	2	EPA 8270D Certifications:		05/20/2019 14:37 10854,NJDEP,PADEP	05/22/2019 20:56	KH
95-95-4	2,4,5-Trichlorophenol	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	КН
88-06-2	2,4,6-Trichlorophenol	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	КН
120-83-2	2,4-Dichlorophenol	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	КН
105-67-9	2,4-Dimethylphenol	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:		05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56	KH
51-28-5	2,4-Dinitrophenol	ND	mg/kg dry	0.102	0.203	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	KH
91-58-7	2-Chloronaphthalene	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	КН
95-57-8	2-Chlorophenol	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	KH
91-57-6	2-Methylnaphthalene	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	KH
95-48-7	2-Methylphenol	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	KH
88-74-4	2-Nitroaniline	ND	mg/kg dry	0.102	0.203	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	KH
88-75-5	2-Nitrophenol	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	КН
65794-96-9	3- & 4-Methylphenols	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDEI	05/22/2019 20:56 P,PADEP	КН
91-94-1	3,3-Dichlorobenzidine	ND	mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEP	05/22/2019 20:56	КН
	SEADOU DDIVE	CTDATEODD OT 00045			400	0 00 00th /			NOUMOND LIIL	NN/ 44 440	

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Client Sample ID: SB002 (6-8) **York Sample ID:** 19E0591-05

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Soil May 10, 2019 8:50 am 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		ate/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.102	0.203	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.102	0.203	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.102	0.203	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.102	0.203	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 NELAC-NY10854	0/2019 14:37 NJDEP,PADE	05/22/2019 20:56 P	KH
52-53-3	Aniline	ND		mg/kg dry	0.204	0.408	2	EPA 8270D Certifications:	05/20 NELAC-NY10854	0/2019 14:37 NJDEP,PADE	05/22/2019 20:56 P	KH
20-12-7	Anthracene	0.0903	J	mg/kg dry	0.0510	0.102	2	EPA 8270D	05/20	0/2019 14:37	05/22/2019 20:56	KH
								Certifications:	CTDOH,NELAC-	NY10854,NJD	EP,PADEP	
912-24-9	Atrazine	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 NELAC-NY10854	0/2019 14:37 NJDEP,PADE	05/22/2019 20:56 P	KH
00-52-7	Benzaldehyde	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 NELAC-NY10854	0/2019 14:37 NJDEP,PADE	05/22/2019 20:56 P	KH
92-87-5	Benzidine	ND		mg/kg dry	0.204	0.408	2	EPA 8270D Certifications:	05/20 CTDOH,NELAC-N	0/2019 14:37 NY10854,PAD	05/22/2019 20:56 EP	KH
6-55-3	Benzo(a)anthracene	0.277		mg/kg dry	0.0510	0.102	2	EPA 8270D	05/20	0/2019 14:37	05/22/2019 20:56	KH
								Certifications:	CTDOH,NELAC-			
50-32-8	Benzo(a)pyrene	0.279		mg/kg dry	0.0510	0.102	2	EPA 8270D		0/2019 14:37	05/22/2019 20:56	KH
	D (1) (1)							Certifications:	CTDOH,NELAC-			
205-99-2	Benzo(b)fluoranthene	0.200		mg/kg dry	0.0510	0.102	2	EPA 8270D		0/2019 14:37	05/22/2019 20:56	KH
01 24 2	Donzo(a h i)nomilono	0.160		ma/lea des	0.0510	0.102	2	Certifications:	CTDOH,NELAC-		05/22/2019 20:56	νII
91-24-2	Benzo(g,h,i)perylene	0.168		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NELAC-	0/2019 14:37 NIV 10854 NIID		KH
07-08-9	Benzo(k)fluoranthene	0.177		ma/ka dry	0.0510	0.102	2	EPA 8270D		0/2019 14:37	05/22/2019 20:56	КН
,-00-/	Zenzo(n)muorumuntint	0.177		mg/kg dry	0.0510	0.102	2	Certifications:	CTDOH,NELAC-			XII
5-85-0	Benzoic acid	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D		0/2019 14:37	05/22/2019 20:56	КН
,5 05 - 0	Delizoic acid	ND		mg/kg diy				Certifications:	NELAC-NY10854	,NJDEP,PADE		
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	05/20 NELAC-NY10854	0/2019 14:37 NJDEP,PADE	05/22/2019 20:56 P	KH

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Client Sample ID: SB002 (6-8)

York Sample ID: 19E0591-05

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 8:50 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3550C								D 4 /TE'	D 4 //P'	
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Me	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 TOOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 TOOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 TDOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 TDOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.102	0.203	2	EPA 8270D Certifications: NE	05/20/2019 14:37 ELAC-NY10854,NJDEP,PADE	05/22/2019 20:56 P	KH
86-74-8	Carbazole	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 TOOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
218-01-9	Chrysene	0.252		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 20:56 EP,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
206-44-0	Fluoranthene	0.466		mg/kg dry	0.0510	0.102	2	EPA 8270D	05/20/2019 14:37	05/22/2019 20:56	KH
								Certifications: C	TDOH,NELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: NE	05/20/2019 14:37 ELAC-NY10854,NJDEP,PADE	05/22/2019 20:56 P	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 TDOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 TOOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.196		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 20:56 EP,PADEP	KH
78-59-1	Isophorone	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	КН
91-20-3	Naphthalene	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications: CT	05/20/2019 14:37 TOOH,NELAC-NY10854,NJDI	05/22/2019 20:56 EP,PADEP	КН

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Client Sample ID: SB002 (6-8)

York Sample ID: 19E0591-05

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:50 am <u>Date Received</u> 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 20:56 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 20:56 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 20:56 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 20:56 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 20:56 EP,PADEP	KH
85-01-8	Phenanthrene	0.317		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	CTDOH N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 20:56	KH
108-95-2	Phenol	ND		mg/kg dry	0.0510	0.102	2	EPA 8270D Certifications:	ŕ	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 20:56	KH
129-00-0	Pyrene	0.471		mg/kg dry	0.0510	0.102	2	EPA 8270D		05/20/2019 14:37	05/22/2019 20:56	KH
110-86-1	Pyridine	ND		mg/kg dry	0.204	0.408	2	Certifications: EPA 8270D Certifications:	ŕ	ELAC-NY10854,NJD 05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 20:56	КН
	Surrogate Recoveries	Result		Accep	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	66.6 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	60.4 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	64.6 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	49.2 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	48.3 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	48.0 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	No. Paramete	r Result	Flag Units	Reported to LOQ	Dilution	Reference N	Date/Time Method Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00201	5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/21/2019 20:22 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00201	5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/21/2019 20:22 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00201	5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/21/2019 20:22 EP,PADEP	CM
309-00-2	Aldrin	ND	mg/kg dry	0.00201	5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/21/2019 20:22 EP,PADEP	CM
319-84-6	alpha-BHC	ND	mg/kg dry	0.00201	5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/21/2019 20:22 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00201	5	EPA 8081B Certifications:	05/20/2019 08:00 NELAC-NY10854,NJDEP	05/21/2019 20:22	CM
319-85-7	beta-BHC	ND	mg/kg dry	0.00201	5	EPA 8081B Certifications:	05/20/2019 08:00 CTDOH,NELAC-NY10854,NJD	05/21/2019 20:22 EP,PADEP	CM

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Client Sample ID: SB002 (6-8)

York Sample ID: 19E0591-05

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 Matrix Collection Date/Time
Soil May 10, 2019 8:50 am

Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepar	red by Method: EPA 3550C										
CAS N	Jo. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:22 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:22 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:22 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854	05/21/2019 20:22	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:22 EP,PADEP	СМ
72-20-8	Endrin	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:22 EP,PADEP	СМ
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:22 EP,PADEP	СМ
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:22 EP,PADEP	СМ
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:22 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	NELAC-NY	05/20/2019 08:00 /10854,NJDEP	05/21/2019 20:22	СМ
76-44-8	Heptachlor	ND		mg/kg dry	0.00201	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 08:00 ELAC-NY10854,NJDI	05/21/2019 20:22 EP,PADEP	CM

mg/kg dry

mg/kg dry

mg/kg dry

mg/kg dry

Surrogate Recoveries Result Acceptance Range
2051-24-3 Surrogate: Decachlorobiphenyl 88.2 % 30-150
877-09-8 Surrogate: Tetrachloro-m-xylene 57.0 % 30-150

ND

ND

ND

ND

Log-in Notes:

0.00201

0.00201

0.201

0.0403

EPA 8081B

Certifications:

EPA 8081B

Certifications:

EPA 8081B

Certifications:

EPA 8081B

Certifications:

Sample Notes:

Sample Prepared by Method: EPA 3550C

Heptachlor epoxide

Methoxychlor

Toxaphene

* Chlordane, total

Polychlorinated Biphenyls (PCB), 8082 List

1024-57-3

72-43-5

8001-35-2

57-74-9

CAS N	o. Paramete	r Result Fla	ng Units	Reported to LOQ Diluti	ion Reference	Date/Time e Method Prepare	Analyst
12674-11-2	Aroclor 1016	ND	mg/kg dry	0.0203 1	EPA 8082A Certifications:	05/20/2019 08: NELAC-NY10854,CTDOH,N	SR
11104-28-2	Aroclor 1221	ND	mg/kg dry	0.0203 1	EPA 8082A Certifications:	05/20/2019 08: NELAC-NY10854,CTDOH,N	SR
11141-16-5	Aroclor 1232	ND	mg/kg dry	0.0203 1	EPA 8082A Certifications:	05/20/2019 08: NELAC-NY10854,CTDOH,N	SR

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05/20/2019 08:00 05/21/2019 20:22

05/21/2019 20:22

05/21/2019 20:22

CTDOH,NELAC-NY10854,NJDEP,PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

05/20/2019 08:00

CTDOH,NELAC-NY10854,NJDEP,PADEP

05/20/2019 08:00

CM

CM

CM

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Client Sample ID: SB002 (6-8)

York Sample ID: 19E0591-05

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:50 am <u>Date Received</u> 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0203	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 08:00 Y10854,CTDOH,NJDE	05/22/2019 11:19 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0203	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 08:00 Y10854,CTDOH,NJDH	05/22/2019 11:19 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0203	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 08:00 Y10854,CTDOH,NJDE	05/22/2019 11:19 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0203	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 08:00 Y10854,CTDOH,NJDH	05/22/2019 11:19 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0203	1	EPA 8082A Certifications:		05/20/2019 08:00	05/22/2019 11:19	SR
	Surrogate Recoveries	Result		Accepta	nce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	55.0 %		30	0-120						
2051-24-3	Surrogate: Decachlorobiphenyl	54.5 %		30	0-120						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference !	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		5280		mg/kg dry	6.12	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.06	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:26 EP,PADEP	KML
7440-38-2	Arsenic		11.7		mg/kg dry	1.84	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		73.5		mg/kg dry	3.06	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		ND		mg/kg dry	0.061	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:26 EP,PADEP	KML
7440-43-9	Cadmium		0.431		mg/kg dry	0.367	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		3340		mg/kg dry	6.12	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		20.3		mg/kg dry	0.612	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		12.8		mg/kg dry	0.490	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		52.4		mg/kg dry	2.45	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		29000		mg/kg dry	30.6	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		137		mg/kg dry	0.612	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium		2110		mg/kg dry	6.12	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML

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CTDOH,NELAC-NY10854,NJDEP,PADEP

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Certifications:

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Client Sample ID: SB002 (6-8)

York Sample ID: 19E0591-05

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:50 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	o. I	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	Manganese		277		mg/kg dry	0.612	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel		21.4		mg/kg dry	1.22	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium		1720		mg/kg dry	6.12	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium		ND		mg/kg dry	3.06	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-22-4	Silver		ND		mg/kg dry	0.612	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-23-5	Sodium		525		mg/kg dry	61.2	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		mg/kg dry	3.06	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-62-2	Vanadium		51.5		mg/kg dry	1.22	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc		94.8		mg/kg dry	3.06	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:26	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-	in	No	tes:

Sample Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.236	mg/kg dry	0.0367	1	EPA 7473	05/22/2019 09:03	05/22/2019 14:14	SY
							Certifications: C	TDOH NIDEPNELAC-NY108	R54 PADEP	

<u>Total Solids</u> <u>Log-in Notes:</u>

Sample Prepared by Method: % Solids Prep

CAS	S No.	Parameter	Result	Flag	Units	Reported LOQ	o Dilutio	n Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		81.7		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

<u>C</u>	Client Sample ID: SB002 (0-2)			York Sample ID:	19E0591-06
Y	ork Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
	19E0591	LST 1802	Soil	May 10, 2019 8:45 am	05/13/2019

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Log-in Notes:

Client Sample ID: SB002 (0-2)

York Sample ID: 19E0591-06

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:45 am

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

	ed by Method: EPA 3550C			100 1	ar rotes.		Sam	ристон			
CAS No		Result I	Flag Unit	Reported LOD/MI		Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2-52-4	1,1-Biphenyl	ND	mg/kş	g dry 0.407	0.813	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/22/2019 21:26	KH
5-94-3	1,2,4,5-Tetrachlorobenzene	ND	mg/kį	g dry 0.813	1.62	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/22/2019 21:26	KH
20-82-1	1,2,4-Trichlorobenzene	ND	mg/kį	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	КН
5-50-1	1,2-Dichlorobenzene	ND	mg/kį	g dry 0.407	0.813	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/22/2019 21:26	KH
22-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	mg/kş	g dry 0.407	0.813	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/22/2019 21:26	KH
41-73-1	1,3-Dichlorobenzene	ND	mg/kg	g dry 0.407	0.813	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/22/2019 21:26	KH
06-46-7	1,4-Dichlorobenzene	ND	mg/kį	g dry 0.407	0.813	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/22/2019 21:26	KH
8-90-2	2,3,4,6-Tetrachlorophenol	ND	mg/kį	g dry 0.813	1.62	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/22/2019 21:26	KH
5-95-4	2,4,5-Trichlorophenol	ND	mg/kş	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
8-06-2	2,4,6-Trichlorophenol	ND	mg/kş	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
20-83-2	2,4-Dichlorophenol	ND	mg/kş	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
05-67-9	2,4-Dimethylphenol	ND	mg/kį	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
1-28-5	2,4-Dinitrophenol	ND	mg/kį	g dry 0.813	1.62	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
21-14-2	2,4-Dinitrotoluene	ND	mg/kį	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
06-20-2	2,6-Dinitrotoluene	ND	mg/kį	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
1-58-7	2-Chloronaphthalene	ND	mg/kį	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
5-57-8	2-Chlorophenol	ND	mg/kį	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
1-57-6	2-Methylnaphthalene	ND	mg/kş	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
5-48-7	2-Methylphenol	ND	mg/kį	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
8-74-4	2-Nitroaniline	ND	mg/kş	g dry 0.813	1.62	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
8-75-5	2-Nitrophenol	ND	mg/kş	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
5794-96-9	3- & 4-Methylphenols	ND	mg/kş	g dry 0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 P,PADEP	KH
1-94-1	3,3-Dichlorobenzidine	ND	mg/kş	g dry 0.407	0.813	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/22/2019 21:26	KH
5794-96-9	3- & 4-Methylphenols	ND	mg/kį	g dry 0.407	0.813	10	Certifications: EPA 8270D Certifications: EPA 8270D	CTDOH,NI	ELAC-NY10854,NJDEI 05/20/2019 14:37 ELAC-NY10854,NJDEI 05/20/2019 14:37	P,PADEI 05/22/2 P,PADEI	P 2019 21:26 P

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Client Sample ID: SB002 (0-2)

York Sample ID: 19E0591-06

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 8:45 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.813	1.62	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.813	1.62	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.813	1.62	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.813	1.62	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEI	05/22/2019 21:26	KH
62-53-3	Aniline	ND		mg/kg dry	1.63	3.25	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEI	05/22/2019 21:26	КН
120-12-7	Anthracene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEI	05/22/2019 21:26	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEI	05/22/2019 21:26	KH
92-87-5	Benzidine	ND		mg/kg dry	1.63	3.25	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,PADI	05/22/2019 21:26 EP	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	КН
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	КН
65-85-0	Benzoic acid	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,NJDEP,PADEI	05/22/2019 21:26	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEI	05/22/2019 21:26	KH

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Client Sample ID: SB002 (0-2)

York Sample ID: 19E0591-06

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:45 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes: San	iple Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	9.01		mg/kg dry	0.407	0.813	10	EPA 8270D		05/20/2019 14:37	05/22/2019 21:26	KH
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	КН
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	0.669	J	mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:26 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.813	1.62	10	EPA 8270D Certifications:		05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 21:26	КН
86-74-8	Carbazole	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 21:26	КН
218-01-9	Chrysene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 21:26	КН
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 21:26	КН
132-64-9	Dibenzofuran	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 21:26 EP,PADEP	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 21:26 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	0.533	J	mg/kg dry	0.407	0.813	10	EPA 8270D		05/20/2019 14:37	05/22/2019 21:26	KH
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
206-44-0	Fluoranthene	0.676	J	mg/kg dry	0.407	0.813	10	EPA 8270D		05/20/2019 14:37	05/22/2019 21:26	KH
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADE	05/22/2019 21:26	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	КН
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	КН
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 21:26 EP,PADEP	KH
78-59-1	Isophorone	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 21:26 EP,PADEP	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 21:26 EP,PADEP	KH

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Client Sample ID: SB002 (0-2)

York Sample ID: 19E0591-06

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:45 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:
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CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
85-01-8	Phenanthrene	0.598	J	mg/kg dry	0.407	0.813	10	EPA 8270D		05/20/2019 14:37	05/22/2019 21:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.407	0.813	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
129-00-0	Pyrene	0.669	J	mg/kg dry	0.407	0.813	10	EPA 8270D		05/20/2019 14:37	05/22/2019 21:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	1.63	3.25	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:26 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	58.8 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	62.1 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	61.8 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	57.6 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	18.3 %	S-01		19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	64.2 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	No. Pa	rameter Result	Flag Units	Reported to LOQ	Dilution	Reference 1		Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00214	5	EPA 8081B Certifications:		5/20/2019 14:33 C-NY10854,NJDI	05/23/2019 00:49 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00214	5	EPA 8081B Certifications:		5/20/2019 14:33 C-NY10854,NJDI	05/23/2019 00:49 EP,PADEP	СМ
50-29-3	4,4'-DDT	ND	mg/kg dr	0.00214	5	EPA 8081B Certifications:		5/20/2019 14:33 C-NY10854,NJDI	05/23/2019 00:49 EP,PADEP	СМ
309-00-2	Aldrin	ND	mg/kg dr	0.00214	5	EPA 8081B Certifications:		5/20/2019 14:33 C-NY10854,NJDI	05/23/2019 00:49 EP,PADEP	СМ
319-84-6	alpha-BHC	ND	mg/kg dr	0.00214	5	EPA 8081B Certifications:		5/20/2019 14:33 C-NY10854,NJDI	05/23/2019 00:49 EP,PADEP	СМ
5103-71-9	alpha-Chlordane	ND	mg/kg dr	0.00214	5	EPA 8081B Certifications:	05 NELAC-NY108	5/20/2019 14:33 354,NJDEP	05/23/2019 00:49	СМ
319-85-7	beta-BHC	ND	mg/kg dr	0.00214	5	EPA 8081B Certifications:		5/20/2019 14:33 C-NY10854,NJDI	05/23/2019 00:49 EP,PADEP	СМ

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Client Sample ID: SB002 (0-2)

York Sample ID: 19E0591-06

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:45 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 00:49 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 00:49 EP,PADEP	СМ
959-98-8	Endosulfan I	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 00:49 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854	05/23/2019 00:49	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 00:49 EP,PADEP	СМ
72-20-8	Endrin	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 00:49 EP,PADEP	СМ
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 00:49 EP,PADEP	СМ
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 00:49 EP,PADEP	СМ
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 00:49 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/23/2019 00:49	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 00:49 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 00:49 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 00:49 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.214	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 00:49 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0429	5	EPA 8081B Certifications:		05/20/2019 14:33	05/23/2019 00:49	СМ
	Surrogate Recoveries	Result		Acceptanc	e Range						
2051-24-3	Surrogate: Decachlorobiphenyl	132 %		30-1	· ·						
877-09-8	Surrogate: Tetrachloro-m-xylene	79.7 %		30-1							
	,										

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Pa	arameter Result	Flag Units	Reported LOQ	Dilution	Reference M	Date/Time lethod Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	mg/kg	dry 0.0216	1	EPA 8082A Certifications: N	05/20/2019 14:33 ELAC-NY10854,CTDOH,NJDI	05/23/2019 00:53 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND	mg/kg	dry 0.0216	1	EPA 8082A Certifications: N	05/20/2019 14:33 ELAC-NY10854,CTDOH,NJDI	05/23/2019 00:53 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND	mg/kg	dry 0.0216	1	EPA 8082A Certifications: N	05/20/2019 14:33 ELAC-NY10854,CTDOH,NJDI	05/23/2019 00:53 EP,PADEP	SR

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Client Sample ID: SB002 (0-2) **York Sample ID:** 19E0591-06

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:45 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 Y10854,CTDOH,NJDE	05/23/2019 00:53 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 Y10854,CTDOH,NJDH	05/23/2019 00:53 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 Y10854,CTDOH,NJDE	05/23/2019 00:53 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 Y10854,CTDOH,NJDH	05/23/2019 00:53 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 00:53	SR
	Surrogate Recoveries	Result		Accepta	nce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	75.0 %		30	0-120						
2051-24-3	Surrogate: Decachlorobiphenyl	73.0 %		30	0-120						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Mo	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		6690		mg/kg dry	6.56	1	EPA 6010D Certifications: C	05/20/2019 14:50 TDOH,NELAC-NY10854,NJD	05/20/2019 20:33 EP,PADEP	KML
7440-36-0	Antimony		ND		mg/kg dry	3.28	1	EPA 6010D Certifications: CT	05/20/2019 14:50 FDOH,NELAC-NY10854,NJDI	05/20/2019 20:33 EP,PADEP	KML
7440-38-2	Arsenic		2.59		mg/kg dry	1.97	1	EPA 6010D Certifications: C	05/20/2019 14:50 TDOH,NELAC-NY10854,NJD	05/20/2019 20:33 EP,PADEP	KML
7440-39-3	Barium		103		mg/kg dry	3.28	1	EPA 6010D Certifications: C	05/20/2019 14:50 TDOH,NELAC-NY10854,NJD	05/20/2019 20:33 EP,PADEP	KML
7440-41-7	Beryllium		ND		mg/kg dry	0.066	1	EPA 6010D Certifications: CT	05/20/2019 14:50 FDOH,NELAC-NY10854,NJDI	05/20/2019 20:33 EP,PADEP	KML

						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7439-95-4	Magnesium	6060	mg/kg dry	6.56	1	EPA 6010D	05/20/2019 14:50	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7439-92-1	Lead	56.0	mg/kg dry	0.656	1	EPA 6010D	05/20/2019 14:50	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7439-89-6	Iron	9370	mg/kg dry	32.8	1	EPA 6010D	05/20/2019 14:50	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7440-50-8	Copper	26.9	mg/kg dry	2.62	1	EPA 6010D	05/20/2019 14:50	KML
					-	Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7440-48-4	Cobalt	4.98	mg/kg dry	0.525	1	EPA 6010D	05/20/2019 14:50	KML
,		12.1		0.050		Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	LLML
7440-47-3	Chromium	12.1	mg/kg dry	0.656	1	EPA 6010D	05/20/2019 14:50 05/20/2019 20:33	KML
/440-/0-2	Carcium	30000	ing/kg til y	0.30	1	Certifications:	05/20/2019 14:30 05/20/2019 20:33 CTDOH,NELAC-NY10854,NJDEP,PADEP	KIVIL
7440-70-2	Calcium	36000	mg/kg dry	6.56	1	EPA 6010D	05/20/2019 14:50 05/20/2019 20:33	KML
7440-43-9	Cadmium	ND	mg/kg dry	0.394	1	EPA 6010D Certifications:	05/20/2019 14:50	KML
	•					Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7440-41-7	Beryllium	ND	mg/kg dry	0.066	1	EPA 6010D	05/20/2019 14:50	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7440-39-3	Barium	103	mg/kg dry	3.28	1	EPA 6010D	05/20/2019 14:50	KML
7440 30 2	TH sellic	2.39	mg/kg ury	1.97	1	Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	KWIL
7440-38-2	Arsenic	2.59	mg/kg dry	1.97	1	EPA 6010D	05/20/2019 14:50 05/20/2019 20:33	KML
7440-36-0	Antimony	ND	mg/kg dry	3.28	1	EPA 6010D Certifications:	05/20/2019 14:50	KML
						certifications.	C12011,1122.10 1111000 1,110221,111221	

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Client Sample ID: SB002 (0-2)

York Sample ID: 19E0591-06

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:45 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by M	Iethod: EPA 3050B

CAS N	No. Param	neter Result	Flag Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	Manganese	176	mg/kg dry	0.656	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:33	KML
						Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	10.7	mg/kg dry	1.31	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:33	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1350	mg/kg dry	6.56	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:33	KML
						Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.28	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:33	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.656	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:33	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-23-5	Sodium	478	mg/kg dry	65.6	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:33	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.28	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:33	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-62-2	Vanadium	20.6	mg/kg dry	1.31	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:33	KML
						Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	96.1	mg/kg dry	3.28	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:33	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-	in	No	tes:

Sample Notes:

CAS N	0.	Parameter	Result	Flag	Units	Reported t LOQ	o Diluti	on Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.272		mg/kg dry	0.0394	1	EPA 7473		05/22/2019 09:04	05/22/2019 16:34	SY
								Certifications:	CTDOH,N	JDEP,NELAC-NY108	54,PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

Log-in Notes:	Sample Notes:

	CAS No.	Parameter	Result	Flag	Units	Reported LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solid	s * % Solids		76.2		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

Client Sample ID:	SB003 (6-8)		York Sample ID:	19E0591-07
York Project (SDG) No	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 7:35 am	05/13/2019

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Client Sample ID: SB003 (6-8)

York Sample ID: 19E0591-07

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 7:35 am05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

S	ampl	le l	Prepareo	l by	Met	hod:	EPA	3550C	
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference l	Date/Time Method Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PAI		КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0925	0.185	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PAI		KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,PADEP	05/22/2019 19:25	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:33 NELAC-NY10854,NJDEP,PAI		KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,PADEP	05/22/2019 19:25	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,PADEP	05/22/2019 19:25	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0925	0.185	2	EPA 8270D Certifications:	05/20/2019 14:33 NELAC-NY10854,NJDEP,PAI		KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0925	0.185	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJ		KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJ		KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJ		KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJ		KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0925	0.185	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ		KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PAI		KH

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Client Sample ID: SB003 (6-8)

York Sample ID: 19E0591-07

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 7:35 am05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0925	0.185	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0925	0.185	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	КН
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0925	0.185	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0925	0.185	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
33-32-9	Acenaphthene	0.0761	J	mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 CLAC-NY10854,NJD	05/22/2019 19:25 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	КН
98-86-2	Acetophenone	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 19:25	КН
52-53-3	Aniline	ND		mg/kg dry	0.185	0.370	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 19:25	КН
20-12-7	Anthracene	0.191		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	CTDOH NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 19:25 EPPADEP	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:		05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 19:25	КН
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 19:25	KH
92-87-5	Benzidine	ND		mg/kg dry	0.185	0.370	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,PAD	05/22/2019 19:25 EP	КН
6-55-3	Benzo(a)anthracene	0.370		mg/kg dry	0.0463	0.0925	2	EPA 8270D		05/20/2019 14:37	05/22/2019 19:25	KH
								Certifications:	CTDOH,NE	LAC-NY10854,NJD		
0-32-8	Benzo(a)pyrene	0.352		mg/kg dry	0.0463	0.0925	2	EPA 8270D		05/20/2019 14:37	05/22/2019 19:25	KH
05.00.2	Danga(h)fluaranthana				0.0463	0.0005		Certifications:	CTDOH,NE	LAC-NY10854,NJD	,	1/11
05-99-2	Benzo(b)fluoranthene	0.240		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	CTDOH NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 19:25 EDDADED	KH
91-24-2	Benzo(g,h,i)perylene	0.157		mg/kg dry	0.0463	0.0925	2	EPA 8270D	CTDOII,NL	05/20/2019 14:37	05/22/2019 19:25	KH
,,,,,	zenzo(g,n,.)per yiene	0.137		mg ng ur y	0.0403	0.0723	2	Certifications:	CTDOH,NE	LAC-NY10854,NJD		
07-08-9	Benzo(k)fluoranthene	0.230		mg/kg dry	0.0463	0.0925	2	EPA 8270D		05/20/2019 14:37	05/22/2019 19:25	KH
								Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
55-85-0	Benzoic acid	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 19:25	КН
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 19:25	KH

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Client Sample ID: SB003 (6-8)

York Sample ID: 19E0591-07

 York Project (SDG) No.
 Client Project ID

 19E0591
 LST 1802

MatrixCollection Date/TimeSoilMay 10, 2019 7:35 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	d by Method: EPA 3550C								Data/Time	Date/Time	
CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Me	Date/Time thod Prepared	Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	КН
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.0925	0.185	2	EPA 8270D Certifications: NE	05/20/2019 14:37 LAC-NY10854,NJDEP,PADE	05/22/2019 19:25 P	KH
86-74-8	Carbazole	0.0480	J	mg/kg dry	0.0463	0.0925	2	EPA 8270D	05/20/2019 14:37	05/22/2019 19:25	KH
								Certifications: CT	TDOH,NELAC-NY10854,NJD	EP,PADEP	
218-01-9	Chrysene	0.313		mg/kg dry	0.0463	0.0925	2	EPA 8270D	05/20/2019 14:37	05/22/2019 19:25	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D	FDOH,NELAC-NY10854,NJD 05/20/2019 14:37	05/22/2019 19:25	КН
122 (4.0	Dibenzofuran	0.0455		4 1	0.04/2	0.0005	•		DOH,NELAC-NY10854,NJDI		1/11
132-64-9	Dibenzoluran	0.0466	J	mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/22/2019 19:25 EP PADEP	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	КН
206-44-0	Fluoranthene	0.838		mg/kg dry	0.0463	0.0925	2	EPA 8270D	05/20/2019 14:37	05/22/2019 19:25	KH
								Certifications: CT	TDOH,NELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	0.0710	J	mg/kg dry	0.0463	0.0925	2	EPA 8270D	05/20/2019 14:37	05/22/2019 19:25	KH
								Certifications: NI	ELAC-NY10854,NJDEP,PADE		
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.204		mg/kg dry	0.0463	0.0925	2	EPA 8270D	05/20/2019 14:37	05/22/2019 19:25	KH
								Certifications: C7	TDOH,NELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: CT	05/20/2019 14:37 DOH,NELAC-NY10854,NJDI	05/22/2019 19:25 EP,PADEP	КН

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Client Sample ID: SB003 (6-8) **York Sample ID:** 19E0591-07

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 7:35 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log	-ın	N	ot	es	:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 19:25 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 19:25 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 19:25 EP,PADEP	КН
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 19:25 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 19:25 EP,PADEP	КН
85-01-8	Phenanthrene	0.733		mg/kg dry	0.0463	0.0925	2	EPA 8270D	05/20/2019 14:37	05/22/2019 19:25	KH
								Certifications: C	CTDOH,NELAC-NY10854,NJE	DEP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0463	0.0925	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 19:25 EP,PADEP	КН
129-00-0	Pyrene	0.725		mg/kg dry	0.0463	0.0925	2	EPA 8270D	05/20/2019 14:37	05/22/2019 19:25	KH
								Certifications: C	CTDOH,NELAC-NY10854,NJE	DEP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.185	0.370	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 19:25 EP,PADEP	KH
	Surrogate Recoveries	Result		Acce	ptance Rang	e					
367-12-4	Surrogate: SURR: 2-Fluorophenol	82.4 %			20-108						
4165-62-2	Surrogate: SURR: Phenol-d5	73.6 %			23-114						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	74.7 %			22-108						
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	62.1 %			21-113						
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	53.2 %			19-110						
1718-51-0	Surrogate: SURR: Terphenyl-d14	66.5 %			24-116						

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	No. Para	meter Result	Flag Units	Reported to LOQ D	Dilution	Reference !	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00184	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/22/2019 19:49 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00184	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/22/2019 19:49 EP,PADEP	СМ
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00184	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/22/2019 19:49 EP,PADEP	СМ
309-00-2	Aldrin	ND	mg/kg dry	0.00184	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/22/2019 19:49 EP,PADEP	СМ
319-84-6	alpha-BHC	ND	mg/kg dry	0.00184	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/22/2019 19:49 EP,PADEP	СМ
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00184	5	EPA 8081B Certifications:	NELAC-NY10	05/20/2019 14:33 0854,NJDEP	05/22/2019 19:49	СМ
319-85-7	beta-BHC	ND	mg/kg dry	0.00184	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/22/2019 19:49 EP,PADEP	СМ

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Client Sample ID: SB003 (6-8)

York Sample ID: 19E0591-07

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:35 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP CM CERTIFICATIONS CTDOH,NELAC-NY10854,NJDEP,PADEP CM CM CERTI	CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Second Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	319-86-8	delta-BHC	ND		mg/kg dry	0.00184	5		CTDOH,NI			СМ
September Sept	60-57-1	Dieldrin	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
Certifications: CTDOH,NELAC-NY10854 1031-07-8 Endosulfan sulfate ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM	959-98-8	Endosulfan I	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
	33213-65-9	Endosulfan II	ND		mg/kg dry	0.00184	5		CTDOH,NI		05/22/2019 19:49	CM
	1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
72-20-8 Endrin ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	72-20-8	Endrin	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
7421-93-4 Endrin aldehyde ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
53494-70-5 Endrin ketone ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	53494-70-5	Endrin ketone	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
58-89-9 gamma-BHC (Lindane) ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
5566-34-7 gamma-Chlordane ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: NELAC-NY10854,NJDEP	5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00184	5		NELAC-NY		05/22/2019 19:49	CM
76-44-8 Heptachlor ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	76-44-8	Heptachlor	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
1024-57-3 Heptachlor epoxide ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
72-43-5 Methoxychlor ND mg/kg dry 0.00184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	72-43-5	Methoxychlor	ND		mg/kg dry	0.00184	5		CTDOH,NI			CM
8001-35-2 Toxaphene ND mg/kg dry 0.184 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	8001-35-2	Toxaphene	ND		mg/kg dry	0.184	5		CTDOH,NI			CM
57-74-9 * Chlordane, total ND mg/kg dry 0.0368 5 EPA 8081B 05/20/2019 14:33 05/22/2019 19:49 CM Certifications:	57-74-9	* Chlordane, total	ND		mg/kg dry	0.0368	5			05/20/2019 14:33	05/22/2019 19:49	CM
Surrogate Recoveries Result Acceptance Range		Surrogate Recoveries	Result		Acceptance F	Range						
2051-24-3 Surrogate: Decachlorobiphenyl 98.1 % 30-150	2051-24-3	o de la companya de	98.1 %		•	Ü						
877-09-8 Surrogate: Tetrachloro-m-xylene 72.8 % 30-150	877-09-8		72.8 %		30-150							

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. I	Parameter Result	Flag	Units	Reported to LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	r	mg/kg dry	0.0186	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 10:36 P,PADEP	SR
11104-28-2	Aroclor 1221	ND	r	mg/kg dry	0.0186	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 10:36 P,PADEP	SR
11141-16-5	Aroclor 1232	ND	r	mg/kg dry	0.0186	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 10:36 P,PADEP	SR

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Client Sample ID: SB003 (6-8)

York Sample ID: 19E0591-07

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 7:35 am

Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0186	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 Y10854,CTDOH,NJDE	05/23/2019 10:36 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0186	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 Y10854,CTDOH,NJDH	05/23/2019 10:36 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0186	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 Y10854,CTDOH,NJDE	05/23/2019 10:36 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0186	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 Y10854,CTDOH,NJDH	05/23/2019 10:36 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0186	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 10:36	SR
	Surrogate Recoveries	Result		Accepta	nce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	69.0 %		30	1-120						
2051-24-3	Surrogate: Decachlorobiphenyl	70.0 %		30	1-120						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		10100		mg/kg dry	5.62	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	2.81	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 17:54 EP,PADEP	KML
7440-38-2	Arsenic		3.78		mg/kg dry	1.69	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		103		mg/kg dry	2.81	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		ND		mg/kg dry	0.056	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 17:54 EP,PADEP	KML
7440-43-9	Cadmium		ND		mg/kg dry	0.337	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 17:54 EP,PADEP	KML
7440-70-2	Calcium		2930		mg/kg dry	5.62	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-47-3	Chromium		22.0		mg/kg dry	0.562	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		11.9		mg/kg dry	0.449	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		24.5		mg/kg dry	2.25	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		25600		mg/kg dry	28.1	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		53.9		mg/kg dry	0.562	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

mg/kg dry

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Magnesium

7439-95-4

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5.62

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CTDOH,NELAC-NY10854,NJDEP,PADEP

05/20/2019 14:51 05/20/2019 17:54

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EPA 6010D

Certifications

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KML



Client Sample ID: SB003 (6-8)

York Sample ID: 19E0591-07

Client Project ID LST 1802 Matrix Col Soil May

Collection Date/Time
May 10, 2019 7:35 am

<u>Date Received</u> 05/13/2019

Metals, Target Analyte

York Project (SDG) No.

19E0591

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	Manganese		457		mg/kg dry	0.562	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel		22.5		mg/kg dry	1.12	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium		3390		mg/kg dry	5.62	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium		ND		mg/kg dry	2.81	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-22-4	Silver		ND		mg/kg dry	0.562	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-23-5	Sodium		306		mg/kg dry	56.2	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		mg/kg dry	2.81	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-62-2	Vanadium		30.8		mg/kg dry	1.12	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc		57.6		mg/kg dry	2.81	1	EPA 6010D		05/20/2019 14:51	05/20/2019 17:54	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-	in	No	tes:

Sample Notes:

ClientServices@

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	CAS No.		Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-	97-6 Me i	rcury		0.323		mg/kg dry	0.0337	1	EPA 7473		05/22/2019 09:04	05/22/2019 15:32	SY
									Certifications:	CTDOH,N	JDEP,NELAC-NY108	54,PADEP	

<u>Total Solids</u> <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: % Solids Prep

CA	S No.	Parameter	Result	Flag	Units	Reported LOQ	to Dilutio i	1 Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		89.0		%	0.100	1	SM 2540G		05/17/2019 18:08	05/18/2019 15:54	TJM
								Certifications:	CTDOH			

Sample Information

Client Sample ID:	SB003 (10-12)			York Sample ID:	19E0591-08
York Project (SDG) N	<u>0.</u>	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591		LST 1802	Soil	May 10, 2019 7:45 am	05/13/2019

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Client Sample ID: SB003 (10-12)

York Sample ID: 19E0591-08

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 7:45 am05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Samp	le l	Prepared	by	M	leth	od:	El	PA	. 35	5(C)(C	
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,NJDEP,PADEP	05/22/2019 21:56	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 / 10854,NJDEP,PADEP	05/22/2019 21:56	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	КН
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,PADEP	05/22/2019 21:56	КН
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 / 10854,NJDEP,PADEP	05/22/2019 21:56	КН
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,PADEP	05/22/2019 21:56	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 / 10854,PADEP	05/22/2019 21:56	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 / 10854,NJDEP,PADEP	05/22/2019 21:56	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	КН
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56	КН
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/20/2019 14:37 / 10854,NJDEP,PADEP	05/22/2019 21:56	KH



Client Sample ID: SB003 (10-12) **York Sample ID:** 19E0591-08

05/13/2019

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Soil May 10, 2019 7:45 am

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

534-52-1 101-55-3 59-50-7	3-Nitroaniline 4,6-Dinitro-2-methylphenol 4-Bromophenyl phenyl ether	ND ND	mg/kg dry	0.106	0.212	2					
101-55-3 59-50-7	4-Bromophenyl phenyl ether					2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
59-50-7		NID	mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	КН
		ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 .AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	КН
106-47-8	4-Chloro-3-methylphenol	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 .AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
	4-Chloroaniline	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 .AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
100-01-6	4-Nitroaniline	ND	mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 .AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	КН
100-02-7	4-Nitrophenol	ND	mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
33-32-9	Acenaphthene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	КН
208-96-8	Acenaphthylene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDE	05/22/2019 21:56	КН
98-86-2	Acetophenone	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEF	05/22/2019 21:56	КН
52-53-3	Aniline	ND	mg/kg dry	0.212	0.425	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEF	05/22/2019 21:56	КН
20-12-7	Anthracene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
912-24-9	Atrazine	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEF	05/22/2019 21:56	КН
00-52-7	Benzaldehyde	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEF	05/22/2019 21:56	KH
2-87-5	Benzidine	ND	mg/kg dry	0.212	0.425	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,PADE	05/22/2019 21:56 P	KH
6-55-3	Benzo(a)anthracene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 .AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	КН
50-32-8	Benzo(a)pyrene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
205-99-2	Benzo(b)fluoranthene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 .AC-NY10854,NJDE	05/22/2019 21:56 P,PADEP	KH
07-08-9	Benzo(k)fluoranthene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/20/2019 14:37 .AC-NY10854,NJDE	05/22/2019 21:56	КН
55-85-0	Benzoic acid	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/20/2019 14:37 10854,NJDEP,PADEF	05/22/2019 21:56	КН
100-51-6	Benzyl alcohol	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/20/2019 14:37 10854,NJDEP,PADEF	05/22/2019 21:56	KH

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Client Sample ID: SB003 (10-12) **York Sample ID:** 19E0591-08

York Project (SDG) No. Client Project ID 19E0591 LST 1802

Matrix Collection Date/Time Soil May 10, 2019 7:45 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Semi-Volatiles, 8270 Comprehensive Sample Prepared by Method: EPA 3550C				<u>Log-in Notes:</u>					Sample Notes:				
CAS No		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst	
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	КН	
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	КН	
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	КН	
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	КН	
105-60-2	Caprolactam	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADE	05/22/2019 21:56 P	КН	
86-74-8	Carbazole	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	КН	
218-01-9	Chrysene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	КН	
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	КН	
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
206-44-0	Fluoranthene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
86-73-7	Fluorene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADE	05/22/2019 21:56 P	KH	
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	KH	
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD		KH	
78-59-1	Isophorone	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	КН	
91-20-3	Naphthalene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 21:56 EP,PADEP	КН	



Log-in Notes:

Client Sample ID: SB003 (10-12)

York Sample ID: 19E0591-08

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:45 am

Sample Notes:

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 EP,PADEP	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 EP,PADEP	KH
108-95-2	Phenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 EP,PADEP	КН
129-00-0	Pyrene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 EP,PADEP	КН
110-86-1	Pyridine	ND		mg/kg dry	0.212	0.425	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 21:56 EP,PADEP	КН
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	72.4 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	64.9 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	66.4 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	54.1 %			21-113							

19-110

24-116

Pesticides, 8081 List

118-79-6

1718-51-0

Sample Prepared by Method: EPA 3550C

Surrogate: SURR: 2,4,6-Tribromophenol

Surrogate: SURR: Terphenyl-d14

Log-in Notes:

CAS I	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Meth	Date/Time nod Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD		ND		mg/kg dry	0.00211	5	EPA 8081B Certifications: CTD	05/20/2019 14:33 OH,NELAC-NY10854,NJDI	05/22/2019 20:04 EP,PADEP	СМ
72-55-9	4,4'-DDE		ND		mg/kg dry	0.00211	5	EPA 8081B Certifications: CTD	05/20/2019 14:33 OH,NELAC-NY10854,NJDI	05/22/2019 20:04 EP,PADEP	CM
50-29-3	4,4'-DDT		ND		mg/kg dry	0.00211	5	EPA 8081B Certifications: CTD	05/20/2019 14:33 DH,NELAC-NY10854,NJDI	05/22/2019 20:04 EP,PADEP	CM
309-00-2	Aldrin		ND		mg/kg dry	0.00211	5	EPA 8081B Certifications: CTD	05/20/2019 14:33 OH,NELAC-NY10854,NJDI	05/22/2019 20:04 EP,PADEP	CM
319-84-6	alpha-BHC		ND		mg/kg dry	0.00211	5	EPA 8081B Certifications: CTD	05/20/2019 14:33 DH,NELAC-NY10854,NJDI	05/22/2019 20:04 EP,PADEP	CM
5103-71-9	alpha-Chlordane		ND		mg/kg dry	0.00211	5	EPA 8081B Certifications: NELA	05/20/2019 14:33 AC-NY10854,NJDEP	05/22/2019 20:04	CM
319-85-7	beta-BHC		ND		mg/kg dry	0.00211	5	EPA 8081B Certifications: CTD6	05/20/2019 14:33 DH,NELAC-NY10854,NJDI	05/22/2019 20:04 EP,PADEP	CM

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45.7 %

59.0 %

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Client Sample ID: SB003 (10-12) **York Sample ID:** 19E0591-08

York Project (SDG) No. Client Project ID 19E0591 LST 1802

Matrix Collection Date/Time May 10, 2019 7:45 am Soil

Date Received 05/13/2019

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	No. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 20:04 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 20:04 EP,PADEP	СМ
959-98-8	Endosulfan I	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:04 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854	05/22/2019 20:04	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 20:04 EP,PADEP	СМ
72-20-8	Endrin	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 20:04 EP,PADEP	СМ
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 20:04 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:04 EP,PADEP	СМ
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 20:04 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/22/2019 20:04	СМ
76-44-8	Heptachlor	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 20:04 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/22/2019 20:04 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 20:04 EP,PADEP	СМ
8001-35-2	Toxaphene	ND		mg/kg dry	0.211	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 20:04 EP,PADEP	СМ
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0421	5	EPA 8081B Certifications:		05/20/2019 14:33	05/22/2019 20:04	СМ
	Surrogate Recoveries	Result		Acceptar	ice Range						
2051-24-3	Surrogate: Decachlorobiphenyl	96.7 %		30	-150						

Polychlorinated Biphenyls (PCB), 8082 List

Surrogate: Tetrachloro-m-xylene

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

877-09-8

CAS No	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference M	Date/Time lethod Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	mg/kg dry	0.0213	1	EPA 8082A Certifications: N	05/20/2019 14:33 IELAC-NY10854,CTDOH,NJD	05/23/2019 10:50 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND	mg/kg dry	0.0213	1	EPA 8082A Certifications: N	05/20/2019 14:33 IELAC-NY10854,CTDOH,NJD	05/23/2019 10:50 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND	mg/kg dry	0.0213	1	EPA 8082A Certifications: N	05/20/2019 14:33 IELAC-NY10854,CTDOH,NJD	05/23/2019 10:50 EP,PADEP	SR

30-150

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96.2 %

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Client Sample ID: SB003 (10-12) **York Sample ID:** 19E0591-08

York Project (SDG) No. Client Project ID 19E0591 LST 1802

Matrix Collection Date/Time Soil May 10, 2019 7:45 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	No. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0213	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 Y10854,CTDOH,NJDI	05/23/2019 10:50 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0213	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 Y10854,CTDOH,NJDH	05/23/2019 10:50 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0213	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 Y10854,CTDOH,NJDE	05/23/2019 10:50 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0213	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 Y10854,CTDOH,NJDE	05/23/2019 10:50 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0213	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 10:50	SR
	Surrogate Recoveries	Result		Acceptance	Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	72.5 %		30-12	20						
2051-24-3	Surrogate: Decachlorobiphenyl	69.0 %		30-12	20						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	No. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference M	Date/Ti lethod Prepa		
7429-90-5	Aluminum	6720	mg/kg dry	6.40	1	EPA 6010D	05/20/2019	14:51 05/20/2019	18:00 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	
7440-36-0	Antimony	ND	mg/kg dry	3.20	1	EPA 6010D Certifications: C	05/20/2019 TDOH,NELAC-NY108		18:00 KML
7440-38-2	Arsenic	2.06	mg/kg dry	1.92	1	EPA 6010D	05/20/2019	14:51 05/20/2019	18:00 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	
7440-39-3	Barium	39.4	mg/kg dry	3.20	1	EPA 6010D	05/20/2019	14:51 05/20/2019	18:00 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	
7440-41-7	Beryllium	ND	mg/kg dry	0.064	1	EPA 6010D Certifications:	05/20/2019 TDOH,NELAC-NY108		18:00 KML
7440-43-9	Cadmium	ND	mg/kg dry	0.384	1	EPA 6010D Certifications: C	05/20/2019 TDOH,NELAC-NY108		18:00 KML
7440-70-2	Calcium	2210	mg/kg dry	6.40	1	EPA 6010D	05/20/2019	14:51 05/20/2019	18:00 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	
7440-47-3	Chromium	17.1	mg/kg dry	0.640	1	EPA 6010D	05/20/2019	14:51 05/20/2019	18:00 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	
7440-48-4	Cobalt	6.95	mg/kg dry	0.512	1	EPA 6010D	05/20/2019	14:51 05/20/2019	18:00 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	
7440-50-8	Copper	17.7	mg/kg dry	2.56	1	EPA 6010D	05/20/2019	14:51 05/20/2019	18:00 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	
7439-89-6	Iron	13600	mg/kg dry	32.0	1	EPA 6010D	05/20/2019	14:51 05/20/2019	18:00 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	
7439-92-1	Lead	54100	mg/kg dry	12.8	20	EPA 6010D	05/20/2019	14:51 05/21/2019	13:03 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	
7439-95-4	Magnesium	3440	mg/kg dry	6.40	1	EPA 6010D	05/20/2019	14:51 05/20/2019	18:00 KML
						Certifications:	CTDOH,NELAC-NY108	54,NJDEP,PADEP	

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Client Sample ID: SB003 (10-12)

York Sample ID: 19E0591-08

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:45 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No	o. Param	eter Result	Flag Units	Reported to LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	Manganese	108	mg/kg dry	0.640	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:00	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	16.7	mg/kg dry	1.28	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:00	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1660	mg/kg dry	6.40	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:00	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.20	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:00	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.640	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:00	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7440-23-5	Sodium	311	mg/kg dry	64.0	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:00	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.20	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:00	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7440-62-2	Vanadium	23.1	mg/kg dry	1.28	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:00	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	30.9	mg/kg dry	3.20	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:00	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

CAS No.

7439-97-6

Sample Prepared by Method: EPA 7473 soil

Mercury

Sample Prepared by Method: % Solids Prep

Parameter

Result

ND

LU	2-m	INO	tes:
	_		

Sample Notes:

Flag	Units	Reported to LOQ	Dilution	Reference M	Date/Time Method Prepared		Date/Time Analyzed	Analyst
	mg/kg dry	0.0384	1	EPA 7473		05/22/2019 09:04	05/22/2019 16:42	SY
				Certifications: C	TDOH,NJD	EP,NELAC-NY1085	4,PADEP	

Total Solids

Log-in Notes:

Sample Notes:

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CAS No.		Parameter	Result	Flag	Units	Reported LOQ	to Dilutio	n Reference Met	Date/Time hod Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		78.1		%	0.100	1	SM 2540G	05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications: CTI	DOH		

Sample Information

 Client Sample ID:
 SB003 (0-2)

 York Project (SDG) No.
 Client Project ID
 Matrix
 Collection Date/Time
 Date Received

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 7:40 am05/13/2019

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Log-in Notes:

Client Sample ID: SB003 (0-2)

York Sample ID: 19E0591-09

 York Project (SDG) No.
 Client Project ID

 19E0591
 LST 1802

MatrixCollection Date/TimeSoilMay 10, 2019 7:40 am

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEF	05/22/2019 22:26	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.693	1.38	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEF	05/22/2019 22:26	КН
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26	КН
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:		05/20/2019 14:37 /10854,PADEP	05/22/2019 22:26	КН
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEF	05/22/2019 22:26	КН
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,PADEP	05/22/2019 22:26	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,PADEP	05/22/2019 22:26	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.693	1.38	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 / 10854,NJDEP,PADEF	05/22/2019 22:26	КН
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.693	1.38	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
95-48-7	2-Methylphenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.693	1.38	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE		КН
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEF	05/22/2019 22:26	КН

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Client Sample ID: SB003 (0-2)

York Sample ID: 19E0591-09

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 7:40 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3550C										
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time lethod Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.693	1.38	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJI	05/22/2019 22:26 DEP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.693	1.38	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJI	05/22/2019 22:26 DEP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJI	05/22/2019 22:26 DEP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJI	05/22/2019 22:26 DEP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJI	05/22/2019 22:26 DEP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJI	05/22/2019 22:26 DEP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.693	1.38	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJI	05/22/2019 22:26 DEP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.693	1.38	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJI	05/22/2019 22:26 DEP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJI	05/22/2019 22:26 DEP,PADEP	КН
208-96-8	Acenaphthylene	1.05		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ	05/22/2019 22:26 DEP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications: N	05/20/2019 14:37 ELAC-NY10854,NJDEP,PAD	05/22/2019 22:26 EP	КН
62-53-3	Aniline	ND		mg/kg dry	1.39	2.78	10	EPA 8270D Certifications: N	05/20/2019 14:37 ELAC-NY10854,NJDEP,PAD	05/22/2019 22:26 EP	KH
120-12-7	Anthracene	1.63		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ	05/22/2019 22:26 DEP,PADEP	КН
1912-24-9	Atrazine	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications: N	05/20/2019 14:37 ELAC-NY10854,NJDEP,PAD	05/22/2019 22:26 EP	КН
100-52-7	Benzaldehyde	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications: N	05/20/2019 14:37 ELAC-NY10854,NJDEP,PAD	05/22/2019 22:26 EP	КН
92-87-5	Benzidine	ND		mg/kg dry	1.39	2.78	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,PAI	05/22/2019 22:26 DEP	KH
56-55-3	Benzo(a)anthracene	7.80		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ	05/22/2019 22:26 DEP,PADEP	KH
50-32-8	Benzo(a)pyrene	7.08		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJ	05/22/2019 22:26 DEP PADEP	КН
205-99-2	Benzo(b)fluoranthene	6.38		mg/kg dry	0.347	0.693	10	EPA 8270D	05/20/2019 14:37 CTDOH.NELAC-NY10854.NJ	05/22/2019 22:26	KH
191-24-2	Benzo(g,h,i)perylene	4.17		mg/kg dry	0.347	0.693	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:26	КН
207-08-9	Benzo(k)fluoranthene	5.00		mg/kg dry	0.347	0.693	10	Certifications: CEPA 8270D	O5/20/2019 14:37		КН
65-85-0	Benzoic acid	ND		mg/kg dry	0.347	0.693	10	EPA 8270D	05/20/2019 14:37		КН
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:26	КН
								Certifications: N	ELAC-NY10854,NJDEP,PAD	EP	

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Client Sample ID: SB003 (0-2)

York Sample ID: 19E0591-09

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 7:40 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

 Log-ın Notes:	. <u>S</u>	sampl	e ſ	Not	tes	:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 22:26 EP,PADEP	КН
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	70.7		mg/kg dry	3.47	6.93	100	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 11:16 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.693	1.38	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADE	05/22/2019 22:26	КН
86-74-8	Carbazole	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 22:26 EP,PADEP	KH
218-01-9	Chrysene	7.17		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH.N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:26 EP.PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	1.24		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:26	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 22:26 EP,PADEP	КН
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	KH
206-44-0	Fluoranthene	15.2		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:26 EP,PADEP	KH
86-73-7	Fluorene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADE	05/22/2019 22:26	КН
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 22:26 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	5.28		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:26 EP,PADEP	KH
78-59-1	Isophorone	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 22:26	КН
91-20-3	Naphthalene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26	КН

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Client Sample ID: SB003 (0-2)

York Sample ID:

19E0591-09

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:40 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log	g-in	No	tes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 22:26 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 22:26 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 22:26 EP,PADEP	КН
85-01-8	Phenanthrene	6.05		mg/kg dry	0.347	0.693	10	EPA 8270D		05/20/2019 14:37	05/22/2019 22:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.347	0.693	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 22:26 EP,PADEP	KH
129-00-0	Pyrene	13.7		mg/kg dry	0.347	0.693	10	EPA 8270D		05/20/2019 14:37	05/22/2019 22:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	1.39	2.78	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 22:26 EP,PADEP	KH
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	66.6 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	63.6 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	66.6 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	58.8 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	51.3 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	66.6 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	Jo. Param	eter Result	Flag Units	Reported to LOQ Dilu	ution Referenc	e Method Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00183	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:04 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00183	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:04 EP,PADEP	СМ
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00183	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:04 EP,PADEP	СМ
309-00-2	Aldrin	ND	mg/kg dry	0.00183	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:04 EP,PADEP	СМ
319-84-6	alpha-BHC	ND	mg/kg dry	0.00183	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:04 EP,PADEP	СМ
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00183	5 EPA 8081B Certifications:	05/20/2019 14:33 NELAC-NY10854,NJDEP	05/23/2019 01:04	СМ
319-85-7	beta-BHC	ND	mg/kg dry	0.00183	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJE	05/23/2019 01:04 EP,PADEP	СМ

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Client Sample ID: SB003 (0-2)

York Sample ID: 19E0591-09

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:40 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:04 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 01:04 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 01:04 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854	05/23/2019 01:04	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 01:04 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 01:04 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 01:04 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 01:04 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:04 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	NELAC-NY	05/20/2019 14:33 Y10854,NJDEP	05/23/2019 01:04	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:04 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 01:04 EP,PADEP	СМ
72-43-5	Methoxychlor	ND		mg/kg dry	0.00183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:04 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.183	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 01:04 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0366	5	EPA 8081B Certifications:		05/20/2019 14:33	05/23/2019 01:04	CM
	Surrogate Recoveries	Result		Acceptan	ce Range						
2051-24-3	Surrogate: Decachlorobiphenyl	84.1 %		30-	-150						
877-09-8	Surrogate: Tetrachloro-m-xylene	55.6 %		30-	-150						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. 1	Parameter Result	Flag U	FT **	orted to OQ l	Dilution	Reference M	1ethod	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	m	ng/kg dry 0.	0185	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 01:07 P,PADEP	SR
11104-28-2	Aroclor 1221	ND	m	ng/kg dry 0.	0185	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 01:07 P,PADEP	SR
11141-16-5	Aroclor 1232	ND	m	ng/kg dry 0.	0185	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 01:07 P,PADEP	SR

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Client Sample ID: SB003 (0-2)

York Sample ID: 19E0591-09

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:40 am <u>Date Received</u> 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0185	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:07 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0185	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:07 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0185	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:07 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0185	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 01:07 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0185	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 01:07	SR
	Surrogate Recoveries	Result		Acceptano	e Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	52.0 %		30-1	120						
2051-24-3	Surrogate: Decachlorobiphenyl	44.0 %		30-1	120						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference I	Date/Time Method Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	7140	mg/kg dry	5.58	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N	DEP,PADEP	
7440-36-0	Antimony	ND	mg/kg dry	2.79	1	EPA 6010D Certifications:	05/20/2019 14:51 CTDOH,NELAC-NY10854,NJ		KML
7440-38-2	Arsenic	4.73	mg/kg dry	1.67	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N.	DEP,PADEP	
7440-39-3	Barium	464	mg/kg dry	2.79	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N	DEP,PADEP	
7440-41-7	Beryllium	0.060	mg/kg dry	0.056	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N.	DEP,PADEP	
7440-43-9	Cadmium	1.11	mg/kg dry	0.335	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N	DEP,PADEP	
7440-70-2	Calcium	35700	mg/kg dry	5.58	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N.	DEP,PADEP	
7440-47-3	Chromium	21.9	mg/kg dry	0.558	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N	DEP,PADEP	
7440-48-4	Cobalt	8.62	mg/kg dry	0.446	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N.	DEP,PADEP	
7440-50-8	Copper	94.7	mg/kg dry	2.23	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N.	DEP,PADEP	
7439-89-6	Iron	20000	mg/kg dry	27.9	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N.	DEP,PADEP	
7439-92-1	Lead	342	mg/kg dry	0.558	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:03	KML
						Certifications:	CTDOH,NELAC-NY10854,N.	DEP,PADEP	

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Client Sample ID: SB003 (0-2) **York Sample ID:** 19E0591-09

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 7:40 am Date Received 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

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Sample Notes:

CAS I	No. Par	ameter Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	6660		mg/kg dry	5.58	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	289		mg/kg dry	0.558	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	25.4		mg/kg dry	1.12	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1350		mg/kg dry	5.58	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND		mg/kg dry	2.79	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver	ND		mg/kg dry	0.558	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	EP,PADEP	
7440-23-5	Sodium	814		mg/kg dry	55.8	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND		mg/kg dry	2.79	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	EP,PADEP	
7440-62-2	Vanadium	27.8		mg/kg dry	1.12	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	402		mg/kg dry	2.79	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:03	KML
							Certifications:	CTDOH N	ELAC-NY10854 NJD	EP PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in Notes:

Sample Notes:

	CAS No.		Parameter	Result	Flag	Units	Reported t LOQ	Dilution	1 Reference M	Reference Method		Date/Time Analyzed	Analyst
7439-9	97-6	Mercury		0.446		mg/kg dry	0.0335	1	EPA 7473		05/22/2019 09:04	05/22/2019 16:51	SY
									Certifications:	CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

Sample Prepared by Method: % Solids Prep

Log-in	Notes:
_ ,	

Sample Notes:

CAS No.		Parameter	Result	Flag	Units	Reported t	Reported to LOQ Dilution		Reference Method		Date/Time Analyzed	Analyst
solids	* % Solids		89.7		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications: (CTDOH			

Sample Information

Client Sample ID: SB004 (0-2)			York Sample ID:	19E0591-10
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 9:30 am	05/13/2019

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Client Sample ID: SB004 (0-2)

York Sample ID: 19E0591-10

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:30 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Metho	od: EPA 3550C
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 NELAC-NY10854,NJDEP,PADEP	05/22/2019 22:56	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	1.11	2.22	10	EPA 8270D Certifications:	05/20/2019 14:37 0 NELAC-NY10854,NJDEP,PADEP	5/22/2019 22:56	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 NELAC-NY10854,PADEP	05/22/2019 22:56	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 NELAC-NY10854,NJDEP,PADEP	05/22/2019 22:56	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 NELAC-NY10854,PADEP	5/22/2019 22:56	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 NELAC-NY10854,PADEP	5/22/2019 22:56	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	1.11	2.22	10	EPA 8270D Certifications:	05/20/2019 14:37 0 NELAC-NY10854,NJDEP,PADEP	5/22/2019 22:56	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	25/22/2019 22:56 PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	25/22/2019 22:56 PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	1.11	2.22	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	1.11	2.22	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	КН
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 CTDOH,NELAC-NY10854,NJDEP,P	05/22/2019 22:56 PADEP	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 0 NELAC-NY10854,NJDEP,PADEP	05/22/2019 22:56	КН

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Client Sample ID: SB004 (0-2)

York Sample ID: 19E0591-10

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 9:30 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3550C												
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst	
99-09-2	3-Nitroaniline	ND		mg/kg dry	1.11	2.22	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	КН	
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	1.11	2.22	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	КН	
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	KH	
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	KH	
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	KH	
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	KH	
100-01-6	4-Nitroaniline	ND		mg/kg dry	1.11	2.22	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	KH	
100-02-7	4-Nitrophenol	ND		mg/kg dry	1.11	2.22	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	КН	
83-32-9	Acenaphthene	2.32		mg/kg dry	0.556	1.11	10	EPA 8270D		05/20/2019 14:37	05/22/2019 22:56	KH	
								Certifications:	CTDOH,N	NELAC-NY10854,NJE	EP,PADEP		
208-96-8	Acenaphthylene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	KH	
98-86-2	Acetophenone	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/22/2019 22:56 P	КН	
62-53-3	Aniline	ND		mg/kg dry	2.22	4.44	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/22/2019 22:56 P	КН	
120-12-7	Anthracene	4.80		mg/kg dry	0.556	1.11	10	EPA 8270D		05/20/2019 14:37	05/22/2019 22:56	KH	
								Certifications:	CTDOH,N	NELAC-NY10854,NJE			
1912-24-9	Atrazine	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE		KH	
100-52-7	Benzaldehyde	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE		KH	
92-87-5	Benzidine	ND		mg/kg dry	2.22	4.44	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,PAD		KH	
56-55-3	Benzo(a)anthracene	8.92		mg/kg dry	0.556	1.11	10	EPA 8270D		05/20/2019 14:37	05/22/2019 22:56	KH	
50-32-8	Benzo(a)pyrene	7.83		mg/kg dry	0.556	1.11	10	Certifications: EPA 8270D	CTDOH,N	NELAC-NY10854,NJE 05/20/2019 14:37	05/22/2019 22:56	КН	
								Certifications:	CTDOH,N	NELAC-NY10854,NJE	EP,PADEP		
205-99-2	Benzo(b)fluoranthene	6.63		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 NELAC-NY10854,NJE	05/22/2019 22:56 EP,PADEP	KH	
191-24-2	Benzo(g,h,i)perylene	4.07		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	СТРОН Х	05/20/2019 14:37 NELAC-NY10854,NJD	05/22/2019 22:56	KH	
207-08-9	Benzo(k)fluoranthene	5.71		ma/ka den	0.55(1.11	10	EPA 8270D	CIDOII,	05/20/2019 14:37	05/22/2019 22:56	VII	
207-00-9	Denzo(K)nuoi antilene	5.71		mg/kg dry	0.556	1.11	10	Certifications:	CTDOH N	05/20/2019 14.57 NELAC-NY10854,NJE		KH	
65-85-0	Benzoic acid	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:		05/20/2019 14:37 Y10854,NJDEP,PADE	05/22/2019 22:56	КН	
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:		05/20/2019 14:37 Y10854,NJDEP,PADE	05/22/2019 22:56	КН	

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Client Sample ID: SB004 (0-2)

York Sample ID: 19E0591-10

York Project (SDG) No. 19E0591

Sample Prepared by Method: EPA 3550C

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:30 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analys
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	0.896	J	mg/kg dry	0.556	1.11	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
105-60-2	Caprolactam	ND		mg/kg dry	1.11	2.22	10	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADI	05/22/2019 22:56 EP	KH
86-74-8	Carbazole	2.07		mg/kg dry	0.556	1.11	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
218-01-9	Chrysene	7.64		mg/kg dry	0.556	1.11	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	1.07	J	mg/kg dry	0.556	1.11	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
132-64-9	Dibenzofuran	1.42		mg/kg dry	0.556	1.11	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	КН
206-44-0	Fluoranthene	20.8		mg/kg dry	0.556	1.11	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
86-73-7	Fluorene	2.08		mg/kg dry	0.556	1.11	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:56	KH
								Certifications:	NELAC-NY10854,NJDEP,PAD	EP	
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 PEP,PADEP	КН
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	КН
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	5.53		mg/kg dry	0.556	1.11	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 22:56 DEP,PADEP	KH
91-20-3	Naphthalene	1.16		mg/kg dry	0.556	1.11	10	EPA 8270D	05/20/2019 14:37	05/22/2019 22:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DED DAIDED	

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Client Sample ID: SB004 (0-2) **York Sample ID:**

19E0591-10

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:30 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDE	05/22/2019 22:56 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDE	05/22/2019 22:56 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDE	05/22/2019 22:56 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDE	05/22/2019 22:56 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDE	05/22/2019 22:56 EP,PADEP	KH
85-01-8	Phenanthrene	19.0		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	КН
108-95-2	Phenol	ND		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDE	05/22/2019 22:56 EP,PADEP	KH
129-00-0	Pyrene	17.5		mg/kg dry	0.556	1.11	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 CLAC-NY10854,NJD	05/22/2019 22:56 EP,PADEP	КН
110-86-1	Pyridine	ND		mg/kg dry	2.22	4.44	10	EPA 8270D Certifications:	CTDOH,NEI	05/20/2019 14:37 LAC-NY10854,NJDE	05/22/2019 22:56 EP,PADEP	КН
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	61.6 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	58.0 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	59.2 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	57.6 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	36.0 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	64.0 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	No. Para	nmeter Result	Flag Units	Reported to LOQ Dilut	ion Reference	Date/Time e Method Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00220 5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:19 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00220 5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:19 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00220 5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:19 EP,PADEP	CM
309-00-2	Aldrin	ND	mg/kg dry	0.00220 5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:19 EP,PADEP	CM
319-84-6	alpha-BHC	ND	mg/kg dry	0.00220 5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:19 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00220 5	EPA 8081B Certifications:	05/20/2019 14:33 NELAC-NY10854,NJDEP	05/23/2019 01:19	CM
319-85-7	beta-BHC	ND	mg/kg dry	0.00220 5	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/23/2019 01:19 EP,PADEP	CM

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Client Sample ID: SB004 (0-2)

York Sample ID: 19E0591-10

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:30 am Date Received 05/13/2019

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	Vo. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	СМ
959-98-8	Endosulfan I	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854	05/23/2019 01:19	СМ
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	СМ
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	СМ
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	СМ
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/23/2019 01:19	СМ
76-44-8	Heptachlor	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	СМ
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.220	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:19 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0439	5	EPA 8081B Certifications:		05/20/2019 14:33	05/23/2019 01:19	CM
	Surrogate Recoveries	Result		Acceptanc	e Range						
2051-24-3	Surrogate: Decachlorobiphenyl	155 %	S-GC	30-1	50						
877-09-8	Surrogate: Tetrachloro-m-xylene	92.4 %		30-1	50						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	0.	Parameter Re	esult Flag	Units	Reported to LOQ	Dilution	Reference M	lethod	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0222	1	EPA 8082A Certifications: N		05/20/2019 14:33 0854,CTDOH,NJDE	05/23/2019 01:20 P,PADEP	SR
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0222	1	EPA 8082A Certifications: N		05/20/2019 14:33 0854,CTDOH,NJDE	05/23/2019 01:20 P,PADEP	SR
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0222	1	EPA 8082A Certifications: N		05/20/2019 14:33 0854,CTDOH,NJDE	05/23/2019 01:20 P,PADEP	SR

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Client Sample ID: SB004 (0-2)

York Sample ID: 19

19E0591-10

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:30 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0222	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:20 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0222	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:20 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0222	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:20 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0222	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 01:20 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0222	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 01:20	SR
	Surrogate Recoveries	Result		Acceptan	ce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	86.0 %		30-	-120						
2051-24-3	Surrogate: Decachlorobiphenyl	84.5 %		30-	-120						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

CAS I	No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		3770		mg/kg dry	6.68	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
			5770		3 3)	0.00	•	Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		3.36		mg/kg dry	3.34	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
	-							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-38-2	Arsenic		5.15		mg/kg dry	2.00	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		175		mg/kg dry	3.34	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.520		mg/kg dry	0.067	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		3.05		mg/kg dry	0.401	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		66000		mg/kg dry	6.68	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		72.2		mg/kg dry	0.668	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		6.18		mg/kg dry	0.534	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		224		mg/kg dry	2.67	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		49100		mg/kg dry	33.4	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		576		mg/kg dry	0.668	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: SB004 (0-2)

York Sample ID: 19E0591-10

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:30 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	No. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	13200	mg/kg dry	6.68	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	303	mg/kg dry	0.668	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	74.1	mg/kg dry	1.34	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	794	mg/kg dry	6.68	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.34	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.668	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
	~ "						CTDOH,NE	LAC-NY10854,NJDE		
7440-23-5	Sodium	432	mg/kg dry	66.8	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.34	1	EPA 6010D	CEROUS NE	05/20/2019 14:51	05/20/2019 18:05	KML
							C1DOH,NE	LAC-NY10854,NJDE		
7440-62-2	Vanadium	51.2	mg/kg dry	1.34	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	966	mg/kg dry	3.34	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:05	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported t	o Dilutio	n Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.289		mg/kg dry	0.0401	1	EPA 7473		05/22/2019 09:04	05/22/2019 17:00	SY
								Certifications:	CTDOH N	JDEP NELAC-NY108	54 PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

Notes:

Sample Notes:

_	CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	to Diluti	on Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
s	olids	* % Solids		74.9		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
									Certifications:	CTDOH			

Sample Information

Client Sample ID: SB004 (4-6)			York Sample ID:	19E0591-11
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 9:35 am	05/13/2019

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Client Sample ID: SB004 (4-6)

<u>York Sample ID:</u> 19E0591-11

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:35 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 854,NJDEP,PADEI	05/22/2019 23:26	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.108	0.216	2	EPA 8270D Certifications:		5/20/2019 14:37 854,NJDEP,PADEI	05/22/2019 23:26	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	0: NELAC-NY108	5/20/2019 14:37 354,PADEP	05/22/2019 23:26	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 854,NJDEP,PADEI	05/22/2019 23:26	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	0: NELAC-NY108	5/20/2019 14:37 854,PADEP	05/22/2019 23:26	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	0: NELAC-NY108	5/20/2019 14:37 354,PADEP	05/22/2019 23:26	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.108	0.216	2	EPA 8270D Certifications:		5/20/2019 14:37 854,NJDEP,PADEI	05/22/2019 23:26	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.108	0.216	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	КН
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	КН
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	КН
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.108	0.216	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 C-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		5/20/2019 14:37 354,NJDEP,PADEI	05/22/2019 23:26	KH



Client Sample ID: SB004 (4-6)

York Sample ID: 19E0591-11

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:35 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:
Log-m Notes:	Samble Notes:

CAS No	o. Parameter	Result Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND	mg/kg dry	0.108	0.216	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND	mg/kg dry	0.108	0.216	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND	mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	КН
59-50-7	4-Chloro-3-methylphenol	ND	mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	КН
106-47-8	4-Chloroaniline	ND	mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	КН
7005-72-3	4-Chlorophenyl phenyl ether	ND	mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	КН
100-01-6	4-Nitroaniline	ND	mg/kg dry	0.108	0.216	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	КН
100-02-7	4-Nitrophenol	ND	mg/kg dry	0.108	0.216	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
83-32-9	Acenaphthene	0.136	mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 23:26 EP,PADEP	KH
208-96-8	Acenaphthylene	0.0589 J	mg/kg dry	0.0543	0.108	2	EPA 8270D	OTTO ALL	05/20/2019 14:37	05/22/2019 23:26	KH
98-86-2	Acetophenone	ND	mg/kg dry	0.0543	0.108	2	Certifications: EPA 8270D Certifications:	ŕ	ELAC-NY10854,NJD 05/20/2019 14:37 Y10854,NJDEP,PADE	05/22/2019 23:26	КН
62-53-3	Aniline	ND	mg/kg dry	0.217	0.434	2	EPA 8270D Certifications:		05/20/2019 14:37 Y10854,NJDEP,PADE	05/22/2019 23:26	КН
120-12-7	Anthracene	0.560	mg/kg dry	0.0543	0.108	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:26	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD		
1912-24-9	Atrazine	ND	mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 Y10854,NJDEP,PADE	05/22/2019 23:26 P	KH
100-52-7	Benzaldehyde	ND	mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/22/2019 23:26 P	KH
92-87-5	Benzidine	ND	mg/kg dry	0.217	0.434	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,PADI	05/22/2019 23:26 EP	KH
56-55-3	Benzo(a)anthracene	1.97	mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 23:26 EPPADEP	KH
50-32-8	Benzo(a)pyrene	2.10	mg/kg dry	0.0543	0.108	2	EPA 8270D	CIBOII,IV	05/20/2019 14:37	05/22/2019 23:26	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
205-99-2	Benzo(b)fluoranthene	1.62	mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 23:26 EDPADED	KH
191-24-2	Benzo(g,h,i)perylene	1.22	mg/kg dry	0.0543	0.108	2	EPA 8270D	CIDOII,N	05/20/2019 14:37	05/22/2019 23:26	KH
	(8) //1 - 0	1,22					Certifications:	CTDOH,N	ELAC-NY10854,NJD		
207-08-9	Benzo(k)fluoranthene	1.28	mg/kg dry	0.0543	0.108	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:26	KH
65-85-0	Benzoic acid	ND	mg/kg dry	0.0543	0.108	2	Certifications: EPA 8270D	ŕ	ELAC-NY10854,NJD 05/20/2019 14:37	05/22/2019 23:26	KH
100-51-6	Panzul alaahal	ND	mg/kg dry	0.0543	0.108	2	Certifications: EPA 8270D	NELAC-NY	Y10854,NJDEP,PADE 05/20/2019 14:37	05/22/2019 23:26	KH
100-31-0	Benzyl alcohol	ND	mg/kg dry	0.0040	0.100		Certifications:	NELAC-N	Y10854,NJDEP,PADE		
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Client Sample ID: SB004 (4-6)

York Sample ID: 19E0591-11

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:35 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	КН
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	КН
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.108	0.216	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 Y10854,NJDEP,PADE	05/22/2019 23:26 P	КН
86-74-8	Carbazole	0.103	J	mg/kg dry	0.0543	0.108	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:26	KH
	CI.							Certifications:	CTDOH,N	ELAC-NY10854,NJD		
218-01-9	Chrysene	1.82		mg/kg dry	0.0543	0.108	2	EPA 8270D	CTPOHAI	05/20/2019 14:37	05/22/2019 23:26	KH
52 50 2	D!h (- h) dh			<i>a</i> 1				Certifications:	C1DOH,N	ELAC-NY10854,NJD		1/11
53-70-3	Dibenzo(a,h)anthracene	0.288		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH N	05/20/2019 14:37 ELAC-NY10854,NJD	05/22/2019 23:26 EDBADED	KH
132-64-9	Dibenzofuran	0.07/2		ma/ka den	0.0542	0.100	2	EPA 8270D	CTDOII,N	05/20/2019 14:37	05/22/2019 23:26	KH
132-04-9	Dibenzolulan	0.0762	J	mg/kg dry	0.0543	0.108	2	Certifications:	CTDOH N	ELAC-NY10854,NJD		ΚП
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	КН
206-44-0	Fluoranthene	3.62		mg/kg dry	0.136	0.271	5	EPA 8270D		05/20/2019 14:37	05/23/2019 11:44	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	0.129		mg/kg dry	0.0543	0.108	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:26	KH
								Certifications:	NELAC-N	Y10854,NJDEP,PADE	P	
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	1.49		mg/kg dry	0.0543	0.108	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI		KH
91-20-3	Naphthalene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/22/2019 23:26 EPPADEP	KH

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Client Sample ID: SB004 (4-6)

York Sample ID:

19E0591-11

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:35 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
85-01-8	Phenanthrene	1.99		mg/kg dry	0.0543	0.108	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0543	0.108	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
129-00-0	Pyrene	3.45		mg/kg dry	0.136	0.271	5	EPA 8270D		05/20/2019 14:37	05/23/2019 11:44	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.217	0.434	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:26 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	60.4 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	71.1 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	76.1 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	66.1 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	10.1 %	S-08		19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	70.2 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS I	No. Pa	arameter Resi	ılt Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:		05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 01:34 P,PADEP	CM
72-55-9	4,4'-DDE	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/23/2019 01:34 P,PADEP	CM
50-29-3	4,4'-DDT	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/23/2019 01:34 P,PADEP	CM
309-00-2	Aldrin	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/23/2019 01:34 P,PADEP	CM
319-84-6	alpha-BHC	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:		05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 01:34 P,PADEP	CM
5103-71-9	alpha-Chlordane	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	NELAC-NY1	05/20/2019 14:33 0854,NJDEP	05/23/2019 01:34	CM
319-85-7	beta-BHC	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/23/2019 01:34 P,PADEP	CM

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Client Sample ID: SB004 (4-6)

York Sample ID: 19E0591-11

Date/Time

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:35 am

Date/Time

Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C										
CAS No.	Parameter	Result	Flag	Units	Reported to LOQ Dilution Reference Method					

CAS N	No. Parameter	Result	sult Flag Units LOQ Dilution Reference		e Method	Prepared	Analyzed	Analyst			
319-86-8	delta-BHC	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854	05/23/2019 01:34	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	NELAC-NY	05/20/2019 14:33 Y10854,NJDEP	05/23/2019 01:34	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.214	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 01:34 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0427	5	EPA 8081B Certifications:		05/20/2019 14:33	05/23/2019 01:34	CM
	Surrogate Recoveries	Result	Acceptance Range		e Range						
2051-24-3	Surrogate: Decachlorobiphenyl	117 %	30-150		50						
877-09-8	Surrogate: Tetrachloro-m-xylene	55.1 %		30-1	50						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result F	lag Units	Reported to LOQ Diluti	on Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	mg/kg dry	0.0216 1	EPA 8082A Certifications:	05/20/2019 14:33 NELAC-NY10854,CTDOH,NJD	05/23/2019 01:34 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND	mg/kg dry	0.0216 1	EPA 8082A Certifications:	05/20/2019 14:33 NELAC-NY10854,CTDOH,NJD	05/23/2019 01:34 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND	mg/kg dry	0.0216 1	EPA 8082A Certifications:	05/20/2019 14:33 NELAC-NY10854,CTDOH,NJD	05/23/2019 01:34 EP,PADEP	SR

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Client Sample ID: SB004 (4-6)

York Sample ID: 19E0591-11

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:35 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:34 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 01:34 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 01:34 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 01:34 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0216	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 01:34	SR
	Surrogate Recoveries	Result		Acceptance	Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	64.0 %		30-12	9						
2051-24-3	Surrogate: Decachlorobiphenyl	59.0 %		30-12	9						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepa	red by Method: EPA	.3050B										
CAS I	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		6850		mg/kg dry	6.51	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.26	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:07 EP,PADEP	KML
7440-38-2	Arsenic		9.12		mg/kg dry	1.95	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		77.3		mg/kg dry	3.26	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.096		mg/kg dry	0.065	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		0.507		mg/kg dry	0.391	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		22200		mg/kg dry	6.51	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		12.8		mg/kg dry	0.651	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		6.79		mg/kg dry	0.521	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		165		mg/kg dry	2.61	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		17900		mg/kg dry	32.6	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	tions: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	Lead		148		mg/kg dry	0.651	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: SB004 (4-6) **York Sample ID:**

19E0591-11

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:35 am Date Received 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

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Sample Notes:

CAS N	No. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference N	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	3760	mg/kg dry	6.51	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	242	mg/kg dry	0.651	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	15.3	mg/kg dry	1.30	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1350	mg/kg dry	6.51	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.26	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.651	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
							CTDOH,NE	LAC-NY10854,NJDE		
7440-23-5	Sodium	421	mg/kg dry	65.1	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.26	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7440-62-2	Vanadium	21.3	mg/kg dry	1.30	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	218	mg/kg dry	3.26	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:07	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported LOQ		Dilution	Reference !	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.127		mg/kg dry	0.039	1	1	EPA 7473		05/22/2019 09:04	05/22/2019 17:09	SY
									Certifications:	CTDOH N	JDEP NELAC-NY108	54 PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

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Log-in	notes:

Sample Notes:

CAS	S No.	Parameter	Result	Flag	Units	Reported LOQ	to Dilutio r	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		76.8		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB004 (2-4)			York Sample ID:	19E0591-12
York Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 9:40 am	05/13/2019

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Client Sample ID: SB004 (2-4)

York Sample ID: 19E0591-12

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 9:40 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample I	Prepared	by	Method:	EPA	3550C
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADE	05/22/2019 23:56 EP	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0921	0.184	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADE	05/22/2019 23:56 EP	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,PADEP	05/22/2019 23:56	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADE	05/22/2019 23:56 EP	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,PADEP	05/22/2019 23:56	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,PADEP	05/22/2019 23:56	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0921	0.184	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADE	05/22/2019 23:56 EP	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0921	0.184	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 23:56 EP,PADEP	KH
91-57-6	2-Methylnaphthalene	0.121		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJI	05/22/2019 23:56 DEP,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJD	05/22/2019 23:56	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0921	0.184	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 23:56	КН
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 23:56 EP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJE	05/22/2019 23:56	КН
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADI	05/22/2019 23:56	KH

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Client Sample ID: SB004 (2-4)

York Sample ID: 19E0591-12

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:40 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

	d by Method: EPA 3550C							<u> </u>	510 1 (500)	<u></u>		
CAS No		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0921	0.184	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0921	0.184	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	КН
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	КН
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	КН
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	КН
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0921	0.184	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	КН
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0921	0.184	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	КН
83-32-9	Acenaphthene	0.315		mg/kg dry	0.0461	0.0921	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications:	CTDOH,NI	ELAC-NY10854,NJI		
208-96-8	Acenaphthylene	0.0935		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH NI	05/20/2019 14:37 ELAC-NY10854,NJI	05/22/2019 23:56 DED DA DED	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:		05/20/2019 14:37 (10854,NJDEP,PADE	05/22/2019 23:56	КН
62-53-3	Aniline	ND		mg/kg dry	0.184	0.369	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 23:56 EP	KH
120-12-7	Anthracene	1.06		mg/kg dry	0.0461	0.0921	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications:	CTDOH,NI	ELAC-NY10854,NJI	DEP,PADEP	
1912-24-9	Atrazine	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 (10854,NJDEP,PADE	05/22/2019 23:56 EP	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 (10854,NJDEP,PADE	05/22/2019 23:56 EP	КН
92-87-5	Benzidine	ND		mg/kg dry	0.184	0.369	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,PAD	05/22/2019 23:56 EP	КН
56-55-3	Benzo(a)anthracene	2.56		mg/kg dry	0.0461	0.0921	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications:	CTDOH,NI	ELAC-NY10854,NJI		
50-32-8	Benzo(a)pyrene	2.53		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOLLNI	05/20/2019 14:37	05/22/2019 23:56	KH
205-99-2	Benzo(b)fluoranthene	2.03		mg/kg dry	0.0461	0.0921	2	EPA 8270D	CTDOH,NI	ELAC-NY10854,NJI 05/20/2019 14:37	05/22/2019 23:56	KH
203-77-2	Denzo(b)nuorumene	2.03		mg/kg ury	0.0401	0.0921	2	Certifications:	CTDOH,NI	ELAC-NY10854,NJI		KII
191-24-2	Benzo(g,h,i)perylene	1.40		mg/kg dry	0.0461	0.0921	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications:	CTDOH,NI	ELAC-NY10854,NJI	DEP,PADEP	
207-08-9	Benzo(k) fluoranthene	1.69		mg/kg dry	0.0461	0.0921	2	EPA 8270D		05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications:	CTDOH,NI	ELAC-NY10854,NJI	DEP,PADEP	
65-85-0	Benzoic acid	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 23:56 EP	КН
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/22/2019 23:56 SP	КН

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Client Sample ID: SB004 (2-4)

York Sample ID: 19E0591-12

 York Project (SDG) No.
 Client Project ID

 19E0591
 LST 1802

MatrixCollection Date/TimeSoilMay 10, 2019 9:40 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3550C										
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.0921	0.184	2	EPA 8270D Certifications: N	05/20/2019 14:37 ELAC-NY10854,NJDEP,PADI	05/22/2019 23:56 EP	КН
86-74-8	Carbazole	0.253		mg/kg dry	0.0461	0.0921	2	EPA 8270D	05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NЛ	DEP,PADEP	
218-01-9	Chrysene	2.35		mg/kg dry	0.0461	0.0921	2	EPA 8270D	05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	0.350		mg/kg dry	0.0461	0.0921	2	EPA 8270D	05/20/2019 14:37	05/22/2019 23:56	KH
	P.11 .								CTDOH,NELAC-NY10854,NJI		
132-64-9	Dibenzofuran	0.218		mg/kg dry	0.0461	0.0921	2	EPA 8270D	05/20/2019 14:37	05/22/2019 23:56	KH
									CTDOH,NELAC-NY10854,NJI		
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
206-44-0	Fluoranthene	5.35		mg/kg dry	0.231	0.460	10	EPA 8270D	05/20/2019 14:37	05/23/2019 12:13	KH
								Certifications:	CTDOH,NELAC-NY10854,NЛ	DEP,PADEP	
86-73-7	Fluorene	0.356		mg/kg dry	0.0461	0.0921	2	EPA 8270D	05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications: N	NELAC-NY10854,NJDEP,PAD	EP	
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/22/2019 23:56 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	1.79		mg/kg dry	0.0461	0.0921	2	EPA 8270D	05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications:	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/22/2019 23:56 EP,PADEP	KH
91-20-3	Naphthalene	0.166		mg/kg dry	0.0461	0.0921	2	EPA 8270D	05/20/2019 14:37	05/22/2019 23:56	KH
								Certifications: C	CTDOH,NELAC-NY10854,NJI	DEP,PADEP	

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Client Sample ID: SB004 (2-4)

York Sample ID:

19E0591-12

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:40 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 23:56 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:56 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:56 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:56 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 23:56 EP,PADEP	KH
85-01-8	Phenanthrene	3.74		mg/kg dry	0.231	0.460	10	EPA 8270D		05/20/2019 14:37	05/23/2019 12:13	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0461	0.0921	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/22/2019 23:56 EP,PADEP	КН
129-00-0	Pyrene	4.90		mg/kg dry	0.231	0.460	10	EPA 8270D		05/20/2019 14:37	05/23/2019 12:13	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.184	0.369	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/22/2019 23:56 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	65.4 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	61.8 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	64.4 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	56.8 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	53.6 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	64.0 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	No. Pa	rameter Result	Flag Unit	Reported to LOQ	Dilution	Reference M	Date/Time Method Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg	dry 0.00180	5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJDI	05/23/2019 01:49 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg	dry 0.00180	5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJDI	05/23/2019 01:49 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	mg/kg	dry 0.00180	5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJDI	05/23/2019 01:49 EP,PADEP	СМ
309-00-2	Aldrin	ND	mg/kg	dry 0.00180	5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJDI	05/23/2019 01:49 EP,PADEP	СМ
319-84-6	alpha-BHC	ND	mg/kg	dry 0.00180	5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJDI	05/23/2019 01:49 EP,PADEP	СМ
5103-71-9	alpha-Chlordane	ND	mg/kg	dry 0.00180	5	EPA 8081B Certifications:	05/20/2019 14:33 NELAC-NY10854,NJDEP	05/23/2019 01:49	СМ
319-85-7	beta-BHC	ND	mg/kg	dry 0.00180	5	EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJDI	05/23/2019 01:49 EP,PADEP	СМ

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Client Sample ID: SB004 (2-4)

York Sample ID: 19E0591-12

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:40 am Date Received 05/13/2019

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes: Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	CM
60-57-1	Dieldrin	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	СМ
959-98-8	Endosulfan I	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	СМ
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854	05/23/2019 01:49	СМ
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	СМ
72-20-8	Endrin	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/23/2019 01:49	СМ
76-44-8	Heptachlor	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	СМ
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.180	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 01:49 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0361	5	EPA 8081B Certifications:		05/20/2019 14:33	05/23/2019 01:49	CM
	Surrogate Recoveries	Result		Acceptance	Range						
2051-24-3	Surrogate: Decachlorobiphenyl	96.3 %		30-15	0						
877-09-8	Surrogate: Tetrachloro-m-xylene	46.8 %		30-15	0						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	0.	Parameter Resu	lt Flag	Units	Reported to LOQ	Dilution	Reference M	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0182	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 01:47 P,PADEP	SR
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0182	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 01:47 P,PADEP	SR
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0182	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 01:47 P,PADEP	SR

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Client Sample ID: SB004 (2-4)

York Sample ID: 19E0591-12

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:40 am <u>Date Received</u> 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0182	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:47 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0182	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:47 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0182	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:47 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0182	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 01:47 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0182	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 01:47	SR
	Surrogate Recoveries	Result		Acceptan	ce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	61.5 %		30-	120						
2051-24-3	Surrogate: Decachlorobiphenyl	53.5 %		30-	120						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		15000		mg/kg dry	5.54	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications:	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	2.77	1	EPA 6010D Certifications: C	05/20/2019 14:51 FDOH,NELAC-NY10854,NJD	05/20/2019 18:14 EP,PADEP	KML
7440-38-2	Arsenic		7.13		mg/kg dry	1.66	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7440-39-3	Barium		162		mg/kg dry	2.77	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7440-41-7	Beryllium		0.121		mg/kg dry	0.055	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7440-43-9	Cadmium		1.05		mg/kg dry	0.332	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7440-70-2	Calcium		22400		mg/kg dry	5.54	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7440-47-3	Chromium		31.3		mg/kg dry	0.554	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7440-48-4	Cobalt		13.0		mg/kg dry	0.443	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7440-50-8	Copper		315		mg/kg dry	2.21	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7439-89-6	Iron		31000		mg/kg dry	27.7	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
7439-92-1	Lead		307		mg/kg dry	0.554	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:14	KML

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Certifications:

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CTDOH,NELAC-NY10854,NJDEP,PADEP

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Client Sample ID: SB004 (2-4) **York Sample ID:**

19E0591-12

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:40 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	9420	mg/kg dry	5.54	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:14	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	436	mg/kg dry	0.554	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:14	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	31.7	mg/kg dry	1.11	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:14	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	3360	mg/kg dry	5.54	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:14	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	2.77	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:14	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJDI	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.554	1	EPA 6010D	CEDOUAN	05/20/2019 14:51	05/20/2019 18:14	KML
	G . W						CTDOH,NE	ELAC-NY10854,NJDI		
7440-23-5	Sodium	432	mg/kg dry	55.4	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:14	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	2.77	1	EPA 6010D Certifications:	CTDOLLNI	05/20/2019 14:51	05/20/2019 18:14	KML
7440 (2.2	Vanadium	44.0	4 1				CTDOH,NI	ELAC-NY10854,NJDI		1/1/11
7440-62-2	vanadium	41.8	mg/kg dry	1.11	1	EPA 6010D	CTDOLLN	05/20/2019 14:51	05/20/2019 18:14	KML
	7.					Certifications:	CTDOH,N	ELAC-NY10854,NJD	,	
7440-66-6	Zinc	462	mg/kg dry	2.77	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:14	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in	Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported t	o Dilut	ion Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.339		mg/kg dry	0.0332	1	EPA 7473		05/22/2019 09:04	05/22/2019 17:18	SY
								Certifications:	CTDOH N	UDEPNELAC-NY108	54 PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

T ~~ :	Mataga
Log-in	notes:

Sample Notes:

	CAS No.	Parameter	Result	Flag	Units	Reported LOQ	to Dilutio 1	1 Reference Meth	od Date/Time Prepared	Date/Time Analyzed	Analyst
solid	s * % Solids		90.3		%	0.100	1	SM 2540G	05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications: CTD	OH		

Sample Information

Client Sample ID: SB005 (2-4	4)		York Sample ID:	19E0591-13
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 8:15 am	05/13/2019

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Client Sample ID: SB005 (2-4)

York Sample ID: 19E0591-13

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:15 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550

CAS No	o. Parameter	Result F	lag Units	Reported to LOD/MDL	LOQ	Dilution	Reference		nte/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 NELAC-NY10854,NJDEP,PADEP	3/2019 00:26	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	mg/kg dr	y 0.502	1.00	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 NELAC-NY10854,NJDEP,PADEP	3/2019 00:26	KH
120-82-1	1,2,4-Trichlorobenzene	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD	3/2019 00:26 DEP	KH
95-50-1	1,2-Dichlorobenzene	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 NELAC-NY10854,PADEP	3/2019 00:26	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 NELAC-NY10854,NJDEP,PADEP	3/2019 00:26	KH
541-73-1	1,3-Dichlorobenzene	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 NELAC-NY10854,PADEP	3/2019 00:26	КН
106-46-7	1,4-Dichlorobenzene	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 NELAC-NY10854,PADEP	3/2019 00:26	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg/kg dr	y 0.502	1.00	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 NELAC-NY10854,NJDEP,PADEP	3/2019 00:26	КН
95-95-4	2,4,5-Trichlorophenol	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD:	3/2019 00:26 DEP	КН
88-06-2	2,4,6-Trichlorophenol	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD:	3/2019 00:26 DEP	KH
120-83-2	2,4-Dichlorophenol	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD:	3/2019 00:26 DEP	КН
105-67-9	2,4-Dimethylphenol	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD:	3/2019 00:26 DEP	KH
51-28-5	2,4-Dinitrophenol	ND	mg/kg dr	y 0.502	1.00	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD:	3/2019 00:26 DEP	KH
121-14-2	2,4-Dinitrotoluene	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD:	3/2019 00:26 DEP	KH
606-20-2	2,6-Dinitrotoluene	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD	3/2019 00:26 DEP	KH
91-58-7	2-Chloronaphthalene	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD	3/2019 00:26 EP	KH
95-57-8	2-Chlorophenol	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD	3/2019 00:26 DEP	KH
91-57-6	2-Methylnaphthalene	0.281	J mg/kg dr	y 0.252	0.502	10	EPA 8270D		3/2019 00:26	KH
05.40.5		110		0.050	0.500		Certifications:	CTDOH,NELAC-NY10854,NJDEP,PAD		
95-48-7	2-Methylphenol	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 CTDOH,NELAC-NY10854,NJDEP,PAD	3/2019 00:26 DEP	KH
88-74-4	2-Nitroaniline	ND	mg/kg dr	y 0.502	1.00	10	EPA 8270D Certifications:	05/20/2019 14:37 05/2: CTDOH,NELAC-NY10854,NJDEP,PAD	3/2019 00:26 DEP	KH
88-75-5	2-Nitrophenol	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 CTDOH,NELAC-NY10854,NJDEP,PAD		KH
65794-96-9	3- & 4-Methylphenols	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/22 CTDOH,NELAC-NY10854,NJDEP,PAD	3/2019 00:26 DEP	KH
91-94-1	3,3-Dichlorobenzidine	ND	mg/kg dr	y 0.252	0.502	10	EPA 8270D Certifications:	05/20/2019 14:37 05/23 NELAC-NY10854,NJDEP,PADEP	3/2019 00:26	КН

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Client Sample ID: SB005 (2-4) **York Sample ID:** 19E0591-13

York Project (SDG) No. 19E0591

Sample Prepared by Method: EPA 3550C

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:15 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS N	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.502	1.00	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.502	1.00	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDE	05/23/2019 00:26 EP,PADEP	КН
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDF	05/23/2019 00:26 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDF	05/23/2019 00:26 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDE	05/23/2019 00:26 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDF	05/23/2019 00:26 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.502	1.00	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDF	05/23/2019 00:26 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.502	1.00	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDF	05/23/2019 00:26 EP,PADEP	КН
83-32-9	Acenaphthene	0.855		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 LAC-NY10854,NJD	05/23/2019 00:26 EP,PADEP	КН
208-96-8	Acenaphthylene	0.313	J	mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 LAC-NY10854,NJD	05/23/2019 00:26 EP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 0854,NJDEP,PADE	05/23/2019 00:26	KH
62-53-3	Aniline	ND		mg/kg dry	1.01	2.01	10	EPA 8270D Certifications:		05/20/2019 14:37 0854,NJDEP,PADE	05/23/2019 00:26	КН
120-12-7	Anthracene	2.07		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	CTDOH,NEI	LAC-NY10854,NJD	EP,PADEP	
1912-24-9	Atrazine	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 0854,NJDEP,PADE	05/23/2019 00:26 P	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 0854,NJDEP,PADE	05/23/2019 00:26 P	КН
92-87-5	Benzidine	ND		mg/kg dry	1.01	2.01	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,PADI	05/23/2019 00:26 EP	КН
56-55-3	Benzo(a)anthracene	6.02		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:		LAC-NY10854,NJD		
50-32-8	Benzo(a)pyrene	4.92		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:		LAC-NY10854,NJD		
205-99-2	Benzo(b)fluoranthene	4.57		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
	B (15)							Certifications:	,	LAC-NY10854,NJD	<i>'</i>	
191-24-2	Benzo(g,h,i)perylene	2.39		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
207.00.0	Dange (Iv) fluorenth one	404			0.050	0.500	10	Certifications:		LAC-NY10854,NJD	05/23/2019 00:26	KII
207-08-9	Benzo(k)fluoranthene	4.04		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 LAC-NY10854,NJD		KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 0854,NJDEP,PADE	05/23/2019 00:26	КН
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 0854,NJDEP,PADE	05/23/2019 00:26	KH

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Client Sample ID: SB005 (2-4)

York Sample ID: 19E0591-13

York Project (SDG) No.

19E0591

Sample Prepared by Method: EPA 3550C

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:15 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analys
85-68-7	Benzyl butyl phthalate	0.305	J	mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	CTDOH,NEI	AC-NY10854,NJD	EP,PADEP	
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
105-60-2	Caprolactam	ND		mg/kg dry	0.502	1.00	10	EPA 8270D Certifications:		05/20/2019 14:37 0854,NJDEP,PADE	05/23/2019 00:26 P	КН
86-74-8	Carbazole	1.33		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
		1.00						Certifications:	CTDOH,NEI	AC-NY10854,NJD	EP,PADEP	
218-01-9	Chrysene	5.75		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
	•							Certifications:	CTDOH,NEI	AC-NY10854,NJD	EP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	0.782		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	CTDOH,NEI	AC-NY10854,NJD	EP,PADEP	
132-64-9	Dibenzofuran	0.742		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	CTDOH,NEI	AC-NY10854,NJD	EP,PADEP	
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
206-44-0	Fluoranthene	14.8		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	CTDOH,NEI	AC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	0.819		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	NELAC-NY1	0854,NJDEP,PADE	EΡ	
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
67-72-1	Hexachloroethane	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
193-39-5	9-5 Indeno(1,2,3-cd)pyrene 3.33			mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	CTDOH,NEI	AC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:		05/20/2019 14:37 AC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	КН
91-20-3	Naphthalene	0.449	J	mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	CTDOH,NEI			

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Client Sample ID: SB005 (2-4)

York Sample ID:

19E0591-13

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:15 am <u>Date Received</u> 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
85-01-8	Phenanthrene	12.1		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.252	0.502	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
129-00-0	Pyrene	12.1		mg/kg dry	0.252	0.502	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	1.01	2.01	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 00:26 EP,PADEP	KH
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	75.6 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	72.6 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	77.6 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	59.6 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	58.4 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	72.0 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	vo. Par	rameter Result	Flag Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDI	05/23/2019 02:04 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/23/2019 02:04 EP,PADEP	СМ
309-00-2	Aldrin	ND	mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDI	05/23/2019 02:04 EP,PADEP	СМ
319-84-6	alpha-BHC	ND	mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/23/2019 02:04 EP,PADEP	СМ
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00200	5	EPA 8081B Certifications:	NELAC-NY	05/20/2019 14:33 10854,NJDEP	05/23/2019 02:04	СМ
319-85-7	beta-BHC	ND	mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	СМ

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Client Sample ID: SB005 (2-4)

York Sample ID: 19E0591-13

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:15 am Date Received 05/13/2019

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:04 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	СМ
959-98-8	Endosulfan I	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	СМ
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854	05/23/2019 02:04	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/23/2019 02:04 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/23/2019 02:04	СМ
76-44-8	Heptachlor	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	СМ
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	СМ
72-43-5	Methoxychlor	ND		mg/kg dry	0.00200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	СМ
8001-35-2	Toxaphene	ND		mg/kg dry	0.200	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/23/2019 02:04 EP,PADEP	СМ
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0400	5	EPA 8081B Certifications:		05/20/2019 14:33	05/23/2019 02:04	СМ
	Surrogate Recoveries	Result		Acceptance	Range						
2051-24-3	Surrogate: Decachlorobiphenyl	96.4 %		30-15	0						
877-09-8	Surrogate: Tetrachloro-m-xylene	45.1 %		30-15	0						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. 1	Parameter Result	Flag U	Reported to LOQ	Dilution	Reference Me	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	mg	g/kg dry 0.0202	1	EPA 8082A Certifications: NE	05/20/2019 14:33 ELAC-NY10854,CTDOH,NJDE	05/23/2019 02:01 P,PADEP	SR
11104-28-2	Aroclor 1221	ND	mg	g/kg dry 0.0202	1	EPA 8082A Certifications: NE	05/20/2019 14:33 ELAC-NY10854,CTDOH,NJDE	05/23/2019 02:01 P,PADEP	SR
11141-16-5	Aroclor 1232	ND	mg	g/kg dry 0.0202	1	EPA 8082A Certifications: NE	05/20/2019 14:33 ELAC-NY10854,CTDOH,NJDE	05/23/2019 02:01 P,PADEP	SR

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Client Sample ID: SB005 (2-4)

York Sample ID: 19E0591-13

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:15 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0202	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 02:01 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0202	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 02:01 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0202	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 02:01 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0202	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 02:01 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0202	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 02:01	SR
	Surrogate Recoveries	Result		Acceptanc	e Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	58.0 %		30-1	20						
2051-24-3	Surrogate: Decachlorobiphenyl	50.5 %		30-1	20						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	No. 1	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		7540		mg/kg dry	6.08	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.04	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 18:16 EP,PADEP	KML
7440-38-2	Arsenic		3.87		mg/kg dry	1.82	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		131		mg/kg dry	3.04	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.830		mg/kg dry	0.061	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		1.19		mg/kg dry	0.365	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		16500		mg/kg dry	6.08	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		26.4		mg/kg dry	0.608	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		12.6		mg/kg dry	0.486	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		241		mg/kg dry	2.43	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		21200		mg/kg dry	30.4	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		432		mg/kg dry	0.608	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: SB005 (2-4) **York Sample ID:**

19E0591-13

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:15 am Date Received 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

	Log-i	n N	ot	es:
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Sample Notes:

CAS N	No. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference M	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	4720	mg/kg dry	6.08	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	338	mg/kg dry	0.608	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	105	mg/kg dry	1.22	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	2180	mg/kg dry	6.08	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.04	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	P,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.608	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
							CTDOH,NE	ELAC-NY10854,NJDE	, i	
7440-23-5	Sodium	485	mg/kg dry	60.8	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.04	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	P,PADEP	
7440-62-2	Vanadium	26.7	mg/kg dry	1.22	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	781	mg/kg dry	3.04	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:16	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in Notes:

Sample Notes:

CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	ution	Reference M	lethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.338		mg/kg dry	0.0365	1	EPA 7473		05/22/2019 09:04	05/22/2019 17:27	SY
								Certifications:	CTDOH.N	JDEP.NELAC-NY108	54.PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

Log-in Notes:

Sample Notes:

CAS	S No.	Parameter	Result	Flag	Units	Reported LOQ	to Dilu	tion	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		82.2		%	0.100		1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
									Certifications:	CTDOH			

Sample Information

Client Sample ID: SB005 (0-	-2)		York Sample ID:	19E0591-14
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 8:23 am	05/13/2019

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Client Sample ID: SB005 (0-2)

York Sample ID: 19E0591-14

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 8:23 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample	Prepared	by	Method:	EPA	3330C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time Date/Time Method Prepared Analyzed A	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.520	1.04	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.520	1.04	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.520	1.04	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.520	1.04	10	EPA 8270D Certifications:	05/20/2019 14:37	КН
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	05/20/2019 14:37	КН



Client Sample ID: SB005 (0-2)

York Sample ID: 19E0591-14

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:23 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.520	1.04	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.520	1.04	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	КН
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	КН
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:		05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.520	1.04	10	EPA 8270D Certifications:		05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.520	1.04	10	EPA 8270D Certifications:		05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:		05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:		05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:		05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 00:55	KH
62-53-3	Aniline	ND		mg/kg dry	1.04	2.08	10	EPA 8270D Certifications:		05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 00:55	KH
120-12-7	Anthracene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 00:55 P	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 00:55 P	KH
92-87-5	Benzidine	ND		mg/kg dry	1.04	2.08	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,PAD	05/23/2019 00:55 EP	KH
56-55-3	Benzo(a)anthracene	0.341	J	mg/kg dry	0.261	0.520	10	EPA 8270D		05/20/2019 14:37	05/23/2019 00:55	KH
50.22.0	P. ()	ND			0.261	0.520	10	Certifications:	CTDOH,NI	ELAC-NY10854,NJD		1/11
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 00:55 EP,PADEP	KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 00:55 P	КН
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	NEL AC NIV	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 00:55	KH

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Client Sample ID: SB005 (0-2)

York Sample ID: 19E0591-14

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 8:23 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	d by Method: EPA 3550C										
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	КН
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.520	1.04	10	EPA 8270D Certifications: NI	05/20/2019 14:37 ELAC-NY10854,NJDEP,PADE	05/23/2019 00:55 P	KH
86-74-8	Carbazole	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: CT	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
218-01-9	Chrysene	0.295	J	mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 00:55 DEP,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	КН
132-64-9	Dibenzofuran	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	КН
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.261	0.520	10	EPA 8270D	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.261	0.520	10	EPA 8270D	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.261	0.520	10	EPA 8270D	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55	КН
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.261	0.520	10	EPA 8270D	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55	KH
206-44-0	Fluoranthene	0.753		mg/kg dry	0.261	0.520	10	EPA 8270D	05/20/2019 14:37	05/23/2019 00:55	KH
								Certifications: C	TDOH,NELAC-NY10854,NJE	EP,PADEP	
86-73-7	Fluorene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: NI	05/20/2019 14:37 ELAC-NY10854,NJDEP,PADE	05/23/2019 00:55 P	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	КН
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
78-59-1	Isophorone	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications: C7	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	KH

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Client Sample ID: SB005 (0-2)

York Sample ID:

19E0591-14

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:23 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 00:55 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 00:55 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 00:55 EP,PADEP	КН
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 00:55 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 00:55 EP,PADEP	KH
85-01-8	Phenanthrene	0.441	J	mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	КН
108-95-2	Phenol	ND		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 00:55 EP,PADEP	KH
129-00-0	Pyrene	0.645		mg/kg dry	0.261	0.520	10	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 00:55 EP,PADEP	КН
110-86-1	Pyridine	ND		mg/kg dry	1.04	2.08	10	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 00:55 EP,PADEP	КН
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	63.6 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	67.6 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	64.8 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	58.8 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	12.0 %	S-01		19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	65.6 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS I	No. P	arameter Res	ult Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NEI	05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 02:19 P,PADEP	CM
72-55-9	4,4'-DDE	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NEI	05/20/2019 14:33 AC-NY10854,NJDE	05/23/2019 02:19 P,PADEP	CM
50-29-3	4,4'-DDT	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NEI	05/20/2019 14:33 AC-NY10854,NJDE	05/23/2019 02:19 P,PADEP	CM
309-00-2	Aldrin	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NEI	05/20/2019 14:33 AC-NY10854,NJDE	05/23/2019 02:19 P,PADEP	CM
319-84-6	alpha-BHC	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NEI	05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 02:19 P,PADEP	CM
5103-71-9	alpha-Chlordane	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	NELAC-NY1	05/20/2019 14:33 10854,NJDEP	05/23/2019 02:19	CM
319-85-7	beta-BHC	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NEI	05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 02:19 P,PADEP	CM

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Client Sample ID: SB005 (0-2) **York Sample ID:** 19E0591-14

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:23 am Date Received 05/13/2019

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854	05/23/2019 02:19	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	СМ
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/23/2019 02:19	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	СМ
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	СМ
72-43-5	Methoxychlor	ND		mg/kg dry	0.00207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	СМ
8001-35-2	Toxaphene	ND		mg/kg dry	0.207	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/23/2019 02:19 EP,PADEP	СМ
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0413	5	EPA 8081B Certifications:		05/20/2019 14:33	05/23/2019 02:19	СМ
	Surrogate Recoveries	Result		Acceptance	Range						
2051-24-3	Surrogate: Decachlorobiphenyl	119 %		30-13	50						

Polychlorinated Biphenyls (PCB), 8082 List

Surrogate: Tetrachloro-m-xylene

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

877-09-8

CAS No	o. 1	Parameter Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	n	mg/kg dry	0.0209	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 02:14 P,PADEP	SR
11104-28-2	Aroclor 1221	ND	n	mg/kg dry	0.0209	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 02:14 P,PADEP	SR
11141-16-5	Aroclor 1232	ND	n	mg/kg dry	0.0209	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 02:14 P,PADEP	SR

30-150

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69.5 %

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Client Sample ID: SB005 (0-2)

York Sample ID: 19E0591-14

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:23 am <u>Date Received</u> 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Sample Prepared by Method: EPA 3550C

Log-in	Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0209	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 / 10854,CTDOH,NJDE	05/23/2019 02:14 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0209	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 02:14 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0209	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 02:14 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0209	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 02:14 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0209	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 02:14	SR
	Surrogate Recoveries	Result		Acceptan	ce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	67.0 %		30-	120						
2051-24-3	Surrogate: Decachlorobiphenyl	63.5 %		30-	120						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		6750		mg/kg dry	6.28	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.14	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 18:19 EP,PADEP	KML
7440-38-2	Arsenic		7.54		mg/kg dry	1.88	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		200		mg/kg dry	3.14	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		ND		mg/kg dry	0.063	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 18:19 EP,PADEP	KML
7440-43-9	Cadmium		0.452		mg/kg dry	0.377	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		72400		mg/kg dry	6.28	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		18.3		mg/kg dry	0.628	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		5.77		mg/kg dry	0.503	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		35.6		mg/kg dry	2.51	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		10700		mg/kg dry	31.4	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		105		mg/kg dry	0.628	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium		17400		mg/kg dry	6.28	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP.PADEP	

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Client Sample ID: SB005 (0-2)

York Sample ID: 19E0591-14

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:23 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

Table Tabl	CAS N	No. Par	ameter Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-02-0 Nickel 13.7 mg/kg dry 1.26 1 EPA 6010D Certifications: CTDOH,NELAC-NY10854,NIDE-PADEP 7440-09-7 Potassium 1520 mg/kg dry 6.28 1 EPA 6010D O5/20/2019 14:51 O5/20/2019 18:19 O5	7439-96-5	Manganese	197		mg/kg dry	0.628	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
Potassium								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-09-7 Potassium 1520 mg/kg dry 6.28 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 7782-49-2 Selenium 9.92 mg/kg dry 3.14 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 7440-22-4 Silver ND mg/kg dry 0.628 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 7440-23-5 Sodium 369 mg/kg dry 62.8 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 7440-28-0 Thallium ND mg/kg dry 3.14 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 7440-28-0 Thallium ND mg/kg dry 3.14 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 7440-62-2 Vanadium pg/kg dry 1.26 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 7440-66-6 Zinc vanadium 21.2 mg/kg dry 3.14 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 </td <td>7440-02-0</td> <td>Nickel</td> <td>13.7</td> <td></td> <td>mg/kg dry</td> <td>1.26</td> <td>1</td> <td>EPA 6010D</td> <td></td> <td>05/20/2019 14:51</td> <td>05/20/2019 18:19</td> <td>KML</td>	7440-02-0	Nickel	13.7		mg/kg dry	1.26	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
Page	7440-09-7	Potassium	1520		mg/kg dry	6.28	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
Taking part								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
ND mg/kg dry 0.628 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 05/20/20	7782-49-2	Selenium	9.92		mg/kg dry	3.14	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP Sodium Solid market								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
ND ND ND ND ND ND ND ND	7440-22-4	Silver	ND		mg/kg dry	0.628	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP Certifications:								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-28-0 Thallium ND mg/kg dry 3.14 1 EPA 6010D Certifications: 05/20/2019 14:51 05/20/2019 18:19 7440-62-2 Vanadium 21.2 mg/kg dry 1.26 1 EPA 6010D PARCHAC-NY10854,NJDE-PADEP 7440-66-6 Zinc 210 mg/kg dry 3.14 1 EPA 6010D PARCHAC-NY10854,NJDE-PADEP 7440-66-6 Zinc 210 mg/kg dry 3.14 1 EPA 6010D PARCHAC-NY10854,NJDE-PADEP	7440-23-5	Sodium	369		mg/kg dry	62.8	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
7440-62-2 Vanadium 21.2 mg/kg dry 1.26 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7440-66-6 Zinc 210 mg/kg dry 3.14 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-62-2 Vanadium 21.2 mg/kg dry 1.26 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19 7440-66-6 Zinc 210 mg/kg dry 3.14 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19	7440-28-0	Thallium	ND		mg/kg dry	3.14	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
7440-66-6 Zinc 210 mg/kg dry 3.14 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-66-6 Zinc 210 mg/kg dry 3.14 1 EPA 6010D 05/20/2019 14:51 05/20/2019 18:19	7440-62-2	Vanadium	21.2		mg/kg dry	1.26	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
210								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	7440-66-6	Zinc	210		mg/kg dry	3.14	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:19	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in	Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported t	Reported to LOQ Dilution		Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.145		mg/kg dry	0.0377	1	EPA 7473		05/22/2019 09:04	05/22/2019 17:36	SY
								Certifications:	CTDOH.N	JDEP.NELAC-NY108	54.PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

CD005 (0.10)

Log-in Notes:	Sample Notes:

CAS No.		Parameter	Result	Flag	Units	Reported LOQ	Reported to LOQ Dilution		Reference Method		Date/Time Analyzed	Analyst
soli	ds * % Solids		79.6		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

2	SBU05 (8-10)			York Sample ID:	19E0591-15
7	ork Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
	19E0591	LST 1802	Soil	May 10, 2019 8:20 am	05/13/2019

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Client Sample ID: SB005 (8-10) **York Sample ID:** 19E0591-15

Sample Notes:

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Soil May 10, 2019 8:20 am 05/13/2019

Log-in Notes:

Semi-Volatiles, 8270 Comprehensive

Sample Prepare	ed by Method: EPA 3550C											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/23/2019 01:25	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.104	0.207	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/23/2019 01:25	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	КН
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/23/2019 01:25	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/23/2019 01:25	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/23/2019 01:25	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/23/2019 01:25	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.104	0.207	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/23/2019 01:25	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.104	0.207	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.104	0.207	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/23/2019 01:25	КН



Client Sample ID: SB005 (8-10)

York Sample ID: 19E0591-15

 York Project (SDG) No.
 Client Project ID

 19E0591
 LST 1802

MatrixCollection Date/TimeSoilMay 10, 2019 8:20 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.104	0.207	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.104	0.207	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	КН
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	КН
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.104	0.207	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
00-02-7	4-Nitrophenol	ND		mg/kg dry	0.104	0.207	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
33-32-9	Acenaphthene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 01:25 P	KH
2-53-3	Aniline	ND		mg/kg dry	0.208	0.415	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 01:25 P	KH
20-12-7	Anthracene	0.0647	J	mg/kg dry	0.0520	0.104	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:25	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
912-24-9	Atrazine	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 01:25 P	KH
00-52-7	Benzaldehyde	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 01:25 P	KH
2-87-5	Benzidine	ND		mg/kg dry	0.208	0.415	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 LAC-NY10854,PAD	05/23/2019 01:25 EP	KH
6-55-3	Benzo(a)anthracene	0.245		mg/kg dry	0.0520	0.104	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:25	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJD		
0-32-8	Benzo(a)pyrene	0.323		mg/kg dry	0.0520	0.104	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:25	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJD	*	
05-99-2	Benzo(b)fluoranthene	0.240		mg/kg dry	0.0520	0.104	2	EPA 8270D	OTTO OVENIE	05/20/2019 14:37	05/23/2019 01:25	KH
01.04.0	D (12) 1							Certifications:	CTDOH,NE	ELAC-NY10854,NJD		
91-24-2	Benzo(g,h,i)perylene	0.235		mg/kg dry	0.0520	0.104	2	EPA 8270D	CTDOLLNI	05/20/2019 14:37	05/23/2019 01:25	KH
07.00.0	Danza(Ir)fluoranthana	0.207			0.0520	0.104	2	Certifications:	CTDOH,NE	ELAC-NY10854,NJD		1/11
07-08-9	Benzo(k)fluoranthene	0.206		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 01:25 EPPADEP	KH
5 95 0	D : :1	ND		ma/ka den	0.0520	0.104	2		CTDOII,NI			VII
5-85-0	Benzoic acid	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 01:25 P	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADE	05/23/2019 01:25 P	KH

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Client Sample ID: SB005 (8-10)

York Sample ID: 19E0591-15

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 8:20 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No. 85-68-7 Be	Parameter	Result			D					Th	D-4-/T	
85-68-7 Be		resure	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	enzyl butyl phthalate	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	КН
111-91-1 Bis	s(2-chloroethoxy)methane	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	КН
111-44-4 Bis	s(2-chloroethyl)ether	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	КН
108-60-1 Bis	s(2-chloroisopropyl)ether	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	КН
117-81-7 Bis	s(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
105-60-2 Ca	prolactam	ND		mg/kg dry	0.104	0.207	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/23/2019 01:25	KH
86-74-8 Ca	ırbazole	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
218-01-9 Ch	nrysene	0.258		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 IELAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
53-70-3 Di	benzo(a,h)anthracene	0.0597	J	mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH.N	05/20/2019 14:37 JELAC-NY10854,NJDI	05/23/2019 01:25 EP.PADEP	КН
132-64-9 Di	benzofuran	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	Í	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25	KH
84-66-2 Die	ethyl phthalate	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25	KH
131-11-3 Di	methyl phthalate	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25	КН
84-74-2 Di	-n-butyl phthalate	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25	КН
117-84-0 Di	-n-octyl phthalate	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	КН
206-44-0 Flo	uoranthene	0.548		mg/kg dry	0.0520	0.104	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:25	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJDI	EP,PADEP	
86-73-7 Flu	uorene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEP	05/23/2019 01:25	KH
118-74-1 He	exachlorobenzene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
87-68-3 He	exachlorobutadiene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	КН
77-47-4 He	exachlorocyclopentadiene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	КН
67-72-1 He	exachloroethane	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH
193-39-5 Inc	deno(1,2,3-cd)pyrene	0.265		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 IELAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	КН
78-59-1 Iso	phorone	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	КН
91-20-3 Na	phthalene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:25 P,PADEP	KH

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Client Sample ID: SB005 (8-10)

York Sample ID: 19E0591-15

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:20 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
85-01-8	Phenanthrene	0.356		mg/kg dry	0.0520	0.104	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:25	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0520	0.104	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
129-00-0	Pyrene	0.494		mg/kg dry	0.0520	0.104	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:25	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.208	0.415	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:25 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	74.4 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	68.1 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	70.9 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	57.1 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	51.9 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	67.0 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	No. P	arameter R	esult F	lag 1	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	NI)	n	ng/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/22/2019 05:43 P,PADEP	CM
72-55-9	4,4'-DDE	NI)	n	ng/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/22/2019 05:43 P,PADEP	CM
50-29-3	4,4'-DDT	NI)	n	ng/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/22/2019 05:43 P,PADEP	СМ
309-00-2	Aldrin	NI)	n	ng/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/22/2019 05:43 P,PADEP	СМ
319-84-6	alpha-BHC	NI)	n	ng/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/22/2019 05:43 P,PADEP	СМ
5103-71-9	alpha-Chlordane	NI)	n	ng/kg dry	0.00205	5	EPA 8081B Certifications:	NELAC-NY	05/20/2019 14:33 10854,NJDEP	05/22/2019 05:43	СМ
319-85-7	beta-BHC	NI)	n	ng/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/22/2019 05:43 P,PADEP	СМ

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Client Sample ID: SB005 (8-10)

York Sample ID: 19E0591-15

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:20 am Date Received 05/13/2019

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes: Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 05:43 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 05:43 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:43 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854	05/22/2019 05:43	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/22/2019 05:43 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/22/2019 05:43 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/22/2019 05:43 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/22/2019 05:43 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/22/2019 05:43 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/22/2019 05:43	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDE	05/22/2019 05:43 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 05:43 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 05:43 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.205	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDF	05/22/2019 05:43 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0410	5	EPA 8081B Certifications:		05/20/2019 14:33	05/22/2019 05:43	CM
	Surrogate Recoveries	Result		Acceptanc	e Range						
2051-24-3	Surrogate: Decachlorobiphenyl	130 %		30-1	50						
877-09-8	Surrogate: Tetrachloro-m-xylene	93.2 %		30-1	50						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	0.	Parameter Resu	ılt Flag	Units	Reported to LOQ	Dilution	Reference M	1ethod	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 11:17 P,PADEP	SR
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 11:17 P,PADEP	SR
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 11:17 P,PADEP	SR

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Client Sample ID: SB005 (8-10) **York Sample ID:** 19E0591-15

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:20 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 // 10854,CTDOH,NJDE	05/23/2019 11:17 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 11:17 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 11:17 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:	NELAC-N	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 11:17 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0207	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 11:17	SR
	Surrogate Recoveries	Result		Accepta	nce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	67.0 %		30	1-120						
2051-24-3	Surrogate: Decachlorobiphenyl	69.0 %		30	1-120						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepar	ed by Method: EPA	.3050B								
CAS N	0.	Parameter	Result	Flag	Units	Reported t	o Dilution	Reference Method	Date/Time Prepared	Date An
7429-90-5	Aluminum		10400		mg/kg dry	6.26	1	EPA 6010D	05/20/2019 14:51	05/20/2

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
429-90-5	Aluminum		10400		mg/kg dry	6.26	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.13	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:21 EP,PADEP	KML
440-38-2	Arsenic		2.09		mg/kg dry	1.88	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-39-3	Barium		63.5		mg/kg dry	3.13	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-41-7	Beryllium		0.437		mg/kg dry	0.063	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		ND		mg/kg dry	0.376	1	EPA 6010D Certifications:	CTDOU NI	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:21	KML
440-70-2	Calcium		001		mg/kg dry	(2)		EPA 6010D	CTDOII,IVI	05/20/2019 14:51	05/20/2019 18:21	KML
440-70-2	Calcium		991		nig/kg dry	6.26	1	Certifications:	CTDOH N	ELAC-NY10854,NJD		NIVIL
440-47-3	Chromium		13.3		mg/kg dry	0.626	1	EPA 6010D	012011,11	05/20/2019 14:51	05/20/2019 18:21	KML
440 47 3	Cinvinium		13.3		mg/kg tiry	0.020	1	Certifications:	CTDOH N	ELAC-NY10854,NJD		KINL
440-48-4	Cobalt		6.21		mg/kg dry	0.501	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
			0.21			0.501	•	Certifications:	CTDOH,N	ELAC-NY10854,NJD		
440-50-8	Copper		17.6		mg/kg dry	2.50	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
	••		17.00					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
439-89-6	Iron		15300		mg/kg dry	31.3	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
439-92-1	Lead		90.8		mg/kg dry	0.626	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
439-95-4	Magnesium		2590		mg/kg dry	6.26	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
	-				•			Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
	OF A DOLL DOLL		OTDATEODD O				00 0015 4			DICUMOND LIII		

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Client Sample ID: SB005 (8-10)

York Sample ID:

19E0591-15

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:20 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sampl	e Pre	pared	by	Method:	EPA	3050B

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	Manganese	247	mg/kg dry	0.626	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	14.0	mg/kg dry	1.25	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	876	mg/kg dry	6.26	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.13	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.626	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDE	EP,PADEP	
7440-23-5	Sodium	697	mg/kg dry	62.6	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.13	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDE	EP,PADEP	
7440-62-2	Vanadium	16.2	mg/kg dry	1.25	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	47.5	mg/kg dry	3.13	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:21	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-	in	No	tes:

Log-in Notes:

Sample Notes:

Sample Notes:

CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	ilution	Reference M	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.662		mg/kg dry	0.0376	1	EPA 7473		05/22/2019 09:04	05/22/2019 17:45	SY
								Certifications:	CTDOH,N	JDEP,NELAC-NY108	54,PADEP	

<u>Total Solids</u>

Sample Prepared by Method: % Solids Prep

CAS	S No.	Parameter	Result	Flag	Units	Reported t	o Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		79.9		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB006 (0-2)			York Sample ID:	19E0591-16
York Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 9:00 am	05/13/2019

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Log-in Notes:

Client Sample ID: SB006 (0-2)

York Sample ID: 19E0591-16

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:00 am

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Post	05/20/2019 14:37 854,NJDEP,PADEP 05/20/2019 14:37 854,NJDEP,PADEP 05/20/2019 14:37 AC-NY10854,NJDEF 05/20/2019 14:37 854,PADEP 05/20/2019 14:37	05/23/2019 01:55 05/23/2019 01:55 05/23/2019 01:55 P,PADEP 05/23/2019 01:55	КН КН КН
122-66-7 1,2-Dichlorobenzene ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC-NY108 122-66-7 1,2-Diphenylhydrazine (as Azobenzene) ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: NELAC-NY108 122-66-7 1,2-Diphenylhydrazine (as Azobenzene) ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: NELAC-NY108 122-66-7 1,3-Dichlorobenzene ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: NELAC-NY108 106-46-7 1,4-Dichlorobenzene ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: NELAC-NY108 106-46-7 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: NELAC-NY108 105-95-4 2,4,5-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC-NY108 106-83-2 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC-NY108 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC-NY108 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC-NY108 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC-NY108 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC-NY108 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC-NY108 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC-NY108 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D CErtifications: CTDOH,NELAC-NY108 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D CErtifications: CTDOH,NELAC-NY108 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D CERTIFICATIONS C	05/20/2019 14:37 AC-NY10854,NJDEF 05/20/2019 14:37 05/20/2019 14:37 05/4,PADEP	05/23/2019 01:55 P,PADEP	КН
Post-10 Post	AC-NY10854,NJDEF 05/20/2019 14:37 0854,PADEP	P,PADEP	
122-66-7 1,2-Diphenylhydrazine (as Azobenzene) ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.0512 0.102 0.102 2 EPA 8270D 0.0512 0.102 0	854,PADEP	05/23/2019 01:55	КН
Azobenzene) 541-73-1 1,3-Dichlorobenzene ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4,5-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.558-90-2 2,4-Dimethylphenol ND 0.559-90-90-90-90-90-90-90-90-90-90-90-90-90	05/20/2019 14:37		
106-46-7 1,4-Dichlorobenzene ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.058-90-2 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.058-90-2 2,4,5-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.058-90-95-95-4 2,4,5-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.058-95-95-4 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.059-95-95-95-95-95-95-95-95-95-95-95-95-9	854,NJDEP,PADEP	05/23/2019 01:55	КН
58-90-2 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.102 0.204 2 EPA 8270D Certifications: NELAC-NY108 95-95-4 2,4,5-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC 88-06-2 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC 120-83-2 2,4-Dichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAC	05/20/2019 14:37 0854,PADEP	05/23/2019 01:55	KH
P5-95-4 2,4,5-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.0588-06-2 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.0588-06-2 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.0589-06-105-105-105-105-105-105-105-105-105-105	05/20/2019 14:37 0854,PADEP	05/23/2019 01:55	КН
88-06-2 2,4,6-Trichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D OS Certifications: CTDOH,NELAC CTDOH,NELAC CTDOH,NELAC CERTIFICATION CONTROL ND mg/kg dry 0.0512 0.102 2 EPA 8270D CERTIFICATIONS: CTDOH,NELAC CERTIFICATIONS:	05/20/2019 14:37 854,NJDEP,PADEP	05/23/2019 01:55	KH
Certifications: CTDOH,NELAGE 120-83-2 2,4-Dichlorophenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D Certifications: CTDOH,NELAGE 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.0512 0.102 0.	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	КН
Certifications: CTDOH,NELAGE 105-67-9 2,4-Dimethylphenol ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.0512 Certifications: CTDOH,NELAGE CERTIFICATION CERTIFIC	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	КН
Certifications: CTDOH,NELAC	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	КН
51-28-5 2 4-Dinitrophenol ND mg/kg dry 0.102 0.204 2 EPA 8270D 05	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	KH
	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	KH
2,1 5 11111 000 000 000	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	КН
-,	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	КН
2 chiefoliaphilateric	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	КН
	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	KH
- ····································	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	KH
2 Methylphenor	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	KH
	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	КН
Z-Ividophichol 10 mg/kg my steel 2 21102702	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	KH
	05/20/2019 14:37 AC-NY10854,NJDEF	05/23/2019 01:55 P,PADEP	KH
91-94-1 3,3-Dichlorobenzidine ND mg/kg dry 0.0512 0.102 2 EPA 8270D 0.0512 0.102 2 EPA 8270D 0.0512 0.102 2 EPA 8270D 0.0512 0.102 0.102	05/20/2019 14:37	05/23/2019 01:55	КН



Client Sample ID: SB006 (0-2) **York Sample ID:** 19E0591-16

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time Method Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.102	0.204	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEP	05/23/2019 01:55 PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.102	0.204	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEP	05/23/2019 01:55 PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEP	05/23/2019 01:55 PADEP	КН
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEP	05/23/2019 01:55 PADEP	КН
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEP	05/23/2019 01:55 PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEP	05/23/2019 01:55 PADEP	КН
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.102	0.204	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEP	05/23/2019 01:55 PADEP	КН
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.102	0.204	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEP	05/23/2019 01:55 PADEP	КН
83-32-9	Acenaphthene	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEP	05/23/2019 01:55 PADEP	KH
208-96-8	Acenaphthylene	0.0744	J	mg/kg dry	0.0512	0.102	2	EPA 8270D	05/20/2019 14:37	05/23/2019 01:55	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEI	P,PADEP	
98-86-2	Acetophenone	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADEP	05/23/2019 01:55	KH
62-53-3	Aniline	ND		mg/kg dry	0.205	0.409	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADEP	05/23/2019 01:55	KH
120-12-7	Anthracene	0.0727	J	mg/kg dry	0.0512	0.102	2	EPA 8270D		05/23/2019 01:55	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEI	P,PADEP	
1912-24-9	Atrazine	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADEP	05/23/2019 01:55	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	05/20/2019 14:37 NELAC-NY10854,NJDEP,PADEP	05/23/2019 01:55	KH
92-87-5	Benzidine	ND		mg/kg dry	0.205	0.409	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,PADEP	05/23/2019 01:55	KH
56-55-3	Benzo(a)anthracene	0.311		mg/kg dry	0.0512	0.102	2	EPA 8270D	05/20/2019 14:37	05/23/2019 01:55	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEI	P,PADEP	
50-32-8	Benzo(a)pyrene	0.364		mg/kg dry	0.0512	0.102	2	EPA 8270D		05/23/2019 01:55	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEI		
205-99-2	Benzo(b)fluoranthene	0.311		mg/kg dry	0.0512	0.102	2	EPA 8270D		05/23/2019 01:55	KH
101.24.2	D(- h :\			4 1				Certifications:	CTDOH,NELAC-NY10854,NJDEI 05/20/2019 14:37	<i>'</i>	1/11
191-24-2	Benzo(g,h,i)perylene	0.230		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	05/20/2019 14:37 CTDOH,NELAC-NY10854,NJDEI		KH
207-08-9	Benzo(k)fluoranthene	0.242		mg/kg dry	0.0512	0.102	2	EPA 8270D		05/23/2019 01:55	KH
207-08-9	Denzo(k)huorantnene	0.242		mg/kg ury	0.0312	0.102	2	Certifications:	CTDOH,NELAC-NY10854,NJDEI		KII
65-85-0	Benzoic acid	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:		05/23/2019 01:55	КН
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:		05/23/2019 01:55	KH

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Client Sample ID: SB006 (0-2)

York Sample ID: 19E0591-16

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

<u>Log-in Notes:</u> <u>Sar</u>	nple Notes:
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CAS No	o. Parameter	Result Fla	g Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	0.102	mg/kg dry	0.0512	0.102	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:55	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
111-91-1	Bis(2-chloroethoxy)methane	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	0.163	mg/kg dry	0.0512	0.102	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:55	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
105-60-2	Caprolactam	ND	mg/kg dry	0.102	0.204	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 01:55 P	KH
86-74-8	Carbazole	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
218-01-9	Chrysene	0.294	mg/kg dry	0.0512	0.102	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:55	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	0.0597	J mg/kg dry	0.0512	0.102	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:55	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
132-64-9	Dibenzofuran	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
84-66-2	Diethyl phthalate	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
206-44-0	Fluoranthene	0.506	mg/kg dry	0.0512	0.102	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:55	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 01:55 P	KH
118-74-1	Hexachlorobenzene	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
67-72-1	Hexachloroethane	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.284	mg/kg dry	0.0512	0.102	2	EPA 8270D		05/20/2019 14:37	05/23/2019 01:55	KH
		•	, , ,				Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	КН
91-20-3	Naphthalene	ND	mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 01:55 EP,PADEP	КН
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Client Sample ID: SB006 (0-2)

York Sample ID:

19E0591-16

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in	No	tes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	КН
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
85-01-8	Phenanthrene	0.203		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	КН
108-95-2	Phenol	ND		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
129-00-0	Pyrene	0.485		mg/kg dry	0.0512	0.102	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	КН
110-86-1	Pyridine	ND		mg/kg dry	0.205	0.409	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	67.1 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	65.7 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	69.0 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	60.6 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	55.2 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	74.7 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	lo. Para	neter Result	Flag Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00202	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00202	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00202	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
309-00-2	Aldrin	ND	mg/kg dry	0.00202	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
319-84-6	alpha-BHC	ND	mg/kg dry	0.00202	5	EPA 8081B Certifications:	CTDOH,NE	05/20/2019 14:33 LAC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
5103-71-9	alpha-Chlordane	0.00983	mg/kg dry	0.00202	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/23/2019 02:34	СМ

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Client Sample ID: SB006 (0-2)

York Sample ID: 19E0591-16

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:00 am <u>Date Received</u> 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

CAS N	Vo. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-85-7	beta-BHC	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	СМ
319-86-8	delta-BHC	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 .AC-NY10854,NJDF	05/23/2019 02:34 EP,PADEP	CM
60-57-1	Dieldrin	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDF	05/23/2019 02:34 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDF	05/23/2019 02:34 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:	CTDOH,NEL	05/20/2019 14:33 .AC-NY10854	05/23/2019 02:34	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
5566-34-7	gamma-Chlordane	0.00771		mg/kg dry	0.00202	5	EPA 8081B		05/20/2019 14:33	05/23/2019 02:34	CM
							Certifications:		10854,NJDEP		
76-44-8	Heptachlor	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDI	05/23/2019 02:34 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 AC-NY10854,NJDF	05/23/2019 02:34 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00202	5	EPA 8081B Certifications:		05/20/2019 14:33 .AC-NY10854,NJDE	05/23/2019 02:34 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.202	5	EPA 8081B Certifications:		05/20/2019 14:33 .AC-NY10854,NJDF	05/23/2019 02:34 EP,PADEP	CM
57-74-9	* Chlordane, total	0.0599		mg/kg dry	0.0404	5	EPA 8081B Certifications:		05/20/2019 14:33	05/23/2019 02:34	CM
	Surrogate Recoveries	Result		Acceptan	ce Range						
2051-24-3	Surrogate: Decachlorobiphenyl	136 %		•	150						
877-09-8	Surrogate: Tetrachloro-m-xylene	64.1 %			150 150						
	Sur rogate. Terractiono-in-xytene	07.1 /0		30-	150						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	0.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	Ŋ	ND		mg/kg dry	0.0204	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 02:28 P,PADEP	SR
11104-28-2	Aroclor 1221	Ν	ND		mg/kg dry	0.0204	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 10854,CTDOH,NJDE	05/23/2019 02:28 P,PADEP	SR

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Client Sample ID: SB006 (0-2)

York Sample ID:

19E0591-16

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:00 am <u>Date Received</u> 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	No. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference I		te/Time Prepared	Date/Time Analyzed	Analyst
11141-16-5	Aroclor 1232	ND	mg/kg o	lry 0.0204	1	EPA 8082A Certifications:	05/20 NELAC-NY10854,	/2019 14:33 CTDOH,NJDI	05/23/2019 02:28 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND	mg/kg o	0.0204	1	EPA 8082A Certifications:	05/20 NELAC-NY10854,	/2019 14:33 CTDOH,NJDI	05/23/2019 02:28 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND	mg/kg o	lry 0.0204	1	EPA 8082A Certifications:	05/20 NELAC-NY10854,	/2019 14:33 CTDOH,NJDI	05/23/2019 02:28 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND	mg/kg o	lry 0.0204	1	EPA 8082A Certifications:	05/20 NELAC-NY10854,	/2019 14:33 CTDOH,NJDI	05/23/2019 02:28 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND	mg/kg o	lry 0.0204	1	EPA 8082A Certifications:	05/20 NELAC-NY10854,	/2019 14:33 CTDOH,NJDI	05/23/2019 02:28 EP,PADEP	SR
1336-36-3	* Total PCBs	ND	mg/kg o	lry 0.0204	1	EPA 8082A Certifications:	05/20	/2019 14:33	05/23/2019 02:28	SR
	Surrogate Recoveries	Result	A	cceptance Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	75.0 %		30-120						
2051-24-3	Surrogate: Decachlorobiphenyl	72.5 %		30-120						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS N	No. Pa	rameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		5890		mg/kg dry	6.15	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.07	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:23 EP,PADEP	KML
7440-38-2	Arsenic		2.26		mg/kg dry	1.84	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		120		mg/kg dry	3.07	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.102		mg/kg dry	0.061	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		0.707		mg/kg dry	0.369	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		39100		mg/kg dry	6.15	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		17.7		mg/kg dry	0.615	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		5.84		mg/kg dry	0.492	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		105		mg/kg dry	2.46	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		12900		mg/kg dry	30.7	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		474		mg/kg dry	0.615	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
					2 2 7		-	Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP			
	OF A DOLL DDIVE		CTDATEODD (T 00045			00 0045 4			DICUMOND IIII		

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Client Sample ID: SB006 (0-2)

York Sample ID:

19E0591-16

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:00 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference !	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	6770	mg/kg dry	6.15	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	175	mg/kg dry	0.615	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	14.7	mg/kg dry	1.23	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1070	mg/kg dry	6.15	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.07	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.615	1	EPA 6010D	CTD OVI VI	05/20/2019 14:51	05/20/2019 18:23	KML
							CTDOH,NE	ELAC-NY10854,NJDE		
7440-23-5	Sodium	646	mg/kg dry	61.5	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.07	1	EPA 6010D	CTD OVI VI	05/20/2019 14:51	05/20/2019 18:23	KML
							C1DOH,NE	ELAC-NY10854,NJDE		
7440-62-2	Vanadium	23.2	mg/kg dry	1.23	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	,	
7440-66-6	Zinc	262	mg/kg dry	3.07	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:23	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported t	o Dilutio	n Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		3.49		mg/kg dry	0.0369	1	EPA 7473		05/22/2019 09:04	05/22/2019 17:58	SY
								Certifications:	CTDOH N	JDEP NELAC-NY108	54 PADEP	

Total Solids

Log-in Notes:

Sample Notes:

Sample F	Prepared by Method: % Se	olids Prep									
CA	AS No.	Parameter	Result	Flag	Units	Reported t LOQ	o Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		81.3		%	0.100	1	SM 2540G	05/16/2019 22:16	05/17/2019 15:13	JTV

Sample Information

Client Sample ID: SB006 (4-6)			York Sample ID:	19E0591-17
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 9:05 am	05/13/2019

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ClientServices@ Page 115 of 446



Client Sample ID: SB006 (4-6)

York Sample ID: 19E0591-17

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:05 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

		Units	LOD/MDL	LOQ	Dilution	Reference	Method Prepared Analyzed	Analyst
1,1-Biphenyl	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
1,2,4,5-Tetrachlorobenzene	ND	mg/kg dry	0.0851	0.170	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
1,2,4-Trichlorobenzene	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
1,2-Dichlorobenzene	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
1,2-Diphenylhydrazine (as Azobenzene)	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
1,3-Dichlorobenzene	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
1,4-Dichlorobenzene	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
2,3,4,6-Tetrachlorophenol	ND	mg/kg dry	0.0851	0.170	2	EPA 8270D Certifications:	05/20/2019 14:37 05/23/2019 02:25 NELAC-NY10854,NJDEP,PADEP	KH
2,4,5-Trichlorophenol	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
2,4,6-Trichlorophenol	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
2,4-Dichlorophenol	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
2,4-Dimethylphenol	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
2,4-Dinitrophenol	ND	mg/kg dry	0.0851	0.170	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
2,4-Dinitrotoluene	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	КН
2,6-Dinitrotoluene	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	КН
2-Chloronaphthalene	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	КН
2-Chlorophenol	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	КН
2-Methylnaphthalene	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	КН
2-Methylphenol	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	КН
2-Nitroaniline	ND	mg/kg dry	0.0851	0.170	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
2-Nitrophenol	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
3- & 4-Methylphenols	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	05/20/2019 14:37	KH
3,3-Dichlorobenzidine	ND	mg/kg dry	0.0427	0.0851	2	EPA 8270D	05/20/2019 14:37	KH
	1,2,4,5-Tetrachlorobenzene 1,2,4-Trichlorobenzene 1,2-Diphenylhydrazine (as Azobenzene) 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorobenzene 2,3,4,6-Tetrachlorophenol 2,4,5-Trichlorophenol 2,4-G-Trichlorophenol 2,4-Dimitrophenol 2,4-Dimitrophenol 2,4-Dinitrotoluene 2,6-Dinitrotoluene 2-Chloronaphthalene 2-Chlorophenol 2-Methylphenol 2-Methylphenol 2-Nitroaniline 2-Nitrophenol 3- & 4-Methylphenols	1,2,4,5-Tetrachlorobenzene ND 1,2,4-Trichlorobenzene ND 1,2-Diphenylhydrazine (as ND 4,2-Diphenylhydrazine (as ND 4,2-Diphenylhydrazine (as ND 4,2-Diphenylhydrazine (as ND 4,2-Diphenylhydrazine ND 1,4-Dichlorobenzene ND 1,4-Dichlorobenzene ND 2,3,4,6-Tetrachlorophenol ND 2,4,5-Trichlorophenol ND 2,4-Dirichlorophenol ND 2,4-Dirichlorophenol ND 2,4-Dimethylphenol ND 2,4-Dinitrophenol ND 2,4-Dinitrophenol ND 2,4-Dinitrotoluene ND 2,6-Dinitrotoluene ND 2-Chloronaphthalene ND 2-Methylnaphthalene ND 2-Methylphenol ND 2-Methylphenol ND 2-Nitroaniline ND 3- & 4-Methylphenols ND	1,2,4,5-Tetrachlorobenzene ND mg/kg dry 1,2-Dichlorobenzene ND mg/kg dry 1,2-Dichlorobenzene ND mg/kg dry 1,2-Diphenylhydrazine (as ND mg/kg dry 1,3-Dichlorobenzene ND mg/kg dry 1,4-Dichlorobenzene ND mg/kg dry 2,3,4,6-Tetrachlorophenol ND mg/kg dry 2,4,5-Trichlorophenol ND mg/kg dry 2,4,5-Trichlorophenol ND mg/kg dry 2,4-Dichlorophenol ND mg/kg dry 2,4-Dinitrotohene ND mg/kg dry 2,6-Dinitrotohene ND mg/kg dry 2-Chlorophenol ND mg/kg dry 2-Chlorophenol ND mg/kg dry 2-Chlorophenol ND mg/kg dry 2-Methylnaphthalene ND mg/kg dry 2-Methylnaphthalene ND mg/kg dry 2-Methylphenol ND mg/kg dry 2-Nitroaniline ND mg/kg dry 3- & 4-Methylphenols ND mg/kg dry	1,2,4,5-Tetrachlorobenzene ND mg/kg dry 0.0851 1,2,4-Trichlorobenzene ND mg/kg dry 0.0427 1,2-Dichlorobenzene ND mg/kg dry 0.0427 1,2-Diphenylhydrazine (as Azobenzene) ND mg/kg dry 0.0427 1,3-Dichlorobenzene ND mg/kg dry 0.0427 1,4-Dichlorobenzene ND mg/kg dry 0.0427 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.0427 2,4,5-Trichlorophenol ND mg/kg dry 0.0427 2,4-G-Trichlorophenol ND mg/kg dry 0.0427 2,4-Dinitrophenol ND mg/kg dry 0.0427 2,4-Dinitrophenol ND mg/kg dry 0.0427 2,4-Dinitrotoluene ND mg/kg dry 0.0427 2,6-Dinitrotoluene ND mg/kg dry 0.0427 2-Chlorophenol ND mg/kg dry 0.0427 2-Methylnaphthalene ND mg/kg dry 0.0427 2-Methylphenol ND mg/kg dry 0.0427	1,2,4,5-Tetrachlorobenzene ND mg/kg dry 0.0851 0.170 1,2,4-Trichlorobenzene ND mg/kg dry 0.0427 0.0851 1,2-Diphlorobenzene ND mg/kg dry 0.0427 0.0851 1,2-Diphenylhydrazine (as Azobenzene) ND mg/kg dry 0.0427 0.0851 1,3-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 1,4-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.0427 0.0851 2,4,5-Trichlorophenol ND mg/kg dry 0.0427 0.0851 2,4-Dirichlorophenol ND mg/kg dry 0.0427 0.0851 2,4-Dimitrophenol ND mg/kg dry 0.0427 0.0851 2,4-Dinitrophenol ND mg/kg dry 0.0427 0.0851 2,4-Dinitrotoluene ND mg/kg dry 0.0427 0.0851 2,6-Dinitrotoluene ND mg/kg dry 0.0427 0.0851 2-Chlorophenol <t< td=""><td>1,2,4,5-Tetrachlorobenzene ND mg/kg dry 0.0851 0.170 2 1,2,4-Trichlorobenzene ND mg/kg dry 0.0427 0.0851 2 1,2-Diphenylhydrazine (as Azobenzene) ND mg/kg dry 0.0427 0.0851 2 1,3-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 1,4-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 1,4-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.0427 0.0851 2 2,4,6-Trichlorophenol ND mg/kg dry 0.0427 0.0851 2 2,4-Dirichlorophenol ND mg/kg dry 0.0427 0.0851 2 2,4-Dimitrophenol ND mg/kg dry 0.0427 0.0851 2 2,4-Dinitrotoluene ND mg/kg dry 0.0427 0.0851 2 2,4-Dinitrotoluene ND mg/kg dry 0.0427 0.0851</td><td> 1,2,4,5-Tetrachlorobenzene ND mg/kg dry 0.0851 0.170 2 EPA 8270D 1,2,4-Trichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,2-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,2-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,2-Diphenylhydrazine (as ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,3-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,3-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.0851 0.170 2 EPA 8270D 2,4,5-Trichlorophenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4,6-Trichlorophenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dichlorophenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dichlorophenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethyl</td><td> 1,2,4,5-Tictachlorobenzene</td></t<>	1,2,4,5-Tetrachlorobenzene ND mg/kg dry 0.0851 0.170 2 1,2,4-Trichlorobenzene ND mg/kg dry 0.0427 0.0851 2 1,2-Diphenylhydrazine (as Azobenzene) ND mg/kg dry 0.0427 0.0851 2 1,3-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 1,4-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 1,4-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.0427 0.0851 2 2,4,6-Trichlorophenol ND mg/kg dry 0.0427 0.0851 2 2,4-Dirichlorophenol ND mg/kg dry 0.0427 0.0851 2 2,4-Dimitrophenol ND mg/kg dry 0.0427 0.0851 2 2,4-Dinitrotoluene ND mg/kg dry 0.0427 0.0851 2 2,4-Dinitrotoluene ND mg/kg dry 0.0427 0.0851	1,2,4,5-Tetrachlorobenzene ND mg/kg dry 0.0851 0.170 2 EPA 8270D 1,2,4-Trichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,2-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,2-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,2-Diphenylhydrazine (as ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,3-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 1,3-Dichlorobenzene ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,3,4,6-Tetrachlorophenol ND mg/kg dry 0.0851 0.170 2 EPA 8270D 2,4,5-Trichlorophenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4,6-Trichlorophenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dichlorophenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dichlorophenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethylphenol ND mg/kg dry 0.0427 0.0851 2 EPA 8270D 2,4-Dimethyl	1,2,4,5-Tictachlorobenzene



Log-in Notes:

Client Sample ID: SB006 (4-6)

York Sample ID: 19E0591-17

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 9:05 am

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

•	ed by Method: EPA 3550C											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0851	0.170	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0851	0.170	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0851	0.170	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0851	0.170	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
83-32-9	Acenaphthene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
98-86-2	Acetophenone	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEI	05/23/2019 02:25	КН
62-53-3	Aniline	ND		mg/kg dry	0.170	0.341	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEI	05/23/2019 02:25	KH
120-12-7	Anthracene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,NJDEP,PADEI	05/23/2019 02:25	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,NJDEP,PADEI	05/23/2019 02:25	KH
92-87-5	Benzidine	ND		mg/kg dry	0.170	0.341	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,PADI	05/23/2019 02:25 EP	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
65-85-0	Benzoic acid	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:		05/20/2019 14:37 710854,NJDEP,PADEI	05/23/2019 02:25	КН
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:		05/20/2019 14:37 (10854,NJDEP,PADEI	05/23/2019 02:25	КН



Client Sample ID: SB006 (4-6)

York Sample ID: 19E0591-17

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:05 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepar	red by Method: EPA 3550C										
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time lethod Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.0851	0.170	2	EPA 8270D Certifications: N	05/20/2019 14:37 IELAC-NY10854,NJDEP,PADI	05/23/2019 02:25 EP	KH
86-74-8	Carbazole	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
218-01-9	Chrysene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
206-44-0	Fluoranthene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
86-73-7	Fluorene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: N	05/20/2019 14:37 IELAC-NY10854,NJDEP,PADI	05/23/2019 02:25 EP	КН
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25 DEP,PADEP	КН
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25	КН
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25	КН
78-59-1	Isophorone	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D	05/20/2019 14:37 TDOH,NELAC-NY10854,NJE	05/23/2019 02:25	КН
91-20-3	Naphthalene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D		05/23/2019 02:25	КН



Client Sample ID: SB006 (4-6) **York Sample ID:** 19E0591-17

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:05 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes: Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:25 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:25 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:25 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
85-01-8	Phenanthrene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
108-95-2	Phenol	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:25 EP,PADEP	КН
129-00-0	Pyrene	ND		mg/kg dry	0.0427	0.0851	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:25 EP,PADEP	КН
110-86-1	Pyridine	ND		mg/kg dry	0.170	0.341	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:25 EP,PADEP	КН
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	48.4 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	44.8 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	46.2 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	37.7 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	41.6 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	48.4 %			24-116							

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	No. Parameter	Result	Flag Units	Reported to LOQ Dilut	tion Reference	Date/Time e Method Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00168	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/22/2019 05:58 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00168	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/22/2019 05:58 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00168	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/22/2019 05:58 EP,PADEP	CM
309-00-2	Aldrin	ND	mg/kg dry	0.00168	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/22/2019 05:58 EP,PADEP	CM
319-84-6	alpha-BHC	ND	mg/kg dry	0.00168	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/22/2019 05:58 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00168	5 EPA 8081B Certifications:	05/20/2019 14:33 NELAC-NY10854,NJDEP	05/22/2019 05:58	CM
319-85-7	beta-BHC	ND	mg/kg dry	0.00168	5 EPA 8081B Certifications:	05/20/2019 14:33 CTDOH,NELAC-NY10854,NJD	05/22/2019 05:58 EP,PADEP	CM

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Client Sample ID: SB006 (4-6)

York Sample ID: 19E0591-17

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:05 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	Jo. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
60-57-1	Dieldrin	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854	05/22/2019 05:58	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/22/2019 05:58	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.168	5	EPA 8081B Certifications:	CTDOH,NI	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 05:58 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0337	5	EPA 8081B Certifications:		05/20/2019 14:33	05/22/2019 05:58	CM
	Surrogate Recoveries	Result		Acceptan	ce Range						
2051-24-3	Surrogate: Decachlorobiphenyl	113 %		30-	150						
877-09-8	Surrogate: Tetrachloro-m-xylene	90.1 %		30-	150						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	lo.	Parameter R	tesult Flag	Units	Reported to LOQ	Dilution	Reference M		ate/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	NI	D	mg/kg dry	0.0170	1	EPA 8082A Certifications: N	05/20 ELAC-NY10854	0/2019 14:33 ,CTDOH,NJDE	05/23/2019 11:30 P,PADEP	SR
11104-28-2	Aroclor 1221	NI	D	mg/kg dry	0.0170	1	EPA 8082A Certifications: N	05/20 ELAC-NY10854	0/2019 14:33 ,CTDOH,NJDE	05/23/2019 11:30 P,PADEP	SR
11141-16-5	Aroclor 1232	NI	D	mg/kg dry	0.0170	1	EPA 8082A Certifications: N	05/20 ELAC-NY10854	0/2019 14:33 ,CTDOH,NJDE	05/23/2019 11:30 P,PADEP	SR

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Client Sample ID: SB006 (4-6) **York Sample ID:** 19E0591-17

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:05 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0170	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 11:30 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0170	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 11:30 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0170	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 11:30 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0170	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 11:30 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0170	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 11:30	SR
	Surrogate Recoveries	Result		Acceptan	ce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	50.0 %		30-	120						
2051-24-3	Surrogate: Decachlorobiphenyl	43.5 %		30-	120						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

CAS I	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		1040		mg/kg dry	5.12	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:51 ELAC-NY10854,NJD	05/20/2019 18:25 EP,PADEP	KML
7440-36-0	Antimony		ND		mg/kg dry	2.56	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:51 LAC-NY10854,NJDI	05/20/2019 18:25 EP,PADEP	KML
7440-38-2	Arsenic		ND		mg/kg dry	1.54	1	EPA 6010D Certifications: (CTDOH,NE	05/20/2019 14:51 LAC-NY10854,NJDI	05/20/2019 18:25 EP,PADEP	KML
7440-39-3	Barium		7.05		mg/kg dry	2.56	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:51 ELAC-NY10854,NJD	05/20/2019 18:25 EP,PADEP	KML

						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7440-36-0	Antimony	ND	mg/kg dry	2.56	1	EPA 6010D Certifications:	05/20/2019 14:51	KML
7440-38-2	Arsenic	ND	mg/kg dry	1.54	1	EPA 6010D Certifications:	05/20/2019 14:51	KML
7440-39-3	Barium	7.05	mg/kg dry	2.56	1	EPA 6010D	05/20/2019 14:51	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7440-41-7	Beryllium	ND	mg/kg dry	0.051	1	EPA 6010D Certifications:	05/20/2019 14:51	KML
7440-43-9	Cadmium	ND	mg/kg dry	0.307	1	EPA 6010D Certifications:	05/20/2019 14:51	KML
7440-70-2	Calcium	982	mg/kg dry	5.12	1	EPA 6010D	05/20/2019 14:51	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7440-47-3	Chromium	2.90	mg/kg dry	0.512	1	EPA 6010D	05/20/2019 14:51	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7440-48-4	Cobalt	1.31	mg/kg dry	0.410	1	EPA 6010D	05/20/2019 14:51	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7440-50-8	Copper	5.54	mg/kg dry	2.05	1	EPA 6010D	05/20/2019 14:51	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7439-89-6	Iron	3260	mg/kg dry	25.6	1	EPA 6010D	05/20/2019 14:51	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7439-92-1	Lead	7.67	mg/kg dry	0.512	1	EPA 6010D	05/20/2019 14:51	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
7439-95-4	Magnesium	422	mg/kg dry	5.12	1	EPA 6010D	05/20/2019 14:51	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	

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Client Sample ID: SB006 (4-6)

York Sample ID:

19E0591-17

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:05 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	o. Par	ameter Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	Manganese	39.6		mg/kg dry	0.512	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:25	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	3.27		mg/kg dry	1.02	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:25	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	255		mg/kg dry	5.12	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:25	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND		mg/kg dry	2.56	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:25	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-22-4	Silver	ND		mg/kg dry	0.512	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:25	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-23-5	Sodium	63.2		mg/kg dry	51.2	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:25	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND		mg/kg dry	2.56	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:25	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-62-2	Vanadium	4.09		mg/kg dry	1.02	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:25	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	26.4		mg/kg dry	2.56	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:25	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-	in	No	tes:

Log-in Notes:

Sample Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported t LOQ	o Dilu t	tion	Reference M	lethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.0375		mg/kg dry	0.0307		1	EPA 7473		05/22/2019 09:04	05/22/2019 18:38	SY
									Certifications:	CTDOH,N	JDEP,NELAC-NY108	54,PADEP	

<u>Total Solids</u>

Sample Prepared by Method: % Solids Prep

CAS	No.	Parameter	Result	Flag	Units	Reported LOQ	o Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		97.7		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB006 (6-8)			York Sample ID:	19E0591-18
York Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 9:10 am	05/13/2019

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Log-in Notes:

Client Sample ID: SB006 (6-8) **York Sample ID:** 19E0591-18

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:10 am

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepar	red by Method: EPA 3550C											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 02:55	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0973	0.194	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 02:55	КН
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 02:55 EP,PADEP	КН
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/23/2019 02:55	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 02:55	КН
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/23/2019 02:55	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/23/2019 02:55	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0973	0.194	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 02:55	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55 EPPADEP	КН
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	ŕ	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	КН
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0973	0.194	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	КН
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	ŕ	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0973	0.194	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 02:55	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:		05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 02:55	КН
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Client Sample ID: SB006 (6-8)

York Sample ID: 19E0591-18

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:10 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

	ed by Method: EPA 3550C						emipre rivies.					
CAS No		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0973	0.194	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0973	0.194	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0973	0.194	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0973	0.194	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,NJDEP,PADE	05/23/2019 02:55 EP	KH
62-53-3	Aniline	ND		mg/kg dry	0.195	0.390	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,NJDEP,PADE	05/23/2019 02:55 EP	KH
120-12-7	Anthracene	0.0848	J	mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJI	05/23/2019 02:55 DEP,PADEP	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,NJDEP,PADE	05/23/2019 02:55 EP	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADE	05/23/2019 02:55 EP	KH
92-87-5	Benzidine	ND		mg/kg dry	0.195	0.390	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,PAD	05/23/2019 02:55 DEP	КН
56-55-3	Benzo(a)anthracene	0.312		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJI	05/23/2019 02:55 DEP,PADEP	KH
50-32-8	Benzo(a)pyrene	0.318		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH N	05/20/2019 14:37 ELAC-NY10854,NJI	05/23/2019 02:55 DEP PADEP	KH
205-99-2	Benzo(b)fluoranthene	0.247		mg/kg dry	0.0488	0.0973	2	EPA 8270D		05/20/2019 14:37	05/23/2019 02:55	КН
191-24-2	Benzo(g,h,i)perylene	0.170		mg/kg dry	0.0488	0.0973	2	Certifications: EPA 8270D		05/20/2019 14:37	05/23/2019 02:55	КН
207-08-9	Benzo(k)fluoranthene	0.203		mg/kg dry	0.0488	0.0973	2	Certifications: EPA 8270D		ELAC-NY10854,NJI 05/20/2019 14:37	05/23/2019 02:55	KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.0488	0.0973	2	Certifications: EPA 8270D	CTDOH,N	05/20/2019 14:37	DEP,PADEP 05/23/2019 02:55	КН
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0488	0.0973	2	Certifications: EPA 8270D	NELAC-NY	710854,NJDEP,PADE 05/20/2019 14:37	EP 05/23/2019 02:55	KH
								Certifications:	NELAC-NY	10854,NJDEP,PADE	EP	

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Client Sample ID: SB006 (6-8)

York Sample ID: 19E0591-18

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:10 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	КН
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.0973	0.194	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 / 10854,NJDEP,PADEI	05/23/2019 02:55	КН
86-74-8	Carbazole	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	КН
218-01-9	Chrysene	0.300		mg/kg dry	0.0488	0.0973	2	EPA 8270D		05/20/2019 14:37	05/23/2019 02:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	КН
206-44-0	Fluoranthene	0.670		mg/kg dry	0.0488	0.0973	2	EPA 8270D		05/20/2019 14:37	05/23/2019 02:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 / 10854,NJDEP,PADEI	05/23/2019 02:55	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	КН
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	КН
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.217		mg/kg dry	0.0488	0.0973	2	EPA 8270D	,	05/20/2019 14:37	05/23/2019 02:55	KH
	, , , , , , , , , , , , , , , , , , ,							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	КН
91-20-3	Naphthalene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 02:55 EP,PADEP	КН

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Client Sample ID: SB006 (6-8)

York Sample ID:

19E0591-18

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:10 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log	g-in	No	tes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications: C	05/20/2019 14:37 FDOH,NELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	КН
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	КН
85-01-8	Phenanthrene	0.379		mg/kg dry	0.0488	0.0973	2	EPA 8270D	05/20/2019 14:37	05/23/2019 02:55	KH
								Certifications: C	TDOH,NELAC-NY10854,NJI	DEP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0488	0.0973	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	КН
129-00-0	Pyrene	0.651		mg/kg dry	0.0488	0.0973	2	EPA 8270D	05/20/2019 14:37	05/23/2019 02:55	KH
								Certifications: C	TDOH,NELAC-NY10854,NJI	DEP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.195	0.390	2	EPA 8270D Certifications: C	05/20/2019 14:37 TDOH,NELAC-NY10854,NJD	05/23/2019 02:55 EP,PADEP	КН
	Surrogate Recoveries	Result		Acce	ptance Rang	e					
367-12-4	Surrogate: SURR: 2-Fluorophenol	76.0 %			20-108						
4165-62-2	Surrogate: SURR: Phenol-d5	70.3 %			23-114						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	72.2 %			22-108						
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	61.3 %			21-113						
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	59.8 %			19-110						
1718-51-0	Surrogate: SURR: Terphenyl-d14	71.0 %			24-116						

Pesticides, 8081 List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	lo. Para	nmeter Result	Flag Units	Reported to LOQ	Dilution	Reference N	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	mg/kg dry	0.00193	5	EPA 8081B Certifications:		5/20/2019 14:33 .C-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
72-55-9	4,4'-DDE	ND	mg/kg dry	0.00193	5	EPA 8081B Certifications:		5/20/2019 14:33 .C-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	mg/kg dry	0.00193	5	EPA 8081B Certifications:		5/20/2019 14:33 C-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	СМ
309-00-2	Aldrin	ND	mg/kg dry	0.00193	5	EPA 8081B Certifications:		5/20/2019 14:33 C-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	СМ
319-84-6	alpha-BHC	ND	mg/kg dry	0.00193	5	EPA 8081B Certifications:		5/20/2019 14:33 .C-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	СМ
5103-71-9	alpha-Chlordane	ND	mg/kg dry	0.00193	5	EPA 8081B Certifications:	0 NELAC-NY10	5/20/2019 14:33 854,NJDEP	05/22/2019 20:19	СМ
319-85-7	beta-BHC	ND	mg/kg dry	0.00193	5	EPA 8081B Certifications:		5/20/2019 14:33 .C-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	СМ

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Client Sample ID: SB006 (6-8) **York Sample ID:** 19E0591-18

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:10 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

Sample Prepared by Metho	d: EPA 3550C					
CAGN	n .	D 1/	TH	TT *4	Reported to	De Mali

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	СМ
60-57-1	Dieldrin	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854	05/22/2019 20:19	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
72-20-8	Endrin	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	СМ
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	NELAC-N	05/20/2019 14:33 Y10854,NJDEP	05/22/2019 20:19	СМ
76-44-8	Heptachlor	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.193	5	EPA 8081B Certifications:	CTDOH,N	05/20/2019 14:33 ELAC-NY10854,NJDI	05/22/2019 20:19 EP,PADEP	СМ
57-74-9	* Chlordane, total	ND		mg/kg dry	0.0386	5	EPA 8081B Certifications:		05/20/2019 14:33	05/22/2019 20:19	СМ
	Surrogate Recoveries	Result		Acceptanc	e Range						
2051-24-3	Surrogate: Decachlorobiphenyl	122 %		30-150							
877-09-8	Surrogate: Tetrachloro-m-xylene	85.3 %		30-1	50						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result Fla	ag Units	Reported to LOQ Dilu	ıtion Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	mg/kg dry	0.0195	1 EPA 8082A Certifications:	05/20/2019 14:33 NELAC-NY10854,CTDOH,NJD	05/23/2019 11:03 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND	mg/kg dry	0.0195	1 EPA 8082A Certifications:	05/20/2019 14:33 NELAC-NY10854,CTDOH,NJD	05/23/2019 11:03 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND	mg/kg dry	0.0195	1 EPA 8082A Certifications:	05/20/2019 14:33 NELAC-NY10854,CTDOH,NJD	05/23/2019 11:03 EP,PADEP	SR

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Client Sample ID: SB006 (6-8) **York Sample ID:** 19E0591-18

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 9:10 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0195	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 /10854,CTDOH,NJDE	05/23/2019 11:03 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0195	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 11:03 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0195	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 11:03 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0195	1	EPA 8082A Certifications:	NELAC-NY	05/20/2019 14:33 710854,CTDOH,NJDE	05/23/2019 11:03 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0195	1	EPA 8082A Certifications:		05/20/2019 14:33	05/23/2019 11:03	SR
	Surrogate Recoveries	Result		Acceptan	ice Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	74.5 %		30-	-120						
2051-24-3	Surrogate: Decachlorobiphenyl	77.5 %		30-	-120						

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B Reported to LOQ Date/Time Date/Time CAS No. Parameter Result Flag Units Dilution Reference Method Analyzed Prepared Analyst Aluminum 7429-90-5 6970 mg/kg dry EPA 6010D 05/20/2019 14:51 05/20/2019 18:28 KML 5.87 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP

7440.26.0		ND	4 1	2.94	1	ED4 (010D	05/20/2019 14:51	05/20/2019 18:28	1/2 (1
7440-36-0	Antimony	ND	mg/kg dry	2.94	1	EPA 6010D Certifications:	CTDOH,NELAC-NY10854,NJDEP,		KML
7440-38-2	Arsenic	2.26	mg/kg dry	1.76	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	;PADEP	
7440-39-3	Barium	45.7	mg/kg dry	2.94	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	,PADEP	
7440-41-7	Beryllium	0.144	mg/kg dry	0.059	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	,PADEP	
7440-43-9	Cadmium	0.908	mg/kg dry	0.352	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	,PADEP	
7440-70-2	Calcium	4170	mg/kg dry	5.87	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	,PADEP	
7440-47-3	Chromium	13.3	mg/kg dry	0.587	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	,PADEP	
7440-48-4	Cobalt	7.00	mg/kg dry	0.470	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	;PADEP	
7440-50-8	Copper	275	mg/kg dry	2.35	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	,PADEP	
7439-89-6	Iron	15800	mg/kg dry	29.4	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	;PADEP	
7439-92-1	Lead	160	mg/kg dry	0.587	1	EPA 6010D	05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP	;PADEP	



Client Sample ID: SB006 (6-8)

York Sample ID:

19E0591-18

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 9:10 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	4410	mg/kg dry	5.87	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:28	KML
				C		Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	123	mg/kg dry	0.587	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	16.7	mg/kg dry	1.17	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1200	mg/kg dry	5.87	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,N?	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	2.94	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:28	KML
						Certifications:	CTDOH,NF	ELAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.587	1	EPA 6010D Certifications:	CTDOUNI	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 18:28	KML
7440.22.5	Sodium	102	4 1	50.5			CIDOR,NE	05/20/2019 14:51	05/20/2019 18:28	1/1/11
7440-23-5	Soutum	192	mg/kg dry	58.7	1	EPA 6010D Certifications:	CTDOLLN	03/20/2019 14.31 ELAC-NY10854,NJD		KML
							CIDOH,NI			
7440-28-0	Thallium	ND	mg/kg dry	2.94	1	EPA 6010D Certifications:	CTDOH.NF	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 18:28 P.PADEP	KML
7440-62-2	Vanadium	19.0	mg/kg dry	1.17	1	EPA 6010D	,	05/20/2019 14:51	05/20/2019 18:28	KML
,		17.0		1.17	•	Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	709	mg/kg dry	2.94	1	EPA 6010D	,	05/20/2019 14:51	05/20/2019 18:28	KML
		,0)	<i>5.5</i> ,	2.54	•	Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ Dilution Reference Me				Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.278		mg/kg dry	0.0352	1	EPA 7473		05/22/2019 09:04	05/22/2019 18:47	SY
								Certifications:	CTDOH NJDEP NELAC-NY 10854 PADEP			

Total Solids

Sample Prepared by Method: % Solids Prep

T ~~ :	Mataga
Log-in	notes:

Sample Notes:

CAS	No.	Parameter	Result	Flag	Units	Units Reported to LoQ Dilution Reference Met				Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		85.1		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB007 (8-10	0)		York Sample ID:	19E0591-19
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 12:50 pm	05/13/2019

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Client Sample ID: SB007 (8-10)

York Sample ID: 19E0591-19

 York Project (SDG) No.
 Client Project ID
 Matrix

 19E0591
 LST 1802
 Soil

Matrix Collection Date/Time
Soil May 10, 2019 12:50 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	. Parameter	Result I	Flag Units	Reported to LOD/MDL	LOQ	Dilution	Reference N	Date/Time Method Prepared		Analys
92-52-4	1,1-Biphenyl	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 NELAC-NY10854,NJDEP,PA		КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	mg/kg dry	0.112	0.224	2	EPA 8270D Certifications:	05/20/2019 14:3 NELAC-NY10854,NJDEP,PA		KH
120-82-1	1,2,4-Trichlorobenzene	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		KH
95-50-1	1,2-Dichlorobenzene	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 NELAC-NY10854,PADEP	7 05/23/2019 03:25	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 NELAC-NY10854,NJDEP,PA		KH
541-73-1	1,3-Dichlorobenzene	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 NELAC-NY10854,PADEP	7 05/23/2019 03:25	KH
106-46-7	1,4-Dichlorobenzene	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 NELAC-NY10854,PADEP	7 05/23/2019 03:25	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg/kg dry	0.112	0.224	2	EPA 8270D Certifications:	05/20/2019 14:3 NELAC-NY10854,NJDEP,PA		KH
95-95-4	2,4,5-Trichlorophenol	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		KH
88-06-2	2,4,6-Trichlorophenol	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D	05/20/2019 14:3 CTDOH,NELAC-NY10854,N	7 05/23/2019 03:25	KH
120-83-2	2,4-Dichlorophenol	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		КН
105-67-9	2,4-Dimethylphenol	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		KH
51-28-5	2,4-Dinitrophenol	ND	mg/kg dry	0.112	0.224	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		KH
121-14-2	2,4-Dinitrotoluene	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		KH
606-20-2	2,6-Dinitrotoluene	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		KH
91-58-7	2-Chloronaphthalene	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		KH
95-57-8	2-Chlorophenol	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		KH
91-57-6	2-Methylnaphthalene	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		КН
95-48-7	2-Methylphenol	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N		KH
88-74-4	2-Nitroaniline	ND	mg/kg dry	0.112	0.224	2	EPA 8270D Certifications:	05/20/2019 14:3 CTDOH,NELAC-NY10854,N	7 05/23/2019 03:25 JDEP,PADEP	КН
88-75-5	2-Nitrophenol	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D	05/20/2019 14:3 CTDOH,NELAC-NY10854,N	7 05/23/2019 03:25	КН
65794-96-9	3- & 4-Methylphenols	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D	05/20/2019 14:3 CTDOH,NELAC-NY10854,N	7 05/23/2019 03:25	KH
91-94-1	3,3-Dichlorobenzidine	ND	mg/kg dry	0.0562	0.112	2	EPA 8270D	05/20/2019 14:3 NELAC-NY10854,NJDEP,PA	7 05/23/2019 03:25	KH

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Client Sample ID: SB007 (8-10)

York Sample ID: 19E0591-19

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil

Collection Date/Time
May 10, 2019 12:50 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.112	0.224	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.112	0.224	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:25 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:25 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.112	0.224	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.112	0.224	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:25 EP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:25 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:25 EP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 03:25	KH
62-53-3	Aniline	ND		mg/kg dry	0.224	0.449	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 03:25	KH
120-12-7	Anthracene	0.0797	J	mg/kg dry	0.0562	0.112	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:25	KH
					0.05/0	0.110		Certifications:	CTDOH,N	ELAC-NY10854,NJD		
1912-24-9	Atrazine	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 03:25	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 03:25	KH
92-87-5	Benzidine	ND		mg/kg dry	0.224	0.449	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,PADI	05/23/2019 03:25 EP	KH
56-55-3	Benzo(a)anthracene	0.259		mg/kg dry	0.0562	0.112	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:25	KH
50.22.0	Panaga(a)mymana	0.000		4 1	0.05/0	0.110		Certifications:	CTDOH,N	ELAC-NY10854,NJD		1/11
50-32-8	Benzo(a)pyrene	0.232		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 03:25 EP,PADEP	KH
205-99-2	Benzo(b)fluoranthene	0.158		mg/kg dry	0.0562	0.112	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:25	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
191-24-2	Benzo(g,h,i)perylene	0.114		mg/kg dry	0.0562	0.112	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:25	KH
207-08-9	Benzo(k)fluoranthene	0.154		mg/kg dry	0.0562	0.112	2	Certifications: EPA 8270D	CTDOH,N	ELAC-NY10854,NJD 05/20/2019 14:37	05/23/2019 03:25	KH
207 00-7	(n)	0.154		mg ng ui y	0.0302	0.112	2	Certifications:	CTDOH,N	ELAC-NY10854,NJD		MI
65-85-0	Benzoic acid	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 03:25	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 03:25	КН

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Client Sample ID: SB007 (8-10)

York Sample ID: 19E0591-19

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 12:50 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:25 EP,PADEP	КН
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:25 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.112	0.224	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 03:25	KH
86-74-8	Carbazole	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:25 EP,PADEP	KH
218-01-9	Chrysene	0.228		mg/kg dry	0.0562	0.112	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:25	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD		
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
206-44-0	Fluoranthene	0.501		mg/kg dry	0.0562	0.112	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:25	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 Y10854,NJDEP,PADE	05/23/2019 03:25	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:25 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.142		mg/kg dry	0.0562	0.112	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:25	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:25 EP,PADEP	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH

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Client Sample ID: SB007 (8-10)

York Sample ID:

19E0591-19

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 12:50 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
85-01-8	Phenanthrene	0.365		mg/kg dry	0.0562	0.112	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:25	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0562	0.112	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
129-00-0	Pyrene	0.561		mg/kg dry	0.0562	0.112	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:25	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.224	0.449	2	EPA 8270D Certifications:	CTDOH,NI	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:25 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	84.1 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	78.8 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	82.5 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	64.5 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	63.9 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	67.2 %			24-116							

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	No. Paran	neter Result	Flag Units	Reported to LOQ Dilu	tion Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	6780	mg/kg dry	6.79	1 EPA 6010D Certifications:	CTDOH NI	05/20/2019 14:51 ELAC-NY10854,NJD	05/20/2019 18:30 EDPADED	KML
7440-36-0	Antimony	ND	mg/kg dry	3.39	1 EPA 6010D Certifications:	ŕ	05/20/2019 14:51 LAC-NY10854,NJDE	05/20/2019 18:30	KML
7440-38-2	Arsenic	8.26	mg/kg dry	2.04	1 EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
					Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium	376	mg/kg dry	3.39	1 EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
					Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium	0.712	mg/kg dry	0.068	1 EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
					Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium	0.602	mg/kg dry	0.407	1 EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
					Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: SB007 (8-10)

York Sample ID: 19E0591-19

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 12:50 pm

Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-70-2	Calcium		9660		mg/kg dry	6.79	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		11.7		mg/kg dry	0.679	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		12.0		mg/kg dry	0.543	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		170		mg/kg dry	2.71	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		10300		mg/kg dry	33.9	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		431		mg/kg dry	0.679	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium		913		mg/kg dry	6.79	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese		329		mg/kg dry	0.679	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel		22.1		mg/kg dry	1.36	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium		1060		mg/kg dry	6.79	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium		ND		mg/kg dry	3.39	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	P,PADEP	
7440-22-4	Silver		ND		mg/kg dry	0.679	1	EPA 6010D Certifications:	CTDOH.NI	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 18:30 P.PADEP	KML
7440-23-5	Sodium		1950		mg/kg dry	67.9	1	EPA 6010D	ŕ	05/20/2019 14:51	05/20/2019 18:30	KML
			1550		0 0)	07.5	•	Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		mg/kg dry	3.39	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
7.10 20 0	mamam		ND						CTDOH,NI	ELAC-NY10854,NJDE		12.112
7440-62-2	Vanadium		26.3		mg/kg dry	1.36	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc		399		mg/kg dry	3.39	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:30	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS N	lo.	Parameter	Result	Flag	Units	Reported t	o Dilution	Reference M	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		1.40		mg/kg dry	0.0407	1	EPA 7473		05/22/2019 09:04	05/22/2019 18:56	SY
								Certifications:	CTDOH N	IDEDNEL AC NV109	54 DADED	

<u>Total Solids</u> <u>Log-in Notes:</u> <u>Sample Notes:</u>

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Client Sample ID: SB007 (8-10) **York Sample ID:** 19E0591-19

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 12:50 pm Date Received 05/13/2019

Sample Prepared by Method: % Solids Prep

CAS	No.	Parameter	Result	Flag	Units	Reported LOQ	o Dilution	Reference N	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		73.7		%	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

SB007 (12-14) **Client Sample ID:**

York Sample ID: 19E0591-20

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix May 10, 2019 1:00 pm Soil

Collection Date/Time

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS N	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analys
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEF	05/23/2019 03:55	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.144	0.287	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEF	05/23/2019 03:55	КН
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 P,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/23/2019 03:55	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEF	05/23/2019 03:55	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/23/2019 03:55	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,PADEP	05/23/2019 03:55	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.144	0.287	2	EPA 8270D Certifications:	NELAC-N	05/20/2019 14:37 Y10854,NJDEP,PADEF	05/23/2019 03:55	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 P,PADEP	КН
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 P,PADEP	КН
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.144	0.287	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 P,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 P,PADEP	КН
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 P,PADEP	КН

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Client Sample ID: SB007 (12-14)

York Sample ID: 19E0591-20

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 1:00 pm05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.144	0.287	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADE	05/23/2019 03:55 P	КН
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.144	0.287	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.144	0.287	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.144	0.287	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.144	0.287	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
83-32-9	Acenaphthene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDI	05/23/2019 03:55 EP,PADEP	КН
208-96-8	Acenaphthylene	0.0849	J	mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 03:55 DEP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:		05/20/2019 14:37 /10854,NJDEP,PADE	05/23/2019 03:55	КН
62-53-3	Aniline	ND		mg/kg dry	0.287	0.575	2	EPA 8270D Certifications:		05/20/2019 14:37 /10854,NJDEP,PADE	05/23/2019 03:55	KH
120-12-7	Anthracene	0.120	J	mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:		05/20/2019 14:37	05/23/2019 03:55	КН
1912-24-9	Atrazine	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:55	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0720	0.144	2	Certifications:		05/20/2019 14:37	05/23/2019 03:55	KH
								Certifications:	NELAC-NY	/10854,NJDEP,PADE	Р	

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Client Sample ID: SB007 (12-14)

York Sample ID: 19E0591-20

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 1:00 pm05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-87-5	Benzidine	ND		mg/kg dry	0.287	0.575	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,PADI	05/23/2019 03:55 EP	КН
56-55-3	Benzo(a)anthracene	0.327		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
50-32-8	Benzo(a)pyrene	0.491		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
205-99-2	Benzo(b)fluoranthene	0.248		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
191-24-2	Benzo(g,h,i)perylene	0.277		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
207-08-9	Benzo(k)fluoranthene	0.263		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
65-85-0	Benzoic acid	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADEI	05/23/2019 03:55 P	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 710854,NJDEP,PADEI	05/23/2019 03:55 P	КН
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55	КН
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55	КН
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
105-60-2	Caprolactam	ND		mg/kg dry	0.144	0.287	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 10854,NJDEP,PADEI	05/23/2019 03:55 P	КН
86-74-8	Carbazole	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
218-01-9	Chrysene	0.319		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
206-44-0	Fluoranthene	0.555		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	СТРОН М	05/20/2019 14:37	05/23/2019 03:55 EPPADEP	КН
								Cerunications:	CIDOH,N	ELAC-NY10854,NJD	LI,PADEP	

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Client Sample ID: SB007 (12-14)

York Sample ID:

19E0591-20

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 1:00 pm Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

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Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
86-73-7	Fluorene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	NELAC-NY	05/20/2019 14:37 /10854,NJDEP,PADE	05/23/2019 03:55	КН
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:55 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:55 EP,PADEP	КН
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:55 EP,PADEP	КН
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:55 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.270		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,N	05/20/2019 14:37 ELAC-NY10854,NJD	05/23/2019 03:55 EP,PADEP	КН
78-59-1	Isophorone	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
91-20-3	Naphthalene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:55 EP,PADEP	КН
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:55 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:55 EP,PADEP	КН
85-01-8	Phenanthrene	0.171		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0720	0.144	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDF	05/23/2019 03:55 EP,PADEP	KH
129-00-0	Pyrene	0.731		mg/kg dry	0.0720	0.144	2	EPA 8270D		05/20/2019 14:37	05/23/2019 03:55	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	,	
110-86-1	Pyridine	ND		mg/kg dry	0.287	0.575	2	EPA 8270D Certifications:	CTDOH,NE	05/20/2019 14:37 ELAC-NY10854,NJDE	05/23/2019 03:55 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	81.9 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	73.8 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	75.2 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	54.2 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	58.4 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	62.9 %			24-116							

Metals, Target Analyte

Log-in Notes:

Sample Notes:

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Client Sample ID: SB007 (12-14)

York Sample ID: 19E0591-20

<u>York Project (SDG) No.</u>
19E0591

<u>Client Project ID</u>
LST 1802

MatrixCollection Date/TimeSoilMay 10, 2019 1:00 pm

Date Received 05/13/2019

Sample Prepared by Method: EPA 3050B

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference M	lethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		21400		mg/kg dry	8.64	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	4.32	1	EPA 6010D Certifications: C	TDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:32 EP,PADEP	KML
7440-38-2	Arsenic		22.1		mg/kg dry	2.59	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		133		mg/kg dry	4.32	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.704		mg/kg dry	0.086	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		0.827		mg/kg dry	0.518	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		3400		mg/kg dry	8.64	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		59.6		mg/kg dry	0.864	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
								Certifications: 0	CTDOH,N	ELAC-NY10854,NJD		
7440-48-4	Cobalt		16.1		mg/kg dry	0.691	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
									CTDOH,N	ELAC-NY10854,NJD	*	
7440-50-8	Copper		158		mg/kg dry	3.45	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
	_								CTDOH,N	ELAC-NY10854,NJD		
7439-89-6	Iron		39800		mg/kg dry	43.2	1	EPA 6010D	OTD OIL V	05/20/2019 14:51	05/20/2019 18:32	KML
									CTDOH,N	ELAC-NY10854,NJD		
7439-92-1	Lead		365		mg/kg dry	0.864	1	EPA 6010D	CTDOLLN	05/20/2019 14:51	05/20/2019 18:32	KML
= 420 05 4									CIDOH,N	ELAC-NY10854,NJD		****
7439-95-4	Magnesium		8990		mg/kg dry	8.64	1	EPA 6010D	CTDOLLN	05/20/2019 14:51	05/20/2019 18:32	KML
7420.07.5	Manganasa		462			0.064			CIDOH,N	ELAC-NY10854,NJD		I/MI
7439-96-5	Manganese		463		mg/kg dry	0.864	1	EPA 6010D Certifications: (CTDOLLN	05/20/2019 14:51	05/20/2019 18:32	KML
7440 02 0	Nickel		20.5		ma/lra der	1.72	1		CIDON,N	ELAC-NY10854,NJD 05/20/2019 14:51	05/20/2019 18:32	VMI
7440-02-0	Mickel		39.5		mg/kg dry	1.73	1	EPA 6010D Certifications:	CTDOH N	ELAC-NY10854,NJD		KML
7440-09-7	Potassium		4460		mg/kg dry	8.64	1	EPA 6010D	c i boii,i t	05/20/2019 14:51	05/20/2019 18:32	KML
7440-07-7	1 otassium		4400		mg/kg til y	8.04	1		CTDOH N	ELAC-NY10854,NJD		KWIL
7782-49-2	Selenium		ND		mg/kg dry	4.32	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
7702-47-2	Selemum		ND		mg/kg til y	4.52	1		TDOH,NI	ELAC-NY10854,NJDI		KWIL
7440-22-4	Silver		ND		mg/kg dry	0.864	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
								Certifications: C	TDOH,NI	ELAC-NY10854,NJDI	EP,PADEP	
7440-23-5	Sodium		2780		mg/kg dry	86.4	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		mg/kg dry	4.32	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
									TDOH,NI	ELAC-NY10854,NJDI		
7440-62-2	Vanadium		51.0		mg/kg dry	1.73	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:32	KML
									CTDOH,N	ELAC-NY10854,NJD		
7440-66-6	Zinc		280		mg/kg dry	4.32	1	EPA 6010D		05/20/2019 14:51		KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	



SB007 (12-14) **Client Sample ID:**

York Sample ID: 19E0591-20

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 1:00 pm Date Received 05/13/2019

Mercury by 7473

CAS No.

Log-in Notes:

Reported to

0.100

Sample Notes:

SY

Sample Prepared by Method: EPA 7473 soil

Mercury

D 4	D 14	El	TT *4
Parameter	Result	Flag	Units

5.38

57.9

Reference Method LOQ Dilution 0.0518 EPA 7473

Certifications:

Date/Time Prepared

Date/Time Analyzed Analyst

05/22/2019 09:04 05/22/2019 19:21 CTDOH,NJDEP,NELAC-NY10854,PADEP

Total Solids

solids

7439-97-6

Sample Prepared by Method: % Solids Prep

Log-in Notes:

Sample Notes:

Date/Time Date/Time Reported to CAS No. Parameter Result Flag Units Dilution Reference Method Prepared Analyzed Analyst LOO * % Solids % SM 2540G 05/16/2019 22:16 05/17/2019 15:13 ITV

> Certifications: CTDOH

Sample Information

mg/kg dry

Client Sample ID: SB007 (0-2) York Sample ID:

19E0591-21

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 12:40 pm Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADEP	05/22/2019 23:58	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0977	0.195	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADEP	05/22/2019 23:58	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 23:58 P,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,PADEP	05/22/2019 23:58	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 710854,NJDEP,PADEP	05/22/2019 23:58	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 710854,PADEP	05/22/2019 23:58	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 710854,PADEP	05/22/2019 23:58	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0977	0.195	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 710854,NJDEP,PADEP	05/22/2019 23:58	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 23:58 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 23:58 P,PADEP	KH

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Client Sample ID: SB007 (0-2)

York Sample ID: 19E0591-21

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:40 pm Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

5	amp	le I	repared	by	Method:	EPA	3550C	

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		e/Time epared	Date/Time Analyzed	Analyst
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	КН
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0977	0.195	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0977	0.195	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 NELAC-NY10854,NJ	019 08:26 JDEP,PADEI	05/22/2019 23:58	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0977	0.195	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0977	0.195	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0977	0.195	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0977	0.195	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	05/21/2 CTDOH,NELAC-NY	019 08:26 10854,NJDE	05/22/2019 23:58 EP,PADEP	KH



Client Sample ID: SB007 (0-2)

York Sample ID: 19E0591-21

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:40 pm Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS N	o. Parameter											
		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-86-2	Acetophenone	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 23:58	КН
62-53-3	Aniline	ND		mg/kg dry	0.196	0.391	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 23:58	KH
120-12-7	Anthracene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58 P,PADEP	КН
1912-24-9	Atrazine	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 23:58	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 23:58	KH
92-87-5	Benzidine	ND		mg/kg dry	0.196	0.391	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,PADE	05/22/2019 23:58 P	KH
56-55-3	Benzo(a)anthracene	0.214		mg/kg dry	0.0490	0.0977	2	EPA 8270D		05/21/2019 08:26	05/22/2019 23:58	KH
50.22.0	Panza(a)nywana	0.204			0.0400	0.0077	2	Certifications:	CTDOH,N	ELAC-NY10854,NJDE		1/11
50-32-8	Benzo(a)pyrene	0.284		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58 EP,PADEP	KH
205-99-2	Benzo(b)fluoranthene	0.252		mg/kg dry	0.0490	0.0977	2	EPA 8270D		05/21/2019 08:26	05/22/2019 23:58	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJDF		
191-24-2	Benzo(g,h,i)perylene	0.196		mg/kg dry	0.0490	0.0977	2	EPA 8270D	CTDOUN	05/21/2019 08:26	05/22/2019 23:58	KH
207-08-9	Benzo(k)fluoranthene	0.210		mg/kg dry	0.0490	0.0977	2	Certifications: EPA 8270D	CTDOH,N	IELAC-NY10854,NJDF 05/21/2019 08:26	05/22/2019 23:58	KH
		0.210			0.0470	0.0777	-	Certifications:	CTDOH,N	ELAC-NY10854,NJDF		
65-85-0	Benzoic acid	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 23:58	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 23:58	KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58 P,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58 P,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58 P,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58 P,PADEP	КН
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58 P,PADEP	КН
105-60-2	Caprolactam	ND		mg/kg dry	0.0977	0.195	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 23:58	КН
86-74-8	Carbazole	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58 P,PADEP	КН
218-01-9	Chrysene	0.219		mg/kg dry	0.0490	0.0977	2	EPA 8270D		05/21/2019 08:26	05/22/2019 23:58	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJDI		
53-70-3	Dibenzo(a,h)anthracene	0.0609	J	mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOUN	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58 ED DA DED	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 23:58	КН

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Client Sample ID: SB007 (0-2)

York Sample ID: 19E0591-21

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:40 pm Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in	Notes:	
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Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
206-44-0	Fluoranthene	0.362		mg/kg dry	0.0490	0.0977	2	EPA 8270D		05/21/2019 08:26	05/22/2019 23:58	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADE	05/22/2019 23:58 P	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	КН
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.216		mg/kg dry	0.0490	0.0977	2	EPA 8270D		05/21/2019 08:26	05/22/2019 23:58	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
35-01-8	Phenanthrene	0.133		mg/kg dry	0.0490	0.0977	2	EPA 8270D		05/21/2019 08:26	05/22/2019 23:58	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0490	0.0977	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
29-00-0	Pyrene	0.305		mg/kg dry	0.0490	0.0977	2	EPA 8270D		05/21/2019 08:26	05/22/2019 23:58	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.196	0.391	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 23:58 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	64.4 %			20-108							
	- Contract of the options	, / 0										

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Client Sample ID: SB007 (0-2)

York Sample ID:

19E0591-21

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:40 pm Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
4165-62-2	Surrogate: SURR: Phenol-d5	69.2 %			23-114					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	80.6 %			22-108					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	76.1 %			21-113					
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	71.7 %			19-110					
1718-51-0	Surrogate: SURR: Terphenyl-d14	73.8 %			24-116					

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Log-in Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Date/Time Iethod Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		11900		mg/kg dry	5.90	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	2.95	1	EPA 6010D Certifications: C	05/20/2019 14:5 CTDOH,NELAC-NY10854,N		KML
440-38-2	Arsenic		5.67		mg/kg dry	1.77	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
440-39-3	Barium		147		mg/kg dry	2.95	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
440-41-7	Beryllium		0.320		mg/kg dry	0.059	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
440-43-9	Cadmium		0.947		mg/kg dry	0.354	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
440-70-2	Calcium		11000		mg/kg dry	5.90	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
440-47-3	Chromium		15.4		mg/kg dry	0.590	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
440-48-4	Cobalt		8.65		mg/kg dry	0.472	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
440-50-8	Copper		117		mg/kg dry	2.36	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
439-89-6	Iron		18000		mg/kg dry	29.5	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
439-92-1	Lead		101		mg/kg dry	0.590	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
439-95-4	Magnesium		2920		mg/kg dry	5.90	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
439-96-5	Manganese		416		mg/kg dry	0.590	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
440-02-0	Nickel		18.8		mg/kg dry	1.18	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
440-09-7	Potassium		1580		mg/kg dry	5.90	1	EPA 6010D	05/20/2019 14:5	05/20/2019 18:34	KML
								Certifications:	CTDOH,NELAC-NY10854,N	IDED DA DED	

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Client Sample ID: SB007 (0-2) **York Sample ID:**

19E0591-21

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 12:40 pm Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7782-49-2	Selenium	Ŋ	ND		mg/kg dry	2.95	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:51 LAC-NY10854,NJDE	05/20/2019 18:34 P,PADEP	KML
7440-22-4	Silver	Ν	ND		mg/kg dry	0.590	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:51 LAC-NY10854,NJDE	05/20/2019 18:34 P,PADEP	KML
7440-23-5	Sodium	4	144		mg/kg dry	59.0	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:34 EP,PADEP	KML
7440-28-0	Thallium	Ν	ND		mg/kg dry	2.95	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:51 LAC-NY10854,NJDE	05/20/2019 18:34 P,PADEP	KML
7440-62-2	Vanadium	2	23.1		mg/kg dry	1.18	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:34 EP,PADEP	KML
7440-66-6	Zinc	2	268		mg/kg dry	2.95	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:34 EP,PADEP	KML

Log-in Notes: Sample Notes: Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.462		mg/kg dry	0.0354	1	EPA 7473		05/22/2019 09:04	05/22/2019 19:32	SY
								Certifications:	CTDOH.NJD	EP.NELAC-NY108:	54.PADEP	

Log-in Notes: Sample Notes: Total Solids

Sample Prepared by Method: % Solids Prep

CAS	No.	Parameter	Result	Flag 1	Units	Reported LOQ	Reported to LOQ Dilution			Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		84.8	9/	6	0.100	1	SM 2540G		05/16/2019 22:16	05/17/2019 15:13	JTV
								Certifications:	CTDOH			

Sample Information

SB008 (6-8) York Sample ID: **Client Sample ID:** 19E0591-22

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received LST 1802 19E0591 Soil May 10, 2019 7:00 am 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	0.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl		ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 00:27	КН

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Sample Prepared by Method: EPA 3550C

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Client Sample ID: SB008 (6-8)

York Sample ID: 19E0591-22

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3550C										
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Me	Date/Time thod Prepared	Date/Time Analyzed	Analyst
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.113	0.226	2	EPA 8270D Certifications: NE	05/21/2019 08:26 LAC-NY10854,NJDEP,PADE	05/23/2019 00:27 P	КН
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: NE	05/21/2019 08:26 LAC-NY10854,PADEP	05/23/2019 00:27	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: NE	05/21/2019 08:26 LAC-NY10854,NJDEP,PADE	05/23/2019 00:27 P	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: NE	05/21/2019 08:26 LAC-NY10854,PADEP	05/23/2019 00:27	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: NE	05/21/2019 08:26 LAC-NY10854,PADEP	05/23/2019 00:27	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.113	0.226	2	EPA 8270D Certifications: NE	05/21/2019 08:26 LAC-NY10854,NJDEP,PADE	05/23/2019 00:27 P	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.113	0.226	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
91-57-6	2-Methylnaphthalene	0.0824	J	mg/kg dry	0.0568	0.113	2	EPA 8270D	05/21/2019 08:26	05/23/2019 00:27	KH
								Certifications: CT	DOH,NELAC-NY10854,NJE		
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 OOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.113	0.226	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	КН
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications: NE	05/21/2019 08:26 LAC-NY10854,NJDEP,PADE	05/23/2019 00:27 P	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.113	0.226	2	EPA 8270D Certifications: CTI	05/21/2019 08:26 DOH,NELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	КН



Client Sample ID: SB008 (6-8)

York Sample ID: 19E0591-22

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:
Log-m Notes:	Sample Notes:

CAS N	o. Parameter	Result Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
534-52-1	4,6-Dinitro-2-methylphenol	ND	mg/kg dry	0.113	0.226	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 00:27 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 00:27 EP,PADEP	КН
59-50-7	4-Chloro-3-methylphenol	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 00:27 EP,PADEP	КН
106-47-8	4-Chloroaniline	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 00:27 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 00:27 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND	mg/kg dry	0.113	0.226	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 00:27 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND	mg/kg dry	0.113	0.226	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 00:27 EP,PADEP	KH
83-32-9	Acenaphthene	0.139	mg/kg dry	0.0568	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
208-96-8	Acenaphthylene	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 00:27 EP,PADEP	KH
98-86-2	Acetophenone	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 00:27 P	KH
62-53-3	Aniline	ND	mg/kg dry	0.227	0.454	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 00:27 P	KH
120-12-7	Anthracene	0.359	mg/kg dry	0.0568	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
1912-24-9	Atrazine	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 00:27 P	KH
100-52-7	Benzaldehyde	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 00:27 P	KH
92-87-5	Benzidine	ND	mg/kg dry	0.227	0.454	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,PADI	05/23/2019 00:27 EP	KH
56-55-3	Benzo(a)anthracene	0.964	mg/kg dry	0.0568	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
50-32-8	Benzo(a)pyrene	1.20	mg/kg dry	0.0568	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD		
205-99-2	Benzo(b)fluoranthene	0.865	mg/kg dry	0.0568	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD		
191-24-2	Benzo(g,h,i)perylene	0.798	mg/kg dry	0.0568	0.113	2	EPA 8270D	OTTO ON A	05/21/2019 08:26	05/23/2019 00:27	KH
207.00.0	D (I-) (I	0 = 4 =	4 1				Certifications:	C1DOH,N	ELAC-NY10854,NJD		1/11
207-08-9	Benzo(k)fluoranthene	0.717	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 00:27	KH
(5.05.0	D : :1	N.D.	4 1	0.05(0	0.112	2		CTDOII,N	05/21/2019 08:26	05/23/2019 00:27	1/11
65-85-0	Benzoic acid	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	NELAC-NY	03/21/2019 08.26 Y10854,NJDEP,PADE		KH
100-51-6	Benzyl alcohol	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 00:27 P	КН
85-68-7	Benzyl butyl phthalate	ND	mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 00:27 EP,PADEP	KH
	CEADOU DDIVE	STRATEORD OT 06645			400	2 02 90th /	VENUE			L ND/ 44 440	

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Client Sample ID: SB008 (6-8)

York Sample ID: 19E0591-22

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result I	lag Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time e Method Prepared	Date/Time Analyzed	Analyst
111-91-1	Bis(2-chloroethoxy)methane	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	КН
108-60-1	Bis(2-chloroisopropyl)ether	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	КН
117-81-7	Bis(2-ethylhexyl)phthalate	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	КН
105-60-2	Caprolactam	ND	mg/kg dr	y 0.113	0.226	2	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PADER	05/23/2019 00:27	KH
86-74-8	Carbazole	0.111	J mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJD	05/23/2019 00:27 EPPADEP	KH
218-01-9	Chrysene	0.830	mg/kg dr	y 0.0568	0.113	2	EPA 8270D	05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	0.177	mg/kg dr	y 0.0568	0.113	2	EPA 8270D	05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
132-64-9	Dibenzofuran	0.0598	J mg/kg dr	y 0.0568	0.113	2	EPA 8270D	05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
84-66-2	Diethyl phthalate	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
206-44-0	Fluoranthene	1.80	mg/kg dr	y 0.0568	0.113	2	EPA 8270D	05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	0.129	mg/kg dr	0.0568	0.113	2	EPA 8270D	05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	NELAC-NY10854,NJDEP,PADE	P	
118-74-1	Hexachlorobenzene	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	КН
67-72-1	Hexachloroethane	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	КН
193-39-5	Indeno(1,2,3-cd)pyrene	0.908	mg/kg dr	y 0.0568	0.113	2	EPA 8270D	05/21/2019 08:26	05/23/2019 00:27	KH
							Certifications:	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
91-20-3	Naphthalene	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
98-95-3	Nitrobenzene	ND	mg/kg dr	y 0.0568	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	КН
400 DEG	NEADOLL DDIVE	STRATEORD OF 06	2045		404	2 02 90+6	A)/ENUIE	BICHWOND HILL	L NIV 44 44 0	

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Client Sample ID: SB008 (6-8)

York Sample ID:

19E0591-22

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:00 am <u>Date Received</u> 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
85-01-8	Phenanthrene	1.35		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 00:27 EP,PADEP	KH
108-95-2	Phenol	ND		mg/kg dry	0.0568	0.113	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
129-00-0	Pyrene	1.63		mg/kg dry	0.0568	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:27	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.227	0.454	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:27 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	44.5 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	73.2 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	80.2 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	71.2 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	18.8 %	S-08		19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	72.9 %			24-116							

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		12700		mg/kg dry	6.82	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
7440-36-0	Antimony		ND		mg/kg dry	3.41	1	Certifications: EPA 6010D Certifications:	ŕ	ELAC-NY10854,NJD 05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:41	KML
7440-38-2	Arsenic		4.78		mg/kg dry	2.05	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:51 ELAC-NY10854,NJD	05/20/2019 18:41 EP,PADEP	KML
7440-39-3	Barium		56.5		mg/kg dry	3.41	1	EPA 6010D Certifications:	CTDOH N	05/20/2019 14:51 ELAC-NY10854,NJD	05/20/2019 18:41 EPPADEP	KML
7440-41-7	Beryllium		0.258		mg/kg dry	0.068	1	EPA 6010D Certifications:	Í	05/20/2019 14:51 ELAC-NY10854,NJD	05/20/2019 18:41	KML
7440-43-9	Cadmium		ND		mg/kg dry	0.409	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:41 EP,PADEP	KML
7440-70-2	Calcium		15900		mg/kg dry	6.82	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:51 ELAC-NY10854,NJD	05/20/2019 18:41 EP,PADEP	KML

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Client Sample ID: SB008 (6-8)

York Sample ID:

19E0591-22

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:00 am <u>Date Received</u> 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes: Sample Notes:

CAS N	No. Par	rameter Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	17.3		mg/kg dry	0.682	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt	8.83		mg/kg dry	0.545	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper	19.8		mg/kg dry	2.73	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron	17300		mg/kg dry	34.1	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead	20.1		mg/kg dry	0.682	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium	7310		mg/kg dry	6.82	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	261		mg/kg dry	0.682	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	16.6		mg/kg dry	1.36	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1630		mg/kg dry	6.82	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND		mg/kg dry	3.41	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJDI	EP,PADEP	
7440-22-4	Silver	ND		mg/kg dry	0.682	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJDI	EP,PADEP	
7440-23-5	Sodium	284		mg/kg dry	68.2	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND		mg/kg dry	3.41	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJDI	EP,PADEP	
7440-62-2	Vanadium	26.4		mg/kg dry	1.36	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	50.8		mg/kg dry	3.41	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:41	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in Notes:

Sample Notes:

CAS N	о.	Parameter	Result	Flag	Units	Reported t LOQ	to Dilut	ion Referen	ce Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.244		mg/kg dry	0.0409	1	EPA 7473		05/22/2019 14:45	05/22/2019 21:02	SY
								Certifications:	CTDOH,N	JDEP,NELAC-NY108	54,PADEP	

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

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

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Client Sample ID: SB008 (6-8)

York Sample ID: 19E0591-22

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:00 am Date Received 05/13/2019

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS	S No.	Parameter	Result	Flag	Units	Reported t LOQ	O Dilution	Reference Me	ethod	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		73.3		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	ТЈМ
								Certifications: C	TDOH			

Sample Information

Client Sample ID: SB008 (0-2)

York Sample ID:

19E0591-23

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time

Date Received 05/13/2019

May 10, 2019 7:05 am

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS I	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time Iethod Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: N	05/21/2019 08:26 NELAC-NY10854,NJDEP,PADEP	05/23/2019 00:56	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.113	0.225	2	EPA 8270D Certifications: N	05/21/2019 08:26 NELAC-NY10854,NJDEP,PADEP	05/23/2019 00:56	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:56 P,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: N	05/21/2019 08:26 NELAC-NY10854,PADEP	05/23/2019 00:56	КН
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: N	05/21/2019 08:26 NELAC-NY10854,NJDEP,PADEP	05/23/2019 00:56	КН
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: N	05/21/2019 08:26 NELAC-NY10854,PADEP	05/23/2019 00:56	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: N	05/21/2019 08:26 NELAC-NY10854,PADEP	05/23/2019 00:56	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.113	0.225	2	EPA 8270D Certifications: N	05/21/2019 08:26 NELAC-NY10854,NJDEP,PADEP	05/23/2019 00:56	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:56 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:56 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:56 P,PADEP	КН
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:56 P,PADEP	КН
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.113	0.225	2	EPA 8270D Certifications: C	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:56 P,PADEP	КН
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJDE	05/23/2019 00:56 P.PADEP	KH



Client Sample ID: SB008 (0-2)

York Sample ID: 19E0591-23

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:05 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:

	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time lethod Prepared	Date/Time Analyzed	Analyst
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	KH
91-57-6	2-Methylnaphthalene	0.0740	J	mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI	05/23/2019 00:56 DEP,PADEP	КН
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.113	0.225	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: N	05/21/2019 08:26 ELAC-NY10854,NJDEP,PADI	05/23/2019 00:56 EP	КН
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.113	0.225	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.113	0.225	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.113	0.225	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.113	0.225	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
83-32-9	Acenaphthene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
208-96-8	Acenaphthylene	0.0731	J	mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI	05/23/2019 00:56 DEP,PADEP	КН
98-86-2	Acetophenone	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: N	05/21/2019 08:26 ELAC-NY10854,NJDEP,PADI	05/23/2019 00:56 EP	КН
62-53-3	Aniline	ND		mg/kg dry	0.226	0.452	2	EPA 8270D Certifications: N	05/21/2019 08:26 ELAC-NY10854,NJDEP,PADI	05/23/2019 00:56 EP	КН
120-12-7	Anthracene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: C	05/21/2019 08:26 TDOH,NELAC-NY10854,NJE	05/23/2019 00:56 DEP,PADEP	КН
1912-24-9	Atrazine	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications: N	05/21/2019 08:26 ELAC-NY10854,NJDEP,PADI	05/23/2019 00:56 EP	КН

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Client Sample ID: SB008 (0-2)

York Sample ID: 19E0591-23

Date/Time Analyzed

05/23/2019 00:56

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:05 am Date Received 05/13/2019

Analyst

KH

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prep	ared by Method: EPA 3	550C	•									
CAS	No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Referenc	e Method	Date/Time Prepared	
100-52-7	Benzaldehyde		ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADE	?
92-87-5	Benzidine		ND		mg/kg drv	0.226	0.452	2	EPA 8270D		05/21/2019 08:26	(

92-87-5	Benzidine	ND		mg/kg dry	0.226	0.452	2	EPA 8270D Certifications:	05/21/2019 08:26	KH
56-55-3	Benzo(a)anthracene	0.188		mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
50-32-8	Benzo(a)pyrene	0.261		mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
205-99-2	Benzo(b)fluoranthene	0.261		mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
191-24-2	Benzo(g,h,i)perylene	0.182		mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
207-08-9	Benzo(k)fluoranthene	0.209		mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
65-85-0	Benzoic acid	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26 05/23/2019 00:56 NELAC-NY10854,NJDEP,PADEP	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
	-							Certifications:	NELAC-NY10854,NJDEP,PADEP	
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
	Bis(2 emotoemyt)emei	ND						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.113	0.225	2	EPA 8270D Certifications:	05/21/2019 08:26	KH
86-74-8	Carbazole	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26	KH
218-01-9	Chrysene	0.200		mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	0.0604	J	mg/kg dry	0.0566	0.113	2	EPA 8270D	05/21/2019 08:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP	
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	05/21/2019 08:26	КН

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Client Sample ID: SB008 (0-2)

York Sample ID:

19E0591-23

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:05 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes
Log-in Notes:	Sample Note

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
206-44-0	Fluoranthene	0.281		mg/kg dry	0.0566	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:56	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 710854,NJDEP,PADE	05/23/2019 00:56 P	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:56 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:56 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 00:56 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:56 EP,PADEP	КН
93-39-5	Indeno(1,2,3-cd)pyrene	0.225		mg/kg dry	0.0566	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:56	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 00:56 EP,PADEP	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 00:56 EP,PADEP	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:56 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:56 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:56 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 00:56 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:56 EP,PADEP	КН
85-01-8	Phenanthrene	0.131		mg/kg dry	0.0566	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:56	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0566	0.113	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:56 EP,PADEP	KH
129-00-0	Pyrene	0.257		mg/kg dry	0.0566	0.113	2	EPA 8270D		05/21/2019 08:26	05/23/2019 00:56	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.226	0.452	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 00:56 EP,PADEP	КН
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	86.9 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	88.1 %			23-114							
1165-60-0	Surrogate: SURR: Nitrobenzene-d5	94.7 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	85.8 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	81.6 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	83.4 %			24-116						AC-NY10854,NJDEP,PADEP 05/21/2019 08:26 05/23/2019 00:56 AC-NY10854,NJDEP,PADEP	

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Client Sample ID: SB008 (0-2)

York Sample ID:

19E0591-23

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:05 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		4130		mg/kg dry	6.81	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.40	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDE	05/20/2019 18:43 EP,PADEP	KML
7440-38-2	Arsenic		3.53		mg/kg dry	2.04	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		62.1		mg/kg dry	3.40	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.208		mg/kg dry	0.068	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		ND		mg/kg dry	0.409	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDF	05/20/2019 18:43 EP,PADEP	KML
7440-70-2	Calcium		34200		mg/kg dry	6.81	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		7.93		mg/kg dry	0.681	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		5.62		mg/kg dry	0.545	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		37.5		mg/kg dry	2.72	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
	••		07.0		0 0 . ,			Certifications:	CTDOH,N	ELAC-NY10854,NJD		
7439-89-6	Iron		10600		mg/kg dry	34.0	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
			10000					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		50.9		mg/kg dry	0.681	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
			000					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium		3390		mg/kg dry	6.81	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
	8		2000		0 0)			Certifications:	CTDOH,N	ELAC-NY10854,NJD		
7439-96-5	Manganese		160		mg/kg dry	0.681	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
	8		100					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel		13.1		mg/kg dry	1.36	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium		752		mg/kg dry	6.81	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium		ND		mg/kg dry	3.40	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDF	05/20/2019 18:43 EP,PADEP	KML
7440-22-4	Silver		ND		mg/kg dry	0.681	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDF	05/20/2019 18:43 EP,PADEP	KML
7440-23-5	Sodium		214		mg/kg dry	68.1	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
					0 0)			Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		mg/kg dry	3.40	1	EPA 6010D Certifications:		05/20/2019 14:51 ELAC-NY10854,NJDF	05/20/2019 18:43	KML
7440-62-2	Vanadium		11.9		mg/kg dry	1.36	1	EPA 6010D	- ,	05/20/2019 14:51	05/20/2019 18:43	KML
, 1-10 02-2			11.7		g/ Rg di y	1.50	1	Certifications:	CTDOH N	ELAC-NY10854,NJD		KIVIL
								certifications.	C1D011,1V	,NJD	,	



SB008 (0-2) **Client Sample ID:**

York Sample ID:

19E0591-23

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 7:05 am Date Received 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Iethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	Zinc		57.5		mg/kg dry	3.40	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:43	KML
								Certifications:	CTDOH N	FLAC-NV10854 NID	EDDADED	

Units

mg/kg dry

Mercury by 7473

Log-in Notes:

Sample Notes:

Reference Method

Sample Prepared by Method: EPA 7473 soil

Mercury

The state of the s	CAS No.	Parameter	Result	Flag
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Reported to LOQ

EPA 7473

Dilution

Dilution

Date/Time Date/Time Analyzed Prepared Analyst

05/22/2019 14:45 05/22/2019 21:48 SY

Certifications CTDOH,NJDEP,NELAC-NY10854,PADEP

Total Solids

Log-in Notes:

0.0409

Sample Notes:

7439-97-6

Sample Prepared by Method: % Solids Prep

CAS No		Parameter	Result	Flag	Units	Reported to LOQ
solids	* % Solids		73.4		%	0.100

0.0673

Reference Method

Date/Time Date/Time Analyzed Prepared Analyst

SM 2540G 05/17/2019 18:10 05/18/2019 15:58 CTDOH Certifications:

Sample Information

SB008 (4-6) **Client Sample ID:**

York Sample ID:

19E0591-24

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 7:10 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

ample	Prepared	hv	Method:	EPA	3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 01:26	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.110	0.220	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 01:26	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 P,PADEP	КН
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/23/2019 01:26	КН
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 01:26	КН
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/23/2019 01:26	КН

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Log-in Notes:

Client Sample ID: SB008 (4-6)

<u>York Sample ID:</u> 19E0591-24

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 7:10 am

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

	ed by Method: EPA 3550C				Log III	i totes.		Sam	pic more	<u>3.</u>		
CAS No		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 / 10854,PADEP	05/23/2019 01:26	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.110	0.220	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 / 10854,NJDEP,PADE	05/23/2019 01:26	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	КН
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	КН
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 01:26 EP,PADEP	КН
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 01:26 EP,PADEP	КН
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.110	0.220	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 01:26 EP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 01:26 EP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.110	0.220	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	КН
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	КН
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADE	05/23/2019 01:26	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.110	0.220	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 01:26 EP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.110	0.220	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 01:26 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 01:26 EP,PADEP	КН
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	KH



Client Sample ID: SB008 (4-6)

York Sample ID: 19E0591-24

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:10 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared	d by Method: EPA 3550C											
CAS No.	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.110	0.220	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 01:26 EP,PADEP	КН
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.110	0.220	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 01:26 EP,PADEP	КН
33-32-9	Acenaphthene	0.105	J	mg/kg dry	0.0551	0.110	2	EPA 8270D		05/21/2019 08:26	05/23/2019 01:26	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 01:26 EP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 01:26	KH
62-53-3	Aniline	ND		mg/kg dry	0.220	0.440	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 01:26	KH
120-12-7	Anthracene	0.386		mg/kg dry	0.0551	0.110	2	EPA 8270D		05/21/2019 08:26	05/23/2019 01:26	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
1912-24-9	Atrazine	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 01:26	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 01:26	KH
92-87-5	Benzidine	ND		mg/kg dry	0.220	0.440	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,PADI	05/23/2019 01:26 EP	КН
56-55-3	Benzo(a)anthracene	0.742		mg/kg dry	0.0551	0.110	2	EPA 8270D		05/21/2019 08:26	05/23/2019 01:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
50-32-8	Benzo(a)pyrene	0.753		mg/kg dry	0.0551	0.110	2	EPA 8270D		05/21/2019 08:26	05/23/2019 01:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
05-99-2	Benzo(b)fluoranthene	0.590		mg/kg dry	0.0551	0.110	2	EPA 8270D		05/21/2019 08:26	05/23/2019 01:26	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJD		
91-24-2	Benzo(g,h,i)perylene	0.457		mg/kg dry	0.0551	0.110	2	EPA 8270D		05/21/2019 08:26	05/23/2019 01:26	KH
	D (1)(1)							Certifications:	CTDOH,N	ELAC-NY10854,NJD		
07-08-9	Benzo(k)fluoranthene	0.473		mg/kg dry	0.0551	0.110	2	EPA 8270D	CTDOUN	05/21/2019 08:26	05/23/2019 01:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD		
55-85-0	Benzoic acid	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 01:26	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 01:26	KH
35-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 01:26 EP,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDF		KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 01:26 EP,PADEP	КН
08-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 01:26 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 01:26 EP,PADEP	KH
05-60-2	Caprolactam	ND		mg/kg dry	0.110	0.220	2	EPA 8270D Certifications:		05/21/2019 08:26 Y10854,NJDEP,PADE	05/23/2019 01:26	KH

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Client Sample ID: SB008 (4-6)

York Sample ID: 19E0591-24

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:10 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Carbazole					** *	Reported to				Date/Time	Date/Time	
		o. Parameter	Result	Flag	Units					•		Analyst
Dibenzo(a,b)anthracene	86-74-8	Carbazole	ND		mg/kg dry	0.0551	0.110	2				KH
Disenter Disenter	218-01-9	Chrysene	0.654		mg/kg dry	0.0551	0.110	2	EPA 8270D	05/21/2019 08:26	05/23/2019 01:26	KH
									Certifications: CTD	OH,NELAC-NY10854,NJE	DEP,PADEP	
	3-70-3	Dibenzo(a,h)anthracene	0.141		mg/kg dry	0.0551	0.110	2				KH
		Du d										
	32-64-9	Dibenzofuran	0.0799	J	mg/kg dry	0.0551	0.110	2				KH
	1 66 2	Diothyd whtholata	ND		ma/ka dry	0.0551	0.110	2				VП
	+-00-2	Dietnyi phinaiate	ND		mg/kg ury	0.0551	0.110	2				КП
	31-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D	05/21/2019 08:26	05/23/2019 01:26	KH
									Certifications: CTD0	OH,NELAC-NY10854,NJD	EP,PADEP	
	4-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0551	0.110	2				KH
1.49	17.94.0	D' (1.14.1)	ND			0.0551	0.110	2				MII
	17-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0551	0.110	2				KH
Filterene Properties Prop	06-44-0	Fluoranthene	1.49		mg/kg dry	0.0551	0.110	2	EPA 8270D	05/21/2019 08:26	05/23/2019 01:26	KH
18-74-1									Certifications: CTD	OH,NELAC-NY10854,NJE	DEP,PADEP	
ND	6-73-7	Fluorene	0.122		mg/kg dry	0.0551	0.110	2	EPA 8270D	05/21/2019 08:26	05/23/2019 01:26	KH
Part									Certifications: NEL	AC-NY10854,NJDEP,PADI	EΡ	
Hexachlorobutadiene ND	18-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0551	0.110	2				KH
Certifications: CTDOH,NELAC-NY10854,NIDEP,PADEP CERTIFICATIONS CTDOH,NELAC-NY10854,NIDEP,PADEP CERTIFICATIONS CTDOH,NELAC-NY10854,NIDEP,PADEP CERTIFICATIONS CTDOH,NELAC-NY10854,NIDEP,PADEP CERTIFICATIONS CTDOH,NELAC-NY10854,NIDE	7.69.2	T 11 1 4 F	ND			0.0551	0.110	2				1/11
No	/-08-3	Hexacniorobutadiene	ND		тд/кд агу	0.0331	0.110	2				KH
Hexachloroethane	7-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D	05/21/2019 08:26	05/23/2019 01:26	KH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP CERTIFICATIONS:									Certifications: CTD0	DH,NELAC-NY10854,NJD	EP,PADEP	
Indeno(1,2,3-cd)pyrene 0,495 mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI	7-72-1	Hexachloroethane	ND		mg/kg dry	0.0551	0.110	2				KH
September Sept	32-30-5	Indeno(1.2.3-cd)nyrene	0.405		ma/ka dry	0.0551	0.110	2				КH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	-3-37-3	indeno(1,2,5-ed)pyrene	0.495		mg/kg dry	0.0331	0.110	2				KII
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	8-59-1	Isonhorone	ND		mg/kg drv	0.0551	0.110	2				KH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 8-95-3 Nitrobenzene ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 2-75-9 N-Nitrosodimethylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 21-64-7 N-nitroso-di-n-propylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 6-30-6 N-Nitrosodiphenylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP		Isophorone	NB									
No. No.	1-20-3	Naphthalene	0.0676	J	mg/kg dry	0.0551	0.110	2	EPA 8270D	05/21/2019 08:26	05/23/2019 01:26	KH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 2-75-9 N-Nitrosodimethylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 21-64-7 N-nitroso-di-n-propylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 6-30-6 N-Nitrosodiphenylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI CERTIFICATIONS: CTDOH,NELAC-NY10854,NJDEP,PADEP ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI CERTIFICATIONS: CTDOH,NELAC-NY10854,NJDEP,PADEP ND ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI									Certifications: CTD	OH,NELAC-NY10854,NJI	DEP,PADEP	
2-75-9 N-Nitrosodimethylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 21-64-7 N-nitroso-di-n-propylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 6-30-6 N-Nitrosodiphenylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 8-5-01-8 Phenanthrene 0.999 mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI	8-95-3	Nitrobenzene	ND		mg/kg dry	0.0551	0.110	2				KH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP N-nitroso-di-n-propylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP N-nitrosodiphenylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP N-nitrosodiphenylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP N-nitrosodiphenylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP N-nitrosodiphenylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	2 75 0	NI Nitana a dimada da maina	ND		ma/ka dry	0.0551	0.110	2				VП
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 6-30-6 N-Nitrosodiphenylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Phenanthrene 0.999 mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI	2-13-9	N-Nitrosodimetnylamine	ND		mg/kg ury	0.0331	0.110	2				КП
6-30-6 N-Nitrosodiphenylamine ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 5-01-8 Phenanthrene 0.999 mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI	21-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0551	0.110	2	EPA 8270D	05/21/2019 08:26	05/23/2019 01:26	KH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 5-01-8 Phenanthrene 0,999 mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI									Certifications: CTD0	DH,NELAC-NY10854,NJD	EP,PADEP	
7-86-5 Pentachlorophenol ND mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 5-01-8 Phenanthrene 0.999 mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI	6-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0551	0.110	2				KH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP 5-01-8 Phenanthrene 0.999 mg/kg dry 0.0551 0.110 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:26 KI	7.06.5	D . II I I	VID		4 1	0.0551	0.110	2				1/11
3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	/-00-3	Pentacniorophenol	ND		mg/kg ary	0.0551	0.110	2				KH
	5-01-8	Phenanthrene	0.999		mg/kg dry	0.0551	0.110	2	EPA 8270D	05/21/2019 08:26	05/23/2019 01:26	KH
									Certifications: CTD	OH,NELAC-NY10854,NJE	EP,PADEP	

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Log-in Notes:

Client Sample ID: SB008 (4-6)

York Sample ID: 19E0591-24

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:10 am

Sample Notes:

<u>Date Received</u> 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Sample Frepa	red by Method: EPA 3330C									D / //E!	D / //E*	
CAS N	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		mg/kg dry	0.0551	0.110	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 01:26 EP,PADEP	КН
129-00-0	Pyrene	1.42		mg/kg dry	0.0551	0.110	2	EPA 8270D		05/21/2019 08:26	05/23/2019 01:26	KH
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.220	0.440	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 01:26 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	76.9 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	79.0 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	77.7 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	71.1 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	78.8 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	73.8 %			24-116							

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		5780		mg/kg dry	6.61	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.31	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDF	05/20/2019 18:45 EP,PADEP	KML
7440-38-2	Arsenic		29.7		mg/kg dry	1.98	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
							(CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	Barium		154		mg/kg dry	3.31	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						C		Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.199		mg/kg dry	0.066	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		1.30		mg/kg dry	0.397	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		15500		mg/kg dry	6.61	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		14.3		mg/kg dry	0.661	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		6.25		mg/kg dry	0.529	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		336		mg/kg dry	2.64	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		13400		mg/kg dry	33.1	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
					*			Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		455		mg/kg dry	0.661	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						*****	-	Certifications:	CTDOH.N	ELAC-NY10854,NJD	EP.PADEP	

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Client Sample ID: SB008 (4-6)

York Sample ID: 19E0591-24

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 7:10 am Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference N	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	5280	mg/kg dry	6.61	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	235	mg/kg dry	0.661	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	13.1	mg/kg dry	1.32	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	850	mg/kg dry	6.61	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.31	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.661	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
							CTDOH,NE	LAC-NY10854,NJDE		
7440-23-5	Sodium	296	mg/kg dry	66.1	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.31	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7440-62-2	Vanadium	19.0	mg/kg dry	1.32	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	531	mg/kg dry	3.31	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:45	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in	Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported LOQ	Reported to LOQ Dilution			Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.746		mg/kg dry	0.0397		1	EPA 7473		05/22/2019 14:45	05/22/2019 21:57	SY
									Certifications:	CTDOH N	JDEP NELAC-NY 108	54 PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

Log-in Notes:

Sample Notes:

CAS No.		Parameter	Result	Flag	Units	Reported LOQ		Dilution Reference Method		Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		75.6		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB009 (6-8)			York Sample ID:	19E0591-25
York Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 8:10 am	05/13/2019

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Client Sample ID: SB009 (6-8) **York Sample ID:**

19E0591-25

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:10 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample	Prepared	by	Method:	EPA	5035A
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference I	Date/T Method Prep	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP,	RDS PADEP
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NEL	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NEL	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NEL	05/16/2019 17:58 2058,NJDEP	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NEL	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NEL	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.054	0.11	1	EPA 8260C Certifications:	05/16/201 NELAC-NY10854,NEL	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	05/16/201 NELAC-NY10854,NEL	05/16/2019 17:58 2058,NJDEP	RDS

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Client Sample ID: SB009 (6-8)

York Sample ID: 19E0591-25

<u>York Project (SDG) No.</u>
19E0591

<u>Client Project ID</u>
LST 1802

MatrixCollection Date/TimeSoilMay 10, 2019 8:10 am

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

<u>Log-in Notes:</u> <u>Sar</u>	nple Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
591-78-6	2-Hexanone	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
67-64-1	Acetone	0.0059	CCV-E,	mg/kg dry	0.0054	0.011	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDE	RDS P,PADEP
107-02-8	Acrolein	ND		mg/kg dry	0.0054	0.011	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
71-43-2	Benzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
108-86-1	Bromobenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
75-25-2	Bromoform	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
74-83-9	Bromomethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
75-00-3	Chloroethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
67-66-3	Chloroform	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
74-87-3	Chloromethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS P,PADEP
110-82-7	Cyclohexane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 17:58 2058,NJDEP,PADEP	RDS



Client Sample ID: SB009 (6-8)

York Sample ID: 19E0591-25

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:10 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 5035A											
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
74-95-3	Dibromomethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
79-20-9	Methyl acetate	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
75-09-2	Methylene chloride	ND		mg/kg dry	0.0054	0.011	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
95-47-6	o-Xylene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,PADEF	RDS
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0054	0.011	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,PADEF	RDS
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
100-42-5	Styrene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0027	0.027	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 17:58 2058,NJDEP,PADEP	RDS
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
108-88-3	Toluene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEF	RDS P,PADEP



Client Sample ID: SB009 (6-8)

York Sample ID: 19E0591-25

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:10 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

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Sample Notes:

CAS No	CAS No. Parameter		Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
108-05-4	Vinyl acetate ND mg/kg dry 0.0027		0.0027	0.0054	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 17:58 2058,NJDEP,PADEP	RDS		
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0027	0.0054	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS PADEP
1330-20-7	Xylenes, Total ND mg/kg dry		0.0082	0.016	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:58 AC-NY12058,NJDEP	RDS		
	Surrogate Recoveries	Result		Accep	otance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	105 %			77-125							
2037-26-5	Surrogate: SURR: Toluene-d8	104 %			85-120							
460-00-4	0-4 Surrogate: SURR: 103 % ;		76-130									

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADEP	05/23/2019 01:55	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0946	0.189	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADEP	05/23/2019 01:55	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/23/2019 01:55 P,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,PADEP	05/23/2019 01:55	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADEP	05/23/2019 01:55	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,PADEP	05/23/2019 01:55	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,PADEP	05/23/2019 01:55	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0946	0.189	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADEP	05/23/2019 01:55	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/23/2019 01:55 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/23/2019 01:55 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/23/2019 01:55 P,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/23/2019 01:55 P,PADEP	KH



Client Sample ID: SB009 (6-8)

York Sample ID: 19E0591-25

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Collect Soil May 10

Collection Date/Time May 10, 2019 8:10 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0946	0.189	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0946	0.189	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADEF	05/23/2019 01:55	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0946	0.189	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0946	0.189	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0946	0.189	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0946	0.189	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJDE	05/23/2019 01:55 EP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADEF	05/23/2019 01:55	KH
62-53-3	Aniline	ND		mg/kg dry	0.189	0.379	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADEF	05/23/2019 01:55	KH



Client Sample ID: SB009 (6-8)

York Sample ID: 19E0591-25

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:10 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

<u>Log-in Notes:</u> <u>S</u>	ample Notes:
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1912-14-9 Atrazine	CAS No.	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-52-7	20-12-7	Anthracene	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	КН
Part	912-24-9	Atrazine	ND		mg/kg dry	0.0474	0.0946	2		NELAC-NY		05/23/2019 01:55	KH
September Sept)0-52-7	Benzaldehyde	ND		mg/kg dry	0.0474	0.0946	2		NELAC-N		05/23/2019 01:55 P	KH
Second S	2-87-5	Benzidine	ND		mg/kg dry	0.189	0.379	2		CTDOH,NI		05/23/2019 01:55 EP	KH
	5-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
)-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
Part)5-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
	91-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.521/2019 08.26 0.523/2019 01.5)7-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
Second Benzyl butyl phthalate ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.05/21/2019 08.26 0.05/23/2019 01.5 0.05/21/2019 08.26 0.05/23/2019 01.5 0.05/21/2019 08.26 0.05/23/2019 01.5 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 2 EPA 8270D 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08.26 0.05/23/2019 01.5 0.0474 0.0946	5-85-0	Benzoic acid	ND		mg/kg dry	0.0474	0.0946	2		NELAC-N		05/23/2019 01:55 P	KH
The control of the)0-51-6	Benzyl alcohol	ND		mg/kg dry	0.0474	0.0946	2		NELAC-N		05/23/2019 01:55 P	KH
111-44-4 Bis(2-chloroethyl)ether ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08:26 0.05/23/2019 01:5 0.08-60-1 Dis(2-chloroisopropyl)ether ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08:26 0.05/23/2019 01:5 0.08-60-1 Dis(2-chloroisopropyl)ether ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08:26 0.05/23/2019 01:5 0.05/23/2019 01:5 0.08-60-2 Dis(2-chloroisopropyl)ether ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08:26 0.05/23/2019 01:5 0.05/23/2019 01:5 0.08-60-2 Dis(2-chloroisopropyl)ether ND mg/kg dry 0.0946 0.189 2 EPA 8270D 0.05/21/2019 08:26 0.05/23/2019 01:5 0.08-60-2 Dis(2-chloroisopropyl)ether ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08:26 0.05/23/2019 01:5 0.08-60-2 Dis(2-chloroisopropyl)ether ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08:26 0.05/23/2019 01:5 0.08-60-2 Dis(2-chloroisopropyl)ether ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08:26 0.05/23/2019 01:5 0.08-60-2 Dis(2-chloroisopropyl)ether Dis(2-chloroisopropyl)ether ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.05/21/2019 08:26 0.05/23/2019 01:5 0.08-60-2 Dis(2-chloroisopropyl)ether Dis(2-chloro	5-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP Certifications: NELAC-NY10854,NJDEP,PADEP Certifications: NELAC-NY10854,NJDEP,PADEP Certifications: NELAC-NY10854,NJDEP,PADEP Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP CERTIFICATIONS: CERTIFICATIONS: CERTIFICATIONS: CTDOH,NELAC-NY10854,NJDEP,PADEP	11-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
117-81-7 Bis(2-ethylhexyl)phthalate ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 0.5/21/2019 08:26 0.5/23/2019 01:5	11-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP)8-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:5	17-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP)5-60-2	Caprolactam	ND		mg/kg dry	0.0946	0.189	2		NELAC-N		05/23/2019 01:55 P	KH
53-70-3 Dibenzo(a,h)anthracene ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:5	5-74-8	Carbazole	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
	18-01-9	Chrysene	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
	3-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
132-64-9 Dibenzofuran ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:5 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	32-64-9	Dibenzofuran	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
84-66-2 Diethyl phthalate ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:5	4-66-2	Diethyl phthalate	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH
131-11-3 Dimethyl phthalate ND mg/kg dry 0.0474 0.0946 2 EPA 8270D 05/21/2019 08:26 05/23/2019 01:5 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	31-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0474	0.0946	2		CTDOH,NI		05/23/2019 01:55 EP,PADEP	KH



Log-in Notes:

Client Sample ID: SB009 (6-8)

York Sample ID:

19E0591-25

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:10 am

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
86-73-7	Fluorene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 710854,NJDEP,PADE	05/23/2019 01:55 P	КН
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
78-59-1	Isophorone	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D		05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55	КН
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
108-95-2	Phenol	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	КН
129-00-0	Pyrene	ND		mg/kg dry	0.0474	0.0946	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
110-86-1	Pyridine	ND		mg/kg dry	0.189	0.379	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 01:55 EP,PADEP	KH
	Surrogate Recoveries	Result		Acce	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	88.3 %		•	20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	85.7 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	89.1 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	77.5 %			21-113							

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Client Sample ID: SB009 (6-8) **York Sample ID:**

19E0591-25

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Flag

Units

Matrix Soil

Collection Date/Time May 10, 2019 8:10 am Date Received 05/13/2019

Analyst

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

LOQ

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No. Parameter Result 91.4 %

Reported to LOD/MDL

Dilution Reference Method Date/Time Date/Time Prepared Analyzed

118-79-6 Surrogate: SURR:

1718-51-0

2,4,6-Tribromophenol Surrogate: SURR: Terphenyl-d14

78.6 %

19-110 24-116

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		10900		mg/kg dry	5.69	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	2.85	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:48 EP,PADEP	KML
7440-38-2	Arsenic		ND		mg/kg dry	1.71	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:48 EP,PADEP	KML
7440-39-3	Barium		93.3		mg/kg dry	2.85	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		ND		mg/kg dry	0.057	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:48 EP,PADEP	KML
7440-43-9	Cadmium		2.25		mg/kg dry	0.342	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		16200		mg/kg dry	5.69	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		18.5		mg/kg dry	0.569	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		11.9		mg/kg dry	0.455	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		18.9		mg/kg dry	2.28	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		16900		mg/kg dry	28.5	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		6.24		mg/kg dry	0.569	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium		14700		mg/kg dry	5.69	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese		1760		mg/kg dry	0.569	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel		21.5		mg/kg dry	1.14	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium		3240		mg/kg dry	5.69	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium		ND		mg/kg dry	2.85	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:48 EP,PADEP	KML
7440-22-4	Silver		ND		mg/kg dry	0.569	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:48 EP,PADEP	KML

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Client Sample ID: SB009 (6-8) **York Sample ID:** 19E0591-25

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:10 am Date Received 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-	in.	No	tes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	Sodium		267		mg/kg dry	56.9	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		mg/kg dry	2.85	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,NE	LAC-NY10854,NJDE	P,PADEP	
7440-62-2	Vanadium		28.0		mg/kg dry	1.14	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc		474		mg/kg dry	2.85	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:48	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

	CAS No	0.	Parameter	Result	Flag	Units	Reported LOQ	Reported to LOQ Dilution		Method Prepared		Date/Time Analyzed	Analyst
7439	9-97-6	Mercury		ND		mg/kg dry	0.0342	1	EPA 7473		05/22/2019 14:45	05/22/2019 22:10	SY
									Certifications:	CTDOH,NJ	DEP,NELAC-NY1085	4,PADEP	

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

	CAS No.	Parameter	Result	Flag	Units	Reported LOQ	o Diluti	on Reference	e Method	Prepared	Analyzed	Analyst
sol	ids * % Solic	ls	87.8		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB009 (2-4)

Client Project ID

York Sample ID:

19E0591-26

York Project (SDG) No. 19E0591

LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	lethod	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications: C		05/16/2019 07:30 AC-NY10854,NELA	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS PADEP
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications: C		05/16/2019 07:30 AC-NY10854,NELA	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications: C		05/16/2019 07:30 AC-NY10854,NELA	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS Padep

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Client Sample ID: SB009 (2-4)

York Sample ID: 19E0591-26

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		Date/Time Prepared	Date/Time Analyzed	Analyst
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30 C-NY10854,NEI	05/16/2019 18:25 AC-NY12058,NJDEP	RDS
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30 C-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEP	RDS PADEP
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30 C-NY10854,NEI	05/16/2019 18:25 AC-NY12058,NJDEP	RDS PADEP
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30 C-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS PADEP
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30 54,NELAC-NY1	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30 54,NELAC-NY1	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05 NELAC-NY108	/16/2019 07:30 54,NELAC-NY1	05/16/2019 18:25 2058,NJDEP	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30 54,NELAC-NY1	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30 C-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 AC-NY12058,NJDEP	RDS
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 AC-NY12058,NJDEP,	RDS
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 AC-NY12058,NJDEP	RDS PADEP
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.061	0.12	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30	05/16/2019 18:25	RDS
78-93-3	2-Butanone	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 AC-NY12058,NJDEP	RDS PADEP
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	05.	/16/2019 07:30	05/16/2019 18:25 .AC-NY12058,NJDEP	RDS
591-78-6	2-Hexanone	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		/16/2019 07:30	05/16/2019 18:25	RDS

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Client Sample ID: SB009 (2-4) **York Sample ID:** 19E0591-26

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
67-64-1	Acetone	ND		mg/kg dry	0.0061	0.012	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
107-02-8	Acrolein	ND		mg/kg dry	0.0061	0.012	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
71-43-2	Benzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
108-86-1	Bromobenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
75-25-2	Bromoform	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
74-83-9	Bromomethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
75-00-3	Chloroethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
67-66-3	Chloroform	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
74-87-3	Chloromethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
110-82-7	Cyclohexane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 18:25	RDS
74-95-3	Dibromomethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:		05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 18:25	RDS
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C		05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 18:25	RDS
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Client Sample ID: SB009 (2-4)

York Sample ID: 19E0591-26

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 710854,NELAC-NY1	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
79-20-9	Methyl acetate	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 710854,NELAC-NY1	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 710854,NELAC-NY1	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
75-09-2	Methylene chloride	0.0068	J	mg/kg dry	0.0061	0.012	1	EPA 8260C		05/16/2019 07:30	05/16/2019 18:25	RDS
								Certifications:	CTDOH,NI	ELAC-NY10854,NEI	LAC-NY12058,NJDE	P,PADEP
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
95-47-6	o-Xylene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,PADEF	RDS
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0061	0.012	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,PADEF	RDS
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
100-42-5	Styrene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0031	0.031	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 710854,NELAC-NY1	05/16/2019 18:25 2058,NJDEP,PADEP	RDS
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
108-88-3	Toluene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:25 AC-NY12058,NJDEF	RDS P,PADEP
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 18:25 2058,NJDEP,PADEP	RDS



Client Sample ID: SB009 (2-4)

York Sample ID: 19E0591-26

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

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Sample Notes:

CAS N	Vo. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0031	0.0061	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 18:25 AC-NY12058,NJDEP	RDS PADEP
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0092	0.018	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 18:25 AC-NY12058,NJDEP	RDS
	Surrogate Recoveries	Result	Acceptance Range			e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	104 %			77-125							
2037-26-5	Surrogate: SURR: Toluene-d8	104 %			85-120							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	102 %			76-130							

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepa CAS N	ared by Method: EPA 3550C No. Parameter	Result	Flag	Units	Reported to	LOO	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND	8	mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 00:15	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0967	0.193	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 00:15	SR
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 00:15 P,PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/22/2019 00:15	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 00:15	SR
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/22/2019 00:15	SR
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/22/2019 00:15	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0967	0.193	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/22/2019 00:15	SR
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 00:15 P,PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 00:15 P,PADEP	SR
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 00:15 P,PADEP	SR
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 00:15 P,PADEP	SR
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0967	0.193	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 00:15 P,PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 00:15 P,PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDEI	05/22/2019 00:15 P,PADEP	SR

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Client Sample ID: SB009 (2-4)

York Sample ID: 19E0591-26

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3550C											
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0967	0.193	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADE	05/22/2019 00:15 P	SR
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0967	0.193	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0967	0.193	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0967	0.193	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0967	0.193	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
83-32-9	Acenaphthene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 00:15 EP,PADEP	SR
208-96-8	Acenaphthylene	0.0727	J	mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH.N	05/21/2019 08:26 NELAC-NY10854,NJD	05/22/2019 00:15 EP.PADEP	SR
98-86-2	Acetophenone	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:		05/21/2019 08:26 Y10854,NJDEP,PADE	05/22/2019 00:15	SR
62-53-3	Aniline	ND		mg/kg dry	0.194	0.387	2	EPA 8270D Certifications:		05/21/2019 08:26 Y10854,NJDEP,PADE	05/22/2019 00:15	SR
120-12-7	Anthracene	0.144		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:		05/21/2019 08:26	05/22/2019 00:15	SR
1912-24-9	Atrazine	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D		05/21/2019 08:26	05/22/2019 00:15	SR
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0485	0.0967	2	Certifications:		Y10854,NJDEP,PADE 05/21/2019 08:26	05/22/2019 00:15	SR
								Certifications:	NELAC-N	Y10854,NJDEP,PADE	r	



Client Sample ID: SB009 (2-4)

York Sample ID: 19E0591-26

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Frepare	d by Method: EPA 3550C				Reported to				Date/Time	Date/Time	
CAS No	o. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference Met		Analyzed	Analyst
92-87-5	Benzidine	ND		mg/kg dry	0.194	0.387	2	EPA 8270D Certifications: CTE	05/21/2019 08:26 OH,NELAC-NY10854,PAD	05/22/2019 00:15 EP	SR
56-55-3	Benzo(a)anthracene	0.897		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26	05/22/2019 00:15	SR
								Certifications: CTI	OOH,NELAC-NY10854,NJI	DEP,PADEP	
50-32-8	Benzo(a)pyrene	1.04		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26	05/22/2019 00:15	SR
								Certifications: CTI	OOH,NELAC-NY10854,NJI	DEP,PADEP	
205-99-2	Benzo(b)fluoranthene	0.726		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26	05/22/2019 00:15	SR
									OOH,NELAC-NY10854,NJI		
91-24-2	Benzo(g,h,i)perylene	0.581		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26	05/22/2019 00:15	SR
									OOH,NELAC-NY10854,NJI		
207-08-9	Benzo(k)fluoranthene	0.712		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26	05/22/2019 00:15	SR
									OOH,NELAC-NY10854,NJI		
65-85-0	Benzoic acid	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications: NEL	05/21/2019 08:26 AC-NY10854,NJDEP,PADE	05/22/2019 00:15 P	SR
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications: NEL	05/21/2019 08:26 AC-NY10854,NJDEP,PADE	05/22/2019 00:15 P	SR
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications: CTE	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15 EP,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications: CTE	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15 EP,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications: CTE	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15 EP,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications: CTD	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15 EPPADEP	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15	SR
105-60-2	Caprolactam	ND		mg/kg dry	0.0967	0.193	2	EPA 8270D	05/21/2019 08:26 AC-NY10854,NJDEP,PADE	05/22/2019 00:15	SR
86-74-8	Carbazole	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15	SR
218-01-9	Chrysene	0.833		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26	05/22/2019 00:15	SR
210-01-7	Chi ysene	0.633		ilig/kg di y	0.0483	0.0907	2		OOH,NELAC-NY10854,NJI		SK
53-70-3	Dibenzo(a,h)anthracene	0.176		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26	05/22/2019 00:15	SR
		017. 0		0 0 7	*******		_		OOH,NELAC-NY10854,NJI	DEP,PADEP	
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications: CTE	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15 EP,PADEP	SR
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15	SR
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15	SR
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications: CTE	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15 EP,PADEP	SR
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications: CTE	05/21/2019 08:26 OH,NELAC-NY10854,NJD	05/22/2019 00:15 EP,PADEP	SR
206-44-0	Fluoranthene	1.30		mg/kg dry	0.0485	0.0967	2	EPA 8270D	05/21/2019 08:26	05/22/2019 00:15	SR
		•		2 0 7					OOH,NELAC-NY10854,NJI	DEP,PADEP	

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Client Sample ID: SB009 (2-4)

York Sample ID:

19E0591-26

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
86-73-7	Fluorene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADEF	05/22/2019 00:15	SR
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
193-39-5	Indeno(1,2,3-cd)pyrene	0.628		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH N	05/21/2019 08:26 ELAC-NY10854,NJD	05/22/2019 00:15 EPPADEP	SR
78-59-1	Isophorone	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15	SR
91-20-3	Naphthalene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15	SR
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
85-01-8	Phenanthrene	0.447		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJD	05/22/2019 00:15 EP,PADEP	SR
108-95-2	Phenol	ND		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
129-00-0	Pyrene	1.38		mg/kg dry	0.0485	0.0967	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJD	05/22/2019 00:15 EP,PADEP	SR
110-86-1	Pyridine	ND		mg/kg dry	0.194	0.387	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 00:15 EP,PADEP	SR
	Surrogate Recoveries	Result		Accep	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	59.5 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	70.3 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	83.4 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	76.7 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	146 %	S-08		19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	88.2 %			24-116							

Metals, Target Analyte

Log-in Notes:

Sample Notes:

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Client Sample ID: SB009 (2-4) **York Sample ID:** 19E0591-26

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Sample Prepared by Method: EPA 3050B

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference N	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		4740		mg/kg dry	5.84	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	2.92	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:51 ELAC-NY10854,NJDI	05/20/2019 18:50 EP,PADEP	KML
7440-38-2	Arsenic		6.39		mg/kg dry	1.75	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		278		mg/kg dry	2.92	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.282		mg/kg dry	0.058	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		1.21		mg/kg dry	0.350	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		8070		mg/kg dry	5.84	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		10.2		mg/kg dry	0.584	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		8.13		mg/kg dry	0.467	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	, , , , , , , , , , , , , , , , , , ,	
7440-50-8	Copper		244		mg/kg dry	2.33	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
									CTDOH,N	ELAC-NY10854,NJD		
7439-89-6	Iron		10100		mg/kg dry	29.2	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
									CTDOH,N	ELAC-NY10854,NJD		
7439-92-1	Lead		357		mg/kg dry	0.584	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
									CTDOH,N	ELAC-NY10854,NJD		
7439-95-4	Magnesium		1370		mg/kg dry	5.84	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
									CTDOH,N	ELAC-NY10854,NJD		
7439-96-5	Manganese		145		mg/kg dry	0.584	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
									CTDOH,N	ELAC-NY10854,NJD		
7440-02-0	Nickel		15.3		mg/kg dry	1.17	1	EPA 6010D	CTDOUN	05/20/2019 14:51	05/20/2019 18:50	KML
	D .								CIDOH,N	ELAC-NY10854,NJD		***
7440-09-7	Potassium		560		mg/kg dry	5.84	1	EPA 6010D	CTDOUN	05/20/2019 14:51	05/20/2019 18:50	KML
						2.02			CIDOH,N	ELAC-NY10854,NJD		
7782-49-2	Selenium		ND		mg/kg dry	2.92	1	EPA 6010D Certifications:	CTDOH NI	05/20/2019 14:51 ELAC-NY10854,NJDF	05/20/2019 18:50 EP PADEP	KML
7440-22-4	Cilvon		ND		ma/ka dry	0.584	1	EPA 6010D	012011,111	05/20/2019 14:51	05/20/2019 18:50	KML
7440-22-4	Silver		ND		mg/kg dry	0.384	1		CTDOH,NI	ELAC-NY10854,NJDI		KWIL
7440-23-5	Sodium		217		mg/kg dry	58.4	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		mg/kg dry	2.92	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
					/				CTDOH,NI	ELAC-NY10854,NJDI		
7440-62-2	Vanadium		22.8		mg/kg dry	1.17	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc		385		mg/kg dry	2.92	1	EPA 6010D		05/20/2019 14:51	05/20/2019 18:50	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	



Client Sample ID: SB009 (2-4)

York Sample ID: 19E0591-26

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:00 am Date Received 05/13/2019

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS N	lo.	Parameter	Result	Flag	Units	Reported LOQ	o Diluti o	on Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.347		mg/kg dry	0.0350	1	EPA 7473		05/22/2019 14:45	05/22/2019 22:18	SY
								Certifications:	CTDOH,N	JDEP,NELAC-NY108	54,PADEP	

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CA	S No.	Parameter	Result	Flag	Units	Reported LOQ	to Dilution	Reference Me	ethod	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		85.7		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications: C'	TDOH			

Sample Information

Client Sample ID: SB009 (8-10)

York Sample ID:

19E0591-27

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:05 am <u>Date Received</u> 05/13/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 5035A											
CAS No	o. 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		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	CTDOH,NE	05/17/2019 07:30 LAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEP,	SS PADEP
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	CTDOH,NE	05/17/2019 07:30 LAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEP,	SS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	CTDOH,NE	05/17/2019 07:30 LAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEP,	SS PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	CTDOH,NE	05/17/2019 07:30 LAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEP	SS
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	CTDOH,NE	05/17/2019 07:30 LAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEP,	SS PADEP
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	CTDOH,NE	05/17/2019 07:30 LAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEP,	SS PADEP
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	CTDOH,NE	05/17/2019 07:30 LAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEP,	SS PADEP
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	NELAC-NY	05/17/2019 07:30 10854,NELAC-NY12	05/17/2019 12:57 2058,NJDEP,PADEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	NELAC-NY	05/17/2019 07:30 10854,NELAC-NY12	05/17/2019 12:57 2058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	NELAC-NY	05/17/2019 07:30 10854,NELAC-NY12	05/17/2019 12:57 2058,NJDEP	SS

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Client Sample ID: SB009 (8-10)

York Sample ID: 19E0591-27

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:05 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:

Sample Notes:

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		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	NELAC-NY	05/17/2019 07:30 10854,NELAC-NY1	05/17/2019 12:57 2058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	CTDOH,NE	05/17/2019 07:30 LAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEI	SS P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	CTDOH,NE	05/17/2019 07:30 LAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEI	SS P,PADEP
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30 (10854,NELAC-NY1	05/17/2019 12:57	SS
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
123-91-1	1,4-Dioxane	ND		mg/kg dry	4.3	8.6	100	EPA 8260C Certifications:		05/17/2019 07:30 (10854,NELAC-NY1	05/17/2019 12:57	SS
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30 (10854,NELAC-NY1	05/17/2019 12:57	SS
78-93-3	2-Butanone	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
591-78-6	2-Hexanone	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
67-64-1	Acetone	ND		mg/kg dry	0.43	0.86	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57 AC-NY12058,NJDEI	SS
107-02-8	Acrolein	ND		mg/kg dry	0.43	0.86	100	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 12:57	SS
107-13-1	Acrylonitrile	ND		mg/kg dry	0.21	0.43	100	EPA 8260C		05/17/2019 07:30	AC-NY12058,NJDEI 05/17/2019 12:57 AC-NY12058 NJDEI	SS
71-43-2	Benzene	ND		mg/kg dry	0.21	0.43	100	Certifications: EPA 8260C		05/17/2019 07:30	05/17/2019 12:57	SS
108-86-1	Bromobenzene	ND		mg/kg dry	0.21	0.43	100	Certifications:		05/17/2019 07:30	05/17/2019 12:57	P,PADEP SS
								Certifications:	NELAC-NY	'10854,NELAC-NY1	2058,NJDEP,PADEP	



Client Sample ID: SB009 (8-10)

York Sample ID: 19E0591-27

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:05 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

<u>Log-in Notes:</u> <u>S</u>	ample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/T Method Prep		Date/Time Analyzed	Analyst
74-97-5	Bromochloromethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 NELAC-NY10854,NELA		05/17/2019 12:57 2058,NJDEP,PADEP	SS
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 CTDOH,NELAC-NY108		05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
75-25-2	Bromoform	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 CTDOH,NELAC-NY108		05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
74-83-9	Bromomethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 CTDOH,NELAC-NY108		05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
75-15-0	Carbon disulfide	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 CTDOH,NELAC-NY108		05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 CTDOH,NELAC-NY108		05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
108-90-7	Chlorobenzene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 CTDOH,NELAC-NY108		05/17/2019 12:57 AC-NY12058,NJDEF	SS P.PADEP
75-00-3	Chloroethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 CTDOH,NELAC-NY108	9 07:30	05/17/2019 12:57	SS
67-66-3	Chloroform	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 CTDOH,NELAC-NY108	9 07:30	05/17/2019 12:57	SS
74-87-3	Chloromethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 CTDOH,NELAC-NY108	9 07:30	05/17/2019 12:57	SS
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 CTDOH,NELAC-NY108	9 07:30	05/17/2019 12:57	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 CTDOH,NELAC-NY108	9 07:30	05/17/2019 12:57	SS
110-82-7	Cyclohexane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 NELAC-NY10854,NELA	9 07:30	05/17/2019 12:57	SS
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019	9 07:30	05/17/2019 12:57	SS
74-95-3	Dibromomethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019	9 07:30	05/17/2019 12:57	SS
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019	9 07:30	05/17/2019 12:57	SS
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019	9 07:30	05/17/2019 12:57	SS
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019	9 07:30	05/17/2019 12:57	P,PADEP SS
98-82-8	Isopropylbenzene	0.24	J	mg/kg dry	0.21	0.43	100	Certifications: EPA 8260C	NELAC-NY10854,NELA 05/17/2019		05/17/2019 12:57	SS
70 02 0		0.24	,	mg ng ur y	0.21	0.45	100	Certifications:	CTDOH,NELAC-NY10			
79-20-9	Methyl acetate	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 NELAC-NY10854,NELA		05/17/2019 12:57 2058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 CTDOH,NELAC-NY108		05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 NELAC-NY10854,NELA	9 07:30	05/17/2019 12:57	SS
75-09-2	Methylene chloride	ND		mg/kg dry	0.43	0.86	100	EPA 8260C	05/17/2019 CTDOH,NELAC-NY108	9 07:30	05/17/2019 12:57	SS P,PADEP

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Client Sample ID: SB009 (8-10)

York Sample ID:

19E0591-27

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:05 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

<u>Log-in Notes:</u>	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time Method Prepared	Date/Time Analyzed	Analyst
104-51-8	n-Butylbenzene	0.63		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 07:30	05/17/2019 12:57	SS
								Certifications:	CTDOH,NELAC-NY10854,NE	LAC-NY12058,NJDE	P,PADEP
103-65-1	n-Propylbenzene	0.39	J	mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 07:30	05/17/2019 12:57	SS
								Certifications:	CTDOH,NELAC-NY10854,NE		
95-47-6	o-Xylene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,PADEI	SS
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.43	0.86	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,PADEI	SS
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
135-98-8	sec-Butylbenzene	1.5		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 07:30	05/17/2019 12:57	SS
								Certifications:	CTDOH,NELAC-NY10854,NE	LAC-NY12058,NJDE	P,PADEP
100-42-5	Styrene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.21	2.1	100	EPA 8260C Certifications:	05/17/2019 07:30 NELAC-NY10854,NELAC-NY1	05/17/2019 12:57 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	0.40	J	mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 07:30	05/17/2019 12:57	SS
								Certifications:	CTDOH,NELAC-NY10854,NE	LAC-NY12058,NJDE	P,PADEP
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
108-88-3	Toluene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 .AC-NY12058,NJDEF	SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEF	SS P.PADEP
79-01-6	Trichloroethylene	ND		mg/kg dry	0.21	0.43	100	EPA 8260C	05/17/2019 07:30	05/17/2019 12:57	SS
								Certifications:	CTDOH,NELAC-NY10854,NEL	AC-NY12058,NJDEF	P,PADEP
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
108-05-4	Vinyl acetate	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 NELAC-NY10854,NELAC-NY1	05/17/2019 12:57 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.21	0.43	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEF	SS P,PADEP
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.64	1.3	100	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 12:57 AC-NY12058,NJDEF	SS
	Surrogate Recoveries	Result		Acce	ptance Rang	e					
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	89.4 %			77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	98.3 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	154 %	S-09		76-130						

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

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Client Sample ID: SB009 (8-10)

York Sample ID: 19E0591-27

 York Project (SDG) No.
 Client Project ID
 Matrix

 19E0591
 LST 1802
 Soil

Collection Date/Time
May 10, 2019 8:05 am

Date Received 05/13/2019

Sample Prepared by Method: EPA 3550C

CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 / 10854,NJDEP,PADEP	05/23/2019 02:53	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.480	0.960	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADEP	05/23/2019 02:53	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	КН
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,PADEP	05/23/2019 02:53	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 (10854,NJDEP,PADEP	05/23/2019 02:53	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,PADEP	05/23/2019 02:53	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 (10854,PADEP	05/23/2019 02:53	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.480	0.960	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 // 10854,NJDEP,PADEP	05/23/2019 02:53	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	КН
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.480	0.960	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	КН
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	КН
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.480	0.960	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53 P,PADEP	КН
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:		05/21/2019 08:26 / 10854,NJDEP,PADEP	05/23/2019 02:53	КН
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.480	0.960	10	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 02:53	KH



Client Sample ID: SB009 (8-10)

York Sample ID: 19E0591-27

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 8:05 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

	ed by Method: EPA 3550C							\ <u></u>				
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.480	0.960	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	КН
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	КН
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.480	0.960	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.480	0.960	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/23/2019 02:53	KH
62-53-3	Aniline	ND		mg/kg dry	0.962	1.92	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/23/2019 02:53	KH
120-12-7	Anthracene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/23/2019 02:53	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/23/2019 02:53	KH
92-87-5	Benzidine	ND		mg/kg dry	0.962	1.92	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,PAE	05/23/2019 02:53 EP	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53 EP,PADEP	KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/23/2019 02:53	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/23/2019 02:53 EP	KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:		05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 02:53	КН



Client Sample ID: SB009 (8-10)

York Sample ID: 19E0591-27

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 8:05 am05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time Prepared	Date/Time Analyzed	Analyst
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.480	0.960	10	EPA 8270D Certifications:	/21/2019 08:26 54,NJDEP,PADE	05/23/2019 02:53 P	KH
86-74-8	Carbazole	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
218-01-9	Chrysene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
132-64-9	Dibenzofuran	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
206-44-0	Fluoranthene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
86-73-7	Fluorene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 54,NJDEP,PADE	05/23/2019 02:53 P	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
78-59-1	Isophorone	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
91-20-3	Naphthalene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН
98-95-3	Nitrobenzene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	/21/2019 08:26 C-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	КН



Client Sample ID: SB009 (8-10)

York Sample ID: 19E0591-27

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 8:05 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
108-95-2	Phenol	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
129-00-0	Pyrene	ND		mg/kg dry	0.241	0.480	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
110-86-1	Pyridine	ND		mg/kg dry	0.962	1.92	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 02:53 EP,PADEP	KH
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	77.2 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	76.4 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	197 %	S-01		22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	72.0 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	73.6 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	72.8 %			24-116							

Metals, Target Analyte

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		17900		mg/kg dry	5.82	1	EPA 6010D Certifications:	CTDOH.N	05/20/2019 14:50 ELAC-NY10854,NJD	05/20/2019 20:35 EP.PADEP	KML
7440-36-0	Antimony		ND		mg/kg dry	2.91	1	EPA 6010D Certifications:	ŕ	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:35	KML
7440-38-2	Arsenic		2.37		mg/kg dry	1.75	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		166		mg/kg dry	2.91	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		ND		mg/kg dry	0.058	1	EPA 6010D Certifications:	CTDOH,NI	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:35 EP,PADEP	KML
7440-43-9	Cadmium		0.426		mg/kg dry	0.349	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium		12400		mg/kg dry	5.82	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: SB009 (8-10)

York Sample ID:

19E0591-27

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:05 am

Sample Notes:

Date Received 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Prepa	ared by Method: EPA	3050B										
CAS I	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference !	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium		26.5		mg/kg dry	0.582	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		20.9		mg/kg dry	0.465	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		44.2		mg/kg dry	2.33	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		29700		mg/kg dry	29.1	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		77.8		mg/kg dry	0.582	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium		15100		mg/kg dry	5.82	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese		226		mg/kg dry	0.582	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel		39.6		mg/kg dry	1.16	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium		8920		mg/kg dry	5.82	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium		ND		mg/kg dry	2.91	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-22-4	Silver		ND		mg/kg dry	0.582	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
									CTDOH,N	ELAC-NY10854,NJDI		
7440-23-5	Sodium		801		mg/kg dry	58.2	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		mg/kg dry	2.91	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:35	KML

Mercury by 7473

7440-62-2

7440-66-6

Sample Prepared by Method: EPA 7473 soil

Vanadium

Zinc

Log-in	Notes:

1.16

2.91

Sample Notes:

CTDOH,NELAC-NY10854,NJDEP,PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

05/20/2019 14:50 05/20/2019 20:35

KML

KML

Certifications:

EPA 6010D

Certifications:

EPA 6010D

Certifications

CAS N	No.	Parameter	Result	Flag	Units	Reported LOQ	to Dilut	ion Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.243		mg/kg dry	0.0349	1	EPA 7473		05/22/2019 14:45	05/22/2019 22:27	SY
								Certifications:	CTDOH,N	CTDOH,NJDEP,NELAC-NY10854,PADEP		

mg/kg dry

mg/kg dry

Total Solids

Log-in Notes:

Sample Notes:

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

Sample Prepared by Method: % Solids Prep

46.3

104



Client Sample ID: SB009 (8-10)

<u>York Sample ID:</u> 19E0591-27

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 8:05 am Date Received 05/13/2019

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS	No.	Parameter	Result	Flag	Units	Reported t LOQ	O Dilution	Reference Meth	Date/Time od Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		85.9		%	0.100	1	SM 2540G	05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications: CTD	ЭH		

Sample Information

Client Sample ID: SB010 (0-2)

York Sample ID:

19E0591-28

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 1:45 pm

Date Received 05/13/2019

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Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

6.63	N .	D 1		** **	Reported to			D. 6		Date/Time	Date/Time	
CAS N	No. Parameter	Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference	Method	Prepared	Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 03:22	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	2.57	5.14	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 03:22	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/23/2019 03:22	КН
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 03:22	КН
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/23/2019 03:22	КН
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/23/2019 03:22	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	2.57	5.14	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 03:22	КН
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	2.57	5.14	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН



Client Sample ID: SB010 (0-2)

York Sample ID: 19E0591-28

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 1:45 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		КН
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
95-48-7	2-Methylphenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	2.57	5.14	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD		KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	2.57	5.14	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	2.57	5.14	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		КН
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		КН
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	2.57	5.14	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	2.57	5.14	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI	05/23/2019 03:22 DEP,PADEP	KH
83-32-9	Acenaphthene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
208-96-8	Acenaphthylene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI		KH
98-86-2	Acetophenone	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD	05/23/2019 03:22	KH
62-53-3	Aniline	ND		mg/kg dry	5.15	10.3	10	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD	05/23/2019 03:22	KH
120-12-7	Anthracene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJI	05/23/2019 03:22	КН
1912-24-9	Atrazine	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD	05/23/2019 03:22	КН
									,		



Client Sample ID: SB010 (0-2)

York Sample ID: 19E0591-28

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 1:45 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

	ed by Method: EPA 3550C											
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-52-7	Benzaldehyde	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 03:22	KH
92-87-5	Benzidine	ND		mg/kg dry	5.15	10.3	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,PADE	05/23/2019 03:22 PP	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
65-85-0	Benzoic acid	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 03:22	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 03:22	KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН
105-60-2	Caprolactam	ND		mg/kg dry	2.57	5.14	10	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 03:22	KH
86-74-8	Carbazole	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН
218-01-9	Chrysene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 P,PADEP	КН



Client Sample ID: SB010 (0-2)

York Sample ID:

19E0591-28

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 1:45 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
206-44-0	Fluoranthene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 03:22 EP,PADEP	КН
86-73-7	Fluorene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 710854,NJDEP,PADE	05/23/2019 03:22 P	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	КН
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	КН
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 EP,PADEP	КН
67-72-1	Hexachloroethane	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	КН
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 EP,PADEP	KH
78-59-1	Isophorone	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	КН
91-20-3	Naphthalene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 EP,PADEP	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	КН
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	КН
85-01-8	Phenanthrene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 EP,PADEP	КН
108-95-2	Phenol	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:22 EP,PADEP	КН
129-00-0	Pyrene	ND		mg/kg dry	1.29	2.57	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 EP,PADEP	КН
110-86-1	Pyridine	ND		mg/kg dry	5.15	10.3	10	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:22 EP,PADEP	КН
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	66.0 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	66.0 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	82.0 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	66.0 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	68.0 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	70.0 %			24-116							

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Client Sample ID: SB010 (0-2)

York Sample ID:

19E0591-28

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 1:45 pm

Date Received 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:	Sample Notes
Lug-III Mutes.	Sample Notes

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	3580		mg/kg dry	6.23	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony	ND		mg/kg dry	3.12	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:50 LAC-NY10854,NJDE	05/20/2019 20:38 EP,PADEP	KML
7440-38-2	Arsenic	3.89		mg/kg dry	1.87	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium	32.9		mg/kg dry	3.12	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium	0.062	В	mg/kg dry	0.062	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium	0.424		mg/kg dry	0.374	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-70-2	Calcium	73600		mg/kg dry	6.23	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium	11.1		mg/kg dry	0.623	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt	4.43		mg/kg dry	0.499	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper	21.2		mg/kg dry	2.49	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron	10900		mg/kg dry	31.2	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead	62.4		mg/kg dry	0.623	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium	39200		mg/kg dry	6.23	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	240		mg/kg dry	0.623	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	9.45		mg/kg dry	1.25	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	847		mg/kg dry	6.23	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	18.8		mg/kg dry	3.12	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-22-4	Silver	ND		mg/kg dry	0.623	1	EPA 6010D	OTT OU VE	05/20/2019 14:50	05/20/2019 20:38	KML
5440.00.5	6.11							CTDOH,NE	LAC-NY10854,NJDE		
7440-23-5	Sodium	156		mg/kg dry	62.3	1	EPA 6010D	CTDOH NII	05/20/2019 14:50	05/20/2019 20:38 EDDADED	KML
7440 0°°°	THE W				2.12			CIDOR,NI	ELAC-NY10854,NJD		***
7440-28-0	Thallium	ND		mg/kg dry	3.12	1	EPA 6010D Certifications: 0	CTDOH NE	05/20/2019 14:50 LAC-NY10854,NJDE	05/20/2019 20:38 P.PADEP	KML
7440-62-2	Vanadium	14.7		mg/kg dry	1.25	1	EPA 6010D	,-,-	05/20/2019 14:50	05/20/2019 20:38	KML
		17./		g. n.g un j	1.23	1		CTDOH.NE	ELAC-NY10854,NJD		11
										,	



Client Sample ID: SB010 (0-2)

York Sample ID:

19E0591-28

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 1:45 pm

Date Received 05/13/2019

19E0591-29

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	0.	Parameter	Result	Flag	Units		orted to OQ	o Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	Zinc		72.7		mg/kg dry	3.	12	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:38	KML
									Certifications:	CTDOH N	ELAC-NY10854 NID	EPPADEP	

Mercury by 7473

Log-in Notes:

Log-in Notes:

Sample Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS N	CAS No. Parameter		Result	Flag	Units	Reported to		Dilution Reference		Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.216		mg/kg dry	0.0374	1	EPA 7473		05/22/2019 14:45	05/22/2019 22:36	SY
						Certifications: CTD0			CTDOH,N	JDEP,NELAC-NY108	54,PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

CAS	CAS No. Parameter		Result	Flag	Units	Reported LOQ	Reported to LOQ Dilution		Reference Method		Date/Time Analyzed	Analyst
solids	* % Solids		80.2		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB010 (6-8)

York Sample ID:

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 1:50 pm05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample I	Prepared	by	Method:	EPA	3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADEP	05/23/2019 03:51	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.109	0.218	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADEP	05/23/2019 03:51	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEI	05/23/2019 03:51 P,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,PADEP	05/23/2019 03:51	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADEP	05/23/2019 03:51	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,PADEP	05/23/2019 03:51	КН

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ClientServices@ Page 193 of 446



Client Sample ID: SB010 (6-8)

York Sample ID: 19E0591-29

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 1:50 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result F	lag Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,PADEP	05/23/2019 03:51	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg/kg dry	0.109	0.218	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADEI	05/23/2019 03:51	КН
95-95-4	2,4,5-Trichlorophenol	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
88-06-2	2,4,6-Trichlorophenol	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
120-83-2	2,4-Dichlorophenol	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
105-67-9	2,4-Dimethylphenol	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
51-28-5	2,4-Dinitrophenol	ND	mg/kg dr	0.109	0.218	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
121-14-2	2,4-Dinitrotoluene	ND	mg/kg dr	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
606-20-2	2,6-Dinitrotoluene	ND	mg/kg dr	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
91-58-7	2-Chloronaphthalene	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
95-57-8	2-Chlorophenol	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
91-57-6	2-Methylnaphthalene	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
95-48-7	2-Methylphenol	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
88-74-4	2-Nitroaniline	ND	mg/kg dry	0.109	0.218	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
88-75-5	2-Nitrophenol	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
65794-96-9	3- & 4-Methylphenols	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
91-94-1	3,3-Dichlorobenzidine	ND	mg/kg dr	0.0546	0.109	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADEI	05/23/2019 03:51	КН
99-09-2	3-Nitroaniline	ND	mg/kg dry	0.109	0.218	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
534-52-1	4,6-Dinitro-2-methylphenol	ND	mg/kg dr	0.109	0.218	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
101-55-3	4-Bromophenyl phenyl ether	ND	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
59-50-7	4-Chloro-3-methylphenol	ND	mg/kg dr	0.0546	0.109	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51	КН
106-47-8	4-Chloroaniline	ND	mg/kg dr	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
7005-72-3	4-Chlorophenyl phenyl ether	ND	mg/kg dr	0.0546	0.109	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51	КН
101-55-3 59-50-7 106-47-8	4-Bromophenyl phenyl ether 4-Chloro-3-methylphenol 4-Chloroaniline	ND ND ND	mg/kg dr mg/kg dr mg/kg dr	7 0.0546 7 0.0546 7 0.0546	0.109 0.109 0.109	2 2 2	EPA 8270D Certifications: EPA 8270D Certifications: EPA 8270D Certifications: EPA 8270D Certifications: EPA 8270D	CTDOH,NE CTDOH,NE CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE 05/21/2019 08:26 ELAC-NY10854,NJDE 05/21/2019 08:26 ELAC-NY10854,NJDE 05/21/2019 08:26 ELAC-NY10854,NJDE 05/21/2019 08:26	05/23/2019 03:51 EP,PADEP 05/23/2019 03:51 EP,PADEP 05/23/2019 03:51 EP,PADEP 05/23/2019 03:51 EP,PADEP 05/23/2019 03:51	



Client Sample ID: SB010 (6-8)

York Sample ID: 19E0591-29

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 1:50 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.109	0.218	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJ		КН
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.109	0.218	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJ		KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJ		KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJ		KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD		KH
62-53-3	Aniline	ND		mg/kg dry	0.218	0.437	2	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD		КН
120-12-7	Anthracene	0.0819	J	mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,N		KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD	05/23/2019 03:51	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD		КН
92-87-5	Benzidine	ND		mg/kg dry	0.218	0.437	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,PA		KH
56-55-3	Benzo(a)anthracene	0.252		mg/kg dry	0.0546	0.109	2	EPA 8270D	05/21/2019 08:26	05/23/2019 03:51	KH
50.00.0	D ()							Certifications:	CTDOH,NELAC-NY10854,N		
50-32-8	Benzo(a)pyrene	0.281		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,N		KH
205-99-2	Benzo(b)fluoranthene	0.219		mg/kg dry	0.0546	0.109	2	EPA 8270D	05/21/2019 08:26		KH
								Certifications:	CTDOH,NELAC-NY10854,N	DEP,PADEP	
191-24-2	Benzo(g,h,i)perylene	0.196		mg/kg dry	0.0546	0.109	2	EPA 8270D	05/21/2019 08:26	05/23/2019 03:51	KH
								Certifications:	CTDOH,NELAC-NY10854,N	DEP,PADEP	
207-08-9	Benzo(k)fluoranthene	0.186		mg/kg dry	0.0546	0.109	2	EPA 8270D	05/21/2019 08:26		KH
								Certifications:	CTDOH,NELAC-NY10854,N		
65-85-0	Benzoic acid	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD	EP	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD		KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJ		KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJ		KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJ		КН
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJ		КН
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	05/21/2019 08:26 CTDOH,NELAC-NY10854,NJ		KH
105-60-2	Caprolactam	ND		mg/kg dry	0.109	0.218	2	EPA 8270D Certifications:	05/21/2019 08:26 NELAC-NY10854,NJDEP,PAD		KH



Client Sample ID: SB010 (6-8)

York Sample ID: 19E0591-29

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 1:50 pm Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3550C											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	1ethod	Date/Time Prepared	Date/Time Analyzed	Analyst
86-74-8	Carbazole	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	КН
218-01-9	Chrysene	0.227		mg/kg dry	0.0546	0.109	2	EPA 8270D		05/21/2019 08:26	05/23/2019 03:51	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJE	DEP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D		05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51	KH
206-44-0	Fluoranthene	0.459		mg/kg dry	0.0546	0.109	2	EPA 8270D		05/21/2019 08:26	05/23/2019 03:51	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJE	DEP,PADEP	
86-73-7	Fluorene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/23/2019 03:51 P	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH.NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP.PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.217		mg/kg dry	0.0546	0.109	2	EPA 8270D	,	05/21/2019 08:26	05/23/2019 03:51	KH
								Certifications:	CTDOH,NE	ELAC-NY10854,NJE	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	КН
91-20-3	Naphthalene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D		05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D		05/21/2019 08:26 LAC-NY10854,NJD	05/23/2019 03:51	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D		05/21/2019 08:26	05/23/2019 03:51	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0546	0.109	2	EPA 8270D		05/21/2019 08:26	05/23/2019 03:51	КН
85-01-8	Phenanthrene	0.215		mg/kg dry	0.0546	0.100	2	Certifications: CEPA 8270D	. i doh,ne	LAC-NY10854,NJD 05/21/2019 08:26	EP,PADEP 05/23/2019 03:51	KH
02-01-0	1 nenanun ene	0.315		mg/kg ury	0.0546	0.109	2	LIA 02/0D		03/21/2017 00.20	3312312017 03.31	KH

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Client Sample ID: SB010 (6-8) **York Sample ID:**

19E0591-29

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 1:50 pm Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

|--|--|

Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	A
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Sample Notes:

CAS N	Го.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-95-2	Phenol		ND		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 03:51 EP,PADEP	КН
129-00-0	Pyrene		0.383		mg/kg dry	0.0546	0.109	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 03:51 EP,PADEP	КН
110-86-1	Pyridine		ND		mg/kg dry	0.218	0.437	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 03:51 EP,PADEP	КН
		Surrogate Recoveries	Result		Accep	tance Rang	e						

367-12-4	Surrogate: SURR: 2-Fluorophenol	77.8 %	20-108
4165-62-2	Surrogate: SURR: Phenol-d5	79.1 %	23-114
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	82.2 %	22-108
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	74.6 %	21-113
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	74.4 %	19-110
1718-51-0	Surrogate: SURR: Terphenyl-d14	75.1 %	24-116

Metals, Target Analyte

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
429-90-5	Aluminum		5830		mg/kg dry	6.60	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
								Certifications:	CTDOH,N?	ELAC-NY10854,NJD	EP,PADEP	
440-36-0	Antimony		ND		mg/kg dry	3.30	1	EPA 6010D Certifications:	CTDOH,NF	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:40 EP,PADEP	KML
440-38-2	Arsenic		4.18		mg/kg dry	1.98	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
440-39-3	Barium		53.1		mg/kg dry	3.30	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-41-7	Beryllium		ND		mg/kg dry	0.066	1	EPA 6010D Certifications:	CTDOH,NF	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:40 EP,PADEP	KML
440-43-9	Cadmium		ND		mg/kg dry	0.396	1	EPA 6010D Certifications:	CTDOH,NF	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:40 EP,PADEP	KML
440-70-2	Calcium		2900		mg/kg dry	6.60	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
440-47-3	Chromium		12.9		mg/kg dry	0.660	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
440-48-4	Cobalt		8.36		mg/kg dry	0.528	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
440-50-8	Copper		35.0		mg/kg dry	2.64	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
439-89-6	Iron		10600		mg/kg dry	33.0	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
439-92-1	Lead		52.1		mg/kg dry	0.660	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
								Certifications:	CTDOH.N	ELAC-NY10854,NJD	EP.PADEP	

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Client Sample ID: SB010 (6-8)

York Sample ID: 19E0591-29

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 1:50 pm Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS N	To. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference N	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	3060	mg/kg dry	6.60	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	183	mg/kg dry	0.660	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	17.0	mg/kg dry	1.32	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1260	mg/kg dry	6.60	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.30	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	P,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.660	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
	a						CTDOH,NE	LAC-NY10854,NJDE	,	
7440-23-5	Sodium	290	mg/kg dry	66.0	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.30	1	EPA 6010D	OTTO OUL VIE	05/20/2019 14:50	05/20/2019 20:40	KML
							C1DOH,NE	LAC-NY10854,NJDE	,	
7440-62-2	Vanadium	19.1	mg/kg dry	1.32	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	56.3	mg/kg dry	3.30	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:40	KML
						Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in	Notes:

Sample Notes:

CAS N	lo.	Parameter	Result Flag Units		Reported t LOQ	o Dilution	Reference !	Reference Method		Date/Time Analyzed	Analyst	
7439-97-6	Mercury		0.258		mg/kg dry	0.0396	1	EPA 7473		05/22/2019 14:45	05/22/2019 22:45	SY
								Certifications:	CTDOH N	JDEP NELAC-NY108	54 PADEP	

Total Solids

Sample Prepared by Method: % Solids Prep

Notes:

Sample Notes:

CAS No.		Parameter	Result	sult Flag Units		Reported t	Reported to LOQ Dilution		Reference Method		Date/Time Analyzed	Analyst
solids	* % Solids		75.7		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB010 (2-4)			York Sample ID:	19E0591-30
York Project (SDG) No.	Client Project ID	<u>Matrix</u>	Collection Date/Time	Date Received
19E0591	LST 1802	Soil	May 10, 2019 1:30 pm	05/13/2019

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Client Sample ID: SB010 (2-4)

York Sample ID: 19E0591-30

York Project (SDG) No.
19E0591

<u>Client Project ID</u>

LST 1802

<u>Matrix</u>

Soil

Collection Date/Time
May 10, 2019 1:30 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepar	red by Method: EPA 3550C											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	0.551		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NEL AC-N	05/21/2019 08:26 IY10854,NJDEP,PADE	05/22/2019 01:20	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.105	0.210	2	EPA 8270D Certifications:		05/21/2019 08:26 Y10854,NJDEP,PADEF	05/22/2019 01:20	SR
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20	SR
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/22/2019 01:20	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEF	05/22/2019 01:20	SR
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/22/2019 01:20	SR
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/22/2019 01:20	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.105	0.210	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEF	05/22/2019 01:20	SR
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.105	0.210	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
91-57-6	2-Methylnaphthalene	1.14		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 IELAC-NY10854,NJDI	05/22/2019 01:20 EP,PADEP	SR
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.105	0.210	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 P,PADEP	SR
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NEL AC-N	05/21/2019 08:26 Y10854,NJDEP,PADEF	05/22/2019 01:20	SR

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Client Sample ID: SB010 (2-4)

York Sample ID: 19E0591-30

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 1:30 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND	mg/kg dry	0.105	0.210	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 01:20 EP,PADEP	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND	mg/kg dry	0.105	0.210	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 01:20 EP,PADEP	SR
101-55-3	4-Bromophenyl phenyl ether	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 01:20 EP,PADEP	SR
59-50-7	4-Chloro-3-methylphenol	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 01:20 EP,PADEP	SR
106-47-8	4-Chloroaniline	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 01:20 EP,PADEP	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 01:20 EP,PADEP	SR
100-01-6	4-Nitroaniline	ND	mg/kg dry	0.105	0.210	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 01:20 EP,PADEP	SR
100-02-7	4-Nitrophenol	ND	mg/kg dry	0.105	0.210	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDI	05/22/2019 01:20 EP,PADEP	SR
83-32-9	Acenaphthene	3.12	mg/kg dry	0.0526	0.105	2	EPA 8270D		05/21/2019 08:26	05/22/2019 01:20	SR
209.07.9	Aconombéhydono	0.106		0.0524	0.105		Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP 05/22/2019 01:20	CD
208-96-8	Acenaphthylene	0.186	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH.N	05/21/2019 08:26 ELAC-NY10854,NJD		SR
98-86-2	Acetophenone	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:		05/21/2019 08:26 Y10854,NJDEP,PADE	05/22/2019 01:20	SR
62-53-3	Aniline	ND	mg/kg dry	0.210	0.421	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/22/2019 01:20	SR
120-12-7	Anthracene	6.73	mg/kg dry	0.658	1.31	25	EPA 8270D		05/21/2019 08:26	05/23/2019 04:20	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
1912-24-9	Atrazine	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/22/2019 01:20 P	SR
100-52-7	Benzaldehyde	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/22/2019 01:20 P	SR
92-87-5	Benzidine	ND	mg/kg dry	0.210	0.421	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,PAD	05/22/2019 01:20 EP	SR
56-55-3	Benzo(a)anthracene	22.7	mg/kg dry	0.658	1.31	25	EPA 8270D Certifications:	CTDOH N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:20 EPPADEP	KH
50-32-8	Benzo(a)pyrene	23.5	mg/kg dry	0.658	1.31	25	EPA 8270D		05/21/2019 08:26	05/23/2019 04:20	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
205-99-2	Benzo(b)fluoranthene	19.7	mg/kg dry	0.658	1.31	25	EPA 8270D		05/21/2019 08:26	05/23/2019 04:20	KH
101 24 2	D(-1-0		<i>a</i> . 1				Certifications:	CTDOH,N	ELAC-NY10854,NJD		1/11
191-24-2	Benzo(g,h,i)perylene	14.0	mg/kg dry	0.658	1.31	25	EPA 8270D Certifications:	CTDOH,N	03/21/2019 08.26 ELAC-NY10854,NJD	05/23/2019 04:20 EP,PADEP	KH
207-08-9	Benzo(k)fluoranthene	15.2	mg/kg dry	0.658	1.31	25	EPA 8270D	,	05/21/2019 08:26	05/23/2019 04:20	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
65-85-0	Benzoic acid	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/22/2019 01:20 P	SR
100-51-6	Benzyl alcohol	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADE	05/22/2019 01:20 P	SR
120 PES	SEARCH DRIVE	STRATEORD CT 06615			133	2-02 89th A	AVENUE		RICHMOND HII	NY 11418	

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Client Sample ID: SB010 (2-4)

York Sample ID: 19E0591-30

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 1:30 pm Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

<u>Log-in Notes:</u> <u>S</u>	ample Notes:
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CAS No	o. Parameter	Result Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
105-60-2	Caprolactam	ND	mg/kg dry	0.105	0.210	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 // 10854,NJDEP,PADEI	05/22/2019 01:20	SR
86-74-8	Carbazole	1.57	mg/kg dry	0.0526	0.105	2	EPA 8270D		05/21/2019 08:26	05/22/2019 01:20	SR
							Certifications:	CTDOH,N	ELAC-NY10854,NJD		
218-01-9	Chrysene	20.3	mg/kg dry	0.658	1.31	25	EPA 8270D		05/21/2019 08:26	05/23/2019 04:20	KH
	P. (1) (1						Certifications:	CTDOH,N	ELAC-NY10854,NJD		
53-70-3	Dibenzo(a,h)anthracene	3.42	mg/kg dry	0.658	1.31	25	EPA 8270D	CTDOLLN	05/21/2019 08:26	05/23/2019 04:20	KH
122 (4.0	Dihangafunan	2.24	7. 1	0.050/	0.105		Certifications:	CTDOH,N	ELAC-NY10854,NJD		GD.
132-64-9	Dibenzofuran	2.24	mg/kg dry	0.0526	0.105	2	EPA 8270D	CTDOLLN	05/21/2019 08:26	05/22/2019 01:20	SR
04.66.2	B. 4. 4. 4. 4.	1770		0.050/	0.105		Certifications:	CTDOH,N	ELAC-NY10854,NJD		an.
84-66-2	Diethyl phthalate	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
131-11-3	Dimethyl phthalate	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
117-84-0	Di-n-octyl phthalate	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
206-44-0	Fluoranthene	48.2	mg/kg dry	0.658	1.31	25	EPA 8270D		05/21/2019 08:26	05/23/2019 04:20	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	2.42	mg/kg dry	0.0526	0.105	2	EPA 8270D		05/21/2019 08:26	05/22/2019 01:20	SR
							Certifications:	NELAC-N	Y10854,NJDEP,PADE	P	
118-74-1	Hexachlorobenzene	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH.NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP.PADEP	SR
87-68-3	Hexachlorobutadiene	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20	SR
77-47-4	Hexachlorocyclopentadiene	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
67-72-1	Hexachloroethane	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
193-39-5	Indeno(1,2,3-cd)pyrene	16.0	mg/kg dry	0.658	1.31	25	EPA 8270D		05/21/2019 08:26	05/23/2019 04:20	KH
			- 1				Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND	mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
91-20-3	Naphthalene	8.47	mg/kg dry	0.658	1.31	25	EPA 8270D		05/21/2019 08:26	05/23/2019 04:20	KH
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
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Client Sample ID: SB010 (2-4)

York Sample ID: 19E0591-30

York Project (SDG) No. Client Project ID

LST 1802

Matrix Co

Collection Date/Time
May 10, 2019 1:30 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

19E0591

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDH	05/22/2019 01:20 EP,PADEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
85-01-8	Phenanthrene	30.7		mg/kg dry	0.658	1.31	25	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:20 EP,PADEP	КН
108-95-2	Phenol	ND		mg/kg dry	0.0526	0.105	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDF	05/22/2019 01:20 EP,PADEP	SR
129-00-0	Pyrene	40.9		mg/kg dry	0.658	1.31	25	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:20 EP,PADEP	КН
110-86-1	Pyridine	ND		mg/kg dry	0.210	0.421	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/22/2019 01:20 EP,PADEP	SR
	Surrogate Recoveries	Result		Accep	otance Rang	ge						
367-12-4	Surrogate: SURR: 2-Fluorophenol	46.9 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	76.4 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	64.7 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	75.8 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	150 %	S-08		19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	88.2 %			24-116							

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	Jo. Parameter	Result	Flag	Units	Reported to LOQ D	ilution	Reference M	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	5660		mg/kg dry	6.36	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony	ND		mg/kg dry	3.18	1	EPA 6010D Certifications:	CTDOH,NE	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:42 EP,PADEP	KML
7440-38-2	Arsenic	5.33		mg/kg dry	1.91	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium	55.0		mg/kg dry	3.18	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium	0.084	В	mg/kg dry	0.064	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium	2.40		mg/kg dry	0.382	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: SB010 (2-4)

York Sample ID: 19E0591-30

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 1:30 pm Date Received 05/13/2019

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-70-2	Calcium		16900		mg/kg dry	6.36	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		9.77		mg/kg dry	0.636	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		5.11		mg/kg dry	0.509	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper		1430		mg/kg dry	2.54	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron		13500		mg/kg dry	31.8	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead		779		mg/kg dry	0.636	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium		7550		mg/kg dry	6.36	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese		240		mg/kg dry	0.636	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel		19.7		mg/kg dry	1.27	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium		923		mg/kg dry	6.36	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium		ND		mg/kg dry	3.18	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver		ND		mg/kg dry	0.636	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDE		
7440-23-5	Sodium		198		mg/kg dry	63.6	1	EPA 6010D	CERONA	05/20/2019 14:50	05/20/2019 20:42	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD		
7440-28-0	Thallium		ND		mg/kg dry	3.18	1	EPA 6010D Certifications:	CTDOH NI	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:42	KML
7440-62-2	Vanadium		15.4		ma/ka dry	1.27	,	EPA 6010D	C I DOII,IVI	05/20/2019 14:50	05/20/2019 20:42	KML
/ 44 0-02-2	₹ anaulum		15.4		mg/kg dry	1.27	1	Certifications:	CTDOH N	03/20/2019 14.30 ELAC-NY10854,NJD		KIVIL
7440-66-6	Zinc		1420		ma/ka dry	2.10	1	EPA 6010D	210011,14	05/20/2019 14:50	05/20/2019 20:42	KML
/ 11 0-00-0	Ziiiç		1430		mg/kg dry	3.18	1	Certifications:	CTDOH N	03/20/2019 14.30 ELAC-NY10854,NJD		KIVIL
								Cortifications.	CIDOII,N	LL: 10054,NJD	,	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Iethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.315		mg/kg dry	0.0382	1	EPA 7473		05/22/2019 14:45	05/22/2019 22:55	SY
								Certifications: (CTDOH NI	DEPNEL AC-NV108	54 PADEP	

Total Solids <u>Log-in Notes:</u> <u>Sample Notes:</u>

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Client Sample ID: SB010 (2-4)

<u>York Sample ID:</u> 19E0591-30

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 Matrix Soil Collection Date/Time May 10, 2019 1:30 pm Date Received 05/13/2019

Sample Prepared by Method: % Solids Prep

CAS	No.	Parameter	Result	Flag	Units	Reported LOQ	o Dilution	Reference M	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		78.6		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications:	CTDOH			

Sample Information

Client Sample ID: MW001

York Sample ID: 19E0591-31

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water

Collection Date/Time May 10, 2019 7:30 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: N	05/16/2019 07:30 ELAC-NY10854,NELAC-NY1	05/16/2019 14:45 2058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: N	05/16/2019 07:30 ELAC-NY10854,NELAC-NY1	05/16/2019 14:45 2058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: N	05/16/2019 07:30 ELAC-NY10854,NELAC-NY1	05/16/2019 14:45 2058,NJDEP,PADEP	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: N	05/16/2019 07:30 ELAC-NY10854,NELAC-NY1	05/16/2019 14:45 2058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEF	SS P,PADEP

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Client Sample ID: MW001

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 7:30 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes: Sample Notes:

York Sample ID:

19E0591-31

CAS N	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time Date/Time Method Prepared Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications:	05/16/2019 07:30	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
67-64-1	Acetone	1.06	J	ug/L	1.00	2.00	1	EPA 8260C	05/16/2019 07:30	SS
107.02.9	A1-i	ND		wa/I	0.200	2.00	1	Certifications: EPA 8260C	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP, 05/16/2019 07:30	P,PADEP SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,F	
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 05/16/2019 14:45 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,P	SS PADEP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS PADEP
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS

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Client Sample ID: MW001

<u>York Sample ID:</u> 19E0591-31

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 7:30 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u>

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time Method Prepared	Date/Time Analyzed	Analyst
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS P,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS P,PADEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS P,PADEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS P,PADEP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS P,PADEP
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY	05/16/2019 14:45	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY	05/16/2019 14:45	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 14:45	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 14:45	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY	05/16/2019 14:45	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 14:45	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY	05/16/2019 14:45	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 14:45	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS P,PADEP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 14:45	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 14:45	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 14:45	SS



Client Sample ID: MW001

York Sample ID:

19E0591-31

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 7:30 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 14:45 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 14:45 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS P,PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:45 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acce	eptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	99.1 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	98.7 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	110 %			70-130							

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes: EXT-EM

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time Iethod Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: N	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADI	05/28/2019 15:56 EP	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: N	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADI	05/28/2019 15:56 EP	KH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: C	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJE	05/28/2019 15:56 EP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: N	05/16/2019 15:13 NELAC-NY10854,PADEP	05/28/2019 15:56	КН

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Client Sample ID: MW001

York Sample ID: 19E0591-31

York Project (SDG) No. 19E0591

Sample Prepared by Method: EPA 3510C

Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 7:30 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes: EXT-EM

CAS N	o. 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/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 710854,NJDEP,PADEF	05/28/2019 15:56	КН
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 710854,PADEP	05/28/2019 15:56	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 / 10854,PADEP	05/28/2019 15:56	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 / 10854,NJDEP,PADEF	05/28/2019 15:56	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56 P,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	KH
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.86	5.71	1	EPA 8270D	Í	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	KH
91-58-7	2-Chloronaphthalene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	КН
95-57-8	2-Chlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	КН
91-57-6	2-Methylnaphthalene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56 P,PADEP	КН
95-48-7	2-Methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	КН
88-74-4	2-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	КН
88-75-5	2-Nitrophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	КН
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.86	5.71	1	EPA 8270D		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	KH
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	KH
99-09-2	3-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	KH
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	KH
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D		05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 15:56	КН

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Client Sample ID: MW001 **York Sample ID:** 19E0591-31

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 7:30 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepar	red by Method: EPA 3510C											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-47-8	4-Chloroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
100-01-6	4-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		ug/L	5.71	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	KH
98-86-2	Acetophenone	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 15:56 P	КН
52-53-3	Aniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 15:56 P	KH
100-52-7	Benzaldehyde	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 15:56 P	KH
92-87-5	Benzidine	ND		ug/L	5.71	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	KH
65-85-0	Benzoic acid	ND		ug/L	28.6	57.1	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 15:56 P	КН
100-51-6	Benzyl alcohol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 15:56 P	КН
35-68-7	Benzyl butyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.14	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
105-60-2	Caprolactam	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 15:56 P	КН
86-74-8	Carbazole	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
132-64-9	Dibenzofuran	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
34-66-2	Diethyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
131-11-3	Dimethyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
34-74-2	Di-n-butyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	5.71	11.4	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
78-59-1	Isophorone	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 15:56	КН



Client Sample ID: MW001

York Sample ID:

19E0591-31

York Project (SDG) No. 19E0591

CAS No.

621-64-7

86-30-6

108-95-2

110-86-1

Client Project ID LST 1802

Flag

Units

ug/L

ug/L

ug/L

ug/L

2.86

Result

ND

ND

ND

ND

Matrix Water

Certifications:

EPA 8270D

Certifications:

Collection Date/Time May 10, 2019 7:30 am

CTDOH,NELAC-NY10854,NJDEP,PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

Date Received 05/13/2019

KH

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

N-nitroso-di-n-propylamine

N-Nitrosodiphenylamine

Phenol

Pyridine

Parameter

Log-in Notes:

5.71

Sample Notes: EXT-EM

Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2.86	5.71	1	EPA 8270D Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	КН
2.86	5.71	1	EPA 8270D Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/28/2019 15:56 EP,PADEP	KH
2.86	5.71	1	EPA 8270D	05/16/2019 15:13	05/28/2019 15:56	KH

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	Surrogate: SURR: 2-Fluorophenol	58.7 %	19.7-63.1
4165-62-2	Surrogate: SURR: Phenol-d5	36.7 %	10.1-41.7
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	107 %	50.2-113
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	97.4 %	39.9-105
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	112 %	39.3-151
1718-51-0	Surrogate: SURR: Terphenyl-d14	93.9 %	30.7-106

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes: EXT-EM

CAS No	o. Parameter	Result	Flag Units	Reported to LOQ Di	ilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
3-32-9	Acenaphthene	0.0800	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
08-96-8	Acenaphthylene	0.206	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
20-12-7	Anthracene	0.229	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
912-24-9	Atrazine	ND	ug/L	0.571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,NI	ELAC-NY10854,NJDE	EΡ	
6-55-3	Benzo(a)anthracene	0.823	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
0-32-8	Benzo(a)pyrene	0.971	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
05-99-2	Benzo(b)fluoranthene	1.04	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
91-24-2	Benzo(g,h,i)perylene	0.434	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
07-08-9	Benzo(k)fluoranthene	0.823	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
17-81-7	Bis(2-ethylhexyl)phthalate	ND	ug/L	0.571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
	-(yy -/ _F		Ž			Certifications: CTDOH,NI	ELAC-NY10854,NJDE	EΡ	
18-01-9	Chrysene	0.846	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: MW001 **York Sample ID:** 19E0591-31

Date/Time

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 7:30 am

Date/Time

Sample Notes: EXT-EM

Date Received 05/13/2019

KH

KH

KΗ

KH

Semi-Volatiles, 8270 Comprehensive

N-Nitrosodimethylamine

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

Pentachlorophenol

Phenanthrene

Pyrene

Sample Prepared by Method: EPA 3510C

62-75-9

87-86-5

85-01-8

129-00-0

CAS No	o. Parameter	Result	Flag Units	LOQ	Dilution	Reference Metho	d Prepared	Analyzed	Analyst
53-70-3	Dibenzo(a,h)anthracene	0.171	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDO	H,NELAC-NY10854,NJD	EP,PADEP	
206-44-0	Fluoranthene	1.69	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDO	H,NELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	0.0914	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDO	H,NELAC-NY10854,NJD	EP,PADEP	
118-74-1	Hexachlorobenzene	ND	ug/L	0.0229	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOI	,NELAC-NY10854,NJDI	EP	
87-68-3	Hexachlorobutadiene	ND	ug/L	0.571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOF	I,NELAC-NY10854,NJDI	EP	
67-72-1	Hexachloroethane	ND	ug/L	0.571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOI	I,NELAC-NY10854,NJDI	EP	
193-39-5	Indeno(1,2,3-cd)pyrene	0.400	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDO	H,NELAC-NY10854,NJD	EP,PADEP	
91-20-3	Naphthalene	0.0914	ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDO	H,NELAC-NY10854,NJD	EP,PADEP	
98-95-3	Nitrobenzene	ND	ug/L	0.286	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:25	KH
						Certifications: CTDOI	NELAC-NY10854,NJDI	EΡ	

ug/L

ug/L

ug/L

Log-in Notes:

Reported to

Pesticides, 8081 List

Log-in Notes:

0.571

0.286

0.0571

0.0571

Sample Notes:

Certifications: CTDOH,NELAC-NY10854,NJDEP

Certifications: CTDOH,NELAC-NY10854,NJDEP

EPA 8270D SIM

EPA 8270D SIM

EPA 8270D SIM

EPA 8270D SIM

Certifications:

CAS N	No. Para	meter Result	Flag Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	ug/L	0.00432	1	EPA 8081B Certifications: CTDOH	05/16/2019 10:56 NELAC-NY10854,NJD	05/20/2019 12:55 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	ug/L	0.00432	1	EPA 8081B Certifications: CTDOH	05/16/2019 10:56 NELAC-NY10854,NJD	05/20/2019 12:55 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	ug/L	0.00432	1	EPA 8081B Certifications: CTDOH	05/16/2019 10:56 NELAC-NY10854,NJD	05/20/2019 12:55 EP,PADEP	CM
309-00-2	Aldrin	ND	ug/L	0.00432	1	EPA 8081B Certifications: CTDOH	05/16/2019 10:56 NELAC-NY10854,NJD	05/20/2019 12:55 EP,PADEP	СМ
319-84-6	alpha-BHC	ND	ug/L	0.00432	1	EPA 8081B Certifications: CTDOH	05/16/2019 10:56 NELAC-NY10854,NJD	05/20/2019 12:55 EP,PADEP	СМ
5103-71-9	alpha-Chlordane	ND	ug/L	0.00432	1	EPA 8081B Certifications: CTDOH	05/16/2019 10:56 NELAC-NY10854,NJD	05/20/2019 12:55 EP,PADEP	СМ
319-85-7	beta-BHC	ND	ug/L	0.00432	1	EPA 8081B Certifications: CTDOH	05/16/2019 10:56 NELAC-NY10854,NJD	05/20/2019 12:55 EP,PADEP	CM

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ND

ND

0.903

1.49

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CTDOH,NELAC-NY10854,NJDEP,PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

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Client Sample ID: MW001

York Sample ID: 19E0591-31

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 7:30 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
319-86-8	delta-BHC	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
60-57-1	Dieldrin	ND		ug/L	0.00216	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
959-98-8	Endosulfan I	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
72-20-8	Endrin	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		ug/L	0.0108	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		ug/L	0.0108	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		ug/L	0.0108	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
76-44-8	Heptachlor	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
72-43-5	Methoxychlor	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
8001-35-2	Toxaphene	ND		ug/L	0.108	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/20/2019 12:55 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		ug/L	0.216	1	EPA 8081B Certifications:		05/16/2019 10:56	05/20/2019 12:55	CM
	Surrogate Recoveries	Result		Acceptano	e Range						
2051-24-3	Surrogate: Decachlorobiphenyl	61.9 %		30-1	150						
877-09-8	Surrogate: Tetrachloro-m-xylene	62.7 %		30-1	150						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS No).	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016		ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 10854,CTDOH,NJDE	05/23/2019 17:24 P,PADEP	SR
11104-28-2	Aroclor 1221		ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 10854,CTDOH,NJDE	05/23/2019 17:24 P,PADEP	SR
11141-16-5	Aroclor 1232		ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 10854,CTDOH,NJDE	05/23/2019 17:24 P,PADEP	SR

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Client Sample ID: MW001

York Sample ID:

19E0591-31

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 7:30 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 /10854,CTDOH,NJDE	05/23/2019 17:24 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 /10854,CTDOH,NJDE	05/23/2019 17:24 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 /10854,CTDOH,NJDE	05/23/2019 17:24 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 /10854,CTDOH,NJDE	05/23/2019 17:24 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0541	1	EPA 8082A Certifications:		05/16/2019 10:56	05/23/2019 17:24	SR
	Surrogate Recoveries	Result		Acceptance	Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	98.5 %		30-13	50						
2051-24-3	Surrogate: Decachlorobiphenyl	104 %		30-13	50						

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

CAS N	vo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
429-90-5	Aluminum		7020		ug/L	55.6	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications: C	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
440-39-3	Barium		336		ug/L	27.8	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications: C	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
440-70-2	Calcium		203000		ug/L	55.6	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications:	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
440-47-3	Chromium		50.2		ug/L	5.56	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications:	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
440-48-4	Cobalt		15.3		ug/L	4.44	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications:	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
440-50-8	Copper		125		ug/L	22.2	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications:	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
439-89-6	Iron		56800		ug/L	278	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications:	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
439-92-1	Lead		711		ug/L	5.56	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications:	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
439-95-4	Magnesium		39700		ug/L	55.6	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications:	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
439-96-5	Manganese		2770		ug/L	5.56	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications: C	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
440-02-0	Nickel		37.1		ug/L	11.1	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications: C	CTDOH,NELAC-NY10854,NJE	EP,PADEP	
140-09-7	Potassium		21800		ug/L	55.6	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
								Certifications: C	CTDOH,NELAC-NY10854,NJE		



Client Sample ID: MW001

York Sample ID: 19E0591-31

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 7:30 am Date Received 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

Log-	in .	No	tes:

Sample Notes:

CAS N	o. Parameter	Result Fla	g Units	Reported to LOQ Dil	lution	Reference Met	Date/Time hod Prepared	Date/Time Analyzed	Analyst
7440-22-4	Silver	ND	ug/L	5.56		EPA 6010D Certifications: CTI	05/15/2019 13:45 OOH,NELAC-NY10854,NJDI	05/16/2019 13:21 EP,PADEP	KML
7440-23-5	Sodium	525000	ug/L	556	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
						Certifications: CT	DOH,NELAC-NY10854,NJD	EP,PADEP	
7440-62-2	Vanadium	50.9	ug/L	11.1	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
						Certifications: CT	DOH,NELAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	408	ug/L	27.8	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:21	KML
						Certifications: CT	DOH NEL AC-NV10854 NID	ED DA DED	

Metals, Target Analyte, ICP Dissolved

Log-in Notes:

Sample Notes:

CAS N	red by Method: EPA	Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND	8	mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51 P,PADEP	KML
7440-39-3	Barium		0.128		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:51	KML
7440-70-2	Calcium		157		mg/L	0.0556	1	EPA 6010D Certifications:		05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:51	KML
7440-47-3	Chromium		ND		mg/L	0.00556	1	EPA 6010D Certifications:	ŕ	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51	KML
7440-48-4	Cobalt		ND		mg/L	0.00444	1	EPA 6010D Certifications:	,	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51	KML
7440-50-8	Copper		ND		mg/L	0.0222	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51 P,PADEP	KML
7439-89-6	Iron		ND		mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51 P,PADEP	KML
7439-92-1	Lead		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51 P,PADEP	KML
7439-95-4	Magnesium		27.7		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:51 EP,PADEP	KML
7439-96-5	Manganese		1.52		mg/L	0.00556	1	EPA 6010D Certifications:		05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:51	KML
7440-02-0	Nickel		ND		mg/L	0.0111	1	EPA 6010D Certifications:	ŕ	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51	KML
7440-09-7	Potassium		15.6		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:51 EPPADEP	KML
7440-22-4	Silver		ND		mg/L	0.00556	1	EPA 6010D Certifications:		05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51	KML
7440-23-5	Sodium		453		mg/L	0.556	1	EPA 6010D Certifications:	CTDOH N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:51	KML
7440-62-2	Vanadium		ND		mg/L	0.0111	1	EPA 6010D Certifications:		05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51	KML
7440-66-6	Zinc		ND		mg/L	0.0278	1	EPA 6010D Certifications:		05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:51	KML



Client Sample ID: MW001 **York Sample ID:**

19E0591-31

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 7:30 am Date Received 05/13/2019

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	No.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDI	05/16/2019 13:20 EP,PADEP	BML
7440-38-2	Arsenic		28.3		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NI	05/15/2019 13:47 ELAC-NY10854,NJD	05/16/2019 13:20 EP,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	0.333	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 13:20 EP,PADEP	BML
7440-43-9	Cadmium		1.30		ug/L	0.556	1	EPA 6020B Certifications:	CTDOH,NI	05/15/2019 13:47 ELAC-NY10854,NJD	05/16/2019 13:20 EP,PADEP	BML
7782-49-2	Selenium		20.5		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NI	05/15/2019 13:47 ELAC-NY10854,NJD	05/16/2019 13:20 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDI	05/16/2019 13:20 EP,PADEP	BML

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:11 EP,PADEP	BML
7440-38-2	Arsenic		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:11 EP,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	3.33	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:11 EP,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	5.56	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:11 EP,PADEP	BML
7782-49-2	Selenium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:11 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH.NE	05/17/2019 16:34 ELAC-NY10854.NJDE	05/20/2019 15:11 EP.PADEP	BML

Log-in Notes: Sample Notes: Mercury by 7473

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported t LOQ	Dilution	Reference	Date/Time Method Prepared	Date/Time Analyzed	Analyst
7439-97-6 Men	reury	ND	l	ug/L	0.20	1	EPA 7473 Certifications:	05/16/2019 09:41 CTDOH,NELAC-NY10854,NJDI	05/16/2019 11:11 EPPADEP	SY

Mercury by 7473, Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag Units	Reported to LOQ Dilution	Reference Me	Date/Time thod Prepared	Date/Time Analyzed	Analyst
7439-97-6 Mercury		ND	mg/L	0.0002000 1	EPA 7473 Certifications: CT	05/21/2019 10:01 DOH,NELAC-NY10854,NJD	05/21/2019 10:35 EP,PADEP	SY

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Client Sample ID: MW002

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 10:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:

Sample Notes:

York Sample ID:

19E0591-32

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Prepared		Analys
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:2 CTDOH,NELAC-NY10854,N		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:. CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N		
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	' SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	' SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: NELAC-NY10854,NELAC-N	0 05/16/2019 15:17	
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: NELAC-NY10854,NELAC-N	0 05/16/2019 15:17	
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: NELAC-NY10854,NELAC-N	0 05/16/2019 15:17	' SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: NELAC-NY10854,NELAC-N	0 05/16/2019 15:17	' SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	' SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	' SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	' SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	' SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	' SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: NELAC-NY10854,NELAC-N	0 05/16/2019 15:17	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: CTDOH,NELAC-NY10854,N	0 05/16/2019 15:17	' SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications:	05/16/2019 07:: NELAC-NY10854,NELAC-N	0 05/16/2019 15:17	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:: NELAC-NY10854,NELAC-N	0 05/16/2019 15:17	SS

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Client Sample ID: MW002

York Sample ID:

19E0591-32

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 10:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Tir e Method Prepar		Analyst
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854		
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854		
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854		
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854		
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854		
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 NELAC-NY10854,NELAC	7:30 05/16/2019 15:17	7 SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 NELAC-NY10854,NELAC	7:30 05/16/2019 15:17	7 SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 15:17	7 SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0	7:30 05/16/2019 15:17	7 SS
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C Certifications:	O5/16/2019 0 NELAC-NY10854,NELAC	7:30 05/16/2019 15:17	7 SS



Client Sample ID: MW002

York Sample ID: 19E0591-32

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 10:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u> <u>S</u>	ample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	te/Time repared	Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 NELAC-NY1	05/16/2019 15:17 2058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 NELAC-NY1	05/16/2019 15:17 2058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 NELAC-NY1	05/16/2019 15:17 2058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 NELAC-NY1	05/16/2019 15:17 2058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 NELAC-NY1	05/16/2019 15:17 2058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,PADEI	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,PADEI	SS
99-87-6	p-Isopropyltoluene	5.51		ug/L	0.200	0.500	1	EPA 8260C	/2019 07:30	05/16/2019 15:17	SS
135-98-8	goo Dutulhongono	ND		ng/I	0.200	0.500	1	Certifications: EPA 8260C	Y 10854,NE /2019 07:30	LAC-NY12058,NJDE 05/16/2019 15:17	P,PADEP SS
133-76-6	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	Certifications:		AC-NY12058,NJDEF	
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	/2019 07:30 NELAC-NY1	05/16/2019 15:17 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	/2019 07:30 Y10854,NEL	05/16/2019 15:17 .AC-NY12058,NJDEF	SS P,PADEP



Client Sample ID: MW002

York Sample ID: 1

19E0591-32

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 10:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

	Log-i	n N	ot	es:
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Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 15:17 AC-NY12058,NJDEP	SS PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 15:17 AC-NY12058,NJDEP	SS PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 15:17 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 15:17 AC-NY12058,NJDEP	SS PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 15:17 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acco	eptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	92.6 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	98.4 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	123 %			70-130							

Semi-Volatiles, 8270 Comprehensive

ample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes: EXT-EM

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time Method Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADEI	05/17/2019 17:04	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADEI	05/17/2019 17:04	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,PADEP	05/17/2019 17:04	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADEI	05/17/2019 17:04	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,PADEP	05/17/2019 17:04	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,PADEP	05/17/2019 17:04	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADEI	05/17/2019 17:04	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR

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ClientServices@ Page 219 of 446



Client Sample ID: MW002

York Sample ID: 19E0591-32

York Project (SDG) No. 19E0591

Sample Prepared by Method: EPA 3510C

Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 10:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes: EXT-EM

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDI	05/17/2019 17:04 EP,PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDI	05/17/2019 17:04 EP,PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
95-57-8	2-Chlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
95-48-7	2-Methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
88-74-4	2-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
99-09-2	3-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
106-47-8	4-Chloroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
100-02-7	4-Nitrophenol	ND		ug/L	5.56	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR
98-86-2	Acetophenone	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 10854,NJDEP,PADE	05/17/2019 17:04 P	SR
62-53-3	Aniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 (10854,NJDEP,PADE	05/17/2019 17:04 P	SR
100-52-7	Benzaldehyde	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 (10854,NJDEP,PADE	05/17/2019 17:04 P	SR
92-87-5	Benzidine	ND		ug/L	5.56	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/17/2019 17:04 EP,PADEP	SR



Client Sample ID: MW002

York Sample ID: 19E0591-32

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 10:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

<u>Log-in Notes:</u>	Sample Notes: EXT-EM

CAS No	o. Parameter	Result Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
65-85-0	Benzoic acid	ND	ug/L	27.8	55.6	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 710854,NJDEP,PADEF	05/17/2019 17:04	SR
100-51-6	Benzyl alcohol	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 // 10854,NJDEP,PADEF	05/17/2019 17:04	SR
85-68-7	Benzyl butyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND	ug/L	1.11	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
105-60-2	Caprolactam	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 710854,NJDEP,PADEF	05/17/2019 17:04	SR
86-74-8	Carbazole	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
132-64-9	Dibenzofuran	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
84-66-2	Diethyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
131-11-3	Dimethyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
117-84-0	Di-n-octyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
77-47-4	Hexachlorocyclopentadiene	ND	ug/L	5.56	11.1	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
78-59-1	Isophorone	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
108-95-2	Phenol	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
110-86-1	Pyridine	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:04 P,PADEP	SR
	Surrogate Recoveries	Result	Acc	eptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	28.3 %		19.7-63.1							
4165-62-2	Surrogate: SURR: Phenol-d5	17.4 %		10.1-41.7							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	56.0 %		50.2-113							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	60.6 %		39.9-105							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	67.1 %		39.3-151							
1718-51-0	Surrogate: SURR: Terphenyl-d14	75.6 %		30.7-106							
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Client Sample ID: MW002

York Sample ID: 19E0591-32

York Project (SDG) No. 19E0591

Sample Prepared by Method: EPA 3510C

Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 10:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes: EXT-EM

CAS No	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 17:42 EP,PADEP	КН
208-96-8	Acenaphthylene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 17:42 EP,PADEP	KH
120-12-7	Anthracene	0.100	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
1912-24-9	Atrazine	ND	ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 17:42 EP	KH
56-55-3	Benzo(a)anthracene	0.300	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
50-32-8	Benzo(a)pyrene	0.344	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
205-99-2	Benzo(b)fluoranthene	0.289	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
191-24-2	Benzo(g,h,i)perylene	0.222	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
207-08-9	Benzo(k)fluoranthene	0.267	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 17:42 EP	KH
218-01-9	Chrysene	0.311	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
53-70-3	Dibenzo(a,h)anthracene	0.0889	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
206-44-0	Fluoranthene	0.611	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
86-73-7	Fluorene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 17:42 EP,PADEP	KH
118-74-1	Hexachlorobenzene	ND	ug/L	0.0222	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,NI	ELAC-NY10854,NJDI	EΡ	
87-68-3	Hexachlorobutadiene	ND	ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
						Certifications: CTDOH,NI	ELAC-NY10854,NJDI	ΞP	
67-72-1	Hexachloroethane	ND	ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
102 20 5	Indo(122-d)		7				ELAC-NY10854,NJDI		1/11
193-39-5	Indeno(1,2,3-cd)pyrene	0.200	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
	N LO I						ELAC-NY10854,NJD		
91-20-3	Naphthalene	0.122	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
							ELAC-NY10854,NJD		
98-95-3	Nitrobenzene	ND	ug/L	0.278	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 17:42 EP	KH
62-75-9	N-Nitrosodimethylamine	ND	ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 17:42 EP	KH
87-86-5	Pentachlorophenol	ND	ug/L	0.278	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 17:42 EP	KH
85-01-8	Phenanthrene	0.289	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 17:42	KH
			-			Certifications: CTDOH,N	ELAC-NY10854,NJD		

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Client Sample ID: MW002 **York Sample ID:** 19E0591-32

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Flag

Units

ug/L

Result

0.744

Matrix Water

Collection Date/Time May 10, 2019 10:00 am Date Received 05/13/2019

KH

Semi-Volatiles, 8270 Comprehensive

Parameter

Sample Prepared by Method: EPA 3510C

Pyrene

Log-in Notes:

Reported to LOQ

0.0556

Dilution

Sample Notes: EXT-EM

Date/Time	Date/Time	
Prepared	Analyzed	Analyst

Doto/Time

CTDOH,NELAC-NY10854,NJDEP,PADEP Certifications:

Data/Time

Pesticides, 8081 List

CAS No.

129-00-0

Log-in Notes:

Sample Notes:

Reference Method

EPA 8270D SIM

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

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
72-55-9	4,4'-DDE	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
309-00-2	Aldrin	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
319-84-6	alpha-BHC	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
319-85-7	beta-BHC	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
319-86-8	delta-BHC	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
60-57-1	Dieldrin	ND	ug/L	0.00216	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
959-98-8	Endosulfan I	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
33213-65-9	Endosulfan II	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
1031-07-8	Endosulfan sulfate	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
72-20-8	Endrin	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND	ug/L	0.0108	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
53494-70-5	Endrin ketone	ND	ug/L	0.0108	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	СМ
58-89-9	gamma-BHC (Lindane)	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	СМ
5566-34-7	gamma-Chlordane	ND	ug/L	0.0108	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
76-44-8	Heptachlor	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND	ug/L	0.00432	1	EPA 8081B Certifications: C	05/16/2019 10:56 TDOH,NELAC-NY10854,NJD	05/17/2019 23:16 EP,PADEP	СМ



Client Sample ID: MW002

York Sample ID:

19E0591-32

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 10:00 am <u>Date Received</u> 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ I	Dilution	Reference N	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-43-5	Methoxychlor	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDE	05/17/2019 23:16 EP,PADEP	CM
8001-35-2	Toxaphene	ND		ug/L	0.108	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDE	05/17/2019 23:16 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		ug/L	0.216	1	EPA 8081B Certifications:		05/16/2019 10:56	05/17/2019 23:16	CM
	Surrogate Recoveries	Result		Accepta	nce Range						
2051-24-3	Surrogate: Decachlorobiphenyl	88.6 %		30	1-150						
877-09-8	Surrogate: Tetrachloro-m-xylene	82.2 %		30	1-150						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:32 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:32 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:32 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:32 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:32 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:32 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:32 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0541	1	EPA 8082A Certifications:		05/16/2019 10:56	05/20/2019 13:32	SR
	Surrogate Recoveries	Result		Acceptan	ce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	92.0 %		30-	-150						
2051-24-3	Surrogate: Decachlorobiphenyl	104 %		30-	-150						

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	lo.	Parameter	Result	Flag	Units	Reported t	o Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		899	1	ug/L	55.6	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:23	KML
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	Barium		83.2	1	ug/L	27.8	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:23	KML
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP			

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Client Sample ID: MW002

York Sample ID: 19E0591-32

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 10:00 am Date Received 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

Log-in Notes:	Sample Notes:
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CAS N	No. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference M	Date/ Method Prep	Time pared	Date/Time Analyzed	Analyst
7440-70-2	Calcium	172000	ug/L	55.6	1	EPA 6010D	05/15/201	9 13:45	05/16/2019 13:23	KML
						Certifications:	CTDOH,NELAC-NY1	0854,NJD	EP,PADEP	
7440-47-3	Chromium	ND	ug/L	5.56	1	EPA 6010D Certifications:	05/15/201 CTDOH,NELAC-NY10		05/16/2019 13:23 EP,PADEP	KML
7440-48-4	Cobalt	ND	ug/L	4.44	1	EPA 6010D Certifications:	05/15/201 CTDOH,NELAC-NY10		05/16/2019 13:23 EP,PADEP	KML
7440-50-8	Copper	ND	ug/L	22.2	1	EPA 6010D Certifications:	05/15/201 CTDOH,NELAC-NY10		05/16/2019 13:23 EP,PADEP	KML
7439-89-6	Iron	3940	ug/L	278	1	EPA 6010D	05/15/201	9 13:45	05/16/2019 13:23	KML
						Certifications:	CTDOH,NELAC-NY1	0854,NJD!	EP,PADEP	
7439-92-1	Lead	16.6	ug/L	5.56	1	EPA 6010D	05/15/201	9 13:45	05/16/2019 13:23	KML
						Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		EP,PADEP	
7439-95-4	Magnesium	265000	ug/L	55.6	1	EPA 6010D	05/15/201	9 13:45	05/16/2019 13:23	KML
						Certifications:	CTDOH,NELAC-NY1	0854,NJD!	EP,PADEP	
7439-96-5	Manganese	409	ug/L	5.56	1	EPA 6010D	05/15/201	9 13:45	05/16/2019 13:23	KML
						Certifications:	CTDOH,NELAC-NY1	0854,NJD	EP,PADEP	
7440-02-0	Nickel	ND	ug/L	11.1	1	EPA 6010D Certifications:	05/15/201 CTDOH,NELAC-NY10		05/16/2019 13:23 EP,PADEP	KML
7440-09-7	Potassium	95600	ug/L	55.6	1	EPA 6010D	05/15/201	9 13:45	05/16/2019 13:23	KML
						Certifications:	CTDOH,NELAC-NY1	0854,NJD!	EP,PADEP	
7440-22-4	Silver	ND	ug/L	5.56	1	EPA 6010D Certifications:	05/15/201 CTDOH,NELAC-NY10		05/16/2019 13:23 EP,PADEP	KML
7440-23-5	Sodium	3030000	ug/L	5560	10	EPA 6010D	05/15/201	9 13:45	05/20/2019 10:40	KML
						Certifications:	CTDOH,NELAC-NY1	0854,NJD!	EP,PADEP	
7440-62-2	Vanadium	ND	ug/L	11.1	1	EPA 6010D Certifications:	05/15/201 CTDOH,NELAC-NY10		05/16/2019 13:23 EP,PADEP	KML
7440-66-6	Zinc	59.0	ug/L	27.8	1	EPA 6010D	05/15/201	9 13:45	05/16/2019 13:23	KML
						Certifications:	CTDOH,NELAC-NY1	0854,NJD	EP,PADEP	

Metals, Target Analyte, ICP Dissolved

Sample Prepared by Method: EPA 3015A

<u>Log-in Notes:</u>	Sample Notes:
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CAS N	No.	Parameter 1	Result	Flag	Units	Reported t	o Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst	
7429-90-5	Aluminum	0.	.0755		mg/L	0.0556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:53	KML	
								Certifications:	CTDOH,N	CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	Barium	0.	.0685		mg/L	0.0278	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:53	KML	
								Certifications:	CTDOH,N	CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	Calcium	10	62		mg/L	0.0556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:53	KML	
								Certifications:	CTDOH,N				
7440-47-3	Chromium	N	ND		mg/L	0.0055	5 1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:53	KML	
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	EP,PADEP		
7440-48-4	Cobalt	N	ND		mg/L	0.0044	1 1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:53	KML	
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	EP,PADEP		
7440-50-8	Copper	N	ND		mg/L	0.0222	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:53	KML	
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	EP,PADEP		

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Client Sample ID: MW002

York Sample ID:

19E0591-32

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 10:00 am <u>Date Received</u> 05/13/2019

Metals, Target Analyte, ICP Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst	
7439-89-6	Iron		ND		mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:53 EP,PADEP	KML	
7439-92-1	Lead		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:53 EP,PADEP	KML	
7439-95-4	Magnesium		248		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32			
7439-96-5	Manganese		0.393		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:53 EP,PADEP	KML	
7440-02-0	Nickel		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:53 EP,PADEP	KML	
7440-09-7	Potassium		88.4		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:53 EP,PADEP	KML	
7440-22-4	Silver		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:53 EP,PADEP	KML	
7440-23-5	Sodium		3250		mg/L	5.56	10	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 11:44 EP,PADEP	KML	
7440-62-2	Vanadium		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:53 EP,PADEP	KML	
7440-66-6	Zinc		0.0302		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:53 EP,PADEP	KML	

Metals, Target Analyte, ICPMS

Sample Prepared by Method: EPA 3015A

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Sample Notes:

CAS N	o. Pa	rameter Result	Flag Unit	Reported LOQ	to Dilution	Reference M	Date/Time Method Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	1.13	ug/L	1.11	1	EPA 6020B	05/15/2019 13:4	05/16/2019 13:24	BML
						Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
7440-38-2	Arsenic	1.32	ug/L	1.11	1	EPA 6020B	05/15/2019 13:4	05/16/2019 13:24	BML
						Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
7440-41-7	Beryllium	ND	ug/L	0.333	1	EPA 6020B	05/15/2019 13:4	05/16/2019 13:24	BML
	-					Certifications:	CTDOH,NELAC-NY10854,N	DEP,PADEP	
7440-43-9	Cadmium	ND	ug/L	0.556	1	EPA 6020B	05/15/2019 13:4	05/16/2019 13:24	BML
						Certifications:	CTDOH,NELAC-NY10854,N.	DEP,PADEP	
7782-49-2	Selenium	84.5	ug/L	1.11	1	EPA 6020B	05/15/2019 13:4	05/16/2019 13:24	BML
						Certifications:	CTDOH,NELAC-NY10854,N	JDEP,PADEP	
7440-28-0	Thallium	ND	ug/L	1.11	1	EPA 6020B	05/15/2019 13:4	05/16/2019 13:24	BML
						Certifications:	CTDOH,NELAC-NY10854,N	DEP,PADEP	

Metals, Target Analyte, ICPMS Dissolved

Sample Prepared by Method: EPA 3015A

	Notes:	

Sample Notes:

CAS No	D.	Parameter	Result	Flag	Units	Reported t	o Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,N	05/17/2019 16:34 ELAC-NY10854,NJDI	05/20/2019 15:16 EP,PADEP	BML

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Client Sample ID: MW002 York Sample ID: 19E0591-32

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 10:00 am05/13/2019

Metals, Target Analyte, ICPMS Dissolved

Sample Prepared by Method: EPA 3015A

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:16 P,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	3.33	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:16 P,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	5.56	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:16 P,PADEP	BML
7782-49-2	Selenium		58.9		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,N	05/17/2019 16:34 ELAC-NY10854,NJD	05/20/2019 15:16 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:16 P,PADEP	BML

Mercury by 7473 <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: EPA 7473 water

CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473	CTDOH NE	05/16/2019 09:41	05/16/2019 11:22 EPPADEP	SY

Mercury by 7473, Dissolved <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: EPA 7473 water

CAS N	0.	Parameter	Result	Flag	Units	Reported to LOQ Dilution	Reference M	lethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		mg/L	***************************************	PA 7473		05/21/2019 10:01	05/21/2019 10:46	SY

Sample Information

Client Sample ID: MW003 York Sample ID: 19E0591-33

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 11:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Me	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEP	SS PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEP	SS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 TDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEP,	SS PADEP

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Client Sample ID: MW003

York Sample ID: 19E0591-33

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 11:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/T Method Prep		Date/Time Analyzed	Analyst
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10		05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10		05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10		05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10		05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NEL		05/16/2019 17:23 2058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NEL		05/16/2019 17:23 2058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/201 NELAC-NY10854,NEL	9 07:30	05/16/2019 17:23	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/201 NELAC-NY10854,NEL	9 07:30	05/16/2019 17:23	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	9 07:30	05/16/2019 17:23	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	9 07:30	05/16/2019 17:23	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	9 07:30	05/16/2019 17:23	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	9 07:30	05/16/2019 17:23	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY10	9 07:30	05/16/2019 17:23	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/201	9 07:30	05/16/2019 17:23	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	O5/16/2019	9 07:30	05/16/2019 17:23	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	Certifications:	O5/16/2019	9 07:30	05/16/2019 17:23	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	Certifications:	05/16/2019	9 07:30	05/16/2019 17:23	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	Certifications:	NELAC-NY10854,NEL	9 07:30	05/16/2019 17:23	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	Certifications:	O5/16/201	9 07:30	05/16/2019 17:23	P,PADEP SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	NELAC-NY10854,NEL 05/16/2019		2058,NJDEP,PADEP 05/16/2019 17:23	SS
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	NELAC-NY10854,NEL 05/16/201	9 07:30	05/16/2019 17:23	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	O5/16/2019	9 07:30	05/16/2019 17:23	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	O5/16/2019		AC-NY12058,NJDEF 05/16/2019 17:23	P,PADEP SS
								Certifications:	CTDOH,NELAC-NY10	854,NEL	AC-NY12058,NJDEF	P,PADEP



Client Sample ID: MW003

York Sample ID: 19E0591-33

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 11:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 17:23 2058,NJDEP,PADEP	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 17:23 2058,NJDEP,PADEP	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 17:23 2058,NJDEP,PADEP	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 710854,NELAC-NY1	05/16/2019 17:23 2058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 17:23 2058,NJDEP,PADEP	SS



Client Sample ID: MW003

York Sample ID: 19]

19E0591-33

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 11:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

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Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1	Date/Time Method Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEF	SS P,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 17:23 2058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 17:23 2058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 17:23 2058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,PADE	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,PADE	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 17:23 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL		SS P,PADEP
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:23 AC-NY12058,NJDEI	SS P,PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 17:23	SS

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Client Sample ID: MW003 **York Sample ID:**

19E0591-33

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 11:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-	in N	01	tes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference l	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 17:23 AC-NY12058,NJDEP	SS PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 17:23 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	100 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	103 %			70-130							
460-00-4	Surrogate: SURR:	107 %			70-130							

Semi-Volatiles, 8270 Comprehensive

Log-in Notes: Sample Notes:

CAS N	Jo. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 17:51	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 17:51	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:51 P,PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,PADEP	05/17/2019 17:51	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 17:51	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,PADEP	05/17/2019 17:51	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,PADEP	05/17/2019 17:51	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 17:51	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:51 P,PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:51 P,PADEP	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:51 P,PADEP	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:51 P,PADEP	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:51 P,PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:51 P,PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 17:51 P,PADEP	SR

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ClientServices@ Page 231 of 446



Log-in Notes:

Client Sample ID: MW003

York Sample ID: 19E0591-33

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water

Certifications:

EPA 8270D

Certifications:

EPA 8270D

Certifications:

EPA 8270D

Certifications

EPA 8270D

Certifications:

EPA 8270D

Certifications:

EPA 8270D

Certifications

EPA 8270D

Certifications

EPA 8270D

Certifications

EPA 8270D

Collection Date/Time May 10, 2019 11:00 am

Sample Notes:

<u>Date Received</u> 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1		Date/Time Prepared	Date/Time Analyzed	Analyst
91-58-7	2-Chloronaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
95-57-8	2-Chlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
95-48-7	2-Methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
88-74-4	2-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
99-09-2	3-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
106-47-8	4-Chloroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	05/ CTDOH,NELAC	16/2019 15:13 -NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.78	5.56	1	EPA 8270D	05/	16/2019 15:13	05/17/2019 17:51	SR

Benzyl butyl phthalate

100-01-6

100-02-7

98-86-2

62-53-3

100-52-7

92-87-5

65-85-0

100-51-6

85-68-7

4-Nitroaniline

4-Nitrophenol

Acetophenone

Benzaldehyde

Benzidine

Benzoic acid

Benzyl alcohol

Aniline

ND

ND

ND

ND

ND

ND

ND

ND

ND

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

2.78

5.56

2.78

2.78

2.78

5.56

27.8

2.78

2.78

5.56

5.56

5.56

5.56

55.6

5.56

5.56

CTDOH.NELAC-NY10854.NJDEP.PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

NELAC-NY10854,NJDEP,PADEP

NELAC-NY10854,NJDEP,PADEP

NELAC-NY10854,NJDEP,PADEP

NELAC-NY10854,NJDEP,PADEP

NELAC-NY10854,NJDEP,PADEP

05/16/2019 15:13

05/16/2019 15:13

05/16/2019 15:13

CTDOH.NELAC-NY10854.NJDEP.PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

05/16/2019 15:13

05/17/2019 17:51

05/17/2019 17:51

05/17/2019 17:51

05/17/2019 17:51

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Client Sample ID: MW003

York Sample ID:

19E0591-33

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 11:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No	o. 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/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.11	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
105-60-2	Caprolactam	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 17:51 P	SR
86-74-8	Carbazole	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
132-64-9	Dibenzofuran	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
131-11-3	Dimethyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	5.56	11.1	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
78-59-1	Isophorone	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
108-95-2	Phenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
110-86-1	Pyridine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 17:51 EP,PADEP	SR
	Surrogate Recoveries	Result		Acc	eptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	26.7 %			19.7-63.1							
4165-62-2	Surrogate: SURR: Phenol-d5	15.3 %			10.1-41.7							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	54.3 %			50.2-113							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	56.9 %			39.9-105							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	66.4 %			39.3-151							
1718-51-0	Surrogate: SURR: Terphenyl-d14	75.1 %			30.7-106							

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

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



Client Sample ID: MW003

York Sample ID: 19E0591-33

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 11:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

	ed by Method: EPA 3510C			Domonto d to			Date/Time Date/Time			
CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Prepared	Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:13 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:13 EP,PADEP	KH
120-12-7	Anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:13 EP,PADEP	KH
1912-24-9	Atrazine	ND		ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:13 EP	KH
56-55-3	Benzo(a)anthracene	0.100		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 NELAC-NY10854,NJD	05/29/2019 18:13 EP,PADEP	KH
50-32-8	Benzo(a)pyrene	0.122		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJD	05/29/2019 18:13 EP,PADEP	KH
205-99-2	Benzo(b)fluoranthene	0.122		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13 IELAC-NY10854,NJD	05/29/2019 18:13	КН
191-24-2	Benzo(g,h,i)perylene	0.100		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	КН
207-08-9	Benzo(k)fluoranthene	0.0889		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	КН
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	КН
218-01-9	Chrysene	0.0778		ug/L	0.0556	1	EPA 8270D SIM	ELAC-NY10854,NJDI 05/16/2019 15:13	05/29/2019 18:13	КН
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	КН
206-44-0	Fluoranthene	0.167		ug/L	0.0556	1	Certifications: CTDOH,N EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	КН
86-73-7	Fluorene	ND		ug/L	0.0556	1	Certifications: CTDOH,N EPA 8270D SIM	05/16/2019 15:13	EP,PADEP 05/29/2019 18:13	KH
118-74-1	Hexachlorobenzene	ND		ug/L	0.0222	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	КН
87-68-3	Hexachlorobutadiene	ND		ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	КН
67-72-1	Hexachloroethane	ND		ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	KH
193-39-5	Indeno(1,2,3-cd)pyrene	0.0778		ug/L	0.0556	1	EPA 8270D SIM	ELAC-NY10854,NJDI 05/16/2019 15:13	05/29/2019 18:13	КН
91-20-3	Naphthalene	ND		ug/L	0.0556	1	EPA 8270D SIM		05/29/2019 18:13	KH
98-95-3	Nitrobenzene	ND		ug/L	0.278	1	Certifications: CTDOH,N EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	KH
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	KH
87-86-5	Pentachlorophenol	ND		ug/L	0.278	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:13	КН
85-01-8	Phenanthrene	0.122		ug/L	0.0556	1	Certifications: CTDOH,N EPA 8270D SIM	ELAC-NY10854,NJDI 05/16/2019 15:13	05/29/2019 18:13	KH

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Client Sample ID: MW003

York Sample ID:

19E0591-33

York Project (SDG) No. 19E0591 Client Project ID LST 1802

0.144

Units

ug/L

Matrix Water Collection Date/Time May 10, 2019 11:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

KH

Sample Prepared by Method: EPA 3510C

Pyrene

CAS No.	Parameter	Result	Fla
CAS No.	Parameter	Result	Fla

Reported to LOQ Dilution

0.0556 1

Reference Method Date/Time Prepared Date/Time Analyzed Analyst

EPA 8270D SIM 05/16/2019 15:13 05/29/2019 18:13
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP

Pesticides, 8081 List

129-00-0

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
72-55-9	4,4'-DDE	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
50-29-3	4,4'-DDT	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
309-00-2	Aldrin	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
319-84-6	alpha-BHC	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
319-85-7	beta-BHC	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
319-86-8	delta-BHC	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
60-57-1	Dieldrin	ND		ug/L	0.00216	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
959-98-8	Endosulfan I	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
72-20-8	Endrin	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		ug/L	0.0108	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		ug/L	0.0108	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		ug/L	0.0108	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
76-44-8	Heptachlor	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/17/2019 23:31 EP,PADEP	СМ



Client Sample ID: MW003 **York Sample ID:**

19E0591-33

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 11:00 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Me	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
72-43-5	Methoxychlor	ND		ug/L	0.00432	1	EPA 8081B Certifications: CT	05/16/2019 10:56 TDOH,NELAC-NY10854,NJ	05/17/2019 23:31 DEP,PADEP	CM
8001-35-2	Toxaphene	ND		ug/L	0.108	1	EPA 8081B Certifications: CT	05/16/2019 10:56 TDOH,NELAC-NY10854,NJ	05/17/2019 23:31 DEP,PADEP	CM
57-74-9	* Chlordane, total	ND		ug/L	0.216	1	EPA 8081B Certifications:	05/16/2019 10:56	05/17/2019 23:31	CM
	Surrogate Recoveries	Result		Acceptance	Range					
2051-24-3	Surrogate: Decachlorobiphenyl	86.6 %		30-15	0					
877-09-8	Surrogate: Tetrachloro-m-xylene	74.7 %		30-15	0					

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:45 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:45 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:45 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:45 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:45 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:45 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 13:45 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0541	1	EPA 8082A Certifications:		05/16/2019 10:56	05/20/2019 13:45	SR
	Surrogate Recoveries	Result		Acceptance	e Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	90.0 %		30-1	50						
2051-24-3	Surrogate: Decachlorobiphenyl	101 %		30-1.	50						

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	lo.	Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		536	ug/L	55.6	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:31	KML
							Certifications:	CTDOH,NE	LAC-NY10854,NJDI	EP,PADEP	
7440-39-3	Barium		39.5	ug/L	27.8	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:31	KML
							Certifications:	CTDOH,NE	LAC-NY10854,NJDI	EP,PADEP	

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Client Sample ID: MW003

York Sample ID:

19E0591-33

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 11:00 am Date Received 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

<u>Log-in Notes:</u>	Sample Notes:
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CAS N	No. Paramete	er Result	Flag Units	Reported to LOQ Dilution	n Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-70-2	Calcium	80600	ug/L	55.6 1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:31	KML
					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium	ND	ug/L	5.56 1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:31 EP,PADEP	KML
7440-48-4	Cobalt	ND	ug/L	4.44 1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:31 EP,PADEP	KML
7440-50-8	Copper	ND	ug/L	22.2 1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:31 EP,PADEP	KML
7439-89-6	Iron	822	ug/L	278 1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:31	KML
					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead	ND	ug/L	5.56 1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:31 EP,PADEP	KML
7439-95-4	Magnesium	94700	ug/L	55.6 1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:31	KML
					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	48.1	ug/L	5.56 1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:31	KML
					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	ND	ug/L	11.1 1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:31 EP,PADEP	KML
7440-09-7	Potassium	33700	ug/L	55.6 1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:31	KML
					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-22-4	Silver	ND	ug/L	5.56 1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:31 EP,PADEP	KML
7440-23-5	Sodium	905000	ug/L	556 1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:31	KML
					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-62-2	Vanadium	ND	ug/L	11.1 1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:31 EP,PADEP	KML
7440-66-6	Zinc	29.4	ug/L	27.8 1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:31	KML
					Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Metals, Target Analyte, ICP Dissolved

Sample Prepared by Method: EPA 3015A

Log-in Notes:	Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56 P,PADEP	KML
7440-39-3	Barium		0.0346		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:56 EP,PADEP	KML
7440-70-2	Calcium		77.5		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:56 EP,PADEP	KML
7440-47-3	Chromium		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56 P,PADEP	KML
7440-48-4	Cobalt		ND		mg/L	0.00444	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56 P,PADEP	KML
7440-50-8	Copper		ND		mg/L	0.0222	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56 P,PADEP	KML

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Client Sample ID: MW003

York Sample ID:

19E0591-33

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 11:00 am <u>Date Received</u> 05/13/2019

Metals, Target Analyte, ICP Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron		ND		mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56 EP,PADEP	KML
7439-92-1	Lead		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56 EP,PADEP	KML
7439-95-4	Magnesium		88.1		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:56 EP,PADEP	KML
7439-96-5	Manganese		0.0202		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:56 EPPADEP	KML
7440-02-0	Nickel		ND		mg/L	0.0111	1	EPA 6010D Certifications:	Í	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56	KML
7440-09-7	Potassium		31.2		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH.N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:56 EP.PADEP	KML
7440-22-4	Silver		ND		mg/L	0.00556	1	EPA 6010D Certifications:	Í	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56	KML
7440-23-5	Sodium		847		mg/L	0.556	1	EPA 6010D Certifications:	CTDOH.N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:56 EP.PADEP	KML
7440-62-2	Vanadium		ND		mg/L	0.0111	1	EPA 6010D Certifications:	Í	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56	KML
7440-66-6	Zinc		ND		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:56 EP,PADEP	KML

Metals, Target Analyte, ICPMS

Sample Prepared by Method: EPA 3015A

Lo	g-in	N	otes:

Sample Notes:

CAS N	No. I	Parameter Ro	esult Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	1.3	8	ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:39	BML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-38-2	Arsenic	4.2	6	ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:39	BML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium	ND)	ug/L	0.333	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:39	BML
	,						Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7440-43-9	Cadmium	ND)	ug/L	0.556	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:39	BML
							Certifications:	CTDOH,NE	LAC-NY10854,NJDE	EP,PADEP	
7782-49-2	Selenium	32	.4	ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:39	BML
							Certifications:	CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND)	ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:39	BML
				-			Certifications:	CTDOH,NE	LAC-NY10854,NJDF	EP,PADEP	

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

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CAS No	١.	Parameter	Result	Flag	Units	Reported LOQ	o Dilution	Reference 1	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:21 EP,PADEP	BML

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Client Sample ID: MW003 York Sample ID: 19E0591-33

Client Project ID Date Received York Project (SDG) No. Matrix Collection Date/Time 19E0591 LST 1802 Water May 10, 2019 11:00 am 05/13/2019

Metals, Target Analyte, ICPMS Dissolved

Sample Prepared by Method: EPA 3015A

Log-in Notes: Sample Notes:

Sample Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:21 P,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	3.33	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:21 P,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	5.56	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:21 P,PADEP	BML
7782-49-2	Selenium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:21 P,PADEP	BML
7440-28-0	Thallium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:21 P,PADEP	BML

Log-in Notes: Sample Notes: Mercury by 7473

Sample Prepared by Method: EPA 7473 water

CAS N	lo.	Parameter	Result	Flag	Units	Reported LOQ	Reported to LOQ Dilution Reference Method			Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473	CTDOU NI	05/16/2019 09:41	05/16/2019 11:57	SY

Log-in Notes: Mercury by 7473, Dissolved

Sample Prepared by Method: EPA 7473 water

CAS No	0.	Parameter	Result	Flag Units	Reported to LOQ Dilution	n Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND	mg/L	0.0002000 1	EPA 7473 Certifications:	CTDOH,NI	05/21/2019 10:01 ELAC-NY10854,NJDE	05/21/2019 11:22 EP,PADEP	SY

Sample Information

MW004 **Client Sample ID: York Sample ID:** 19E0591-34

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Water May 10, 2019 12:15 pm 05/13/2019

Log-in Notes:

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference N	Date/Time Method Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		SS PADEP

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Client Sample ID: MW004

York Sample ID: 19E0591-34

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:15 pm

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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Resu	t Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		Date/Time Prepared	Date/Time Analyzed	Analyst
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		16/2019 07:30 -NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEI	SS P,PADEP
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		16/2019 07:30 -NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEI	SS P,PADEP
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		16/2019 07:30 -NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEI	SS P,PADEP
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		16/2019 07:30 -NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEI	SS P,PADEP
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/ NELAC-NY1085	16/2019 07:30 54,NELAC-NY1	05/16/2019 17:54 2058,NJDEP	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		16/2019 07:30 54,NELAC-NY1	05/16/2019 17:54 2058,NJDEP,PADEP	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 2058,NJDEP,PADEP	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 2058,NJDEP,PADEP	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 AC-NY12058,NJDEI	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 AC-NY12058,NJDEI	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 AC-NY12058,NJDE	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 AC-NY12058,NJDE	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 AC-NY12058,NJDEI	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		16/2019 07:30 -NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDE	SS P,PADEP
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 AC-NY12058,NJDEI	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 AC-NY12058,NJDE	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 2058,NJDEP,PADEP	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 AC-NY12058,NJDE	SS P.PADEP
ND		ug/L	40.0	80.0	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 2058,NJDEP,PADEP	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54 2058,NJDEP,PADEP	SS
ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/	16/2019 07:30	05/16/2019 17:54	SS
ND		ug/L	0.200	0.500	1	EPA 8260C	05/	16/2019 07:30	05/16/2019 17:54	SS
ND		ug/L	0.200	0.500	1	EPA 8260C	05/	16/2019 07:30	05/16/2019 17:54	SS
					<u> </u>	•	ND ug/L 0.200 0.500 1 EPA 8260C Certifications:	ND ug/L 0.200 0.500 1 EPA 8260C 05/ Certifications: CTDOH,NELAC	ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 Certifications: CTDOH,NELAC-NY10854,NEL ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30	ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 17:54 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEI ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 17:54



Client Sample ID: MW004

York Sample ID: 19E0591-34

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:15 pm

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Prepared Analyzed An	nalyst
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
67-64-1	Acetone	1.80	J	ug/L	1.00	2.00	1	EPA 8260C	05/16/2019 07:30	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	DEP
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
75-15-0	Carbon disulfide	0.450	J	ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	DEP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS DEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	SS

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Client Sample ID: MW004

York Sample ID: 19

19E0591-34

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:15 pm

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

 Log-ın Notes:	. <u>S</u>	sampl	e ſ	Not	tes	:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference I	Date/Time Method Prepared	Date/Time Analyzed	Analys
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEF	SS P,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 17:54 2058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	10.6		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 17:54	SS
								Certifications:	CTDOH,NELAC-NY10854,NE	LAC-NY12058,NJDE	P,PADEP
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 17:54 2058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEF	SS P,PADEP
108-87-2	Methylcyclohexane	0.260	J	ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 17:54	SS
								Certifications:	NELAC-NY10854,NELAC-NY	12058,NJDEP,PADEP	1
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEF	SS P,PADEP
104-51-8	n-Butylbenzene	1.64		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 17:54	SS
								Certifications:	CTDOH,NELAC-NY10854,NE	LAC-NY12058,NJDE	.P,PADEP
103-65-1	n-Propylbenzene	16.4		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 17:54	SS
								Certifications:	CTDOH,NELAC-NY10854,NE	LAC-NY12058,NJDE	.P,PADEP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,PADEF	SS P
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,PADER	SS P
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEF	SS P,PADEP
135-98-8	sec-Butylbenzene	5.96		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 17:54	SS
								Certifications:	CTDOH,NELAC-NY10854,NE	LAC-NY12058,NJDE	P,PADEP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEF	SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 17:54 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	1.91		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 17:54	SS
								Certifications:	CTDOH,NELAC-NY10854,NE	LAC-NY12058,NJDE	P,PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEF	SS P,PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEF	SS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEF	SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058.NJDEF	SS P.PADEP
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 17:54	SS
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 17:54	SS

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Client Sample ID: MW004

York Sample ID:

19E0591-34

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:15 pm

<u>Date Received</u> 05/13/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS N	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEP	SS PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 17:54 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acc	eptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	104 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	99.6 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	114 %			70-130							

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes: Sample Notes: EXT-EM

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/28/2019 16:25	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/28/2019 16:25	KH
20-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 16:25 P,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,PADEP	05/28/2019 16:25	KH
22-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/28/2019 16:25	KH
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,PADEP	05/28/2019 16:25	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,PADEP	05/28/2019 16:25	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/28/2019 16:25	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 16:25 P,PADEP	KH
38-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 16:25 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 16:25 P,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 16:25 P,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 16:25 P,PADEP	KH
21-14-2	2,4-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 16:25 P,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/28/2019 16:25 P,PADEP	KH

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Client Sample ID: MW004

York Sample ID: 19E0591-34

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeWaterMay 10, 2019 12:15 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepar	red by Method: EPA 3510C									D-4-772	D-4-/F'	
CAS N	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analys
91-58-7	2-Chloronaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	КН
95-57-8	2-Chlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
95-48-7	2-Methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
88-74-4	2-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
88-75-5	2-Nitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
99-09-2	3-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	КН
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	КН
106-47-8	4-Chloroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	КН
100-01-6	4-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
100-02-7	4-Nitrophenol	ND		ug/L	5.56	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	КН
98-86-2	Acetophenone	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 16:25 P	КН
62-53-3	Aniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 16:25 P	КН
100-52-7	Benzaldehyde	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 16:25 P	КН
92-87-5	Benzidine	ND		ug/L	5.56	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	КН
65-85-0	Benzoic acid	ND		ug/L	27.8	55.6	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 16:25 P	КН
100-51-6	Benzyl alcohol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 16:25 P	КН
85-68-7	Benzyl butyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25	КН



Client Sample ID: MW004

York Sample ID:

19E0591-34

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:15 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

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LU	2-III	1.4	ULCS.

Sample Notes: EXT-EM

CAS No	o. 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/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	КН
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.11	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	КН
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
105-60-2	Caprolactam	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/28/2019 16:25 P	KH
86-74-8	Carbazole	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
132-64-9	Dibenzofuran	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
84-66-2	Diethyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	5.56	11.1	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	КН
78-59-1	Isophorone	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
108-95-2	Phenol	4.72	J	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 NELAC-NY10854,NJD	05/28/2019 16:25 EP,PADEP	КН
110-86-1	Pyridine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/28/2019 16:25 EP,PADEP	KH
	Surrogate Recoveries	Result		Acc	eptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	53.2 %			19.7-63.1							
4165-62-2	Surrogate: SURR: Phenol-d5	34.0 %			10.1-41.7							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	104 %			50.2-113							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	93.7 %			39.9-105							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	121 %			39.3-151							
1718-51-0	Surrogate: SURR: Terphenyl-d14	106 %			30.7-106							

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes: EXT-EM

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

Sample Prepared by Method: EPA 3510C



Client Sample ID: MW004

York Sample ID: 19E0591-34

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:15 pm

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Į	Log-ın 🗅	Notes:	Sample Notes:	ĽΧ	I	ĽГ	V

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
208-96-8	Acenaphthylene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
120-12-7	Anthracene	0.0889	IS-01	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:56	KH
							Certifications: CTDOH	NELAC-NY10854,NJD	EP,PADEP	
1912-24-9	Atrazine	ND	IS-01	ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP	KH
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP	KH
218-01-9	Chrysene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
206-44-0	Fluoranthene	0.0778	IS-01	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:56	KH
							Certifications: CTDOH	NELAC-NY10854,NJD,	EP,PADEP	
86-73-7	Fluorene	0.0778		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:56	KH
							Certifications: CTDOH	NELAC-NY10854,NJD,	EP,PADEP	
118-74-1	Hexachlorobenzene	ND	IS-01	ug/L	0.0222	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP	KH
87-68-3	Hexachlorobutadiene	ND		ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP	KH
67-72-1	Hexachloroethane	ND		ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56 EP,PADEP	KH
91-20-3	Naphthalene	0.811		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:56	KH
98-95-3	Nitrobenzene	ND		ug/L	0.278	1	EPA 8270D SIM	,NELAC-NY10854,NJD 05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56	КН
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56	КН
87-86-5	Pentachlorophenol	ND	IS-01	ug/L	0.278	1	EPA 8270D SIM	05/16/2019 15:13 NELAC-NY10854,NJDI	05/29/2019 22:56	КН
85-01-8	Phenanthrene	0.300	IS-01	ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:56	KH
		0.500	15-01	- -	0.0550	1		NELAC-NY10854,NJD		

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Client Sample ID: MW004

York Sample ID: 19E0591-34

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:15 pm

<u>Date Received</u> 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes: EXT-EM

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS I	No.	Parameter	Result	Flag	Units	Reported to LOQ Di	ilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
129-00-0	Pyrene		0.0778		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 22:56	КН
								Certifications: CTDOH	NELAC-NY10854,NJD	EP,PADEP	

Pesticides, 8081 List Log-in Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	CM
50-29-3	4,4'-DDT	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	CM
309-00-2	Aldrin	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	CM
319-84-6	alpha-BHC	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
5103-71-9	alpha-Chlordane	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
319-85-7	beta-BHC	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
319-86-8	delta-BHC	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
60-57-1	Dieldrin	ND		ug/L	0.00216	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
959-98-8	Endosulfan I	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
33213-65-9	Endosulfan II	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
72-20-8	Endrin	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		ug/L	0.0108	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
53494-70-5	Endrin ketone	ND		ug/L	0.0108	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
5566-34-7	gamma-Chlordane	ND		ug/L	0.0108	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
76-44-8	Heptachlor	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	СМ

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Client Sample ID: MW004

York Sample ID:

19E0591-34

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:15 pm

<u>Date Received</u> 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
72-43-5	Methoxychlor	ND		ug/L	0.00432	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDF	05/20/2019 13:10 EP,PADEP	CM
8001-35-2	Toxaphene	ND		ug/L	0.108	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDE	05/20/2019 13:10 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		ug/L	0.216	1	EPA 8081B Certifications:		05/16/2019 10:56	05/20/2019 13:10	CM
	Surrogate Recoveries	Result		Acceptance Ra	nge						
2051-24-3	Surrogate: Decachlorobiphenyl	48.6 %		30-150							
877-09-8	Surrogate: Tetrachloro-m-xylene	47.5 %		30-150							

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/23/2019 17:37 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/23/2019 17:37 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/23/2019 17:37 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/23/2019 17:37 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/23/2019 17:37 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/23/2019 17:37 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0541	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/23/2019 17:37 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0541	1	EPA 8082A Certifications:		05/16/2019 10:56	05/23/2019 17:37	SR
	Surrogate Recoveries	Result		Acceptan	ce Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	100 %		30-	150						
2051-24-3	Surrogate: Decachlorobiphenyl	104 %		30-	150						

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

Flag Units	Reported to LOQ Dil	lution Referen			Date/Time Analyzed	Analyst
ug/L	55.6	1 EPA 6010D	05/15/2	019 13:45	05/16/2019 13:34	KML
		Certifications	: CTDOH,NELAC-N	Y10854,NJD	EP,PADEP	
ug/L	27.8	1 EPA 6010D	05/15/2	019 13:45	05/16/2019 13:34	KML
		Certifications	: CTDOH,NELAC-N	Y10854,NJD	EP,PADEP	
	ug/L	ug/L 55.6	Elag Units LOQ Dilution Reference ug/L 55.6 1 EPA 6010D Certifications ug/L 27.8 1 EPA 6010D	Flag Units LOQ Dilution Reference Method Pr ug/L 55.6 1 EPA 6010D 05/15/2 Certifications: CTDOH,NELAC-N ug/L 27.8 1 EPA 6010D 05/15/2	Flag Units LOQ Dilution Reference Method Prepared ug/L 55.6 1 EPA 6010D 05/15/2019 13:45 Certifications: CTDOH,NELAC-NY10854,NJD ug/L 27.8 1 EPA 6010D 05/15/2019 13:45	Flag Units LOQ LOQ Dilution Dilution Reference Method Prepared Analyzed ug/L 55.6 1 EPA 6010D Certifications: 05/15/2019 13:45 05/16/2019 13:34 ug/L 27.8 1 EPA 6010D 05/15/2019 13:45 05/16/2019 13:34

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Client Sample ID: MW004

York Sample ID:

19E0591-34

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:15 pm

Date Received 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

Log	g-in	No	tes:

Sample Notes:

CAS N	lo. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference M	Date/Time Iethod Prepared	Date/Time Analyzed	Analyst
7440-70-2	Calcium	202000	ug/L	55.6	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7440-47-3	Chromium	34.8	ug/L	5.56	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7440-48-4	Cobalt	17.3	ug/L	4.44	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7440-50-8	Copper	398	ug/L	22.2	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7439-89-6	Iron	20300	ug/L	278	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7439-92-1	Lead	203	ug/L	5.56	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7439-95-4	Magnesium	110000	ug/L	55.6	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7439-96-5	Manganese	610	ug/L	5.56	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7440-02-0	Nickel	29.5	ug/L	11.1	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7440-09-7	Potassium	80900	ug/L	55.6	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7440-22-4	Silver	ND	ug/L	5.56	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications: C	TDOH,NELAC-NY10854,NJI	DEP,PADEP	
7440-23-5	Sodium	1630000	ug/L	5560	10	EPA 6010D	05/15/2019 13:45	05/20/2019 10:43	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7440-62-2	Vanadium	47.9	ug/L	11.1	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	
7440-66-6	Zinc	933	ug/L	27.8	1	EPA 6010D	05/15/2019 13:45	05/16/2019 13:34	KML
						Certifications:	CTDOH,NELAC-NY10854,NJ	DEP,PADEP	

Metals, Target Analyte, ICP Dissolved

Sample Prepared by Method: EPA 3015A

Log-in Notes:	Sample Notes:
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CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	0	0.0822		mg/L	0.0556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:59	KML
								Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium	0	0.0937		mg/L	0.0278	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:59	KML
						Certifications:	ons: CTDOH,NELAC-NY10854,NJDEP,PADEP					
7440-70-2	Calcium	1	103		mg/L	0.0556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:59	KML
								Certifications:	CTDOH,NE	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium	1	ND		mg/L	0.00556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:59	KML
								Certifications:	CTDOH,NE	LAC-NY10854,NJDE	P,PADEP	
7440-48-4	Cobalt	1	ND		mg/L	0.00444	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:59	KML
								Certifications:	CTDOH,NE	LAC-NY10854,NJDE	P,PADEP	
7440-50-8	Copper	1	ND		mg/L	0.0222	1	EPA 6010D		05/17/2019 16:32	05/20/2019 10:59	KML
								Certifications:	CTDOH,NE	LAC-NY10854,NJDE	P,PADEP	

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Client Sample ID: MW004 **York Sample ID:**

19E0591-34

York Project (SDG) No. 19E0591

Sample Prepared by Method: EPA 3015A

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:15 pm Date Received 05/13/2019

Metals, Target Analyte, ICP Dissolved

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron		ND		mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:59 EP,PADEP	KML
7439-92-1	Lead		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:59 EP,PADEP	KML
7439-95-4	Magnesium		75.9		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:59 EP,PADEP	KML
7439-96-5	Manganese		0.0308		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:59 EP,PADEP	KML
7440-02-0	Nickel		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:59 EP,PADEP	KML
7440-09-7	Potassium		70.6		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:59 EP,PADEP	KML
7440-22-4	Silver		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:59 EP,PADEP	KML
7440-23-5	Sodium		1260		mg/L	0.556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:59 EP,PADEP	KML
7440-62-2	Vanadium		0.0202		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 10:59 EP,PADEP	KML
7440-66-6	Zinc		ND		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 10:59 EP,PADEP	KML

Metals, Target Analyte, ICPMS

Sample Prepared by Method: EPA 3015A

Log-i	n N	otes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		1.25		ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:44	BML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-38-2	Arsenic		16.4		ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:44	BML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		ND		ug/L	0.333	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:44	BML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDI	EP,PADEP	
7440-43-9	Cadmium		2.31		ug/L	0.556	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:44	BML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium		56.4		ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:44	BML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium		ND		ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:44	BML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDI	EP,PADEP	

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	,	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:26 EP,PADEP	BML

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Client Sample ID: MW004 **York Sample ID:**

19E0591-34

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:15 pm Date Received 05/13/2019

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	0.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic		20.3		ug/L	11.1	10	EPA 6020B		05/17/2019 16:34	05/20/2019 15:26	BML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDI	EP,PADEP	
7440-41-7	Beryllium		ND		ug/L	3.33	10	EPA 6020B Certifications:	CTDOH NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:26 PPADEP	BML
7440-43-9	Cadmium		ND		ug/L	5.56	10	EPA 6020B Certifications:	,	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:26	BML
7782-49-2	Selenium		12.7		ug/L	11.1	10	EPA 6020B	CTDOII,NE	05/17/2019 16:34	05/20/2019 15:26	BML
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDI	EP,PADEP	
7440-28-0	Thallium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:26 P,PADEP	BML

Log-in Notes: Mercury by 7473 **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	to Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473 Certifications:	CTDOH NI	05/16/2019 09:41 ELAC-NY10854 NJDE	05/16/2019 12:08 EPPADEP	SY

Mercury by 7473, Dissolved

Log-in Notes:

Sample Notes:

Data/Time

Sample Prepared by Method: EPA 7473 water

CAS I	No.	Parameter	Result	Flag	Units	Reported to LOQ 1	Dilution	n Reference	Method	Prepared	Analyzed	Analyst
7439-97-6	Mercury		ND		mg/L	0.0002000	1	EPA 7473		05/21/2019 10:01	05/21/2019 11:33	SY
								Certifications:	CTDOH,NE	LAC-NY10854,NJDE	P,PADEP	

Sample Information

DUPE001 York Sample ID: **Client Sample ID:** 19E0591-35

York Project (SDG) No. Client Project ID Collection Date/Time Date Received Matrix 19E0591 LST 1802 Soil May 10, 2019 12:00 am 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes: Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 04:49	КН
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.109	0.217	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 Y10854,NJDEP,PADEP	05/23/2019 04:49	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH

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Client Sample ID: DUPE001

York Sample ID: 19E0591-35

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 12:00 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/23/2019 04:49	КН
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEF	05/23/2019 04:49	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/23/2019 04:49	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,PADEP	05/23/2019 04:49	КН
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.109	0.217	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEF	05/23/2019 04:49	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 EP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.109	0.217	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
91-57-6	2-Methylnaphthalene	0.109		mg/kg dry	0.0544	0.109	2	EPA 8270D		05/21/2019 08:26	05/23/2019 04:49	KH
					0.0544	0.100		Certifications:	CTDOH,N	ELAC-NY10854,NJD		
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.109	0.217	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	NELAC-N	05/21/2019 08:26 Y10854,NJDEP,PADEF	05/23/2019 04:49	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.109	0.217	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.109	0.217	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	КН
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NI	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 P,PADEP	КН

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Client Sample ID: DUPE001

<u>York Sample ID:</u> 19E0591-35

York Project (SDG) No. 19E0591

Sample Prepared by Method: EPA 3550C

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared		Analys
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N		КН
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N		КН
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N		KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.109	0.217	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N		KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.109	0.217	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N		KH
33-32-9	Acenaphthene	0.108	J	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N		KH
208-96-8	Acenaphthylene	0.162		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,1		KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 NELAC-NY10854,NJDEP,PA		КН
62-53-3	Aniline	ND		mg/kg dry	0.217	0.435	2	EPA 8270D Certifications:	05/21/2019 08:2 NELAC-NY10854,NJDEP,PA		KH
120-12-7	Anthracene	0.304		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,1		KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 NELAC-NY10854,NJDEP,PA		KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 NELAC-NY10854,NJDEP,PA		KH
92-87-5	Benzidine	ND		mg/kg dry	0.217	0.435	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,P.		КН
6-55-3	Benzo(a)anthracene	1.14		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N		KH
0-32-8	Benzo(a)pyrene	1.50		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N		KH
205-99-2	Benzo(b)fluoranthene	1.22		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,1	6 05/23/2019 04:49	КН
91-24-2	Benzo(g,h,i)perylene	1.00		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,1	6 05/23/2019 04:49	KH
07-08-9	Benzo(k)fluoranthene	1.11		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2	6 05/23/2019 04:49	KH
55-85-0	Benzoic acid	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NELAC-NY10854,N 05/21/2019 08:2 NELAC-NY10854,NJDEP,PA	6 05/23/2019 04:49	КН
00-51-6	Benzyl alcohol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 NELAC-NY10854,NJDEP,PA	6 05/23/2019 04:49	КН
35-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N	6 05/23/2019 04:49	КН
11-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N	6 05/23/2019 04:49	КН
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	05/21/2019 08:2 CTDOH,NELAC-NY10854,N	6 05/23/2019 04:49	KH

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Client Sample ID: DUPE001 **York Sample ID:** 19E0591-35

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes: Samp	ole Notes:
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CAS No	o. Parameter	Result Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-60-1	Bis(2-chloroisopropyl)ether	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 04:49 EP,PADEP	КН
117-81-7	Bis(2-ethylhexyl)phthalate	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	KH
105-60-2	Caprolactam	ND	mg/kg dry	0.109	0.217	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 /10854,NJDEP,PADE	05/23/2019 04:49	KH
86-74-8	Carbazole	0.246	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:49 EP,PADEP	KH
218-01-9	Chrysene	1.27	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:49 EP,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	0.269	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:49 EP PADEP	КН
132-64-9	Dibenzofuran	0.128	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:49	КН
84-66-2	Diethyl phthalate	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49	КН
131-11-3	Dimethyl phthalate	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	КН
84-74-2	Di-n-butyl phthalate	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDE	05/23/2019 04:49 EP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	КН
206-44-0	Fluoranthene	2.83	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:49 EPPADEP	KH
86-73-7	Fluorene	0.169	mg/kg dry	0.0544	0.109	2	EPA 8270D		05/21/2019 08:26	05/23/2019 04:49	КН
118-74-1	Hexachlorobenzene	ND	mg/kg dry	0.0544	0.109	2	Certifications: EPA 8270D Certifications:		Y10854,NJDEP,PADE 05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 04:49	КН
87-68-3	Hexachlorobutadiene	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:		05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49	КН
77-47-4	Hexachlorocyclopentadiene	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	КН
67-72-1	Hexachloroethane	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 04:49 EP,PADEP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	1.18	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:49 EP,PADEP	КН
78-59-1	Isophorone	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	КН
91-20-3	Naphthalene	0.135	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJD	05/23/2019 04:49 EP,PADEP	KH
98-95-3	Nitrobenzene	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 04:49 EP,PADEP	КН
62-75-9	N-Nitrosodimethylamine	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	КН
621-64-7	N-nitroso-di-n-propylamine	ND	mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJDF	05/23/2019 04:49 EP,PADEP	КН
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Client Sample ID: DUPE001

York Sample ID:

19E0591-35

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

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Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	КН
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	KH
85-01-8	Phenanthrene	1.99		mg/kg dry	0.0544	0.109	2	EPA 8270D		05/21/2019 08:26	05/23/2019 04:49	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0544	0.109	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	KH
129-00-0	Pyrene	2.22		mg/kg dry	0.0544	0.109	2	EPA 8270D		05/21/2019 08:26	05/23/2019 04:49	KH
								Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.217	0.435	2	EPA 8270D Certifications:	CTDOH,N	05/21/2019 08:26 ELAC-NY10854,NJDI	05/23/2019 04:49 EP,PADEP	KH
	Surrogate Recoveries	Result		Accep	otance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	69.4 %			20-108							
4165-62-2	Surrogate: SURR: Phenol-d5	79.0 %			23-114							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	84.8 %			22-108							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	79.1 %			21-113							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	33.7 %			19-110							
1718-51-0	Surrogate: SURR: Terphenyl-d14	81.6%			24-116							

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		9690		mg/kg dry	6.53	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:44	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony		ND		mg/kg dry	3.27	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:44 EP,PADEP	KML
7440-38-2	Arsenic		3.94		mg/kg dry	1.96	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:44	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium		39.2		mg/kg dry	3.27	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:44	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium		0.325	В	mg/kg dry	0.065	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:44	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium		ND		mg/kg dry	0.392	1	EPA 6010D Certifications:	CTDOH,N	05/20/2019 14:50 ELAC-NY10854,NJDE	05/20/2019 20:44 EP,PADEP	KML
7440-70-2	Calcium		6000		mg/kg dry	6.53	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:44	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium		12.7		mg/kg dry	0.653	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:44	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt		7.92		mg/kg dry	0.523	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:44	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: DUPE001

York Sample ID:

19E0591-35

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:00 am

Sample Notes:

Date Received 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes: Sample Notes:

CAS N	No. P	'arameter Result	Flag	Units	Reported to LOQ	Dilution	Reference M	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
7440-50-8	Copper	18.8		mg/kg dry	2.61	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
							Certifications: C	TDOH,NELAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron	15600		mg/kg dry	32.7	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
							Certifications:	TDOH,NELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead	24.8		mg/kg dry	0.653	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
							Certifications: C	TDOH,NELAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium	3730		mg/kg dry	6.53	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
							Certifications: C	TDOH,NELAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	254		mg/kg dry	0.653	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
							Certifications:	TDOH,NELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	15.3		mg/kg dry	1.31	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
							Certifications: C	TDOH,NELAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	1060		mg/kg dry	6.53	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
							Certifications: C	TDOH,NELAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND		mg/kg dry	3.27	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
							Certifications: C	TDOH,NELAC-NY10854,NJDE	P,PADEP	
7440-22-4	Silver	ND		mg/kg dry	0.653	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
								FDOH,NELAC-NY10854,NJDE		
7440-23-5	Sodium	207		mg/kg dry	65.3	1	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
								TDOH,NELAC-NY10854,NJD		
7440-28-0	Thallium	ND		mg/kg dry	3.27	1	EPA 6010D Certifications: C	05/20/2019 14:50 FDOH,NELAC-NY10854,NJDE	05/20/2019 20:44	KML
7440 (2.2	Vanadium	160			1.21	,			,	I/MI
7440-62-2	v anautum	16.8		mg/kg dry	1.31	1	EPA 6010D Certifications: C	05/20/2019 14:50 TDOH,NELAC-NY10854,NJD	05/20/2019 20:44	KML
7440-66-6	Zinc	42.2		ma/Ira derr	2.25	,	EPA 6010D	05/20/2019 14:50	05/20/2019 20:44	KML
/440-00-0	Zalic	43.3		mg/kg dry	3.27	1		05/20/2019 14:50 TDOH,NELAC-NY10854,NJD		KIVIL
							Certifications. C	1DO11,NELAC-N 1 10034,NJD	LI,I ADEF	

Mercury by 7473 Log-in Notes:

Sample Prepared by Method: EPA 7473 soil

CAS N	0.	Parameter	Result	Flag	Units	Reported to	Dilution	1 Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.142		mg/kg dry	0.0392	1	EPA 7473		05/22/2019 14:45	05/22/2019 23:03	SY
								Certifications:	CTDOH,N	JDEP,NELAC-NY108	54,PADEP	

<u>Total Solids</u> <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: % Solids Prep

CAS	S No.	Parameter	Result	Flag	Units	Reported t	o Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		76.5		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications:	CTDOH			

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Client Sample ID: DUPE002

York Sample ID: 19E0591-36

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No	o. Parameter	Result Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY1	05/21/2019 08:26 10854,NJDEP,PADEP	05/22/2019 02:23	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	NELAC-NY1	05/21/2019 08:26 10854,NJDEP,PADEP	05/22/2019 02:23	SR
120-82-1	1,2,4-Trichlorobenzene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/21/2019 08:26 LAC-NY10854,NJDEI	05/22/2019 02:23 P,PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY1	05/21/2019 08:26 10854,PADEP	05/22/2019 02:23	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY1	05/21/2019 08:26 10854,NJDEP,PADEP	05/22/2019 02:23	SR
541-73-1	1,3-Dichlorobenzene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY1	05/21/2019 08:26 10854,PADEP	05/22/2019 02:23	SR
106-46-7	1,4-Dichlorobenzene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/21/2019 08:26 10854,PADEP	05/22/2019 02:23	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND	mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:		05/21/2019 08:26 10854,NJDEP,PADEP	05/22/2019 02:23	SR
95-95-4	2,4,5-Trichlorophenol	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/21/2019 08:26 LAC-NY10854,NJDEI	05/22/2019 02:23 P,PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEI	05/22/2019 02:23 P,PADEP	SR
120-83-2	2,4-Dichlorophenol	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/21/2019 08:26 LAC-NY10854,NJDEI	05/22/2019 02:23 P,PADEP	SR
105-67-9	2,4-Dimethylphenol	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
51-28-5	2,4-Dinitrophenol	ND	mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
91-58-7	2-Chloronaphthalene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
95-57-8	2-Chlorophenol	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
91-57-6	2-Methylnaphthalene	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
95-48-7	2-Methylphenol	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
88-74-4	2-Nitroaniline	ND	mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
88-75-5	2-Nitrophenol	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NEI	05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
65794-96-9	3- & 4-Methylphenols	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		05/21/2019 08:26 LAC-NY10854,NJDEF	05/22/2019 02:23 P,PADEP	SR
91-94-1	3,3-Dichlorobenzidine	ND	mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY1	05/21/2019 08:26 10854,NJDEP,PADEP	05/22/2019 02:23	SR
	NEADOLL DDIVE	CTDATEODD OT 06645				00 0045 4			ICHMOND HILL		



Client Sample ID: DUPE002 **York Sample ID:** 19E0591-36

York Project (SDG) No. Client Project ID 19E0591 LST 1802

Matrix Collection Date/Time May 10, 2019 12:00 am Soil

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

	ed by Method: EPA 3550C														
CAS No		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference N	Method	Date/Time Prepared	Date/Time Analyzed	Analyst			
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/22/2019 02:23 EP,PADEP	SR			
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/22/2019 02:23 EP,PADEP	SR			
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/22/2019 02:23 EP,PADEP	SR			
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/22/2019 02:23 EP,PADEP	SR			
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/22/2019 02:23 EP,PADEP	SR			
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/22/2019 02:23 EP,PADEP	SR			
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/22/2019 02:23 EP,PADEP	SR			
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/22/2019 02:23 EP,PADEP	SR			
83-32-9	Acenaphthene	0.108		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 ELAC-NY10854,NJE	05/22/2019 02:23 DEP,PADEP	SR			
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,NJD	05/22/2019 02:23 EP,PADEP	SR			
98-86-2	Acetophenone	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/22/2019 02:23 P	SR			
62-53-3	Aniline	ND		mg/kg dry	0.213	0.425	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/22/2019 02:23 P	SR			
120-12-7	Anthracene	0.515		mg/kg dry	0.0532	0.106	2	EPA 8270D		05/21/2019 08:26	05/22/2019 02:23	SR			
								Certifications:	CTDOH,NE	ELAC-NY10854,NJE	DEP,PADEP				
1912-24-9	Atrazine	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/22/2019 02:23 P	SR			
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	NELAC-NY	05/21/2019 08:26 10854,NJDEP,PADE	05/22/2019 02:23 P	SR			
92-87-5	Benzidine	ND		mg/kg dry	0.213	0.425	2	EPA 8270D Certifications:	CTDOH,NE	05/21/2019 08:26 LAC-NY10854,PAD	05/22/2019 02:23 EP	SR			
56-55-3	Benzo(a)anthracene	1.08		mg/kg dry	0.0532	0.106	2	EPA 8270D		05/21/2019 08:26	05/22/2019 02:23	SR			
								Certifications:	CTDOH,NE	ELAC-NY10854,NJE					
50-32-8	Benzo(a)pyrene	1.28		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	CTDOUNT	05/21/2019 08:26	05/22/2019 02:23	SR			
205-99-2	Benzo(b)fluoranthene	0.921		mg/kg dry	0.0532	0.106	2	EPA 8270D	CIDOH,NI	ELAC-NY10854,NJE 05/21/2019 08:26	05/22/2019 02:23	SR			
200), 2		0.721			0.0332	0.100	-		CTDOH,NE	ELAC-NY10854,NJE		510			
191-24-2	Benzo(g,h,i)perylene	0.689		mg/kg dry	0.0532	0.106	2	EPA 8270D		05/21/2019 08:26	05/22/2019 02:23	SR			
									CTDOH,NE	ELAC-NY10854,NJE	,				
207-08-9	Benzo(k)fluoranthene	0.765		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	СТООН МЕ	05/21/2019 08:26 ELAC-NY10854,NJE	05/22/2019 02:23 DEP PADEP	SR			
65-85-0	Benzoic acid	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D		05/21/2019 08:26 10854,NJDEP,PADE	05/22/2019 02:23	SR			
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D		05/21/2019 08:26	05/22/2019 02:23	SR			

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Certifications:

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NELAC-NY10854,NJDEP,PADEP

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Client Sample ID: DUPE002

York Sample ID: 19E0591-36

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		i/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		5/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		5/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		i/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		i/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
105-60-2	Caprolactam	ND		mg/kg dry	0.106	0.212	2	EPA 8270D Certifications:		5/21/2019 08:26 54,NJDEP,PADE	05/22/2019 02:23 P	SR
86-74-8	Carbazole	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		i/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
218-01-9	Chrysene	0.948		mg/kg dry	0.0532	0.106	2	EPA 8270D		5/21/2019 08:26	05/22/2019 02:23	SR
53-70-3	Dibenzo(a,h)anthracene	0.214		mg/kg dry	0.0532	0.106	2	Certifications: EPA 8270D		C-NY10854,NJD 5/21/2019 08:26	05/22/2019 02:23	SR
23 70 3	2 io en 20(u) in) un un u e en e	0.214		mg/ng my	0.0332	0.100	2	Certifications:		C-NY10854,NJD		510
132-64-9	Dibenzofuran	0.0815	J	mg/kg dry	0.0532	0.106	2	EPA 8270D	05	5/21/2019 08:26	05/22/2019 02:23	SR
								Certifications:	CTDOH,NELA	C-NY10854,NJD	EP,PADEP	
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		5/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		5/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		5/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		5/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
206-44-0	Fluoranthene	2.23		mg/kg dry	0.0532	0.106	2	EPA 8270D	05	5/21/2019 08:26	05/22/2019 02:23	SR
								Certifications:		C-NY10854,NJD		
86-73-7	Fluorene	0.138		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		5/21/2019 08:26 854,NJDEP,PADE	05/22/2019 02:23	SR
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	05	5/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23	SR
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:	05	5/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23	SR
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		5/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		i/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
193-39-5	Indeno(1,2,3-cd)pyrene	0.779		mg/kg dry	0.0532	0.106	2	EPA 8270D	05	5/21/2019 08:26	05/22/2019 02:23	SR
								Certifications:	CTDOH,NELA	C-NY10854,NJD	EP,PADEP	
78-59-1	Isophorone	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications:		i/21/2019 08:26 C-NY10854,NJDI	05/22/2019 02:23 EP,PADEP	SR
91-20-3	Naphthalene	0.0611	J	mg/kg dry	0.0532	0.106	2	EPA 8270D	05	5/21/2019 08:26	05/22/2019 02:23	SR

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Client Sample ID: DUPE002

York Sample ID: 1

19E0591-36

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:00 am <u>Date Received</u> 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Me	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications: CT	05/21/2019 08:26 DOH,NELAC-NY10854,NJDE	05/22/2019 02:23 EP,PADEP	SR
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications: CT	05/21/2019 08:26 DOH,NELAC-NY10854,NJDE	05/22/2019 02:23 EP,PADEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications: CT	05/21/2019 08:26 DOH,NELAC-NY10854,NJDE	05/22/2019 02:23 EP,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications: CT	05/21/2019 08:26 DOH,NELAC-NY10854,NJDE	05/22/2019 02:23 EP,PADEP	SR
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications: CT	05/21/2019 08:26 DOH,NELAC-NY10854,NJDE	05/22/2019 02:23 EP,PADEP	SR
85-01-8	Phenanthrene	1.39		mg/kg dry	0.0532	0.106	2	EPA 8270D	05/21/2019 08:26	05/22/2019 02:23	SR
								Certifications: C	ΓDOH,NELAC-NY10854,NJD	EP,PADEP	
108-95-2	Phenol	ND		mg/kg dry	0.0532	0.106	2	EPA 8270D Certifications: CT	05/21/2019 08:26 DOH,NELAC-NY10854,NJDE	05/22/2019 02:23 EP,PADEP	SR
129-00-0	Pyrene	1.95		mg/kg dry	0.0532	0.106	2	EPA 8270D	05/21/2019 08:26	05/22/2019 02:23	SR
								Certifications: C	ΓDOH,NELAC-NY10854,NJD	EP,PADEP	
110-86-1	Pyridine	ND		mg/kg dry	0.213	0.425	2	EPA 8270D Certifications: CT	05/21/2019 08:26 DOH,NELAC-NY10854,NJDE	05/22/2019 02:23 EP,PADEP	SR
	Surrogate Recoveries	Result		Acce	ptance Rang	e					
367-12-4	Surrogate: SURR: 2-Fluorophenol	39.6 %			20-108						
4165-62-2	Surrogate: SURR: Phenol-d5	37.0 %			23-114						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	73.5 %			22-108						
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	73.0 %			21-113						
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	147 %	S-08		19-110						
1718-51-0	Surrogate: SURR: Terphenyl-d14	88.2 %			24-116						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS N	No. P	arameter Result	Flag	Units	Reported t LOQ	O Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	5370		mg/kg dry	6.39	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-36-0	Antimony	ND		mg/kg dry	3.20	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-38-2	Arsenic	5.95		mg/kg dry	1.92	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-39-3	Barium	41.5		mg/kg dry	3.20	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium	0.101	В	mg/kg dry	0.064	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	
7440-43-9	Cadmium	1.42		mg/kg dry	0.383	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
							Certifications:	CTDOH,N	IELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: DUPE002

York Sample ID:

19E0591-36

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 12:00 am <u>Date Received</u> 05/13/2019

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

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Sample Notes:

CAS N	No. Parameter	Result	Flag Units	Reported to LOQ I	Dilution	Reference M	lethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-70-2	Calcium	16500	mg/kg dry	6.39	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications: C	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium	8.29	mg/kg dry	0.639	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7440-48-4	Cobalt	4.98	mg/kg dry	0.511	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7440-50-8	Copper	381	mg/kg dry	2.56	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7439-89-6	Iron	10100	mg/kg dry	32.0	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead	135	mg/kg dry	0.639	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7439-95-4	Magnesium	8910	mg/kg dry	6.39	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7439-96-5	Manganese	232	mg/kg dry	0.639	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	10.3	mg/kg dry	1.28	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7440-09-7	Potassium	800	mg/kg dry	6.39	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7782-49-2	Selenium	ND	mg/kg dry	3.20	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications: C	TDOH,NEL	AC-NY10854,NJDE	EP,PADEP	
7440-22-4	Silver	ND	mg/kg dry	0.639	1	EPA 6010D Certifications: C	TDOH,NEL	05/20/2019 14:50 AC-NY10854,NJDE	05/20/2019 20:46 EP,PADEP	KML
7440-23-5	Sodium	273	mg/kg dry	63.9	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications: C	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND	mg/kg dry	3.20	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications: C	TDOH,NEL	AC-NY10854,NJDE	EP,PADEP	
7440-62-2	Vanadium	16.1	mg/kg dry	1.28	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications: C	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	
7440-66-6	Zinc	645	mg/kg dry	3.20	1	EPA 6010D		05/20/2019 14:50	05/20/2019 20:46	KML
						Certifications:	CTDOH,NE	LAC-NY10854,NJD	EP,PADEP	

Mercury by 7473

Sample Prepared by Method: EPA 7473 soil

Log-in Notes:

Sample Notes:

CAS N	0.	Parameter	Parameter Result	Flag	Units	Reported to LOQ	Reported to LOQ Dilution Reference Met			Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		0.613		mg/kg dry	0.0383	1	EPA 7473		05/22/2019 14:45	05/22/2019 23:13	SY
								Certifications:	CTDOH N	IDEPNELAC-NY108	54 PADEP	

Total Solids

Log-in Notes:

Sample Notes:

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Client Sample ID: DUPE002

York Sample ID: 19E0591-36

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Soil Collection Date/Time
May 10, 2019 12:00 am

Date Received 05/13/2019

Sample Prepared by Method: % Solids Prep

CAS No.		Parameter	Result	Flag	Units	Reported LOQ	o Dilution	Reference M	Reference Method		Date/Time Analyzed	Analyst
solids	* % Solids		78.2		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications: C	TDOH			

Sample Information

Client Sample ID: DUPE003

York Sample ID: 19E0591-37

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix

Collection Date/Time

Date Received

Water May 10, 2019 12:00 am

05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes: Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 18:27 2058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEF	SS P,PADEP

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Client Sample ID: DUPE003

York Sample ID: 19E0591-37

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS N	Jo. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEI	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEI	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEF	SS P,PADEP
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 18:27 12058,NJDEP,PADEP	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEI	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEI	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEI	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30		SS



Client Sample ID: DUPE003 **York Sample ID:** 19E0591-37

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

J	<u>Log-in Notes:</u>	 sampl	le I	Not	tes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		te/Time repared	Date/Time Analyzed	Analyst
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 NELAC-NY1	05/16/2019 18:27 2058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 .AC-NY12058,NJDEI	SS P,PADEP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEI	SS P,PADEP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEL	05/16/2019 18:27 AC-NY12058,PADE	SS P
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	05/16/	/2019 07:30	05/16/2019 18:27 .AC-NY12058,PADE	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/	/2019 07:30	05/16/2019 18:27 .AC-NY12058,NJDEI	SS



Client Sample ID: DUPE003

York Sample ID: 1

19E0591-37

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 18:27 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 18:27 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS P,PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:27 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	102 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	102 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	109 %			70-130							

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log	g-in	Not	es:

Sample Notes: EXT-EM

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:		05/16/2019 15:13 0854,NJDEP,PADEP	05/17/2019 19:26	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:		05/16/2019 15:13 0854,NJDEP,PADEP	05/17/2019 19:26	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:		05/16/2019 15:13 AC-NY10854,NJDE	05/17/2019 19:26 P,PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	NELAC-NY1	05/16/2019 15:13 0854,PADEP	05/17/2019 19:26	SR

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Client Sample ID: DUPE003

York Sample ID: 19E0591-37

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

<u>Log-in Notes:</u> <u>Sample</u>	e		N	01	tes	:	\mathbf{E}_{2}	K.	۱-	E	N	1
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Me	thod Date/Time Prepared	Date/Time Analyzed	Analyst
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications: NE	05/16/2019 15:13 LAC-NY10854,NJDEP,PAI		SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications: NE	05/16/2019 15:13 LAC-NY10854,PADEP	05/17/2019 19:26	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications: NE	05/16/2019 15:13 LAC-NY10854,PADEP	05/17/2019 19:26	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications: NE	05/16/2019 15:13 LAC-NY10854,NJDEP,PAI		SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications: CT	05/16/2019 15:13 DOH,NELAC-NY10854,NJ		SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
95-57-8	2-Chlorophenol	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
95-48-7	2-Methylphenol	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
88-74-4	2-Nitroaniline	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
99-09-2	3-Nitroaniline	ND		ug/L	2.70	5.41	1	EPA 8270D	,	05/17/2019 19:26	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.70	5.41	1	EPA 8270D	05/16/2019 15:13 DOH,NELAC-NY10854,NJ	05/17/2019 19:26	SR

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Client Sample ID: DUPE003

York Sample ID: 19E0591-37

 York Project (SDG) No.
 Client Project ID

 19E0591
 LST 1802

MatrixCollection Date/TimeWaterMay 10, 2019 12:00 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes: EXT-EM

CAS I	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
106-47-8	4-Chloroaniline	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
100-02-7	4-Nitrophenol	ND		ug/L	5.41	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
98-86-2	Acetophenone	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 19:26 EP	SR
62-53-3	Aniline	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 19:26 EP	SR
100-52-7	Benzaldehyde	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 19:26 EP	SR
92-87-5	Benzidine	ND		ug/L	5.41	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
65-85-0	Benzoic acid	ND		ug/L	27.0	54.1	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 19:26 EP	SR
100-51-6	Benzyl alcohol	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 19:26 EP	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.08	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
105-60-2	Caprolactam	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 19:26 EP	SR
86-74-8	Carbazole	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
132-64-9	Dibenzofuran	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
131-11-3	Dimethyl phthalate	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	5.41	10.8	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26 EP,PADEP	SR
78-59-1	Isophorone	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 19:26	SR
									, , , , , , , , , , , , , , , , , , , ,		



Client Sample ID: DUPE003

York Sample ID: 19E0591-37

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes: EXT-EM

Sample Prepared by Method: EPA 3510C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 19:26 EP,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 19:26 EP,PADEP	SR
108-95-2	Phenol	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 19:26 EP,PADEP	SR
110-86-1	Pyridine	ND		ug/L	2.70	5.41	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 19:26 EP,PADEP	SR
	Surrogate Recoveries	Result		Acc	eptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	30.0 %			19.7-63.1							
4165-62-2	Surrogate: SURR: Phenol-d5	17.0 %			10.1-41.7							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	56.4 %			50.2-113							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	63.2 %			39.9-105							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	70.0 %			39.3-151							
1718-51-0	Surrogate: SURR: Terphenyl-d14	79.4 %			30.7-106							

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes: EXT-EM

CAS N	No. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	КН
208-96-8	Acenaphthylene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	КН
120-12-7	Anthracene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	KH
1912-24-9	Atrazine	ND		ug/L	0.541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP	KH
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	KH
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	КН
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	0.541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP	KH
218-01-9	Chrysene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	КН
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 18:44 EP,PADEP	KH

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Log-in Notes:

Client Sample ID: DUPE003

York Sample ID: 19E0591-37

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeWaterMay 10, 2019 12:00 am

Sample Notes: EXT-EM

Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP

<u>Date Received</u> 05/13/2019

Semi-Volatiles, 8270 Comprehensive

ample Prepared by Method: FPA 3510C

Sample Prepa	red by Method: EPA 3510C									
CAS N	No. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
206-44-0	Fluoranthene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP,PADEP	КН
86-73-7	Fluorene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP,PADEP	KH
118-74-1	Hexachlorobenzene	ND		ug/L	0.0216	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP	KH
87-68-3	Hexachlorobutadiene	ND		ug/L	0.541	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP	KH
67-72-1	Hexachloroethane	ND		ug/L	0.541	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP,PADEP	KH
91-20-3	Naphthalene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP,PADEP	КН
98-95-3	Nitrobenzene	ND		ug/L	0.270	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP	KH
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.541	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP	КН
87-86-5	Pentachlorophenol	ND		ug/L	0.270	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP	КН
85-01-8	Phenanthrene	ND		ug/L	0.0541	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 18:44 EP,PADEP	КН
129-00-0	Pyrene	ND		ug/L	0.0541	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 18:44	KH

Pesticides, 8081 List

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

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS I	No. Parameter	Result	Flag Units	Reported to LOQ Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	ug/L	0.00444 1	EPA 8081B Certifications: CTDOH,	05/16/2019 10:56 NELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	ug/L	0.00444 1	EPA 8081B Certifications: CTDOH,	05/16/2019 10:56 NELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	ug/L	0.00444 1	EPA 8081B Certifications: CTDOH,	05/16/2019 10:56 NELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	CM
309-00-2	Aldrin	ND	ug/L	0.00444 1	EPA 8081B Certifications: CTDOH,	05/16/2019 10:56 NELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	CM
319-84-6	alpha-BHC	ND	ug/L	0.00444 1	EPA 8081B Certifications: CTDOH,	05/16/2019 10:56 NELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND	ug/L	0.00444 1	EPA 8081B Certifications: CTDOH,	05/16/2019 10:56 NELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	CM
319-85-7	beta-BHC	ND	ug/L	0.00444 1	EPA 8081B Certifications: CTDOH,	05/16/2019 10:56 NELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	CM
319-86-8	delta-BHC	ND	ug/L	0.00444 1	EPA 8081B Certifications: CTDOH,	05/16/2019 10:56 NELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	СМ

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Client Sample ID: DUPE003

York Sample ID: 19E0591-37

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Pesticides, 8081 List

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

Log-in Notes:	Sample Notes
Log-m Notes:	Sample Notes

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
60-57-1	Dieldrin	ND		ug/L	0.00222	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	СМ
959-98-8	Endosulfan I	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/17/2019 23:46 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/17/2019 23:46 EP,PADEP	CM
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	СМ
72-20-8	Endrin	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/17/2019 23:46 EP,PADEP	СМ
7421-93-4	Endrin aldehyde	ND		ug/L	0.0111	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	СМ
53494-70-5	Endrin ketone	ND		ug/L	0.0111	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/17/2019 23:46 EP,PADEP	СМ
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/17/2019 23:46 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		ug/L	0.0111	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/17/2019 23:46 EP,PADEP	CM
76-44-8	Heptachlor	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/17/2019 23:46 EP,PADEP	СМ
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/17/2019 23:46 EP,PADEP	СМ
72-43-5	Methoxychlor	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/17/2019 23:46 EP,PADEP	СМ
8001-35-2	Toxaphene	ND		ug/L	0.111	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/17/2019 23:46 EP,PADEP	СМ
57-74-9	* Chlordane, total	ND		ug/L	0.222	1	EPA 8081B Certifications:		05/16/2019 10:56	05/17/2019 23:46	CM
	Surrogate Recoveries	Result		Acceptai	nce Range						
2051-24-3	Surrogate: Decachlorobiphenyl	92.7 %		30)-150						
877-09-8	Surrogate: Tetrachloro-m-xylene	88.4 %		30	1-150						
	-										

Polychlorinated Biphenyls (PCB), 8082 List

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

Log-in Notes:

Sample Notes:

CAS No	o. P:	arameter Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:12 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:12 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:12 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:12 EP,PADEP	SR

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Client Sample ID: DUPE003 **York Sample ID:** 19E0591-37

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12672-29-6	Aroclor 1248	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 /10854,CTDOH,NJDE	05/20/2019 14:12 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 710854,CTDOH,NJDE	05/20/2019 14:12 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 710854,CTDOH,NJDE	05/20/2019 14:12 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0556	1	EPA 8082A Certifications:		05/16/2019 10:56	05/20/2019 14:12	SR
	Surrogate Recoveries	Result		Accept	ance Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	85.0 %		ŝ	30-150						
2051-24-3	Surrogate: Decachlorobiphenyl	106 %		Ĵ	30-150						

Metals, Target Analyte, ICP

Log-in Notes:	S	ample Notes:

CAS N	No. Par	ameter Resu	lt Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
429-90-5	Aluminum	492		ug/L	55.6	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
							Certifications:	CTDOH,N	NELAC-NY10854,NJD	EP,PADEP	
440-39-3	Barium	40.0		ug/L	27.8	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
							Certifications:	CTDOH,N	NELAC-NY10854,NJD	EP,PADEP	
440-70-2	Calcium	81200		ug/L	55.6	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
							Certifications:	CTDOH,N	NELAC-NY10854,NJD	EP,PADEP	
7440-47-3	Chromium	ND		ug/L	5.56	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJDE	EP,PADEP	
7440-48-4	Cobalt	ND		ug/L	4.44	1	EPA 6010D Certifications:			05/16/2019 13:36 EP,PADEP	KML
440-50-8	40-50-8 Copper			ug/L	22.2	1	EPA 6010D Certifications:	05/15/2019 13:45 05 CTDOH,NELAC-NY10854,NJDEP,PA		05/16/2019 13:36 EP,PADEP	KML
439-89-6	9-89-6 Iron			ug/L	278	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
	7-0						Certifications:	CTDOH,N	NELAC-NY10854,NJD	EP,PADEP	
7439-92-1	Lead	ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,N	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:36 EP,PADEP	KML
439-95-4	Magnesium	95700		ug/L	55.6	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
							Certifications:	CTDOH,N	NELAC-NY10854,NJD	EP,PADEP	
439-96-5	Manganese	49.6		ug/L	5.56	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
							Certifications:	CTDOH,N	NELAC-NY10854,NJD	EP,PADEP	
7440-02-0	Nickel	ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,N	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:36 EP,PADEP	KML
440-09-7	Potassium	34200		ug/L	55.6	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
							Certifications:	CTDOH,N	NELAC-NY10854,NJD	EP,PADEP	
7440-22-4	Silver	ND		ug/L	5.56	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
							Certifications:	CTDOH,N	ELAC-NY10854,NJDE	EP,PADEP	
440-23-5	Sodium	93300	0	ug/L	556	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
							Certifications:	CTDOH,N	NELAC-NY10854,NJD	EP,PADEP	

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Client Sample ID: DUPE003

York Sample ID:

19E0591-37

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:00 am

D-4-/T:---

D-4-/T:---

Date Received 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

Log-in Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported t LOQ	O Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	Vanadium		ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:36 P,PADEP	KML
7440-66-6	Zinc		27.9		ug/L	27.8	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:36	KML
								Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	

Metals, Target Analyte, ICP Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	0.0728	mg/L	0.0556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 11:01	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-39-3	Barium	0.0350	mg/L	0.0278	1	EPA 6010D		05/17/2019 16:32	05/20/2019 11:01	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-70-2	Calcium	77.9	mg/L	0.0556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 11:01	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-47-3	Chromium	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:01 P,PADEP	KML
7440-48-4	Cobalt	ND	mg/L	0.00444	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:01 P,PADEP	KML
7440-50-8	Copper	ND	mg/L	0.0222	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:01 P,PADEP	KML
7439-89-6	Iron	ND	mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:01 P,PADEP	KML
7439-92-1	Lead	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:01 P,PADEP	KML
7439-95-4	Magnesium	88.2	mg/L	0.0556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 11:01	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7439-96-5	Manganese	0.0204	mg/L	0.00556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 11:01	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-02-0	Nickel	ND	mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:01 P,PADEP	KML
7440-09-7	Potassium	31.3	mg/L	0.0556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 11:01	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-22-4	Silver	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:01 P,PADEP	KML
7440-23-5	Sodium	857	mg/L	0.556	1	EPA 6010D		05/17/2019 16:32	05/20/2019 11:01	KML
						Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	
7440-62-2	Vanadium	ND	mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:01 P,PADEP	KML
7440-66-6	Zinc	ND	mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:01 P,PADEP	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

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Client Sample ID: DUPE003 **York Sample ID:** 19E0591-37

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Sample Prepared by Method: EPA 3015A

CAS N	No. Pa	nrameter Res	ult Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	1.34		ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:49	BML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-38-2	Arsenic	3.97		ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:49	BML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-41-7	Beryllium	ND		ug/L	0.333	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:49	BML
							Certifications:	CTDOH,NE	ELAC-NY10854,NJDE	EP,PADEP	
7440-43-9	Cadmium	ND		ug/L	0.556	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:49	BML
							Certifications:	CTDOH,NE	LAC-NY10854,NJDE	P,PADEP	
7782-49-2	Selenium	27.5		ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:49	BML
							Certifications:	CTDOH,N	ELAC-NY10854,NJD	EP,PADEP	
7440-28-0	Thallium	ND		ug/L	1.11	1	EPA 6020B		05/15/2019 13:47	05/16/2019 13:49	BML
							Certifications:	CTDOH,NE	LAC-NY10854,NJDE	P,PADEP	

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	ło.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:31 P,PADEP	BML
7440-38-2	Arsenic		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:31 P,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	3.33	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:31 P,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	5.56	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:31 P,PADEP	BML
7782-49-2	Selenium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:31 P,PADEP	BML
7440-28-0	Thallium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:31 P,PADEP	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No	0.	Parameter	Result	Result Flag Units		Reported LOQ	o Dilution	Reference Method		Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473 Certifications:	CTDOH,NI	05/16/2019 09:41 ELAC-NY10854,NJDE	05/16/2019 13:19 EPPADEP	SY

Mercury by 7473, Dissolved

Log-in Notes:

Sample Notes:

Sample Prep	ared by M	ethod: EPA	.7473 water

CAS No.		Parameter	Result	Flag	Units	Reported to LOQ Di	lution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		mg/L	0.0002000	1	EPA 7473 Certifications:	CTDOH.NE	05/21/2019 10:01 ELAC-NY10854.NJDE	05/21/2019 11:44 EP.PADEP	SY

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Client Sample ID: SB009 (8-10) E

York Sample ID: 19

19E0591-38

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Soil Collection Date/Time May 10, 2019 11:35 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Date/Time Date/Time Method Prepared Analyzed	Analys
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS PADEP
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS PADEP
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS PADEP
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS PADEP
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
95-63-6	1,2,4-Trimethylbenzene	160		mg/kg dry	2.8	5.6	1000	EPA 8260C Certifications:	05/17/2019 07:30	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
108-67-8	1,3,5-Trimethylbenzene	63		mg/kg dry	2.8	5.6	1000	EPA 8260C	05/17/2019 07:30	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,	,PADEP
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 05/17/2019 13:48 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,R	SS PADEP
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS PADEP
123-91-1	1,4-Dioxane	ND		mg/kg dry	14	28	250	EPA 8260C Certifications:	05/17/2019 07:30	SS
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30	SS



Client Sample ID: SB009 (8-10) E

York Sample ID: 19E0591-38

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 11:35 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:		05/17/2019 07:30 AC-NY10854,NEI	05/17/2019 13:48 AC-NY12058,NJDEI	SS P,PADEP
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:		05/17/2019 07:30 AC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEI	SS P,PADEP
591-78-6	2-Hexanone	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	(05/17/2019 07:30	05/17/2019 13:48 AC-NY12058,NJDEI	SS
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	(05/17/2019 07:30	05/17/2019 13:48 .AC-NY12058,NJDEI	SS
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	(05/17/2019 07:30	05/17/2019 13:48 .AC-NY12058,NJDEI	SS
67-64-1	Acetone	ND		mg/kg dry	1.4	2.8	250	EPA 8260C Certifications:	(05/17/2019 07:30	05/17/2019 13:48 .AC-NY12058,NJDEI	SS
107-02-8	Acrolein	ND		mg/kg dry	1.4	2.8	250	EPA 8260C	(05/17/2019 07:30	05/17/2019 13:48	SS
107-13-1	Acrylonitrile	ND		mg/kg dry	0.70	1.4	250	Certifications: EPA 8260C	(05/17/2019 07:30	05/17/2019 13:48	SS
71-43-2	Benzene	ND		mg/kg dry	0.70	1.4	250	Certifications: EPA 8260C	(05/17/2019 07:30	05/17/2019 13:48	SS
108-86-1	Bromobenzene	ND		mg/kg dry	0.70	1.4	250	Certifications: EPA 8260C		AC-NY 10854,NEI 05/17/2019 07:30	AC-NY12058,NJDEI 05/17/2019 13:48	P,PADEP SS
74-97-5	Bromochloromethane	ND		mg/kg dry	0.70	1.4	250	Certifications: EPA 8260C		0854,NELAC-NY1 05/17/2019 07:30	2058,NJDEP,PADEP 05/17/2019 13:48	SS
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.70	1.4	250	Certifications: EPA 8260C		0854,NELAC-NY1 05/17/2019 07:30	2058,NJDEP,PADEP 05/17/2019 13:48	SS
75-25-2	Bromoform	ND		mg/kg dry	0.70	1.4	250	Certifications: EPA 8260C		AC-NY10854,NEL 05/17/2019 07:30	AC-NY12058,NJDEI 05/17/2019 13:48	P,PADEP SS
74-83-9	Bromomethane	ND		mg/kg dry	0.70	1.4	250	Certifications: EPA 8260C		AC-NY10854,NEI 05/17/2019 07:30	AC-NY12058,NJDEI 05/17/2019 13:48	P,PADEP SS
7.03	Bromomentane	ND						Certifications:			AC-NY12058,NJDEI	
75-15-0	Carbon disulfide	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:		05/17/2019 07:30 AC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEI	SS P,PADEP
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:		05/17/2019 07:30 AC-NY10854,NEI	05/17/2019 13:48 AC-NY12058,NJDEI	SS P,PADEP
108-90-7	Chlorobenzene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:		05/17/2019 07:30 AC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEF	SS P,PADEP
75-00-3	Chloroethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:		05/17/2019 07:30 AC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEI	SS P,PADEP
67-66-3	Chloroform	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:		05/17/2019 07:30 AC-NY10854,NEI	05/17/2019 13:48 AC-NY12058,NJDEI	SS P,PADEP
74-87-3	Chloromethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:		05/17/2019 07:30 AC-NY10854.NEL	05/17/2019 13:48 AC-NY12058,NJDEI	SS P.PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:		05/17/2019 07:30	05/17/2019 13:48 AC-NY12058,NJDEI	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	(05/17/2019 07:30	05/17/2019 13:48 .AC-NY12058,NJDEI	SS
110-82-7	Cyclohexane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C		05/17/2019 07:30	05/17/2019 13:48	SS
								Certifications:	NELAC-NYIO	0034,NELAC-NY I	2058,NJDEP,PADEP	



Client Sample ID: SB009 (8-10) E

York Sample ID: 19E0591-38

 York Project (SDG) No.
 Client Project ID

 19E0591
 LST 1802

MatrixCollection Date/TimeSoilMay 10, 2019 11:35 am

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes: Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1	Date/Time Method Prepared	Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 NELAC-NY10854,NELAC-NY1	05/17/2019 13:48 2058,NJDEP,PADEP	SS
74-95-3	Dibromomethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 NELAC-NY10854,NELAC-NY1	05/17/2019 13:48 2058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 NELAC-NY10854,NELAC-NY1	05/17/2019 13:48 2058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	1.1	J	mg/kg dry	0.70	1.4	250	EPA 8260C	05/17/2019 07:30	05/17/2019 13:48	SS
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.70	1.4	250	Certifications: EPA 8260C Certifications:	CTDOH,NELAC-NY10854,NEI 05/17/2019 07:30 NELAC-NY10854,NELAC-NY1	05/17/2019 13:48	P,PADEP SS
98-82-8	Isopropylbenzene	13		mg/kg dry	0.70	1.4	250	EPA 8260C	05/17/2019 07:30	05/17/2019 13:48	SS
								Certifications:	CTDOH,NELAC-NY10854,NEI	LAC-NY12058,NJDE	P,PADEP
79-20-9	Methyl acetate	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 NELAC-NY10854,NELAC-NY1	05/17/2019 13:48 2058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEF	SS P,PADEP
108-87-2	Methylcyclohexane	4.2		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 NELAC-NY10854,NELAC-NY	05/17/2019 13:48	SS
75-09-2	Methylene chloride	ND		mg/kg dry	1.4	2.8	250	EPA 8260C	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 13:48	SS
104-51-8	n-Butylbenzene	17		mg/kg dry	0.70	1.4	250	EPA 8260C	05/17/2019 07:30	05/17/2019 13:48	SS
								Certifications:	CTDOH,NELAC-NY10854,NEI	LAC-NY12058,NJDE	P,PADEP
103-65-1	n-Propylbenzene	33		mg/kg dry	0.70	1.4	250	EPA 8260C	05/17/2019 07:30	05/17/2019 13:48	SS
	V. 1		_					Certifications:	CTDOH,NELAC-NY10854,NEI		
95-47-6	o-Xylene	0.81	J	mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEI	05/17/2019 13:48 LAC-NY12058,PADE	SS P
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	1.4	2.8	250	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 13:48	SS
99-87-6	p-Isopropyltoluene	19		mg/kg dry	0.70	1.4	250	EPA 8260C	05/17/2019 07:30	05/17/2019 13:48	SS
								Certifications:	CTDOH,NELAC-NY10854,NEI	LAC-NY12058,NJDE	P,PADEP
135-98-8	sec-Butylbenzene	24		mg/kg dry	0.70	1.4	250	EPA 8260C	05/17/2019 07:30	05/17/2019 13:48	SS
								Certifications:	CTDOH,NELAC-NY10854,NEI	LAC-NY12058,NJDE	P,PADEP
100-42-5	Styrene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEF	SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.70	7.0	250	EPA 8260C Certifications:	05/17/2019 07:30 NELAC-NY10854,NELAC-NY1	05/17/2019 13:48 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	2.0		mg/kg dry	0.70	1.4	250	EPA 8260C	05/17/2019 07:30	05/17/2019 13:48	SS
								Certifications:	CTDOH,NELAC-NY10854,NEI	LAC-NY12058,NJDE	P,PADEP
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEF	SS P,PADEP
108-88-3	Toluene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEF	SS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEF	SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	05/17/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEF	SS P,PADEP

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Client Sample ID: SB009 (8-10) E

York Sample ID:

19E0591-38

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 11:35 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in	No	tes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	CTDOH,NI	05/17/2019 07:30 ELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEP	SS PADEP
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	CTDOH,NI	05/17/2019 07:30 ELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEP	SS PADEP
108-05-4	Vinyl acetate	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	NELAC-N	05/17/2019 07:30 Y10854,NELAC-NY12	05/17/2019 13:48 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.70	1.4	250	EPA 8260C Certifications:	CTDOH,NI	05/17/2019 07:30 ELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEP	SS PADEP
1330-20-7	Xylenes, Total	ND		mg/kg dry	2.1	4.2	250	EPA 8260C Certifications:	CTDOH,NI	05/17/2019 07:30 ELAC-NY10854,NEL	05/17/2019 13:48 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	92.0 %			77-125							
2037-26-5	Surrogate: SURR: Toluene-d8	94.4 %			85-120							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	135 %	S-09		76-130							

Log-in Notes: Sample Notes: Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.		Parameter	Result	Result Flag Units			o Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids		90.7		%	0.100	1	SM 2540G	05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications: CTDOH			

Sample Information

SB009 (8-10) N **Client Sample ID:**

York Sample ID:

19E0591-39

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 11:30 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:	Sample Notes:
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CAS N	o. 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		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP,	RDS PADEP
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP,	RDS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP,	RDS PADEP

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Client Sample ID: SB009 (8-10) N

York Sample ID: 19E0591-39

<u>York Project (SDG) No.</u>
19E0591

<u>Client Project ID</u>
LST 1802

MatrixCollection Date/TimeSoilMay 10, 2019 11:30 am

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

<u>Log-in Notes:</u> <u>Sar</u>	nple Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 19:44 2058,NJDEP,PADEP	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 19:44 2058,NJDEP,PADEP	RDS
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 19:44 2058,NJDEP	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 19:44	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C		05/16/2019 07:30	05/16/2019 19:44	RDS
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0033	0.0065	1	Certifications: EPA 8260C Certifications:		710854,NELAC-NY1 05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.065	0.13	1	EPA 8260C		05/16/2019 07:30	05/16/2019 19:44	RDS
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0033	0.0065	1	Certifications:		710854,NELAC-NY1 05/16/2019 07:30	05/16/2019 19:44	RDS
78-93-3	2-Butanone	0.0000	CCVE	ma/ka dry	0.0022	0.0065	1	Certifications: EPA 8260C	NELAC-NY	/10854,NELAC-NY1 05/16/2019 07:30	05/16/2019 19:44	PDC
10-73-3	2 Dutanylit	0.0088	CC V-E	mg/kg dry	0.0033	0.0065	1	Certifications:	CTDOH.N	03/10/2019 07.30 ELAC-NY10854,NEI		RDS P,PADEP
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS
591-78-6	2-Hexanone	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44	RDS

ClientServices@



Client Sample ID: SB009 (8-10) N

York Sample ID: 19E0591-39

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 11:30 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NELA	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
67-64-1	Acetone	0.037	CCV-E	mg/kg dry	0.0065	0.013	1	EPA 8260C		05/16/2019 07:30	05/16/2019 19:44	RDS
								Certifications:	CTDOH,NEI	LAC-NY10854,NEL	AC-NY12058,NJDE	P,PADEP
107-02-8	Acrolein	ND		mg/kg dry	0.0065	0.013	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
71-43-2	Benzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
108-86-1	Bromobenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:44 058,NJDEP,PADEP	RDS
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:44 058,NJDEP,PADEP	RDS
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
75-25-2	Bromoform	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
74-83-9	Bromomethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C		05/16/2019 07:30	05/16/2019 19:44 AC-NY12058,NJDEF	RDS
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
75-00-3	Chloroethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
67-66-3	Chloroform	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
74-87-3	Chloromethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEF	RDS P,PADEP
110-82-7	Cyclohexane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:44 058,NJDEP,PADEP	RDS
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:44 058,NJDEP,PADEP	RDS
74-95-3	Dibromomethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:44 058,NJDEP,PADEP	RDS
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:44 058,NJDEP,PADEP	RDS



Client Sample ID: SB009 (8-10) N

York Sample ID: 19E0591-39

 York Project (SDG) No.
 Client Project ID

 19E0591
 LST 1802

MatrixCollection Date/TimeSoilMay 10, 2019 11:30 am

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:	Sample Notes

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 710854,NELAC-NY1	05/16/2019 19:44 2058,NJDEP,PADEP	RDS
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
79-20-9	Methyl acetate	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 19:44 2058,NJDEP,PADEP	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 19:44 2058,NJDEP,PADEP	RDS
75-09-2	Methylene chloride	ND		mg/kg dry	0.0065	0.013	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
95-47-6	o-Xylene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,PADEP	RDS
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0065	0.013	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,PADEP	RDS
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
100-42-5	Styrene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0033	0.033	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 19:44 2058,NJDEP,PADEP	RDS
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
108-88-3	Toluene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 710854,NELAC-NY1	05/16/2019 19:44 2058,NJDEP,PADEP	RDS



Client Sample ID: SB009 (8-10) N **York Sample ID:**

19E0591-39

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Soil

Collection Date/Time May 10, 2019 11:30 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS N	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0033	0.0065	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS PADEP
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0098	0.020	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:44 AC-NY12058,NJDEP	RDS
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	102 %			77-125							
2037-26-5	Surrogate: SURR: Toluene-d8	98.4 %			85-120							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	101 %			76-130							

Log-in Notes: Sample Notes: Total Solids

Sample Prepared by Method: % Solids Prep

CAS	No.	Parameter	Result	Flag	Units	Reported to LOQ	Reported to LOQ Dilution		Reference Method		Date/Time Analyzed	Analyst
solids	* % Solids		78.9		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Certifications:	CTDOH			

Sample Information

Client Sample ID: SB009 (8-10) W **York Sample ID:** 19E0591-40

Collection Date/Time Date Received York Project (SDG) No. Client Project ID Matrix 19E0591 LST 1802 May 10, 2019 12:30 pm Soil 05/13/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	o. 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		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS PADEP
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 20:11 AC-NY12058,NJDEP	RDS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 20:11 AC-NY12058,NJDEP	RDS PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 20:11 AC-NY12058,NJDEP	RDS
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 20:11 AC-NY12058,NJDEP	RDS PADEP
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NELA	05/16/2019 20:11 AC-NY12058,NJDEP,	RDS PADEP

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Client Sample ID: SB009 (8-10) W **York Sample ID:** 19E0591-40

Date Received York Project (SDG) No. Client Project ID Matrix Collection Date/Time 19E0591 LST 1802 Soil May 10, 2019 12:30 pm 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		RDS P,PADEP
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		RDS
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		RDS
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		RDS
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		RDS
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		RDS P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		RDS P,PADEP
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		RDS P,PADEP
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		RDS P,PADEP
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		RDS P,PADEP
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		RDS P,PADEP
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		RDS P,PADEP
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 20:11	RDS
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		RDS
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE		RDS P,PADEP
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.068	0.14	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		RDS
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		RDS
78-93-3	2-Butanone	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 20:11	RDS P,PADEP
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 20:11	RDS
591-78-6	2-Hexanone	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 20:11	RDS
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 20:11	RDS
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NE	05/16/2019 20:11	RDS
67-64-1	Acetone	0.0074		mg/kg dry	0.0068	0.014	1	EPA 8260C	05/16/2019 07:30	05/16/2019 20:11	RDS
			J					Certifications:	CTDOH,NELAC-NY10854,NI	LAC-NY 12058,NJDE	z,padep

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Client Sample ID: SB009 (8-10) W

York Sample ID: 19E0591-40

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802SoilMay 10, 2019 12:30 pm05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-02-8	Acrolein	ND		mg/kg dry	0.0068	0.014	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
71-43-2	Benzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
108-86-1	Bromobenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 710854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 710854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
75-25-2	Bromoform	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
74-83-9	Bromomethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
75-00-3	Chloroethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
67-66-3	Chloroform	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
74-87-3	Chloromethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
110-82-7	Cyclohexane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
74-95-3	Dibromomethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEF	RDS P,PADEP



Client Sample ID: SB009 (8-10) W

<u>York Sample ID:</u> 19E0591-40

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeSoilMay 10, 2019 12:30 pm

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

<u>Log-in Notes:</u> <u>Sar</u>	nple Notes:
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CAS No	o. 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		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 / 10854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 / 10854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
75-09-2	Methylene chloride	0.010	J	mg/kg dry	0.0068	0.014	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDE	RDS P,PADEP
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
95-47-6	o-Xylene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,PADEF	RDS
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0068	0.014	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,PADEF	RDS
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
100-42-5	Styrene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0034	0.034	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
108-88-3	Toluene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
108-05-4	Vinyl acetate	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 20:11 2058,NJDEP,PADEP	RDS
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0034	0.0068	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS P,PADEP
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.010	0.020	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:11 AC-NY12058,NJDEP	RDS
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	99.1 %			77-125							

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Client Sample ID: SB009 (8-10) W **York Sample ID:** 19E0591-40

York Project (SDG) No. 19E0591

CAS No.

Client Project ID LST 1802

Matrix Soil

Dilution

Collection Date/Time May 10, 2019 12:30 pm Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5035A

Log-in Notes:

Sample Notes:

Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
receive check machine	r r cpur cu		1 111111 3 5 0

2037-26-5 Surrogate: SURR: Toluene-d8 460-00-4 Surrogate: SURR:

102 %

Result

101 %

85-120

Reported to

LOD/MDL

Prepared Analyzed

p-Bromofluorobenzene

Parameter

76-130

Log-in Notes: Sample Notes: Total Solids

Flag

Units

Sample Prepared by Method: % Solids Prep

	CAS No.	Parameter	Result	Flag	Units	Reported LOQ	lution	Reference Method		Date/Time Prepared	Date/Time Analyzed	Analyst
sol	ids * % Solids		84.1		%	0.100	1	SM 2540G		05/17/2019 18:10	05/18/2019 15:58	TJM
								Cartifications:	CTDOH			

Sample Information

FB001 **Client Sample ID: York Sample ID:** 19E0591-41

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Water May 10, 2019 12:00 am 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:58 AC-NY12058,NJDEP	SS PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:58 AC-NY12058,NJDEP	SS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:58 AC-NY12058,NJDEP	SS PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:58 AC-NY12058,NJDEP	SS PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:58 AC-NY12058,NJDEP	SS PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:58 AC-NY12058,NJDEP	SS PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 18:58 AC-NY12058,NJDEP	SS PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 18:58 2058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 18:58 2058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY12	05/16/2019 18:58 2058,NJDEP,PADEP	SS

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Client Sample ID: FB001

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:

York Sample ID:

19E0591-41

CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		te/Time repared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 NELAC-NY	05/16/2019 18:58 12058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEI	05/16/2019 18:58 LAC-NY12058,NJDE	SS P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 18:58 AC-NY12058,NJDE	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 18:58 AC-NY12058,NJDE	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 18:58	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16	/2019 07:30	05/16/2019 18:58	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	Certifications:	05/16	/2019 07:30	05/16/2019 18:58	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	Certifications:	05/16	/2019 07:30	05/16/2019 18:58	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	05/16	/2019 07:30	05/16/2019 18:58	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	05/16	/2019 07:30	05/16/2019 18:58	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	Certifications:	05/16	/2019 07:30	05/16/2019 18:58	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	Certifications: EPA 8260C	05/16	/2019 07:30	05/16/2019 18:58	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	05/16	/2019 07:30	05/16/2019 18:58	SS
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	05/16	/2019 07:30	05/16/2019 18:58	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		Y10854,NEI /2019 07:30	05/16/2019 18:58	P,PADEP SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		Y10854,NEI /2019 07:30	05/16/2019 18:58	P,PADEP SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		Y10854,NEI /2019 07:30	05/16/2019 18:58	P,PADEP SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		Y10854,NEI /2019 07:30	05/16/2019 18:58	P,PADEP SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	Certifications: EPA 8260C		Y10854,NEI /2019 07:30	05/16/2019 18:58	
	Acetone							Certifications:	CTDOH,NELAC-N	Y10854,NEI	LAC-NY12058,NJDE	P,PADEP
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEI	05/16/2019 18:58 LAC-NY12058,NJDE	SS P,PADEP
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEI	05/16/2019 18:58 LAC-NY12058,NJDE	SS P,PADEP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 Y10854,NEI	05/16/2019 18:58 LAC-NY12058,NJDE	SS P,PADEP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 NELAC-NY	05/16/2019 18:58 12058,NJDEP,PADEP	SS
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Client Sample ID: FB001

York Sample ID: 19E0591-41

 York Project (SDG) No.
 Client Project ID

 19E0591
 LST 1802

MatrixCollection Date/TimeWaterMay 10, 2019 12:00 am

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 (10854,NELAC-NY)	05/16/2019 18:58 2058,NJDEP,PADEP	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 .AC-NY12058,NJDEF	SS P,PADEP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 .AC-NY12058,NJDEF	SS P,PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 .AC-NY12058,NJDEF	SS P,PADEP
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY	05/16/2019 18:58 12058,NJDEP,PADEP	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY	05/16/2019 18:58 12058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY	05/16/2019 18:58 12058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY	05/16/2019 18:58 12058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 (10854,NELAC-NY)	05/16/2019 18:58 12058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 18:58 12058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 18:58 AC-NY12058,NJDEF	SS P,PADEP
											·	



Client Sample ID: York Sample ID: 19E0591-41

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference 1	Date/Time Method Prepared	Date/Time Analyzed	Analyst
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS
	Surrogate Recoveries	Result		Acce	eptance Rang	e					
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	105 %			70-130						
2037-26-5	Surrogate: SURR: Toluene-d8	102 %			70-130						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	109 %			70-130						

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

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ClientServices@ Page 288 of 446



Client Sample ID: FB001 **York Sample ID:** 19E0591-41

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 710854,NJDEP,PADEP	05/17/2019 20:13	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 / 10854,NJDEP,PADEP	05/17/2019 20:13	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 /10854,PADEP	05/17/2019 20:13	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 710854,NJDEP,PADEP	05/17/2019 20:13	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 / 10854,PADEP	05/17/2019 20:13	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 / 10854,PADEP	05/17/2019 20:13	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 // 10854,NJDEP,PADEP	05/17/2019 20:13	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
95-57-8	2-Chlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
95-48-7	2-Methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
88-74-4	2-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 P,PADEP	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13	SR
99-09-2	3-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:			05/17/2019 20:13	SR



Client Sample ID: FB001 **York Sample ID:** 19E0591-41

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDF	05/17/2019 20:13 EP,PADEP	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDF	05/17/2019 20:13 EP,PADEP	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDF	05/17/2019 20:13 EP,PADEP	SR
106-47-8	4-Chloroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDF	05/17/2019 20:13 EP,PADEP	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
100-02-7	4-Nitrophenol	ND		ug/L	5.71	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDF	05/17/2019 20:13 EP,PADEP	SR
98-86-2	Acetophenone	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 20:13	SR
62-53-3	Aniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 20:13	SR
100-52-7	Benzaldehyde	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 20:13	SR
92-87-5	Benzidine	ND		ug/L	5.71	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
65-85-0	Benzoic acid	ND		ug/L	28.6	57.1	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 20:13	SR
100-51-6	Benzyl alcohol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 20:13	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.14	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
105-60-2	Caprolactam	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 20:13	SR
86-74-8	Carbazole	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
132-64-9	Dibenzofuran	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 20:13 EP,PADEP	SR
131-11-3	Dimethyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 20:13 EP,PADEP	SR



Client Sample ID: FB001

York Sample ID:

19E0591-41

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log	g-in	No	tes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 20:13 EP,PADEP	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	5.71	11.4	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
78-59-1	Isophorone	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
108-95-2	Phenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 20:13 EP,PADEP	SR
110-86-1	Pyridine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 20:13 EP,PADEP	SR
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	31.1 %			19.7-63.1							
4165-62-2	Surrogate: SURR: Phenol-d5	18.9 %			10.1-41.7							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	54.2 %			50.2-113							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	58.5 %			39.9-105							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	62.5 %			39.3-151							
1718-51-0	Surrogate: SURR: Terphenyl-d14	73.0 %			30.7-106							

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND	ug/L	0.0571 1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:16 EP,PADEP	КН
208-96-8	Acenaphthylene	ND	ug/L	0.0571 1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:16 EP,PADEP	KH
120-12-7	Anthracene	ND	ug/L	0.0571 1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:16 EP,PADEP	KH
1912-24-9	Atrazine	ND	ug/L	0.571 1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:16 EP	КН
56-55-3	Benzo(a)anthracene	ND	ug/L	0.0571 1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:16 EP,PADEP	KH
50-32-8	Benzo(a)pyrene	ND	ug/L	0.0571 1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:16 EP,PADEP	КН
205-99-2	Benzo(b)fluoranthene	ND	ug/L	0.0571 1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:16 EP,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND	ug/L	0.0571 1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:16 EP,PADEP	KH
207-08-9	Benzo(k)fluoranthene	ND	ug/L	0.0571 1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:16 EP,PADEP	КН

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Client Sample ID: FB001

York Sample ID: 19E0591-41

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am <u>Date Received</u> 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	0.571	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P	KH
218-01-9	Chrysene	ND		ug/L	0.0571	1	EIII 02/02 DIM	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0571	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P,PADEP	KH
206-44-0	Fluoranthene	ND		ug/L	0.0571	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P,PADEP	KH
86-73-7	Fluorene	0.320		ug/L	0.0571	1		05/16/2019 15:13 AC-NY10854,NJDI	05/29/2019 19:16 EP,PADEP	KH
118-74-1	Hexachlorobenzene	ND		ug/L	0.0229	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P	KH
87-68-3	Hexachlorobutadiene	ND		ug/L	0.571	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 PP	KH
67-72-1	Hexachloroethane	ND		ug/L	0.571	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 PP	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0571	1	EIII 02/02 DIM	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P,PADEP	KH
91-20-3	Naphthalene	ND		ug/L	0.0571	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P,PADEP	KH
98-95-3	Nitrobenzene	ND		ug/L	0.286	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P	KH
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.571	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P	KH
87-86-5	Pentachlorophenol	ND		ug/L	0.286	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P	KH
85-01-8	Phenanthrene	ND		ug/L	0.0571	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P,PADEP	KH
129-00-0	Pyrene	ND		ug/L	0.0571	1		05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 19:16 P,PADEP	KH

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

CAS N	0.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference N	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/18/2019 00:01 P,PADEP	СМ
72-55-9	4,4'-DDE		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/18/2019 00:01 P,PADEP	СМ
50-29-3	4,4'-DDT		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/18/2019 00:01 P,PADEP	CM
309-00-2	Aldrin		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NEI	05/16/2019 10:56 LAC-NY10854,NJDE	05/18/2019 00:01 P,PADEP	CM
319-84-6	alpha-BHC		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 LAC-NY10854,NJDE	05/18/2019 00:01 P,PADEP	CM

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Client Sample ID: FB001

York Sample ID: 19E0591-41

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
5103-71-9	alpha-Chlordane	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	СМ
319-85-7	beta-BHC	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
319-86-8	delta-BHC	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
60-57-1	Dieldrin	ND		ug/L	0.00222	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
959-98-8	Endosulfan I	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	СМ
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
72-20-8	Endrin	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		ug/L	0.0111	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		ug/L	0.0111	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		ug/L	0.0111	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
76-44-8	Heptachlor	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
72-43-5	Methoxychlor	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
8001-35-2	Toxaphene	ND		ug/L	0.111	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/18/2019 00:01 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		ug/L	0.222	1	EPA 8081B Certifications:		05/16/2019 10:56	05/18/2019 00:01	СМ
	Surrogate Recoveries	Result		Accepta	ince Range						
2051-24-3	Surrogate: Decachlorobiphenyl	106 %		3	0-150						
377-09-8	Surrogate: Tetrachloro-m-xylene	85.8 %		3	0-150						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS No.	Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference N	Date/Time Method Prepared	Date/Time Analyzed	Analyst
12674-11-2 Aroclor 1	16	ND	ug/L	0.0556	1	EPA 8082A Certifications:	05/16/2019 10:56 NELAC-NY10854,CTDOH,NJDI	05/20/2019 14:26 EP,PADEP	SR

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Client Sample ID: FB001

York Sample ID: 19E0591-41

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am <u>Date Received</u> 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported t LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11104-28-2	Aroclor 1221	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:26 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/20/2019 14:26 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:26 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:26 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/20/2019 14:26 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:26 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0556	1	EPA 8082A Certifications:		05/16/2019 10:56	05/20/2019 14:26	SR
	Surrogate Recoveries	Result		Acce	ptance Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	75.0 %			30-150						
2051-24-3	Surrogate: Decachlorobiphenyl	86.5 %			30-150						

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 P,PADEP	KML
7440-39-3	Barium		ND		ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 P,PADEP	KML
7440-70-2	Calcium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 P,PADEP	KML
7440-47-3	Chromium		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 P,PADEP	KML
7440-48-4	Cobalt		ND		ug/L	4.44	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 P,PADEP	KML
7440-50-8	Copper		ND		ug/L	22.2	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 P,PADEP	KML
7439-89-6	Iron		329		ug/L	278	1	EPA 6010D Certifications:	CTDOH.N	05/15/2019 13:45 ELAC-NY10854,NJD	05/16/2019 13:44 EP.PADEP	KML
7439-92-1	Lead		ND		ug/L	5.56	1	EPA 6010D Certifications:	ŕ	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44	KML
7439-95-4	Magnesium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 P,PADEP	KML
7439-96-5	Manganese		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 P,PADEP	KML
7440-02-0	Nickel		ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 P.PADEP	KML



Client Sample ID: FB001

York Sample ID: 19E0591-41

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am <u>Date Received</u> 05/13/2019

Metals, Target Analyte, ICP
Sample Prepared by Method: EPA 3015A

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-09-7	Potassium		123		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,N	05/15/2019 13:45 ELAC-NY10854,NJD	05/16/2019 13:44 EP,PADEP	KML
7440-22-4	Silver		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:44 EP,PADEP	KML
7440-23-5	Sodium		ND		ug/L	556	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:44 EP,PADEP	KML
7440-62-2	Vanadium		ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:44 EP,PADEP	KML
7440-66-6	Zinc		ND		ug/L	27.8	1	EPA 6010D		05/15/2019 13:45	05/16/2019 13:44	KML

Metals, Target Analyte, ICP Dissolved

Log-in Notes:

Sample Notes:

Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP

Sample Prepa	ared by Method: EPA	N 3015A Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analys
7429-90-5	Aluminum		ND		mg/L	0.0556	1	EPA 6010D Certifications:		05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04	KML
7440-39-3	Barium		ND		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7440-70-2	Calcium		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7440-47-3	Chromium		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7440-48-4	Cobalt		ND		mg/L	0.00444	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7440-50-8	Copper		ND		mg/L	0.0222	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7439-89-6	Iron		ND		mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7439-92-1	Lead		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7439-95-4	Magnesium		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7439-96-5	Manganese		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7440-02-0	Nickel		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7440-09-7	Potassium		0.216		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 11:04 EP,PADEP	KML
7440-22-4	Silver		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7440-23-5	Sodium		ND		mg/L	0.556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7440-62-2	Vanadium		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML
7440-66-6	Zinc		ND		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:04 EP,PADEP	KML

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Client Sample ID: FB001 **York Sample ID:**

19E0591-41

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:04 EP,PADEP	BML
7440-38-2	Arsenic		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:04 EP,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	0.333	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:04 EP,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	0.556	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:04 EP,PADEP	BML
7782-49-2	Selenium		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:04 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:04 EP,PADEP	BML

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	No.	Parameter	Result	Flag	Units	Reported LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDI	05/20/2019 15:36 EP,PADEP	BML
7440-38-2	Arsenic		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:36 EP,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	3.33	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:36 EP,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	5.56	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:36 EP,PADEP	BML
7782-49-2	Selenium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:36 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:36 EP,PADEP	BML

Log-in Notes: Sample Notes: Mercury by 7473

Sample Prepared by Method: EPA 7473 water

CAS N	0.	Parameter	Result	Result Flag Units			to Dilution	Reference Method		Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473	CTDOH NI	05/16/2019 09:41	05/16/2019 13:30	SY

Mercury by 7473, Dissolved

Log-in Notes:

Sample Notes:

Commis	Prepared	1	Mathadi	EDA	7472	viota.
Sample	rrepareu	υy	Methou.	EIA	1413	water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilu	tion l	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6 Mercury		ND		mg/L	0.000200	0		7473	CTDOH.NI	05/21/2019 10:01 ELAC-NY10854,NJDE	05/21/2019 12:17 EP.PADEP	SY

120 RESEARCH DRIVE STRATFORD, CT 06615 132-02 89th AVENUE **RICHMOND HILL, NY 11418** www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@ Page 296 of 446



Client Sample ID: EB001

York Sample ID: 19E0591-42

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:31 2058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:31 2058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:31 2058,NJDEP,PADEP	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:31 2058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:31 2058,NJDEP,PADEP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEL	05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEF	SS P,PADEP
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:31 2058,NJDEP,PADEP	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 0854,NELAC-NY12	05/16/2019 19:31 2058,NJDEP,PADEP	SS
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Client Sample ID: EB001

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
Jog-in Notes:	Sample P

York Sample ID:

19E0591-42

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Tin Aethod Prepar		Analyst
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: C	05/16/2019 0 CTDOH,NELAC-NY10854		
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0 CTDOH,NELAC-NY10854		
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 19:3	l SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 19:3	l SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 19:3	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 19:3	l SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 19:3	ss
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 19:3	l SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0	7:30 05/16/2019 19:3	l SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0	7:30 05/16/2019 19:3	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0	7:30 05/16/2019 19:3	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0	7:30 05/16/2019 19:3	l SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C	CTDOH,NELAC-NY10854 05/16/2019 0 CTDOH,NELAC-NY10854	7:30 05/16/2019 19:3	l SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0	7:30 05/16/2019 19:3	l SS
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0	7:30 05/16/2019 19:3	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0	7:30 05/16/2019 19:3	l SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	O5/16/2019 0	7:30 05/16/2019 19:3	ss
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	O5/16/2019 0	7:30 05/16/2019 19:3	l SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C	O5/16/2019 0	7:30 05/16/2019 19:3	l SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	O5/16/2019 0	7:30 05/16/2019 19:3	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	O5/16/2019 0	7:30 05/16/2019 19:3	l SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	O5/16/2019 0	7:30 05/16/2019 19:3	l ss
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	Certifications: CEPA 8260C	CTDOH,NELAC-NY10854 05/16/2019 0		
110 02 /	Cyclonexane	ND		ug 2	0.200	0.500	•		NELAC-NY10854,NELAC		



Client Sample ID: York Sample ID: 19E0591-42

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Referenc	Date/Ti e Method Prepa		Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NELA		05/16/2019 19:31 058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NELA		05/16/2019 19:31 058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NELA		05/16/2019 19:31 058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NELA		05/16/2019 19:31 058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NELA		05/16/2019 19:31 058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,PADEF	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,PADEF	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	05/16/2019 NELAC-NY10854,NELA		05/16/2019 19:31 058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085	07:30	05/16/2019 19:31	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085		05/16/2019 19:31 .C-NY12058,NJDEF	SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 CTDOH,NELAC-NY1085	07:30	05/16/2019 19:31	SS

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Client Sample ID: EB001

York Sample ID: 19E0591-42

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

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Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEP	SS PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEP	SS PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 19:31 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEP	SS PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 19:31 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acce	eptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	104 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	102 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	111 %			70-130							

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 21:01	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 21:01	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 21:01 P,PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,PADEP	05/17/2019 21:01	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 21:01	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,PADEP	05/17/2019 21:01	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,PADEP	05/17/2019 21:01	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 21:01	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 21:01 P,PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 21:01 P,PADEP	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 21:01 P,PADEP	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 21:01 P,PADEP	SR

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Log-in Notes:

Client Sample ID: EB001

York Sample ID: 19E0591-42

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Notes:

					Reported to					Date/Time	Date/Time	
CAS N		Result	Flag	Units	LOD/MDL	LOQ	Dilution	Reference	Method	Prepared	Analyzed	Analys
1-28-5	2,4-Dinitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01 EP,PADEP	SR
21-14-2	2,4-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01 EP,PADEP	SR
06-20-2	2,6-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01 EP,PADEP	SR
1-58-7	2-Chloronaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01 EP,PADEP	SR
5-57-8	2-Chlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01 EP,PADEP	SR
1-57-6	2-Methylnaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01 EPPADEP	SR
5-48-7	2-Methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01	SR
8-74-4	2-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01	SR
8-75-5	2-Nitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01	SR
5794-96-9	3- & 4-Methylphenols	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01	SR
1-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.78	5.56	1	EPA 8270D		05/16/2019 15:13	05/17/2019 21:01	SR
9-09-2	3-Nitroaniline	ND		ug/L	2.78	5.56	1	Certifications:		05/16/2019 15:13	05/17/2019 21:01	SR
34-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.78	5.56	1	Certifications:		05/16/2019 15:13	05/17/2019 21:01	SR
01-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.78	5.56	1	Certifications:		05/16/2019 15:13	05/17/2019 21:01	SR
9-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.78	5.56	1	Certifications: EPA 8270D		05/16/2019 15:13	05/17/2019 21:01	SR
06-47-8	4-Chloroaniline	ND		ug/L	2.78	5.56	1	Certifications: EPA 8270D		05/16/2019 15:13	05/17/2019 21:01	SR
005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.78	5.56	1	Certifications: EPA 8270D	CTDOH,NE	05/16/2019 15:13	EP,PADEP 05/17/2019 21:01	SR
00-01-6	4-Nitroaniline	ND		ug/L	2.78	5.56	1	Certifications: EPA 8270D	CTDOH,NE	ELAC-NY10854,NJDI 05/16/2019 15:13	EP,PADEP 05/17/2019 21:01	SR
00-02-7	4-Nitrophenol	ND		ug/L	5.56	5.56	1	Certifications: EPA 8270D	CTDOH,NI	05/16/2019 15:13	EP,PADEP 05/17/2019 21:01	SR
	•				2.50			Certifications:	CTDOH,NI	ELAC-NY10854,NJDI		an.
8-86-2	Acetophenone	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 21:01	SR
52-53-3	Aniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 21:01	SR
00-52-7	Benzaldehyde	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 Y10854,NJDEP,PADE	05/17/2019 21:01	SR
2-87-5	Benzidine	ND		ug/L	5.56	5.56	1	EPA 8270D Certifications:		05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 21:01	SR



Log-in Notes:

Client Sample ID: EB001

York Sample ID:

19E0591-42

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepare	ed by Method: EPA 3510C											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
65-85-0	Benzoic acid	ND		ug/L	27.8	55.6	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 21:01	SR
100-51-6	Benzyl alcohol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 IY10854,NJDEP,PADEP	05/17/2019 21:01	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.11	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
105-60-2	Caprolactam	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 IY10854,NJDEP,PADEP	05/17/2019 21:01	SR
86-74-8	Carbazole	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
132-64-9	Dibenzofuran	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
131-11-3	Dimethyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	5.56	11.1	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
78-59-1	Isophorone	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
108-95-2	Phenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
110-86-1	Pyridine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 IELAC-NY10854,NJDE	05/17/2019 21:01 P,PADEP	SR
	Surrogate Recoveries	Result		Acc	eptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	35.3 %			19.7-63.1							
4165-62-2	Surrogate: SURR: Phenol-d5	21.3 %			10.1-41.7							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	65.6 %			50.2-113							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	70.9 %			39.9-105							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	79.1 %			39.3-151							
1718-51-0	Surrogate: SURR: Terphenyl-d14	89.8 %			30.7-106							

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Client Sample ID: EB001

York Sample ID: 19E0591-42

 York Project (SDG) No.
 Client Project ID

 19E0591
 LST 1802

MatrixCollection Date/TimeWaterMay 10, 2019 12:00 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analys
33-32-9	Acenaphthene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDF	05/29/2019 19:47 EP,PADEP	КН
208-96-8	Acenaphthylene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 19:47 EP,PADEP	КН
20-12-7	Anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:47 EP,PADEP	КН
912-24-9	Atrazine	ND		ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:47 EP	KH
6-55-3	Benzo(a)anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:47 EP,PADEP	КН
0-32-8	Benzo(a)pyrene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDF	05/29/2019 19:47 EP,PADEP	KH
05-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDF	05/29/2019 19:47 EP,PADEP	КН
91-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13 ELAC-NY10854,NJDF	05/29/2019 19:47	КН
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13 ELAC-NY10854,NJDF	05/29/2019 19:47	KH
17-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 19:47	KH
18-01-9	Chrysene	ND		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13 ELAC-NY10854,NJDF	05/29/2019 19:47	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13 ELAC-NY10854,NJDF	05/29/2019 19:47	KH
06-44-0	Fluoranthene	ND		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 19:47	KH
5-73-7	Fluorene	0.389		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	КН
18-74-1	Hexachlorobenzene	ND		ug/L	0.0222	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	КН
7-68-3	Hexachlorobutadiene	ND		ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	КН
57-72-1	Hexachloroethane	ND		ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	КН
93-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	КН
01-20-3	Naphthalene	ND		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	КН
8-95-3	Nitrobenzene	ND		ug/L	0.278	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	КН
2-75-9	N-Nitrosodimethylamine	ND		ug/L	0.556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	КН
7-86-5	Pentachlorophenol	ND		ug/L	0.278	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	КН
5-01-8	Phenanthrene	ND		ug/L	0.0556	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 19:47	KH
29-00-0	Pyrene	0.0667		ug/L	0.0556	1	Certifications: CTDOH,NE EPA 8270D SIM	ELAC-NY10854,NJDF 05/16/2019 15:13	05/29/2019 19:47	КН

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Client Sample ID: EB001 **York Sample ID:**

19E0591-42

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Pesticides, 8081 List

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

Log-in Notes: Sample Notes:

CAS No	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
72-55-9	4,4'-DDE	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
50-29-3	4,4'-DDT	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		CM
309-00-2	Aldrin	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
319-84-6	alpha-BHC	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		CM
5103-71-9	alpha-Chlordane	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		CM
319-85-7	beta-BHC	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		CM
319-86-8	delta-BHC	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		CM
50-57-1	Dieldrin	ND	ug/L	0.00216	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		CM
959-98-8	Endosulfan I	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		CM
33213-65-9	Endosulfan II	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		CM
1031-07-8	Endosulfan sulfate	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
72-20-8	Endrin	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
7421-93-4	Endrin aldehyde	ND	ug/L	0.0108	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
53494-70-5	Endrin ketone	ND	ug/L	0.0108	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
58-89-9	gamma-BHC (Lindane)	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
5566-34-7	gamma-Chlordane	ND	ug/L	0.0108	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
76-44-8	Heptachlor	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
1024-57-3	Heptachlor epoxide	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		СМ
72-43-5	Methoxychlor	ND	ug/L	0.00432	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ		CM
8001-35-2	Toxaphene	ND	ug/L	0.108	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJ	05/19/2019 09:34	СМ
57-74-9	* Chlordane, total	ND	ug/L	0.216	1	EPA 8081B Certifications:	05/16/2019 10:56		СМ
	Surrogate Recoveries	Result	Acceptan	ce Range					
2051-24-3	Surrogate: Decachlorobiphenyl	109 %	_	150					

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Client Sample ID: EB001 **York Sample ID:**

19E0591-42

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

Reported to LOQ

Date/Time

Date/Time Analyzed

877-09-8

Parameter

Result 79.4 %

Dilution

Reference Method

Prepared

CAS No.

Surrogate: Tetrachloro-m-xylene

Flag

Units

30-150

Analyst

Polychlorinated Biphenyls (PCB), 8082 List

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

Log-in Notes:

Sample Notes:

CAS N	Vo. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference 1	Date/Time Method Prepared		Analyst
12674-11-2	Aroclor 1016	ND	ug/L	0.0541	1	EPA 8082A Certifications:	05/16/2019 10:5 NELAC-NY10854,CTDOH,N		SR
11104-28-2	Aroclor 1221	ND	ug/L	0.0541	1	EPA 8082A Certifications:	05/16/2019 10:5 NELAC-NY10854,CTDOH,N		SR
11141-16-5	Aroclor 1232	ND	ug/L	0.0541	1	EPA 8082A Certifications:	05/16/2019 10:5 NELAC-NY10854,CTDOH,N		SR
53469-21-9	Aroclor 1242	ND	ug/L	0.0541	1	EPA 8082A Certifications:	05/16/2019 10:5 NELAC-NY10854,CTDOH,N		SR
12672-29-6	Aroclor 1248	ND	ug/L	0.0541	1	EPA 8082A Certifications:	05/16/2019 10:5 NELAC-NY10854,CTDOH,N		SR
11097-69-1	Aroclor 1254	ND	ug/L	0.0541	1	EPA 8082A Certifications:	05/16/2019 10:5 NELAC-NY10854,CTDOH,N		SR
11096-82-5	Aroclor 1260	ND	ug/L	0.0541	1	EPA 8082A Certifications:	05/16/2019 10:5 NELAC-NY10854,CTDOH,N		SR
1336-36-3	* Total PCBs	ND	ug/L	0.0541	1	EPA 8082A Certifications:	05/16/2019 10:5	6 05/20/2019 14:39	SR
	Surrogate Recoveries	Result	Accepta	nce Range					
877-09-8	Surrogate: Tetrachloro-m-xylene	99.5 %	30	0-150					
2051-24-3	Surrogate: Decachlorobiphenyl	118 %	30	0-150					

Metals, Target Analyte, ICP Sample Prepared by Method: EPA 3015A

Log-in Notes:

Sample Notes:

CAS N	No. I	Parameter	Result	Flag	Units	Reported to	Dilution	Reference M	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-39-3	Barium		ND		ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-70-2	Calcium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-47-3	Chromium		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-48-4	Cobalt		ND		ug/L	4.44	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-50-8	Copper		ND		ug/L	22.2	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7439-89-6	Iron		ND		ug/L	278	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML

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Client Sample ID: EB001

York Sample ID: 19E0591-42

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

Log-in	Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7439-95-4	Magnesium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7439-96-5	Manganese		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-02-0	Nickel		ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-09-7	Potassium		104		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,N	05/15/2019 13:45 ELAC-NY10854,NJD	05/16/2019 13:46 EP,PADEP	KML
7440-22-4	Silver		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-23-5	Sodium		ND		ug/L	556	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-62-2	Vanadium		ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML
7440-66-6	Zinc		ND		ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:46 EP,PADEP	KML

Metals, Target Analyte, ICP Dissolved

Sample Prepared by Method: EPA 3015A

Log-in Notes:

Sample Notes:

CAS N	o. Paramet	er Result	Flag Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	ND	mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7440-39-3	Barium	ND	mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7440-70-2	Calcium	ND	mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7440-47-3	Chromium	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7440-48-4	Cobalt	ND	mg/L	0.00444	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7440-50-8	Copper	ND	mg/L	0.0222	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7439-89-6	Iron	ND	mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7439-92-1	Lead	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7439-95-4	Magnesium	ND	mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7439-96-5	Manganese	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7440-02-0	Nickel	ND	mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:12 P,PADEP	KML
7440-09-7	Potassium	0.0719	mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 11:12 EP,PADEP	KML

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Client Sample ID: EB001

York Sample ID:

19E0591-42

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:00 am

<u>Date Received</u> 05/13/2019

Metals, Target Analyte, ICP Dissolved

Sample Prepared by Method: EPA 3015A

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Sample Notes:

CAS I	No. Paran	neter Result	Flag Units	Reported to LOQ Dilu	ıtion Referenc	Date/Time e Method Prepared	Date/Time Analyzed	Analyst
7440-22-4	Silver	ND	mg/L	0.00556	1 EPA 6010D Certifications:	05/17/2019 16:3. CTDOH,NELAC-NY10854,N.		KML
7440-23-5	Sodium	ND	mg/L	0.556	1 EPA 6010D Certifications:	05/17/2019 16:3. CTDOH,NELAC-NY10854,N.		KML
7440-62-2	Vanadium	ND	mg/L	0.0111	1 EPA 6010D Certifications:	05/17/2019 16:3. CTDOH,NELAC-NY10854,N.		KML
7440-66-6	Zinc	ND	mg/L	0.0278	1 EPA 6010D	05/17/2019 16:3.		KML

Metals, Target Analyte, ICPMS

Sample Prepared by Method: EPA 3015A

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LOG	_in	Notes:	
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Sample Notes:

CAS N	No.	Parameter	Result	Flag Units	Reported to LOQ I	Dilution	Reference N	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND	ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NI	05/15/2019 13:47 ELAC-NY10854,NJDI	05/16/2019 14:09 EP,PADEP	BML
7440-38-2	Arsenic		ND	ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NI	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:09 EP,PADEP	BML
7440-41-7	Beryllium		ND	ug/L	0.333	1	EPA 6020B Certifications:	CTDOH,NI	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:09 EP,PADEP	BML
7440-43-9	Cadmium		ND	ug/L	0.556	1	EPA 6020B Certifications:	CTDOH,NI	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:09 EP,PADEP	BML
7782-49-2	Selenium		ND	ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NI	05/15/2019 13:47 ELAC-NY10854,NJDF	05/16/2019 14:09 EP,PADEP	BML
7440-28-0	Thallium		ND	ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NI	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:09 EP,PADEP	BML

Metals, Target Analyte, ICPMS Dissolved

Sample Prepared by Method: EPA 3015A

Log-in	Notes:

Sample Notes:

Sample Prepa	red by Method: EPA	A 3015A									
CAS I	No.	Parameter	Result	Flag Units	Reported to LOQ Dil	lution	Reference M	1ethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND	ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDI	05/20/2019 15:40 EP,PADEP	BML
7440-38-2	Arsenic		ND	ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDI	05/20/2019 15:40 EP,PADEP	BML
7440-41-7	Beryllium		ND	ug/L	3.33	10	EPA 6020B Certifications: (CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDI	05/20/2019 15:40 EP,PADEP	BML
7440-43-9	Cadmium		ND	ug/L	5.56	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:40 EP,PADEP	BML
7782-49-2	Selenium		ND	ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDI	05/20/2019 15:40 EP,PADEP	BML
7440-28-0	Thallium		ND	ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 LAC-NY10854,NJDE	05/20/2019 15:40 EP,PADEP	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

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Client Sample ID: EB001 **York Sample ID:** 19E0591-42

Client Project ID Collection Date/Time Date Received York Project (SDG) No. Matrix LST 1802 19E0591 Water May 10, 2019 12:00 am 05/13/2019

Sample Prepared by Method: EPA 7473 water

CAS No	0.	Parameter	Result	Flag	Units	Reported LOQ	to Dilutio	n Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473	CTDOH N	05/16/2019 09:41 FLAC-NY10854 NIDI	05/16/2019 13:41 EPPADEP	SY

Mercury by 7473, Dissolved Sample Prepared by Method: EPA 7473 water

Log-in Notes: Sample Notes:

CAS N	0.	Parameter	Result	Flag	Units	Reported to LOQ		ution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		mg/L	0.00020	00	1	EPA 7473 Certifications:	CTDOH,NE	05/21/2019 10:01 ELAC-NY10854,NJDE	05/21/2019 12:28 EP,PADEP	SY

Sample Information

Client Sample ID: FB002 **York Sample ID:** 19E0591-43

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Water May 10, 2019 12:00 am 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:

CAS No). Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 20:03 2058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 20:03 2058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 20:03 2058,NJDEP,PADEP	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 20:03 2058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP

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Client Sample ID: FB002

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Water May 10, 2019 12:00 am 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u> <u>Sar</u>	nple Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1:	05/16/2019 20:03 2058,NJDEP,PADEP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1:	05/16/2019 20:03 2058,NJDEP,PADEP	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1:	05/16/2019 20:03 2058,NJDEP,PADEP	SS
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 AC-NY12058,NJDEF	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 AC-NY12058,NJDEF	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 AC-NY12058,NJDEF	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 AC-NY12058,NJDEF	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 2058,NJDEP,PADEP	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 2058,NJDEP,PADEP	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 AC-NY12058,NJDEF	SS P.PADEP
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York Sample ID:

19E0591-43



Client Sample ID: FB002

York Sample ID: 19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
74-87-3	Chloromethane	0.440	J	ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 LAC-NY12058,NJDE	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 AC-NY12058,NJDEF	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 AC-NY12058,NJDEF	SS
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:03 2058,NJDEP,PADEP	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 20:03 2058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 20:03 2058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 20:03 2058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 20:03 2058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 0854,NELAC-NY1	05/16/2019 20:03 2058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 AC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEF	SS P,PADEP



Client Sample ID: FB002

York Sample ID:

19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u>

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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference I	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,PADEP	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,PADEP	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP,	SS PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 20:03 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP,	SS PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP,	SS PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP,	SS PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP,	SS PADEP
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP,	SS PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP,	SS PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 20:03 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:03 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acce	eptance Range	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	106 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	104 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	107 %			70-130							

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes:

CAS N	Vo.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl		ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 / 10854,NJDEP,PADEP	05/17/2019 21:48	SR

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ClientServices@ Page 311 of 446



Client Sample ID: FB002

York Sample ID: 19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADEP	05/17/2019 21:48	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,PADEP	05/17/2019 21:48	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADEP	05/17/2019 21:48	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,PADEP	05/17/2019 21:48	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,PADEP	05/17/2019 21:48	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADEP	05/17/2019 21:48	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
95-57-8	2-Chlorophenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
95-48-7	2-Methylphenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
88-74-4	2-Nitroaniline	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
88-75-5	2-Nitrophenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEP	05/17/2019 21:48 PADEP	SR
99-09-2	3-Nitroaniline	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJDEF	05/17/2019 21:48 PADEP	SR



Client Sample ID: FB002

York Sample ID: 19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

<u>Log-in Notes:</u>	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
106-47-8	4-Chloroaniline	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
100-01-6	4-Nitroaniline	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
100-02-7	4-Nitrophenol	ND		ug/L	7.14	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
98-86-2	Acetophenone	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 21:48 EP	SR
62-53-3	Aniline	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 21:48 EP	SR
100-52-7	Benzaldehyde	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 21:48 EP	SR
92-87-5	Benzidine	ND		ug/L	7.14	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
65-85-0	Benzoic acid	ND		ug/L	35.7	71.4	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 21:48 EP	SR
100-51-6	Benzyl alcohol	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 21:48 EP	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.43	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
105-60-2	Caprolactam	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PADE	05/17/2019 21:48 EP	SR
86-74-8	Carbazole	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
132-64-9	Dibenzofuran	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
84-66-2	Diethyl phthalate	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
131-11-3	Dimethyl phthalate	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48 DEP,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	3.57	7.14	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJD	05/17/2019 21:48	SR



Client Sample ID: FB002

Sample Prepared by Method: EPA 3510C

CAS No.

117-84-0

77-47-4

78-59-1

621-64-7

86-30-6

York Sample ID: 19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802

Flag

Units

ug/L

ug/L

ug/L

ug/L

ug/L

Matrix Water

EPA 8270D

Certifications:

EPA 8270D

Certifications

EPA 8270D

Certifications

EPA 8270D

Certifications:

Dilution

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

SR

SR

SR

SR

Semi-Volatiles, 8270 Comprehensive

Di-n-octyl phthalate

Isophorone

Hexachlorocyclopentadiene

N-nitroso-di-n-propylamine

N-Nitrosodiphenylamine

Result

ND

ND

ND

ND

ND

Parameter

Log-in Notes:

LOO

7.14

14.3

7.14

7.14

7 14

7 14

7.14

Reported to

LOD/MDL

3.57

7.14

3.57

3.57

3.57

Sample Notes:

Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
EPA 8270D		05/16/2019 15:13	05/17/2019 21:48	SR
Certifications:	CTDOH,NEI	LAC-NY10854,NJDI	EP,PADEP	
EPA 8270D		05/16/2019 15:13	05/17/2019 21:48	SR
Certifications:	CTDOH,NEI	LAC-NY10854,NJDI	EP,PADEP	
EPA 8270D		05/16/2019 15:13	05/17/2019 21:48	SR
Certifications:	CTDOH,NEI	LAC-NY10854,NJDI	EP,PADEP	

CTDOH.NELAC-NY10854.NJDEP.PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

CTDOH,NELAC-NY10854,NJDEP,PADEP

05/16/2019 15:13 05/17/2019 21:48

108-95-2 Phenol ND ug/L 3.57 110-86-1 ug/L 3.57 Pyridine ND Acceptance Range **Surrogate Recoveries** Result 367-12-4 Surrogate: SURR: 2-Fluorophenol 40.8 % 19.7-63.1 4165-62-2 Surrogate: SURR: Phenol-d5 25.6 % 10.1-41.7 4165-60-0 50.2-113 Surrogate: SURR: Nitrobenzene-d5 72.0 % 321-60-8 Surrogate: SURR: 2-Fluorobiphenyl 73.7 % 39.9-105 118-79-6 Surrogate: SURR: 80.1 % 39.3-151 2,4,6-Tribromophenol 1718-51-0 Surrogate: SURR: Terphenyl-d14 89.1 % 30.7-106

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepar	red by Method: EPA 3510C								
CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP,PADEP	КН
208-96-8	Acenaphthylene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP,PADEP	KH
120-12-7	Anthracene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP,PADEP	KH
1912-24-9	Atrazine	ND	ug/L	0.714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP	KH
56-55-3	Benzo(a)anthracene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP,PADEP	KH
50-32-8	Benzo(a)pyrene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP,PADEP	KH
205-99-2	Benzo(b)fluoranthene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP,PADEP	KH
207-08-9	Benzo(k)fluoranthene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP,PADEP	КН

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Client Sample ID: FB002

York Sample ID: 19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

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Sample Notes:

CAS N	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
117-81-7	Bis(2-ethylhexyl)phthalate	ND	ug/L	0.714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P	KH
218-01-9	Chrysene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P,PADEP	КН
206-44-0	Fluoranthene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P,PADEP	КН
86-73-7	Fluorene	0.514	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/29/2019 20:19 EP,PADEP	KH
118-74-1	Hexachlorobenzene	ND	ug/L	0.0286	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P	KH
87-68-3	Hexachlorobutadiene	ND	ug/L	0.714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P	КН
67-72-1	Hexachloroethane	ND	ug/L	0.714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P	КН
193-39-5	Indeno(1,2,3-cd)pyrene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P,PADEP	KH
91-20-3	Naphthalene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P,PADEP	КН
98-95-3	Nitrobenzene	ND	ug/L	0.357	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P	KH
62-75-9	N-Nitrosodimethylamine	ND	ug/L	0.714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P	КН
87-86-5	Pentachlorophenol	ND	ug/L	0.357	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P	KH
85-01-8	Phenanthrene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P,PADEP	KH
129-00-0	Pyrene	ND	ug/L	0.0714	1	EPA 8270D SIM Certifications: CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 20:19 P,PADEP	KH

Pesticides, 8081 List

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

Log-in Notes:

Sample Notes:

CAS I	No.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	СМ
72-55-9	4,4'-DDE		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 09:50 EP,PADEP	CM
50-29-3	4,4'-DDT		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 09:50 EP,PADEP	CM
309-00-2	Aldrin		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 09:50 EP,PADEP	CM
319-84-6	alpha-BHC		ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDF	05/19/2019 09:50 EP,PADEP	CM



Client Sample ID: FB002

York Sample ID: 19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am <u>Date Received</u> 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

CAS N	No. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
5103-71-9	alpha-Chlordane	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
319-85-7	beta-BHC	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
319-86-8	delta-BHC	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	СМ
60-57-1	Dieldrin	ND		ug/L	0.00222	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
959-98-8	Endosulfan I	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
33213-65-9	Endosulfan II	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
72-20-8	Endrin	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND		ug/L	0.0111	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
53494-70-5	Endrin ketone	ND		ug/L	0.0111	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	СМ
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND		ug/L	0.0111	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
76-44-8	Heptachlor	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
72-43-5	Methoxychlor	ND		ug/L	0.00444	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
8001-35-2	Toxaphene	ND		ug/L	0.111	1	EPA 8081B Certifications:	CTDOH,NE	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 09:50 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		ug/L	0.222	1	EPA 8081B Certifications:		05/16/2019 10:56	05/19/2019 09:50	CM
	Surrogate Recoveries	Result		Accepta	nce Range						
2051-24-3	Surrogate: Decachlorobiphenyl	107 %		30	0-150						
877-09-8	Surrogate: Tetrachloro-m-xylene	75.3 %		30)-150						

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	Dilutio	1 Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016		ND		ug/L	0.0556	1	EPA 8082A		05/16/2019 10:56	05/20/2019 14:53	SR
								Certifications:	NELAC-N	/10854,CTDOH,NJDE	EP,PADEP	

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Client Sample ID: FB002

York Sample ID: 19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11104-28-2	Aroclor 1221	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDI	05/20/2019 14:53 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:53 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDI	05/20/2019 14:53 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:53 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:53 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 14:53 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0556	1	EPA 8082A Certifications:		05/16/2019 10:56	05/20/2019 14:53	SR
	Surrogate Recoveries	Result		Accept	ance Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	78.0 %			30-150						
2051-24-3	Surrogate: Decachlorobiphenyl	91.5 %			30-150						

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepar	red by Method: EPA	3015A										
CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-39-3	Barium		ND		ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-70-2	Calcium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-47-3	Chromium		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-48-4	Cobalt		ND		ug/L	4.44	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-50-8	Copper		ND		ug/L	22.2	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7439-89-6	Iron		ND		ug/L	278	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7439-92-1	Lead		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7439-95-4	Magnesium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7439-96-5	Manganese		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-02-0	Nickel		ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML

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Client Sample ID: FB002

York Sample ID: 19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am <u>Date Received</u> 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-09-7	Potassium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-22-4	Silver		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-23-5	Sodium		ND		ug/L	556	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-62-2	Vanadium		ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML
7440-66-6	Zinc		ND		ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:49 EP,PADEP	KML

Metals, Target Analyte, ICP Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	No. Par	rameter Result	Flag Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	ND	mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-39-3	Barium	ND	mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-70-2	Calcium	ND	mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-47-3	Chromium	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-48-4	Cobalt	ND	mg/L	0.00444	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-50-8	Copper	ND	mg/L	0.0222	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7439-89-6	Iron	ND	mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7439-92-1	Lead	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7439-95-4	Magnesium	ND	mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7439-96-5	Manganese	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-02-0	Nickel	ND	mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-09-7	Potassium	ND	mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-22-4	Silver	ND	mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-23-5	Sodium	ND	mg/L	0.556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-62-2	Vanadium	ND	mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML
7440-66-6	Zinc	ND	mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 LAC-NY10854,NJDE	05/20/2019 11:14 P,PADEP	KML



Client Sample ID: FB002

York Sample ID:

19E0591-43

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:00 am

Date Received 05/13/2019

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	lo.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:14 EP,PADEP	BML
7440-38-2	Arsenic		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:14 EP,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	0.333	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:14 EP,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	0.556	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:14 EP,PADEP	BML
7782-49-2	Selenium		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:14 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:14 EP,PADEP	BML

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	No.	Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference N		e/Time epared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND	ug/L	11.1	10	EPA 6020B Certifications:	05/17/20 CTDOH,NELAC-NY	019 16:34 10854,NJDI	05/20/2019 15:45 EP,PADEP	BML
7440-38-2	Arsenic		ND	ug/L	11.1	10	EPA 6020B Certifications:	05/17/20 CTDOH,NELAC-NY	019 16:34 10854,NJDI	05/20/2019 15:45 EP,PADEP	BML
7440-41-7	Beryllium		ND	ug/L	3.33	10	EPA 6020B Certifications:	05/17/20 CTDOH,NELAC-NY	019 16:34 10854,NJDI	05/20/2019 15:45 EP,PADEP	BML
7440-43-9	Cadmium		ND	ug/L	5.56	10	EPA 6020B Certifications:	05/17/20 CTDOH,NELAC-NY	019 16:34 10854,NJDI	05/20/2019 15:45 EP,PADEP	BML
7782-49-2	Selenium		ND	ug/L	11.1	10	EPA 6020B Certifications:	05/17/20 CTDOH,NELAC-NY	019 16:34 10854,NJDI	05/20/2019 15:45 EP,PADEP	BML
7440-28-0	Thallium		ND	ug/L	11.1	10	EPA 6020B Certifications:	05/17/20 CTDOH,NELAC-NY	019 16:34 10854,NJDI	05/20/2019 15:45 EP,PADEP	BML

Mercury by 7473 <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: EPA 7473 water

CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	to Dilution	Reference N	Aethod	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473	CTDOU NI	05/16/2019 09:41	05/16/2019 13:52	SY

Mercury by 7473, Dissolved Sample Prepared by Method: EPA 7473 water

Log-in Notes:

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Diluti	on Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		mg/L	0.0002000	0 1	EPA 7473		05/21/2019 10:01	05/21/2019 12:38	SY
								Certifications:	CTDOH,N	ELAC-NY10854,NJDI	EP,PADEP	

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Client Sample ID: EB002

York Sample ID:

19E0591-44

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS No	o. Parameter	Result	Flag	Units	Reported to	100	Dilution	Reference Me	Date/Time thod Prepared	Date/Time Analyzed	Analyst
630-20-6			Flag	ug/L	0.200	0.500	Dilution 1	EPA 8260C	05/16/2019 07:30	05/16/2019 20:35	SS
030-20-0	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1		DOH,NELAC-NY10854,NEI		
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 DOH,NELAC-NY10854,NEI	05/16/2019 20:35 AC-NY12058,NJDEF	SS P,PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 20:35	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		ug/L	0.200	0.500	1	Certifications: CT EPA 8260C	DOH,NELAC-NY10854,NEI 05/16/2019 07:30	05/16/2019 20:35	P,PADEP SS
	(Freon 113)	1,2							DOH,NELAC-NY10854,NEI	AC-NY12058,NJDEF	,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 DOH,NELAC-NY10854,NEI	05/16/2019 20:35 AC-NY12058,NJDEF	SS P,PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 20:35	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	Certifications: CT EPA 8260C	DOH,NELAC-NY10854,NEI 05/16/2019 07:30	05/16/2019 20:35	P,PADEP SS
	-,							Certifications: CT	DOH,NELAC-NY10854,NEI		
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NE	05/16/2019 07:30 LAC-NY10854,NELAC-NY1	05/16/2019 20:35 2058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NE	05/16/2019 07:30 LAC-NY10854,NELAC-NY1	05/16/2019 20:35	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 20:35	SS
		1.75		/-	0.200	0.500	,		LAC-NY10854,NELAC-NY1		99
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NE	05/16/2019 07:30 LAC-NY10854,NELAC-NY1	05/16/2019 20:35 2058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 DOH,NELAC-NY10854,NEI	05/16/2019 20:35 AC-NY12058,NJDEF	SS P.PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 20:35	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	Certifications: CT EPA 8260C	DOH,NELAC-NY10854,NEI 05/16/2019 07:30	AC-NY12058,NJDEF 05/16/2019 20:35	P,PADEP SS
	1,2-Diotomoculane	ND		-0-	V.=V.				DOH,NELAC-NY10854,NEI		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 DOH,NELAC-NY10854,NEI	05/16/2019 20:35 AC-NY12058,NJDEF	SS P,PADEP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 20:35	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	Certifications: CT EPA 8260C	DOH,NELAC-NY10854,NEI 05/16/2019 07:30	05/16/2019 20:35	SS
									DOH,NELAC-NY10854,NEI		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 DOH,NELAC-NY10854,NEI	05/16/2019 20:35 AC-NY12058,NJDEF	SS P,PADEP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 DOH,NELAC-NY10854,NEI	05/16/2019 20:35	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 20:35	SS
104.44.5		1.75			0.200	0.500	,		LAC-NY10854,NELAC-NY1		99
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CT	05/16/2019 07:30 DOH,NELAC-NY10854,NEI	05/16/2019 20:35 AC-NY12058,NJDEF	SS P,PADEP
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications: NE	05/16/2019 07:30 LAC-NY10854,NELAC-NY1	05/16/2019 20:35 2058.NJDEP.PADEP	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30	05/16/2019 20:35	SS
								Certifications: NE	LAC-NY10854,NELAC-NY1	2058,NJDEP,PADEP	

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Client Sample ID: EB002

York Sample ID: 19E0591-44

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:

Sample Notes:

CAS N	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 20:35 AC-NY12058,NJDE	
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 20:35 AC-NY12058,NJDE	
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 AC-NY12058,NJDE	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 AC-NY12058,NJDE	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 AC-NY12058,NJDE	SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 AC-NY12058,NJDE	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C		05/16/2019 07:30	05/16/2019 20:35 AC-NY12058,NJDE	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C		05/16/2019 07:30	05/16/2019 20:35	SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	Certifications:		05/16/2019 07:30	05/16/2019 20:35	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	Certifications:		05/16/2019 07:30	2058,NJDEP,PADEP 05/16/2019 20:35	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	Certifications:		05/16/2019 07:30	2058,NJDEP,PADEP 05/16/2019 20:35	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	Certifications:		05/16/2019 07:30	05/16/2019 20:35	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		05/16/2019 07:30	AC-NY12058,NJDE 05/16/2019 20:35	SS
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		05/16/2019 07:30	05/16/2019 20:35	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		05/16/2019 07:30	AC-NY12058,NJDE 05/16/2019 20:35	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	CTDOH,NE	LAC-NY10854,NEI 05/16/2019 07:30	AC-NY12058,NJDE 05/16/2019 20:35	
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	CTDOH,NE	LAC-NY10854,NEL 05/16/2019 07:30	AC-NY12058,NJDE 05/16/2019 20:35	
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	CTDOH,NE	LAC-NY10854,NEL 05/16/2019 07:30	AC-NY12058,NJDE 05/16/2019 20:35	
								Certifications:	CTDOH,NE	· ·	AC-NY12058,NJDE	_
74-87-3	Chloromethane	0.280	J	ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH NE	05/16/2019 07:30 FLAC-NY10854 NE	05/16/2019 20:35 LAC-NY12058,NJDI	
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 AC-NY12058,NJDE	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 AC-NY12058,NJDE	SS
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30	05/16/2019 20:35	SS



Client Sample ID: York Sample ID: 19E0591-44

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NEI	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 20:35 LAC-NY12058,NJDE	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 10854,NELAC-NY	05/16/2019 20:35 12058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY1	05/16/2019 07:30 10854,NELAC-NY	05/16/2019 20:35 12058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 LAC-NY12058,NJDE	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 12058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 AC-NY12058,NJDE	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 12058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 LAC-NY12058,NJDE	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 12058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C		05/16/2019 07:30	05/16/2019 20:35 LAC-NY12058,NJDE	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35 LAC-NY12058,NJDE	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	ŕ	05/16/2019 07:30	05/16/2019 20:35	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 20:35	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C		05/16/2019 07:30	05/16/2019 20:35	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		05/16/2019 07:30	05/16/2019 20:35	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		05/16/2019 07:30	05/16/2019 20:35	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	Certifications:		05/16/2019 07:30	05/16/2019 20:35	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	Certifications:		05/16/2019 07:30	05/16/2019 20:35	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	Certifications:		05/16/2019 07:30	05/16/2019 20:35	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	Certifications:		05/16/2019 07:30	05/16/2019 20:35	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C		05/16/2019 07:30	05/16/2019 20:35	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	CTDOH,NEI	05/16/2019 07:30	05/16/2019 20:35	P,PADEP SS
								Certifications:	CTDOH,NEI	LAC-NY10854,NEI	LAC-NY12058,NJDE	P,PADEP



Client Sample ID: EB002

York Sample ID: 19E0591-44

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am <u>Date Received</u> 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:35 AC-NY12058,NJDEP	SS P,PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:35 AC-NY12058,NJDEP	SS P,PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 20:35 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:35 AC-NY12058,NJDEP	SS P,PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 20:35 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	104 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	104 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	111 %			70-130							

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3510C											
CAS No		Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEI	05/17/2019 22:37	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEI	05/17/2019 22:37 P	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 22:37 EP,PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,PADEP	05/17/2019 22:37	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEI	05/17/2019 22:37 P	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,PADEP	05/17/2019 22:37	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,PADEP	05/17/2019 22:37	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEI	05/17/2019 22:37 P	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 22:37 EP,PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 22:37 EP,PADEP	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 22:37 EP,PADEP	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 22:37 EP,PADEP	SR
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ClientServices@ Page 323 of 446



Client Sample ID: EB002

York Sample ID: 19E0591-44

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
95-57-8	2-Chlorophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
95-48-7	2-Methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
88-74-4	2-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
99-09-2	3-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
106-47-8	4-Chloroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
100-02-7	4-Nitrophenol	ND		ug/L	5.56	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR
98-86-2	Acetophenone	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 710854,NJDEP,PADE	05/17/2019 22:37 P	SR
62-53-3	Aniline	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:		05/16/2019 15:13 710854,NJDEP,PADE	05/17/2019 22:37	SR
100-52-7	Benzaldehyde	ND		ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 /10854,NJDEP,PADE	05/17/2019 22:37 P	SR
92-87-5	Benzidine	ND		ug/L	5.56	5.56	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDI	05/17/2019 22:37 EP,PADEP	SR



Reported to

Client Sample ID: EB002

York Sample ID:

19E0591-44

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am

Date/Time

Date/Time

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
65-85-0	Benzoic acid	ND	ug/L	27.8	55.6	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 22:37	SR
100-51-6	Benzyl alcohol	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 22:37	SR
85-68-7	Benzyl butyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 22:37 P,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 22:37 P,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND	ug/L	1.11	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 22:37 P,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 22:37 P,PADEP	SR
105-60-2	Caprolactam	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADEP	05/17/2019 22:37	SR
86-74-8	Carbazole	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 22:37 P,PADEP	SR
132-64-9	Dibenzofuran	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 22:37 P,PADEP	SR
84-66-2	Diethyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEF	05/17/2019 22:37 P,PADEP	SR
131-11-3	Dimethyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEP	05/17/2019 22:37 P,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEP	05/17/2019 22:37 P,PADEP	SR
117-84-0	Di-n-octyl phthalate	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEP	05/17/2019 22:37 P,PADEP	SR
77-47-4	Hexachlorocyclopentadiene	ND	ug/L	5.56	11.1	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEP	05/17/2019 22:37 P,PADEP	SR
78-59-1	Isophorone	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEP	05/17/2019 22:37 P,PADEP	SR
521-64-7	N-nitroso-di-n-propylamine	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEP	05/17/2019 22:37 P,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEP	05/17/2019 22:37 P,PADEP	SR
108-95-2	Phenol	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEP	05/17/2019 22:37 P,PADEP	SR
110-86-1	Pyridine	ND	ug/L	2.78	5.56	1	EPA 8270D Certifications:	CTDOH,NI	05/16/2019 15:13 ELAC-NY10854,NJDEP	05/17/2019 22:37 P,PADEP	SR
	Surrogate Recoveries	Result	Acc	eptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	35.0 %		19.7-63.1							
4165-62-2	Surrogate: SURR: Phenol-d5	19.6 %		10.1-41.7							
1165-60-0	Surrogate: SURR: Nitrobenzene-d5	62.2 %		50.2-113							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	68.0 %		39.9-105							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	72.3 %		39.3-151							
1718-51-0	Surrogate: SURR: Terphenyl-d14	84.2 %		30.7-106							
120 RES	SEARCH DRIVE	STRATFORD, CT 06615			132	2-02 89th <i>A</i>	AVENUE		RICHMOND HILL	, NY 11418	

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Client Sample ID: EB002

Sample Prepared by Method: EPA 3510C

York Sample ID: 19E0591-44

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result Fla	g Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
3-32-9	Acenaphthene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	КН
08-96-8	Acenaphthylene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	КН
20-12-7	Anthracene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	КН
912-24-9	Atrazine	ND	ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50	КН
6-55-3	Benzo(a)anthracene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	КН
0-32-8	Benzo(a)pyrene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	КН
05-99-2	Benzo(b)fluoranthene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	KH
91-24-2	Benzo(g,h,i)perylene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	КН
07-08-9	Benzo(k)fluoranthene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	KH
17-81-7	Bis(2-ethylhexyl)phthalate	ND	ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50	КН
18-01-9	Chrysene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	KH
3-70-3	Dibenzo(a,h)anthracene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	KH
06-44-0	Fluoranthene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	KH
6-73-7	Fluorene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	KH
18-74-1	Hexachlorobenzene	ND	ug/L	0.0222	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50	KH
7-68-3	Hexachlorobutadiene	ND	ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50	KH
7-72-1	Hexachloroethane	ND	ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 20:50	KH
93-39-5	Indeno(1,2,3-cd)pyrene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	KH
1-20-3	Naphthalene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	KH
8-95-3	Nitrobenzene	ND	ug/L	0.278	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 20:50	KH
2-75-9	N-Nitrosodimethylamine	ND	ug/L	0.556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 20:50	KH
7-86-5	Pentachlorophenol	ND	ug/L	0.278	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 .AC-NY10854,NJDE	05/29/2019 20:50	КН
5-01-8	Phenanthrene	ND	ug/L	0.0556	1	EPA 8270D SIM Certifications: CTDOH,NEI	05/16/2019 15:13 AC-NY10854,NJDE	05/29/2019 20:50 P,PADEP	KH
			ug/L						KH

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Client Sample ID: EB002

York Sample ID: 19E0591-44

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

-DDD -DDE -DDT rin na-BHC na-Chlordane	ND ND ND ND ND ND ND	ug/L ug/L ug/L ug/L ug/L	0.00444 0.00444 0.00444 0.00444 0.00444	1 1 1 1	EPA 8081B Certifications: EPA 8081B Certifications: EPA 8081B Certifications: EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD: 05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD: 05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD: 05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD: 05/16/2019 10:56	05/19/2019 10:05 EP,PADEP 05/19/2019 10:05 EP,PADEP 05/19/2019 10:05	CM CM CM CM CM
rin na-BHC na-Chlordane	ND ND ND	ug/L ug/L ug/L	0.00444 0.00444 0.00444	1	Certifications: EPA 8081B Certifications: EPA 8081B Certifications: EPA 8081B	CTDOH,NELAC-NY10854,NJD 05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD 05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	EP,PADEP 05/19/2019 10:05 EP,PADEP 05/19/2019 10:05 EP,PADEP	CM CM
rin na-BHC na-Chlordane n-BHC	ND ND ND	ug/L	0.00444 0.00444	1	Certifications: EPA 8081B Certifications: EPA 8081B	CTDOH,NELAC-NY10854,NJD 05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	EP,PADEP 05/19/2019 10:05 EP,PADEP	СМ
na-BHC na-Chlordane n-BHC	ND ND	ug/L	0.00444		Certifications: EPA 8081B	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
na-Chlordane n-BHC	ND			1		05/16/2019 10:56	05/19/2019 10:05	CM
-ВНС		ug/L	0.00444		Certifications:	CTDOH,NELAC-NY10854,NJD	EP,PADEP	
	ND			1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	CM
		ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	CM
a-BHC	ND	ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	CM
ldrin	ND	ug/L	0.00222	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	СМ
osulfan I	ND	ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	СМ
osulfan II	ND	ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	СМ
osulfan sulfate	ND	ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	СМ
rin	ND	ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	СМ
rin aldehyde	ND	ug/L	0.0111	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	CM
rin ketone	ND	ug/L	0.0111	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	CM
nma-BHC (Lindane)	ND	ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	CM
nma-Chlordane	ND	ug/L	0.0111	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	CM
otachlor	ND	ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	CM
otachlor epoxide	ND	ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	CM
hoxychlor	ND	ug/L	0.00444	1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJD	05/19/2019 10:05 EP,PADEP	СМ
aphene	ND	ug/L	0.111	1	EPA 8081B Certifications:	05/16/2019 10:56	05/19/2019 10:05	СМ
hlordane, total	ND	ug/L	0.222	1	EPA 8081B Certifications:	05/16/2019 10:56	05/19/2019 10:05	СМ
Surrogate Recoveries	Result	Acceptar	ce Range					
rogate: Decachlorobiphenyl	121 %	•	U					
	osulfan I osulfan II osulfan sulfate rin rin aldehyde rin ketone ma-BHC (Lindane) ma-Chlordane tachlor tachlor epoxide choxychlor aphene nlordane, total Surrogate Recoveries	osulfan I ND osulfan II ND osulfan sulfate ND rin ND rin aldehyde ND rin ketone ND ma-BHC (Lindane) ND ma-Chlordane ND tachlor epoxide ND tachlor epoxide ND hoxychlor ND aphene ND surrogate Recoveries Result rogate: Decachlorobiphenyl 121 %	osulfan I ND ug/L osulfan II ND ug/L osulfan II ND ug/L osulfan sulfate ND ug/L rin ND ug/L rin aldehyde ND ug/L rin ketone ND ug/L ma-BHC (Lindane) ND ug/L ma-Chlordane ND ug/L tachlor ND ug/L tachlor Poxide ND ug/L stachlor Poxide ND ug/L stachlor ND ug/L stachlor ND ug/L stachlor Poxide ND ug/L stachlor Poxide ND ug/L stachlor Poxide ND ug/L surrogate Recoveries Result Acceptant Rogate: Decachlorobiphenyl 121 % 30-	osulfan I ND ug/L 0.00444 osulfan II ND ug/L 0.00444 osulfan sulfate ND ug/L 0.00444 rin ND ug/L 0.00444 rin aldehyde ND ug/L 0.0111 rin ketone ND ug/L 0.0111 ma-BHC (Lindane) ND ug/L 0.00444 ma-Chlordane ND ug/L 0.00444 tachlor ND ug/L 0.00444 hoxychlor ND ug/L 0.00444 hoxychlor ND ug/L 0.00444 plordane, total ND ug/L 0.222 Surrogate Recoveries Result Acceptance Range sogate: Decachlorobiphenyl 121 % 30-150	osulfan I ND ug/L 0.00444 1 osulfan II ND ug/L 0.00444 1 osulfan sulfate ND ug/L 0.00444 1 rin ND ug/L 0.00444 1 rin aldehyde ND ug/L 0.0111 1 rin ketone ND ug/L 0.0111 1 ma-BHC (Lindane) ND ug/L 0.00444 1 ma-Chlordane ND ug/L 0.00444 1 tachlor epoxide ND ug/L 0.00444 1 hoxychlor ND ug/L 0.00444 1 aphene ND ug/L 0.00444 1 alordane, total ND ug/L 0.111 1 Surrogate Recoveries Result Acceptance Range rogate: Decachlorobiphenyl 121 % 30-150	Certifications: Certificat	Certifications CTDOH,NELAC-NY10854,NID	ND

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Client Sample ID: EB002

York Sample ID: 19E0591-44

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Log-in Notes:

Sample Notes:

1 05010141054 0 0 0 1 2150

CAS No.

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

Parameter

Flag Units

Reported to LOQ Dilution

Reference Method

Date/Time Prepared Date/Time Analyzed Analyst

877-09-8

Surrogate: Tetrachloro-m-xylene

Result

96.0 %

30-150

,

Sample Notes:

Polychlorinated Biphenyls (PCB), 8082 List

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

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDF	05/20/2019 15:06 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/20/2019 15:06 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:06 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/20/2019 15:06 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/20/2019 15:06 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/20/2019 15:06 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:06 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0556	1	EPA 8082A Certifications:		05/16/2019 10:56	05/20/2019 15:06	SR
	Surrogate Recoveries	Result		Acceptance R	lange						
877-09-8	Surrogate: Tetrachloro-m-xylene	70.5 %		30-150							

Metals, Target Analyte, ICP

Surrogate: Decachlorobiphenyl

2051-24-3

Sample Prepared by Method: EPA 3015A

-			
Log	-in	N	otes:

30-150

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported t	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDI	05/16/2019 13:51 EP,PADEP	KML
7440-39-3	Barium		ND		ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7440-70-2	Calcium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7440-47-3	Chromium		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7440-48-4	Cobalt		ND		ug/L	4.44	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7440-50-8	Copper		ND		ug/L	22.2	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7439-89-6	Iron		ND		ug/L	278	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML

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Client Sample ID: EB002

York Sample ID: 19E0591-44

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am <u>Date Received</u> 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

		TAT 4
1.0	T_IN	Notes:
LU		Tiutes.

Sample Notes:

CAS N	No.	Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead		ND	ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7439-95-4	Magnesium		ND	ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:51 EP,PADEP	KML
7439-96-5	Manganese		ND	ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7440-02-0	Nickel		ND	ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7440-09-7	Potassium		59.7	ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,N	05/15/2019 13:45 ELAC-NY10854,NJD	05/16/2019 13:51 EP,PADEP	KML
7440-22-4	Silver		ND	ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7440-23-5	Sodium		ND	ug/L	556	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7440-62-2	Vanadium		ND	ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDF	05/16/2019 13:51 EP,PADEP	KML
7440-66-6	Zinc		ND	ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:51 EPPADEP	KML

Metals, Target Analyte, ICP Dissolved

Sample Prepared by Method: EPA 3015A

Log-in Notes:

Sample Notes:

CAS N	No. I	arameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7440-39-3	Barium		ND		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7440-70-2	Calcium		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7440-47-3	Chromium		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7440-48-4	Cobalt		ND		mg/L	0.00444	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7440-50-8	Copper		ND		mg/L	0.0222	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7439-89-6	Iron		ND		mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7439-92-1	Lead		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7439-95-4	Magnesium		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7439-96-5	Manganese		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7440-02-0	Nickel		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 EP,PADEP	KML
7440-09-7	Potassium		0.104		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 IELAC-NY10854,NJD	05/20/2019 11:17 EP,PADEP	KML

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Client Sample ID: EB002

York Sample ID:

19E0591-44

York Project (SDG) No. 19E0591

Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:00 am

<u>Date Received</u> 05/13/2019

Metals, Target Analyte, ICP Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	۱o.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-22-4	Silver		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 P,PADEP	KML
7440-23-5	Sodium		ND		mg/L	0.556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 P,PADEP	KML
7440-62-2	Vanadium		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 P,PADEP	KML
7440-66-6	Zinc		ND		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:17 P,PADEP	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	No.	Parameter	Result	Flag Units	Reported to LOQ I	Dilution	Reference Meth	Date/Time od Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND	ug/L	1.11	1	EPA 6020B Certifications: CTDC	05/15/2019 13:47 DH,NELAC-NY10854,NJDI	05/16/2019 14:19 EP,PADEP	BML
7440-38-2	Arsenic		ND	ug/L	1.11	1	EPA 6020B Certifications: CTDC	05/15/2019 13:47 DH,NELAC-NY10854,NJDI	05/16/2019 14:19 EP,PADEP	BML
7440-41-7	Beryllium		ND	ug/L	0.333	1	EPA 6020B Certifications: CTDC	05/15/2019 13:47 DH,NELAC-NY10854,NJDI	05/16/2019 14:19 EP,PADEP	BML
7440-43-9	Cadmium		ND	ug/L	0.556	1	EPA 6020B Certifications: CTDC	05/15/2019 13:47 DH,NELAC-NY10854,NJDI	05/16/2019 14:19 EP,PADEP	BML
7782-49-2	Selenium		ND	ug/L	1.11	1	EPA 6020B Certifications: CTDC	05/15/2019 13:47 DH,NELAC-NY10854,NJDI	05/16/2019 14:19 EP,PADEP	BML
7440-28-0	Thallium		ND	ug/L	1.11	1	EPA 6020B Certifications: CTDC	05/15/2019 13:47 OH,NELAC-NY10854,NJDI	05/16/2019 14:19 EP,PADEP	BML

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

Sample	Prepared	hv	Method:	EPA	3015A

CAS I	No.	Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND	ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDI	05/20/2019 15:50 EP,PADEP	BML
7440-38-2	Arsenic		ND	ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDI	05/20/2019 15:50 EP,PADEP	BML
7440-41-7	Beryllium		ND	ug/L	3.33	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDI	05/20/2019 15:50 EP,PADEP	BML
7440-43-9	Cadmium		ND	ug/L	5.56	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDI	05/20/2019 15:50 EP,PADEP	BML
7782-49-2	Selenium		ND	ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDF	05/20/2019 15:50 EP,PADEP	BML
7440-28-0	Thallium		ND	ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:50 EP,PADEP	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

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Client Sample ID: EB002 **York Sample ID:** 19E0591-44

Client Project ID Collection Date/Time Date Received York Project (SDG) No. Matrix LST 1802 19E0591 Water May 10, 2019 12:00 am 05/13/2019

Sample Prepared by Method: EPA 7473 water

CAS No	0.	Parameter	Result	Flag	Units	Reported LOQ	to Dilutio	n Referenc	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473	CTDOH N	05/16/2019 09:41 FLAC-NY10854 NIDI	05/16/2019 14:03 EPPADEP	SY

Mercury by 7473, Dissolved

Log-in Notes: Sample Notes: Sample Prepared by Method: EPA 7473 water

CAS N	0.	Parameter	Result	Flag	Units	Reported to LOQ		lution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		mg/L	0.00020	00	1	EPA 7473 Certifications:	CTDOH,NE	05/21/2019 10:01 ELAC-NY10854,NJDE	05/21/2019 12:49 EP,PADEP	SY

Sample Information

Client Sample ID: FB003 **York Sample ID:** 19E0591-45

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Water May 10, 2019 12:00 am 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:

1,1,1,2-Tetrachloroethane	DEP,PADEP 06 SS DEP,PADEP 06 SS DEP,PADEP
79-34-5 1,1,2,2-Tetrachloroethane ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 (Freon 113)	DEP,PADEP 06 SS DEP,PADEP
Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,N. 76-13-1 1,1,2-Trichloro-1,2,2-trifluoroethane ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 (Freon 113) CTDOH,NELAC-NY10854,NELAC-NY12058,N. 79-00-5 1,1,2-Trichloroethane ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 (CTDOH,NELAC-NY10854,NELAC-NY12058,N.)	DEP,PADEP
(Freon 113) Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,N. 79-00-5 1,1,2-Trichloroethane ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21	06 SS
1,1,2 Incinoroculatio	DEP,PADEP
Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,N.	
75-34-3 1,1-Dichloroethane ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,N.	
75-35-4 1,1-Dichloroethylene ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,N.	
563-58-6 1,1-Dichloropropylene ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	06 SS
87-61-6 1,2,3-Trichlorobenzene ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	55
96-18-4 1,2,3-Trichloropropane ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	
120-82-1 1,2,4-Trichlorobenzene ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	
95-63-6 1,2,4-Trimethylbenzene ND ug/L 0.200 0.500 1 EPA 8260C 05/16/2019 07:30 05/16/2019 21 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,N.	

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Client Sample ID: FB003

Client Project ID York Project (SDG) No. Matrix Collection Date/Time Date Received 19E0591 LST 1802 Water May 10, 2019 12:00 am 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	<u>:</u>	Samp	le No	otes:

York Sample ID:

19E0591-45

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Prepar		Analyst
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0° CTDOH,NELAC-NY10854		
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0° CTDOH,NELAC-NY10854		
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0° CTDOH,NELAC-NY10854		
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854		
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0° CTDOH,NELAC-NY10854		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854		
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' NELAC-NY10854,NELAC	7:30 05/16/2019 21:0	6 SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications:	05/16/2019 0' NELAC-NY10854,NELAC	7:30 05/16/2019 21:0	6 SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' NELAC-NY10854,NELAC	7:30 05/16/2019 21:0	6 SS
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' CTDOH,NELAC-NY10854	7:30 05/16/2019 21:0	6 SS
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 0' NELAC-NY10854,NELAC	7:30 05/16/2019 21:0	6 SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 0	7:30 05/16/2019 21:0	6 SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	Certifications: EPA 8260C	NELAC-NY10854,NELAC 05/16/2019 0'	7:30 05/16/2019 21:0	6 SS
								Certifications:	CTDOH,NELAC-NY10854	,NELAC-NY 12058,NJD	EP,PADEP



Client Sample ID: FB003

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u>	Sample Notes:
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York Sample ID:

19E0591-45

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Date/Time Analyzed	Analys
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS
74-87-3	Chloromethane	0.400	J	ug/L	0.200	0.500	1	EPA 8260C	05/16/2019 07:30		
								Certifications:	CTDOH,NELAC-NY10854,N	ELAC-NY12058,NJDI	EP,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		SS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY		
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY	05/16/2019 21:06	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY	05/16/2019 21:06 05/16/2019 21:06	
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NI	05/16/2019 21:06	SS

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Client Sample ID: FB003

York Sample ID:

19E0591-45

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u>	Sample Notes:
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CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,PADEP	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,PADEP	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 21:06 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 21:06 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:06 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acc	eptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	109 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	104 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	105 %			70-130							

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes:

CAS N	0.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl		ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-NY	05/16/2019 15:13 710854,NJDEP,PADEP	05/17/2019 23:24	SR

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Client Sample ID: FB003

York Sample ID: 19E0591-45

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepare	ed by Method: EPA 3510C								D 4 //E'	D / //E'	
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Met		Date/Time Analyzed	Analyst
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: NEL	05/16/2019 15:13 0 AC-NY10854,NJDEP,PADEP	05/17/2019 23:24	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: NEL	05/16/2019 15:13 0 AC-NY10854,PADEP	05/17/2019 23:24	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: NEL	05/16/2019 15:13 0 AC-NY10854,NJDEP,PADEP	05/17/2019 23:24	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: NEL	05/16/2019 15:13 0 AC-NY10854,PADEP	5/17/2019 23:24	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: NEL	05/16/2019 15:13 0 AC-NY10854,PADEP	5/17/2019 23:24	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: NEL	05/16/2019 15:13 0 AC-NY10854,NJDEP,PADEP	5/17/2019 23:24	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	25/17/2019 23:24 PADEP	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	95/17/2019 23:24 PADEP	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
95-57-8	2-Chlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
95-48-7	2-Methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTE	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
88-74-4	2-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 0 OOH,NELAC-NY10854,NJDEP,P	05/17/2019 23:24 PADEP	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.86	5.71	1	EPA 8270D		05/17/2019 23:24	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.86	5.71	1	EPA 8270D		05/17/2019 23:24	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.86	5.71	1	EPA 8270D		5/17/2019 23:24	SR
99-09-2	3-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D		05/17/2019 23:24	SR
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Client Sample ID: FB003

York Sample ID: 19E0591-45

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Date/Time Prepared	Analyst
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
106-47-8	4-Chloroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
100-02-7	4-Nitrophenol	ND		ug/L	5.71	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
98-86-2	Acetophenone	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 NELAC-NY10854,NJDEP,PA	SR
62-53-3	Aniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 NELAC-NY10854,NJDEP,PA	SR
100-52-7	Benzaldehyde	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 NELAC-NY10854,NJDEP,PA	SR
92-87-5	Benzidine	ND		ug/L	5.71	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
65-85-0	Benzoic acid	ND		ug/L	28.6	57.1	1	EPA 8270D Certifications:	05/16/2019 15:1 NELAC-NY10854,NJDEP,PA	SR
100-51-6	Benzyl alcohol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 NELAC-NY10854,NJDEP,PA	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.14	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
105-60-2	Caprolactam	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 NELAC-NY10854,NJDEP,PA	SR
86-74-8	Carbazole	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
132-64-9	Dibenzofuran	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
131-11-3	Dimethyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:1 CTDOH,NELAC-NY10854,N	SR



Client Sample ID: FB003 **York Sample ID:**

19E0591-45

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Samp	le I	repared	l by	Method:	EPA 35	10C

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 23:24 P,PADEP	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	5.71	11.4	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 23:24 P,PADEP	SR
78-59-1	Isophorone	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 23:24 P,PADEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 23:24 P,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 23:24 P,PADEP	SR
108-95-2	Phenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 23:24 P,PADEP	SR
110-86-1	Pyridine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/17/2019 23:24 P,PADEP	SR
	Surrogate Recoveries	Result		Acce	ptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	26.2 %			19.7-63.1							
4165-62-2	Surrogate: SURR: Phenol-d5	15.6 %			10.1-41.7							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	49.0 %			50.2-113							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	53.2 %			39.9-105							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	54.3 %			39.3-151							
1718-51-0	Surrogate: SURR: Terphenyl-d14	70.6 %			30.7-106							

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag Units	Reported to LOQ I	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND	ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/29/2019 21:22 P,PADEP	КН
208-96-8	Acenaphthylene	ND	ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/29/2019 21:22 P,PADEP	KH
120-12-7	Anthracene	ND	ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/29/2019 21:22 P,PADEP	KH
1912-24-9	Atrazine	ND	ug/L	0.571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/29/2019 21:22 P	KH
56-55-3	Benzo(a)anthracene	ND	ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/29/2019 21:22 P,PADEP	КН
50-32-8	Benzo(a)pyrene	ND	ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/29/2019 21:22 P,PADEP	КН
205-99-2	Benzo(b)fluoranthene	ND	ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/29/2019 21:22 P,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND	ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 LAC-NY10854,NJDE	05/29/2019 21:22 P,PADEP	KH

ug/L

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Benzo(k)fluoranthene

207-08-9

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0.0571

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Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP

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EPA 8270D SIM

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Client Sample ID: FB003

York Sample ID: 19E0591-45

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:	Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
117-81-7	Bis(2-ethylhexyl)phthalate	0.857		ug/L	0.571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 21:22	KH
							Certifications: CTDOH,NI	ELAC-NY10854,NJD	EP	
218-01-9	Chrysene	ND		ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP,PADEP	КН
3-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP,PADEP	KH
06-44-0	Fluoranthene	ND		ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP,PADEP	KH
6-73-7	Fluorene	ND		ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP,PADEP	KH
18-74-1	Hexachlorobenzene	ND		ug/L	0.0229	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP	КН
7-68-3	Hexachlorobutadiene	ND		ug/L	0.571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP	КН
7-72-1	Hexachloroethane	ND		ug/L	0.571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP	КН
93-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP,PADEP	КН
1-20-3	Naphthalene	0.0800		ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 21:22	KH
							Certifications: CTDOH,NI	ELAC-NY10854,NJD	EP,PADEP	
8-95-3	Nitrobenzene	ND		ug/L	0.286	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP	КН
2-75-9	N-Nitrosodimethylamine	ND		ug/L	0.571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP	KH
7-86-5	Pentachlorophenol	ND		ug/L	0.286	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP	KH
5-01-8	Phenanthrene	ND		ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP,PADEP	KH
29-00-0	Pyrene	ND		ug/L	0.0571	1	EPA 8270D SIM Certifications: CTDOH,NE	05/16/2019 15:13 ELAC-NY10854,NJDE	05/29/2019 21:22 EP,PADEP	KH

Pesticides, 8081 List

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

CAS I	No.	Parameter	Result	Flag Units	Reported to LOQ Dilut	ion Reference	Date/Time e Method Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD		ND	ug/L	0.00421 1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJE	05/19/2019 10:20 DEP,PADEP	СМ
72-55-9	4,4'-DDE		ND	ug/L	0.00421 1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJE	05/19/2019 10:20 DEP,PADEP	СМ
50-29-3	4,4'-DDT		ND	ug/L	0.00421 1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJE	05/19/2019 10:20 DEP,PADEP	СМ
309-00-2	Aldrin		ND	ug/L	0.00421 1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJE	05/19/2019 10:20 DEP,PADEP	CM
319-84-6	alpha-BHC		ND	ug/L	0.00421 1	EPA 8081B Certifications:	05/16/2019 10:56 CTDOH,NELAC-NY10854,NJE	05/19/2019 10:20 DEP,PADEP	CM

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Client Sample ID: FB003 **York Sample ID:** 19E0591-45

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Pesticides, 8081 List

Sample Notes:

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

o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
alpha-Chlordane	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDI	05/19/2019 10:20 EP,PADEP	СМ
beta-BHC	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/19/2019 10:20 EP,PADEP	CM
delta-BHC	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 10:20 EP,PADEP	CM
Dieldrin	ND		ug/L	0.00211	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 10:20 EP,PADEP	CM
Endosulfan I	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/19/2019 10:20 EP,PADEP	CM
Endosulfan II	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/19/2019 10:20 EP,PADEP	CM
Endosulfan sulfate	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/19/2019 10:20 EP,PADEP	CM
Endrin	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 10:20 EP,PADEP	CM
Endrin aldehyde	ND		ug/L	0.0105	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 10:20 EP,PADEP	CM
Endrin ketone	ND		ug/L	0.0105	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/19/2019 10:20 EP,PADEP	CM
gamma-BHC (Lindane)	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 10:20 EP,PADEP	CM
gamma-Chlordane	ND		ug/L	0.0105	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/19/2019 10:20 EP,PADEP	CM
Heptachlor	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 10:20 EP,PADEP	CM
Heptachlor epoxide	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/19/2019 10:20 EP,PADEP	CM
Methoxychlor	ND		ug/L	0.00421	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDF	05/19/2019 10:20 EP,PADEP	CM
Toxaphene	ND		ug/L	0.105	1	EPA 8081B Certifications:	CTDOH,NI	05/16/2019 10:56 ELAC-NY10854,NJDE	05/19/2019 10:20 EP,PADEP	CM
* Chlordane, total	ND		ug/L	0.211	1	EPA 8081B Certifications:		05/16/2019 10:56	05/19/2019 10:20	CM
Surrogate Recoveries	Result		Accept	ance Range						
Surrogate: Decachlorobiphenyl	102 %		Ĵ	0-150						
Surrogate: Tetrachloro-m-xylene	86.4 %		Ĵ	0-150						
	alpha-Chlordane beta-BHC delta-BHC Dieldrin Endosulfan I Endosulfan II Endosulfan sulfate Endrin Endrin aldehyde Endrin ketone gamma-BHC (Lindane) gamma-Chlordane Heptachlor Heptachlor Toxaphene * Chlordane, total Surrogate Recoveries Surrogate: Decachlorobiphenyl	alpha-Chlordane ND beta-BHC ND delta-BHC ND Dieldrin ND Endosulfan I ND Endosulfan II ND Endosulfan sulfate ND Endrin ND Endrin ND Endrin Aldehyde ND Endrin ketone ND gamma-BHC (Lindane) ND gamma-Chlordane ND Heptachlor ND Heptachlor ND Toxaphene ND * Chlordane, total ND Surrogate Recoveries Result Surrogate: Decachlorobiphenyl 102 %	alpha-Chlordane ND beta-BHC ND delta-BHC ND Dieldrin ND Endosulfan I ND Endosulfan II ND Endosulfan sulfate ND Endrin Aldehyde ND Endrin aldehyde ND Endrin ketone ND gamma-BHC (Lindane) ND gamma-Chlordane ND Heptachlor ND Heptachlor ND Methoxychlor ND Toxaphene ND * Chlordane, total ND Surrogate Recoveries Result Surrogate: Decachlorobiphenyl 102 %	alpha-Chlordane ND ug/L beta-BHC ND ug/L delta-BHC ND ug/L Endosulfan I ND ug/L Endosulfan II ND ug/L Endosulfan sulfate ND ug/L Endrin ND ug/L Endrin aldehyde ND ug/L Endrin ketone ND ug/L Endrin ketone ND ug/L Heptachlor ND ug/L Heptachlor ND ug/L Surrogate Recoveries Result Accepta Surrogate: Decachlorobiphenyl ND ug/L Accepta Surrogate: Decachlorobiphenyl	Parameter Result Flag Units LOQ	Appha-Chlordane ND	ND	Action Parameter Result Flag Units 1.00 Dilution Reference Method	Parameter	No. Parameter Prepare Prepar

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	o Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016		ND		ug/L	0.0526	1	EPA 8082A		05/16/2019 10:56	05/20/2019 15:20	SR
								Certifications:	NELAC-N	/10854,CTDOH,NJDE	EP,PADEP	

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Client Sample ID: FB003

York Sample ID: 19E0591-45

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

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

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11104-28-2	Aroclor 1221	ND		ug/L	0.0526	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:20 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND		ug/L	0.0526	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/20/2019 15:20 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		ug/L	0.0526	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDF	05/20/2019 15:20 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		ug/L	0.0526	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:20 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0526	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/20/2019 15:20 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0526	1	EPA 8082A Certifications:	NELAC-N	05/16/2019 10:56 Y10854,CTDOH,NJDH	05/20/2019 15:20 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0526	1	EPA 8082A Certifications:		05/16/2019 10:56	05/20/2019 15:20	SR
	Surrogate Recoveries	Result		Accep	otance Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	89.5 %			30-150						
2051-24-3	Surrogate: Decachlorobiphenyl	106 %			30-150						

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7440-39-3	Barium		ND		ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7440-70-2	Calcium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7440-47-3	Chromium		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7440-48-4	Cobalt		ND		ug/L	4.44	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7440-50-8	Copper		ND		ug/L	22.2	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7439-89-6	Iron		ND		ug/L	278	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7439-92-1	Lead		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7439-95-4	Magnesium		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7439-96-5	Manganese		ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML
7440-02-0	Nickel		ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:54 EP,PADEP	KML



Client Sample ID: FB003

York Sample ID: 19E0591-45

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

Log-in Notes:	Sample Notes:
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CAS N	o.]	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-09-7	Potassium	1	100		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NI	05/15/2019 13:45 ELAC-NY10854,NJDI	05/16/2019 13:54 EP,PADEP	KML
7440-22-4	Silver	N	ND		ug/L	5.56	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 LAC-NY10854,NJDE	05/16/2019 13:54 P,PADEP	KML
7440-23-5	Sodium	Ν	ND		ug/L	556	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 LAC-NY10854,NJDE	05/16/2019 13:54 P,PADEP	KML
7440-62-2	Vanadium	Ν	ND		ug/L	11.1	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 LAC-NY10854,NJDE	05/16/2019 13:54 P,PADEP	KML
7440-66-6	Zinc	N	ND		ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 LAC-NY10854,NJDE	05/16/2019 13:54 P,PADEP	KML

Metals, Target Analyte, ICP Dissolved

Log-in Notes:

Sample Notes:

CAS N	0.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7440-39-3	Barium		ND		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7440-70-2	Calcium		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7440-47-3	Chromium		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7440-48-4	Cobalt		ND		mg/L	0.00444	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7440-50-8	Copper		ND		mg/L	0.0222	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7439-89-6	Iron		ND		mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7439-92-1	Lead		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7439-95-4	Magnesium		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7439-96-5	Manganese		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7440-02-0	Nickel		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7440-09-7	Potassium		0.0786		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDI	05/20/2019 11:19 EP,PADEP	KML
7440-22-4	Silver		ND		mg/L	0.00556	1	EPA 6010D Certifications:		05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19	KML
7440-23-5	Sodium		ND		mg/L	0.556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19 P,PADEP	KML
7440-62-2	Vanadium		ND		mg/L	0.0111	1	EPA 6010D Certifications:		05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19	KML
7440-66-6	Zinc		ND		mg/L	0.0278	1	EPA 6010D Certifications:		05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:19	KML



Client Sample ID: FB003

York Sample ID:

19E0591-45

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:00 am

<u>Date Received</u> 05/13/2019

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	lo.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:23 EP,PADEP	BML
7440-38-2	Arsenic		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:23 EP,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	0.333	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:23 EP,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	0.556	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:23 EP,PADEP	BML
7782-49-2	Selenium		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:23 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	1.11	1	EPA 6020B Certifications:	CTDOH,NE	05/15/2019 13:47 ELAC-NY10854,NJDE	05/16/2019 14:23 EP,PADEP	BML

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

D / /T.

Sample Prepared by Method: EPA 3015A

CAS N	No.	Parameter	Result	Flag	Units	Reported LOQ	to Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDI	05/20/2019 15:55 EP,PADEP	BML
7440-38-2	Arsenic		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NE	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:55 EP,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	3.33	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:55 EP,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	5.56	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:55 EP,PADEP	BML
7782-49-2	Selenium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 15:55 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDF	05/20/2019 15:55 EP,PADEP	BML

Mercury by 7473 <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: EPA 7473 water

CAS N	0.	Parameter	Result	Flag	Units	Reported LOQ	to Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473	CTDOH NI	05/16/2019 09:41	05/16/2019 14:13	SY

Mercury by 7473, Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag Units	Reported to LOQ Dilution	Reference 1	Date/Time Method Prepared	Date/Time Analyzed	Analyst
7439-97-6 Mercury		ND	mg/L	0.0002000 1	EPA 7473 Certifications:	05/21/2019 10:01 CTDOH,NELAC-NY10854,NJDI	05/21/2019 13:00 EPPADEP	SY

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Client Sample ID: EB003

York Sample ID: 19E0591-46

05/13/2019

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Water May 10, 2019 12:00 am

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:

Sample Notes:

CAS No	. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time Iethod Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP,PADEP	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: N	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: N	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP,PADEP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEI	SS P,PADEP
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications: N	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP,PADEP	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: N	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP,PADEP	SS

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Log-in Notes:

Client Sample ID: EB003 **York Sample ID:** 19E0591-46

York Project (SDG) No. Client Project ID Matrix Collection Date/Time 19E0591 LST 1802 Water

May 10, 2019 12:00 am

Sample Notes:

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepare	ed by Method: EPA 5030B										
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Date/Time Iethod Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP,PADEP	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP,PADEP	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: (05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 CTDOH,NELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEF	SS P,PADEP
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 NELAC-NY10854,NELAC-NY1	05/16/2019 21:38 2058,NJDEP,PADEP	SS



Client Sample ID: EB003

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
Lug-III Mutes.	Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEI	05/16/2019 21:38 LAC-NY12058,NJDEI	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY	05/16/2019 21:38 12058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY	05/16/2019 21:38 12058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 .AC-NY12058,NJDEI	SS P.PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 12058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 .AC-NY12058,NJDEI	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 12058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,NJDEI	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 12058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,NJDEI	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,NJDEI	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,NJDEI	SS
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,PADE	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,PADE	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,NJDEI	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,NJDEI	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,NJDEI	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 12058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38 LAC-NY12058,NJDEI	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30	05/16/2019 21:38	SS
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C		05/16/2019 07:30	05/16/2019 21:38	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	Certifications:		05/16/2019 07:30	05/16/2019 21:38	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	Certifications:		05/16/2019 07:30	05/16/2019 21:38	SS
								Certifications:	CTDOH,NE	LAC-NY10854,NEI	LAC-NY12058,NJDEI	P,PADEP

19E0591-46



Client Sample ID: EB003

York Sample ID:

19E0591-46

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in	Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEP	SS P,PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEP	SS P,PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY12	05/16/2019 21:38 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEP	SS P,PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 21:38 AC-NY12058,NJDEP	SS
	Surrogate Recoveries	Result		Acc	eptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	106 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	104 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	106 %			70-130							

Semi-Volatiles, 8270 Comprehensive

ample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes:

CAS N	No. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference I	Method Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PAD	05/18/2019 00:12 EP	SR
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PAD	05/18/2019 00:12 EP	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJI	05/18/2019 00:12 DEP,PADEP	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,PADEP	05/18/2019 00:12	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PAD	05/18/2019 00:12 EP	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,PADEP	05/18/2019 00:12	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,PADEP	05/18/2019 00:12	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 NELAC-NY10854,NJDEP,PAD	05/18/2019 00:12 EP	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJI	05/18/2019 00:12 DEP,PADEP	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJI		SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJI		SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	05/16/2019 15:13 CTDOH,NELAC-NY10854,NJI	05/18/2019 00:12 DEP,PADEP	SR



Client Sample ID: EB003

York Sample ID: 19E0591-46

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepar	red by Method: EPA 3510C										
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Met	Date/Time nod Prepared	Date/Time Analyzed	Analyst
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
95-57-8	2-Chlorophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
95-48-7	2-Methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
88-74-4	2-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
99-09-2	3-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
106-47-8	4-Chloroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
100-02-7	4-Nitrophenol	ND		ug/L	5.71	5.71	1	EPA 8270D Certifications: CTD	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12 EP,PADEP	SR
98-86-2	Acetophenone	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications: NEL	05/16/2019 15:13 AC-NY10854,NJDEP,PADE	05/18/2019 00:12 P	SR
62-53-3	Aniline	ND		ug/L	2.86	5.71	1	EPA 8270D	05/16/2019 15:13 AC-NY10854,NJDEP,PADE	05/18/2019 00:12	SR
100-52-7	Benzaldehyde	ND		ug/L	2.86	5.71	1	EPA 8270D	05/16/2019 15:13 AC-NY10854,NJDEP,PADE	05/18/2019 00:12	SR
92-87-5	Benzidine	ND		ug/L	5.71	5.71	1	EPA 8270D	05/16/2019 15:13 OH,NELAC-NY10854,NJD	05/18/2019 00:12	SR



Log-in Notes:

Client Sample ID: EB003 **York Sample ID:**

19E0591-46

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am

Sample Notes:

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepar	ed by Method: EPA 3510C											
CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
65-85-0	Benzoic acid	ND		ug/L	28.6	57.1	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/18/2019 00:12 P	SR
100-51-6	Benzyl alcohol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/18/2019 00:12 P	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.14	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
105-60-2	Caprolactam	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	NELAC-N	05/16/2019 15:13 Y10854,NJDEP,PADE	05/18/2019 00:12 P	SR
86-74-8	Carbazole	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
132-64-9	Dibenzofuran	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
131-11-3	Dimethyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	5.71	11.4	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
78-59-1	Isophorone	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
108-95-2	Phenol	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
110-86-1	Pyridine	ND		ug/L	2.86	5.71	1	EPA 8270D Certifications:	CTDOH,N	05/16/2019 15:13 ELAC-NY10854,NJDI	05/18/2019 00:12 EP,PADEP	SR
	Surrogate Recoveries	Result		Acco	eptance Rang	e						
367-12-4	Surrogate: SURR: 2-Fluorophenol	34.1 %			19.7-63.1							
4165-62-2	Surrogate: SURR: Phenol-d5	19.4 %			10.1-41.7							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	61.1 %			50.2-113							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	65.4 %			39.9-105							
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	71.1 %			39.3-151							
1718-51-0	Surrogate: SURR: Terphenyl-d14	82.7 %			30.7-106							

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ClientServices@ Page 348 of 446



Client Sample ID: EB003

Sample Prepared by Method: EPA 3510C

York Sample ID: 19E0591-46

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeWaterMay 10, 2019 12:00 am

Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Log-in Notes:

Sample Notes:

CAS No	o. Parameter	Result	Flag Units	Reported to LOQ	Dilution		ite/Time Analyzed Analys
83-32-9	Acenaphthene	ND	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2019 15:13 Certifications: CTDOH,NELAC-NY10854,NJDEP,PAD	9/2019 21:53 KH
208-96-8	Acenaphthylene	ND	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2019 15:13 Certifications: CTDOH,NELAC-NY10854,NJDEP,PAD	9/2019 21:53 KH
120-12-7	Anthracene	ND	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2 Certifications: CTDOH,NELAC-NY10854,NJDEP,PAD	9/2019 21:53 KH
1912-24-9	Atrazine	ND	ug/L	0.571	1	EPA 8270D SIM 05/16/2019 15:13 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10	9/2019 21:53 KH
56-55-3	Benzo(a)anthracene	ND	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2 Certifications: CTDOH,NELAC-NY10854,NJDEP,PAD	9/2019 21:53 KH
50-32-8	Benzo(a)pyrene	ND	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2019 15:13 Certifications: CTDOH,NELAC-NY10854,NJDEP,PAD	9/2019 21:53 KH
205-99-2	Benzo(b)fluoranthene	ND	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2019 15:13 Certifications: CTDOH,NELAC-NY10854,NJDEP,PAD	9/2019 21:53 KH EP
191-24-2	Benzo(g,h,i)perylene	ND	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2019 15:13 Certifications: CTDOH,NELAC-NY10854,NJDEP,PAD	9/2019 21:53 KH EP
207-08-9	Benzo(k)fluoranthene	ND	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10	9/2019 21:53 KH
117-81-7	Bis(2-ethylhexyl)phthalate	0.800	ug/L	0.571	1	EPA 8270D SIM 05/16/2019 15:13 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10 05/2019 15:10	9/2019 21:53 KH
218-01-9	Chrysene	ND	ug/L	0.0571	1		9/2019 21:53 KH
53-70-3	Dibenzo(a,h)anthracene	ND	ug/L	0.0571	1		9/2019 21:53 KH
206-44-0	Fluoranthene	ND	ug/L	0.0571	1		9/2019 21:53 KH
86-73-7	Fluorene	0.389	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2	9/2019 21:53 KH
118-74-1	Hexachlorobenzene	ND	ug/L	0.0229	1		9/2019 21:53 KH
87-68-3	Hexachlorobutadiene	ND	ug/L	0.571	1		9/2019 21:53 KH
67-72-1	Hexachloroethane	ND	ug/L	0.571	1		9/2019 21:53 KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND	ug/L	0.0571	1		9/2019 21:53 KH
91-20-3	Naphthalene	0.126	ug/L	0.0571	1	EPA 8270D SIM 05/16/2019 15:13 05/2	9/2019 21:53 KH
98-95-3	Nitrobenzene	ND	ug/L	0.286	1		9/2019 21:53 KH
62-75-9	N-Nitrosodimethylamine	ND	ug/L	0.571	1	Certifications: CTDOH,NELAC-NY10854,NJDEP EPA 8270D SIM 05/16/2019 15:13 05/2	9/2019 21:53 KH
87-86-5	Pentachlorophenol	ND	ug/L	0.286	1		9/2019 21:53 KH
85-01-8	Phenanthrene	ND	ug/L	0.0571	1		9/2019 21:53 KH
						Certifications: CTDOH,NELAC-NY10854,NJDEP,PAD	EP



Client Sample ID: EB003 **York Sample ID:**

19E0591-46

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Semi-Volatiles, 8270 Comprehensive

Sample Prepared by Method: EPA 3510C

Log-in Notes:

Sample Notes:

Sample Notes:

CAS	No.	Parameter	Result	Flag	Units	Reported LOQ	ıtion	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
129-00-0	Pyrene		0.0686		ug/L	0.0571	1	EPA 8270D SIM	05/16/2019 15:13	05/29/2019 21:53	KH
								Certifications: CTDOH,	NELAC-NY10854,NJD	EP,PADEP	

Log-in Notes: Pesticides, 8081 List

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

CAS N	No. Parameter	Result	Flag Units	Reported to LOQ	Dilution	Reference Mo	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND	ug/L	0.00444	1	EPA 8081B Certifications: C1	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	СМ
72-55-9	4,4'-DDE	ND	ug/L	0.00444	1	EPA 8081B Certifications: C1	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
50-29-3	4,4'-DDT	ND	ug/L	0.00444	1	EPA 8081B Certifications: CT	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
309-00-2	Aldrin	ND	ug/L	0.00444	1	EPA 8081B Certifications: CT	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
319-84-6	alpha-BHC	ND	ug/L	0.00444	1	EPA 8081B Certifications: C1	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
5103-71-9	alpha-Chlordane	ND	ug/L	0.00444	1	EPA 8081B Certifications: C1	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
319-85-7	beta-BHC	ND	ug/L	0.00444	1	EPA 8081B Certifications: C7	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
319-86-8	delta-BHC	ND	ug/L	0.00444	1	EPA 8081B Certifications: C7	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
60-57-1	Dieldrin	ND	ug/L	0.00222	1	EPA 8081B Certifications: C7	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
959-98-8	Endosulfan I	ND	ug/L	0.00444	1	EPA 8081B Certifications: C7	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
33213-65-9	Endosulfan II	ND	ug/L	0.00444	1	EPA 8081B Certifications: CT	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
1031-07-8	Endosulfan sulfate	ND	ug/L	0.00444	1	EPA 8081B Certifications: C7	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
72-20-8	Endrin	ND	ug/L	0.00444	1	EPA 8081B Certifications: C7	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
7421-93-4	Endrin aldehyde	ND	ug/L	0.0111	1	EPA 8081B Certifications: C7	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
53494-70-5	Endrin ketone	ND	ug/L	0.0111	1	EPA 8081B Certifications: CT	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
58-89-9	gamma-BHC (Lindane)	ND	ug/L	0.00444	1	EPA 8081B Certifications: CT	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
5566-34-7	gamma-Chlordane	ND	ug/L	0.0111	1	EPA 8081B Certifications: C7	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	СМ
76-44-8	Heptachlor	ND	ug/L	0.00444	1	EPA 8081B Certifications: C7	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	СМ
1024-57-3	Heptachlor epoxide	ND	ug/L	0.00444	1	EPA 8081B Certifications: CT	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	СМ



Client Sample ID: EB003 **York Sample ID:**

19E0591-46

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Pesticides, 8081 List

Log-in Notes:

Sample Notes:

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

CAS N	lo. Parameter	Result	Flag	Units	Reported to LOQ 1	Dilution	Reference Me	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
72-43-5	Methoxychlor	ND		ug/L	0.00444	1	EPA 8081B Certifications: CT	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
8001-35-2	Toxaphene	ND		ug/L	0.111	1	EPA 8081B Certifications: CT	05/16/2019 10:56 FDOH,NELAC-NY10854,NJD	05/19/2019 10:35 EP,PADEP	CM
57-74-9	* Chlordane, total	ND		ug/L	0.222	1	EPA 8081B Certifications:	05/16/2019 10:56	05/19/2019 10:35	CM
	Surrogate Recoveries	Result		Acceptance	e Range					
2051-24-3	Surrogate: Decachlorobiphenyl	111 %		30-13	50					
877-09-8	Surrogate: Tetrachloro-m-xylene	94.8 %		30-13	50					

Polychlorinated Biphenyls (PCB), 8082 List

Log-in Notes:

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:34 EP,PADEP	SR
11104-28-2	Aroclor 1221	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:34 EP,PADEP	SR
11141-16-5	Aroclor 1232	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:34 EP,PADEP	SR
53469-21-9	Aroclor 1242	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:34 EP,PADEP	SR
12672-29-6	Aroclor 1248	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:34 EP,PADEP	SR
11097-69-1	Aroclor 1254	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:34 EP,PADEP	SR
11096-82-5	Aroclor 1260	ND		ug/L	0.0556	1	EPA 8082A Certifications:	NELAC-NY	05/16/2019 10:56 Y10854,CTDOH,NJDE	05/20/2019 15:34 EP,PADEP	SR
1336-36-3	* Total PCBs	ND		ug/L	0.0556	1	EPA 8082A Certifications:		05/16/2019 10:56	05/20/2019 15:34	SR
	Surrogate Recoveries	Result		Acceptanc	e Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	88.5 %		30-1	50						
2051-24-3	Surrogate: Decachlorobiphenyl	97.0 %		30-1	50						

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No	0.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		ug/L	55.6	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:56 EP,PADEP	KML
7440-39-3	Barium		ND		ug/L	27.8	1	EPA 6010D Certifications:	CTDOH,NE	05/15/2019 13:45 ELAC-NY10854,NJDE	05/16/2019 13:56 EP,PADEP	KML

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Client Sample ID: EB003

York Sample ID: 19F

19E0591-46

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Metals, Target Analyte, ICP

Sample Prepared by Method: EPA 3015A

		TAT 4
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Sample Notes:

CAS N	lo. Parameter	Result	Flag Units	Reported to LOQ Di	ilution	Reference !	Date/Time Method Prepared	Date/Time Analyzed	Analyst
7440-70-2	Calcium	ND	ug/L	55.6	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7440-47-3	Chromium	ND	ug/L	5.56	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7440-48-4	Cobalt	ND	ug/L	4.44	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7440-50-8	Copper	ND	ug/L	22.2	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7439-89-6	Iron	ND	ug/L	278	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7439-92-1	Lead	ND	ug/L	5.56	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7439-95-4	Magnesium	ND	ug/L	55.6	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7439-96-5	Manganese	ND	ug/L	5.56	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7440-02-0	Nickel	ND	ug/L	11.1	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7440-09-7	Potassium	ND	ug/L	55.6	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7440-22-4	Silver	ND	ug/L	5.56	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7440-23-5	Sodium	ND	ug/L	556	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7440-62-2	Vanadium	ND	ug/L	11.1	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML
7440-66-6	Zinc	ND	ug/L	27.8	1	EPA 6010D Certifications:	05/15/2019 13:45 CTDOH,NELAC-NY10854,NJD	05/16/2019 13:56 EP,PADEP	KML

Metals, Target Analyte, ICP Dissolved

Sample Prepared by Method: EPA 3015A

Sample Notes:

CAS N	lo.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:22 EP,PADEP	KML
7440-39-3	Barium		ND		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDF	05/20/2019 11:22 EP,PADEP	KML
7440-70-2	Calcium		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:22 EP,PADEP	KML
7440-47-3	Chromium		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:22 EP,PADEP	KML
7440-48-4	Cobalt		ND		mg/L	0.00444	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDF	05/20/2019 11:22 EP,PADEP	KML
7440-50-8	Copper		ND		mg/L	0.0222	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:22 EP,PADEP	KML
7439-89-6	Iron		ND		mg/L	0.278	1	EPA 6010D Certifications:	CTDOH,NE	05/17/2019 16:32 ELAC-NY10854,NJDI	05/20/2019 11:22 EP,PADEP	KML

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Client Sample ID: EB003

York Sample ID: 19E0591-46

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time
May 10, 2019 12:00 am

<u>Date Received</u> 05/13/2019

Metals, Target Analyte, ICP Dissolved

Sample Prepared by Method: EPA 3015A

		TAT 4
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Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDI	05/20/2019 11:22 EP,PADEP	KML
7439-95-4	Magnesium		ND		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:22 EP,PADEP	KML
7439-96-5	Manganese		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDF	05/20/2019 11:22 EP,PADEP	KML
7440-02-0	Nickel		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:22 EP,PADEP	KML
7440-09-7	Potassium		0.0872		mg/L	0.0556	1	EPA 6010D Certifications:	CTDOH,N	05/17/2019 16:32 ELAC-NY10854,NJD	05/20/2019 11:22 EP,PADEP	KML
7440-22-4	Silver		ND		mg/L	0.00556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDE	05/20/2019 11:22 EP,PADEP	KML
7440-23-5	Sodium		ND		mg/L	0.556	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDF	05/20/2019 11:22 EP,PADEP	KML
7440-62-2	Vanadium		ND		mg/L	0.0111	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDF	05/20/2019 11:22 EP,PADEP	KML
7440-66-6	Zinc		ND		mg/L	0.0278	1	EPA 6010D Certifications:	CTDOH,NI	05/17/2019 16:32 ELAC-NY10854,NJDF	05/20/2019 11:22 EP,PADEP	KML

Metals, Target Analyte, ICPMS

Sample Prepared by Method: EPA 3015A

Log-	-in	No	tes:

Sample Notes:

CAS N	No.	Parameter	Result	Flag	Units	Reported to	Dilution	Reference Me	Date/Time ethod Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony		ND		ug/L	1.11	1	EPA 6020B Certifications: CT	05/15/2019 13:47 FDOH,NELAC-NY10854,NJDF	05/16/2019 14:28 EP,PADEP	BML
7440-38-2	Arsenic		ND		ug/L	1.11	1	EPA 6020B Certifications: CT	05/15/2019 13:47 FDOH,NELAC-NY10854,NJDF	05/16/2019 14:28 EP,PADEP	BML
7440-41-7	Beryllium		ND		ug/L	0.333	1	EPA 6020B Certifications: CT	05/15/2019 13:47 FDOH,NELAC-NY10854,NJDF	05/16/2019 14:28 EP,PADEP	BML
7440-43-9	Cadmium		ND		ug/L	0.556	1	EPA 6020B Certifications: CT	05/15/2019 13:47 FDOH,NELAC-NY10854,NJDF	05/16/2019 14:28 EP,PADEP	BML
7782-49-2	Selenium		ND		ug/L	1.11	1	EPA 6020B Certifications: CT	05/15/2019 13:47 FDOH,NELAC-NY10854,NJDI	05/16/2019 14:28 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	1.11	1	EPA 6020B Certifications: CT	05/15/2019 13:47 FDOH,NELAC-NY10854,NJDF	05/16/2019 14:28 EP,PADEP	BML

Metals, Target Analyte, ICPMS Dissolved

Sample Prepared by Method: EPA 3015A

Log-in	Notes:

Sample Notes:

CAS N	No. Para	meter Result	Flag Units	Reported to LOQ Dilut	ntion Reference	Method Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND	ug/L	11.1 1	10 EPA 6020B Certifications:	05/17/2019 16:34 CTDOH,NELAC-NY10854,NJD	05/20/2019 16:10 EP,PADEP	BML
7440-38-2	Arsenic	ND	ug/L	11.1 1	10 EPA 6020B Certifications:	05/17/2019 16:34 CTDOH,NELAC-NY10854,NJD	05/20/2019 16:10 EP,PADEP	BML
7440-41-7	Beryllium	ND	ug/L	3.33 1	10 EPA 6020B Certifications:	05/17/2019 16:34 CTDOH,NELAC-NY10854,NJD	05/20/2019 16:10 EP,PADEP	BML

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Client Sample ID: EB003 **York Sample ID:** 19E0591-46

York Project (SDG) No. 19E0591

Client Project ID LST 1802

Matrix Water

Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Metals, Target Analyte, ICPMS Dissolved

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS N	0.	Parameter	Result	Flag	Units	Reported t LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium		ND		ug/L	5.56	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 16:10 EP,PADEP	BML
7782-49-2	Selenium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 16:10 EP,PADEP	BML
7440-28-0	Thallium		ND		ug/L	11.1	10	EPA 6020B Certifications:	CTDOH,NI	05/17/2019 16:34 ELAC-NY10854,NJDE	05/20/2019 16:10 EP,PADEP	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS	No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury		ND		ug/L	0.20	1	EPA 7473	CTDOUNI	05/16/2019 09:41	05/16/2019 14:24	SY
								Certifications:	CTDOH,NI	ELAC-NY10854,NJDE	EP,PADEP	

Mercury by 7473, Dissolved

Log-in Notes:

Sample Notes:

Data/Time

Sample Prepared by Method: EPA 7473 water

CAS N	0.	Parameter	Result	Flag	Units	Reported to LOQ D	ilution	Reference	Method	Prepared	Analyzed	Analyst
7439-97-6	Mercury		ND		mg/L	0.0002000	1	EPA 7473		05/21/2019 10:01	05/21/2019 13:11	SY
								Certifications:	CTDOH,NE	LAC-NY10854,NJDE	P,PADEP	

Sample Information

TB001 **Client Sample ID:**

Client Project ID

Matrix

Collection Date/Time

York Sample ID:

Data/Time

19E0591-47

York Project (SDG) No. 19E0591

LST 1802

Water

May 10, 2019 12:00 am

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Sample Notes:

Sample Prepare	at by Method. ETA 3030B											
CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference M	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP

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RICHMOND HILL, NY 11418

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Client Sample ID: TB001

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 19E0591 LST 1802 Water May 10, 2019 12:00 am 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:

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York Sample ID:

19E0591-47

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		te/Time Prepared	Date/Time Analyzed	Analyst
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 IY10854,NEI	05/16/2019 13:41 LAC-NY12058,NJDE	
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 IY10854,NEI	05/16/2019 13:41 LAC-NY12058,NJDE	
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16 NELAC-NY10854,	/2019 07:30 NELAC-NY	05/16/2019 13:41 12058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		/2019 07:30 NELAC-NY	05/16/2019 13:41 12058,NJDEP,PADEF	
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 12058,NJDEP,PADEF	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 12058,NJDEP,PADEF	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 12058,NJDEP,PADEF	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 12058,NJDEP,PADEF	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 12058,NJDEP,PADEF	SS
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30	05/16/2019 13:41 LAC-NY12058,NJDE	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16	/2019 07:30		SS
								Certifications:	CIDOII,NELAC-N	1110034,INE	LAC-IN 1 12038,INJDE	a,rader



Log-in Notes:

Client Sample ID: TB001

<u>York Sample ID:</u> 19E0591-47

<u>York Project (SDG) No.</u> <u>Client Project ID</u> 19E0591 LST 1802 MatrixCollection Date/TimeWaterMay 10, 2019 12:00 am

Sample Notes:

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

	red by Method: EPA 5030B			Loc III	- totes.		Sample Potes.					
CAS N	<u> </u>	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 13:41 2058,NJDEP,PADEP	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 13:41 2058,NJDEP,PADEP	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 13:41 2058,NJDEP,PADEP	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 13:41 2058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 13:41 2058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NI	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 13:41 AC-NY12058,NJDEF	SS P,PADEP

Hexachlorobutadiene

87-68-3

ug/L

ND

0.500

0.200

NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP

EPA 8260C

SS



Client Sample ID: TB001

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
Jog-in Notes:	Sample r

York Sample ID:

19E0591-47

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method Prepared Analyze		alyst
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30		SS EP
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30		SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30		SS EP
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30		SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/2019 07:30 05/16/2019 1: CTDOH,NELAC-NY10854,NELAC-NY12058,N		SS EP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30		SS EP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30		SS EP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS EP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 5	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30 05/16/2019 12 CTDOH,NELAC-NY10854,NELAC-NY12058,N	:41 \$	SS EP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30		SS EP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 5	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS
08-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 \$	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/2019 07:30	:41 5	SS EP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	05/16/2019 07:30 05/16/2019 12 CTDOH,NELAC-NY10854,NELAC-NY12058,N	:41 \$	SS
	Surrogate Recoveries	Result		Acce	eptance Rang	e			,		

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Client Sample ID: York Sample ID: 19E0591-47

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in	Notes:	Sa

Sample Notes:

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	94.7 %			70-130					
2037-26-5	Surrogate: SURR: Toluene-d8	97.8 %			70-130					
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	107 %			70-130					

Sample Information

Client Sample ID: TB002 York Sample ID: 19E0591-48

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received19E0591LST 1802WaterMay 10, 2019 12:00 am05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS No	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 14:13 2058,NJDEP	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 14:13 2058,NJDEP,PADEP	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 14:13 2058,NJDEP,PADEP	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 10854,NELAC-NY12	05/16/2019 14:13 2058,NJDEP,PADEP	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 LAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP

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132-02 89th AVENUE FAX (203) 357-0166 RICHMOND HILL, NY 11418

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Client Sample ID: TB002

<u>York Sample ID:</u> 19E0591-48

<u>York Project (SDG) No.</u>
19E0591

<u>Client Project ID</u>
LST 1802

Water May 10, 2019 12:00 am

Collection Date/Time

Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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Matrix

CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
142-28-9	1,3-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 14:13 2058,NJDEP,PADEP	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
123-91-1	1,4-Dioxane	ND		ug/L	40.0	80.0	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 14:13 2058,NJDEP,PADEP	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 14:13 2058,NJDEP,PADEP	SS
78-93-3	2-Butanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
95-49-8	2-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
591-78-6	2-Hexanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
106-43-4	4-Chlorotoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
67-64-1	Acetone	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
107-13-1	Acrylonitrile	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
108-86-1	Bromobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 14:13 2058,NJDEP,PADEP	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-NY	05/16/2019 07:30 /10854,NELAC-NY1	05/16/2019 14:13 2058,NJDEP,PADEP	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,NE	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEI	SS P,PADEP
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:		05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13	SS



Client Sample ID: TB002

York Sample ID: 19E0591-48

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference		Time pared	Date/Time Analyzed	Analyst
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
110-82-7	Cyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 NELAC-NY10854,NEI		05/16/2019 14:13 2058,NJDEP,PADEP	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 NELAC-NY10854,NEI		05/16/2019 14:13 2058,NJDEP,PADEP	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 NELAC-NY10854,NEI		05/16/2019 14:13 2058,NJDEP,PADEP	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 NELAC-NY10854,NEI		05/16/2019 14:13 2058,NJDEP,PADEP	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 NELAC-NY10854,NEI		05/16/2019 14:13 2058,NJDEP,PADEP	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
108-87-2	Methylcyclohexane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 NELAC-NY10854,NEI		05/16/2019 14:13 2058,NJDEP,PADEP	SS
75-09-2	Methylene chloride	ND		ug/L	1.00	2.00	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
104-51-8	n-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
103-65-1	n-Propylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,NJDEP	SS P,PADEP
95-47-6	o-Xylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,PADEF	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.500	1.00	1	EPA 8260C Certifications:	05/16/20 CTDOH,NELAC-NY10		05/16/2019 14:13 AC-NY12058,PADEF	SS



Client Sample ID: TB002

York Sample ID:

19E0591-48

York Project (SDG) No. 19E0591 Client Project ID LST 1802 Matrix Water Collection Date/Time May 10, 2019 12:00 am Date Received 05/13/2019

Volatiles, 8260 Comprehensive

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS N	o. Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference	e Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-87-6	p-Isopropyltoluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
135-98-8	sec-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 14:13 2058,NJDEP,PADEP	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
108-88-3	Toluene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
79-01-6	Trichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
108-05-4	Vinyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	NELAC-N	05/16/2019 07:30 Y10854,NELAC-NY1	05/16/2019 14:13 2058,NJDEP,PADEP	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS P,PADEP
1330-20-7	Xylenes, Total	ND		ug/L	0.600	1.50	1	EPA 8260C Certifications:	CTDOH,N	05/16/2019 07:30 ELAC-NY10854,NEL	05/16/2019 14:13 AC-NY12058,NJDEF	SS
	Surrogate Recoveries	Result		Acce	eptance Rang	e						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	95.9 %			70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	98.8 %			70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	107 %			70-130							



Analytical Batch Summary

	Batch ID: BE90912	Preparation Method:	EPA 3015A	Prepared By:	SY
19E1591-32	YORK Sample ID	Client Sample ID	Preparation Date		
1980591-32RE1 MW002	19E0591-31	MW001	05/15/19		
19-0591-33 MW003 O5/15/19	19E0591-32	MW002	05/15/19		
1906.991-34 MW004 05/15/19 1906.991-34 PB001 05/15/19 1906.991-41 PB001 05/15/19 1906.991-42 EB001 05/15/19 1906.991-43 PB002 05/15/19 1906.991-45 PB003 05/15/19 1906.991-46 EB003 05/15/19 1906.991-46 EB003 05/15/19 1809.912-18	19E0591-32RE1		05/15/19		
1906.991-34 MV004 0.515.19 1906.991-37 DUFE003 0.515.19 1906.991-37 DUFE003 0.515.19 1906.991-42 EB001 0.515.19 1906.991-43 FB002 0.515.19 1906.991-45 FB003 0.515.19 1906.991-46 EB003 0.515.19 1906.991-46 EB003 0.515.19 1906.991-46 EB003 0.515.19 1809.091-2.BLXI Blank 0.515.19 1809.0912-DUFI Duplicate 0.515.19 1809.0912-DUFI Duplicate 0.515.19 1809.0912-DUFI Duplicate 0.515.19 1809.0912-DUFI Duplicate 0.515.19 1809.0912-MS1 Matrix Spike 0.5115.19 1906.991-31 MV001 0.515.19 1906.991-31 MV001 0.515.19 1906.991-32 MV002 0.515.19 1906.991-33 MV003 0.515.19 1906.991-34 MV004 0.515.19 1906.991-37 DUFE003 0.515.19 1906.991-37 DUFE003 0.515.19 1906.991-40 EB001 0.515.19 1906.991-41 FB001 0.515.19 1906.991-42 EB001 0.515.19 1906.991-44 EB002 0.515.19 1906.991-44 EB002 0.515.19 1906.991-45 FB003 0.515.19 1906.991-46 EB003 0.515.19 1906.991-46 EB001 0.515.19 1906.991-47 EB001 0.515.19 1906.991-48 EB002 0.515.19 1906.991-49 EB001 0.515.19 1906.991-40 0.516.19 1906.991-40 0.5	19E0591-33		05/15/19		
1966991-34REL	19E0591-34		05/15/19		
19E0591-37	19E0591-34RE1		05/15/19		
PB0991-11	19E0591-37		05/15/19		
19E0591-42 EB001 05/15/19 19E0591-43 FB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 18E90912-BLK1 Blank 05/15/19 18E90912-BLK1 Duplicate 05/15/19 18E90912-MS1 Matrix Spike 05/15/19 18E90912-MS1 Matrix Spike 05/15/19 18E0591-31 MW001 05/15/19 19E0591-32 MW002 05/15/19 19E0591-33 MW003 05/15/19 19E0591-34 MW004 05/15/19 19E0591-37 DUPE003 05/15/19 19E0591-38 HD 05/15/19 19E0591-37 DUPE003 05/15/19 19E0591-40 EB001 05/15/19 19E0591-41 FB001 05/15/19 19E0591-42 EB001 05/15/19 19E0591-43 FB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E0591-47 EB002 05/15/19 19E0591-48 FB002 05/15/19 19E0591-49 FB003 05/15/19 19E0591-40 EB003 05/15/19 19E0591-40 EB001 05/15/19 19E0591-40 EB002 05/15/19 19E0591-40 EB003 05/15/19 19E0591-40 EB003 05/15/19 18E59013-BLK1 Blank 05/15/19 18E90913-BLK1 Blank 05/15/19	19E0591-41		05/15/19		
1910-991-43	19E0591-42		05/15/19		
JPED\$91-44 EB002 05/15/19 JPED\$914-5 FB003 05/15/19 JPED\$914-6 EB003 05/15/19 JPED\$912-BLK1 Blank 05/15/19 JEP0\$912-BLK1 Blank 05/15/19 JEP0\$912-DUP1 Duplicate 05/15/19 JEP0\$912-DUP1 Duplicate 05/15/19 JEP0\$913 Preparation Method: EPA 3015A Prepared By: SY JPED\$91-31 MW001 05/15/19 JPED\$91-32 MW002 05/15/19 JPED\$91-33 MW003 05/15/19 JPED\$91-34 MW004 05/15/19 JPED\$91-37 DUPE003 05/15/19 JPED\$91-37 DUPE003 05/15/19 JPED\$91-41 FB001 05/15/19 JPED\$91-42 EB001 05/15/19 JPED\$91-43 FB002 05/15/19 JPED\$91-44 EB002 05/15/19 JPED\$91-45 FB003 05/15/19 JPED\$91-46 EB003 05/15/19 JPED\$91-47 DUPLE01 05/15/19 JPED\$91-48 Blank 05/15/19 JPED\$91-49 Blank 05/15/19 JPED\$91-40 Blank 05/15/19 JPED\$91-41 Blank 05/15/19 JPED\$91-42 Blank 05/15/19 JPED\$91-45 FB003 05/15/19 JPED\$91-46 EB003 05/15/19 JPED\$91-47 Duplicate 05/15/19 JPED\$91-48 Blank 05/15/19 JPED\$91-49 Blank 05/15/19 JPED\$91-3-BS1 L.CS 05/15/19 JPED\$91-3-BS1 Matrix Spike 05/15/19 JPED\$91-25 SB009 (8-10) W 05/16/19 JPED\$91-26 SB009 (8-10) W 05/16/19 JPE0\$91-3-BS1 SB009 (8-10) W 05/16/19 JPE0\$91-3-BS1 Blank 05/16/19 JPE0\$91-3-BS1 SB009 (8-10) W 05/16/19 JPE0\$91-3-BS2 JECK JPEO\$1-BS2 JP	19E0591-43		05/15/19		
19E0591-45 EB003 05/15/19 19E0591-26 EB003 05/15/19 19E0591-26 EB001 05/15/19 19E09012-BLK Blank 05/15/19 19E09012-DUP1 Duplicate 05/15/19 19E09012-DUP1 Duplicate 05/15/19 19E09012-MS1 Matrix Spike 05/15/19 19E09012-MS1 Matrix Spike 05/15/19 19E0591-31 MW001 05/15/19 19E0591-32 MW002 05/15/19 19E0591-33 MW003 05/15/19 19E0591-34 MW004 05/15/19 19E0591-37 DUP1003 05/15/19 19E0591-41 FB001 05/15/19 19E0591-42 EB001 05/15/19 19E0591-43 FB002 05/15/19 19E0591-44 EB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E0591-47 Blank 05/15/19 19E0591-48 Blank 05/15/19 19E0591-49 EB001 05/15/19 19E0591-40 EB003 05/15/19 19E0591-41 Blank 05/15/19 19E0591-42 Blank 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E0591-47 Duplicate 05/15/19 19E0591-3BK1 LCS 05/15/19 19E09913-MS1 Matrix Spike 05/15/19 19E09913-MS1 Matrix Spike 05/15/19 19E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (7-4) 05/16/19 19E0591-30 SB009 (8-10) N 05/16/19 19E0591-30 SB009 (8-10) N 05/16/19 19E0591-30 SB009 (8-10) N 05/16/19 19E0591-30 Blank 05/16/19 19E0591-30 SB009 (8-10) N 05/16/19 19E0591-30 Blank 05/16/19 10 RESEARCH DRIVE STRATFORD, CT 08615 ■ 132-02 89th AVENUE RICHMOND HILL NY 11418					
DE0591-46 EB003 O\$715/19					
BE90912-BLK1 Blank 05/15/19 BE90912-DUP1 Duplicate 05/15/19 BE90912-MS1 Matrix Spike 05/15/19 Batch ID: BE90913 Preparation Method: EPA 3015A Prepared By: SY YORK Sample ID Client Sample ID 05/15/19 Batch ID: BE90913 Preparation Date 19E0591-31 MW001 05/15/19 19E0591-32 MW002 05/15/19 19E0591-33 MW003 05/15/19 19E0591-34 MW004 05/15/19 19E0591-37 DUPE003 05/15/19 19E0591-41 F8001 05/15/19 19E0591-42 EB001 05/15/19 19E0591-43 FB002 05/15/19 19E0591-44 EB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E0591-46 EB003 05/15/19 19E0591-46 EB003 05/15/19 19E0591-47 Duplicate 05/15/19 19E0591-48 Be90913-BLK1 Blank 05/15/19 19E0591-49 EB001 05/15/19 19E0591-40 EB003 05/15/19 19E0591-3-BLK1 Blank 05/15/19 19E0591-3-BLK1 Blank 05/15/19 19E0591-3-BLK1 Blank 05/15/19 19E0591-3-MS1 LCS 05/15/19 19E0591-3-MS1 LCS 05/15/19 19E0591-3-MS1 LCS 05/15/19 19E0591-3-MS1 LCS 05/15/19 19E0591-3-MS1 BE90970 Preparation Method: EPA 5035A Prepared By: AB YORK Sample ID Client Sample ID Preparation Date 19E0591-26 SB009 (6-8) 05/16/19 19E0591-3-0 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) N 05/16/19 140 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418					
BE90912-BS1					
BE90912-DUP1 BE90913 Preparation Method: EPA 3015A Prepared By: SY WORK Sample ID Client Sample ID Preparation Date Propared By: SY					
Batch ID: BE90913					
YORK Sample ID	BE90912-MS1	-			
YORK Sample ID	Rotch ID: REQUOIS	Proparation Mathad	EDA 3015A	Prangrad Ry	SV
19E0591-31		•		гтератей Бу.	31
19E0591-32 MW002 05/15/19 19E0591-33 MW003 05/15/19 19E0591-34 MW004 05/15/19 19E0591-37 DUPE003 05/15/19 19E0591-41 FB001 05/15/19 19E0591-42 EB001 05/15/19 19E0591-43 FB002 05/15/19 19E0591-44 EB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E0591-3-BILK1 Blank 05/15/19 18E90913-BLK1 Blank 05/15/19 18E90913-BS1 LCS 05/15/19 18E90913-BS1 LCS 05/15/19 18E90913-MS1 Matrix Spike 05/15/19 18E90913-MS1 Matrix Spike 05/15/19 18E90913-MS1 Matrix Spike 05/15/19 19E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) N 05/16/19 11E0591-BE0070-BLK1 Blank 05/16/19 11E0591-BE0070-BLK1 Blank 05/16/19 11E0591-40 SB009 (8-10) N 05/16/19 11E0591-BE0070-BLK1 Blank 05/16/19	YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-33	19E0591-31				
19E0591-34 MW004 05/15/19 19E0591-37 DUPE003 05/15/19 19E0591-41 FB001 05/15/19 19E0591-42 EB001 05/15/19 19E0591-43 FB002 05/15/19 19E0591-44 EB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E0913-BLK1 Blank 05/15/19 18E90913-BLK1 Blank 05/15/19 18E90913-BS1 LCS 05/15/19 18E90913-DUP1 Duplicate 05/15/19 18E90913-MS1 Matrix Spike 05/15/19 18Beth ID: BE90970 Preparation Method: EPA 5035A Prepared By: AB YORK Sample ID Client Sample ID Preparation Date 19E0591-25 SB009 (6-8) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 1120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418					
19E0591-37 DUPE003 05/15/19 19E0591-41 FB001 05/15/19 19E0591-42 EB001 05/15/19 19E0591-43 FB002 05/15/19 19E0591-44 EB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E05913-BLK1 Blank 05/15/19 19E0913-BLK1 Blank 05/15/19 19E09913-BUF Duplicate 05/15/19 19E09913-MS1 Matrix Spike 05/15/19 10E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 11E0591-40 SB009 (8-10) W 05/16/19					
19E0591-41 FB001 05/15/19 19E0591-42 EB001 05/15/19 19E0591-43 FB002 05/15/19 19E0591-44 EB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E05913-BLK1 Blank 05/15/19 19E90913-BLK1 Blank 05/15/19 19E90913-DUP1 Duplicate 05/15/19 19E90913-MS1 Matrix Spike 05/15/19 10E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418					
19E0591-42 EB001 05/15/19 19E0591-43 FB002 05/15/19 19E0591-44 EB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E0913-BLK1 Blank 05/15/19 19E90913-BS1 LCS 05/15/19 19E90913-DUP1 Duplicate 05/15/19 19E90913-MS1 Matrix Spike 05/15/19 10E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-26 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 1120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418					
19E0591-43 FB002 05/15/19 19E0591-44 EB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 19E0913-BLK1 Blank 05/15/19 19E0913-BS1 LCS 05/15/19 19E0913-MS1 Duplicate 05/15/19 19E0913-MS1 Matrix Spike 05/15/19 19E0913-MS1 Method: EPA 5035A Prepared By: AB YORK Sample ID Client Sample ID Preparation Date 19E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418					
19E0591-44 EB002 05/15/19 19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 BE90913-BLK1 Blank 05/15/19 BE90913-BS1 LCS 05/15/19 BE90913-DUP1 Duplicate 05/15/19 BE90913-MS1 Matrix Spike 05/15/19 Batch ID: BE90970 Preparation Method: EPA 5035A Prepared By: AB YORK Sample ID Client Sample ID Preparation Date 19E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418		EB001			
19E0591-45 FB003 05/15/19 19E0591-46 EB003 05/15/19 BE90913-BLK1 Blank 05/15/19 BE90913-BS1 LCS 05/15/19 BE90913-DUP1 Duplicate 05/15/19 BE90913-MS1 Matrix Spike 05/15/19 BE90913-MS1 Method: EPA 5035A Prepared By: AB YORK Sample ID Client Sample ID Preparation Date 19E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418					
19E0591-46 EB003 05/15/19 BE90913-BLK1 Blank 05/15/19 BE90913-BS1 LCS 05/15/19 BE90913-DUP1 Duplicate 05/15/19 BE90913-MS1 Matrix Spike 05/15/19 BE90913-MS1 Matrix Spike 05/15/19 Batch ID: BE90970 Preparation Method: EPA 5035A Prepared By: AB YORK Sample ID Client Sample ID Preparation Date 19E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	19E0591-44				
BE90913-BLK1 BBank 05/15/19 BE90913-BS1 LCS 05/15/19 BE90913-DUP1 Duplicate 05/15/19 BE90913-MS1 Matrix Spike 05/15/19 Batch ID: BE90970 Preparation Method: EPA 5035A Prepared By: AB YORK Sample ID Client Sample ID Preparation Date 19E0591-25 SB009 (6-8) 19E0591-26 SB009 (2-4) 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	19E0591-45	FB003			
BE90913-BS1	19E0591-46	EB003	05/15/19		
BE90913-DUP1 BE90913-MS1 Duplicate	BE90913-BLK1	Blank			
BE90913-MS1 Matrix Spike 05/15/19 Preparation Method: EPA 5035A Prepared By: AB YORK Sample ID Client Sample ID Preparation Date 19E0591-25 SB009 (6-8) 19E0591-26 SB009 (2-4) 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	BE90913-BS1	LCS	05/15/19		
Batch ID: BE90970 Preparation Method: EPA 5035A Prepared By: AB YORK Sample ID Client Sample ID Preparation Date 19E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	BE90913-DUP1	Duplicate			
YORK Sample ID Client Sample ID Preparation Date 19E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	BE90913-MS1	Matrix Spike	05/15/19		
19E0591-25 SB009 (6-8) 05/16/19 19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	Batch ID: BE90970	Preparation Method:	EPA 5035A	Prepared By:	AB
19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-26 SB009 (2-4) 05/16/19 19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	19E0591-25	SB009 (6-8)	05/16/19		
19E0591-39 SB009 (8-10) N 05/16/19 19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	19E0591-26				
19E0591-40 SB009 (8-10) W 05/16/19 BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418	19E0591-39				
BE90970-BLK1 Blank 05/16/19 120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418					
	BE90970-BLK1				
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@ Page 362 of 446	120 RESEARCH DRIVE	STRATFORD, CT 06615	■ 132-02 89th AVENUE	RICHMO	ND HILL, NY 11418
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 BE90970-BLK2
 Blank
 05/16/19

 BE90970-BS1
 LCS
 05/16/19

 BE90970-BSD1
 LCS Dup
 05/16/19

Batch ID: BE90972	Preparation Method:	EPA 5030B	Prepared By:	AB
YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-31	MW001	05/16/19		
9E0591-32	MW002	05/16/19		
9E0591-33	MW003	05/16/19		
9E0591-34	MW004	05/16/19		
9E0591-37	DUPE003	05/16/19		
9E0591-41	FB001	05/16/19		
9E0591-42	EB001	05/16/19		
9E0591-43	FB002	05/16/19		
9E0591-44	EB002	05/16/19		
9E0591-45	FB003	05/16/19		
9E0591-46	EB003	05/16/19		
9E0591-47	TB001	05/16/19		
9E0591-48	TB002	05/16/19		
BE90972-BLK1	Blank	05/16/19		
BE90972-BS1	LCS	05/16/19		
BE90972-BSD1	LCS Dup	05/16/19		
BE90972-MS1	Matrix Spike	05/16/19		
BE90972-MSD1	Matrix Spike Dup	05/16/19		
Batch ID: BE90989	Preparation Method:	EPA 7473 water	Prepared By:	SY
ORK Sample ID	Client Sample ID	Preparation Date		
9E0591-31	MW001	05/16/19		
9E0591-32	MW002	05/16/19		
9E0591-33	MW003	05/16/19		
9E0591-34	MW004	05/16/19		
9E0591-37	DUPE003	05/16/19		
9E0591-41	FB001	05/16/19		
9E0591-42	EB001	05/16/19		
9E0591-43	FB002	05/16/19		
9E0591-44	EB002	05/16/19		
9E0591-45	FB003	05/16/19		
9E0591-46	EB003	05/16/19		
BE90989-BLK1	Blank	05/16/19		
BE90989-DUP1	Duplicate	05/16/19		
BE90989-MS1	Matrix Spike	05/16/19		
BE90989-SRM1	Reference	05/16/19		
Batch ID: BE90993	Preparation Method:	EPA SW846-3510C Low Level	Prepared By:	CTD
ORK Sample ID	Client Sample ID	Preparation Date		
	MW001	05/16/19		
9E0591-31				
	MW001	05/16/19		
9E0591-31 9E0591-31 120 RESEARCH DRIVE			RICHMO	ND HILL, NY 11418



19E0591-32	MW002	05/16/19
19E0591-32	MW002	05/16/19
19E0591-33	MW003	05/16/19
19E0591-33	MW003	05/16/19
19E0591-34	MW004	05/16/19
19E0591-34	MW004	05/16/19
19E0591-37	DUPE003	05/16/19
19E0591-37	DUPE003	05/16/19
19E0591-41	FB001	05/16/19
19E0591-41	FB001	05/16/19
19E0591-42	EB001	05/16/19
19E0591-42	EB001	05/16/19
19E0591-43	FB002	05/16/19
19E0591-43	FB002	05/16/19
19E0591-44	EB002	05/16/19
19E0591-44	EB002	05/16/19
19E0591-45	FB003	05/16/19
19E0591-45	FB003	05/16/19
19E0591-46	EB003	05/16/19
19E0591-46	EB003	05/16/19
BE90993-BLK1	Blank	05/16/19
BE90993-BS1	LCS	05/16/19
BE90993-MS1	Matrix Spike	05/16/19
BE90993-MS2	Matrix Spike	05/16/19
BE90993-MSD1	Matrix Spike Dup	05/16/19
BE90993-MSD2	Matrix Spike Dup	05/16/19

Batch ID: BE91020	Preparation Method:	EPA 3510C	Prepared By:	MAM
YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-31	MW001	05/16/19		
19E0591-32	MW002	05/16/19		
19E0591-33	MW003	05/16/19		
19E0591-34	MW004	05/16/19		
19E0591-37	DUPE003	05/16/19		
19E0591-41	FB001	05/16/19		
19E0591-42	EB001	05/16/19		
19E0591-43	FB002	05/16/19		
19E0591-44	EB002	05/16/19		
19E0591-45	FB003	05/16/19		
19E0591-46	EB003	05/16/19		
BE91020-BS2	LCS	05/16/19		
BE91020-MS1	Matrix Spike	05/16/19		
BE91020-MSD1	Matrix Spike Dup	05/16/19		
Batch ID: BE91045	Preparation Method:	% Solids Prep	Prepared By:	MAO
YORK Sample ID	Client Sample ID	Preparation Date		

120 RESEARCH DRIVE www.YORKLAB.com

19E0591-01

19E0591-02

19E0591-03

STRATFORD, CT 06615 (203) 325-1371

SB001 (0-2)

SB001 (2-4)

SB001 (4-6)

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

05/16/19

05/16/19

05/16/19

RICHMOND HILL, NY 11418

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19E0591-04	SB002 (4-6)	05/16/19
19E0591-05	SB002 (6-8)	05/16/19
19E0591-06	SB002 (0-2)	05/16/19
19E0591-08	SB003 (10-12)	05/16/19
19E0591-09	SB003 (0-2)	05/16/19
19E0591-10	SB004 (0-2)	05/16/19
19E0591-11	SB004 (4-6)	05/16/19
19E0591-12	SB004 (2-4)	05/16/19
19E0591-13	SB005 (2-4)	05/16/19
19E0591-14	SB005 (0-2)	05/16/19
19E0591-15	SB005 (8-10)	05/16/19
19E0591-16	SB006 (0-2)	05/16/19
19E0591-17	SB006 (4-6)	05/16/19
19E0591-18	SB006 (6-8)	05/16/19
19E0591-19	SB007 (8-10)	05/16/19
19E0591-20	SB007 (12-14)	05/16/19
19E0591-21	SB007 (0-2)	05/16/19
BE91045-DUP1	Duplicate	05/16/19

YORK Sample ID	Client Sample ID	Preparation Date
19E0591-27	SB009 (8-10)	05/17/19
19E0591-38	SB009 (8-10) E	05/17/19
19E0591-38RE1	SB009 (8-10) E	05/17/19
BE91074-BLK1	Blank	05/17/19
BE91074-BLK2	Blank	05/17/19
BE91074-BS1	LCS	05/17/19
BE91074-BSD1	LCS Dup	05/17/19

Batch ID: BE91114 Preparation Method: EPA 3015A Prepared By: SY

YORK Sample ID	Client Sample ID	Preparation Date	
19E0591-31	MW001	05/17/19	
19E0591-32	MW002	05/17/19	
19E0591-32RE1	MW002	05/17/19	
19E0591-33	MW003	05/17/19	
19E0591-34	MW004	05/17/19	
19E0591-37	DUPE003	05/17/19	
19E0591-41	FB001	05/17/19	
19E0591-42	EB001	05/17/19	
19E0591-43	FB002	05/17/19	
19E0591-44	EB002	05/17/19	
19E0591-45	FB003	05/17/19	
19E0591-46	EB003	05/17/19	
BE91114-BLK1	Blank	05/17/19	
BE91114-BS1	LCS	05/17/19	
BE91114-DUP1	Duplicate	05/17/19	
BE91114-MS1	Matrix Spike	05/17/19	



Batch ID: BE91115	Preparation Method:	EPA 3015A	Prepared By:	SY
YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-31	MW001	05/17/19		
19E0591-32	MW002	05/17/19		
19E0591-33	MW003	05/17/19		
19E0591-34	MW004	05/17/19		
19E0591-37	DUPE003	05/17/19		
19E0591-41	FB001	05/17/19		
19E0591-42	EB001	05/17/19		
19E0591-43	FB002	05/17/19		
19E0591-44	EB002	05/17/19		
19E0591-45	FB003	05/17/19		
19E0591-46	EB003	05/17/19		
BE91115-BLK1	Blank	05/17/19		
BE91115-BS1	LCS	05/17/19		
BE91115-DUP1	Duplicate	05/17/19		
BE91115-MS1	Matrix Spike	05/17/19		
Batch ID: BE91124	Preparation Method:	% Solids Prep	Prepared By:	MAO
YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-07	SB003 (6-8)	05/17/19		
BE91124-DUP1	Duplicate	05/17/19		
	2 aprilation			
Batch ID: BE91125	Preparation Method:	% Solids Prep	Prepared By:	MAO
YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-22	SB008 (6-8)	05/17/19		
19E0591-23	SB008 (0-2)	05/17/19		
19E0591-24	SB008 (4-6)	05/17/19		
19E0591-25	SB009 (6-8)	05/17/19		
19E0591-26	SB009 (2-4)	05/17/19		
19E0591-27	SB009 (8-10)	05/17/19		
19E0591-28	SB010 (0-2)	05/17/19		
19E0591-29	SB010 (6-8)	05/17/19		
19E0591-30	SB010 (2-4)	05/17/19		
19E0591-35	DUPE001	05/17/19		
19E0591-36	DUPE002	05/17/19		
19E0591-38	SB009 (8-10) E	05/17/19		
19E0591-39	SB009 (8-10) N	05/17/19		
19E0591-40	SB009 (8-10) W	05/17/19		
Batch ID: BE91139	Preparation Method:	EPA 3550C	Prepared By:	LM
YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-01	SB001 (0-2)	05/20/19		
19E0591-01	SB001 (0-2)	05/20/19		
19E0591-02	SB001 (0-2) SB001 (2-4)	05/20/19		
19E0591-02	SB001 (2-4)	05/20/19		
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19E0591-03	SB001 (4-6)	05/20/19
19E0591-03	SB001 (4-6)	05/20/19
19E0591-04	SB002 (4-6)	05/20/19
19E0591-04	SB002 (4-6)	05/20/19
19E0591-05	SB002 (6-8)	05/20/19
19E0591-05	SB002 (6-8)	05/20/19
BE91139-MS2	Matrix Spike	05/20/19
BE91139-MSD2	Matrix Spike Dup	05/20/19

YORK Sample ID	Client Sample ID	Preparation Date
19E0591-01	SB001 (0-2)	05/20/19
19E0591-02	SB001 (2-4)	05/20/19
19E0591-03	SB001 (4-6)	05/20/19
19E0591-04	SB002 (4-6)	05/20/19
BE91142-BS1	LCS	05/20/19
BE91142-MS1	Matrix Spike	05/20/19
BE91142-MSD1	Matrix Spike Dup	05/20/19

Batch ID: BE91200 **Preparation Method:** EPA 3550C **Prepared By:** MAT

YORK Sample ID	Client Sample ID	Preparation Date	
19E0591-06	SB002 (0-2)	05/20/19	
19E0591-06	SB002 (0-2)	05/20/19	
19E0591-07	SB003 (6-8)	05/20/19	
19E0591-07	SB003 (6-8)	05/20/19	
19E0591-08	SB003 (10-12)	05/20/19	
19E0591-08	SB003 (10-12)	05/20/19	
19E0591-09	SB003 (0-2)	05/20/19	
19E0591-09	SB003 (0-2)	05/20/19	
19E0591-10	SB004 (0-2)	05/20/19	
19E0591-10	SB004 (0-2)	05/20/19	
19E0591-11	SB004 (4-6)	05/20/19	
19E0591-11	SB004 (4-6)	05/20/19	
19E0591-12	SB004 (2-4)	05/20/19	
19E0591-12	SB004 (2-4)	05/20/19	
19E0591-13	SB005 (2-4)	05/20/19	
19E0591-13	SB005 (2-4)	05/20/19	
19E0591-14	SB005 (0-2)	05/20/19	
19E0591-14	SB005 (0-2)	05/20/19	
19E0591-15	SB005 (8-10)	05/20/19	
19E0591-15	SB005 (8-10)	05/20/19	
19E0591-16	SB006 (0-2)	05/20/19	
19E0591-16	SB006 (0-2)	05/20/19	
19E0591-17	SB006 (4-6)	05/20/19	
19E0591-17	SB006 (4-6)	05/20/19	
19E0591-18	SB006 (6-8)	05/20/19	
19E0591-18	SB006 (6-8)	05/20/19	
BE91200-BLK1	Blank	05/20/19	
BE91200-BS1	LCS	05/20/19	



	Preparation Method:	EPA 3550C	Prepared By:	MAT
YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-05	SB002 (6-8)	05/20/19		
9E0591-06	SB002 (0-2)	05/20/19		
9E0591-07	SB003 (6-8)	05/20/19		
9E0591-08	SB003 (10-12)	05/20/19		
9E0591-09	SB003 (0-2)	05/20/19		
9E0591-09RE1	SB003 (0-2)	05/20/19		
9E0591-10	SB004 (0-2)	05/20/19		
9E0591-11	SB004 (4-6)	05/20/19		
9E0591-11RE1	SB004 (4-6)	05/20/19		
9E0591-12	SB004 (2-4)	05/20/19		
9E0591-12RE1	SB004 (2-4)	05/20/19		
9E0591-13	SB005 (2-4)	05/20/19		
9E0591-14	SB005 (0-2)	05/20/19		
9E0591-15	SB005 (8-10)	05/20/19		
9E0591-16	SB006 (0-2)	05/20/19		
9E0591-17	SB006 (4-6)	05/20/19		
9E0591-18	SB006 (6-8)	05/20/19		
9E0591-19	SB007 (8-10)	05/20/19		
9E0591-20	SB007 (0 10) SB007 (12-14)	05/20/19		
BE91201-BLK1	Blank	05/20/19		
BE91201-BS1	LCS	05/20/19		
BE91201-MS1	Matrix Spike	05/20/19		
BE91201-MSD1	Matrix Spike Dup	05/20/19		
			ь ть	SY
Batch ID: BE91204	Preparation Method:	EPA 3050B	Prepared By:	51
	Preparation Method: Client Sample ID	EPA 3050B Preparation Date	Prepared By:	31
ORK Sample ID	Client Sample ID		Prepared By:	31
ORK Sample ID 9E0591-01	Client Sample ID SB001 (0-2)	Preparation Date	Prepared By:	31
ORK Sample ID 9E0591-01 9E0591-02	Client Sample ID SB001 (0-2) SB001 (2-4)	Preparation Date 05/20/19	Prepared By:	31
FORK Sample ID 9E0591-01 9E0591-02 9E0591-03	Client Sample ID SB001 (0-2) SB001 (2-4) SB001 (4-6)	Preparation Date 05/20/19 05/20/19	Prepared By:	31
FORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04	Client Sample ID SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6)	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	31
FORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05	Client Sample ID SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8)	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	31
FORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-06	Client Sample ID SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2)	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	31
ORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-06 9E0591-27	Client Sample ID SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2) SB009 (8-10)	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	31
FORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-06 9E0591-27 9E0591-28	SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2) SB009 (8-10) SB010 (0-2)	05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	31
9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-06 9E0591-27 9E0591-28 9E0591-29	SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2) SB009 (8-10) SB010 (0-2) SB010 (6-8)	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	31
PORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-06 9E0591-27 9E0591-28 9E0591-29 9E0591-30	SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2) SB009 (8-10) SB010 (0-2) SB010 (6-8) SB010 (2-4)	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	31
PORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-06 9E0591-27 9E0591-28 9E0591-29 9E0591-30 9E0591-35	SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2) SB009 (8-10) SB010 (0-2) SB010 (6-8) SB010 (2-4) DUPE001	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	51
FORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-06 9E0591-27 9E0591-28 9E0591-29 9E0591-30 9E0591-35 9E0591-36	SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2) SB009 (8-10) SB010 (0-2) SB010 (6-8) SB010 (2-4) DUPE001 DUPE002	05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	31
7ORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-06 9E0591-27 9E0591-28 9E0591-29 9E0591-30 9E0591-36 3E91204-BLK1	Client Sample ID SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2) SB009 (8-10) SB010 (0-2) SB010 (6-8) SB010 (2-4) DUPE001 DUPE002 Blank	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	31
9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-06 9E0591-27 9E0591-28 9E0591-29 9E0591-30 9E0591-36 BE91204-BLK1 BE91204-DUP1	Client Sample ID SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2) SB009 (8-10) SB010 (0-2) SB010 (6-8) SB010 (2-4) DUPE001 DUPE002 Blank Duplicate	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	
3atch ID: BE91204 CORK Sample ID 9E0591-01 9E0591-02 9E0591-03 9E0591-04 9E0591-05 9E0591-27 9E0591-28 9E0591-29 9E0591-30 9E0591-36 3E91204-BLK1 3E91204-MS1 3E91204-SRM1	Client Sample ID SB001 (0-2) SB001 (2-4) SB001 (4-6) SB002 (4-6) SB002 (6-8) SB002 (0-2) SB009 (8-10) SB010 (0-2) SB010 (6-8) SB010 (2-4) DUPE001 DUPE002 Blank	Preparation Date 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19 05/20/19	Prepared By:	51

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		YORK ANALYTICAL LABORATORIES INC		
YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-07	SB003 (6-8)	05/20/19		
19E0591-08	SB003 (10-12)	05/20/19		
19E0591-08RE1	SB003 (10-12)	05/20/19		
19E0591-09	SB003 (0-2)	05/20/19		
19E0591-10	SB004 (0-2)	05/20/19		
19E0591-11	SB004 (4-6)	05/20/19		
19E0591-12	SB004 (2-4)	05/20/19		
19E0591-13	SB005 (2-4)	05/20/19		
19E0591-14	SB005 (0-2)	05/20/19		
19E0591-15	SB005 (8-10)	05/20/19		
19E0591-16	SB006 (0-2)	05/20/19		
19E0591-17	SB006 (4-6)	05/20/19		
19E0591-18	SB006 (6-8)	05/20/19		
19E0591-19	SB007 (8-10)	05/20/19		
19E0591-20	SB007 (12-14)	05/20/19		
19E0591-21	SB007 (0-2)	05/20/19		
19E0591-22	SB008 (6-8)	05/20/19		
19E0591-23	SB008 (0-2)	05/20/19		
19E0591-24	SB008 (4-6)	05/20/19		
19E0591-25	SB009 (6-8)	05/20/19		
19E0591-26	SB009 (2-4)	05/20/19		
BE91205-BLK1	Blank	05/20/19		
BE91205-DUP1	Duplicate	05/20/19		
BE91205-MS1	Matrix Spike	05/20/19		
BE91205-SRM1	Reference	05/20/19		
Batch ID: BE91249	Preparation Method:	EPA 3550C	Prepared By:	LM
YORK Sample ID	Client Sample ID	Preparation Date		
19E0591-21	SB007 (0-2)	05/21/19		
19E0591-22	SB007 (0-2) SB008 (6-8)	05/21/19		
19E0591-23	SB008 (0-8) SB008 (0-2)	05/21/19		
19E0591-24	SB008 (0-2) SB008 (4-6)	05/21/19		
19E0591-25	SB009 (6-8)	05/21/19		
19E0591-26	SB009 (2-4)	05/21/19		
19E0591-27	SB009 (8-10)	05/21/19		
19E0591-28	SB010 (0-2)	05/21/19		
19E0591-29	SB010 (6-8)	05/21/19		
19E0591-30	SB010 (0-8) SB010 (2-4)	05/21/19		
19E0591-30RE1	SB010 (2-4)	05/21/19		
19E0591-35	DUPE001	05/21/19		
19E0591-36	DUPE002	05/21/19		
BE91249-BLK1	Blank	05/21/19		
BE91249-BS1	LCS	05/21/19		
Batch ID: BE91266	Preparation Method:	EPA 7473 water	Prepared By:	SY
VODV Camala ID	Cli and Commute ID	Down on the Date		

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YORK Sample ID

19E0591-31

19E0591-32

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Client Sample ID

MW001

MW002

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Preparation Date

05/21/19

05/21/19

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19E0591-33	MW003	05/21/19
19E0591-34	MW004	05/21/19
19E0591-37	DUPE003	05/21/19
19E0591-41	FB001	05/21/19
19E0591-42	EB001	05/21/19
19E0591-43	FB002	05/21/19
19E0591-44	EB002	05/21/19
19E0591-45	FB003	05/21/19
19E0591-46	EB003	05/21/19
BE91266-BLK1	Blank	05/21/19
BE91266-DUP1	Duplicate	05/21/19
BE91266-MS1	Matrix Spike	05/21/19
BE91266-SRM1	Reference	05/21/19

YORK Sample ID	Client Sample ID	Preparation Date
19E0591-01	SB001 (0-2)	05/22/19
19E0591-02	SB001 (2-4)	05/22/19
19E0591-03	SB001 (4-6)	05/22/19
19E0591-04	SB002 (4-6)	05/22/19
19E0591-05	SB002 (6-8)	05/22/19
BE91342-BLK1	Blank	05/22/19
BE91342-DUP1	Duplicate	05/22/19
BE91342-MS1	Matrix Spike	05/22/19
BE91342-SRM1	Reference	05/22/19

YORK Sample ID	Client Sample ID	Preparation Date	
19E0591-06	SB002 (0-2)	05/22/19	
19E0591-07	SB003 (6-8)	05/22/19	
19E0591-08	SB003 (10-12)	05/22/19	
19E0591-09	SB003 (0-2)	05/22/19	
19E0591-10	SB004 (0-2)	05/22/19	
19E0591-11	SB004 (4-6)	05/22/19	
19E0591-12	SB004 (2-4)	05/22/19	
19E0591-13	SB005 (2-4)	05/22/19	
19E0591-14	SB005 (0-2)	05/22/19	
19E0591-15	SB005 (8-10)	05/22/19	
19E0591-16	SB006 (0-2)	05/22/19	
19E0591-17	SB006 (4-6)	05/22/19	
19E0591-18	SB006 (6-8)	05/22/19	
19E0591-19	SB007 (8-10)	05/22/19	
19E0591-20	SB007 (12-14)	05/22/19	
19E0591-21	SB007 (0-2)	05/22/19	
BE91343-BLK1	Blank	05/22/19	
BE91343-DUP1	Duplicate	05/22/19	
BE91343-MS1	Matrix Spike	05/22/19	
BE91343-SRM1	Reference	05/22/19	



YORK Sample ID	Client Sample ID	Preparation Date	
19E0591-22	SB008 (6-8)	05/22/19	
19E0591-23	SB008 (0-2)	05/22/19	
19E0591-24	SB008 (4-6)	05/22/19	
19E0591-25	SB009 (6-8)	05/22/19	
19E0591-26	SB009 (2-4)	05/22/19	
19E0591-27	SB009 (8-10)	05/22/19	
19E0591-28	SB010 (0-2)	05/22/19	
19E0591-29	SB010 (6-8)	05/22/19	
19E0591-30	SB010 (2-4)	05/22/19	
19E0591-35	DUPE001	05/22/19	
19E0591-36	DUPE002	05/22/19	
BE91382-BLK1	Blank	05/22/19	
BE91382-DUP1	Duplicate	05/22/19	
BE91382-MS1	Matrix Spike	05/22/19	
BE91382-SRM1	Reference	05/22/19	



$\label{lem:compounds} \textbf{Volatile Organic Compounds by GC/MS-Quality Control Data}$

York Analytical Laboratories, Inc.

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

Ratch	BE90970	- EPA	5035A

Blank (BE90970-BLK1)				Prepared & Analyzed: 05/16/2019
,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet	
,1,1-Trichloroethane	ND	0.0050	"	
,1,2,2-Tetrachloroethane	ND	0.0050	"	
,1,2-Trichloro-1,2,2-trifluoroethane (Freon	ND	0.0050	"	
13)				
,1,2-Trichloroethane	ND	0.0050	"	
,1-Dichloroethane	ND	0.0050	"	
,1-Dichloroethylene	ND	0.0050	"	
,1-Dichloropropylene	ND	0.0050	"	
,2,3-Trichlorobenzene	ND	0.0050	"	
,2,3-Trichloropropane	ND	0.0050	"	
,2,4-Trichlorobenzene	ND	0.0050	"	
,2,4-Trimethylbenzene	ND	0.0050	"	
,2-Dibromo-3-chloropropane	ND	0.0050	"	
,2-Dibromoethane	ND	0.0050	"	
,2-Dichlorobenzene	ND	0.0050	"	
,2-Dichloroethane	ND	0.0050	"	
,2-Dichloropropane	ND	0.0050	"	
,3,5-Trimethylbenzene	ND	0.0050	"	
,3-Dichlorobenzene	ND	0.0050	"	
,3-Dichloropropane	ND	0.0050	"	
,4-Dichlorobenzene	ND	0.0050	"	
,4-Dioxane	ND	0.10	"	
2,2-Dichloropropane	ND	0.0050	"	
2-Butanone	ND	0.0050	"	
-Chlorotoluene	ND	0.0050	"	
-Hexanone	ND	0.0050	"	
-Chlorotoluene	ND	0.0050	"	
-Methyl-2-pentanone	ND	0.0050	"	
Acetone	ND	0.010	"	
Acrolein	ND	0.010	"	
Acrylonitrile	ND	0.0050	"	
Benzene	ND	0.0050	"	
Bromobenzene	ND	0.0050	"	
Bromochloromethane	ND	0.0050	"	
Bromodichloromethane	ND	0.0050	"	
Bromoform	ND	0.0050	"	
Bromomethane	ND	0.0050	"	
Carbon disulfide	ND	0.0050	"	
Carbon disumde	ND ND	0.0050	"	
Chlorobenzene	ND ND	0.0050	"	
Chloroethane	ND ND	0.0050	"	
Chloroform	ND ND	0.0050	"	
Chloromethane	ND ND	0.0050	"	
ris-1,2-Dichloroethylene	ND ND		"	
-		0.0050	,,	
ris-1,3-Dichloropropylene	ND	0.0050		
Cyclohexane Dibrom achloromathana	ND	0.0050		
Dibromochloromethane	ND	0.0050	,,	
Dibromomethane Dichlorodifluoromethane	ND ND	0.0050 0.0050	"	

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132-02 89th AVENUE

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York Analytical Laboratories, Inc.

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

Ratch	BE90970	- EPA	5035A

Blank (BE90970-BLK1)						Prepared & Analyzed: 05/16/2019	
Ethyl Benzene	ND	0.0050	mg/kg wet				
Hexachlorobutadiene	ND	0.0050	"				
Isopropylbenzene	ND	0.0050	"				
Methyl acetate	ND	0.0050	"				
Methyl tert-butyl ether (MTBE)	ND	0.0050	"				
Methylcyclohexane	ND	0.0050	"				
Methylene chloride	ND	0.010	"				
n-Butylbenzene	ND	0.0050	"				
n-Propylbenzene	ND	0.0050	"				
o-Xylene	ND	0.0050	"				
p- & m- Xylenes	ND	0.010	"				
p-Isopropyltoluene	ND	0.0050	"				
sec-Butylbenzene	ND	0.0050	"				
Styrene	ND	0.0050	"				
tert-Butyl alcohol (TBA)	ND	0.025	"				
tert-Butylbenzene	ND	0.0050	"				
Tetrachloroethylene	ND	0.0050	"				
Toluene	ND	0.0050	"				
trans-1,2-Dichloroethylene	ND	0.0050	"				
trans-1,3-Dichloropropylene	ND	0.0050	"				
Trichloroethylene	ND	0.0050	"				
Trichlorofluoromethane	ND	0.0050	"				
Vinyl acetate	ND	0.0050	"				
Vinyl Chloride	ND	0.0050	"				
Xylenes, Total	ND	0.015	"				
Surrogate: SURR: 1,2-Dichloroethane-d4	50.4		ug/L	50.0	101	77-125	
Surrogate: SURR: Toluene-d8	49.4		"	50.0	98.9	85-120	
Surrogate: SURR: p-Bromofluorobenzene	48.5		"	50.0	97.1	76-130	

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York Analytical Laboratories, Inc.

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

D / 1	DECOME	EDA	E02E A
Katch	RF90970	_ н РД	20142A

1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) 1,1,2-Trichloroethane	ND ND ND	0.50 0.50		
1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		0.50		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"	
113)		0.50	"	
	ND	0.50	"	
1,1,2-Trichloroethane				
	ND	0.50	"	
1,1-Dichloroethane	ND	0.50	"	
1,1-Dichloroethylene	ND	0.50	"	
1,1-Dichloropropylene	ND	0.50	"	
1,2,3-Trichlorobenzene	ND	0.50	"	
1,2,3-Trichloropropane	ND	0.50	"	
1,2,4-Trichlorobenzene	ND	0.50	"	
1,2,4-Trimethylbenzene	ND	0.50	"	
1,2-Dibromo-3-chloropropane	ND	0.50	"	
1,2-Dibromoethane	ND	0.50	"	
1,2-Dichlorobenzene	ND	0.50	"	
1,2-Dichloroethane	ND	0.50	"	
1,2-Dichloropropane	ND	0.50	"	
1,3,5-Trimethylbenzene	ND	0.50	"	
1,3-Dichlorobenzene	ND	0.50	"	
1,3-Dichloropropane	ND	0.50	"	
1,4-Dichlorobenzene	ND	0.50	"	
1,4-Dioxane	ND	10	"	
2,2-Dichloropropane	ND	0.50	"	
2-Butanone	ND	0.50	"	
2-Chlorotoluene	ND	0.50	"	
2-Hexanone	ND	0.50	"	
1-Chlorotoluene	ND	0.50	"	
4-Methyl-2-pentanone	ND	0.50	"	
Acetone	ND	1.0	"	
Acrolein	ND	1.0	"	
Acrylonitrile	ND	0.50	"	
Benzene	ND	0.50	"	
Bromobenzene	ND	0.50	"	
Bromochloromethane	ND	0.50	"	
Bromodichloromethane	ND	0.50	"	
Bromoform	ND	0.50	"	
Bromomethane	ND	0.50	"	
Carbon disulfide	ND	0.50	"	
Carbon tetrachloride	ND	0.50	"	
Chlorobenzene	ND	0.50	"	
Chloroethane	ND	0.50	"	
Chloroform	ND	0.50	"	
Chloromethane	ND	0.50	"	
cis-1,2-Dichloroethylene	ND	0.50	"	
cis-1,3-Dichloropropylene	ND	0.50	"	
Cyclohexane	ND	0.50	"	
Dibromochloromethane	ND	0.50	"	
Dibromomethane	ND	0.50	"	
Dichlorodifluoromethane	ND	0.50	"	
Ethyl Benzene	ND	0.50	"	

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York Analytical Laboratories, Inc.

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

Ratch	BE90970	- EPA	5035A

Blank (BE90970-BLK2)						Prepared & Analyzed: 05/16/2019
Hexachlorobutadiene	ND	0.50	mg/kg wet			
Isopropylbenzene	ND	0.50	"			
Methyl acetate	ND	0.50	"			
Methyl tert-butyl ether (MTBE)	ND	0.50	"			
Methylcyclohexane	ND	0.50	"			
Methylene chloride	ND	1.0	"			
n-Butylbenzene	ND	0.50	"			
n-Propylbenzene	ND	0.50	"			
o-Xylene	ND	0.50	"			
p- & m- Xylenes	ND	1.0	"			
p-Isopropyltoluene	ND	0.50	"			
sec-Butylbenzene	ND	0.50	"			
Styrene	ND	0.50	"			
tert-Butyl alcohol (TBA)	ND	2.5	"			
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 acetate	ND	0.50	"			
Vinyl Chloride	ND	0.50	"			
Xylenes, Total	ND	1.5	"			
Surrogate: SURR: 1,2-Dichloroethane-d4	49.7		ug/L	50.0	99.4	77-125
Surrogate: SURR: Toluene-d8	49.2		"	50.0	98.3	85-120
Surrogate: SURR: p-Bromofluorobenzene	48.7		"	50.0	97.4	76-130



York Analytical Laboratories, Inc.

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

Batch	BE90970 -	· EPA 5035A

LCS (BE90970-BS1)					Prepared & Analyzed: 05/16/2019
,1,1,2-Tetrachloroethane	50.4	ug/L	50.0	101	75-129
,1,1-Trichloroethane	50.0	"	50.0	100	71-137
,1,2,2-Tetrachloroethane	48.2	"	50.0	96.5	79-129
,1,2-Trichloro-1,2,2-trifluoroethane (Freon 13)	49.9	"	50.0	99.8	58-146
1,2-Trichloroethane	48.4	"	50.0	96.8	83-123
1-Dichloroethane	49.5	"	50.0	99.0	75-130
1-Dichloroethylene	48.4	"	50.0	96.7	64-137
1-Dichloropropylene	49.1	"	50.0	98.2	77-127
2,3-Trichlorobenzene	48.0	"	50.0	96.0	81-140
2,3-Trichloropropane	49.0	"	50.0	98.1	81-126
2,4-Trichlorobenzene	48.0	"	50.0	96.0	80-141
2,4-Trimethylbenzene	47.0	"	50.0	94.0	84-125
2-Dibromo-3-chloropropane	47.8	"	50.0	95.5	74-142
2-Dibromoethane	51.6	"	50.0	103	86-123
2-Dichlorobenzene	49.0	"	50.0	98.1	85-122
2-Dichloroethane	51.1	"	50.0	102	71-133
2-Dichloropropane	46.4	"	50.0	92.8	81-122
3,5-Trimethylbenzene	47.0	"	50.0	94.0	82-126
3-Dichlorobenzene	47.6	"	50.0	95.1	84-124
3-Dichloropropane	49.3	"	50.0	98.6	83-123
4-Dichlorobenzene	47.8	"	50.0	95.6	84-124
4-Dioxane	1020	"	1050	97.5	10-228
2-Dichloropropane	50.1	"	50.0	100	67-136
Butanone	54.1	"	50.0	108	58-147
Chlorotoluene	45.2	"	50.0	90.4	78-127
Hexanone	46.8	"	50.0	93.7	70-139
Chlorotoluene	46.7	"	50.0	93.3	79-125
Methyl-2-pentanone	46.6	"	50.0	93.2	72-132
cetone	51.3	"	50.0	103	36-155
crolein	50.4	"	50.0	101	10-238
crylonitrile	50.5	"	50.0	101	66-141
enzene	51.2	"	50.0	101	77-127
romobenzene	46.2	"	50.0	92.4	77-127
romochloromethane	48.1	"	50.0	96.3	74-129
romodichloromethane	48.9	"	50.0	97.9	81-124
romoform	49.0	"	50.0	97.9	80-136
romomethane	56.3	"	50.0		32-177
arbon disulfide		"		113	
arbon tetrachloride	50.3	"	50.0	101	10-136
hlorobenzene	51.6		50.0	103	66-143
hloroethane	49.0		50.0	98.1	86-120
hloroform	54.1	"	50.0	108	51-142
	50.8	"	50.0	102	76-131
nloromethane	53.0	"	50.0	106	49-132
s-1,2-Dichloroethylene	50.2	"	50.0	100	74-132
s-1,3-Dichloropropylene	47.4		50.0	94.8	81-129
yclohexane	50.1	"	50.0	100	70-130
bromochloromethane	50.0	"	50.0	99.9	10-200
ibromomethane	49.2	"	50.0	98.5	83-124
ichlorodifluoromethane	64.1	"	50.0	128	28-158
thyl Benzene	49.4	"	50.0	98.7	84-125

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	7	York Analy	tical La	boratori	ies, Inc.						
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE90970 - EPA 5035A											
LCS (BE90970-BS1)							Prep	ared & Anal	yzed: 05/16/	2019	
Hexachlorobutadiene	48.7		ug/L	50.0		97.3	83-133				
Isopropylbenzene	46.4		"	50.0		92.7	81-127				
Methyl acetate	46.9		"	50.0		93.9	41-143				
Methyl tert-butyl ether (MTBE)	51.8		"	50.0		104	74-131				
Methylcyclohexane	47.9		"	50.0		95.9	70-130				
Methylene chloride	49.6		"	50.0		99.2	57-141				
n-Butylbenzene	47.3		"	50.0		94.7	80-130				
n-Propylbenzene	46.9		"	50.0		93.8	74-136				
o-Xylene	49.4		"	50.0		98.9	83-123				
p- & m- Xylenes	98.7		"	100		98.7	82-128				
p-Isopropyltoluene	48.4		"	50.0		96.9	85-125				
sec-Butylbenzene	49.4		"	50.0		98.7	83-125				
Styrene Styrene	49.4		,,			99.2	86-126				
tert-Butyl alcohol (TBA)			"	50.0							
	252		"	250		101	70-130				
tert-Butylbenzene	41.4		"	50.0		82.8	80-127				
Tetrachloroethylene	48.3			50.0		96.7	80-129				
Toluene	49.3		"	50.0		98.5	85-121				
trans-1,2-Dichloroethylene	49.1		"	50.0		98.3	72-132				
trans-1,3-Dichloropropylene	47.5		"	50.0		95.0	78-132				
Trichloroethylene	48.9		"	50.0		97.8	84-123				
Trichlorofluoromethane	55.9		"	50.0		112	62-140				
Vinyl acetate	49.5		"	50.0		99.0	67-136				
Vinyl Chloride	60.4		"	50.0		121	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	50.8		"	50.0		102	77-125				
Surrogate: SURR: Toluene-d8	49.2		"	50.0		98.3	85-120				
Surrogate: SURR: p-Bromofluorobenzene	47.9		"	50.0		95.8	76-130				
LCS Dup (BE90970-BSD1)							Prep	ared & Anal	yzed: 05/16/	2019	
1,1,1,2-Tetrachloroethane	50.6		ug/L	50.0		101	75-129		0.436	30	
1,1,1-Trichloroethane	51.0		"	50.0		102	71-137		1.94	30	
1,1,2,2-Tetrachloroethane	48.3		"	50.0		96.5	79-129		0.0622	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon	51.4		"	50.0		103	58-146		2.96	30	
113)											
1,1,2-Trichloroethane	48.5		"	50.0		97.0	83-123		0.206	30	
1,1-Dichloroethane	50.2		"	50.0		100	75-130		1.36	30	
1,1-Dichloroethylene	49.5		"	50.0		99.1	64-137		2.37	30	
1,1-Dichloropropylene	50.4		"	50.0		101	77-127		2.55	30	
1,2,3-Trichlorobenzene	50.3		"	50.0		101	81-140		4.62	30	
1,2,3-Trichloropropane	50.0		"	50.0		100	81-126		1.92	30	
1,2,4-Trichlorobenzene	50.2		"	50.0		100	80-141		4.40	30	
1,2,4-Trimethylbenzene	48.8		"	50.0		97.6	84-125		3.69	30	
1,2-Dibromo-3-chloropropane	47.5		"	50.0		95.0	74-142		0.567	30	
1,2-Dibromoethane	50.5		"	50.0		101	86-123		2.27	30	
1,2-Dichlorobenzene	50.0		"	50.0		99.9	85-122		1.90	30	
1,2-Dichloroethane	51.1		"	50.0		102	71-133		0.117	30	
1,2-Dichloropropane	47.6		"	50.0		95.3	81-122		2.57	30	
1,3,5-Trimethylbenzene	49.0		"	50.0		93.3 98.0	82-126		4.15	30	
1,3-Dichlorobenzene	49.3		,,			98.0 98.7	82-126 84-124		3.65	30	
			"	50.0					1.39	30	
1,3-Dichloropropane	48.6		"	50.0		97.2	83-123				
1,4-Dichlorobenzene	49.6			50.0		99.2	84-124		3.66	30	

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1,4-Dioxane

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

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE90970 - EPA 5035A											
LCS Dup (BE90970-BSD1)							Prepa	ared & Analyzed	: 05/16/2	2019	
2,2-Dichloropropane	50.7		ug/L	50.0		101	67-136		1.21	30	
2-Butanone	52.8		"	50.0		106	58-147		2.41	30	
2-Chlorotoluene	46.1		"	50.0		92.3	78-127		1.99	30	
2-Hexanone	46.0		"	50.0		92.0	70-139		1.77	30	
4-Chlorotoluene	48.2		"	50.0		96.3	79-125		3.16	30	
4-Methyl-2-pentanone	46.2		"	50.0		92.4	72-132	().819	30	
Acetone	51.7		"	50.0		103	36-155	().874	30	
Acrolein	47.9		"	50.0		95.8	10-238		5.03	30	
Acrylonitrile	48.9		"	50.0		97.7	66-141		3.22	30	
Benzene	51.9		"	50.0		104	77-127		1.30	30	
Bromobenzene	47.4		"	50.0		94.8	77-129		2.58	30	
Bromochloromethane	48.4		"	50.0		96.9	74-129	(0.621	30	
Bromodichloromethane	49.2		"	50.0		98.3	81-124	(0.428	30	
Bromoform	48.4		"	50.0		96.7	80-136		1.23	30	
Bromomethane	55.7		"	50.0		111	32-177		1.00	30	
Carbon disulfide	50.9		"	50.0		102	10-136		1.23	30	
Carbon tetrachloride	52.1		"	50.0		104	66-143	(0.907	30	
Chlorobenzene	49.6		"	50.0		99.2	86-120		1.14	30	
Chloroethane	53.7		"	50.0		107	51-142	().649	30	
Chloroform	51.1		"	50.0		102	76-131	(0.628	30	
Chloromethane	53.7		"	50.0		107	49-132		1.33	30	
cis-1,2-Dichloroethylene	50.5		"	50.0		101	74-132	(0.596	30	
cis-1,3-Dichloropropylene	47.7		"	50.0		95.5	81-129	(0.673	30	
Cyclohexane	51.1		"	50.0		102	70-130		1.98	30	
Dibromochloromethane	49.8		"	50.0		99.6	10-200	(0.281	30	
Dibromomethane	49.2		"	50.0		98.5	83-124	0	.0203	30	
Dichlorodifluoromethane	65.5		"	50.0		131	28-158		2.10	30	
Ethyl Benzene	50.6		"	50.0		101	84-125		2.54	30	
Hexachlorobutadiene	51.9		"	50.0		104	83-133		6.46	30	
Isopropylbenzene	47.8		"	50.0		95.6	81-127		3.02	30	
Methyl acetate	46.5		"	50.0		93.0	41-143	(0.963	30	
Methyl tert-butyl ether (MTBE)	51.3		"	50.0		103	74-131		1.11	30	
Methylcyclohexane	49.9		"	50.0		99.8	70-130		4.05	30	
Methylene chloride	49.1		"	50.0		98.2	57-141	(0.932	30	
n-Butylbenzene	48.4		"	50.0		96.8	80-130		2.17	30	
n-Propylbenzene	48.9		"	50.0		97.8	74-136		4.11	30	
o-Xylene	50.2		"	50.0		100	83-123		1.59	30	
p- & m- Xylenes	100		"	100		100	82-128		1.64	30	
p-Isopropyltoluene	49.9		"	50.0		99.8	85-125		2.97	30	
sec-Butylbenzene	51.5		"	50.0		103	83-125		4.34	30	
Styrene	50.7		"	50.0		101	86-126		2.19	30	
tert-Butyl alcohol (TBA)	263		"	250		105	70-130		4.05	30	
tert-Butylbenzene	43.6		"	50.0		87.1	80-127		5.01	30	
Tetrachloroethylene	50.0		"	50.0		99.9	80-129		3.32	30	
Toluene	50.4		"	50.0		101	85-121		2.27	30	
trans-1,2-Dichloroethylene	49.7		"	50.0		99.4	72-132		1.13	30	
trans-1,3-Dichloropropylene	47.0		"	50.0		94.1	78-132		1.02	30	
Trichloroethylene	49.8		"	50.0		99.7	84-123		1.88	30	
Trichlorofluoromethane	56.1		"	50.0		112	62-140	(0.411	30	
Vinyl acetate	49.3		"	50.0		98.6	67-136	(0.405	30	
Vinyl Chloride	61.0		"	50.0		122	52-130	(0.956	30	

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132-02 89th AVENUE

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York Analytical Laboratories, Inc.

	1	ork Analy	ucai La	DUI ALUI I	es, inc.						
		Reporting		Spike	Source*		%REC	771	222	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE90970 - EPA 5035A											
LCS Dup (BE90970-BSD1)							Prep	ared & Anal	yzed: 05/16/	2019	
Surrogate: SURR: 1,2-Dichloroethane-d4	50.6		ug/L	50.0		101	77-125				
Surrogate: SURR: Toluene-d8	49.3		"	50.0		98.5	85-120				
Surrogate: SURR: p-Bromofluorobenzene	48.4		"	50.0		96.9	76-130				
Batch BE90972 - EPA 5030B											
Blank (BE90972-BLK1)							Prep	ared & Anal	yzed: 05/16/	2019	
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon	ND	0.500	"								
113)											
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,1-Dichloropropylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene			"								
	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,3-Dichloropropane	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
1,4-Dioxane	ND	80.0	"								
2,2-Dichloropropane	ND	0.500	"								
2-Butanone	ND	0.500	"								
2-Chlorotoluene			"								
	ND	0.500									
2-Hexanone	ND	0.500									
4-Chlorotoluene	ND	0.500	"								
4-Methyl-2-pentanone	ND	0.500	"								
Acetone	ND	2.00	"								
Acrolein	ND	2.00	"								
Acrylonitrile	ND	0.500	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride			"								
	ND	0.500	,,								
Chlorobenzene	ND	0.500									
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								

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

Blank (BE90972-BLK1)						Prepare
cis-1,3-Dichloropropylene	ND	0.500	ug/L			
Cyclohexane	ND	0.500	"			
Dibromochloromethane	ND	0.500	"			
Dibromomethane	ND	0.500	"			
Dichlorodifluoromethane	ND	0.500	"			
Ethyl Benzene	ND	0.500	"			
Hexachlorobutadiene	ND	0.500	"			
sopropylbenzene	ND	0.500	"			
Methyl acetate	ND	0.500	"			
Methyl tert-butyl ether (MTBE)	ND	0.500	"			
fethylcyclohexane	ND	0.500	"			
Methylene chloride	ND	2.00	"			
-Butylbenzene	ND	0.500	"			
-Propylbenzene	ND	0.500	"			
o-Xylene	ND	0.500	"			
- & m- Xylenes	ND	1.00	"			
-Isopropyltoluene	ND	0.500	"			
ec-Butylbenzene	ND	0.500	"			
tyrene	ND	0.500	"			
rt-Butyl alcohol (TBA)	ND	2.50	"			
ert-Butylbenzene	ND	0.500	"			
etrachloroethylene	ND	0.500	"			
oluene	ND	0.500	"			
ans-1,2-Dichloroethylene	ND	0.500	"			
rans-1,3-Dichloropropylene	ND	0.500	"			
Trichloroethylene	ND	0.500	"			
Frichlorofluoromethane	ND	0.500	"			
/inyl acetate	ND	0.500	"			
Vinyl Chloride	ND	0.500	"			
Kylenes, Total	ND	1.50	"			
urrogate: SURR: 1,2-Dichloroethane-d4	9.32		"	10.0	93.2	70-130
urrogate: SURR: Toluene-d8	9.81		"	10.0	98.1	70-130

10.0

108

70-130

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10.8

Surrogate: SURR: p-Bromofluorobenzene



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

Ratch	BE90972	- FPA	5030R

LCS (BE90972-BS1)					Prepared & Anal	yzed: 05/16/2019
1,1,1,2-Tetrachloroethane	10.2	ug/L	10.0	102	82-126	30
1,1,1-Trichloroethane	12.1	"	10.0	121	70-130	20
1,1,2,2-Tetrachloroethane	10.4	"	10.0	104	70-130	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon	12.0	"	10.0	120	70-130	20
113)						
1,1,2-Trichloroethane	9.66	"	10.0	96.6	70-130	20
1,1-Dichloroethane	12.1	"	10.0	121	70-130	20
1,1-Dichloroethylene	12.3	"	10.0	123	70-130	20
1,1-Dichloropropylene	11.8	"	10.0	118	83-133	30
1,2,3-Trichlorobenzene	8.53	"	10.0	85.3	70-130	20
,2,3-Trichloropropane	9.76	"	10.0	97.6	77-128	30
1,2,4-Trichlorobenzene	9.38	"	10.0	93.8	70-130	20
1,2,4-Trimethylbenzene	11.0	"	10.0	110	82-132	20
,2-Dibromo-3-chloropropane	9.45	"	10.0	94.5	40-160	20
,2-Dibromoethane	9.86	"	10.0	98.6	70-130	20
,2-Dichlorobenzene	10.1	"	10.0	101	70-130	20
,2-Dichloroethane	11.0	"	10.0	110	70-130	20
,2-Dichloropropane	10.8	"	10.0	108	70-130	20
1,3,5-Trimethylbenzene	11.1	"	10.0	111	80-131	30
,3-Dichlorobenzene	10.7	"	10.0	107	70-130	20
,3-Dichloropropane	10.2	"	10.0	102	81-125	30
,4-Dichlorobenzene	10.5	"	10.0	105	70-130	20
,4-Dioxane	99.7	"	210	47.5	40-160	20
2,2-Dichloropropane	12.2	"	10.0	122	56-150	30
2-Butanone	11.4	"	10.0	114	40-160	20
-Chlorotoluene	11.2	"	10.0	112	79-130	30
-Hexanone	10.4	"	10.0	104	40-160	20
l-Chlorotoluene	11.3	"	10.0	113	79-128	30
-Methyl-2-pentanone	9.35	"	10.0	93.5	40-160	20
Acetone	11.6	"	10.0	116	40-160	20
Acrolein	11.4	"	10.0	114	10-153	30
Acrylonitrile	9.42	"	10.0	94.2	51-150	30
Benzene	12.1	"	10.0	121	70-130	20
Bromobenzene	10.8	"	10.0	108	78-129	30
Bromochloromethane	12.0	"	10.0	120	70-130	20
Bromodichloromethane	10.3	"	10.0	103	70-130	20
Bromoform	9.15	"	10.0	91.5	70-130	20
Bromomethane	8.32	"	10.0	83.2	40-160	20
Carbon disulfide	12.9	"	10.0	129	40-160	20
Carbon tetrachloride	12.2	"	10.0	122	70-130	20
Chlorobenzene	10.5	"	10.0	105	70-130	20
Chloroethane	13.1	"	10.0	131	40-160	20
Chloroform	11.6	"	10.0	116	70-130	20
Chloromethane	13.2	"	10.0	132	40-160	20
eis-1,2-Dichloroethylene	12.2	"	10.0	132	70-130	20
ris-1,3-Dichloropropylene	10.7	"	10.0	107	70-130	20
Eyclohexane		"				20
Dibromochloromethane	12.4	"	10.0	124	70-130	20
	9.73	"	10.0	97.3	70-130	
Dibromomethane	9.85	"	10.0	98.5	72-134	30
Dichlorodifluoromethane	14.6		10.0	146	40-160	20
Ethyl Benzene	11.0	"	10.0	110	70-130	20

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										DDD	
	D 1	Reporting	TT 1	Spike	Source*	N/DEG	%REC	El	DDD	RPD	El
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE90972 - EPA 5030B											
LCS (BE90972-BS1)							Prej	pared & Analy	zed: 05/16/	2019	
Hexachlorobutadiene	9.17		ug/L	10.0		91.7	67-146			30	
Isopropylbenzene	11.2		"	10.0		112	70-130			20	
Methyl acetate	10.0		"	10.0		100	70-130			20	
Methyl tert-butyl ether (MTBE)	11.2		"	10.0		112	70-130			20	
Methylcyclohexane	11.0		"	10.0		110	70-130			20	
Methylene chloride	11.2		"	10.0		112	70-130			20	
n-Butylbenzene	11.2		"	10.0		112	79-132			30	
n-Propylbenzene	11.2		"	10.0		112	78-133			30	
o-Xylene	10.8		"	10.0		108	70-130			20	
p- & m- Xylenes	22.1		"	20.0		110	70-130			20	
p-Isopropyltoluene	10.8		"	10.0		108	81-136			30	
sec-Butylbenzene	11.1		"	10.0		111	79-137			30	
Styrene	10.5		"	10.0		105	70-130			20	
tert-Butyl alcohol (TBA)	35.1		"	50.0		70.2	25-162			30	
tert-Butylbenzene	10.8		"	10.0		108	77-138			30	
Tetrachloroethylene	8.82		"	10.0		88.2	70-130			20	
Toluene	10.9		"	10.0		109	70-130			20	
trans-1,2-Dichloroethylene	12.5		"	10.0		125	70-130			20	
trans-1,3-Dichloropropylene	10.6		"	10.0		106	70-130			20	
Trichloroethylene	10.4		"	10.0		104	70-130			20	
Trichlorofluoromethane	12.8		"	10.0		128	40-160			20	
Vinyl acetate	9.88		"	10.0		98.8	21-90	High Bias		30	
Vinyl Chloride	14.0		"	10.0		140	70-130	High Bias		20	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.27		"	10.0		92.7	70-130				
Surrogate: SURR: Toluene-d8	9.57		"	10.0		95.7	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.7		"	10.0		107	70-130				
LCS Dup (BE90972-BSD1)							Prej	pared & Analy	zed: 05/16/	2019	
1,1,1,2-Tetrachloroethane	9.91		ug/L	10.0		99.1	82-126		2.59	30	
1,1,1-Trichloroethane	10.9		"	10.0		109	70-130		9.74	20	
1,1,2,2-Tetrachloroethane	9.91		"	10.0		99.1	70-130		4.44	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon	11.0		"	10.0		110	70-130		8.72	20	
113)											
1,1,2-Trichloroethane	9.32		"	10.0		93.2	70-130		3.58	20	
1,1-Dichloroethane	11.0		"	10.0		110	70-130		9.40	20	
1,1-Dichloroethylene	11.3		"	10.0		113	70-130		8.64	20	
1,1-Dichloropropylene	10.9		"	10.0		109	83-133		7.99	30	
1,2,3-Trichlorobenzene	8.09		"	10.0		80.9	70-130		5.29	20	
1,2,3-Trichloropropane	9.05		"	10.0		90.5	77-128		7.55	30	
1,2,4-Trichlorobenzene	8.40		"	10.0		84.0	70-130		11.0	20	
1,2,4-Trimethylbenzene	10.4		"	10.0		104	82-132		4.95	20	
1,2-Dibromo-3-chloropropane	9.14		"	10.0		91.4	40-160		3.34	20	
1,2-Dibromoethane	9.22		"	10.0		92.2	70-130		6.71	20	
1,2-Dichlorobenzene	9.60		"	10.0		96.0	70-130		4.88	20	
1,2-Dichloroethane	10.2		"	10.0		102	70-130		7.94	20	
1,2-Dichloropropane	10.7		"	10.0		107	70-130		1.30	20	
1,3,5-Trimethylbenzene	10.7		"	10.0		107	80-131		4.13	30	
1,3-Dichlorobenzene	10.2		"	10.0		102	70-130		5.07	20	
1,3-Dichloropropane	9.98		"	10.0		99.8	81-125		2.28	30	
1,4-Dichlorobenzene	9.97		"	10.0		99.7	70-130		5.08	20	
1,4-Dioxane	91.0		"	210		43.3	40-160		9.11	20	

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

		Reporting	Spike	Source*		%REC			KPD	
Analyte	Result	Limit Un		Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE90972 - EPA 5030B										
LCS Dup (BE90972-BSD1)						Prep	ared & Anal	yzed: 05/16/	2019	
2,2-Dichloropropane	11.1	ug/	L 10.0		111	56-150		9.69	30	
2-Butanone	10.0	"	10.0		100	40-160		13.2	20	
2-Chlorotoluene	10.7	"	10.0		107	79-130		5.11	30	
2-Hexanone	9.99	"	10.0		99.9	40-160		4.50	20	
4-Chlorotoluene	10.7	"	10.0		107	79-128		5.72	30	
4-Methyl-2-pentanone	9.20	"	10.0		92.0	40-160		1.62	20	
Acetone	9.24	"	10.0		92.4	40-160		22.6	20	Non-dir.
Acrolein	9.29	"	10.0		92.9	10-153		20.1	30	
Acrylonitrile	8.01	"	10.0		80.1	51-150		16.2	30	
Benzene	10.9	"	10.0		109	70-130		10.2	20	
Bromobenzene	10.5	"	10.0		105	78-129		2.62	30	
Bromochloromethane	10.8	"	10.0		108	70-130		10.0	20	
Bromodichloromethane	10.4	"	10.0		104	70-130		0.675	20	
Bromoform	9.20	"	10.0		92.0	70-130		0.545	20	
Bromomethane	9.35	"	10.0		93.5	40-160		11.7	20	
Carbon disulfide	11.5	"	10.0		115	40-160		11.6	20	
Carbon tetrachloride	10.6	"	10.0		106	70-130		13.2	20	
Chlorobenzene	10.3	"	10.0		103	70-130		2.11	20	
Chloroethane	11.9	"	10.0		119	40-160		9.57	20	
Chloroform	10.5	"	10.0		105	70-130		9.92	20	
Chloromethane	11.6	"	10.0		116	40-160		12.9	20	
cis-1,2-Dichloroethylene	11.0	"	10.0		110	70-130		10.5	20	
cis-1,3-Dichloropropylene	10.6	"	10.0		106	70-130		0.281	20	
Cyclohexane	11.1	"	10.0		111	70-130		10.6	20	
Dibromochloromethane	9.64	"			96.4	70-130		0.929	20	
Dibromomethane	9.83	"			98.3	72-134		0.203	30	
Dichlorodifluoromethane	13.2	"			132	40-160		10.2	20	
Ethyl Benzene	10.6	"			106	70-130		3.34	20	
Hexachlorobutadiene	8.81	"			88.1	67-146		4.00	30	
Isopropylbenzene	10.8	"			108	70-130		3.37	20	
Methyl acetate	9.27	"			92.7	70-130		7.88	20	
Methyl tert-butyl ether (MTBE)	10.1	"			101	70-130		10.1	20	
Methylcyclohexane	10.6	"			106	70-130		3.60	20	
Methylene chloride	10.2	"			102	70-130		9.45	20	
n-Butylbenzene	10.2	"			100	79-132		10.6	30	
n-Propylbenzene	10.9	"			100	78-133		2.63	30	
o-Xylene	10.4	"	10.0		104	70-130		3.78	20	
p- & m- Xylenes	21.3	"			107	70-130		3.64	20	
p-Isopropyltoluene	10.3	,,			107	81-136		4.17	30	
sec-Butylbenzene	10.5	"			105	79-137		5.09	30	
Styrene Styrene	10.3	"	10.0		103	79-137		3.57	20	
tert-Butyl alcohol (TBA)		"	10.0					12.7	30	
tert-Butyl alcohol (TBA)	30.9	"	30.0		61.8	25-162		4.95	30	
Tetrachloroethylene	10.2	"	10.0		102	77-138		5.36	20	
Toluene	8.36		10.0		83.6	70-130		3.55	20	
trans-1,2-Dichloroethylene	10.5	"	10.0		105	70-130		3.55 10.7	20	
	11.2	"	10.0		112	70-130				
trans-1,3-Dichloropropylene	10.1	"	10.0		101	70-130		4.94	20	
Trichlerefferensethere	10.6		10.0		106	70-130		1.81	20	
Trichlorofluoromethane	11.5	"	10.0		115	40-160		10.8	20	
Vinyl Chlorida	8.60	"	10.0		86.0	21-90		13.9	30	
vanya Chlorido	12.2	"	10.0		122	70 120		177.0		

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Vinyl Chloride

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12.3

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10.0

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12.8

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123

70-130



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

Analyte	Result	Limit Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE90972 - EPA 5030B										
LCS Dup (BE90972-BSD1)						Prej	2019			
Surrogate: SURR: 1,2-Dichloroethane-d4	8.56	ug/L	10.0		85.6	70-130				
Surrogate: SURR: Toluene-d8	9.88	"	10.0		98.8	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.6	"	10.0		106	70-130				
Matrix Spike (BE90972-MS1)	*Source sample: 19	9E0591-32 (MW002)				Prej	pared & Analy	zed: 05/16/	2019	
1,1,1,2-Tetrachloroethane	9.89	ug/L	10.0	0.00	98.9	45-161			30	
1,1,1-Trichloroethane	10.1	"	10.0	0.00	101	70-130			20	
1,1,2,2-Tetrachloroethane	11.3	"	10.0	0.00	113	70-130			20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon	8.88	"	10.0	0.00	88.8	70-130			20	
113)										
1,1,2-Trichloroethane	9.47	"	10.0	0.00	94.7	70-130			20	
1,1-Dichloroethane	10.5	"	10.0	0.00	105	70-130			20	
1,1-Dichloroethylene	10.2	"	10.0	0.00	102	70-130			20	
1,1-Dichloropropylene	9.59	"	10.0	0.00	95.9	82-134			30	
1,2,3-Trichlorobenzene	7.06	"	10.0	0.00	70.6	70-130			20	
1,2,3-Trichloropropane	10.2	"	10.0	0.00	102	74-127			30	
1,2,4-Trichlorobenzene	6.76	"	10.0	0.00	67.6	70-130	Low Bias		20	
1,2,4-Trimethylbenzene	8.77	"	10.0	0.00	87.7	72-129			20	
1,2-Dibromo-3-chloropropane	9.29	"	10.0	0.00	92.9	40-160			20	
1,2-Dibromoethane	9.45	"	10.0	0.00	94.5	70-130			20	
1,2-Dichlorobenzene	8.50	"	10.0	0.00	85.0	70-130			20	
1,2-Dichloroethane	10.1	"	10.0	0.00	101	70-130			20	
1,2-Dichloropropane	9.73	"	10.0	0.00	97.3	70-130			20	
1,3,5-Trimethylbenzene	9.03	"	10.0	0.00	90.3	69-126			30	
1,3-Dichlorobenzene	8.38	"	10.0	0.00	83.8	70-130			20	
1,3-Dichloropropane	9.92	"	10.0	0.00	99.2	77-119			30	
1,4-Dichlorobenzene	8.19	"	10.0	0.00	81.9	70-130			20	
1,4-Dioxane	51.4	"	210	0.00	24.5	40-160	Low Bias		20	
2,2-Dichloropropane	10.5	"	10.0	0.00	105	10-160			30	
2-Butanone	7.51	"	10.0	0.00	75.1	40-160			20	
2-Chlorotoluene	9.70	"	10.0	0.00	97.0	70-126			30	
2-Hexanone	8.57	"	10.0	0.00	85.7	40-160			20	
4-Chlorotoluene	9.23	"	10.0	0.00	92.3	69-124			30	
4-Methyl-2-pentanone	9.41	"	10.0	0.00	94.1	40-160			20	
Acetone	5.82	"	10.0	0.870	49.5	40-160			20	
Acrolein	8.16	"	10.0	0.00	81.6	10-195			30	
Acrylonitrile	8.35	"	10.0	0.00	83.5	37-165			30	
Benzene	10.3	"	10.0	0.00	103	70-130			20	
Bromobenzene	10.2	"	10.0	0.00	102	72-122			30	
Bromochloromethane	10.5	"	10.0	0.00	105	70-130			20	
Bromodichloromethane	9.74	"	10.0	0.00	97.4	70-130			20	
Bromoform	9.04	11	10.0	0.00	90.4	70-130			20	
Bromomethane	8.90	"	10.0	0.00	89.0	40-160			20	
Carbon disulfide	10.8	11	10.0	0.00	108	40-160			20	
Carbon tetrachloride	9.82	n .	10.0	0.00	98.2	70-130			20	
Chlorobenzene	9.25	"	10.0	0.00	92.5	70-130			20	
Chloroethane	12.3	11	10.0	0.00	123	40-160			20	
Chloroform	10.0	"	10.0	0.00	100	70-130			20	
Chloromethane	11.3	"	10.0	0.00	113	40-160			20	
cis-1,2-Dichloroethylene	10.4	"	10.0	0.00	104	70-130			20	
cis-1,3-Dichloropropylene	9.76	"	10.0	0.00	97.6	70-130			20	
c.s. 1,5 Diemoropropyrene	7.70		10.0	0.00	91.0	/0-130			20	

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

Ratch	BE90972	- EPA	5030R

Matrix Spike (BE90972-MS1)	*Source sample: 19E059	1-32 (MW002)				Pre	5/16/2019	
Cyclohexane	9.37	ug/L	10.0	0.00	93.7	70-130		20
Dibromochloromethane	9.80	"	10.0	0.00	98.0	70-130		20
Dibromomethane	9.60	"	10.0	0.00	96.0	76-120		30
Dichlorodifluoromethane	13.9	"	10.0	0.00	139	40-160		20
Ethyl Benzene	9.40	"	10.0	0.00	94.0	70-130		20
Hexachlorobutadiene	6.86	"	10.0	0.00	68.6	34-166		30
Isopropylbenzene	8.81	"	10.0	0.00	88.1	70-130		20
Methyl acetate	8.97	"	10.0	0.00	89.7	70-130		20
Methyl tert-butyl ether (MTBE)	10.2	"	10.0	0.00	102	70-130		20
Methylcyclohexane	8.23	"	10.0	0.00	82.3	70-130		20
Methylene chloride	9.98	"	10.0	0.00	99.8	70-130		20
n-Butylbenzene	7.51	"	10.0	0.00	75.1	61-138		30
n-Propylbenzene	8.88	"	10.0	0.00	88.8	66-134		30
o-Xylene	9.41	"	10.0	0.00	94.1	70-130		20
p- & m- Xylenes	18.4	"	20.0	0.00	92.1	70-130		20
p-Isopropyltoluene	13.1	"	10.0	5.51	75.6	64-137		30
sec-Butylbenzene	8.56	"	10.0	0.00	85.6	53-155		30
Styrene	9.06	"	10.0	0.00	90.6	70-130		20
tert-Butyl alcohol (TBA)	31.8	"	50.0	0.00	63.7	10-130		30
tert-Butylbenzene	8.80	"	10.0	0.00	88.0	65-139		30
Tetrachloroethylene	5.60	"	10.0	0.00	56.0	70-130	Low Bias	20
Toluene	9.69	"	10.0	0.00	96.9	70-130		20
trans-1,2-Dichloroethylene	10.2	"	10.0	0.00	102	70-130		20
trans-1,3-Dichloropropylene	9.79	"	10.0	0.00	97.9	70-130		20
Trichloroethylene	9.29	"	10.0	0.00	92.9	70-130		20
Trichlorofluoromethane	11.2	"	10.0	0.00	112	40-160		20
Vinyl acetate	8.52	"	10.0	0.00	85.2	10-87		30
Vinyl Chloride	14.3	"	10.0	0.00	143	70-130	High Bias	20
Surrogate: SURR: 1,2-Dichloroethane-d4	9.59	"	10.0		95.9	70-130		
Surrogate: SURR: Toluene-d8	10.2	"	10.0		102	70-130		
Surrogate: SURR: p-Bromofluorobenzene	11.1	"	10.0		111	70-130		

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

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE90972 - EPA 5030B											
Matrix Spike Dup (BE90972-MSD1)	*Source sample: 19	E0591-32 (MV	W002)				Pre	pared & Analy	zed: 05/16/	2019	
1,1,1,2-Tetrachloroethane	9.58		ug/L	10.0	0.00	95.8	45-161		3.18	30	
1,1,1-Trichloroethane	9.85		"	10.0	0.00	98.5	70-130		2.21	20	
1,1,2,2-Tetrachloroethane	10.6		"	10.0	0.00	106	70-130		6.31	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon	7.93		"	10.0	0.00	79.3	70-130		11.3	20	
113)											
1,1,2-Trichloroethane	9.24		"	10.0	0.00	92.4	70-130		2.46	20	
1,1-Dichloroethane	10.2		"	10.0	0.00	102	70-130		2.50	20	
1,1-Dichloroethylene	10.0		"	10.0	0.00	100	70-130		1.19	20	
1,1-Dichloropropylene	9.03		"	10.0	0.00	90.3	82-134		6.02	30	
1,2,3-Trichlorobenzene	6.44		"	10.0	0.00	64.4	70-130	Low Bias	9.19	20	
1,2,3-Trichloropropane	10.1		"	10.0	0.00	101	74-127		0.786	30	
1,2,4-Trichlorobenzene	6.17		"	10.0	0.00	61.7	70-130	Low Bias	9.13	20	
1,2,4-Trimethylbenzene	7.78		"	10.0	0.00	77.8	72-129		12.0	20	
1,2-Dibromo-3-chloropropane	9.30		"	10.0	0.00	93.0	40-160		0.108	20	
1,2-Dibromoethane	9.50		"	10.0	0.00	95.0	70-130		0.528	20	
1,2-Dichlorobenzene	8.00		"	10.0	0.00	80.0	70-130		6.06	20	
1,2-Dichloroethane	9.99		"	10.0	0.00	99.9	70-130		1.39	20	
1,2-Dichloropropane	9.64		"	10.0	0.00	96.4	70-130		0.929	20	
1,3,5-Trimethylbenzene	8.17		"	10.0	0.00	81.7	69-126		10.0	30	
1,3-Dichlorobenzene	7.65		"	10.0	0.00	76.5	70-130		9.11	20	
1,3-Dichloropropane	9.96		"	10.0	0.00	99.6	77-119		0.402	30	
1,4-Dichlorobenzene	7.77		"	10.0	0.00	77.7	70-130		5.26	20	NI II
1,4-Dioxane	93.1		"	210	0.00	44.3	40-160		57.7 3.77	20 30	Non-dir.
2,2-Dichloropropane 2-Butanone	10.2		,,	10.0	0.00	102	10-160		3.53	20	
2-Chlorotoluene	7.78 8.90		,,	10.0 10.0	0.00	77.8 89.0	40-160 70-126		8.60	30	
2-Hexanone	8.49		,,	10.0	0.00	84.9	40-160		0.938	20	
4-Chlorotoluene	8.58		,,	10.0	0.00	85.8	69-124		7.30	30	
4-Methyl-2-pentanone	9.56		,,	10.0	0.00	95.6	40-160		1.58	20	
Acetone	5.80		"	10.0	0.870	49.3	40-160		0.344	20	
Acrolein	9.76		"	10.0	0.00	97.6	10-195		17.9	30	
Acrylonitrile	8.37		"	10.0	0.00	83.7	37-165		0.239	30	
Benzene	10.1		"	10.0	0.00	101	70-130		2.06	20	
Bromobenzene	9.65		"	10.0	0.00	96.5	72-122		5.93	30	
Bromochloromethane	10.4		"	10.0	0.00	104	70-130		0.478	20	
Bromodichloromethane	9.86		"	10.0	0.00	98.6	70-130		1.22	20	
Bromoform	9.26		"	10.0	0.00	92.6	70-130		2.40	20	
Bromomethane	10.6		"	10.0	0.00	106	40-160		17.4	20	
Carbon disulfide	10.6		"	10.0	0.00	106	40-160		1.78	20	
Carbon tetrachloride	9.68		"	10.0	0.00	96.8	70-130		1.44	20	
Chlorobenzene	8.94		"	10.0	0.00	89.4	70-130		3.41	20	
Chloroethane	12.0		"	10.0	0.00	120	40-160		2.79	20	
Chloroform	10.0		"	10.0	0.00	100	70-130		0.399	20	
Chloromethane	12.2		"	10.0	0.00	122	40-160		7.55	20	
cis-1,2-Dichloroethylene	10.2		"	10.0	0.00	102	70-130		2.23	20	
cis-1,3-Dichloropropylene	9.73		"	10.0	0.00	97.3	70-130		0.308	20	
Cyclohexane	8.55		"	10.0	0.00	85.5	70-130		9.15	20	
Dibromochloromethane	9.52		"	10.0	0.00	95.2	70-130		2.90	20	
Dibromomethane	9.13		"	10.0	0.00	91.3	76-120		5.02	30	
Dichlorodifluoromethane	13.0		"	10.0	0.00	130	40-160		6.24	20	
Ethyl Benzene	8.74		"	10.0	0.00	87.4	70-130		7.28	20	

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

Ratch	BE90972	- EPA	5030R

Matrix Spike Dup (BE90972-MSD1)	*Source sample: 19E059	1-32 (MW002)				Pre	pared & Analy	zed: 05/16/2	2019
Hexachlorobutadiene	5.84	ug/L	10.0	0.00	58.4	34-166		16.1	30
Isopropylbenzene	8.00	"	10.0	0.00	80.0	70-130		9.64	20
Methyl acetate	8.93	"	10.0	0.00	89.3	70-130		0.447	20
Methyl tert-butyl ether (MTBE)	10.4	"	10.0	0.00	104	70-130		1.36	20
Methylcyclohexane	7.01	"	10.0	0.00	70.1	70-130		16.0	20
Methylene chloride	9.93	"	10.0	0.00	99.3	70-130		0.502	20
n-Butylbenzene	6.25	"	10.0	0.00	62.5	61-138		18.3	30
n-Propylbenzene	8.04	"	10.0	0.00	80.4	66-134		9.93	30
o-Xylene	8.73	"	10.0	0.00	87.3	70-130		7.50	20
p- & m- Xylenes	17.1	"	20.0	0.00	85.6	70-130		7.32	20
p-Isopropyltoluene	12.3	"	10.0	5.51	67.5	64-137		6.40	30
sec-Butylbenzene	7.42	"	10.0	0.00	74.2	53-155		14.3	30
Styrene	8.58	"	10.0	0.00	85.8	70-130		5.44	20
tert-Butyl alcohol (TBA)	34.2	"	50.0	0.00	68.5	10-130		7.32	30
tert-Butylbenzene	7.79	"	10.0	0.00	77.9	65-139		12.2	30
Tetrachloroethylene	5.07	"	10.0	0.00	50.7	70-130	Low Bias	9.93	20
Toluene	9.39	"	10.0	0.00	93.9	70-130		3.14	20
trans-1,2-Dichloroethylene	9.92	"	10.0	0.00	99.2	70-130		2.59	20
trans-1,3-Dichloropropylene	9.90	"	10.0	0.00	99.0	70-130		1.12	20
Trichloroethylene	8.81	"	10.0	0.00	88.1	70-130		5.30	20
Trichlorofluoromethane	10.5	"	10.0	0.00	105	40-160		6.08	20
Vinyl acetate	8.77	"	10.0	0.00	87.7	10-87	High Bias	2.89	30
Vinyl Chloride	14.2	"	10.0	0.00	142	70-130	High Bias	0.843	20
Surrogate: SURR: 1,2-Dichloroethane-d4	9.96	"	10.0		99.6	70-130			
Surrogate: SURR: Toluene-d8	10.1	"	10.0		101	70-130			
Surrogate: SURR: p-Bromofluorobenzene	11.1	"	10.0		111	70-130			

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

Ratch	RE91074	- EPA 5035A

Blank (BE91074-BLK1)				 Prepared & Analyzed: 05/17/2019
1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet	
1,1,1-Trichloroethane	ND	0.0050	"	
1,1,2,2-Tetrachloroethane	ND	0.0050	"	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon	ND	0.0050	"	
113)				
1,1,2-Trichloroethane	ND	0.0050	"	
1,1-Dichloroethane	ND	0.0050	"	
1,1-Dichloroethylene	ND	0.0050	"	
1,1-Dichloropropylene	ND	0.0050	"	
1,2,3-Trichlorobenzene	ND	0.0050	"	
1,2,3-Trichloropropane	ND	0.0050	"	
1,2,4-Trichlorobenzene	ND	0.0050	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	
1,2-Dibromo-3-chloropropane	ND	0.0050	"	
1,2-Dibromoethane	ND	0.0050	"	
1,2-Dichlorobenzene	ND	0.0050	"	
1,2-Dichloroethane	ND	0.0050	"	
1,2-Dichloropropane	ND	0.0050	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	
1,3-Dichlorobenzene	ND	0.0050	"	
1,3-Dichloropropane	ND	0.0050		
1,4-Dichlorobenzene	ND	0.0050	"	
1,4-Dioxane	ND	0.10	"	
2,2-Dichloropropane 2-Butanone	ND	0.0050	"	
2-Chlorotoluene	ND ND	0.0050	"	
2-Hexanone	ND ND	0.0050	"	
4-Chlorotoluene		0.0050	"	
4-Methyl-2-pentanone	ND	0.0050	"	
Acetone	ND ND	0.0050 0.010	"	
Acrolein	ND ND	0.010	"	
Acrylonitrile	ND ND		"	
Benzene	ND ND	0.0050 0.0050	"	
Bromobenzene	ND ND	0.0050	"	
Bromochloromethane	ND ND	0.0050	"	
Bromodichloromethane	ND	0.0050	,,	
Bromoform	ND	0.0050	"	
Bromomethane	ND	0.0050	"	
Carbon disulfide	ND	0.0050	"	
Carbon tetrachloride	ND ND	0.0050	"	
Chlorobenzene	ND	0.0050	"	
Chloroethane	ND	0.0050	"	
Chloroform	ND	0.0050	"	
Chloromethane	ND	0.0050	"	
cis-1,2-Dichloroethylene	ND	0.0050	"	
cis-1,3-Dichloropropylene	ND	0.0050	"	
Cyclohexane	ND	0.0050	"	
Dibromochloromethane	ND	0.0050	"	
Dibromomethane	ND	0.0050	"	
Dichlorodifluoromethane	ND	0.0050	"	

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

Ratch	BE91074	- FPA	5035 A

Blank (BE91074-BLK1)						Prepared & Analyzed: 05/17/2019	
Hexachlorobutadiene	ND	0.0050	mg/kg wet				
Isopropylbenzene	ND	0.0050	"				
Methyl acetate	ND	0.0050	"				
Methyl tert-butyl ether (MTBE)	ND	0.0050	"				
Methylcyclohexane	ND	0.0050	"				
Methylene chloride	ND	0.010	"				
n-Butylbenzene	ND	0.0050	"				
n-Propylbenzene	ND	0.0050	"				
o-Xylene	ND	0.0050	"				
p- & m- Xylenes	ND	0.010	"				
p-Isopropyltoluene	ND	0.0050	"				
sec-Butylbenzene	ND	0.0050	"				
Styrene	ND	0.0050	"				
tert-Butyl alcohol (TBA)	ND	0.025	"				
tert-Butylbenzene	ND	0.0050	"				
Tetrachloroethylene	ND	0.0050	"				
Toluene	ND	0.0050	"				
trans-1,2-Dichloroethylene	ND	0.0050	"				
trans-1,3-Dichloropropylene	ND	0.0050	"				
Trichloroethylene	ND	0.0050	"				
Trichlorofluoromethane	ND	0.0050	"				
Vinyl acetate	ND	0.0050	"				
Vinyl Chloride	ND	0.0050	"				
Xylenes, Total	ND	0.015	"				
Surrogate: SURR: 1,2-Dichloroethane-d4	48.3		ug/L	50.0	96.6	77-125	
Surrogate: SURR: Toluene-d8	47.8		"	50.0	95.5	85-120	
Surrogate: SURR: p-Bromofluorobenzene	55.6		"	50.0	111	76-130	

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York Analytical Laboratories, Inc.

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

Ratch	BE91074	- FPA	5035 A

Blank (BE91074-BLK2)				Prepared & Analyzed: 05/17/2019
,1,1,2-Tetrachloroethane	ND	0.50	mg/kg wet	
,1,1-Trichloroethane	ND	0.50	"	
,1,2,2-Tetrachloroethane	ND	0.50	"	
,1,2-Trichloro-1,2,2-trifluoroethane (Freon	ND	0.50	"	
13)				
,1,2-Trichloroethane	ND	0.50	"	
1-Dichloroethane	ND	0.50	"	
1-Dichloroethylene	ND	0.50	"	
1-Dichloropropylene	ND	0.50	"	
2,3-Trichlorobenzene	ND	0.50	"	
2,3-Trichloropropane	ND	0.50	"	
2,4-Trichlorobenzene	ND	0.50	"	
2,4-Trimethylbenzene	ND	0.50	"	
2-Dibromo-3-chloropropane	ND	0.50	II .	
2-Dibromoethane	ND	0.50	II .	
2-Dichlorobenzene	ND	0.50	II .	
2-Dichloroethane	ND	0.50	"	
2-Dichloropropane	ND	0.50	"	
3,5-Trimethylbenzene	ND	0.50	"	
3-Dichlorobenzene	ND	0.50	"	
3-Dichloropropane	ND	0.50	"	
4-Dichlorobenzene	ND	0.50	"	
4-Dioxane	ND	10	"	
2-Dichloropropane	ND	0.50	II .	
Butanone	ND	0.50	"	
Chlorotoluene	ND	0.50	II .	
Hexanone	ND	0.50	II .	
Chlorotoluene	ND	0.50	"	
Methyl-2-pentanone	ND	0.50	"	
cetone	ND	1.0	"	
crolein	ND	1.0	"	
crylonitrile	ND	0.50	"	
enzene	ND	0.50	"	
romobenzene	ND	0.50	"	
romochloromethane	ND	0.50	"	
romodichloromethane	ND	0.50	"	
romoform	ND	0.50	"	
romomethane	ND	0.50	"	
arbon disulfide	ND	0.50	"	
arbon tetrachloride	ND	0.50	"	
hlorobenzene	ND	0.50	"	
hloroethane	ND	0.50	"	
hloroform	ND	0.50	"	
hloromethane	ND	0.50	п	
s-1,2-Dichloroethylene	ND	0.50	"	
s-1,3-Dichloropropylene	ND	0.50	п	
clohexane	ND	0.50	"	
ibromochloromethane	ND	0.50	"	
ibromomethane	ND	0.50	"	
vichlorodifluoromethane	ND	0.50	"	
thyl Benzene	ND	0.50	"	

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York Analytical Laboratories, Inc.

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

Ratch	BE91074	- FPA	5035 A

Blank (BE91074-BLK2)						Prepared & Analyzed: 05/17/2019
Hexachlorobutadiene	ND	0.50	mg/kg wet			
Isopropylbenzene	ND	0.50	"			
Methyl acetate	ND	0.50	"			
Methyl tert-butyl ether (MTBE)	ND	0.50	"			
Methylcyclohexane	ND	0.50	"			
Methylene chloride	ND	1.0	"			
n-Butylbenzene	ND	0.50	"			
n-Propylbenzene	ND	0.50	"			
o-Xylene	ND	0.50	"			
p- & m- Xylenes	ND	1.0	"			
p-Isopropyltoluene	ND	0.50	"			
sec-Butylbenzene	ND	0.50	"			
Styrene	ND	0.50	"			
tert-Butyl alcohol (TBA)	ND	2.5	"			
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 acetate	ND	0.50	"			
Vinyl Chloride	ND	0.50	"			
Xylenes, Total	ND	1.5	"			
Surrogate: SURR: 1,2-Dichloroethane-d4	50.8		ug/L	50.0	102	77-125
Surrogate: SURR: Toluene-d8	48.4		"	50.0	96.7	85-120
Surrogate: SURR: p-Bromofluorobenzene	55.1		"	50.0	110	76-130



York Analytical Laboratories, Inc.

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

Ratah	RF91074.	FDA	5035 A

49.9 51.8 46.6 52.9 48.3 51.1 50.6 51.0 46.6 46.4 46.0 44.4 45.5	ug/L " " " " " " " "	50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0	99.8 104 93.2 106 96.5 102 101 102	75-129 71-137 79-129 58-146 83-123 75-130 64-137
46.6 52.9 48.3 51.1 50.6 51.0 46.6 46.4 46.0 44.4	" " " " " " " "	50.0 50.0 50.0 50.0 50.0 50.0	93.2 106 96.5 102 101	79-129 58-146 83-123 75-130
52.9 48.3 51.1 50.6 51.0 46.6 46.4 46.0 44.4	" " " " " " " " " " " " " " " " " " " "	50.0 50.0 50.0 50.0 50.0	106 96.5 102 101	58-146 83-123 75-130
48.3 51.1 50.6 51.0 46.6 46.4 46.0 44.4	" " " " "	50.0 50.0 50.0 50.0	96.5 102 101	83-123 75-130
51.1 50.6 51.0 46.6 46.4 46.0 44.4	" " " " " " " " " " " " " " " " " " " "	50.0 50.0 50.0	102 101	75-130
51.1 50.6 51.0 46.6 46.4 46.0 44.4	" " " " " " " " " " " " " " " " " " " "	50.0 50.0 50.0	102 101	75-130
50.6 51.0 46.6 46.4 46.0 44.4	" " "	50.0 50.0	101	
51.0 46.6 46.4 46.0 44.4	"	50.0		64-137
46.6 46.4 46.0 44.4	"		102	
46.4 46.0 44.4	"	50.0		77-127
46.0 44.4			93.3	81-140
44.4	"	50.0	92.8	81-126
		50.0	92.0	80-141
45.5	"	50.0	88.7	84-125
	"	50.0	91.1	74-142
47.7	"	50.0	95.4	86-123
46.3	"	50.0	92.6	85-122
53.3	"	50.0	107	71-133
44.8	"	50.0	89.6	81-122
44.8	"	50.0	89.5	82-126
46.6	"	50.0	93.3	84-124
48.2	"	50.0	96.3	83-123
45.9	"	50.0	91.8	84-124
938	"	1050	89.3	10-228
51.0	"	50.0	102	67-136
	"			58-147
	"			78-127
	"			70-139
	"			79-125
	"			72-132
	"			36-155
	"			10-238
	"			66-141
	"			77-127
	"			77-129
	"			74-129
	"			81-124
	"			80-136
	"			32-177
	"			10-136
	"			66-143
	"			86-120
	"			51-142
	"			76-131
	"			49-132
	"			74-132
	"			
				81-129
				70-130
				10-200
	"			83-124
				28-158 84-125
	48.2 45.9	48.2 45.9 938 " 51.0 " 48.9 " 44.2 " 46.2 " 44.4 48.3 36.2 62.7 51.4 52.4 46.5 50.9 " 48.7 51.7 52.4 55.6 53.2 " 48.0 " 48.9 " 51.8 57.5 52.4 47.0 63.0 " 52.1 49.2 64.0	48.2 " 50.0 45.9 " 50.0 938 " 1050 51.0 " 50.0 48.9 " 50.0 44.2 " 50.0 44.2 " 50.0 44.4 " 50.0 48.3 " 50.0 36.2 " 50.0 62.7 " 50.0 51.4 " 50.0 52.4 " 50.0 48.7 " 50.0 50.9 " 50.0 48.7 " 50.0 51.7 " 50.0 52.4 " 50.0 53.2 " 50.0 48.0 " 50.0 57.5 " 50.0 52.4 " 50.0 57.5 " 50.0 52.4 " 50.0 47.0 " 50.0 52.1 " 50.0 64.0 " 50.	48.2 " 50.0 96.3 45.9 " 50.0 91.8 938 " 1050 89.3 51.0 " 50.0 102 48.9 " 50.0 97.7 44.2 " 50.0 97.7 44.2 " 50.0 92.3 44.4 " 50.0 92.3 44.4 " 50.0 92.3 48.3 " 50.0 96.6 36.2 " 50.0 96.6 36.2 " 50.0 125 51.4 " 50.0 103 52.4 " 50.0 105 46.5 " 50.0 102 48.7 " 50.0 97.4 51.7 " 50.0 103 52.4 " 50.0 105 48.0 " 50.0 97.8 51.8 " 50.0 104 57.5 " 50.0 105 47.0

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Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE91074 - EPA 5035A											
LCS (DE01074 DS1)							Dron	arad & Analy	azed: 05/17/	2010	

.CS (BE91074-BS1)					Pre	pared & Analyzed: 05/17/2	019
[exachlorobutadiene	47.4	ug/L	50.0	94.8	83-133	·	
sopropylbenzene	44.8	"	50.0	89.7	81-127		
lethyl acetate	46.2	"	50.0	92.5	41-143		
lethyl tert-butyl ether (MTBE)	51.3	"	50.0	103	74-131		
lethylcyclohexane	47.9	"	50.0	95.7	70-130		
lethylene chloride	51.3	"	50.0	103	57-141		
-Butylbenzene	45.4	"	50.0	90.7	80-130		
-Propylbenzene	44.5	"	50.0	89.0	74-136		
-Xylene	46.4	"	50.0	92.7	83-123		
- & m- Xylenes	90.8	"	100	90.8	82-128		
-Isopropyltoluene	46.5	"	50.0	93.0	85-125		
ec-Butylbenzene	48.0	"	50.0	95.9	83-125		
tyrene	46.5	"	50.0	93.0	86-126		
ert-Butyl alcohol (TBA)	255	,,	250	102	70-130		
ert-Butylbenzene	39.3	"	50.0	78.6	80-127	Low Bias	
etrachloroethylene	39.3 47.5	"	50.0	78.6 94.9	80-127 80-129	LOW DIGS	
oluene	47.5 47.5	"	50.0	94.9 95.0	85-121		
ans-1,2-Dichloroethylene	51.1	,,	50.0	102	72-132		
ans-1,3-Dichloropropylene	46.7	,,	50.0	93.4	78-132		
richloroethylene		,,					
richlorofluoromethane	46.4 59.5	,,	50.0 50.0	92.8	84-123 62-140		
inyl acetate		,,		119			
inyl Chloride	37.3	"	50.0	74.6	67-136		
	64.1		50.0	128	52-130		
urrogate: SURR: 1,2-Dichloroethane-d4	49.9	"	50.0	99.8	77-125		
urrogate: SURR: Toluene-d8	47.8	"	50.0	95.5	85-120		
urrogate: SURR: p-Bromofluorobenzene	47.5	"	50.0	94.9	76-130		
CS Dup (BE91074-BSD1)					Pre	pared & Analyzed: 05/17/2	2019
1,1,2-Tetrachloroethane	47.4	ug/L	50.0	94.9	75-129	5.01	30
1,1-Trichloroethane	52.0	"	50.0	104	71-137	0.251	30
1,2,2-Tetrachloroethane	47.8	"	50.0	95.6	79-129	2.46	30
1,2-Trichloro-1,2,2-trifluoroethane (Freon	52.6	"	50.0	105	58-146	0.569	30
13)							
1,2-Trichloroethane	48.1	"	50.0	96.2	83-123	0.353	30
1-Dichloroethane	51.0	"	50.0	102	75-130	0.157	30
1-Dichloroethylene	49.6	"	50.0	99.2	64-137	2.04	30
1-Dichloropropylene	50.5	"	50.0	101	77-127	0.945	30
2,3-Trichlorobenzene	47.1	"	50.0	94.1	81-140	0.896	30
2,3-Trichloropropane	48.3	"	50.0	96.7	81-126	4.07	30
,2,4-Trichlorobenzene	45.7	"	50.0	91.5	80-141	0.589	30
,2,4-Trimethylbenzene	44.1	"	50.0	88.1	84-125	0.633	30
2-Dibromo-3-chloropropane	49.8	"	50.0	99.5	74-142	8.88	30
2-Dibromoethane	48.5	"	50.0	97.0	86-123	1.73	30
2-Dichlorobenzene	46.8	"	50.0	93.7	85-122	1.14	30
2-Dichloroethane	55.3	"	50.0	111	71-133	3.76	30
2-Dichloropropane	46.2	"	50.0	92.4	81-122	3.05	30
3,5-Trimethylbenzene	44.0	"	50.0	88.0	82-126	1.71	30
3-Dichlorobenzene	46.7	"	50.0	93.3	84-124	0.0429	30
3-Dichloropropane	48.5	"	50.0	93.3 97.0	83-123	0.703	30
,5 2.0oropropuno	70.3						
4-Dichlorobenzene	44.9	"	50.0	89.7	84-124	2.27	30

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York Analytical Laboratories, Inc.

A 1.	5 1.	Reporting	TT '4	Spike	Source*	0/PEC	%REC	Ele -	DDD	RPD	E1
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE91074 - EPA 5035A											
LCS Dup (BE91074-BSD1)							Prep	ared & Analy	zed: 05/17/2	2019	
2,2-Dichloropropane	52.0		ug/L	50.0		104	67-136		1.94	30	
2-Butanone	49.8		"	50.0		99.6	58-147		1.95	30	
2-Chlorotoluene	43.6		"	50.0		87.2	78-127		1.41	30	
2-Hexanone	47.9		"	50.0		95.7	70-139		3.64	30	
4-Chlorotoluene	43.1		"	50.0		86.2	79-125		2.99	30	
4-Methyl-2-pentanone	50.3		"	50.0		101	72-132		4.02	30	
Acetone	39.4		"	50.0		78.9	36-155		8.67	30	
Acrolein	55.6		"	50.0		111	10-238		12.0	30	
Acrylonitrile	53.6		"	50.0		107	66-141		4.15	30	
Benzene	52.1		"	50.0		104	77-127		0.612	30	
Bromobenzene	45.3		"	50.0		90.7	77-129		2.46	30	
Bromochloromethane	53.5		"	50.0		107	74-129		4.94	30	
Bromodichloromethane	49.4		"	50.0		98.8	81-124		1.47	30	
Bromoform	52.3		"	50.0		105	80-136		1.27	30	
Bromomethane	44.0		"	50.0		88.0	32-177		17.5	30	
Carbon disulfide	53.8		"	50.0		108	10-136		3.35	30	
Carbon tetrachloride	54.2		"	50.0		108	66-143		1.92	30	
Chlorobenzene	47.0		"	50.0		94.0	86-120		2.08	30	
Chloroethane	49.3		"	50.0		98.5	51-142		0.754	30	
Chloroform	52.4		"	50.0		105	76-131		1.09	30	
Chloromethane	55.0		"	50.0		110	49-132		4.32	30	
cis-1,2-Dichloroethylene	51.8		"	50.0		104	74-132		1.32	30	
cis-1,3-Dichloropropylene	47.5		"	50.0		94.9	81-129		1.08	30	
Cyclohexane	63.5		"	50.0		127	70-130		0.854	30	
Dibromochloromethane	52.8		"	50.0		106	10-200		1.32	30	
Dibromomethane	48.8		"	50.0		97.6	83-124		0.857	30	
Dichlorodifluoromethane	55.0		"	50.0		110	28-158		15.3	30	
Ethyl Benzene	45.5		"	50.0		91.1	84-125		2.77	30	
Hexachlorobutadiene	48.4		"	50.0		96.9	83-133		2.13	30	
Isopropylbenzene	44.8		,	50.0		89.5	81-127		0.134	30	
Methyl acetate	47.5		,,	50.0		95.0	41-143		2.69	30	
Methyl tert-butyl ether (MTBE)	53.2		"	50.0		106	74-131		3.52	30	
Methylcyclohexane	47.3		"	50.0		94.6	70-130		1.22	30	
Methylene chloride	50.1		"	50.0		100	57-141		2.48 0.686	30 30	
n-Butylbenzene n-Propylbenzene	45.0		"	50.0		90.1	80-130		0.686	30	
o-Xylene	44.2 45.0		,,	50.0 50.0		88.5 90.0	74-136 83-123		2.95	30	
p- & m- Xylenes	45.0 89.8		,,						1.09	30	
p- & m- Ayienes p-Isopropyltoluene	89.8 46.0		,,	100 50.0		89.8 92.0	82-128 85-125		1.09	30	
sec-Butylbenzene	48.0		,,	50.0		92.0 95.9	83-125 83-125		0.0417	30	
Styrene	48.0 45.6		,,	50.0		95.9 91.2	86-126		1.93	30	
tert-Butyl alcohol (TBA)	265		,,	250		106	70-130		4.05	30	
tert-Butyl alcohol (TBA)	39.1		,,	50.0		78.2	80-127	Low Bias	0.536	30	
Tetrachloroethylene	45.9		"	50.0		91.8	80-127	Lon Dias	3.32	30	
Toluene	47.2		"	50.0		94.3	85-121		0.782	30	
trans-1,2-Dichloroethylene	50.4		"	50.0		101	72-132		1.30	30	
trans-1,3-Dichloropropylene	48.0		"	50.0		96.0	78-132		2.77	30	
Trichloroethylene	47.3		"	50.0		94.6	84-123		1.86	30	
Trichlorofluoromethane	60.7		"	50.0		121	62-140		2.08	30	
Vinyl acetate	40.4			50.0		80.7	67-136		7.85	30	
Vinyl Chloride	46.7		,,	50.0		93.4	52-130		31.4	30	Non-dir

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York Analytical Laboratories, Inc.

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

Batch	BE910'	74 -	EPA	5035A
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LCS Dup (BE91074-BSD1)					Prepared & Analyzed: 05/17/2019
Surrogate: SURR: 1,2-Dichloroethane-d4	50.5	ug/L	50.0	101	77-125
Surrogate: SURR: Toluene-d8	47.5	"	50.0	95.0	85-120
Surrogate: SURR: p-Bromofluorobenzene	47.7	"	50.0	95.5	76-130

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

CS (DE01020 DS2)						Dec	pared: 05/16/2010 Analyzad: 05/17/201
LCS (BE91020-BS2)	ND.	5.00	/*				pared: 05/16/2019 Analyzed: 05/17/201
,1-Biphenyl	ND	5.00	ug/L "			33-95	
,2,4,5-Tetrachlorobenzene	ND	5.00	"	1.00		26-120	I Di
,2,4-Trichlorobenzene	ND	5.00		1.00		20-118	Low Bias
2-Dichlorobenzene	ND	5.00	"	1.00		29-111	Low Bias
,2-Diphenylhydrazine (as Azobenzene)	ND	5.00	"	1.00		16-141	Low Bias
3-Dichlorobenzene	ND	5.00	"	1.00		23-117	Low Bias
4-Dichlorobenzene	ND	5.00	"	1.00		30-105	Low Bias
3,4,6-Tetrachlorophenol	ND	5.00	"			30-130	
4,5-Trichlorophenol	ND	5.00	"	1.00		32-114	Low Bias
4,6-Trichlorophenol	ND	5.00	"	1.00		35-118	Low Bias
4-Dichlorophenol	ND	5.00	"	1.00		25-116	Low Bias
4-Dimethylphenol	ND	5.00	"	1.00		15-116	Low Bias
4-Dinitrophenol	ND	5.00	"	1.00		10-170	Low Bias
4-Dinitrotoluene	ND	5.00	"	1.00		41-128	Low Bias
6-Dinitrotoluene	ND	5.00	"	1.00		45-116	Low Bias
Chloronaphthalene	ND	5.00	"	1.00		33-112	Low Bias
Chlorophenol	ND	5.00	"	1.00		15-120	Low Bias
-Methylnaphthalene	ND	5.00	"	1.00		24-118	Low Bias
Methylphenol	ND	5.00	"	1.00		10-110	Low Bias
Nitroaniline	ND	5.00	"	1.00		34-129	Low Bias
Nitrophenol	ND	5.00	"	1.00		28-118	Low Bias
& 4-Methylphenols	ND	5.00	"	1.00		10-107	Low Bias
3-Dichlorobenzidine	ND	5.00	"			15-187	
Nitroaniline	ND	5.00	"	1.00		24-134	Low Bias
6-Dinitro-2-methylphenol	ND	5.00	"	1.00		10-153	Low Bias
Bromophenyl phenyl ether	ND	5.00	"	1.00		34-120	Low Bias
Chloro-3-methylphenol	ND	5.00	"	1.00		20-120	Low Bias
Chloroaniline	ND	5.00	"	1.00		10-147	Low Bias
Chlorophenyl phenyl ether	ND	5.00	"	1.00		27-121	Low Bias
Nitroaniline	ND	5.00	"	1.00		13-134	Low Bias
Nitrophenol	ND	5.00	"	1.00		10-131	Low Bias
cenaphthene	0.750	0.0500	"	1.00	75.0	25-116	
cenaphthylene	0.730	0.0500	"	1.00	73.0	26-116	
cetophenone	ND	5.00	"			25-110	
niline	ND	5.00	"	1.00		10-117	Low Bias
nthracene	0.860	0.0500	"	1.00	86.0	25-123	
enzaldehyde	ND	5.00	"			29-117	
enzo(a)anthracene	0.840	0.0500	"	1.00	84.0	33-125	
enzo(a)pyrene	0.910	0.0500	"	1.00	91.0	32-132	
enzo(b)fluoranthene	0.890	0.0500	"	1.00	89.0	22-137	
enzo(g,h,i)perylene	1.13	0.0500	"	1.00	113	10-138	
enzo(k)fluoranthene	0.870	0.0500	"	1.00	87.0	20-137	
enzoic acid	ND	50.0	"	1.00	07.0	30-130	
enzyl alcohol	ND ND	5.00	"	1.00		10-117	Low Bias
enzyl butyl phthalate	ND ND	5.00	"	1.00		29-133	Low Bias
is(2-chloroethoxy)methane	ND ND	5.00	"	1.00		10-154	Low Bias
is(2-chloroethyl)ether	ND ND	5.00	"	1.00		17-125	Low Bias
is(2-chloroisopropyl)ether			"				Low Bias
	ND	5.00	"	1.00	100	10-139	LOW DIAS
is(2-ethylhexyl)phthalate	1.00	0.500	"	1.00	100	10-189	
aprolactam arbazole	ND ND	5.00 5.00	"	1.00		10-137 42-126	Low Bias

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

LCS (BE91020-BS2)						Prep	pared: 05/16/2019 Analyzed: 05/17/2019
Chrysene	0.860	0.0500	ug/L	1.00	86.0	32-124	
Dibenzo(a,h)anthracene	1.17	0.0500	"	1.00	117	16-133	
Dibenzofuran	ND	5.00	"	1.00		36-113	Low Bias
Diethyl phthalate	ND	5.00	"	1.00		38-115	Low Bias
Dimethyl phthalate	ND	5.00	"	1.00		38-129	Low Bias
Di-n-butyl phthalate	ND	5.00	"	1.00		31-120	Low Bias
Di-n-octyl phthalate	ND	5.00	"	1.00		21-149	Low Bias
Fluoranthene	1.00	0.0500	"	1.00	100	32-121	
Fluorene	0.820	0.0500	"	1.00	82.0	28-118	
Hexachlorobenzene	ND	0.0200	"	1.00		23-124	Low Bias
Hexachlorobutadiene	ND	0.500	"	1.00		15-123	Low Bias
Hexachlorocyclopentadiene	ND	10.0	"	1.00		10-130	Low Bias
Hexachloroethane	ND	0.500	"	1.00		18-115	Low Bias
Indeno(1,2,3-cd)pyrene	1.13	0.0500	"	1.00	113	15-135	
Isophorone	ND	5.00	"	1.00		25-127	Low Bias
Naphthalene	0.900	0.0500	"	1.00	90.0	18-120	
Nitrobenzene	ND	0.250	"	1.00		21-121	Low Bias
N-Nitrosodimethylamine	ND	0.500	"	1.00		10-124	Low Bias
N-nitroso-di-n-propylamine	ND	5.00	"	1.00		26-122	Low Bias
N-Nitrosodiphenylamine	ND	5.00	"	1.00		23-149	Low Bias
Pentachlorophenol	0.520	0.250	"	1.00	52.0	10-156	
Phenanthrene	0.860	0.0500	"	1.00	86.0	24-127	
Phenol	ND	5.00	"	1.00		10-110	Low Bias
Pyrene	0.730	0.0500	"	1.00	73.0	31-132	
Pyridine	ND	5.00	"	1.00		10-90	Low Bias
Surrogate: SURR: 2-Fluorophenol	0.00		"	50.0		19.7-63.1	
Surrogate: SURR: Phenol-d5	0.00		"	50.0		10.1-41.7	
Surrogate: SURR: Nitrobenzene-d5	0.00		"	25.0		50.2-113	
Surrogate: SURR: 2-Fluorobiphenyl	0.00		"	25.0		39.9-105	
Surrogate: SURR: 2,4,6-Tribromophenol	0.00		"	50.0		39.3-151	

25.0

0.00

Surrogate: SURR: Terphenyl-d14

30.7-106



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

Allaryte	Result	Lillit	Omis	Level	Result	/oKEC	Lillits	1 lug	KI D	Lillin	1 lug
Batch BE91020 - EPA 3510C											
Matrix Spike (BE91020-MS1)	*Source sample: 191	E0591-32 (M	W002)				Pre	pared: 05/16/2	019 Analy:	zed: 05/23/2	2019
1,1-Biphenyl	42.6	11.1	ug/L	27.8	ND	153	26-79	High Bias			
1,2,4,5-Tetrachlorobenzene	65.8	11.1	"	27.8	ND	237	33-90	High Bias			
1,2,4-Trichlorobenzene	46.8	11.1	"	27.8	ND	169	31-88	High Bias			
1,2-Dichlorobenzene	40.9	11.1	"	27.8	ND	147	24-93	High Bias			
1,2-Diphenylhydrazine (as Azobenzene)	43.5	11.1	"	27.8	ND	157	21-107	High Bias			
1,3-Dichlorobenzene	40.7	11.1	"	27.8	ND	146	28-86	High Bias			
1,4-Dichlorobenzene	42.6	11.1	"	27.8	ND	153	25-85	High Bias			
2,3,4,6-Tetrachlorophenol	37.5	11.1	"	27.8	ND	135	30-130	High Bias			
2,4,5-Trichlorophenol	40.5	11.1	"	27.8	ND	146	43-96	High Bias			
2,4,6-Trichlorophenol	47.7	11.1	"	27.8	ND	172	46-94	High Bias			
2,4-Dichlorophenol	47.9	11.1	"	27.8	ND	172	26-101	High Bias			
2,4-Dimethylphenol	43.6	11.1	"	27.8	ND	157	10-104	High Bias			
2,4-Dinitrophenol	17.8	11.1	"	27.8	ND	64.0	10-146	Ü			
2,4-Dinitrotoluene	43.4	11.1	"	27.8	ND	156	30-108	High Bias			
2,6-Dinitrotoluene	47.1	11.1	"	27.8	ND	169	38-98	High Bias			
2-Chloronaphthalene	41.9	11.1	"	27.8	ND	151	30-89	High Bias			
2-Chlorophenol	43.9	11.1	"	27.8	ND	158	24-98	High Bias			
2-Methylnaphthalene	46.0	11.1	,,	27.8	ND	166	10-112	High Bias			
2-Methylphenol	31.8	11.1	,,	27.8	ND	115	10-112	mgn Dias			
2-Nitroaniline	43.2	11.1	,,	27.8				High Bias			
2-Nitrophenol	50.8	11.1		27.8	ND ND	155 183	25-110 10-139	High Bias			
3- & 4-Methylphenols			"					High Bias			
3,3-Dichlorobenzidine	26.8	11.1	,,	27.8	ND	96.4	10-91	-			
	41.0	11.1	,,	27.8	ND	148	10-140	High Bias			
3-Nitroaniline	31.6	11.1		27.8	ND	114	22-111	High Bias			
4,6-Dinitro-2-methylphenol	18.8	11.1		27.8	ND	67.6	10-140	II. 1 D.			
4-Bromophenyl phenyl ether	46.2	11.1	"	27.8	ND	166	30-108	High Bias			
4-Chloro-3-methylphenol	45.9	11.1	"	27.8	ND	165	11-109	High Bias			
4-Chloroaniline	29.3	11.1	"	27.8	ND	106	10-116	*** 1 5.			
4-Chlorophenyl phenyl ether	44.9	11.1	"	27.8	ND	162	39-85	High Bias			
4-Nitroaniline	42.6	11.1	"	27.8	ND	153	11-132	High Bias			
4-Nitrophenol	22.6	11.1	"	27.8	ND	81.3	10-82				
Acenaphthene	37.8	0.111	"	27.8	ND	136	31-90	High Bias			
Acenaphthylene	38.4	0.111	"	27.8	ND	138	32-83	High Bias			
Acetophenone	43.4	11.1	"	27.8	ND	156	14-102	High Bias			
Aniline	19.6	11.1	"	27.8	ND	70.7	10-80				
Anthracene	49.5	0.111	"	27.8	ND	178	35-92	High Bias			
Benzaldehyde	59.9	11.1	"	27.8	ND	216	13-87	High Bias			
Benzo(a)anthracene	49.1	0.111	"	27.8	0.300	176	17-117	High Bias			
Benzo(a)pyrene	53.2	0.111	"	27.8	0.344	190	42-110	High Bias			
Benzo(b)fluoranthene	52.6	0.111	"	27.8	0.289	188	18-135	High Bias			
Benzo(g,h,i)perylene	51.4	0.111	"	27.8	0.222	184	10-125	High Bias			
Benzo(k)fluoranthene	47.3	0.111	"	27.8	0.267	169	33-107	High Bias			
Benzoic acid	ND	111	"	31.7	ND		10-162	Low Bias			
Benzyl alcohol	31.8	11.1	"	27.8	ND	114	10-102	High Bias			
Benzyl butyl phthalate	58.4	11.1	"	27.8	ND	210	10-133	High Bias			
Bis(2-chloroethoxy)methane	47.8	11.1	"	27.8	ND	172	18-105	High Bias			
Bis(2-chloroethyl)ether	47.6	11.1	"	27.8	ND	171	10-108	High Bias			
Bis(2-chloroisopropyl)ether	55.7	11.1	"	27.8	ND	201	13-116	High Bias			
Bis(2-ethylhexyl)phthalate	61.7	1.11	"	27.8	ND	222	10-119	High Bias			
Caprolactam	6.13	11.1	"	27.8	ND	22.1	10-75	-			
Carbazole	50.1	11.1	"	27.8	ND	180	36-108	High Bias			
	JU. 1	11.1		27.0	1110	100	50-100				

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

Matrix Spike (BE91020-MS1)	*Source sample: 19	E0591-32 (M	W002)				Prep	Prepared: 05/16/2019 Analyzed: 05/23/2019		
Chrysene	47.3	0.111	ug/L	27.8	0.311	169	23-111	High Bias		
Dibenzo(a,h)anthracene	52.4	0.111	"	27.8	ND	189	10-118	High Bias		
Dibenzofuran	40.5	11.1	"	27.8	ND	146	34-92	High Bias		
Diethyl phthalate	40.8	11.1	"	27.8	ND	147	33-98	High Bias		
Dimethyl phthalate	42.0	11.1	"	27.8	ND	151	18-116	High Bias		
Di-n-butyl phthalate	53.7	11.1	"	27.8	ND	193	25-97	High Bias		
Di-n-octyl phthalate	70.0	11.1	"	27.8	ND	252	10-137	High Bias		
Fluoranthene	50.5	0.111	"	27.8	0.611	180	35-98	High Bias		
Fluorene	40.6	0.111	"	27.8	ND	146	37-87	High Bias		
Hexachlorobenzene	44.2	0.0444	"	27.8	ND	159	16-106	High Bias		
Hexachlorobutadiene	49.0	1.11	"	27.8	ND	176	10-120	High Bias		
Hexachlorocyclopentadiene	14.2	22.2	"	27.8	ND	51.0	10-79			
Hexachloroethane	38.9	1.11	"	27.8	ND	140	10-108	High Bias		
Indeno(1,2,3-cd)pyrene	51.8	0.111	"	27.8	0.200	186	10-120	High Bias		
Isophorone	50.2	11.1	"	27.8	ND	181	25-103	High Bias		
Naphthalene	45.3	0.111	"	27.8	0.122	163	27-92	High Bias		
Nitrobenzene	50.4	0.556	"	27.8	ND	181	10-127	High Bias		
N-Nitrosodimethylamine	23.3	1.11	"	27.8	ND	84.0	10-81	High Bias		
N-nitroso-di-n-propylamine	45.3	11.1	"	27.8	ND	163	19-115	High Bias		
N-Nitrosodiphenylamine	47.8	11.1	"	27.8	ND	172	31-112	High Bias		
Pentachlorophenol	44.8	0.556	"	27.8	ND	161	10-149	High Bias		
Phenanthrene	48.9	0.111	"	27.8	0.289	175	34-94	High Bias		
Phenol	19.9	11.1	"	27.8	ND	71.8	10-61	High Bias		
Pyrene	51.3	0.111	"	27.8	0.744	182	25-122	High Bias		
Pyridine	21.4	11.1	"	28.1	ND	76.4	10-78			
Surrogate: SURR: 2-Fluorophenol	55.6		"	55.6		100	19.7-63.1			
C CLIDD. Dl 1 45	22.1		"	55 (57.0	10 1 41 7			

Surrogate: SURR: Phenol-d5	32.1	"	55.6	57.8 10.1-41.7
Surrogate: SURR: Nitrobenzene-d5	48.2	"	27.8	173 50.2-113
Surrogate: SURR: 2-Fluorobiphenyl	40.8	"	27.8	147 39.9-105
Surrogate: SURR: 2,4,6-Tribromophenol	76.3	"	55.6	137 39.3-151
Surrogate: SURR: Terphenyl-d14	45.9	"	27.8	165 30.7-106



		Reporting		Spike	Source*		%REC			RPD		1
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag	

Analyte	Result	Limit	Units	Level	Result	%REC	%REC Limits	Flag	RPD	Limit	Flag
Datah DE01020 EDA 2510C											
Batch BE91020 - EPA 3510C Matrix Spike Dup (BE91020-MSD1)	*Source sample: 19	0F0591-32 (M	W002)				Pre	pared: 05/16/2	.019 Analyz	ed: 05/23/2	2019
1,1-Biphenyl	40.6	11.4	ug/L	28.6	ND	142	26-79	High Bias	4.72	25	
1,2,4,5-Tetrachlorobenzene	60.6	11.4	"	28.6	ND	212	33-90	High Bias	8.27	25	
1,2,4-Trichlorobenzene	43.8	11.4	"	28.6	ND	153	31-88	High Bias	6.63	25	
1,2-Dichlorobenzene	38.7	11.4	"	28.6	ND	135	24-93	High Bias	5.68	25	
1,2-Diphenylhydrazine (as Azobenzene)	40.9	11.4	"	28.6	ND	143	21-107	High Bias	6.04	25	
1,3-Dichlorobenzene	38.3	11.4	"	28.6	ND	134	28-86	High Bias	5.97	25	
1,4-Dichlorobenzene	39.4	11.4	"	28.6	ND	138	25-85	High Bias	7.73	25	
2,3,4,6-Tetrachlorophenol	36.1	11.4	"	28.6	ND	126	30-130	8	3.92	25	
2,4,5-Trichlorophenol	40.5	11.4	"	28.6	ND	142	43-96	High Bias	0.0768	25	
2,4,6-Trichlorophenol	45.3	11.4	"	28.6	ND	159	46-94	High Bias	5.22	25	
2,4-Dichlorophenol	45.7	11.4	"	28.6	ND	160	26-101	High Bias	4.70	25	
2,4-Dimethylphenol	40.6	11.4	,,	28.6	ND	142	10-104	High Bias	7.13	25	
2,4-Dinitrophenol	21.9	11.4	,,	28.6	ND	76.8	10-104	THEN DIG	21.0	25	
2,4-Dinitrotoluene	42.9	11.4	"	28.6	ND ND	150	30-108	High Bias	0.994	25	
2,6-Dinitrotoluene	44.5	11.4	,,	28.6	ND ND	156	38-98	High Bias	5.55	25	
2-Chloronaphthalene	39.7	11.4	,,	28.6	ND ND	139	30-89	High Bias	5.30	25	
2-Chlorophenol	41.4	11.4	"	28.6		139	24-98	High Bias	5.69	25	
2-Methylnaphthalene			"		ND		24-98 10-112	High Bias	4.81	25	
2-Methylphenol	43.8	11.4	"	28.6	ND	153		High Dias	0.0139	25	
2-Methylphenol 2-Nitroaniline	31.8	11.4	,,	28.6	ND	111	10-134	High Dies		25	
	41.8	11.4	,,	28.6	ND	146	25-110	High Bias	3.12	25	
2-Nitrophenol	50.2	11.4	,,	28.6	ND	176	10-139	High Bias	1.24		
3- & 4-Methylphenols	26.0	11.4	,,	28.6	ND	91.1	10-91	High Bias	2.82	25	
3,3-Dichlorobenzidine	40.4	11.4		28.6	ND	141	10-140	High Bias	1.61	25	
3-Nitroaniline	30.5	11.4	"	28.6	ND	107	22-111		3.65	25	
4,6-Dinitro-2-methylphenol	22.2	11.4	"	28.6	ND	77.6	10-140	II. 1 D.	16.6	25	
4-Bromophenyl phenyl ether	45.0	11.4	"	28.6	ND	157	30-108	High Bias	2.77	25	
4-Chloro-3-methylphenol	44.3	11.4	"	28.6	ND	155	11-109	High Bias	3.58	25	
4-Chloroaniline	28.0	11.4	"	28.6	ND	98.2	10-116		4.41	25	
4-Chlorophenyl phenyl ether	43.8	11.4	"	28.6	ND	153	39-85	High Bias	2.57	25	
4-Nitroaniline	42.4	11.4	"	28.6	ND	149	11-132	High Bias	0.363	25	
4-Nitrophenol	24.6	11.4	"	28.6	ND	86.0	10-82	High Bias	8.46	25	
Acenaphthene	36.5	0.114	"	28.6	ND	128	31-90	High Bias	3.55	25	
Acenaphthylene	36.0	0.114	"	28.6	ND	126	32-83	High Bias	6.27	25	
Acetophenone	40.8	11.4	"	28.6	ND	143	14-102	High Bias	6.22	25	
Aniline	17.4	11.4	"	28.6	ND	60.8	10-80		12.3	25	
Anthracene	49.1	0.114	"	28.6	ND	172	35-92	High Bias	0.933	25	
Benzaldehyde	55.7	11.4	"	28.6	ND	195	13-87	High Bias	7.32	25	
Benzo(a)anthracene	50.2	0.114	"	28.6	0.300	175	17-117	High Bias	2.23	25	
Benzo(a)pyrene	55.4	0.114	"	28.6	0.344	193	42-110	High Bias	3.90	25	
Benzo(b)fluoranthene	54.1	0.114	"	28.6	0.289	188	18-135	High Bias	2.90	25	
Benzo(g,h,i)perylene	53.6	0.114	"	28.6	0.222	187	10-125	High Bias	4.02	25	
Benzo(k)fluoranthene	49.5	0.114	"	28.6	0.267	172	33-107	High Bias	4.68	25	
Benzoic acid	ND	114	"	32.6	ND		10-162	Low Bias		25	
Benzyl alcohol	32.2	11.4	"	28.6	ND	113	10-102	High Bias	1.13	25	
Benzyl butyl phthalate	59.5	11.4	"	28.6	ND	208	10-133	High Bias	1.71	25	
Bis(2-chloroethoxy)methane	44.5	11.4	"	28.6	ND	156	18-105	High Bias	7.00	25	
Bis(2-chloroethyl)ether	44.1	11.4	"	28.6	ND	154	10-108	High Bias	7.55	25	
Bis(2-chloroisopropyl)ether	53.3	11.4	"	28.6	ND	187	13-116	High Bias	4.33	25	
Bis(2-ethylhexyl)phthalate	64.0	1.14	"	28.6	ND	224	10-119	High Bias	3.61	25	
Caprolactam	6.79	11.4	"	28.6	ND	23.8	10-75		10.1	25	
Carbazole	50.4	11.4	"	28.6	ND	177	36-108	High Bias	0.754	25	

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

Matrix Spike Dup (BE91020-MSD1)	*Source sample: 19	E0591-32 (M	W002)				Prep	oared: 05/16/2	019 Analyze	ed: 05/23	2019
Chrysene	47.6	0.114	ug/L	28.6	0.311	165	23-111	High Bias	0.490	25	
Dibenzo(a,h)anthracene	56.6	0.114	"	28.6	ND	198	10-118	High Bias	7.73	25	
Dibenzofuran	38.6	11.4	"	28.6	ND	135	34-92	High Bias	4.71	25	
Diethyl phthalate	40.7	11.4	"	28.6	ND	142	33-98	High Bias	0.282	25	
Dimethyl phthalate	41.1	11.4	"	28.6	ND	144	18-116	High Bias	2.23	25	
Di-n-butyl phthalate	55.8	11.4	"	28.6	ND	195	25-97	High Bias	3.85	25	
Di-n-octyl phthalate	73.8	11.4	"	28.6	ND	258	10-137	High Bias	5.26	25	
Fluoranthene	52.0	0.114	"	28.6	0.611	180	35-98	High Bias	2.77	25	
Fluorene	39.7	0.114	"	28.6	ND	139	37-87	High Bias	2.35	25	
Hexachlorobenzene	43.1	0.0457	"	28.6	ND	151	16-106	High Bias	2.66	25	
Hexachlorobutadiene	45.2	1.14	"	28.6	ND	158	10-120	High Bias	8.04	25	
Hexachlorocyclopentadiene	12.0	22.9	"	28.6	ND	42.1	10-79		16.4	25	
Hexachloroethane	36.7	1.14	"	28.6	ND	128	10-108	High Bias	5.77	25	
Indeno(1,2,3-cd)pyrene	54.4	0.114	"	28.6	0.200	190	10-120	High Bias	4.85	25	
Isophorone	48.3	11.4	"	28.6	ND	169	25-103	High Bias	3.82	25	
Naphthalene	42.4	0.114	"	28.6	0.122	148	27-92	High Bias	6.58	25	
Nitrobenzene	47.8	0.571	"	28.6	ND	167	10-127	High Bias	5.31	25	
N-Nitrosodimethylamine	25.6	1.14	"	28.6	ND	89.6	10-81	High Bias	9.26	25	
N-nitroso-di-n-propylamine	42.9	11.4	"	28.6	ND	150	19-115	High Bias	5.31	25	
N-Nitrosodiphenylamine	44.9	11.4	"	28.6	ND	157	31-112	High Bias	6.37	25	
Pentachlorophenol	44.0	0.571	"	28.6	ND	154	10-149	High Bias	1.70	25	
Phenanthrene	48.4	0.114	"	28.6	0.289	168	34-94	High Bias	1.08	25	
Phenol	20.0	11.4	"	28.6	ND	69.9	10-61	High Bias	0.220	25	
Pyrene	49.8	0.114	"	28.6	0.744	172	25-122	High Bias	2.93	25	
Pyridine	15.5	11.4	"	28.9	ND	53.9	10-78		31.9	25	Non-di
Surrogate: SURR: 2-Fluorophenol	53.0		"	57.1		92.7	19.7-63.1				
Surrogate: SURR: Phenol-d5	32.7		"	57.1		57.2	10.1-41.7				
Surrogate: SURR: Nitrobenzene-d5	46.7		"	28.6		163	50.2-113				
Surrogate: SURR: 2-Fluorobiphenyl	39.1		"	28.6		137	39.9-105				

Surrogate: SURR: 2-Fluorophenol	53.0	"	57.1	92.7	19.7-63.1
Surrogate: SURR: Phenol-d5	32.7	"	57.1	57.2	10.1-41.7
Surrogate: SURR: Nitrobenzene-d5	46.7	"	28.6	163	50.2-113
Surrogate: SURR: 2-Fluorobiphenyl	39.1	"	28.6	137	39.9-105
Surrogate: SURR: 2,4,6-Tribromophenol	78.2	"	57.1	137	39.3-151
Surrogate: SURR: Terphenyl-d14	46.8	"	28.6	164	30.7-106

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

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE91142 - EPA 3550C											
LCS (BE91142-BS1)							Prepa	ared: 05/20/2	2019 Analyz	ed: 05/22/2	2019
1,1-Biphenyl	0.613	0.0416	mg/kg wet	0.831		73.8	18-111				
1,2,4,5-Tetrachlorobenzene	0.654	0.0830	"	0.831		78.8	21-131				
1,2,4-Trichlorobenzene	0.561	0.0416	"	0.831		67.6	10-140				
1,2-Dichlorobenzene	0.556	0.0416	"	0.831		67.0	34-108				
1,2-Diphenylhydrazine (as Azobenzene)	0.585	0.0416	"	0.831		70.5	17-137				
1,3-Dichlorobenzene	0.544	0.0416	"	0.831		65.5	33-110				
1,4-Dichlorobenzene	0.557	0.0416	"	0.831		67.0	32-104				
2,3,4,6-Tetrachlorophenol	0.547	0.0830	"	0.831		65.9	30-130				
2,4,5-Trichlorophenol	0.548	0.0416	"	0.831		66.0	27-118				
2,4,6-Trichlorophenol	0.606	0.0416	"	0.831		73.0	31-120				
2,4-Dichlorophenol	0.609	0.0416	"	0.831		73.3	20-127				
2,4-Dimethylphenol	0.609	0.0416	"	0.831		73.3	14-132				
2,4-Dinitrophenol	0.711	0.0830	"	0.831		85.6	10-171				
2,4-Dinitrotoluene	0.640	0.0416	"	0.831		77.0	34-131				
2,6-Dinitrotoluene	0.673	0.0416	"	0.831		81.0	31-128				
2-Chloronaphthalene	0.574	0.0416	"	0.831		69.1	31-117				
2-Chlorophenol	0.594	0.0416	"	0.831		71.5	33-113				
2-Methylnaphthalene	0.613	0.0416	"	0.831		73.8	12-138				
2-Methylphenol	0.519	0.0416	"	0.831		62.5	10-136				
2-Nitroaniline	0.669	0.0830	"	0.831		80.6	27-132				
2-Nitrophenol	0.679	0.0416	"	0.831		81.8	17-129				
3- & 4-Methylphenols	0.467	0.0416	"	0.831		56.2	29-103				
3,3-Dichlorobenzidine	0.731	0.0416	"	0.831		88.0	22-149				
3-Nitroaniline	0.581	0.0830	"	0.831		69.9	20-133				
4,6-Dinitro-2-methylphenol	0.732	0.0830	"	0.831		88.2	10-143				
4-Bromophenyl phenyl ether	0.617	0.0416	"	0.831		74.2	29-120				
4-Chloro-3-methylphenol	0.618	0.0416	"	0.831		74.4	24-129				
4-Chloroaniline	0.502	0.0416	"	0.831		60.4	10-132				
4-Chlorophenyl phenyl ether	0.581	0.0416	"	0.831		70.0	27-124				
4-Nitroaniline	0.644	0.0830	"	0.831		77.5	16-128				
4-Nitrophenol	0.611	0.0830	"	0.831		73.6	10-141				
Acenaphthene	0.560	0.0416	"	0.831		67.5	30-121				
Acenaphthylene	0.579	0.0416	"	0.831		69.7	30-115				
Acetophenone	0.570	0.0416	"	0.831		68.6	20-112				
Aniline	0.548	0.166	"	0.831		66.0	10-119				
Anthracene	0.614	0.0416	"	0.831		74.0	34-118				
Atrazine	0.699	0.0416	"	0.831		84.2	26-112				
Benzaldehyde	0.728	0.0416	"	0.831		87.6	21-100				
Benzo(a)anthracene	0.614	0.0416	"	0.831		73.9	32-122				
Benzo(a)pyrene	0.650	0.0416	"	0.831		78.3	29-133				
Benzo(b)fluoranthene	0.639	0.0416	"	0.831		77.0	25-133				
Benzo(g,h,i)perylene	0.642	0.0416	"	0.831		77.3	10-143				
Benzo(k)fluoranthene	0.574	0.0416	"	0.831		69.1	25-128				
Benzoic acid	0.415	0.0416	"	0.947		43.8	10-140				
Benzyl alcohol	0.651	0.0416	"	0.831		78.4	30-115				
Benzyl butyl phthalate	0.764	0.0416	"	0.831		92.0	26-126				
Bis(2-chloroethoxy)methane	0.601	0.0416	"	0.831		72.4	19-132				
Bis(2-chloroethyl)ether	0.564	0.0416	"	0.831		67.9	19-132				
Bis(2-chloroisopropyl)ether	0.656	0.0416	"	0.831		79.0	20-135				
Bis(2-ethylhexyl)phthalate	0.741	0.0416	"	0.831		89.2	10-155				
Caprolactam	0.686	0.0410	"	0.831		82.6	10-133				

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

Batch BE91142 - EPA 3550C						
LCS (BE91142-BS1)						Prepared: 05/20/2019 Analyzed: 05/22/2019
Carbazole	0.611	0.0416	mg/kg wet	0.831	73.6	35-123
Chrysene	0.578	0.0416	"	0.831	69.6	32-123
Dibenzo(a,h)anthracene	0.641	0.0416	"	0.831	77.2	10-136
Dibenzofuran	0.582	0.0416	"	0.831	70.0	29-121
Diethyl phthalate	0.605	0.0416	"	0.831	72.8	34-116
Dimethyl phthalate	0.594	0.0416	"	0.831	71.6	35-124
Di-n-butyl phthalate	0.664	0.0416	"	0.831	80.0	31-116
Di-n-octyl phthalate	0.869	0.0416	"	0.831	105	26-136
Fluoranthene	0.635	0.0416	"	0.831	76.4	33-122
Fluorene	0.579	0.0416	"	0.831	69.7	29-123
Hexachlorobenzene	0.579	0.0416	"	0.831	69.7	21-124
Hexachlorobutadiene	0.565	0.0416	"	0.831	68.0	10-149
Hexachlorocyclopentadiene	0.629	0.0416	"	0.831	75.7	10-129
Hexachloroethane	0.568	0.0416	"	0.831	68.4	28-108
Indeno(1,2,3-cd)pyrene	0.669	0.0416	"	0.831	80.6	10-135
Isophorone	0.612	0.0416	"	0.831	73.7	20-132
Naphthalene	0.589	0.0416	"	0.831	70.9	23-124
Nitrobenzene	0.584	0.0416	"	0.831	70.4	13-132
N-Nitrosodimethylamine	0.562	0.0416	"	0.831	67.7	11-129
N-nitroso-di-n-propylamine	0.597	0.0416	"	0.831	71.9	24-119
N-Nitrosodiphenylamine	0.720	0.0416	"	0.831	86.6	22-152
Pentachlorophenol	0.564	0.0416	"	0.831	67.9	10-139
Phenanthrene	0.609	0.0416	"	0.831	73.4	33-123
Phenol	0.585	0.0416	"	0.831	70.5	23-115
Pyrene	0.593	0.0416	"	0.831	71.4	32-130
Pyridine	0.422	0.166	"	0.831	50.8	10-91
Surrogate: SURR: 2-Fluorophenol	1.16		"	1.66	70.0	20-108
Surrogate: SURR: Phenol-d5	1.11		"	1.66	67.1	23-114
Surrogate: SURR: Nitrobenzene-d5	0.612		"	0.831	73.7	22-108
Surrogate: SURR: 2-Fluorobiphenyl	0.573		"	0.831	69.0	21-113
Surrogate: SURR: 2,4,6-Tribromophenol	1.27		"	1.66	76.4	19-110
Surrogate: SURR: Terphenyl-d14	0.598		"	0.831	72.0	24-116

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

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Matrix Spike (BE91142-MS1)	*Source sample: 19E	E0591-04 (S	B002 (4-6))				Prep	pared: 05/20/2019 Analyzed: 05/22/2019
1,1-Biphenyl	ND	2.68	mg/kg dry	1.07	ND		10-130	Low Bias
1,2,4,5-Tetrachlorobenzene	ND	5.36	"	1.07	ND		10-133	Low Bias
1,2,4-Trichlorobenzene	ND	2.68	"	1.07	ND		10-127	Low Bias
1,2-Dichlorobenzene	ND	2.68	"	1.07	ND		14-111	Low Bias
,2-Diphenylhydrazine (as Azobenzene)	ND	2.68	"	1.07	ND		10-144	Low Bias
,3-Dichlorobenzene	ND	2.68	"	1.07	ND		11-111	Low Bias
1,4-Dichlorobenzene	ND	2.68	"	1.07	ND		10-106	Low Bias
2,3,4,6-Tetrachlorophenol	ND	5.36	"	1.07	ND		30-130	Low Bias
2,4,5-Trichlorophenol	ND	2.68	"	1.07	ND		10-127	Low Bias
2,4,6-Trichlorophenol	ND	2.68	"	1.07	ND		10-132	Low Bias
2,4-Dichlorophenol	ND	2.68	"	1.07	ND		10-128	Low Bias
2,4-Dimethylphenol	ND	2.68	"	1.07	ND		10-137	Low Bias
2,4-Dinitrophenol	ND	5.36	"	1.07	ND		10-171	Low Bias
2,4-Dinitrotoluene	ND	2.68	"	1.07	ND		16-135	Low Bias
2,6-Dinitrotoluene	36.8	2.68	"	1.07	ND	NR	18-131	High Bias
2-Chloronaphthalene	ND	2.68	"	1.07	ND	. 111	10-131	Low Bias
2-Chlorophenol	ND	2.68	"	1.07	ND		15-116	Low Bias
2-Methylnaphthalene	ND	2.68	"	1.07	ND		10-147	Low Bias
2-Methylphenol	ND	2.68	"	1.07	ND		10-136	Low Bias
2-Nitroaniline	ND	5.36	"	1.07	ND		10-130	Low Bias
2-Nitrophenol	ND	2.68	"	1.07	ND		10-137	Low Bias
- & 4-Methylphenols	ND	2.68	"	1.07	ND		10-123	Low Bias
.3-Dichlorobenzidine	ND	2.68	"	1.07	ND		10-125	Low Bias
-Nitroaniline	ND ND	5.36	,,	1.07	ND ND		12-133	Low Bias
4,6-Dinitro-2-methylphenol	ND ND		"	1.07	ND ND		10-155	Low Bias
-Bromophenyl phenyl ether	ND ND	5.36 2.68	"	1.07	ND ND		14-128	Low Bias
I-Chloro-3-methylphenol	ND ND	2.68	,,	1.07	ND ND		10-134	Low Bias
I-Chloroaniline	ND ND		,,					Low Bias
I-Chlorophenyl phenyl ether		2.68	,,	1.07	ND		10-145	Low Bias
I-Nitroaniline	ND	2.68	"	1.07	ND		14-130	Low Bias
4-Nitrophenol	ND	5.36	"	1.07	ND		10-147	Low Bias
•	ND	5.36	"	1.07	ND		10-137	Low Bias
Acenaphthele	ND	2.68	"	1.07	ND		10-146	
Acenaphthylene	ND	2.68		1.07	ND		10-134	Low Bias
Acetophenone	ND	2.68	"	1.07	ND		10-116	Low Bias
Aniline	ND	10.7	"	1.07	ND	4.40	10-123	Low Bias
Anthracene	1.50	2.68		1.07	ND	140	10-142	1 D:
Atrazine	ND	2.68	"	1.07	ND		19-115	Low Bias
Benzaldehyde	ND	2.68	"	1.07	ND		10-125	Low Bias
Benzo(a)anthracene	3.75	2.68	"	1.07	3.13	57.9	10-158	
Benzo(a)pyrene	3.56	2.68	"	1.07	3.00	51.9	10-180	
Benzo(b)fluoranthene	3.17	2.68	"	1.07	2.30	81.4	10-200	
Benzo(g,h,i)perylene	2.59	2.68	"	1.07	1.94	61.2	10-138	
Benzo(k)fluoranthene	2.59	2.68	"	1.07	2.30	27.4	10-197	
Benzoic acid	ND	2.68	"	1.22	ND		10-166	Low Bias
Benzyl alcohol	ND	2.68	"	1.07	ND		12-124	Low Bias
Benzyl butyl phthalate	ND	2.68	"	1.07	ND		10-154	Low Bias
Bis(2-chloroethoxy)methane	ND	2.68	"	1.07	ND		10-132	Low Bias
Bis(2-chloroethyl)ether	ND	2.68	"	1.07	ND		10-119	Low Bias
Bis(2-chloroisopropyl)ether	ND	2.68	"	1.07	ND		10-139	Low Bias
Bis(2-ethylhexyl)phthalate	ND	2.68	"	1.07	ND		10-167	Low Bias
Caprolactam	ND	5.36	"	1.07	ND		10-132	Low Bias

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

Datah	RF91142	EDA	3550C

Matrix Spike (BE91142-MS1)	*Source sample: 19E	E0591-04 (S	B002 (4-6))				Pre	pared: 05/20/2019 Analyzed: 05/22/201
Carbazole	ND	2.68	mg/kg dry	1.07	ND		10-167	Low Bias
Chrysene	3.22	2.68	"	1.07	2.68	49.7	10-156	
Dibenzo(a,h)anthracene	ND	2.68	"	1.07	ND		10-137	Low Bias
Dibenzofuran	ND	2.68	"	1.07	ND		10-147	Low Bias
Diethyl phthalate	ND	2.68	"	1.07	ND		20-120	Low Bias
Dimethyl phthalate	ND	2.68	"	1.07	ND		18-131	Low Bias
Di-n-butyl phthalate	ND	2.68	"	1.07	ND		10-137	Low Bias
Di-n-octyl phthalate	ND	2.68	"	1.07	ND		10-180	Low Bias
Fluoranthene	6.48	2.68	"	1.07	5.15	123	10-160	
Fluorene	ND	2.68	"	1.07	ND		10-157	Low Bias
Hexachlorobenzene	ND	2.68	"	1.07	ND		10-137	Low Bias
Hexachlorobutadiene	ND	2.68	"	1.07	ND		10-132	Low Bias
Hexachlorocyclopentadiene	ND	2.68	"	1.07	ND		10-106	Low Bias
Hexachloroethane	ND	2.68	"	1.07	ND		10-110	Low Bias
Indeno(1,2,3-cd)pyrene	2.83	2.68	"	1.07	2.15	63.3	10-144	
Isophorone	ND	2.68	"	1.07	ND		10-132	Low Bias
Naphthalene	ND	2.68	"	1.07	ND		10-141	Low Bias
Nitrobenzene	ND	2.68	"	1.07	ND		10-131	Low Bias
N-Nitrosodimethylamine	ND	2.68	"	1.07	ND		10-126	Low Bias
N-nitroso-di-n-propylamine	ND	2.68	"	1.07	ND		10-125	Low Bias
N-Nitrosodiphenylamine	ND	2.68	"	1.07	ND		10-177	Low Bias
Pentachlorophenol	ND	2.68	"	1.07	ND		10-153	Low Bias
Phenanthrene	4.31	2.68	"	1.07	2.68	152	10-148	High Bias
Phenol	ND	2.68	"	1.07	ND		10-126	Low Bias
Pyrene	5.45	2.68	"	1.07	4.79	61.0	10-165	
Pyridine	ND	10.7	"	1.07	ND		10-83	Low Bias
Surrogate: SURR: 2-Fluorophenol	1.29		"	2.14		60.0	20-108	
Surrogate: SURR: Phenol-d5	1.16		"	2.14		54.0	23-114	
Surrogate: SURR: Nitrobenzene-d5	0.643		"	1.07		60.0	22-108	
Surrogate: SURR: 2-Fluorobiphenyl	0.579		"	1.07		54.0	21-113	
Surrogate: SURR: 2,4,6-Tribromophenol	1.29		"	2.14		60.0	19-110	
Surrogate: SURR: Terphenyl-d14	0.643		"	1.07		60.0	24-116	

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

Ratch	RF91142	_ FDA	3550C

Matrix Spike Dup (BE91142-MSD1)	*Source sample: 19I	E0591-04 (S	B002 (4-6)				Pre	pared: 05/20/2	019 Analyz	ed: 05/22	/2019
1,1-Biphenyl	ND	2.68	mg/kg dry	1.07	ND		10-130	Low Bias		30	
1,2,4,5-Tetrachlorobenzene	ND	5.36	"	1.07	ND		10-133	Low Bias		30	
1,2,4-Trichlorobenzene	ND	2.68	"	1.07	ND		10-127	Low Bias		30	
1,2-Dichlorobenzene	ND	2.68	"	1.07	ND		14-111	Low Bias		30	
1,2-Diphenylhydrazine (as Azobenzene)	ND	2.68	"	1.07	ND		10-144	Low Bias		30	
1,3-Dichlorobenzene	ND	2.68	"	1.07	ND		11-111	Low Bias		30	
1,4-Dichlorobenzene	ND	2.68	"	1.07	ND		10-106	Low Bias		30	
2,3,4,6-Tetrachlorophenol	ND	5.36	"	1.07	ND		30-130	Low Bias		30	
2,4,5-Trichlorophenol	ND	2.68	"	1.07	ND		10-127	Low Bias		30	
2,4,6-Trichlorophenol	ND	2.68	"	1.07	ND		10-132	Low Bias		30	
2,4-Dichlorophenol	ND	2.68	"	1.07	ND		10-128	Low Bias		30	
2,4-Dimethylphenol	ND	2.68	"	1.07	ND		10-137	Low Bias		30	
2,4-Dinitrophenol	ND	5.36	"	1.07	ND		10-171	Low Bias		30	
2,4-Dinitrotoluene	ND	2.68	"	1.07	ND		16-135	Low Bias		30	
2,6-Dinitrotoluene	ND	2.68	"	1.07	ND		18-131	Low Bias		30	
2-Chloronaphthalene	ND	2.68	"	1.07	ND		10-129	Low Bias		30	
2-Chlorophenol	ND	2.68	"	1.07	ND		15-116	Low Bias		30	
2-Methylnaphthalene	ND	2.68	"	1.07	ND		10-147	Low Bias		30	
2-Methylphenol	ND	2.68	"	1.07	ND		10-136	Low Bias		30	
2-Nitroaniline	ND	5.36	"	1.07	ND		10-137	Low Bias		30	
2-Nitrophenol	ND	2.68	"	1.07	ND		10-129	Low Bias		30	
3- & 4-Methylphenols	ND	2.68	"	1.07	ND		10-123	Low Bias		30	
3,3-Dichlorobenzidine	ND	2.68	"	1.07	ND		10-155	Low Bias		30	
3-Nitroaniline	ND	5.36	"	1.07	ND		12-133	Low Bias		30	
4,6-Dinitro-2-methylphenol	ND	5.36	"	1.07	ND		10-155	Low Bias		30	
4-Bromophenyl phenyl ether	ND	2.68	"	1.07	ND		14-128	Low Bias		30	
4-Chloro-3-methylphenol	ND	2.68	"	1.07	ND		10-134	Low Bias		30	
4-Chloroaniline	ND	2.68	"	1.07	ND		10-145	Low Bias		30	
4-Chlorophenyl phenyl ether	ND	2.68	"	1.07	ND		14-130	Low Bias		30	
4-Nitroaniline	ND	5.36	"	1.07	ND		10-147	Low Bias		30	
4-Nitrophenol	ND	5.36	"	1.07	ND		10-137	Low Bias		30	
Acenaphthene	ND	2.68	"	1.07	ND		10-146	Low Bias		30	
Acenaphthylene	ND	2.68	"	1.07	ND		10-134	Low Bias		30	
Acetophenone	ND	2.68	"	1.07	ND		10-116	Low Bias		30	
Aniline	ND	10.7	"	1.07	ND		10-123	Low Bias		30	
Anthracene	ND	2.68	"	1.07	ND		10-142	Low Bias		30	
Atrazine	ND	2.68	"	1.07	ND		19-115	Low Bias		30	
Benzaldehyde	ND	2.68	"	1.07	ND		10-125	Low Bias		30	
Benzo(a)anthracene	2.70	2.68	"	1.07	3.13	NR	10-158	Low Bias	32.6	30	Non-di
Benzo(a)pyrene	2.81	2.68	"	1.07	3.00	NR	10-180	Low Bias	23.6	30	
Benzo(b)fluoranthene	2.57	2.68	"	1.07	2.30	25.4	10-200		20.9	30	
Benzo(g,h,i)perylene	2.19	2.68	"	1.07	1.94	23.2	10-138		17.0	30	
Benzo(k)fluoranthene	2.12	2.68	"	1.07	2.30	NR	10-197	Low Bias	20.0	30	
Benzoic acid	ND	2.68	"	1.22	ND		10-166	Low Bias		30	
Benzyl alcohol	ND	2.68	"	1.07	ND		12-124	Low Bias		30	
Benzyl butyl phthalate	ND	2.68	"	1.07	ND		10-154	Low Bias		30	
Bis(2-chloroethoxy)methane	ND	2.68	"	1.07	ND		10-132	Low Bias		30	
Bis(2-chloroethyl)ether	ND	2.68	"	1.07	ND		10-119	Low Bias		30	
Bis(2-chloroisopropyl)ether	ND	2.68	"	1.07	ND		10-119	Low Bias		30	
Bis(2-ethylhexyl)phthalate	ND	2.68	"	1.07	ND		10-157	Low Bias		30	
Caprolactam	ND	5.36	"	1.07	ND		10-107	Low Bias		30	

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

Ratch	BE9114	2 - EPA	3550C

Matrix Spike Dup (BE91142-MSD1)	*Source sample: 19E	E0591-04 (S	B002 (4-6))				Pre	pared: 05/20/20	019 Analyz	ed: 05/22	/2019
Carbazole	ND	2.68	mg/kg dry	1.07	ND		10-167	Low Bias		30	
Chrysene	2.34	2.68	"	1.07	2.68	NR	10-156	Low Bias	31.7	30	Non-dir.
Dibenzo(a,h)anthracene	ND	2.68	"	1.07	ND		10-137	Low Bias		30	
Dibenzofuran	ND	2.68	"	1.07	ND		10-147	Low Bias		30	
Diethyl phthalate	ND	2.68	"	1.07	ND		20-120	Low Bias		30	
Dimethyl phthalate	ND	2.68	"	1.07	ND		18-131	Low Bias		30	
Di-n-butyl phthalate	ND	2.68	"	1.07	ND		10-137	Low Bias		30	
Di-n-octyl phthalate	ND	2.68	"	1.07	ND		10-180	Low Bias		30	
Fluoranthene	4.42	2.68	"	1.07	5.15	NR	10-160	Low Bias	37.8	30	Non-dir.
Fluorene	ND	2.68	"	1.07	ND		10-157	Low Bias		30	
Hexachlorobenzene	ND	2.68	"	1.07	ND		10-137	Low Bias		30	
Hexachlorobutadiene	ND	2.68	"	1.07	ND		10-132	Low Bias		30	
Hexachlorocyclopentadiene	ND	2.68	"	1.07	ND		10-106	Low Bias		30	
Hexachloroethane	ND	2.68	"	1.07	ND		10-110	Low Bias		30	
Indeno(1,2,3-cd)pyrene	2.62	2.68	"	1.07	2.15	43.3	10-144		7.87	30	
Isophorone	ND	2.68	"	1.07	ND		10-132	Low Bias		30	
Naphthalene	ND	2.68	"	1.07	ND		10-141	Low Bias		30	
Nitrobenzene	ND	2.68	"	1.07	ND		10-131	Low Bias		30	
N-Nitrosodimethylamine	ND	2.68	"	1.07	ND		10-126	Low Bias		30	
N-nitroso-di-n-propylamine	ND	2.68	"	1.07	ND		10-125	Low Bias		30	
N-Nitrosodiphenylamine	ND	2.68	"	1.07	ND		10-177	Low Bias		30	
Pentachlorophenol	ND	2.68	"	1.07	ND		10-153	Low Bias		30	
Phenanthrene	2.64	2.68	"	1.07	2.68	NR	10-148	Low Bias	48.1	30	Non-dir.
Phenol	ND	2.68	"	1.07	ND		10-126	Low Bias		30	
Pyrene	3.69	2.68	"	1.07	4.79	NR	10-165	Low Bias	38.5	30	Non-dir.
Pyridine	ND	10.7	"	1.07	ND		10-83	Low Bias		30	
Surrogate: SURR: 2-Fluorophenol	1.35		"	2.14		63.0	20-108				
Surrogate: SURR: Phenol-d5	1.33		"	2.14		62.0	23-114				
Surrogate: SURR: Nitrobenzene-d5	0.750		"	1.07		70.0	22-108				
Surrogate: SURR: 2-Fluorobiphenyl	0.708		"	1.07		66.0	21-113				
Surrogate: SURR: 2,4,6-Tribromophenol	1.35		"	2.14		63.0	19-110				
Surrogate: SURR: Terphenyl-d14	0.686		"	1.07		64.0	24-116				

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Semivolatile Organic Compounds by GC/MS - Quality Control Data

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

Ratch RE91201	- EPA 3550C
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Blank (BE91201-BLK1)				Prepared: 05/20/2019 Analyzed: 05/22/2019
1,1-Biphenyl	ND	0.0417	mg/kg wet	
1,2,4,5-Tetrachlorobenzene	ND	0.0833	"	
1,2,4-Trichlorobenzene	ND	0.0417	"	
1,2-Dichlorobenzene	ND	0.0417	"	
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.0417	"	
1,3-Dichlorobenzene	ND	0.0417	"	
1,4-Dichlorobenzene	ND	0.0417	"	
2,3,4,6-Tetrachlorophenol	ND	0.0833	II .	
2,4,5-Trichlorophenol	ND	0.0417	"	
2,4,6-Trichlorophenol	ND	0.0417	"	
2,4-Dichlorophenol	ND	0.0417	"	
2,4-Dimethylphenol	ND	0.0417	"	
2,4-Dinitrophenol	ND	0.0833	"	
2,4-Dinitrotoluene	ND	0.0417	"	
2,6-Dinitrotoluene	ND	0.0417	"	
2-Chloronaphthalene	ND	0.0417	"	
2-Chlorophenol	ND	0.0417	"	
2-Methylnaphthalene	ND	0.0417	"	
2-Methylphenol	ND	0.0417	"	
2-Nitroaniline	ND	0.0833	"	
2-Nitrophenol	ND	0.0417	"	
3- & 4-Methylphenols	ND	0.0417	"	
3,3-Dichlorobenzidine	ND	0.0417	"	
3-Nitroaniline	ND	0.0833	"	
4,6-Dinitro-2-methylphenol	ND	0.0833	"	
4-Bromophenyl phenyl ether	ND	0.0417	"	
4-Chloro-3-methylphenol	ND	0.0417	"	
4-Chloroaniline	ND	0.0417	"	
4-Chlorophenyl phenyl ether	ND	0.0417	"	
4-Nitroaniline	ND	0.0833	"	
4-Nitrophenol	ND	0.0833	"	
Acenaphthene	ND	0.0417	"	
Acenaphthylene	ND	0.0417	"	
Acetophenone	ND	0.0417	"	
Aniline	ND	0.167	"	
Anthracene	ND	0.0417	"	
Atrazine	ND	0.0417	"	
Benzaldehyde	ND	0.0417	"	
Benzidine	ND	0.167	"	
		0.107	"	
Benzo(a)anthracene Benzo(a)pyrene	ND ND	0.0417	11	
Benzo(b)fluoranthene	ND ND	0.0417	II .	
Benzo(g,h,i)perylene	ND ND	0.0417	"	
Benzo(k)fluoranthene			11	
Benzoic acid	ND ND	0.0417 0.0417	"	
Benzyl alcohol	ND ND	0.0417	"	
Benzyl butyl phthalate	ND ND	0.0417	"	
Bis(2-chloroethoxy)methane	ND ND		"	
Bis(2-chloroethyl)ether		0.0417	"	
Bis(2-chloroisopropyl)ether	ND	0.0417	"	
	ND	0.0417	"	
Bis(2-ethylhexyl)phthalate	ND	0.0417		

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Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch	BE9	1201 -	EPA	3550C
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Blank (BE91201-BLK1)						Prepared: 05/20/2019 Analyzed: 05/22/20
Caprolactam	ND	0.0833	mg/kg wet			
Carbazole	ND	0.0417	"			
Chrysene	ND	0.0417	"			
Dibenzo(a,h)anthracene	ND	0.0417	"			
Dibenzofuran	ND	0.0417	"			
Diethyl phthalate	ND	0.0417	"			
Dimethyl phthalate	ND	0.0417	"			
Di-n-butyl phthalate	ND	0.0417	"			
Di-n-octyl phthalate	ND	0.0417	"			
Fluoranthene	ND	0.0417	"			
Fluorene	ND	0.0417	"			
Hexachlorobenzene	ND	0.0417	"			
Hexachlorobutadiene	ND	0.0417	"			
Hexachlorocyclopentadiene	ND	0.0417	"			
Hexachloroethane	ND	0.0417	"			
Indeno(1,2,3-cd)pyrene	ND	0.0417	"			
Isophorone	ND	0.0417	"			
Naphthalene	ND	0.0417	"			
Nitrobenzene	ND	0.0417	"			
N-Nitrosodimethylamine	ND	0.0417	"			
N-nitroso-di-n-propylamine	ND	0.0417	"			
N-Nitrosodiphenylamine	ND	0.0417	"			
Pentachlorophenol	ND	0.0417	"			
Phenanthrene	ND	0.0417	"			
Phenol	ND	0.0417	"			
Pyrene	ND	0.0417	"			
Pyridine	ND	0.167	"			
Surrogate: SURR: 2-Fluorophenol	1.09		"	1.67	65.4	20-108
Surrogate: SURR: Phenol-d5	0.959		"	1.67	57.6	23-114
Surrogate: SURR: Nitrobenzene-d5	0.522		"	0.833	62.6	22-108
Surrogate: SURR: 2-Fluorobiphenyl	0.445		"	0.833	53.4	21-113
Surrogate: SURR: 2,4,6-Tribromophenol	0.756		"	1.67	45.4	19-110
Surrogate: SURR: Terphenyl-d14	0.484		"	0.833	58.1	24-116



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

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE91201 - EPA 3550C											
LCS (BE91201-BS1)							Prep	ared: 05/20/2	2019 Analyz	red: 05/22/2	2019
1,1-Biphenyl	0.409	0.0417	mg/kg wet	0.833		49.1	18-111				
1,2,4,5-Tetrachlorobenzene	0.539	0.0833	"	0.833		64.7	21-131				
1,2,4-Trichlorobenzene	0.351	0.0417	"	0.833		42.1	10-140				
1,2-Dichlorobenzene	0.398	0.0417	"	0.833		47.8	34-108				
1,2-Diphenylhydrazine (as Azobenzene)	0.454	0.0417	"	0.833		54.5	17-137				
1,3-Dichlorobenzene	0.397	0.0417	"	0.833		47.6	33-110				
1,4-Dichlorobenzene	0.401	0.0417	"	0.833		48.1	32-104				
2,3,4,6-Tetrachlorophenol	1.01	0.0833	"	0.833		121	30-130				
2,4,5-Trichlorophenol	0.389	0.0417	"	0.833		46.7	27-118				
2,4,6-Trichlorophenol	0.447	0.0417	"	0.833		53.7	31-120				
2,4-Dichlorophenol	0.452	0.0417	"	0.833		54.2	20-127				
2,4-Dimethylphenol	0.455	0.0417	"	0.833		54.6	14-132				
2,4-Dinitrophenol	0.364	0.0833	"	0.833		43.6	10-171				
2,4-Dinitrotoluene	0.420	0.0417	"	0.833		50.4	34-131				
2,6-Dinitrotoluene	0.438	0.0417	"	0.833		52.5	31-128				
2-Chloronaphthalene	0.391	0.0417	"	0.833		46.9	31-117				
2-Chlorophenol	0.524	0.0417	"	0.833		62.9	33-113				
2-Methylnaphthalene	0.472	0.0417	"	0.833		56.6	12-138				
2-Methylphenol	0.468	0.0417	"	0.833		56.2	10-136				
2-Nitroaniline	0.523	0.0833	"	0.833		62.8	27-132				
2-Nitrophenol	0.505	0.0417	"	0.833		60.6	17-129				
3- & 4-Methylphenols	0.427	0.0417	"	0.833		51.3	29-103				
3,3-Dichlorobenzidine	0.445	0.0417	"	0.833		53.4	22-149				
3-Nitroaniline	0.457	0.0833	"	0.833		54.8	20-133				
4,6-Dinitro-2-methylphenol	0.369	0.0833	"	0.833		44.3	10-143				
4-Bromophenyl phenyl ether	0.387	0.0417	"	0.833		46.5	29-120				
4-Chloro-3-methylphenol	0.492	0.0417	"	0.833		59.1	24-129				
4-Chloroaniline	0.383	0.0417	"	0.833		45.9	10-132				
4-Chlorophenyl phenyl ether	0.427	0.0417	"	0.833		51.2	27-124				
4-Nitroaniline	0.505	0.0833	"	0.833		60.6	16-128				
4-Nitrophenol	0.555	0.0833	"	0.833		66.6	10-141				
Acenaphthene	0.394	0.0417	"	0.833		47.2	30-121				
Acenaphthylene	0.423	0.0417	"	0.833		50.8	30-115				
Acetophenone	0.461	0.0417	"	0.833		55.3	20-112				
Aniline	0.511	0.167	"	0.833		61.4	10-119				
Anthracene	0.483	0.0417	"	0.833		58.0	34-118				
Atrazine	0.421	0.0417	"	0.833		50.5	26-112				
Benzaldehyde	0.615	0.0417	,,	0.833		73.8	21-100				
Benzo(a)anthracene	0.476	0.0417	"	0.833		57.1	32-122				
Benzo(a)pyrene	0.498	0.0417	"	0.833		59.7	29-133				
Benzo(b)fluoranthene	0.478	0.0417	"	0.833		57.4	25-133				
Benzo(g,h,i)perylene	0.465	0.0417	,,	0.833		55.8	10-143				
Benzo(k)fluoranthene	0.433	0.0417	"	0.833		51.9	25-128				
Benzoic acid	0.444	0.0417	,,	0.833		46.8	10-140				
Benzyl alcohol	0.584	0.0417	,,	0.833		70.1	30-115				
Benzyl butyl phthalate	0.656	0.0417	,,	0.833		78.7	26-126				
Bis(2-chloroethoxy)methane	0.483	0.0417	"	0.833		58.0	19-132				
Bis(2-chloroethyl)ether	0.483	0.0417	"	0.833		62.2	19-132				
Bis(2-chloroisopropyl)ether			"								
Bis(2-ethylhexyl)phthalate	0.597	0.0417	"	0.833		71.6	20-135				
	0.638	0.0417	"	0.833		76.5	10-155				
Caprolactam	0.442	0.0833		0.833		53.0	10-127				

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

Batch BE91201 - EPA 3550C						
LCS (BE91201-BS1)						Prepared: 05/20/2019 Analyzed: 05/22/2019
Carbazole	0.475	0.0417	mg/kg wet	0.833	57.0	35-123
Chrysene	0.452	0.0417	"	0.833	54.2	32-123
Dibenzo(a,h)anthracene	0.471	0.0417	"	0.833	56.5	10-136
Dibenzofuran	0.481	0.0417	"	0.833	57.8	29-121
Diethyl phthalate	0.506	0.0417	"	0.833	60.7	34-116
Dimethyl phthalate	0.480	0.0417	"	0.833	57.6	35-124
Di-n-butyl phthalate	0.574	0.0417	"	0.833	68.9	31-116
Di-n-octyl phthalate	0.770	0.0417	"	0.833	92.4	26-136
Fluoranthene	0.478	0.0417	"	0.833	57.4	33-122
Fluorene	0.398	0.0417	"	0.833	47.8	29-123
Hexachlorobenzene	0.357	0.0417	"	0.833	42.8	21-124
Hexachlorobutadiene	0.336	0.0417	"	0.833	40.4	10-149
Hexachlorocyclopentadiene	0.193	0.0417	"	0.833	23.1	10-129
Hexachloroethane	0.408	0.0417	"	0.833	49.0	28-108
Indeno(1,2,3-cd)pyrene	0.511	0.0417	"	0.833	61.3	10-135
Isophorone	0.464	0.0417	"	0.833	55.7	20-132
Naphthalene	0.444	0.0417	"	0.833	53.3	23-124
Nitrobenzene	0.453	0.0417	"	0.833	54.4	13-132
N-Nitrosodimethylamine	0.643	0.0417	"	0.833	77.1	11-129
N-nitroso-di-n-propylamine	0.524	0.0417	"	0.833	62.9	24-119
N-Nitrosodiphenylamine	0.511	0.0417	"	0.833	61.3	22-152
Pentachlorophenol	0.257	0.0417	"	0.833	30.8	10-139
Phenanthrene	0.482	0.0417	"	0.833	57.8	33-123
Phenol	0.540	0.0417	"	0.833	64.8	23-115
Pyrene	0.485	0.0417	"	0.833	58.2	32-130
Pyridine	0.316	0.167	"	0.833	37.9	10-91
Surrogate: SURR: 2-Fluorophenol	1.16		"	1.67	69.7	20-108
Surrogate: SURR: Phenol-d5	1.02		"	1.67	61.1	23-114
Surrogate: SURR: Nitrobenzene-d5	0.554		"	0.833	66.5	22-108
Surrogate: SURR: 2-Fluorobiphenyl	0.468		"	0.833	56.2	21-113
Surrogate: SURR: 2,4,6-Tribromophenol	0.824		"	1.67	49.4	19-110
Surrogate: SURR: Terphenyl-d14	0.525		"	0.833	63.0	24-116

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

Ratch	RF91201	_ FPA	3550C

Matrix Spike (BE91201-MS1)	*Source sample: 19	E0591-07 (S	B003 (6-8))				Prepared: 05/20/2019 Analyzed: 05/22/2019		
1,1-Biphenyl	0.550	0.0934		0.933	ND	59.0	10-130		
1,2,4,5-Tetrachlorobenzene	0.750	0.187	"	0.933	ND	80.4	10-133		
1,2,4-Trichlorobenzene	0.474	0.0934	"	0.933	ND	50.8	10-127		
,2-Dichlorobenzene	0.589	0.0934	"	0.933	ND	63.1	14-111		
,2-Diphenylhydrazine (as Azobenzene)	0.518	0.0934	"	0.933	ND	55.5	10-144		
,3-Dichlorobenzene	0.575	0.0934	"	0.933	ND	61.6	11-111		
,4-Dichlorobenzene	0.563	0.0934	"	0.933	ND	60.3	10-106		
,3,4,6-Tetrachlorophenol	0.554	0.187	"	0.933	ND	59.4	30-130		
,4,5-Trichlorophenol	0.556	0.0934	"	0.933	ND	59.6	10-127		
,4,6-Trichlorophenol	0.640	0.0934	"	0.933	ND	68.6	10-132		
4-Dichlorophenol	0.637	0.0934	"	0.933	ND	68.2	10-128		
4-Dimethylphenol	0.703	0.0934	"	0.933	ND	75.3	10-137		
4-Dinitrophenol	0.348	0.187	"	0.933	ND	37.3	10-171		
,4-Dinitrotoluene	0.588	0.0934	"	0.933	ND	63.0	16-135		
,6-Dinitrotoluene	0.603	0.0934	"	0.933	ND	64.6	18-131		
-Chloronaphthalene	0.532	0.0934	"	0.933	ND ND	57.0	10-129		
-Chlorophenol	0.799	0.0934	"	0.933	ND ND	85.6	15-116		
-Methylnaphthalene	0.799	0.0934	"	0.933	ND ND	72.4	10-147		
Methylphenol	0.739	0.0934	"	0.933	ND ND	79.2	10-136		
-Nitroaniline			"						
-Nitrophenol	0.776	0.187	"	0.933	ND	83.2	10-137		
•	0.744	0.0934	"	0.933	ND	79.8	10-129		
& 4-Methylphenols	0.666	0.0934		0.933	ND	71.4	10-123		
3-Dichlorobenzidine	0.554	0.0934	"	0.933	ND	59.4	10-155		
-Nitroaniline	0.650	0.187	"	0.933	ND	69.6	12-133		
6-Dinitro-2-methylphenol	0.535	0.187	"	0.933	ND	57.4	10-155		
-Bromophenyl phenyl ether	0.548	0.0934	"	0.933	ND	58.7	14-128		
Chloro-3-methylphenol	0.729	0.0934	"	0.933	ND	78.1	10-134		
Chloroaniline	0.533	0.0934	"	0.933	ND	57.1	10-145		
Chlorophenyl phenyl ether	0.597	0.0934	"	0.933	ND	64.0	14-130		
-Nitroaniline	0.707	0.187	"	0.933	ND	75.8	10-147		
-Nitrophenol	0.676	0.187	"	0.933	ND	72.5	10-137		
cenaphthene	0.611	0.0934	"	0.933	0.0761	57.3	10-146		
cenaphthylene	0.608	0.0934	"	0.933	ND	65.2	10-134		
cetophenone	0.682	0.0934	"	0.933	ND	73.1	10-116		
niline	0.721	0.374	"	0.933	ND	77.3	10-123		
nthracene	0.769	0.0934	"	0.933	0.191	61.9	10-142		
trazine	0.548	0.0934	"	0.933	ND	58.7	19-115		
enzaldehyde	0.898	0.0934	"	0.933	ND	96.2	10-125		
enzo(a)anthracene	0.945	0.0934	"	0.933	0.370	61.7	10-158		
enzo(a)pyrene	0.980	0.0934	"	0.933	0.352	67.3	10-180		
enzo(b)fluoranthene	0.891	0.0934	"	0.933	0.240	69.8	10-200		
enzo(g,h,i)perylene	0.757	0.0934	"	0.933	0.157	64.3	10-138		
enzo(k)fluoranthene	0.779	0.0934	"	0.933	0.230	58.8	10-197		
enzoic acid	0.128	0.0934	"	1.06	ND	12.1	10-166		
enzyl alcohol	0.897	0.0934	"	0.933	ND	96.1	12-124		
enzyl butyl phthalate	0.849	0.0934	"	0.933	ND	91.0	10-154		
is(2-chloroethoxy)methane	0.680	0.0934	"	0.933	ND	72.9	10-132		
is(2-chloroethyl)ether	0.795	0.0934	"	0.933	ND	85.2	10-119		
is(2-chloroisopropyl)ether	0.862	0.0934	"	0.933	ND	92.3	10-139		
sis(2-ethylhexyl)phthalate	0.782	0.0934	"	0.933	ND	83.8	10-167		
Caprolactam	0.618	0.0334	"	0.933	ND	66.2	10-132		

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

D 4 1	DE01301	EDA	25500
Ratch	RF91201	_ н РД	35500

Matrix Spike (BE91201-MS1)	*Source sample: 19	E0591-07 (S	B003 (6-8))				Prepared: 05/20/2019 Analyzed: 05/22/201
Carbazole	0.676	0.0934	mg/kg dry	0.933	0.0480	67.3	10-167
Chrysene	0.862	0.0934	"	0.933	0.313	58.7	10-156
Dibenzo(a,h)anthracene	0.661	0.0934	"	0.933	ND	70.9	10-137
Dibenzofuran	0.690	0.0934	"	0.933	ND	73.9	10-147
Diethyl phthalate	0.658	0.0934	"	0.933	ND	70.6	20-120
Dimethyl phthalate	0.692	0.0934	"	0.933	ND	74.2	18-131
Di-n-butyl phthalate	0.753	0.0934	"	0.933	ND	80.6	10-137
Di-n-octyl phthalate	0.947	0.0934	"	0.933	ND	102	10-180
Fluoranthene	1.32	0.0934	"	0.933	0.838	51.7	10-160
Fluorene	0.586	0.0934	"	0.933	0.0710	55.2	10-157
Hexachlorobenzene	0.458	0.0934	"	0.933	ND	49.1	10-137
Hexachlorobutadiene	0.458	0.0934	"	0.933	ND	49.0	10-132
Hexachlorocyclopentadiene	0.149	0.0934	"	0.933	ND	16.0	10-106
Hexachloroethane	0.570	0.0934	"	0.933	ND	61.1	10-110
Indeno(1,2,3-cd)pyrene	0.834	0.0934	"	0.933	0.204	67.5	10-144
Isophorone	0.660	0.0934	"	0.933	ND	70.7	10-132
Naphthalene	0.628	0.0934	"	0.933	ND	67.3	10-141
Nitrobenzene	0.641	0.0934	"	0.933	ND	68.7	10-131
N-Nitrosodimethylamine	0.991	0.0934	"	0.933	ND	106	10-126
N-nitroso-di-n-propylamine	0.767	0.0934	"	0.933	ND	82.2	10-125
N-Nitrosodiphenylamine	0.691	0.0934	"	0.933	ND	74.0	10-177
Pentachlorophenol	0.334	0.0934	"	0.933	ND	35.8	10-153
Phenanthrene	1.15	0.0934	"	0.933	0.733	44.5	10-148
Phenol	0.864	0.0934	"	0.933	ND	92.6	10-126
Pyrene	1.19	0.0934	"	0.933	0.725	49.7	10-165
Pyridine	0.492	0.374	"	0.933	ND	52.7	10-83
Surrogate: SURR: 2-Fluorophenol	1.74		"	1.87		93.1	20-108
Surrogate: SURR: Phenol-d5	1.57		"	1.87		83.9	23-114
Surrogate: SURR: Nitrobenzene-d5	0.773		"	0.933		82.9	22-108
Surrogate: SURR: 2-Fluorobiphenyl	0.642		"	0.933		68.8	21-113
Surrogate: SURR: 2,4,6-Tribromophenol	1.20		"	1.87		64.1	19-110
			"	0.933		74.2	

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

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE91201 - EPA 3550C											
Matrix Spike Dup (BE91201-MSD1)	*Source sample: 19	E0591-07 (S	B003 (6-8))				Prep	ared: 05/20/2	2019 Analyz	ed: 05/22/2	2019
1,1-Biphenyl	0.504	0.0934	mg/kg dry	0.933	ND	54.0	10-130		8.78	30	
1,2,4,5-Tetrachlorobenzene	0.617	0.187	"	0.933	ND	66.2	10-133		19.4	30	
1,2,4-Trichlorobenzene	0.403	0.0934	"	0.933	ND	43.2	10-127		16.2	30	
1,2-Dichlorobenzene	0.508	0.0934	"	0.933	ND	54.5	14-111		14.7	30	
1,2-Diphenylhydrazine (as Azobenzene)	0.505	0.0934	"	0.933	ND	54.1	10-144		2.63	30	
1,3-Dichlorobenzene	0.505	0.0934	"	0.933	ND	54.1	11-111		13.0	30	
1,4-Dichlorobenzene	0.508	0.0934	"	0.933	ND	54.5	10-106		10.2	30	
2,3,4,6-Tetrachlorophenol	0.490	0.187	"	0.933	ND	52.6	30-130		12.2	30	
2,4,5-Trichlorophenol	0.467	0.0934	"	0.933	ND	50.1	10-127		17.4	30	
2,4,6-Trichlorophenol	0.544	0.0934	"	0.933	ND	58.2	10-132		16.3	30	
2,4-Dichlorophenol	0.563	0.0934	"	0.933	ND	60.3	10-128		12.3	30	
2,4-Dimethylphenol	0.611	0.0934	"	0.933	ND	65.5	10-137		13.9	30	
2,4-Dinitrophenol	0.272	0.187	"	0.933	ND	29.2	10-171		24.3	30	
2,4-Dinitrotoluene	0.502	0.0934	"	0.933	ND	53.8	16-135		15.6	30	
2,6-Dinitrotoluene	0.527	0.0934	"	0.933	ND	56.5	18-131		13.5	30	
2-Chloronaphthalene	0.473	0.0934	"	0.933	ND	50.6	10-131		11.7	30	
2-Chlorophenol	0.680	0.0934	"	0.933	ND	72.9	15-116		16.1	30	
2-Methylnaphthalene	0.597	0.0934	"	0.933	ND	63.9	10-147		12.4	30	
2-Methylphenol	0.637	0.0934	,,	0.933	ND ND	68.2	10-147		14.9	30	
2-Nitroaniline			"						13.0	30	
2-Nitrophenol	0.682	0.187	"	0.933	ND	73.0	10-137		13.6	30	
•	0.650	0.0934	"	0.933	ND	69.6	10-129		7.32	30	
3- & 4-Methylphenols	0.619	0.0934	"	0.933	ND	66.3	10-123				
3,3-Dichlorobenzidine	0.482	0.0934	,,	0.933	ND	51.7	10-155		13.8	30	
3-Nitroaniline	0.603	0.187		0.933	ND	64.6	12-133		7.39	30	
4,6-Dinitro-2-methylphenol	0.452	0.187		0.933	ND	48.4	10-155		16.9	30	
4-Bromophenyl phenyl ether	0.470	0.0934	"	0.933	ND	50.4	14-128		15.2	30	
4-Chloro-3-methylphenol	0.651	0.0934	"	0.933	ND	69.8	10-134		11.3	30	
4-Chloroaniline	0.479	0.0934	"	0.933	ND	51.4	10-145		10.6	30	
4-Chlorophenyl phenyl ether	0.515	0.0934	"	0.933	ND	55.2	14-130		14.8	30	
4-Nitroaniline	0.664	0.187	"	0.933	ND	71.2	10-147		6.21	30	
4-Nitrophenol	0.713	0.187	"	0.933	ND	76.4	10-137		5.27	30	
Acenaphthene	0.558	0.0934	"	0.933	0.0761	51.6	10-146		9.07	30	
Acenaphthylene	0.574	0.0934	"	0.933	ND	61.5	10-134		5.81	30	
Acetophenone	0.611	0.0934	"	0.933	ND	65.4	10-116		11.1	30	
Aniline	0.646	0.374	"	0.933	ND	69.2	10-123		11.0	30	
Anthracene	0.823	0.0934	"	0.933	0.191	67.6	10-142		6.75	30	
Atrazine	0.482	0.0934	"	0.933	ND	51.7	19-115		12.8	30	
Benzaldehyde	0.856	0.0934	"	0.933	ND	91.8	10-125		4.77	30	
Benzo(a)anthracene	1.22	0.0934	"	0.933	0.370	90.8	10-158		25.1	30	
Benzo(a)pyrene	1.15	0.0934	"	0.933	0.352	85.5	10-180		16.0	30	
Benzo(b)fluoranthene	1.04	0.0934	"	0.933	0.240	85.2	10-200		15.0	30	
Benzo(g,h,i)perylene	0.814	0.0934	"	0.933	0.157	70.4	10-138		7.22	30	
Benzo(k)fluoranthene	0.944	0.0934	"	0.933	0.230	76.5	10-197		19.2	30	
Benzoic acid	0.110	0.0934	"	1.06	ND	10.3	10-166		15.7	30	
Benzyl alcohol	0.779	0.0934	"	0.933	ND	83.4	12-124		14.1	30	
Benzyl butyl phthalate	0.767	0.0934	"	0.933	ND	82.2	10-154		10.1	30	
Bis(2-chloroethoxy)methane	0.619	0.0934	"	0.933	ND	66.3	10-132		9.43	30	
Bis(2-chloroethyl)ether	0.674	0.0934	"	0.933	ND	72.2	10-119		16.5	30	
Bis(2-chloroisopropyl)ether	0.770	0.0934	"	0.933	ND	82.6	10-139		11.2	30	
Bis(2-ethylhexyl)phthalate	0.774	0.0934	"	0.933	ND	75.4	10-157		10.5	30	
Completent	0.704	0.0934		0.933	ND	75.4	10-107		0.62	20	

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0.187

0.561

Caprolactam

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0.933

ND

60.2

10-132

9.62



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

Ratch	RE91201	- ЕРА	3550C

Matrix Spike Dup (BE91201-MSD1)	*Source sample: 19	E0591-07 (SI	B003 (6-8))				Prepared:	05/20/2019 Analyze	d: 05/22	/2019
Carbazole	0.673	0.0934	mg/kg dry	0.933	0.0480	67.0	10-167	0.442	30	
Chrysene	1.10	0.0934	"	0.933	0.313	84.4	10-156	24.4	30	
Dibenzo(a,h)anthracene	0.647	0.0934	"	0.933	ND	69.3	10-137	2.28	30	
Dibenzofuran	0.655	0.0934	"	0.933	ND	70.2	10-147	5.11	30	
Diethyl phthalate	0.600	0.0934	"	0.933	ND	64.3	20-120	9.25	30	
Dimethyl phthalate	0.594	0.0934	"	0.933	ND	63.7	18-131	15.2	30	
Di-n-butyl phthalate	0.685	0.0934	"	0.933	ND	73.4	10-137	9.35	30	
Di-n-octyl phthalate	0.877	0.0934	"	0.933	ND	94.0	10-180	7.69	30	
Fluoranthene	1.94	0.0934	"	0.933	0.838	118	10-160	38.1	30	Non-dir.
Fluorene	0.594	0.0934	"	0.933	0.0710	56.1	10-157	1.39	30	
Hexachlorobenzene	0.440	0.0934	"	0.933	ND	47.1	10-137	4.16	30	
Hexachlorobutadiene	0.391	0.0934	"	0.933	ND	41.9	10-132	15.7	30	
Hexachlorocyclopentadiene	0.112	0.0934	"	0.933	ND	12.0	10-106	28.6	30	
Hexachloroethane	0.505	0.0934	"	0.933	ND	54.2	10-110	12.1	30	
Indeno(1,2,3-cd)pyrene	0.905	0.0934	"	0.933	0.204	75.1	10-144	8.16	30	
Isophorone	0.609	0.0934	"	0.933	ND	65.3	10-132	8.00	30	
Naphthalene	0.572	0.0934	"	0.933	ND	61.3	10-141	9.33	30	
Nitrobenzene	0.576	0.0934	"	0.933	ND	61.8	10-131	10.7	30	
N-Nitrosodimethylamine	0.926	0.0934	"	0.933	ND	99.2	10-126	6.85	30	
N-nitroso-di-n-propylamine	0.707	0.0934	"	0.933	ND	75.8	10-125	8.20	30	
N-Nitrosodiphenylamine	0.682	0.0934	"	0.933	ND	73.1	10-177	1.20	30	
Pentachlorophenol	0.338	0.0934	"	0.933	ND	36.2	10-153	1.11	30	
Phenanthrene	1.55	0.0934	"	0.933	0.733	87.1	10-148	29.5	30	
Phenol	0.760	0.0934	"	0.933	ND	81.4	10-126	12.8	30	
Pyrene	1.76	0.0934	"	0.933	0.725	111	10-165	38.7	30	Non-dir.
Pyridine	0.466	0.374	"	0.933	ND	49.9	10-83	5.46	30	
Surrogate: SURR: 2-Fluorophenol	1.58		"	1.87		84.7	20-108			
Surrogate: SURR: Phenol-d5	1.41		"	1.87		75.3	23-114			
Surrogate: SURR: Nitrobenzene-d5	0.720		"	0.933		77.2	22-108			
Surrogate: SURR: 2-Fluorobiphenyl	0.552		"	0.933		59.1	21-113			
Surrogate: SURR: 2,4,6-Tribromophenol	1.03		"	1.87		55.1	19-110			
Surrogate: SURR: Terphenyl-d14	0.608		"	0.933		65.1	24-116			



$Semivolatile\ Organic\ Compounds\ by\ GC/MS\ -\ Quality\ Control\ Data$

York Analytical Laboratories, Inc.

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

Ratch	BE91249	- EPA	3550C

Blank (BE91249-BLK1)				Prepared: 05/21/2019 Analyzed: 05/22/2019
1,1-Biphenyl	ND	0.0416	mg/kg wet	
1,2,4,5-Tetrachlorobenzene	ND	0.0830	"	
1,2,4-Trichlorobenzene	ND	0.0416	"	
1,2-Dichlorobenzene	ND	0.0416	"	
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.0416	"	
1,3-Dichlorobenzene	ND	0.0416	"	
1,4-Dichlorobenzene	ND	0.0416	"	
2,3,4,6-Tetrachlorophenol	ND	0.0830	"	
2,4,5-Trichlorophenol	ND	0.0416	"	
2,4,6-Trichlorophenol	ND	0.0416	"	
2,4-Dichlorophenol	ND	0.0416	"	
2,4-Dimethylphenol	ND	0.0416	"	
2,4-Dinitrophenol	ND	0.0830	u .	
2,4-Dinitrotoluene	ND	0.0416	u .	
2,6-Dinitrotoluene	ND	0.0416	n .	
2-Chloronaphthalene	ND	0.0416	n .	
2-Chlorophenol	ND	0.0416	u .	
2-Methylnaphthalene	ND	0.0416	"	
2-Methylphenol	ND	0.0416	"	
2-Nitroaniline	ND	0.0830	"	
2-Nitrophenol	ND	0.0416	"	
- & 4-Methylphenols	ND	0.0416	"	
3,3-Dichlorobenzidine	ND	0.0416	"	
-Nitroaniline	ND	0.0830	"	
,6-Dinitro-2-methylphenol	ND	0.0830	"	
l-Bromophenyl phenyl ether	ND	0.0416	"	
-Chloro-3-methylphenol	ND	0.0416	"	
I-Chloroaniline	ND	0.0416	"	
I-Chlorophenyl phenyl ether	ND	0.0416	"	
l-Nitroaniline	ND	0.0830	m .	
1-Nitrophenol	ND	0.0830	"	
Acenaphthene	ND	0.0416	m .	
Acenaphthylene	ND	0.0416	m .	
Acetophenone	ND	0.0416	"	
Aniline	ND	0.166	"	
Anthracene	ND	0.0416	"	
Atrazine	ND	0.0416	"	
Benzaldehyde	ND	0.0416	"	
Benzidine	ND	0.166	"	
Benzo(a)anthracene	ND	0.0416	"	
Benzo(a)pyrene	ND	0.0416	"	
Benzo(b)fluoranthene	ND	0.0416	"	
Benzo(g,h,i)perylene	ND	0.0416	"	
Benzo(k)fluoranthene	ND	0.0416	"	
Benzoic acid	ND	0.0416	"	
Benzyl alcohol	ND	0.0416	"	
Benzyl butyl phthalate	ND	0.0416	"	
Bis(2-chloroethoxy)methane	ND ND	0.0416	"	
Bis(2-chloroethyl)ether	ND ND	0.0416	"	
Bis(2-chloroisopropyl)ether	ND ND	0.0416	11	
Bis(2-ethylhexyl)phthalate	ND ND	0.0416	"	

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Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BE91249 - EPA 3550	C
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Blank (BE91249-BLK1)						Prepared: 05/21/2019 Analyzed: 05/22/2019
Caprolactam	ND	0.0830	mg/kg wet			
Carbazole	ND	0.0416	"			
Chrysene	ND	0.0416	"			
Dibenzo(a,h)anthracene	ND	0.0416	"			
Dibenzofuran	ND	0.0416	"			
Diethyl phthalate	ND	0.0416	"			
Dimethyl phthalate	ND	0.0416	"			
Di-n-butyl phthalate	ND	0.0416	"			
Di-n-octyl phthalate	ND	0.0416	"			
Fluoranthene	ND	0.0416	"			
Fluorene	ND	0.0416	"			
Hexachlorobenzene	ND	0.0416	"			
Hexachlorobutadiene	ND	0.0416	"			
Hexachlorocyclopentadiene	ND	0.0416	"			
Hexachloroethane	ND	0.0416	"			
Indeno(1,2,3-cd)pyrene	ND	0.0416	"			
Isophorone	ND	0.0416	"			
Naphthalene	ND	0.0416	"			
Nitrobenzene	ND	0.0416	"			
N-Nitrosodimethylamine	ND	0.0416	"			
N-nitroso-di-n-propylamine	ND	0.0416	"			
N-Nitrosodiphenylamine	ND	0.0416	"			
Pentachlorophenol	ND	0.0416	"			
Phenanthrene	ND	0.0416	"			
Phenol	ND	0.0416	"			
Pyrene	ND	0.0416	"			
Pyridine	ND	0.166	"			
Surrogate: SURR: 2-Fluorophenol	1.33		"	1.66	80.2	20-108
Surrogate: SURR: Phenol-d5	1.16		"	1.66	69.7	23-114
Surrogate: SURR: Nitrobenzene-d5	0.638		"	0.831	76.8	22-108
Surrogate: SURR: 2-Fluorobiphenyl	0.543		"	0.831	65.4	21-113
Surrogate: SURR: 2,4,6-Tribromophenol	1.05		"	1.66	63.3	19-110
Surrogate: SURR: Terphenyl-d14	0.596		"	0.831	71.7	24-116

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

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE91249 - EPA 3550C											
LCS (BE91249-BS1)							Prep	ared: 05/21/2	2019 Analyz	ed: 05/22/2	2019
1,1-Biphenyl	0.515	0.0416	mg/kg wet	0.831		62.0	18-111				
1,2,4,5-Tetrachlorobenzene	0.676	0.0830	"	0.831		81.4	21-131				
1,2,4-Trichlorobenzene	0.428	0.0416	"	0.831		51.6	10-140				
1,2-Dichlorobenzene	0.504	0.0416	"	0.831		60.7	34-108				
1,2-Diphenylhydrazine (as Azobenzene)	0.516	0.0416	"	0.831		62.2	17-137				
1,3-Dichlorobenzene	0.495	0.0416	"	0.831		59.6	33-110				
1,4-Dichlorobenzene	0.514	0.0416	"	0.831		61.9	32-104				
2,3,4,6-Tetrachlorophenol	0.514	0.0830	"	0.831		61.9	30-130				
2,4,5-Trichlorophenol	0.484	0.0416	"	0.831		58.3	27-118				
2,4,6-Trichlorophenol	0.556	0.0416	"	0.831		67.0	31-120				
2,4-Dichlorophenol	0.559	0.0416	"	0.831		67.3	20-127				
2,4-Dimethylphenol	0.576	0.0416	"	0.831		69.3	14-132				
2,4-Dinitrophenol	0.540	0.0830	"	0.831		65.0	10-171				
2,4-Dinitrotoluene	0.510	0.0416	"	0.831		61.4	34-131				
2,6-Dinitrotoluene	0.543	0.0416	"	0.831		65.3	31-128				
2-Chloronaphthalene	0.492	0.0416	"	0.831		59.3	31-117				
2-Chlorophenol	0.655	0.0416	"	0.831		78.8	33-113				
2-Methylnaphthalene	0.582	0.0416	"	0.831		70.1	12-138				
2-Methylphenol	0.584	0.0416	"	0.831		70.4	10-136				
2-Nitroaniline	0.665	0.0830	"	0.831		80.0	27-132				
2-Nitrophenol	0.622	0.0416	"	0.831		74.9	17-129				
3- & 4-Methylphenols	0.539	0.0416	"	0.831		64.8	29-103				
3,3-Dichlorobenzidine	0.521	0.0416	"	0.831		62.7	22-149				
3-Nitroaniline	0.500	0.0830	"	0.831		60.2	20-133				
4,6-Dinitro-2-methylphenol	0.526	0.0830	"	0.831		63.4	10-143				
4-Bromophenyl phenyl ether	0.457	0.0416	"	0.831		55.0	29-120				
4-Chloro-3-methylphenol	0.615	0.0416	"	0.831		74.0	24-129				
4-Chloroaniline	0.407	0.0416	"	0.831		49.0	10-132				
4-Chlorophenyl phenyl ether	0.530	0.0416	"	0.831		63.8	27-124				
4-Nitroaniline	0.628	0.0830	"	0.831		75.6	16-128				
4-Nitrophenol	0.694	0.0830	"	0.831		83.6	10-141				
Acenaphthene	0.501	0.0416	"	0.831		60.4	30-121				
Acenaphthylene	0.526	0.0416	"	0.831		63.3	30-115				
Acetophenone	0.572	0.0416	"	0.831		68.9	20-112				
Aniline	0.642	0.166	"	0.831		77.2	10-119				
Anthracene	0.596	0.0416	"	0.831		71.8	34-118				
Atrazine	0.480	0.0416	"	0.831		57.8	26-112				
Benzaldehyde	0.760	0.0416	"	0.831		91.5	21-100				
Benzo(a)anthracene	0.582	0.0416	"	0.831		70.0	32-122				
Benzo(a)pyrene	0.595	0.0416	"	0.831		71.6	29-133				
Benzo(b)fluoranthene	0.583	0.0416	"	0.831		70.2	25-133				
Benzo(g,h,i)perylene	0.553	0.0416	"	0.831		66.6	10-143				
Benzo(k)fluoranthene	0.521	0.0416	"	0.831		62.7	25-128				
Benzoic acid	0.500	0.0416	"	0.947		52.8	10-140				
Benzyl alcohol	0.730	0.0416	"	0.831		87.9	30-115				
Benzyl butyl phthalate	0.764	0.0416	"	0.831		92.0	26-126				
Bis(2-chloroethoxy)methane	0.584	0.0416	"	0.831		70.4	19-132				
Bis(2-chloroethyl)ether	0.656	0.0416	"	0.831		79.0	19-125				
Bis(2-chloroisopropyl)ether	0.732	0.0416	"	0.831		88.1	20-135				
Bis(2-ethylhexyl)phthalate	0.728	0.0416	"	0.831		87.6	10-155				
Caprolactam	0.497	0.0830	"	0.831		59.8	10-127				

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

LCS (BE91249-BS1)						Prepared: 05/21/2019 Analyzed: 05/22/2019
Carbazole	0.577	0.0416	mg/kg wet	0.831	69.5	35-123
Chrysene	0.554	0.0416	"	0.831	66.7	32-123
Dibenzo(a,h)anthracene	0.559	0.0416	"	0.831	67.3	10-136
Dibenzofuran	0.593	0.0416	"	0.831	71.4	29-121
Diethyl phthalate	0.603	0.0416	"	0.831	72.6	34-116
Dimethyl phthalate	0.599	0.0416	"	0.831	72.2	35-124
Di-n-butyl phthalate	0.667	0.0416	"	0.831	80.3	31-116
Di-n-octyl phthalate	0.870	0.0416	"	0.831	105	26-136
Fluoranthene	0.569	0.0416	"	0.831	68.5	33-122
Fluorene	0.493	0.0416	"	0.831	59.4	29-123
Hexachlorobenzene	0.459	0.0416	"	0.831	55.3	21-124
Hexachlorobutadiene	0.423	0.0416	"	0.831	50.9	10-149
Hexachlorocyclopentadiene	0.260	0.0416	"	0.831	31.3	10-129
Hexachloroethane	0.514	0.0416	"	0.831	61.9	28-108
ndeno(1,2,3-cd)pyrene	0.623	0.0416	"	0.831	75.0	10-135
sophorone	0.550	0.0416	"	0.831	66.2	20-132
Naphthalene	0.534	0.0416	"	0.831	64.3	23-124
Nitrobenzene	0.550	0.0416	"	0.831	66.3	13-132
N-Nitrosodimethylamine	0.834	0.0416	"	0.831	100	11-129
N-nitroso-di-n-propylamine	0.630	0.0416	"	0.831	75.9	24-119
N-Nitrosodiphenylamine	0.603	0.0416	"	0.831	72.6	22-152
Pentachlorophenol	0.291	0.0416	"	0.831	35.0	10-139
Phenanthrene	0.580	0.0416	"	0.831	69.8	33-123
Phenol	0.692	0.0416	"	0.831	83.3	23-115
Pyrene	0.601	0.0416	"	0.831	72.3	32-130
Pyridine	0.424	0.166	"	0.831	51.0	10-91
Surrogate: SURR: 2-Fluorophenol	1.48		"	1.66	89.0	20-108
Surrogate: SURR: Phenol-d5	1.27		"	1.66	76.2	23-114
Surrogate: SURR: Nitrobenzene-d5	0.677		"	0.831	81.6	22-108
Surrogate: SURR: 2-Fluorobiphenyl	0.578		"	0.831	69.6	21-113
Surrogate: SURR: 2,4,6-Tribromophenol	0.981		"	1.66	59.1	19-110

0.831

77.4

24-116

0.643

Surrogate: SURR: Terphenyl-d14



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York Analytical Laboratories, Inc.

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

Blank (BE90993-BLK1)						Prepared: 05/16	/2019 Analyzed: 05/17/20
,4'-DDD	ND	0.00400	ug/L				
,4'-DDE	ND	0.00400	"				
,4'-DDT	ND	0.00400	"				
ldrin	ND	0.00400	"				
pha-BHC	ND	0.00400	"				
pha-Chlordane	ND	0.00400	"				
eta-BHC	ND	0.00400	"				
elta-BHC	ND	0.00400	"				
ieldrin	ND	0.00200	"				
idosulfan I	ND	0.00400	"				
ndosulfan II	ND	0.00400	"				
idosulfan sulfate	ND	0.00400	"				
ndrin	ND	0.00400	"				
ndrin aldehyde	ND	0.0100	"				
ndrin ketone	ND	0.0100	"				
mma-BHC (Lindane)	ND	0.00400	"				
mma-Chlordane	ND	0.0100	"				
eptachlor	ND	0.00400	"				
eptachlor epoxide	ND	0.00400	"				
ethoxychlor	ND	0.00400	"				
oxaphene	ND	0.100	"				
hlordane, total	ND	0.200	"				
urrogate: Decachlorobiphenyl	0.212		"	0.200	106	30-150	
rrogate: Tetrachloro-m-xylene	0.212		,,	0.200	100	30-150	
	0.200			0.200	100		
CS (BE90993-BS1)			-				/2019 Analyzed: 05/17/20
4'-DDD	0.101	0.00400	ug/L	0.100	101	40-140	20
4'-DDE	0.0919	0.00400	"	0.100	91.9	40-140	20
4'-DDT	0.0712	0.00400	"	0.100	71.2	40-140	20
drin	0.0970	0.00400	"	0.100	97.0	40-140	20
bha-BHC	0.106	0.00400	"	0.100	106	40-140	20
pha-Chlordane	0.0872	0.00400	"	0.100	87.2	40-140	20
eta-BHC	0.0922	0.00400	"	0.100	92.2	40-140	20
lta-BHC	0.101	0.00400	"	0.100	101	40-140	20
eldrin	0.0886	0.00200	"	0.100	88.6	40-140	20
ndosulfan I	0.0927	0.00400	"	0.100	92.7	40-140	20
ndosulfan II	0.0928	0.00400	"	0.100	92.8	40-140	20
ndosulfan sulfate	0.0955	0.00400	"	0.100	95.5	40-140	20
drin	0.0787	0.00400	"	0.100	78.7	40-140	20
ndrin aldehyde	0.0868	0.0100	"	0.100	86.8	40-140	20
drin ketone	0.0971	0.0100	"	0.100	97.1	40-140	20
mma-BHC (Lindane)	0.101	0.00400	"	0.100	101	40-140	20
mma-Chlordane	0.0906	0.0100	"	0.100	90.6	40-140	20
eptachlor	0.0959	0.00400	"	0.100	95.9	40-140	20
eptachlor epoxide	0.0891	0.00400	"	0.100	89.1	40-140	20
ethoxychlor	0.0649	0.00400	"	0.100	64.9	40-140	20
rrogate: Decachlorobiphenyl	0.214		"	0.200	107	30-150	
rrogate: Tetrachloro-m-xylene	0.209		"	0.200	105	30-150	

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Organochlorine Pesticides by GC/ECD - Quality Control Data York Analytical Laboratories, Inc.

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

Analyte	Kesuit	Limit	Units	Levei	Result	%REC	Limits	riag	KPD	LIIIII	riag
Batch BE90993 - EPA SW846-3510C	Low Level										
Matrix Spike (BE90993-MS1)	*Source sample: 19	E0591-32 (M	W002)				Prepa	ared: 05/16/2	019 Analyz	ed: 05/22/2	2019
4,4'-DDD	0.112	0.00444	ug/L	0.111	ND	101	30-150			20	
4,4'-DDE	0.0935	0.00444	"	0.111	ND	84.1	30-150			20	
4,4'-DDT	0.114	0.00444	"	0.111	ND	103	30-150			20	
Aldrin	0.0906	0.00444	"	0.111	ND	81.6	30-150			20	
alpha-BHC	0.107	0.00444	"	0.111	ND	96.1	30-150			20	
alpha-Chlordane	0.0857	0.00444	"	0.111	ND	77.2	30-150			20	
beta-BHC	0.0977	0.00444	"	0.111	ND	88.0	30-150			20	
delta-BHC	0.112	0.00444	"	0.111	ND	101	30-150			20	
Dieldrin	0.0950	0.00222	"	0.111	ND	85.5	30-150			20	
Endosulfan I	0.0987	0.00444	"	0.111	ND	88.8	30-150			20	
Endosulfan II	0.104	0.00444	"	0.111	ND	93.3	30-150			20	
Endosulfan sulfate	0.114	0.00444	"	0.111	ND	103	30-150			20	
Endrin	0.102	0.00444	"	0.111	ND	92.1	30-150			20	
Endrin aldehyde	0.0991	0.0111	"	0.111	ND	89.2	30-150			20	
Endrin ketone	0.116	0.0111	"	0.111	ND	104	30-150			20	
gamma-BHC (Lindane)	0.102	0.00444	"	0.111	ND	91.8	30-150			20	
gamma-Chlordane	0.0898	0.0111	"	0.111	ND	80.8	30-150			20	
Heptachlor	0.0776	0.00444	"	0.111	ND	69.9	30-150			20	
Heptachlor epoxide	0.0970	0.00444	"	0.111	ND	87.3	30-150			20	
Methoxychlor	0.115	0.00444	"	0.111	ND	103	30-150			20	
Surrogate: Decachlorobiphenyl	0.249		"	0.222		112	30-150				
Surrogate: Tetrachloro-m-xylene	0.197		"	0.222		88.8	30-150				
-				0.222		00.0					
Matrix Spike Dup (BE90993-MSD1)	*Source sample: 19	E0591-32 (M	W002)				Prepa	ared: 05/16/2			2019
4,4'-DDD	0.120	0.00432	ug/L	0.108	ND	111	30-150		6.93	20	
4,4'-DDE	0.0977	0.00432	"	0.108	ND	90.4	30-150		4.41	20	
4,4'-DDT	0.125	0.00432	"	0.108	ND	116	30-150		9.17	20	
Aldrin	0.0940	0.00432	"	0.108	ND	87.0	30-150		3.68	20	
alpha-BHC	0.109	0.00432	"	0.108	ND	101	30-150		2.08	20	
alpha-Chlordane	0.0882	0.00432	"	0.108	ND	81.6	30-150		2.86	20	
beta-BHC	0.101	0.00432	"	0.108	ND	93.1	30-150		2.91	20	
delta-BHC	0.116	0.00432	"	0.108	ND	108	30-150		3.74	20	
Dieldrin	0.0987	0.00216	"	0.108	ND	91.3	30-150		3.78	20	
Endosulfan I	0.104	0.00432	"	0.108	ND	96.0	30-150		4.97	20	
Endosulfan II	0.110	0.00432	"	0.108	ND	101	30-150		5.61	20	
Endosulfan sulfate	0.129	0.00432	"	0.108	ND	119	30-150		11.8	20	
Endrin	0.109	0.00432	"	0.108	ND	101	30-150		6.10	20	
Endrin aldehyde	0.104	0.0108	"	0.108	ND	96.3	30-150		4.90	20	
Endrin ketone	0.128	0.0108	"	0.108	ND	118	30-150		9.78	20	
gamma-BHC (Lindane)	0.105	0.00432	"	0.108	ND	97.1	30-150		2.87	20	
gamma-Chlordane	0.0921	0.0108	"	0.108	ND	85.2	30-150		2.55	20	
Heptachlor	0.0876	0.00432	"	0.108	ND	81.0	30-150		12.0	20	
Heptachlor epoxide	0.0997	0.00432	"	0.108	ND	92.2	30-150		2.67	20	
Methoxychlor	0.129	0.00432	"	0.108	ND	120	30-150		11.9	20	
Surrogate: Decachlorobiphenyl	0.263		"	0.216		122	30-150				

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$\label{eq:control} \textbf{Organochlorine Pesticides by GC/ECD - Quality Control Data}$

York Analytical Laboratories, Inc.

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

Blank (BE91200-BLK1)						Prepared: 05/20/2019 Analyzed: 05/22/20
,4'-DDD	ND	0.000330	mg/kg wet			
,4'-DDE	ND	0.000330	"			
,4'-DDT	ND	0.000330	"			
lldrin	ND	0.000330	"			
pha-BHC	ND	0.000330	"			
pha-Chlordane	ND	0.000330	"			
eta-BHC	ND	0.000330	"			
elta-BHC	ND	0.000330	"			
ieldrin	ND	0.000330	"			
ndosulfan I	ND	0.000330	"			
ndosulfan II	ND	0.000330	"			
ndosulfan sulfate	ND	0.000330	"			
ndrin	ND	0.000330	"			
ndrin aldehyde	ND	0.000330	"			
ndrin ketone	ND	0.000330	"			
mma-BHC (Lindane)	ND	0.000330	"			
mma-Chlordane	ND	0.000330	"			
eptachlor	ND	0.000330	"			
eptachlor epoxide	ND	0.000330	"			
ethoxychlor	ND	0.000330	"			
oxaphene	ND	0.0330	"			
hlordane, total	ND	0.00660	"			
urrogate: Decachlorobiphenyl	0.105		"	0.0667	158	30-150
urrogate: Tetrachloro-m-xylene	0.0766		"	0.0667	115	30-150
-						
CS (BE91200-BS1)	0.0250	0.000220		0.0222	11.4	Prepared: 05/20/2019 Analyzed: 05/22/20
4'-DDD	0.0379	0.000330	mg/kg wet	0.0333	114	40-140
4'-DDE	0.0368	0.000330	"	0.0333	110	40-140
4'-DDT	0.0301	0.000330	"	0.0333	90.3	40-140
drin	0.0375	0.000330		0.0333	113	40-140
bha-BHC	0.0392	0.000330	"	0.0333	117	40-140
pha-Chlordane	0.0329	0.000330		0.0333	98.8	40-140
ta-BHC	0.0353	0.000330	"	0.0333	106	40-140
lta-BHC	0.0388	0.000330	"	0.0333	116	40-140
eldrin	0.0350	0.000330		0.0333	105	40-140
ndosulfan I	0.0374	0.000330	"	0.0333	112	40-140
ndosulfan II	0.0382	0.000330	"	0.0333	115	40-140
ndosulfan sulfate	0.0421	0.000330	"	0.0333	126	40-140
ndrin	0.0295	0.000330	"	0.0333	88.6	40-140
ndrin aldehyde	0.0372	0.000330	"	0.0333	112	40-140
drin ketone	0.0389	0.000330	"	0.0333	117	40-140
mma-BHC (Lindane)	0.0378	0.000330	"	0.0333	113	40-140
mma-Chlordane	0.0348	0.000330	"	0.0333	104	40-140
eptachlor	0.0243	0.000330	"	0.0333	73.0	40-140
eptachlor epoxide	0.0352	0.000330	"	0.0333	106	40-140
ethoxychlor	0.0264	0.000330	"	0.0333	79.2	40-140
rrogate: Decachlorobiphenyl	0.102		"	0.0667	153	30-150
rrogate: Tetrachloro-m-xylene	0.0802		"	0.0667	120	30-150

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Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

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

Ratah	VOE	BEOUUO3

Performance Mix (Y9E2237-PEM1)					Prepared & Analyzed: 05/21/2019
4,4'-DDD	0.00	ng/mL	0.00		0-200
4,4'-DDE	0.735	"	0.00		0-200
1,4'-DDT	166	"	20000	0.831	0-200
Endrin	90.8	"	10000	0.908	0-200
Endrin aldehyde	1.42	"	0.00		0-200
Endrin ketone	9.50	"	0.00		0-200
Performance Mix (Y9E2237-PEM2)					Prepared & Analyzed: 05/21/2019
4,4'-DDD	0.00	ng/mL	0.00		0-200
4,4'-DDE	0.615	"	0.00		0-200
4,4'-DDT	185	"	200	92.7	0-200
Endrin	114	"	100	114	0-200
Endrin aldehyde	1.46	"	0.00		0-200

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Polychlorinated Biphenyls by GC/ECD - Quality Control Data York Analytical Laboratories, Inc.

A 1-4-	Result	Reporting	Units	Spike	Source*	%REC	%REC	Flag	RPD	RPD Limit	Flag
Analyte	Result	Limit	Units	Level	Result	%KEC	Limits	riag	KFD	Liiiit	riag
Batch BE90993 - EPA SW846-3510C	Low Level										
Matrix Spike (BE90993-MS2)	*Source sample: 1	9E0591-32 (N	(W002)				Prepa	ared: 05/16/2	2019 Analyz	ed: 05/17/2	2019
Aroclor 1016	0.757	0.0556	ug/L	1.11	ND	68.1	40-140			20	
Aroclor 1260	0.942	0.0556	"	1.11	ND	84.8	40-140			20	
Surrogate: Tetrachloro-m-xylene	0.164		"	0.222		74.0	30-150				
Surrogate: Decachlorobiphenyl	0.224		"	0.222		101	30-150				
Matrix Spike Dup (BE90993-MSD2)	*Source sample: 1	9E0591-32 (M	(W002)				Prepa	ared: 05/16/2	2019 Analyz	ed: 05/17/2	2019
Aroclor 1016	0.729	0.0541	ug/L	1.08	ND	67.4	40-140		3.77	20	
Aroclor 1260	0.923	0.0541	"	1.08	ND	85.4	40-140		2.03	20	
Surrogate: Tetrachloro-m-xylene	0.161		"	0.216		74.5	30-150				
Surrogate: Decachlorobiphenyl	0.216		"	0.216		100	30-150				
Batch BE91139 - EPA 3550C											
Matrix Spike (BE91139-MS2)	*Source sample: 1	9E0591-04 (S	B002 (4-6))				Prepa	ared: 05/20/2	2019 Analyz	ed: 05/23/2	2019
Aroclor 1016	0.443	0.0214	mg/kg dry	0.429	ND	103	40-140				
Aroclor 1260	0.388	0.0214	"	0.429	ND	90.5	40-140				
Surrogate: Tetrachloro-m-xylene	0.0858		"	0.0858		100	30-120				
Surrogate: Decachlorobiphenyl	0.0841		"	0.0858		98.0	30-120				
Matrix Spike Dup (BE91139-MSD2)	*Source sample: 1	9E0591-04 (S	B002 (4-6))				Prepa	ared: 05/20/2	2019 Analyz	ed: 05/23/2	2019
Aroclor 1016	0.458	0.0214	mg/kg dry	0.429	ND	107	40-140		3.37	50	
Aroclor 1260	0.409	0.0214	"	0.429	ND	95.3	40-140		5.19	50	
Surrogate: Tetrachloro-m-xylene	0.0905		"	0.0858		106	30-120				
Surrogate: Decachlorobiphenyl	0.0853		"	0.0858		99.5	30-120				

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Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE90912 - EPA 3015A	100000		- Cinto	20,01	riosan	, , , ,	2				
Blank (BE90912-BLK1)							Pren	ared: 05/15/2	2019 Analyz	ed: 05/16/2	2019
Aluminum	ND	55.6	ug/L								
Barium	ND	27.8	"								
Calcium	ND	55.6	"								
Chromium	ND	5.56	"								
Cobalt	ND	4.44	"								
Copper	ND	22.2	"								
Iron	ND	278	"								
Lead	ND	5.56	"								
Magnesium	ND	55.6	"								
Manganese	ND	5.56	"								
Nickel	ND	11.1	"								
Potassium	ND	55.6	"								
Silver	ND	5.56	"								
Sodium	ND	556	"								
Vanadium	ND	11.1	"								
Zinc	ND	27.8	"								
	ND	27.0									
LCS (BE90912-BS1)							Prep	ared: 05/15/	2019 Analyz	ed: 05/16/2	2019
Aluminum	2.05		ug/mL	2.00		102	80-120				
Barium	2.03		"	2.00		102	80-120				
Calcium	0.963		"	1.00		96.3	80-120				
Chromium	0.196		"	0.200		98.0	80-120				
Cobalt	0.519		"	0.500		104	80-120				
Copper	0.254		"	0.250		102	80-120				
Iron	0.993		"	1.00		99.3	80-120				
Lead	0.497		"	0.500		99.5	80-120				
Magnesium	0.974		"	1.00		97.4	80-120				
Manganese	0.513		"	0.500		103	80-120				
Nickel	0.506		"	0.500		101	80-120				
Potassium	0.995		"	1.00		99.5	80-120				
Silver	0.0497		"	0.0500		99.4	80-120				

1.00

0.500

0.500

109

99.2

97.6

80-120

80-120

80-120

Sodium

Zinc

Vanadium

1.09

0.496

0.488



		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE90912 - EPA 3015A											
Duplicate (BE90912-DUP1)	*Source sample: 19E	60591-32 (M	W002)				Prepa	ared: 05/15/2	2019 Analyz	ed: 05/16/	2019
Aluminum	467	55.6	ug/L		899				63.2	20	Non-dir.
Barium	83.6	27.8	"		83.2				0.404	20	
0.1.									0.441	20	

Duplicate (BE90912-DUP1)	*Source sample: 19F	E0591-32 (M	W002)		Prepared: 05/15/2019 Analyzed: 05/16/2019				
Aluminum	467	55.6	ug/L	899	63.2	20	Non-dir.		
Barium	83.6	27.8	"	83.2	0.404	20			
Calcium	173000	55.6	"	172000	0.441	20			
Chromium	ND	5.56	"	ND		20			
Cobalt	ND	4.44	"	ND		20			
Copper	ND	22.2	"	ND		20			
Iron	3900	278	"	3940	1.07	20			
Lead	16.0	5.56	"	16.6	3.49	20			
Magnesium	267000	55.6	"	265000	0.865	20			
Manganese	413	5.56	"	409	0.981	20			
Nickel	ND	11.1	"	ND		20			
Potassium	97200	55.6	"	95600	1.65	20			
Silver	ND	5.56	"	ND		20			
Sodium	2710000	556	"	2690000	0.886	20			
Vanadium	ND	11.1	"	ND		20			
Zinc	46.6	27.8	"	59.0	23.5	20	Non-dir.		
	10.0	27.0		27.0					

Matrix Spike (BE90912-MS1)	*Source sample: 19E	0591-32 (M	W002)	*Source sample: 19E0591-32 (MW002)								
Aluminum	2570	55.6	ug/L	2220	899	75.3	75-125					
Barium	2200	27.8	"	2220	83.2	95.2	75-125					
Calcium	169000	55.6	"	1110	172000	NR	75-125	Low Bias				
Chromium	208	5.56	"	222	ND	93.6	75-125					
Cobalt	536	4.44	"	556	ND	96.4	75-125					
Copper	313	22.2	"	278	ND	113	75-125					
Iron	4910	278	"	1110	3940	86.8	75-125					
Lead	523	5.56	"	556	16.6	91.1	75-125					
Magnesium	261000	55.6	"	1110	265000	NR	75-125	Low Bias				
Manganese	919	5.56	"	556	409	91.8	75-125					
Nickel	565	11.1	"	556	ND	102	75-125					
Potassium	95400	55.6	"	1110	95600	NR	75-125	Low Bias				
Silver	57.2	5.56	"	55.6	ND	103	75-125					
Sodium	2630000	556	"	1110	2690000	NR	75-125	Low Bias				
Vanadium	541	11.1	"	556	ND	97.4	75-125					
Zinc	582	27.8	"	556	59.0	94.2	75-125					



		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE91114 - EPA 3015A											
Blank (BE91114-BLK1)							Prep	ared: 05/17/2	2019 Analyz	zed: 05/20/2	2019
Aluminum - Dissolved	ND	0.0556	mg/L								
Barium - Dissolved	ND	0.0278	"								
Calcium - Dissolved	ND	0.0556	"								
Chromium - Dissolved	ND	0.00556	"								
Cobalt - Dissolved	ND	0.00444	"								
Copper - Dissolved	ND	0.0222	"								
Iron - Dissolved	ND	0.278	"								
Lead - Dissolved	ND	0.00556	"								
Magnesium - Dissolved	ND	0.0556	"								
Manganese - Dissolved	ND	0.00556	"								
Nickel - Dissolved	ND	0.0111	"								
Potassium - Dissolved	ND	0.0556	"								
Silver - Dissolved	ND	0.00556	"								
Sodium - Dissolved	ND	0.556	"								
Vanadium - Dissolved	ND	0.0111	"								
Zinc - Dissolved	ND	0.0278	"								
LCS (BE91114-BS1)							Prep	ared: 05/17/2	2019 Analyz	zed: 05/20/2	2019
Aluminum - Dissolved	1.87		ug/mL	2.00		93.7	80-120				
Barium - Dissolved	1.84		"	2.00		92.0	80-120				
Calcium - Dissolved	0.852		"	1.00		85.2	80-120				
Chromium - Dissolved	0.175		"	0.200		87.4	80-120				
Cobalt - Dissolved	0.463		"	0.500		92.6	80-120				
Copper - Dissolved	0.233		"	0.250		93.1	80-120				
Iron - Dissolved	0.924		"	1.00		92.4	80-120				
Lead - Dissolved	0.447		"	0.500		89.3	80-120				
Magnesium - Dissolved	0.899		"	1.00		89.9	80-120				
Manganese - Dissolved	0.459		"	0.500		91.9	80-120				
Nickel - Dissolved	0.453		"	0.500		90.7	80-120				

1.00

0.0500

1.00

0.500

0.500

90.2

92.3

94.0

90.0

85.3

80-120

80-120

80-120

80-120

80-120

0.902

0.0461

0.940

0.450

0.427

Potassium - Dissolved

Silver - Dissolved

Zinc - Dissolved

Sodium - Dissolved

Vanadium - Dissolved



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

Duplicate (BE91114-DUP1)	*Source sample: 19	E0591-32 (M	W002)				Prepared:	05/17/2019 Analyze	ed: 05/20/2019
Aluminum - Dissolved	ND	0.0556	mg/L		0.0755				20
Barium - Dissolved	0.0685	0.0278	"		0.0685			0.106	20
Calcium - Dissolved	163	0.0556	"		162			0.683	20
Chromium - Dissolved	ND	0.00556	"		ND				20
Cobalt - Dissolved	ND	0.00444	"		ND				20
Copper - Dissolved	ND	0.0222	"		ND				20
Iron - Dissolved	ND	0.278	"		ND				20
Lead - Dissolved	ND	0.00556	"		ND				20
Magnesium - Dissolved	249	0.0556	"		248			0.177	20
Manganese - Dissolved	0.395	0.00556	"		0.393			0.472	20
Nickel - Dissolved	ND	0.0111	"		ND				20
Potassium - Dissolved	87.9	0.0556	"		88.4			0.582	20
Silver - Dissolved	ND	0.00556	"		ND				20
Sodium - Dissolved	2590	0.556	"		2480			4.54	20
Vanadium - Dissolved	ND	0.0111	"		ND				20
Zinc - Dissolved	ND	0.0278	"		0.0302				20
Matrix Spike (BE91114-MS1)	*Source sample: 19	E0591-32 (M	W002)				Prepared:	05/17/2019 Analyze	ed: 05/20/2019
Barium - Dissolved	2.06	0.0278	mg/L	2.22	0.0685	89.6	75-125		
Chromium - Dissolved	0.204	0.00556	"	0.222	ND	91.9	75-125		
Cobalt - Dissolved	0.500	0.00444	"	0.556	ND	89.9	75-125		
Copper - Dissolved	0.295	0.0222	"	0.278	ND	106	75-125		
Iron - Dissolved	1.06	0.278	"	1.11	ND	95.0	75-125		
Lead - Dissolved	0.469	0.00556	"	0.556	ND	84.5	75-125		
Manganese - Dissolved	0.888	0.00556	"	0.556	0.393	89.2	75-125		
Nickel - Dissolved	0.530	0.0111	"	0.556	ND	95.4	75-125		
Silver - Dissolved	0.0571	0.00556	"	0.0556	ND	103	75-125		
Vanadium - Dissolved	0.509	0.0111	"	0.556	ND	91.5	75-125		

0.556

0.0302

85.4

75-125

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0.505

0.0278

Zinc - Dissolved



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

Batch BE91204 - EPA 3050B							
Blank (BE91204-BLK1)					Prepared & Analyzed: 05/20/20	019	
Aluminum	ND	5.00	mg/kg wet				
Antimony	ND	2.50	"				
Arsenic	ND	1.50	"				
Barium	ND	2.50	"				
Beryllium	0.062	0.050	"				
Cadmium	ND	0.300	"				
alcium	ND	5.00	"				
Chromium	ND	0.500	"				
obalt	ND	0.400	"				
opper	ND	2.00	"				
on	ND	25.0	"				
ead	ND	0.500	"				
lagnesium	ND	5.00	"				
fanganese	ND	0.500	"				
fickel	ND	1.00	"				
otassium	ND	5.00	"				
elenium	ND	2.50	"				
ilver	ND	0.500	"				
odium	ND	50.0	"				
hallium	ND	2.50	"				
anadium	ND	1.00	"				
inc	ND	2.50	"				
Ouplicate (BE91204-DUP1)	*Source sample: 191	E0591-04 (S	B002 (4-6))		Prepared & Analyzed: 05/20/20	019	
luminum	6850	(15					
	0050	6.45	mg/kg ary	5850	15.7	35	
ntimony	ND	3.23	mg/kg dry	5850 ND	15.7	35 35	
					15.7		
rsenic	ND	3.23	"	ND		35	Non-
rsenic arium	ND 6.48	3.23 1.94	"	ND 7.26	11.4	35 35	Non-o
rsenic arium eryllium	ND 6.48 145	3.23 1.94 3.23	" "	ND 7.26 245	11.4	35 35 35	Non-o
rsenic arium eryllium admium	ND 6.48 145 ND 1.05	3.23 1.94 3.23 0.065 0.387	11 11 11	ND 7.26 245 0.113 1.18	11.4 51.4	35 35 35 35 35	Non-
antimony arsenic farium feryllium fadmium falcium fhromium	ND 6.48 145 ND	3.23 1.94 3.23 0.065	n n n	ND 7.26 245 0.113 1.18 19900	11.4 51.4 11.3	35 35 35 35 35 35	Non-c
arsenic Jarium Jeryllium Jadmium Jalcium Jaromium	ND 6.48 145 ND 1.05 14800 18.2	3.23 1.94 3.23 0.065 0.387 6.45 0.645	" " " " " "	ND 7.26 245 0.113 1.18 19900 17.0	11.4 51.4 11.3 29.3	35 35 35 35 35 35 35	Non-o
arsenic larium leryllium ladmium lalcium l'hromium lobalt	ND 6.48 145 ND 1.05 14800 18.2 8.93	3.23 1.94 3.23 0.065 0.387 6.45 0.645 0.516	" " " " " " " " "	ND 7.26 245 0.113 1.18 19900 17.0 8.27	11.4 51.4 11.3 29.3 6.46	35 35 35 35 35 35	Non-c
rsenic arium eryllium admium alcium hromium obalt opper	ND 6.48 145 ND 1.05 14800 18.2 8.93 200	3.23 1.94 3.23 0.065 0.387 6.45 0.645 0.516 2.58	" " " " " " " " " " "	ND 7.26 245 0.113 1.18 19900 17.0 8.27 151	11.4 51.4 11.3 29.3 6.46 7.67 27.4	35 35 35 35 35 35 35 35 35 35	Non-e
arsenic larium leryllium ladmium lalcium lobalt lopper	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500	3.23 1.94 3.23 0.065 0.387 6.45 0.645 0.516 2.58 32.3	11 11 11 11 11	ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71	35 35 35 35 35 35 35 35 35 35 35	
arsenic sarium seryllium seldmium seldium seldromium sobalt sopper son	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500 303	3.23 1.94 3.23 0.065 0.387 6.45 0.645 0.516 2.58 32.3 0.645		ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400 459	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71 40.9	35 35 35 35 35 35 35 35 35 35 35 35	Non-o
rsenic arium eryllium admium alcium hromium obalt opper on ead lagnesium	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500 303 7710	3.23 1.94 3.23 0.065 0.387 6.45 0.645 0.516 2.58 32.3 0.645 6.45		ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400 459 7800	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71 40.9 1.10	35 35 35 35 35 35 35 35 35 35 35 35 35	
rsenic arium eryllium admium alcium hromium obalt opper on ead lagnesium langanese	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500 303 7710 290	3.23 1.94 3.23 0.065 0.387 6.45 0.645 0.516 2.58 32.3 0.645 6.45		ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400 459 7800 266	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71 40.9 1.10 8.55	35 35 35 35 35 35 35 35 35 35 35 35 35 3	
rsenic arium eryllium admium alcium hromium obalt opper on ead lagnesium langanese ickel	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500 303 7710 290 20.0	3.23 1.94 3.23 0.065 0.387 6.45 0.516 2.58 32.3 0.645 6.45 0.645		ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400 459 7800 266 18.9	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71 40.9 1.10 8.55 5.39	35 35 35 35 35 35 35 35 35 35 35 35 35 3	Non-
rsenic arium eryllium admium alcium hromium obalt opper on ead lagnesium langanese ickel otassium	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500 303 7710 290 20.0 2390	3.23 1.94 3.23 0.065 0.387 6.45 0.516 2.58 32.3 0.645 6.45 0.645		ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400 459 7800 266 18.9 1500	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71 40.9 1.10 8.55	35 35 35 35 35 35 35 35 35 35 35 35 35 3	
rsenic arium eryllium admium alcium hromium obalt opper on ead lagnesium langanese ickel otassium elenium	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500 303 7710 290 20.0 2390 ND	3.23 1.94 3.23 0.065 0.387 6.45 0.516 2.58 32.3 0.645 6.45 0.645 1.29 6.45 3.23		ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400 459 7800 266 18.9 1500 ND	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71 40.9 1.10 8.55 5.39	35 35 35 35 35 35 35 35 35 35 35 35 35 3	Non-
rsenic arium eryllium admium alcium hromium obalt opper on ead lagnesium langanese ickel otassium elenium	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500 303 7710 290 20.0 2390 ND ND	3.23 1.94 3.23 0.065 0.387 6.45 0.516 2.58 32.3 0.645 6.45 0.645 1.29 6.45 3.23 0.645		ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400 459 7800 266 18.9 1500 ND	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71 40.9 1.10 8.55 5.39 45.5	35 35 35 35 35 35 35 35 35 35 35 35 35 3	Non-
rsenic arium eryllium admium alcium hromium obalt opper on ead lagnesium langanese ickel otassium elenium ilver odium	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500 303 7710 290 20.0 2390 ND ND ND	3.23 1.94 3.23 0.065 0.387 6.45 0.516 2.58 32.3 0.645 6.45 0.645 1.29 6.45 3.23 0.645 6.45		ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400 459 7800 266 18.9 1500 ND ND ND	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71 40.9 1.10 8.55 5.39	35 35 35 35 35 35 35 35 35 35 35 35 35 3	Non-
rsenic arium eryllium admium alcium hromium obalt opper	ND 6.48 145 ND 1.05 14800 18.2 8.93 200 15500 303 7710 290 20.0 2390 ND ND	3.23 1.94 3.23 0.065 0.387 6.45 0.516 2.58 32.3 0.645 6.45 0.645 1.29 6.45 3.23 0.645		ND 7.26 245 0.113 1.18 19900 17.0 8.27 151 16400 459 7800 266 18.9 1500 ND	11.4 51.4 11.3 29.3 6.46 7.67 27.4 5.71 40.9 1.10 8.55 5.39 45.5	35 35 35 35 35 35 35 35 35 35 35 35 35 3	Non-

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

Matrix Spike (BE91204-MS1)	*Source sample: 19I	E0591-04 (S	B002 (4-6))				Prep	ared & Analyzed: 05/20/2019
luminum	5920	6.45	mg/kg dry	258	5850	24.6	75-125	Low Bias
antimony	22.8	3.23	"	32.3	ND	70.5	75-125	Low Bias
arsenic	240	1.94	"	258	7.26	90.2	75-125	
Barium	431	3.23	"	258	245	72.0	75-125	Low Bias
Beryllium	6.24	0.065	"	6.45	0.113	94.9	75-125	
Cadmium	6.70	0.387	"	6.45	1.18	85.7	75-125	
alcium	22000	6.45	"	129	19900	NR	75-125	High Bias
Chromium	41.4	0.645	"	25.8	17.0	94.3	75-125	
obalt	69.2	0.516	"	64.5	8.27	94.5	75-125	
opper	195	2.58	"	32.3	151	137	75-125	High Bias
on	15900	32.3	"	129	16400	NR	75-125	Low Bias
ead	408	0.645	"	64.5	459	NR	75-125	Low Bias
lagnesium	10900	6.45	"	129	7800	NR	75-125	High Bias
langanese	357	0.645	"	64.5	266	142	75-125	High Bias
lickel	84.1	1.29	"	64.5	18.9	101	75-125	
otassium	1730	6.45	"	129	1500	177	75-125	High Bias
elenium	208	3.23	"	258	ND	80.4	75-125	
ilver	3.05	0.645	"	6.45	ND	47.2	75-125	Low Bias
odium	444	64.5	"	129	292	118	75-125	
hallium	248	3.23	"	258	ND	96.1	75-125	
anadium	85.5	1.29	"	64.5	25.7	92.7	75-125	
inc	414	3.23	"	64.5	446	NR	75-125	Low Bias
teference (BE91204-SRM1)							Pren	ared & Analyzed: 05/20/2019
luminum	7480	5.00	mg/kg wet	8360		89.4	50.2-149.5	area ee 1 mary 20a. 00, 20, 2019
ntimony	103	2.50	mg/kg wet	89.6		115	19.3-258.9	
rsenic	209	1.50	"	202		103	69.8-130.2	
arium	285	2.50	"	270				
eryllium			"			106	75.2-125.2	
admium	106	0.050	"	96.8		110	75-125	
alcium	141	0.300	"	141		100	74.5-124.8	
hromium	4660	5.00	,,	4700		99.2	72.6-127.7	
obalt	176	0.500	"	167		105	70.1-129.9	
opper	191	0.400	"	174		109	74.7-124.7	
opper on	129	2.00	"	108		119	74.7-124.1	
on ead	12600	25.0	,,	14700		85.8	36.4-163.9	
	73.9	0.500	,,	73.8		100	68.4-131.6	
Iagnesium	2190	5.00	,,	2310		94.8	61.9-138.1	
langanese ickel	353	0.500	,,	330		107	75.2-124.8	
	108	1.00	,,	89.4		121	69.9-129.8	
otassium	2210	5.00		2240		98.6	60.7-139.7	Law Diag
elenium	28.9	2.50	"	49.9		58.0	58.1-141.7	LOW BIAS
ilver	76.5	0.500	"	71.1		108	70.7-129.3	
odium	220	50.0	"	195		113	45.5-154.4	
'hallium 'anadium	61.6 56.2	2.50 1.00	"	58.5		105	60.9-139.3 57.4-142.6	
			"	58.2		96.5		

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Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE91205 - EPA 3050B											

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE91205 - EPA 3050B											
Blank (BE91205-BLK1)							Prepa	ared & Analyzed	: 05/20/2	2019	
Aluminum	ND	5.00	mg/kg wet								
Antimony	ND	2.50	"								
Arsenic	ND	1.50	"								
Barium	ND	2.50	"								
Beryllium	ND	0.050	"								
Cadmium	ND	0.300	"								
Calcium	ND	5.00	"								
Chromium	ND	0.500	"								
Cobalt	ND	0.400	"								
Copper	ND	2.00	"								
Iron	ND	25.0	"								
Lead	ND	0.500	"								
Magnesium	ND	5.00	"								
Manganese	ND	0.500	"								
Nickel	ND	1.00	"								
Potassium	ND	5.00	"								
Selenium	ND	2.50	"								
Silver	ND	0.500	"								
Sodium	ND	50.0	"								
Thallium	ND	2.50	"								
Vanadium	ND	1.00	"								
Zinc	ND	2.50	"								
Duplicate (BE91205-DUP1)	*Source sample: 19	E0591-07 (S	B003 (6-8))				Prepa	ared & Analyzed	: 05/20/2	2019	
Aluminum	11000	5.62	mg/kg dry		10100				7.90	35	
Antimony	ND	2.81	"		ND					35	
Arsenic	ND	1.69	"		3.78					35	
Barium	123	2.81	"		103				17.2	35	
Beryllium	ND	0.056	"		ND					35	
Cadmium	ND	0.337	"		ND					35	
Calcium	3400	5.62	"		2930				14.9	35	
Chromium	23.0	0.562	"		22.0				4.18	35	
Cobalt	13.1	0.449	"		11.9				9.07	35	
Copper	29.1	2.25	"		24.5				17.1	35	
Iron	24900	28.1	"		25600				2.75	35	
Lead									87.4	35	Non-dir.
	138	0.562	"		53.9						
Magnesium		0.562 5.62	"		53.9 3830				12.6	35	
Magnesium Manganese	138										
Manganese Nickel	138 4350	5.62	"		3830				12.6 11.1 7.41	35 35 35	
Manganese	138 4350 409	5.62 0.562	"		3830 457				12.6 11.1	35 35 35 35	
Manganese Nickel	138 4350 409 24.3	5.62 0.562 1.12	"		3830 457 22.5				12.6 11.1 7.41	35 35 35	
Manganese Nickel Potassium	138 4350 409 24.3 3660	5.62 0.562 1.12 5.62	" " "		3830 457 22.5 3390				12.6 11.1 7.41	35 35 35 35	
Manganese Nickel Potassium Selenium	138 4350 409 24.3 3660 ND	5.62 0.562 1.12 5.62 2.81	" " " " " " " " " " " " " " " " " " " "		3830 457 22.5 3390 ND				12.6 11.1 7.41	35 35 35 35 35	
Manganese Nickel Potassium Selenium Silver Sodium Thallium	138 4350 409 24.3 3660 ND	5.62 0.562 1.12 5.62 2.81 0.562	" " " " " " " " " " " " " " " " " " " "		3830 457 22.5 3390 ND ND				12.6 11.1 7.41 7.68	35 35 35 35 35 35 35 35 35	
Manganese Nickel Potassium Selenium Silver Sodium	138 4350 409 24.3 3660 ND ND 340	5.62 0.562 1.12 5.62 2.81 0.562 56.2	" " " " " " " " " " " " " " " " " " " "		3830 457 22.5 3390 ND ND ND 306				12.6 11.1 7.41 7.68	35 35 35 35 35 35 35	



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

atrix Spike (BE91205-MS1)	*Source sample: 191	E0591-07 (S	B003 (6-8))				Prep	ared & Analyzed: 05/20/2019
uminum	11300	5.62	mg/kg dry	225	10100	538	75-125	High Bias
ntimony	6.96	2.81	"	28.1	ND	24.8	75-125	Low Bias
senic	197	1.69	"	225	3.78	86.1	75-125	
rium	322	2.81	"	225	103	97.1	75-125	
ryllium	5.01	0.056	"	5.62	ND	89.1	75-125	
dmium	5.20	0.337	"	5.62	ND	92.6	75-125	
cium	3520	5.62	"	112	2930	529	75-125	High Bias
romium	47.9	0.562	"	22.5	22.0	115	75-125	
balt	67.0	0.449	"	56.2	11.9	98.1	75-125	
pper	56.8	2.25	"	28.1	24.5	115	75-125	
	23500	28.1	"	112	25600	NR	75-125	Low Bias
d	137	0.562	"	56.2	53.9	147	75-125	High Bias
gnesium	4810	5.62	"	112	3830	871	75-125	High Bias
nganese	405	0.562	"	56.2	457	NR	75-125	Low Bias
kel	80.7	1.12	"	56.2	22.5	103	75-125	
assium	4050	5.62	"	112	3390	584	75-125	High Bias
enium	148	2.81	"	225	ND	66.0	75-125	Low Bias
er	ND	0.562	"	5.62	ND		75-125	Low Bias
ium	413	56.2	"	112	306	95.5	75-125	
llium	195	2.81	"	225	ND	86.7	75-125	
adium	86.5	1.12	"	56.2	30.8	99.1	75-125	
С	123	2.81	"	56.2	57.6	117	75-125	
C (DE01205 CDM1)								ared & Analyzed: 05/20/2019
eference (BE91205-SRM1)	=0.0			00.00				ared & Allaryzed. 05/20/2019
minum :	7860	5.00	mg/kg wet	8360		94.0	50.2-149.5	
imony	110	2.50	"	89.6		122	19.3-258.9	
enic	227	1.50		202		113	69.8-130.2	
um	312	2.50	"	270		115	75.2-125.2	
yllium	110	0.050	"	96.8		114	75-125	
lmium	160	0.300	"	141		113	74.5-124.8	
cium	4990	5.00	"	4700		106	72.6-127.7	
omium	184	0.500	"	167		110	70.1-129.9	
alt	203	0.400	"	174		117	74.7-124.7	
pper	129	2.00	"	108		119	74.7-124.1	
1	13400	25.0	"	14700		91.3	36.4-163.9	
nd	83.2	0.500	"	73.8		113	68.4-131.6	
gnesium	2430	5.00	"	2310		105	61.9-138.1	
nganese	373	0.500	"	330		113	75.2-124.8	
kel	117	1.00	"	89.4		131	69.9-129.8	High Bias
ssium	2320	5.00	"	2240		103	60.7-139.7	
enium	31.8	2.50	"	49.9		63.7	58.1-141.7	
ver	78.6	0.500	"	71.1		111	70.7-129.3	
lium	216	50.0	"	195		111	45.5-154.4	
ıllium	69.0	2.50	"	58.5		118	60.9-139.3	
adium	58.9	1.00	"	58.2		101	57.4-142.6	
	286	2.50	"	264		108	70.1-130.3	

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Metals by ICP/MS - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE90913 - EPA 3015A											
Blank (BE90913-BLK1)							Prej	pared: 05/15/2	2019 Analyz	ed: 05/16/2	2019
Antimony	ND	1.11	ug/L								
Arsenic	ND	1.11	"								
Beryllium	ND	0.333	"								
Cadmium	ND	0.556	"								
Selenium	ND	1.11	"								
Thallium	ND	1.11	"								
LCS (BE90913-BS1)							Prej	pared: 05/15/2	2019 Analyz	ed: 05/16/2	2019
Antimony	35.4		ug/L	50.0		70.8	80-120	Low Bias			
Arsenic	45.9		"	50.0		91.8	80-120				
Beryllium	47.2		"	50.0		94.4	80-120				
Cadmium	44.7		"	50.0		89.4	80-120				
Selenium	40.2		"	50.0		80.4	80-120				
Thallium	47.2		"	50.0		94.3	80-120				
Duplicate (BE90913-DUP1)	*Source sample: 19	9E0591-32 (M	W002)				Prej	pared: 05/15/2	2019 Analyz	ed: 05/16/2	2019
Antimony	ND	1.11	ug/L		1.13					20	
Arsenic	1.61	1.11	"		1.32				19.9	20	
Beryllium	ND	0.333	"		ND					20	
Cadmium	ND	0.556	"		ND					20	
Selenium	70.6	1.11	"		84.5				17.9	20	
Thallium	ND	1.11	"		ND					20	
Matrix Spike (BE90913-MS1)	*Source sample: 19	9E0591-32 (M	W002)				Prej	pared: 05/15/2	2019 Analyz	ed: 05/16/2	2019
Antimony	37.1		ug/L	50.0	1.02	72.1	75-125	Low Bias		<u> </u>	
Arsenic	48.2		"	50.0	1.19	94.0	75-125				
Beryllium	22.6		"	50.0	0.010	45.2	75-125	Low Bias			
Cadmium	42.8		"	50.0	0.265	85.0	75-125				
Selenium	132		"	50.0	76.0	113	75-125				
Thallium	46.1		"	50.0	0.111	92.0	75-125				

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Metals by ICP/MS - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE91115 - EPA 3015A											
Blank (BE91115-BLK1)							Pre	pared: 05/17/2	2019 Analyz	zed: 05/20/2	2019
Antimony - Dissolved	ND	1.11	ug/L								
Arsenic - Dissolved	ND	1.11	"								
Beryllium - Dissolved	ND	0.333	"								
Cadmium - Dissolved	ND	0.556	"								
Selenium - Dissolved	ND	1.11	"								
Thallium - Dissolved	ND	1.11	"								
LCS (BE91115-BS1)							Pre	pared: 05/17/2	2019 Analyz	zed: 05/20/2	2019
Antimony - Dissolved	37.9		ug/L	50.0		75.7	80-120	Low Bias			
Arsenic - Dissolved	50.2		"	50.0		100	80-120				
Beryllium - Dissolved	46.8		"	50.0		93.7	80-120				
Cadmium - Dissolved	46.4		"	50.0		92.9	80-120				
Selenium - Dissolved	48.1		"	50.0		96.3	80-120				
Thallium - Dissolved	52.5		"	50.0		105	80-120				
Duplicate (BE91115-DUP1)	*Source sample: 19	9E0591-32 (M	W002)				Prej	pared: 05/17/2	2019 Analyz	zed: 05/20/2	2019
Antimony - Dissolved	ND	1.11	ug/L		ND					20	
Arsenic - Dissolved	ND	1.11	"		ND					20	
Beryllium - Dissolved	ND	0.333	"		ND					20	
Cadmium - Dissolved	ND	0.556	"		ND					20	
Selenium - Dissolved	68.9	1.11	"		58.9				15.5	20	
Thallium - Dissolved	ND	1.11	"		ND					20	
Matrix Spike (BE91115-MS1)	*Source sample: 19	9E0591-32 (M	W002)				Pre	pared: 05/17/2	2019 Analyz	zed: 05/20/2	2019
Antimony - Dissolved	43.8		ug/L	50.0	0.982	85.6	75-125				
Arsenic - Dissolved	52.2		"	50.0	-0.931	104	75-125				
Beryllium - Dissolved	25.3		"	50.0	-0.006	50.5	75-125	Low Bias			
Cadmium - Dissolved	48.4		"	50.0	0.266	96.2	75-125				
Selenium - Dissolved	105		"	50.0	53.0	104	75-125				
Thallium - Dissolved	54.4		"	50.0	0.211	108	75-125				

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

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE90989 - EPA 7473 water											
Blank (BE90989-BLK1)							Prep	ared & Anal	yzed: 05/16/	/2019	
Mercury	ND	0.20	ug/L								
Duplicate (BE90989-DUP1)	*Source sample: 1	9E0591-32 (M	(W002)				Prep	ared & Anal	yzed: 05/16/	/2019	
Mercury	ND	0.20	ug/L		ND					20	
Matrix Spike (BE90989-MS1)	*Source sample: 1	9E0591-32 (M	(W002)				Prep	ared & Anal	yzed: 05/16/	/2019	
Mercury	0.00848		mg/L	0.0100	0.00	84.8	75-125				
Reference (BE90989-SRM1)							Prep	ared & Anal	yzed: 05/16/	/2019	
Mercury	0.00845		mg/L	0.0100		84.5	70-130				
Batch BE91266 - EPA 7473 water											
Blank (BE91266-BLK1)							Prep	ared & Anal	yzed: 05/21/	/2019	
Mercury - Dissolved	ND	0.0002000	mg/L								
Duplicate (BE91266-DUP1)	*Source sample: 1	9E0591-32 (M	(W002)				Prep	ared & Anal	yzed: 05/21/	/2019	
Mercury - Dissolved	ND	0.0002000	mg/L		ND					20	
Matrix Spike (BE91266-MS1)	*Source sample: 1	9E0591-32 (M	(W002)				Prep	ared & Anal	yzed: 05/21/	/2019	
Mercury - Dissolved	0.008992		mg/L	0.0100	0.000	89.9	75-125				
Reference (BE91266-SRM1)							Prep	ared & Anal	yzed: 05/21/	/2019	
Mercury - Dissolved	0.009233		mg/L	0.0100		92.3	70-130				
Batch BE91342 - EPA 7473 soil											
Blank (BE91342-BLK1)							Prep	ared & Anal	yzed: 05/22/	/2019	
Mercury	ND	0.0300	mg/kg wet								

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Mercury by EPA 7000/200 Series Methods - Quality Control Data York Analytical Laboratories, Inc.

		Reporting		Spike	Source*	N/DEG	%REC	El	DDD	RPD	Elec
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BE91342 - EPA 7473 soil											
Duplicate (BE91342-DUP1)	*Source sample: 1	9E0591-04 (S	B002 (4-6))				Prep	ared & Anal	yzed: 05/22/	2019	
Mercury	0.521	0.0387	mg/kg dry		0.616				16.6	35	
Matrix Spike (BE91342-MS1)	*Source sample: 1	9E0591-04 (S	B002 (4-6))				Prep	ared & Anal	yzed: 05/22/	2019	
Mercury	1.05		mg/kg	0.500	0.477	114	75-125				
Reference (BE91342-SRM1)							Prep	ared & Anal	yzed: 05/22/	2019	
Mercury	3.3790		mg/kg	3.71		91.1	65-135				
Batch BE91343 - EPA 7473 soil											
Blank (BE91343-BLK1)							Prep	ared & Anal	yzed: 05/22/	2019	
Mercury	ND	0.0300	mg/kg wet								
Duplicate (BE91343-DUP1)	*Source sample: 1	9E0591-07 (S	B003 (6-8))				Prep	ared & Anal	yzed: 05/22/	2019	
Mercury	0.450	0.0337	mg/kg dry		0.323				33.1	35	
Matrix Spike (BE91343-MS1)	*Source sample: 1	9E0591-07 (S	B003 (6-8))				Prep	ared & Anal	yzed: 05/22/	2019	
Mercury	0.768		mg/kg	0.500	0.287	96.1	75-125				
Reference (BE91343-SRM1)							Prep	ared & Anal	yzed: 05/22/	2019	
Mercury	3.7417		mg/kg	3.71		101	65-135				
Batch BE91382 - EPA 7473 soil											
Blank (BE91382-BLK1)							Prep	ared & Anal	yzed: 05/22/	2019	
Mercury	ND	0.0300	mg/kg wet								

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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 BE91382 - EPA 7473 soil											
Duplicate (BE91382-DUP1)	*Source sample: 19	E0591-22 (S	B008 (6-8))				Prepa	ared & Anal	yzed: 05/22/2	2019	
Mercury	0.300	0.0409	mg/kg dry		0.244				20.9	35	
Matrix Spike (BE91382-MS1)	*Source sample: 19	E0591-22 (S	B008 (6-8))				Prepa	ared & Anal	yzed: 05/22/2	2019	
Mercury	0.640		mg/kg	0.500	0.179	92.2	75-125				
Reference (BE91382-SRM1)							Prepa	ared & Anal	yzed: 05/22/2	2019	
Mercury	3.1821		mg/kg	3.71		85.8	65-135				

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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 BE91045 - % Solids Prep											
Duplicate (BE91045-DUP1)	*Source sample: 191	E0591-04 (SE	3002 (4-6))				Prepa	ared: 05/16/	2019 Analyz	ed: 05/17/2	2019
% Solids	79.4	0.100	%		77.5				2.41	20	
Batch BE91124 - % Solids Prep											
Duplicate (BE91124-DUP1)	*Source sample: 191	E0591-07 (SE	3003 (6-8))				Prepa	ared: 05/17/	2019 Analyz	ed: 05/18/2	2019
% Solids	90.3	0.100	%		89.0				1.47	20	



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19E0591-25	SB009 (6-8)	40mL Vial with Stir Bar-Cool 4° C
19E0591-26	SB009 (2-4)	40mL Vial with Stir Bar-Cool 4° C
19E0591-27	SB009 (8-10)	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19E0591-31	MW001	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-32	MW002	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-33	MW003	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-34	MW004	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-37	DUPE003	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-38	SB009 (8-10) E	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19E0591-39	SB009 (8-10) N	40mL Vial with Stir Bar-Cool 4° C
19E0591-40	SB009 (8-10) W	40mL Vial with Stir Bar-Cool 4° C
19E0591-41	FB001	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-42	EB001	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-43	FB002	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-44	EB002	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-45	FB003	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-46	EB003	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-47	TB001	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19E0591-48	TB002	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

	Sample and Data Qualifiers Relating to This Work Order
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
EXT-EM	The sample exhibited emulsion formation during the extraction process. This may affect surrogate recoveries.
IS-01	This internal standard did not meet acceptance criteria. The sample was reanalyzed to confirm matrix interference.
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.
M-BS	The recovery for this element in the batch blank spike recovered slightly outside of control limits
M-CRL	The RL check for this element recovered outside of control limits.
M-DUPS	The RPD between the native sample and the duplicate is outside of limits due to sample non-homogeneity
M-ICV2	The recovery for this element in the ICV was outside the 90-110% recovery criteria.
В	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.
M-SRD1	The serial dilution for this element was outside control limits.
S-GC	Two surrogates are used for this analysis. One surrogate recovered within control limits therefore the analysis is acceptable.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-11	The spike recovery or RPD may not be available or within QC limits because of sample dilution due to high analyte concentration and/or 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.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-04	The RPD exceeded control limits for the LCS/LCSD QC.
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.
S-09	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect confirmed by re-extraction and re-analysis of the sample.
M-SPKM	The spike recovery is not within acceptance windows due to sample non-homogeneity, or matrix interference.
	Definitions and Other Explanations
*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.

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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.

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 Reported to above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and

semi-volatile target compounds only.

NR Not reported

RPD Relative Percent Difference

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

Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias

conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias

conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high

due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

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1980591

YOUR Information	Repo	rt To:		iovi	се То:	YOUR Pro	ject Number	Turn-Around Time
Company: PWGC	Company:		Company:		7	7 1	T1807	RUSH - Next Day
Address: 630 Junson Ave Busenia	Address:		Address:				1 1002	RUSH - Two Day
NY 11716			_			YOUR Pr	oject Name	RUSH - Three Day
Phone: (431-589-6353	Phone.:		Phone.:			1 0	TIGO	RUSH - Four Day
Contact: Dan Haug	Contact:		Contact:			6	T1802	Standard (5-7 Day)
E-mail: DHUVga pwgrosser.com	E-mail:		E-mail:			YOUR PO#:		
E-mail: Huyan pugusser. M Please print clearly and legibly. All information muswill not be logged in and the turn-around-time clock questions by YORK are resolved.	st be complete. Samples k will not begin until any	Matrix Codes	Samples From	m	Report /	EDD Type (circle s	elections)	YORK Reg. Comp.
		S - soil / solid	New York	X	Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in)
Sanette loo	Icej	GW - groundwater	New Jersey		QA Report	CT RCP DQA/DUE	EQuIS (Standard)	Regulation(s). (please fill in)
Samples Collected by: (print your name abo	ove and sign below)	DW - drinking water	Connecticut	П	NY ASP A Package	NJDEP Reduced	NYSDEC EQuIS	
		WW - wastewater	Pennsylvania	29	NY ASP B Package	Deliverables	NJDEP SRP HazSite	
#		O - Oil Other	Other			NJDKQP	Other:	
Sample Identification	n	Sample Matrix	Date/Time Samp	led		Analysis Requested	ı	Container Description
SB061 (U-2)		2	915		SVOCs, metals,	Pest, PCBs		
SB001 (2-4)		S	925		5 VOU, metals	, Pest, PCBI		
SB001 (4-6)		>	920		svocs, metas	, Pest, PCBs		
SB002 (4-6),15B00214	46) MS SBO 02(4-6)M	50 5	630		SVOG, metal	s, Pest, PCBs		
58002 (6-8)		5	850		SVOG, metal	, Pest, PCB	(
SB002 (0-2)		S	845		SVOCI, meta	W. Pest, PC	Br	
SB603 (6-8)15B003(6-8)	NS (5B603(68)MD	5	735		SVOCS, mete	is, Pert, PCF	31	
5B003 (10-12)	1	5	745		SVOC, meta	als, Pest, PC	Br	
5B003 (0-2)		5	740		Svoc, meta	ils, Pest, PCI	3)	·
SB004 (1,2)		5	936		SVOCS, meta	15, Pest, PCE	3r.	
Comments:					Preser	vation: (check all tha	t apply)	Special Instruction
Proposal from 4	129/19				HCI MeOH HN Ascorbic Acid Other:	IO3 H2SO4	NaOH ZnAc	Field Filtered Lab to Filter _<
Samples Relinquished by / Company	Date/Time	Samples Received by / Compa	ny		Date/Time S	Samples Relinquished by / Com	pany	Date/Time
Day G Recaived by Company	101101191500	KBach 4	ork		5/13/19 230PM	KBahr yor	k	5/13/19
Sa Received by Company	Date/Time	Samples Relinquished by / Con	npany		Date/Time S	Samples Received by / Compan	у	Date/Time
442								
Sa 4 Relinquished by / Company	Date/Time	Samples Received by / Compa	ny		Date/Time S	Samples Received in LAB by	Date/Time	Temp. Received at Lab
Sa 4 4 Relinquished by / Company 00						Q	race 5-13-19174	40.20
							179	T P Degrees C



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YOUR Information	Repor	rt To:	Invo	oice To:	YOUR Pro	ject Number	Turn-Around Time
Company: PWGC	Company:		Company:		LST	1802	RUSH - Next Day
Address: Taharaa Ave	Address:		Address:		C 3 1	1000	RUSH - Two Day
Bohemis NY 15716	3	>			YOUR Pr	oject Name	RUSH - Three Day
Phone: 631-589-6353	Phone.:		Phone.:		ICT	1802	RUSH - Four Day
Contact:	Contact:		Contact:		L 3 1	1802	Standard (5-7 Day)
E-mail: Denay (2) PW GNSSET-Con	E-mail:		E-mail:		YOUR PO#:		
Please print clearly and legibly. All information mus will not be logged in and the turn-around-time clock	t be complete. Samples	Matrix Codes	Samples From	Report	/ EDD Type (circle s	elections)	YORK Reg. Comp.
questions by YORK are resolved.	inn not begin and, any	S - soil / solid	New York	Summary Report	CT RCP	Standard Excel EDD	Compared to the following
Taxelle Cooley		GW - groundwater	New Jersey	QA Report	CT RCP DQA/DUE	EQuIS (Standard)	Regulation(s): (please fill in)
Samples Collected by: (print your name about	ve and sign below)	DW - drinking water	Connecticut	NY ASP A Package		NYSDEC EQuIS	
		WW - wastewater	Pennsylvania	NY ASP B Package	NJDEP Reduced Deliverables	NJDEP SRP HazSite	
7		O - Oil Other	Other	NT Not Brackage,	NJDKQP	Other:	
Sample Identification	1	Sample Matrix	Date/Time Sampled		Analysis Requested	I	Container Description
SRA4 (4-6)		5	935 5/10/19	SVOC, meta	1 0 0	ſ	
SBMY (2-4)		5	946 - 11019	SVOCC moto	II. Pest, PCF	35	
SRM5 (24)		5	815 5/W/19	SUDGE meta	0 . 5 . 6	36	
SBMK (0-2)		5	825 5/10/19	Svocs, metal	1		
50005 (0-10)		5	820 5/10/19	SVOCS, meta	0 0 0		
58006 (0-2)		7	900 5/10/19	Svocs, metal	0 - 0 - 0		
SB106 (4-6).		(905 5/10/19	SVOC metal			
Servic (10-8)		7	910 5/10/19	SVOCs, metal			
(8007 (8-10)		7	1250 5/10/19	CVOS, met	1.		
(8007 (12-14)		7	1300 5 10 19	SVOG meta			
Comments:		-	1300		ervation: (check all tha	t apply)	Special Instruction
Rropusal fi	mm 4/201	IG		HCI MeOH H	HNO3 H2SO4	NaOH ZnAc	Field Filtered
Mobadia	1011) 9/201			Ascorbic Acid Other	r		Lab to Filter 🔫
Samples Relinquished by / Company	Date/Time	Samples Received by / Compa		Date/Time	Samples Relinquished by / Com	pany	Date/Time
Pag	10/10/19580	KBahr	york	230PM	KBahy	orla	5/13/19
Sa 0 Received by Company	Date/Time	Samples Relinquished by / Co	mpany	Date/Time	Samples Received by / Compan	у	Date/Time
443 of							
Sa 4 Relinquished by / Company	Date/Time	Samples Received by / Compa	any	Date/Time	Samples Received in LAB by	Date/Time	Temp. Received at Lab
Ó						Grace 5-13-	19 1744 C2 - O Degrees C



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YOUR Information	Repor	rt To:	Invo	oice To:	YOUR Pro	ject Number	Turn-Around Ti	me
Company: PWGS	Company:		Company:		1 1	1807	RUSH - Next Day	
Address: 630Johnson Ave	Address:		Address			1002	RUSH - Two Day	
Bonemiarry 11716					YOUR Pr	oject Name	RUSH - Three Day	
Phone:: (221-589-[e353]	Phone.		Phone		LST	18,07	RUSH - Four Day	
Contact: Dan Haug	Contact:		Contact:		1	I U UL	Standard (5-7 Day)	X
E-mail:	E-mail:		E-mail:		YOUR PO#:			
Please print clearly and legibly. All information mus will not be logged in and the turn-around-time cloc	st be complete. Samples k will not begin until anv	Matrix Codes	Samples From	Report	/ EDD Type (circle s	elections)	YORK Reg. Con	np.
questions by YORK are resolved.	,	S - soil / solid	New York	Summary Report	CT RCP	Standard Excel EDD	Compared to the follow Regulation(s): (please fill	
Janelly loc	7 Ley	GW - groundwater	New Jersey	QA Report	CT RCP DQA/DUE	EQuIS (Standard)	Trogulation(o), (piease iii	
Samples Collected by: (print your name about	ove and sign below)	DW - drinking water	Connecticut	NY ASP A Package	NJDEP Reduced	NYSDEC EQuIS		
		WW - wastewater	Pennsylvania -	NY ASP B Package	Deliverables	NJDEP SRP HazSite		
		O - Oil Other	Other		NJDKQP	Other:		
Sample Identification	n	Sample Matrix	Date/Time Sample	t	Analysis Requested	d	Container Descrip	otion
SB00710.2)			1240	SVOC, meta	(U			
58008 (6-8)			700	SVOG, met	24/327			
SB008 (0-2)			705	Svoc me	tals			
SB008 14-6)			716	SVOG: ne	741			
SB009 160-95			810	SVOC, metal,	Pert, PCBS NO	C		
SBM9 12-41			800	Svoc , meta	U. POST PCBS	NOC		
SB009 (81-10)			802	SVOG, meta	U. Pert, PCBT.	VOCs		
SB010 (0-2)			1345	SVOG, meta				
SBOID (10-8)			1350	SVOG, me-				
58010 (2-4)			1330	SVOU met	ar			
Comments:					ervation: (check all that		Special Instruction	on
Propusal +	wm 4/29/1.	Í		HCI MeOH Ascorbic Acid Othe			Field Filtered	<
Samples Relinquished by Company	Date/Time	Samples Received by / Compa	any	Date/Time	Samples Relinquished by / Con		5//3/19	
Page 444 Of 446 Relinquished by / Company	10/10/19/500	KBach		5/13/19 2300M	K.Bah t			
Sa A Received by / Company	Date/Time	Samples Relinquished by / Co	ompany	Date/Time	Samples Received by / Compa	ny	Date/Time	
4 0								
Si 44 Relinquished by / Company	Date/Time	Samples Received by / Compa	any	Date/Time	Samples Received in LAB by	Date/Time	Temp. Received at I	Lab
6	(4)					Agrace 5-13	3-19 1744 02-0	egrees (
				ph.			11.1	



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YOUR Information	Repo	rt To:	Invo	ice To:	YOUR Pro	ject Number	Turn-Around Time
Company: PWGC	Company:		Company:		ICT	1000	RUSH - Next Day
Address: 630 Johan Ave	Address:		Address:		C31	1802	RUSH - Two Day
Bohemia NY -			>		YOUR Pr	oject Name	RUSH - Three Day
Phone: 631-589-6353	Phone.:		Phone.:		1051	010	RUSH - Four Day
Contact: Dan Havs	Contact:		Contact:		LSTI	800	Standard (5-7 Day)
E-mail: Dhaus Dhibasses can	E-mail:		E-mail:		YOUR PO#:		
Please print clearly and legibly. All information mu will not be logged in and the turn-around-time clos questions by YORK are resolved.	st be complete. Samples	Matrix Codes	Samples From	Report	I EDD Type (circle s	elections)	YORK Reg. Comp.
11 11 1		S - soil / solid	New York	Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in)
Inelle Cooley		GW - groundwater	New Jersey	QA Report	CT RCP DQA/DUE	EQuIS (Standard)	,
Samples Collected by: (print your name ab	ove and sign below)	DW - drinking water	Connecticut	NY ASP A Package	NJDEP Reduced	NYSDEC EQuIS	
		WW - wastewater	Pennsylvania	NY ASP B Package	Deliverables	NJDEP SRP HazSite	
		O - Oil Other	Other		NJDKQP	Other:	
Sample Identification	n	Sample Matrix	Date/Time Sampled		Analysis Requested	1	Container Description
MMOOI		W	730	SVOCS, Metals (+	other heat, Pest, Pr	CBs, VOCs	
M MOOZIMWOORLMS)	(MVOOZ (MSD)	W	1000	S VOG, Metali	(tutal Pest,	PCBS, VOCS	
MW003		W	730 1100	SVOCS, Metals	(tutu) pest,	PCBS, VOCS	
MW 664		W	1215	SVOCS, Metals	(total led) Pest.	PCBs, VOCs	
PUPEDOI		S	1215 NM	5 VOG, meta	NIS		
DUPEOOZ		S	NW	SVOC, me	tall		
PUPEO03		W	NM	SVOCS, Metals	(total ved) Pest P	CBS, VOCS.	
SB009 18-10) E		5	1135	Voc	•		
5 B009/8-10) N		S	1130	VOC			
5B009(8-10)W		5	1230	VOC			
Comments:	0 41-1			Pres	ervation: (check all tha	at apply)	Special Instruction
Proposil	for 4/29/	19		HCI MeOH H Ascorbic Acid Othe			Field Filtered Lab to FilterX
S Relinquished by //Company	Date/Time	Samples Received by / Compa		Date/Time,	Samples Relinquished by / Com	pany	Date/Time
Page	10/10/19/500	KBakiya	rK	5/13/19 230 pm	Khah 40	rk	5/13/19
S 44 s Received by / Company	Date/Time	Samples Relinquished by / Co	mpany	Date/Time	Samples Received by / Compar	ny	Date/Time
of 4							
S 4 Relinquished by / Company	Date/Time	Samples Received by / Compa	any	Date/Time	Samples Received in LAB by	Date/Time	Temp. Received at Lab
						Parace 5-1	3-9 1744 62-0 Degrees C

120 Research Drive Stratford, CT 06615

YOUR Information

132-02 89th Ave Queens, NY 11418

Report To:

clientservices@yorklab.com

www.yorklab.com

Field Chain-of-Custody Record

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document.

This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

Invoice To:

YOUR Project Number

YORK Project No.

19E0591

Turn-Around Time

Page 5 of 5

Company: PWW	Company:		Company:			1 1	-100	RUSH - Next Day
Address (Balannson Ave Balemia	Address:		Address:				1802	RUSH - Two Day
NY 11716						YOUR Pr	oject Name	RUSH - Three Day
Phone: (031-589-6353	Phone.:		Phone.			15-	TIBOO	RUSH - Four Day
Contact: Dan Have	Contact:		Contact:				11807	Standard (5-7 Day)
E-mail: 1 Hay 1962 Onlayous Recom	E-mail:		E-mail:			YOUR PO#:		
Please print clearly and legibly. All information mus will not be logged in and the turn-around-time clock questions by YORK are resolved.	t be complete. Samples will not begin until any	Matrix Codes	Samples Fro	om	Report	/ EDD Type (circle s	elections)	YORK Reg. Comp.
questions by YORK are resolved.		S - soil / solid	New York	X	Summary Report	CT RCP	Standard Excel EDD	Compared to the following
		GW - groundwater	New Jersey		QA Report	CT RCP DQA/DUE	EQuIS (Standard)	Regulation(s): (please fill in)
Samples Collected by: (print your name above	ve and sign below)	DW - drinking water	Connecticut		NY ASP A Package	NJDEP Reduced	NYSDEC EQuIS	
		WW - wastewater	Pennsylvania		NY ASP B Package	Deliverables	NJDEP SRP HazSite	
		O - Oil Other	Other			NJDKQP	Other:	
Sample Identification	1	Sample Matrix	Date/Time Sam	pled		Analysis Requested	ı	Container Description
FBUOI		W	10/10/10		SVOCE VOG. M	etals (tetalivea	Pest PCBs	
EBOO!		W	10/10/19		3408 NOVE 1	etals / totalisava	Thera PCB	-
FBOOT		W	10/10/19		SVOG, VOCE O	netal (tutul)	fisiolyal Pert PCBr	
EBOOT		12	10/10/19		SUOG WAS	motar (total)	Wider Pert RBI	
F 8003		in.	(0)10/19		SVOCE VOO	metal (total)	dissolved Perf PrBr	
EB003		V	10/10/19		SUDG / VOC	E-motali Hotal	diuded Port PCB	
			1-(101)		700	The state of	100019 144,107	
Comments:	1.10				Prese	rvation: (check all tha	t apply)	Special Instruction
Propulation	n 4/29/19	ì			HCI MeOH H Ascorbic Acid Other		NaOH ZnAc	Field Filtered Lab to Filter
7	Date/Time	Samples Received by / Compa	ny		Date/Time	Samples Relinquished by / Com	pany	Date/Time
Page 446	10/10/19/1500	KBahy			3/13/19 230PM	KBahr 4		5/13/19
Sa A Received by / Company	Date/Time	Samples Relinquished by / Cor	npany		Date/Time	Samples Received by / Compan	у	Date/Time
6 of								
	Date/Time	Samples Received by / Compa	ny		Date/Time	Samples Received in LAB by	Date/Time	Temp. Received at Lab
0							Pgrace 5-13	1744 C 2.0 C Degrees C



ANALYTICAL REPORT

Lab Number: L1924473

Client: P. W. Grosser

630 Johnson Avenue

Suite 7

Bohemia, NY 11716

ATTN: Derek Ersbak
Phone: (631) 589-6353

Project Name: 399 EXTERIOR STREET

Project Number: LST1802 Report Date: 07/02/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473 **Report Date:** 07/02/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1924473-01	SB017(6-8)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 16:00	06/07/19
L1924473-02	SB003(8-10)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 08:00	06/07/19
L1924473-03	SB003(10-12)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 08:05	06/07/19
L1924473-04	SB003(12-14)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 08:10	06/07/19
L1924473-05	SB003(14-16)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 08:15	06/07/19
L1924473-06	SB008(8-10)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 13:00	06/07/19
L1924473-07	SB008(10-12)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 13:05	06/07/19
L1924473-08	SB013(6-8)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 10:00	06/07/19
L1924473-09	SB013(8-10)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 10:05	06/07/19
L1924473-10	SB013(10-12)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 10:15	06/07/19
L1924473-11	SB011(8-10)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 08:20	06/07/19
L1924473-12	SB011(10-12)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 08:25	06/07/19
L1924473-13	SB011(12-14)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 08:25	06/07/19
L1924473-14	SB005(6-8)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 11:00	06/07/19
L1924473-15	SB005(4-6)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 11:05	06/07/19
L1924473-16	SB006(8-10)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 11:10	06/07/19
L1924473-17	SB006(10-12)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 11:15	06/07/19
L1924473-18	SB001(6-8)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 11:20	06/07/19
L1924473-19	SB001(8-10)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 11:25	06/07/19
L1924473-20	SB001(10-12)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 11:30	06/07/19
L1924473-21	SB016(6-8)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 13:00	06/07/19
L1924473-22	SB016(8-10)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 13:10	06/07/19
L1924473-23	SB016(10-12)	SOIL	399 EXTERIOR ST., BRONX, NY	06/06/19 13:20	06/07/19
Page 2 of 127					



L1924473

Project Name: 399 EXTERIOR STREET Lab Number:

Project Number: LST1802 Report Date: 07/02/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

Case Narrative (continued)

Report Submission

July 02, 2019: This final report includes the results of the Total Arsenic, Copper, and Lead analyses performed on L1924473-23.

June 25, 2019: This preliminary report includes the result of the Total Lead analysis performed on L1924473-13.

June 25, 2019: This preliminary report includes the results of the Semivolatile Organics analysis performed on L1924473-07 and -19, and the results of the Total Metals analysis performed on L1924473-22.

June 14, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative Date: 07/02/19

600, Sew on Kelly Stenstrom

ORGANICS



VOLATILES



L1924473

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 13:00

Report Date: 07/02/19

Lab ID: L1924473-21

Client ID: SB016(6-8)

Sample Location: 399 EXTERIOR ST., BRONX, NY

Date Received: 06/07/19
Field Prep: Not Specified

Lab Number:

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/12/19 13:59

Analyst: JC Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westl	oorough Lab					
Methylene chloride	ND		ug/kg	6.1	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.61	0.24	1
Chlorobenzene	ND		ug/kg	0.61	0.16	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.85	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	0.20	1
Bromodichloromethane	ND		ug/kg	0.61	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.61	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.61	0.20	1
Bromoform	ND		ug/kg	4.9	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	0.20	1
Benzene	ND		ug/kg	0.61	0.20	1
Toluene	ND		ug/kg	1.2	0.67	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.9	1.1	1
Bromomethane	ND		ug/kg	2.4	0.71	1
Vinyl chloride	ND		ug/kg	1.2	0.41	1
Chloroethane	ND		ug/kg	2.4	0.55	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-21

SB016(6-8)

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 13:00

Lab Number:

Report Date:

Date Received: 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - W	estborough Lab					
Trichloroethene	ND		ug/kg	0.61	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	0.36	J	ug/kg	2.4	0.25	1
p/m-Xylene	ND		ug/kg	2.4	0.69	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	110		ug/kg	12	5.9	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	19		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.16	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.61	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.9	0.80	1
Acrylonitrile	ND		ug/kg	4.9	1.4	1



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-21 Date Collected: 06/06/19 13:00

Client ID: SB016(6-8) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Campio Location: Coo Extra Nort Cri, Brichard, 111

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Low	- Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1	
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.24	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.41	1	
1,4-Dioxane	ND		ug/kg	98	43.	1	
p-Diethylbenzene	ND		ug/kg	2.4	0.22	1	
p-Ethyltoluene	ND		ug/kg	2.4	0.47	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1	
Ethyl ether	ND		ug/kg	2.4	0.42	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.1	1.7	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	100	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	113	70-130	
Dibromofluoromethane	98	70-130	

Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/12/19 07:55

Analyst: MV

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035 Low	- Westboro	ugh Lab fo	r sample(s):	21	Batch:	WG1247990-5
Methylene chloride	ND		ug/kg	5.0		2.3
1,1-Dichloroethane	ND		ug/kg	1.0		0.14
Chloroform	ND		ug/kg	1.5		0.14
Carbon tetrachloride	ND		ug/kg	1.0		0.23
1,2-Dichloropropane	ND		ug/kg	1.0		0.12
Dibromochloromethane	ND		ug/kg	1.0		0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0		0.27
Tetrachloroethene	ND		ug/kg	0.50		0.20
Chlorobenzene	ND		ug/kg	0.50		0.13
Trichlorofluoromethane	ND		ug/kg	4.0		0.70
1,2-Dichloroethane	ND		ug/kg	1.0		0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50		0.17
Bromodichloromethane	ND		ug/kg	0.50		0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0		0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50		0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50		0.16
1,1-Dichloropropene	ND		ug/kg	0.50		0.16
Bromoform	ND		ug/kg	4.0		0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50		0.17
Benzene	ND		ug/kg	0.50		0.17
Toluene	ND		ug/kg	1.0		0.54
Ethylbenzene	ND		ug/kg	1.0		0.14
Chloromethane	ND		ug/kg	4.0		0.93
Bromomethane	ND		ug/kg	2.0		0.58
Vinyl chloride	ND		ug/kg	1.0		0.34
Chloroethane	ND		ug/kg	2.0		0.45
1,1-Dichloroethene	ND		ug/kg	1.0		0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5		0.14
Trichloroethene	ND		ug/kg	0.50		0.14



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/12/19 07:55

Analyst: MV

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035	Low - Westboro	ugh Lab fo	r sample(s):	21	Batch:	WG1247990-5
1,2-Dichlorobenzene	ND		ug/kg	2.0		0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0		0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0		0.17
Methyl tert butyl ether	0.30	J	ug/kg	2.0		0.20
p/m-Xylene	ND		ug/kg	2.0		0.56
o-Xylene	ND		ug/kg	1.0		0.29
Xylenes, Total	ND		ug/kg	1.0		0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0		0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0		0.14
Dibromomethane	ND		ug/kg	2.0		0.24
Styrene	ND		ug/kg	1.0		0.20
Dichlorodifluoromethane	ND		ug/kg	10		0.92
Acetone	ND		ug/kg	10		4.8
Carbon disulfide	ND		ug/kg	10		4.6
2-Butanone	ND		ug/kg	10		2.2
Vinyl acetate	ND		ug/kg	10		2.2
4-Methyl-2-pentanone	ND		ug/kg	10		1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0		0.13
2-Hexanone	ND		ug/kg	10		1.2
Bromochloromethane	ND		ug/kg	2.0		0.20
2,2-Dichloropropane	ND		ug/kg	2.0		0.20
1,2-Dibromoethane	ND		ug/kg	1.0		0.28
1,3-Dichloropropane	ND		ug/kg	2.0		0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50		0.13
Bromobenzene	ND		ug/kg	2.0		0.14
n-Butylbenzene	ND		ug/kg	1.0		0.17
sec-Butylbenzene	ND		ug/kg	1.0		0.15
tert-Butylbenzene	ND		ug/kg	2.0		0.12
o-Chlorotoluene	ND		ug/kg	2.0		0.19



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/12/19 07:55

Analyst: MV

Parameter	Result	Qualifier	Units	RL		MDL
Volatile Organics by EPA 5035 Low	- Westbord	ough Lab fo	r sample(s):	21	Batch:	WG1247990-5
p-Chlorotoluene	ND		ug/kg	2.0		0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0		1.0
Hexachlorobutadiene	ND		ug/kg	4.0		0.17
Isopropylbenzene	ND		ug/kg	1.0		0.11
p-Isopropyltoluene	ND		ug/kg	1.0		0.11
Naphthalene	ND		ug/kg	4.0		0.65
Acrylonitrile	ND		ug/kg	4.0		1.2
n-Propylbenzene	ND		ug/kg	1.0		0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0		0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0		0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0		0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0		0.33
1,4-Dioxane	ND		ug/kg	80		35.
p-Diethylbenzene	ND		ug/kg	2.0		0.18
p-Ethyltoluene	ND		ug/kg	2.0		0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0		0.19
Ethyl ether	ND		ug/kg	2.0		0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0		1.4

		Acceptance	
Surrogate	%Recovery Qualifie	er Criteria	
1,2-Dichloroethane-d4	99	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	103	70-130	
Dibromofluoromethane	94	70-130	



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery		SD covery	%i Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westbo	orough Lab Ass	ociated sample(s): 2	1 Batch:	WG1247990-	3 WG124799	0-4		
Methylene chloride	112		111		70-130	1		30
1,1-Dichloroethane	106		103		70-130	3		30
Chloroform	102		100		70-130	2		30
Carbon tetrachloride	88		84		70-130	5		30
1,2-Dichloropropane	110		108		70-130	2		30
Dibromochloromethane	93		92		70-130	1		30
1,1,2-Trichloroethane	103		101		70-130	2		30
Tetrachloroethene	82		78		70-130	5		30
Chlorobenzene	92		89		70-130	3		30
Trichlorofluoromethane	81		78		70-139	4		30
1,2-Dichloroethane	109		108		70-130	1		30
1,1,1-Trichloroethane	93		90		70-130	3		30
Bromodichloromethane	105		104		70-130	1		30
trans-1,3-Dichloropropene	104		102		70-130	2		30
cis-1,3-Dichloropropene	113		110		70-130	3		30
1,1-Dichloropropene	92		90		70-130	2		30
Bromoform	91		90		70-130	1		30
1,1,2,2-Tetrachloroethane	96		95		70-130	1		30
Benzene	103		100		70-130	3		30
Toluene	90		87		70-130	3		30
Ethylbenzene	89		86		70-130	3		30
Chloromethane	108		104		52-130	4		30
Bromomethane	96		92		57-147	4		30



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	LCS Qual %Reco		ry RPD	RPD Qual Limits
Volatile Organics by EPA 5035 Low - Westb	orough Lab Ass	ociated sample(s): 21	Batch: WG1247990-3 WG1	247990-4	
Vinyl chloride	91	88	67-130	3	30
Chloroethane	87	85	50-151	2	30
1,1-Dichloroethene	91	86	65-135	6	30
trans-1,2-Dichloroethene	96	94	70-130	2	30
Trichloroethene	94	91	70-130	3	30
1,2-Dichlorobenzene	93	91	70-130	2	30
1,3-Dichlorobenzene	92	89	70-130	3	30
1,4-Dichlorobenzene	91	89	70-130	2	30
Methyl tert butyl ether	117	116	66-130	1	30
p/m-Xylene	90	86	70-130	5	30
o-Xylene	92	89	70-130	3	30
cis-1,2-Dichloroethene	103	101	70-130	2	30
Dibromomethane	106	107	70-130	1	30
Styrene	94	92	70-130	2	30
Dichlorodifluoromethane	95	91	30-146	4	30
Acetone	131	127	54-140	3	30
Carbon disulfide	86	83	59-130	4	30
2-Butanone	110	100	70-130	10	30
Vinyl acetate	121	120	70-130	1	30
4-Methyl-2-pentanone	101	98	70-130	3	30
1,2,3-Trichloropropane	101	99	68-130	2	30
2-Hexanone	92	90	70-130	2	30
Bromochloromethane	105	104	70-130	1	30



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
platile Organics by EPA 5035 Low - Westbo	rough Lab Ass	sociated sample(s): 21 Batch	: WG124799	0-3 WG12479	90-4		
2,2-Dichloropropane	103		98		70-130	5		30
1,2-Dibromoethane	100		98		70-130	2		30
1,3-Dichloropropane	103		102		69-130	1		30
1,1,1,2-Tetrachloroethane	96		93		70-130	3		30
Bromobenzene	92		90		70-130	2		30
n-Butylbenzene	87		83		70-130	5		30
sec-Butylbenzene	85		81		70-130	5		30
tert-Butylbenzene	85		81		70-130	5		30
o-Chlorotoluene	91		88		70-130	3		30
p-Chlorotoluene	92		89		70-130	3		30
1,2-Dibromo-3-chloropropane	88		85		68-130	3		30
Hexachlorobutadiene	81		77		67-130	5		30
Isopropylbenzene	86		82		70-130	5		30
p-Isopropyltoluene	86		82		70-130	5		30
Naphthalene	92		89		70-130	3		30
Acrylonitrile	114		114		70-130	0		30
n-Propylbenzene	88		84		70-130	5		30
1,2,3-Trichlorobenzene	96		92		70-130	4		30
1,2,4-Trichlorobenzene	92		88		70-130	4		30
1,3,5-Trimethylbenzene	88		86		70-130	2		30
1,2,4-Trimethylbenzene	90		87		70-130	3		30
1,4-Dioxane	130		128		65-136	2		30
p-Diethylbenzene	86		80		70-130	7		30



Project Name: 399 EXTERIOR STREET

Project Number:

LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by EPA 5035 Low - Westb	orough Lab Asso	ciated sample	e(s): 21 Batch	: WG1247990-3 WG124	7990-4	
p-Ethyltoluene	88		84	70-130	5	30
1,2,4,5-Tetramethylbenzene	90		86	70-130	5	30
Ethyl ether	119		118	67-130	1	30
trans-1,4-Dichloro-2-butene	103		98	70-130	5	30

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qual	%Recovery Qual	Criteria
1,2-Dichloroethane-d4	100	100	70-130
Toluene-d8	97	97	70-130
4-Bromofluorobenzene	104	104	70-130
Dibromofluoromethane	98	98	70-130

SEMIVOLATILES



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

06/11/19 08:57

Project Number: LST1802

SAMPLE RESULTS

Lab Number:

Report Date:

Date Collected: 06/06/19 16:00 L1924473-01

Date Received: Client ID: 06/07/19 SB017(6-8) Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Lab ID:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 06/10/19 02:23 Analytical Method: 1,8270D Analytical Date:

Analyst: RC 82% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	stborough Lab					
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	41.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	110	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-01

SB017(6-8)

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 16:00

Date Received: 06/07/19
Field Prep: Not Specified

Lab Number:

Report Date:

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep:

Sample Depth:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westbe	orough Lab					
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	43.	1
Benzo(a)anthracene	140		ug/kg	120	23.	1
Benzo(a)pyrene	190		ug/kg	160	50.	1
Benzo(b)fluoranthene	160		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	240		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	40.	1
Benzo(ghi)perylene	160		ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	20.	1
Phenanthrene	54	J	ug/kg	120	25.	1
Dibenzo(a,h)anthracene	62	J	ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	69	J	ug/kg	160	28.	1
Pyrene	170		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	33.	1
2,4-Dimethylphenol	ND		ug/kg	200	67.	1
2-Nitrophenol	ND		ug/kg	440	76.	1
4-Nitrophenol	ND		ug/kg	280	83.	1
2,4-Dinitrophenol	ND		ug/kg	970	95.	1
4,6-Dinitro-o-cresol	ND		ug/kg	530	97.	1
Pentachlorophenol	ND		ug/kg	160	45.	1
Phenol	ND		ug/kg	200	31.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	32.	1



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-01 Date Collected: 06/06/19 16:00

Client ID: SB017(6-8) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	200	39.	1
Benzoic Acid	ND		ug/kg	660	200	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	ND		ug/kg	200	20.	1
1,4-Dioxane	ND		ug/kg	30	9.3	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	63	25-120
Phenol-d6	59	10-120
Nitrobenzene-d5	68	23-120
2-Fluorobiphenyl	58	30-120
2,4,6-Tribromophenol	72	10-136
4-Terphenyl-d14	51	18-120



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-06

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 13:00

Lab Number:

Report Date:

Date Received: Client ID: 06/07/19 SB008(8-10) Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Lab ID:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 06/10/19 22:37 Analytical Method: 1,8270D Analytical Date: 06/11/19 19:01

Analyst: RC 85% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
Acenaphthene	1100		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	16000	Е	ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	1100		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-06

SB008(8-10)

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 13:00

Lab Number:

Report Date:

Date Received: 06/07/19 Not Specified

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep:

Sample Depth:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS	- Westborough Lab					
,	•					
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	6500		ug/kg	120	22.	1
Benzo(a)pyrene	6400		ug/kg	160	48.	1
Benzo(b)fluoranthene	7500		ug/kg	120	33.	1
Benzo(k)fluoranthene	2300		ug/kg	120	31.	1
Chrysene	5500		ug/kg	120	20.	1
Acenaphthylene	670		ug/kg	160	30.	1
Anthracene	3000		ug/kg	120	38.	1
Benzo(ghi)perylene	3900		ug/kg	160	23.	1
Fluorene	950		ug/kg	200	19.	1
Phenanthrene	11000	Е	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	750		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	4200		ug/kg	160	27.	1
Pyrene	14000	E	ug/kg	120	20.	1
Biphenyl	150	J	ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	940		ug/kg	200	18.	1
2-Methylnaphthalene	340		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	75	J	ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	130	J	ug/kg	280	31.	1
			-			



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-06 Date Collected: 06/06/19 13:00

Client ID: SB008(8-10) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	1100		ug/kg	200	19.	1
1,4-Dioxane	ND		ua/ka	29	9.0	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	64	25-120	
Phenol-d6	66	10-120	
Nitrobenzene-d5	83	23-120	
2-Fluorobiphenyl	66	30-120	
2,4,6-Tribromophenol	71	10-136	
4-Terphenyl-d14	56	18-120	



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-06 D Date Collected: 06/06/19 13:00

Client ID: SB008(8-10) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8270D Extraction Date: 06/10/19 22:37

Analytical Date: 06/14/19 11:54

Analyst: JG

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC	/MS - Westborough Lab					
Fluoranthene	23000		ug/kg	590	110	5
Phenanthrene	17000		ug/kg	590	120	5
Pvrene	21000		ua/ka	590	98.	5



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

SAMPLE RESULTS

Report Date: 07/02/19

L1924473

Lab ID: L1924473-07

Client ID: SB008(10-12)

Sample Location: 399 EXTERIOR ST., BRONX, NY Date Received: Field Prep:

Date Collected:

Lab Number:

06/06/19 13:05 06/07/19 Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 06/24/19 02:50

Analyst: ΕK 72% Percent Solids:

Extraction Method: EPA 3546

Extraction Date: 06/19/19 09:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	Westborough Lab					
Acenaphthene	32	J	ug/kg	180	24.	1
1,2,4-Trichlorobenzene	ND		ug/kg	230	26.	1
Hexachlorobenzene	ND		ug/kg	140	26.	1
Bis(2-chloroethyl)ether	ND		ug/kg	210	31.	1
2-Chloronaphthalene	ND		ug/kg	230	23.	1
1,2-Dichlorobenzene	ND		ug/kg	230	41.	1
1,3-Dichlorobenzene	ND		ug/kg	230	39.	1
1,4-Dichlorobenzene	ND		ug/kg	230	40.	1
3,3'-Dichlorobenzidine	ND		ug/kg	230	61.	1
2,4-Dinitrotoluene	ND		ug/kg	230	46.	1
2,6-Dinitrotoluene	ND		ug/kg	230	39.	1
Fluoranthene	400		ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	230	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	230	35.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	280	39.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	250	23.	1
Hexachlorobutadiene	ND		ug/kg	230	34.	1
Hexachlorocyclopentadiene	ND		ug/kg	660	210	1
Hexachloroethane	ND		ug/kg	180	37.	1
Isophorone	ND		ug/kg	210	30.	1
Naphthalene	78	J	ug/kg	230	28.	1
Nitrobenzene	ND		ug/kg	210	34.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	230	35.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	230	79.	1
Butyl benzyl phthalate	ND		ug/kg	230	58.	1
Di-n-butylphthalate	ND		ug/kg	230	43.	1
Di-n-octylphthalate	ND		ug/kg	230	78.	1



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-07

SB008(10-12)

Project Number: LST1802

SAMPLE RESULTS

Date Collected:

06/06/19 13:05

Date Received: 06/07/19 Not Specified

Lab Number:

Report Date:

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep:

Sample Depth:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	estborough Lab					
Diethyl phthalate	ND		ug/kg	230	21.	1
Dimethyl phthalate	ND		ug/kg	230	48.	1
Benzo(a)anthracene	280		ug/kg	140	26.	1
Benzo(a)pyrene	250		ug/kg	180	56.	1
Benzo(b)fluoranthene	260		ug/kg	140	39.	1
Benzo(k)fluoranthene	75	J	ug/kg	140	37.	1
Chrysene	240		ug/kg	140	24.	1
Acenaphthylene	ND		ug/kg	180	35.	1
Anthracene	86	J	ug/kg	140	45.	1
Benzo(ghi)perylene	140	J	ug/kg	180	27.	1
Fluorene	30	J	ug/kg	230	22.	1
Phenanthrene	270		ug/kg	140	28.	1
Dibenzo(a,h)anthracene	31	J	ug/kg	140	26.	1
Indeno(1,2,3-cd)pyrene	130	J	ug/kg	180	32.	1
Pyrene	500		ug/kg	140	23.	1
Biphenyl	ND		ug/kg	520	53.	1
4-Chloroaniline	ND		ug/kg	230	42.	1
2-Nitroaniline	ND		ug/kg	230	44.	1
3-Nitroaniline	ND		ug/kg	230	43.	1
4-Nitroaniline	ND		ug/kg	230	95.	1
Dibenzofuran	ND		ug/kg	230	22.	1
2-Methylnaphthalene	ND		ug/kg	280	28.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	230	24.	1
Acetophenone	ND		ug/kg	230	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	43.	1
p-Chloro-m-cresol	ND		ug/kg	230	34.	1
2-Chlorophenol	ND		ug/kg	230	27.	1
2,4-Dichlorophenol	ND		ug/kg	210	37.	1
2,4-Dimethylphenol	ND		ug/kg	230	76.	1
2-Nitrophenol	ND		ug/kg	500	86.	1
4-Nitrophenol	ND		ug/kg	320	94.	1
2,4-Dinitrophenol	ND		ug/kg	1100	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	600	110	1
Pentachlorophenol	ND		ug/kg	180	50.	1
Phenol	ND		ug/kg	230	35.	1
2-Methylphenol	ND		ug/kg	230	36.	1
3-Methylphenol/4-Methylphenol	570		ug/kg	330	36.	1



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-07 Date Collected: 06/06/19 13:05

Client ID: SB008(10-12) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	230	44.	1
Benzoic Acid	ND		ug/kg	740	230	1
Benzyl Alcohol	ND		ug/kg	230	70.	1
Carbazole	ND		ug/kg	230	22.	1
1,4-Dioxane	ND		ua/ka	34	10.	1

% Recovery	Acceptance Qualifier Criteria
64	25-120
60	10-120
66	23-120
64	30-120
71	10-136
49	18-120
	64 60 66 64 71



L1924473

07/02/19

Not Specified

06/07/19

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 10:00

Lab ID: L1924473-08

Client ID: SB013(6-8)

Sample Location: 399 EXTERIOR ST., BRONX, NY

Lab Number:

Report Date:

Date Received:

Field Prep:

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/11/19 17:19

Analyst: RC Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 06/10/19 22:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	Westborough Lab					
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	170		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-08

SB013(6-8)

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 10:00

Date Received: 06/07/19

Lab Number:

Report Date:

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	stborough Lab					
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	100	J	ug/kg	110	21.	1
Benzo(a)pyrene	110	J	ug/kg	150	46.	1
Benzo(b)fluoranthene	130		ug/kg	110	32.	1
Benzo(k)fluoranthene	48	J	ug/kg	110	30.	1
Chrysene	99	J	ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	79	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	62	J	ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	82	J	ug/kg	150	26.	1
Pyrene	190		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-08 Date Collected: 06/06/19 10:00

Client ID: SB013(6-8) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	stborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.6	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	62	25-120	
Phenol-d6	67	10-120	
Nitrobenzene-d5	77	23-120	
2-Fluorobiphenyl	65	30-120	
2,4,6-Tribromophenol	78	10-136	
4-Terphenyl-d14	61	18-120	

L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 11:05

Lab ID: L1924473-15

Client ID: SB005(4-6)

Sample Location: 399 EXTERIOR ST., BRONX, NY

Date Received: 06/07/19
Field Prep: Not Specified

Lab Number:

Report Date:

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/11/19 13:02

Analyst: RC Percent Solids: 95%

Extraction	Method:	EPA 3546
Extraction	Date:	06/10/19 22:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS -	Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1	
Hexachlorobenzene	ND		ug/kg	100	19.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1	
2-Chloronaphthalene	ND		ug/kg	170	17.	1	
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1	
1,3-Dichlorobenzene	ND		ug/kg	170	30.	1	
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1	
2,4-Dinitrotoluene	ND		ug/kg	170	35.	1	
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1	
Fluoranthene	ND		ug/kg	100	20.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	170	19.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1	
Hexachlorobutadiene	ND		ug/kg	170	25.	1	
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1	
Hexachloroethane	ND		ug/kg	140	28.	1	
Isophorone	ND		ug/kg	160	22.	1	
Naphthalene	ND		ug/kg	170	21.	1	
Nitrobenzene	ND		ug/kg	160	26.	1	
NDPA/DPA	ND		ug/kg	140	20.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1	
Butyl benzyl phthalate	ND		ug/kg	170	44.	1	
Di-n-butylphthalate	ND		ug/kg	170	33.	1	
Di-n-octylphthalate	ND		ug/kg	170	59.	1	



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-15

SB005(4-6)

Project Number: LST1802

SAMPLE RESULTS

Date Collected:

Lab Number:

Report Date:

06/06/19 11:05

Date Received: 06/07/19 Not Specified

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep:

Sample Depth:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS	- Westborough Lab					
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	20.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	400	40.	1
4-Chloroaniline	ND		ug/kg	170	32.	1
2-Nitroaniline	ND		ug/kg	170	34.	1
3-Nitroaniline	ND		ug/kg	170	33.	1
4-Nitroaniline	ND		ug/kg	170	72.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	380	65.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	840	81.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	84.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1



Project Name: Lab Number: 399 EXTERIOR STREET L1924473

Project Number: Report Date: LST1802 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-15 Date Collected: 06/06/19 11:05

Client ID: Date Received: 06/07/19 SB005(4-6)

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	560	180	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ua/ka	26	8.0	1

% Recovery	Acceptance Qualifier Criteria
70	25-120
72	10-120
84	23-120
69	30-120
72	10-136
63	18-120
	70 72 84 69 72



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

06/11/19 18:10

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 11:20

Lab Number:

Report Date:

Lab ID: L1924473-18 Date

Client ID: SB001(6-8) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Analytical Date:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 06/10/19 22:37

Analyst: RC Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - West	borough Lab					
Acenaphthene	55	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	4100		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	190		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-18

399 EXTERIOR ST., BRONX, NY

SB001(6-8)

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 11:20

Data Callastada 00/00/40 44a

Lab Number:

Report Date:

Date Received: 06/07/19
Field Prep: Not Specified

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	3200		ug/kg ug/kg	110	21.	1
Benzo(a)pyrene	3100			150	45.	1
Benzo(b)fluoranthene	4200		ug/kg	110	31.	1
Benzo(k)fluoranthene	1400		ug/kg	110	30.	1
Chrysene	2600		ug/kg	110	19.	1
Acenaphthylene	670		ug/kg	150	28.	1
Anthracene	430		ug/kg	110	36.	1
Benzo(ghi)perylene	1800		ug/kg	150	22.	1
Fluorene	72	J	ug/kg	180	18.	1
Phenanthrene	520	<u> </u>	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	530		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	2200		ug/kg	150	26.	1
Pyrene	3300		ug/kg	110	18.	1
·	ND		ug/kg		43.	1
Biphenyl 4 Chloroppiline	ND ND		ug/kg	420	34.	
4-Chloroaniline 2-Nitroaniline	ND ND		ug/kg	180	34.	1
	ND ND		ug/kg	180	35.	
3-Nitroaniline			ug/kg			1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	65 	J	ug/kg	180	18. 22.	1
2-Methylnaphthalene		J	ug/kg			
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	38	J	ug/kg	270	29.	1



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-18 Date Collected: 06/06/19 11:20

Client ID: SB001(6-8) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/M	S - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1	
Benzoic Acid	ND		ug/kg	600	190	1	
Benzyl Alcohol	ND		ug/kg	180	57.	1	
Carbazole	55	J	ug/kg	180	18.	1	
1,4-Dioxane	ND		ua/ka	28	8.5	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	65	25-120	
Phenol-d6	68	10-120	
Nitrobenzene-d5	72	23-120	
2-Fluorobiphenyl	67	30-120	
2,4,6-Tribromophenol	74	10-136	
4-Terphenyl-d14	60	18-120	



L1924473

07/02/19

Not Specified

06/07/19

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 11:25

Lab Number:

Report Date:

Date Received:

Field Prep:

Lab ID: L1924473-19

Client ID: SB001(8-10)

Sample Location: 399 EXTERIOR ST., BRONX, NY

399 EXTERIOR 31., BROWN, NT

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/24/19 03:14

Analyst: EK Percent Solids: 81% Extraction Method: EPA 3546
Extraction Date: 06/19/19 09:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS -	Westborough Lab						
Acenaphthene	ND		ug/kg	160	21.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1	
Hexachlorobenzene	ND		ug/kg	120	23.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1	
2-Chloronaphthalene	ND		ug/kg	200	20.	1	
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1	
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1	
1,4-Dichlorobenzene	ND		ug/kg	200	36.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1	
2,4-Dinitrotoluene	ND		ug/kg	200	41.	1	
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1	
Fluoranthene	220		ug/kg	120	23.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	35.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1	
Hexachlorobutadiene	ND		ug/kg	200	30.	1	
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1	
Hexachloroethane	ND		ug/kg	160	33.	1	
Isophorone	ND		ug/kg	180	26.	1	
Naphthalene	ND		ug/kg	200	25.	1	
Nitrobenzene	ND		ug/kg	180	30.	1	
NDPA/DPA	ND		ug/kg	160	23.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1	
Butyl benzyl phthalate	ND		ug/kg	200	51.	1	
Di-n-butylphthalate	ND		ug/kg	200	39.	1	
Di-n-octylphthalate	ND		ug/kg	200	69.	1	



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-19

SB001(8-10)

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 11:25

Date Received: 06/07/19 Field Prep: Not Specified

Lab Number:

Report Date:

Sample Location: 399 EXTERIOR ST., BRONX, NY

Sample Depth:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	43.	1
Benzo(a)anthracene	160		ug/kg	120	23.	1
Benzo(a)pyrene	150	J	ug/kg	160	50.	1
Benzo(b)fluoranthene	200		ug/kg	120	34.	1
Benzo(k)fluoranthene	68	J	ug/kg	120	32.	1
Chrysene	140		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	40.	1
Benzo(ghi)perylene	95	J	ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	20.	1
Phenanthrene	91	J	ug/kg	120	25.	1
Dibenzo(a,h)anthracene	26	J	ug/kg	120	24.	1
Indeno(1,2,3-cd)pyrene	100	J	ug/kg	160	28.	1
Pyrene	200		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	39.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	33.	1
2,4-Dimethylphenol	ND		ug/kg	200	67.	1
2-Nitrophenol	ND		ug/kg	440	76.	1
4-Nitrophenol	ND		ug/kg	280	83.	1
2,4-Dinitrophenol	ND		ug/kg	980	95.	1
4,6-Dinitro-o-cresol	ND		ug/kg	530	98.	1
Pentachlorophenol	ND		ug/kg	160	45.	1
Phenol	ND		ug/kg	200	31.	1
2-Methylphenol	ND		ug/kg	200	32.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	32.	1



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-19 Date Collected: 06/06/19 11:25

Client ID: SB001(8-10) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	200	39.	1
Benzoic Acid	ND		ug/kg	660	210	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	ND		ug/kg	200	20.	1
1,4-Dioxane	ND		ua/ka	30	9.4	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	54	25-120
Phenol-d6	52	10-120
Nitrobenzene-d5	69	23-120
2-Fluorobiphenyl	72	30-120
2,4,6-Tribromophenol	67	10-136
4-Terphenyl-d14	61	18-120



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 13:00

Lab ID: L1924473-21 Client ID: SB016(6-8)

Sample Location: 399 EXTERIOR ST., BRONX, NY

Date Received: 06/07/19
Field Prep: Not Specified

Lab Number:

Report Date:

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/11/19 05:58

Analyst: RC Percent Solids: 72%

Extraction Method: EPA 3546
Extraction Date: 06/10/19 02:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	Westborough Lab					
Acenaphthene	ND		ug/kg	180	24.	1
1,2,4-Trichlorobenzene	ND		ug/kg	230	26.	1
Hexachlorobenzene	ND		ug/kg	140	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	31.	1
2-Chloronaphthalene	ND		ug/kg	230	22.	1
1,2-Dichlorobenzene	ND		ug/kg	230	41.	1
1,3-Dichlorobenzene	ND		ug/kg	230	39.	1
1,4-Dichlorobenzene	ND		ug/kg	230	40.	1
3,3'-Dichlorobenzidine	ND		ug/kg	230	60.	1
2,4-Dinitrotoluene	ND		ug/kg	230	46.	1
2,6-Dinitrotoluene	ND		ug/kg	230	39.	1
Fluoranthene	210		ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	230	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	230	35.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	39.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	23.	1
Hexachlorobutadiene	ND		ug/kg	230	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	650	210	1
Hexachloroethane	ND		ug/kg	180	37.	1
Isophorone	ND		ug/kg	200	30.	1
Naphthalene	39	J	ug/kg	230	28.	1
Nitrobenzene	ND		ug/kg	200	34.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	230	35.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	230	79.	1
Butyl benzyl phthalate	ND		ug/kg	230	57.	1
Di-n-butylphthalate	ND		ug/kg	230	43.	1
Di-n-octylphthalate	ND		ug/kg	230	77.	1



L1924473

07/02/19

Project Name: 399 EXTERIOR STREET

L1924473-21

Project Number: LST1802

SAMPLE RESULTS

Date Collected: 06/06/19 13:00

Date Received: 06/07/19

Lab Number:

Report Date:

SB016(6-8) Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor					
Semivolatile Organics by GC/MS - Westborough Lab											
Diethyl phthalate	ND		ug/kg	230	21.	1					
Dimethyl phthalate	ND		ug/kg	230	48.	1					
Benzo(a)anthracene	120	J	ug/kg	140	26.	1					
Benzo(a)pyrene	120	J	ug/kg	180	56.	1					
Benzo(b)fluoranthene	120	J	ug/kg	140	38.	1					
Benzo(k)fluoranthene	52	J	ug/kg	140	36.	1					
Chrysene	120	J	ug/kg	140	24.	1					
Acenaphthylene	ND		ug/kg	180	35.	1					
Anthracene	ND		ug/kg	140	44.	1					
Benzo(ghi)perylene	63	J	ug/kg	180	27.	1					
Fluorene	ND		ug/kg	230	22.	1					
Phenanthrene	130	J	ug/kg	140	28.	1					
Dibenzo(a,h)anthracene	ND		ug/kg	140	26.	1					
Indeno(1,2,3-cd)pyrene	66	J	ug/kg	180	32.	1					
Pyrene	220		ug/kg	140	23.	1					
Biphenyl	ND		ug/kg	520	53.	1					
4-Chloroaniline	ND		ug/kg	230	41.	1					
2-Nitroaniline	ND		ug/kg	230	44.	1					
3-Nitroaniline	ND		ug/kg	230	43.	1					
4-Nitroaniline	ND		ug/kg	230	94.	1					
Dibenzofuran	ND		ug/kg	230	22.	1					
2-Methylnaphthalene	ND		ug/kg	270	27.	1					
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	230	24.	1					
Acetophenone	ND		ug/kg	230	28.	1					
2,4,6-Trichlorophenol	ND		ug/kg	140	43.	1					
p-Chloro-m-cresol	ND		ug/kg	230	34.	1					
2-Chlorophenol	ND		ug/kg	230	27.	1					
2,4-Dichlorophenol	ND		ug/kg	200	37.	1					
2,4-Dimethylphenol	ND		ug/kg	230	75.	1					
2-Nitrophenol	ND		ug/kg	490	86.	1					
4-Nitrophenol	ND		ug/kg	320	93.	1					
2,4-Dinitrophenol	ND		ug/kg	1100	110	1					
4,6-Dinitro-o-cresol	ND		ug/kg	590	110	1					
Pentachlorophenol	ND		ug/kg	180	50.	1					
Phenol	ND		ug/kg	230	34.	1					
2-Methylphenol	ND		ug/kg	230	35.	1					
3-Methylphenol/4-Methylphenol	77	J	ug/kg	330	36.	1					



Project Name: Lab Number: 399 EXTERIOR STREET L1924473

Project Number: Report Date: LST1802 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-21 Date Collected: 06/06/19 13:00

Client ID: Date Received: 06/07/19 SB016(6-8)

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	230	44.	1
Benzoic Acid	ND		ug/kg	740	230	1
Benzyl Alcohol	ND		ug/kg	230	70.	1
Carbazole	ND		ug/kg	230	22.	1
1,4-Dioxane	ND		ug/kg	34	10.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	60	25-120	
Phenol-d6	62	10-120	
Nitrobenzene-d5	70	23-120	
2-Fluorobiphenyl	64	30-120	
2,4,6-Tribromophenol	72	10-136	
4-Terphenyl-d14	57	18-120	



Extraction Method: EPA 3546

L1924473

07/02/19

06/10/19 02:23

Lab Number:

Report Date:

Extraction Date:

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Method Blank Analysis

Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 06/11/19 00:50

Analyst: RC

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/M	S - Westborough	Lab for s	ample(s):	01,21	Batch:	WG1246368-1
Acenaphthene	ND		ug/kg	130		17.
1,2,4-Trichlorobenzene	ND		ug/kg	160		19.
Hexachlorobenzene	ND		ug/kg	98		18.
Bis(2-chloroethyl)ether	ND		ug/kg	150		22.
2-Chloronaphthalene	ND		ug/kg	160		16.
1,2-Dichlorobenzene	ND		ug/kg	160		29.
1,3-Dichlorobenzene	ND		ug/kg	160		28.
1,4-Dichlorobenzene	ND		ug/kg	160		28.
3,3'-Dichlorobenzidine	ND		ug/kg	160		43.
2,4-Dinitrotoluene	ND		ug/kg	160		33.
2,6-Dinitrotoluene	ND		ug/kg	160		28.
Fluoranthene	ND		ug/kg	98		19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160		17.
4-Bromophenyl phenyl ether	ND		ug/kg	160		25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200		28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180		16.
Hexachlorobutadiene	ND		ug/kg	160		24.
Hexachlorocyclopentadiene	ND		ug/kg	470		150
Hexachloroethane	ND		ug/kg	130		26.
Isophorone	ND		ug/kg	150		21.
Naphthalene	ND		ug/kg	160		20.
Nitrobenzene	ND		ug/kg	150		24.
NDPA/DPA	ND		ug/kg	130		18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160		25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160		56.
Butyl benzyl phthalate	ND		ug/kg	160		41.
Di-n-butylphthalate	ND		ug/kg	160		31.
Di-n-octylphthalate	ND		ug/kg	160		55.
Diethyl phthalate	ND		ug/kg	160		15.



Project Name: 399 EXTERIOR STREET

Project Number: LST1802 Report Date: 07/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/11/19 00:50

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 06/10/19 02:23

Lab Number:

arameter	Result	Qualifier	Units	RL		MDL
emivolatile Organics by GC/N	MS - Westborough	Lab for s	ample(s):	01,21	Batch:	WG1246368-1
Dimethyl phthalate	ND		ug/kg	160		34.
Benzo(a)anthracene	ND		ug/kg	98		18.
Benzo(a)pyrene	ND		ug/kg	130		40.
Benzo(b)fluoranthene	ND		ug/kg	98		27.
Benzo(k)fluoranthene	ND		ug/kg	98		26.
Chrysene	ND		ug/kg	98		17.
Acenaphthylene	ND		ug/kg	130		25.
Anthracene	ND		ug/kg	98		32.
Benzo(ghi)perylene	ND		ug/kg	130		19.
Fluorene	ND		ug/kg	160		16.
Phenanthrene	ND		ug/kg	98		20.
Dibenzo(a,h)anthracene	ND		ug/kg	98		19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		23.
Pyrene	ND		ug/kg	98		16.
Biphenyl	ND		ug/kg	370		38.
4-Chloroaniline	ND		ug/kg	160		30.
2-Nitroaniline	ND		ug/kg	160		31.
3-Nitroaniline	ND		ug/kg	160		31.
4-Nitroaniline	ND		ug/kg	160		67.
Dibenzofuran	ND		ug/kg	160		15.
2-Methylnaphthalene	ND		ug/kg	200		20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160		17.
Acetophenone	ND		ug/kg	160		20.
2,4,6-Trichlorophenol	ND		ug/kg	98		31.
p-Chloro-m-cresol	ND		ug/kg	160		24.
2-Chlorophenol	ND		ug/kg	160		19.
2,4-Dichlorophenol	ND		ug/kg	150		26.
2,4-Dimethylphenol	ND		ug/kg	160		54.
2-Nitrophenol	ND		ug/kg	350		61.



Lab Number:

Project Name: 399 EXTERIOR STREET

1,8270D

Project Number: LST1802 Report Date: 07/02/19

Method Blank Analysis Batch Quality Control

Batch Quality Control

Analytical Date: 06/11/19 00:50 Analyst: RC

Analytical Method:

Extraction Method: EPA 3546
Extraction Date: 06/10/19 02:23

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS	S - Westboroug	h Lab for s	ample(s):	01,21	Batch: WG1246368-1	
4-Nitrophenol	ND		ug/kg	230	66.	
2,4-Dinitrophenol	ND		ug/kg	780	76.	
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.	
Pentachlorophenol	ND		ug/kg	130	36.	
Phenol	ND		ug/kg	160	25.	
2-Methylphenol	ND		ug/kg	160	25.	
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	26.	
2,4,5-Trichlorophenol	ND		ug/kg	160	31.	
Benzoic Acid	ND		ug/kg	530	160	
Benzyl Alcohol	ND		ug/kg	160	50.	
Carbazole	ND		ug/kg	160	16.	
1,4-Dioxane	ND		ug/kg	24	7.5	

Surrogate	%Recovery Qual	Acceptance lifier Criteria	
2-Fluorophenol	80	25-120	
Phenol-d6	78	10-120	
Nitrobenzene-d5	91	23-120	
2-Fluorobiphenyl	80	30-120	
2,4,6-Tribromophenol	88	10-136	
4-Terphenyl-d14	83	18-120	



Lab Number:

Project Name: 399 EXTERIOR STREET

Project Number: LST1802 Report Date: 07/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3546
Analytical Date: 06/11/19 09:36 Extraction Date: 06/10/19 14:22

Analyst: RC

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS	- Westborough	Lab for s	sample(s):	06,08,15,18	Batch:	WG1246559-1
Acenaphthene	ND		ug/kg	130	17.	
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.	
Hexachlorobenzene	ND		ug/kg	99	18.	
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.	
2-Chloronaphthalene	ND		ug/kg	160	16.	
1,2-Dichlorobenzene	ND		ug/kg	160	30.	
1,3-Dichlorobenzene	ND		ug/kg	160	28.	
1,4-Dichlorobenzene	ND		ug/kg	160	29.	
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.	
2,4-Dinitrotoluene	ND		ug/kg	160	33.	
2,6-Dinitrotoluene	ND		ug/kg	160	28.	
Fluoranthene	ND		ug/kg	99	19.	
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.	
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.	
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.	
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.	
Hexachlorobutadiene	ND		ug/kg	160	24.	
Hexachlorocyclopentadiene	ND		ug/kg	470	150	
Hexachloroethane	ND		ug/kg	130	27.	
Isophorone	ND		ug/kg	150	21.	
Naphthalene	ND		ug/kg	160	20.	
Nitrobenzene	ND		ug/kg	150	24.	
NDPA/DPA	ND		ug/kg	130	19.	
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.	
Butyl benzyl phthalate	ND		ug/kg	160	42.	
Di-n-butylphthalate	ND		ug/kg	160	31.	
Di-n-octylphthalate	ND		ug/kg	160	56.	
Diethyl phthalate	ND		ug/kg	160	15.	



Lab Number:

Project Name: 399 EXTERIOR STREET

Project Number: Report Date:

LST1802 07/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3546 Analytical Date: 06/11/19 09:36 06/10/19 14:22 **Extraction Date:**

Analyst: RC

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/M	S - Westborough	Lab for s	sample(s):	06,08,15,18	Batch:	WG1246559-1
Dimethyl phthalate	ND		ug/kg	160	35.	
Benzo(a)anthracene	ND		ug/kg	99	18.	
Benzo(a)pyrene	ND		ug/kg	130	40.	
Benzo(b)fluoranthene	ND		ug/kg	99	28.	
Benzo(k)fluoranthene	ND		ug/kg	99	26.	
Chrysene	ND		ug/kg	99	17.	
Acenaphthylene	ND		ug/kg	130	25.	
Anthracene	ND		ug/kg	99	32.	
Benzo(ghi)perylene	ND		ug/kg	130	19.	
Fluorene	ND		ug/kg	160	16.	
Phenanthrene	ND		ug/kg	99	20.	
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.	
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.	
Pyrene	ND		ug/kg	99	16.	
Biphenyl	ND		ug/kg	380	38.	
4-Chloroaniline	ND		ug/kg	160	30.	
2-Nitroaniline	ND		ug/kg	160	32.	
3-Nitroaniline	ND		ug/kg	160	31.	
4-Nitroaniline	ND		ug/kg	160	68.	
Dibenzofuran	ND		ug/kg	160	16.	
2-Methylnaphthalene	ND		ug/kg	200	20.	
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.	
Acetophenone	ND		ug/kg	160	20.	
2,4,6-Trichlorophenol	ND		ug/kg	99	31.	
p-Chloro-m-cresol	ND		ug/kg	160	24.	
2-Chlorophenol	ND		ug/kg	160	20.	
2,4-Dichlorophenol	ND		ug/kg	150	26.	
2,4-Dimethylphenol	ND		ug/kg	160	54.	
2-Nitrophenol	ND		ug/kg	360	62.	



Project Name: 399 EXTERIOR STREET

Lab Number:

L1924473

Project Number: L

Analyst:

LST1802

Report Date: 07/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 06/11/19 09:36

RC

Extraction Method: EPA 3546 Extraction Date: 06/10/19 14:22

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS	- Westboroug	h Lab for s	ample(s):	06,08,15,18	Batch:	WG1246559-1
4-Nitrophenol	ND		ug/kg	230	67.	
2,4-Dinitrophenol	ND		ug/kg	790	77.	
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.	
Pentachlorophenol	ND		ug/kg	130	36.	
Phenol	ND		ug/kg	160	25.	
2-Methylphenol	ND		ug/kg	160	26.	
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	
2,4,5-Trichlorophenol	ND		ug/kg	160	32.	
Benzoic Acid	ND		ug/kg	530	170	
Benzyl Alcohol	ND		ug/kg	160	50.	
Carbazole	ND		ug/kg	160	16.	
1,4-Dioxane	ND		ug/kg	25	7.6	

Surrogate	%Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	70	25-120
Phenol-d6	68	10-120
Nitrobenzene-d5	78	23-120
2-Fluorobiphenyl	70	30-120
2,4,6-Tribromophenol	70	10-136
4-Terphenyl-d14	74	18-120



Extraction Method: EPA 3546

L1924473

07/02/19

06/19/19 09:22

Lab Number:

Extraction Date:

Project Name: 399 EXTERIOR STREET

Project Number: Report Date: LST1802

Method Blank Analysis

Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 06/20/19 03:20

Analyst: RC

arameter	Result	Qualifier	Units	RL		MDL
emivolatile Organics by GC/MS	G - Westboroug	h Lab for s	ample(s):	07,19	Batch:	WG1250337-1
Acenaphthene	ND		ug/kg	130		17.
1,2,4-Trichlorobenzene	ND		ug/kg	160		19.
Hexachlorobenzene	ND		ug/kg	99		18.
Bis(2-chloroethyl)ether	ND		ug/kg	150		22.
2-Chloronaphthalene	ND		ug/kg	160		16.
1,2-Dichlorobenzene	ND		ug/kg	160		30.
1,3-Dichlorobenzene	ND		ug/kg	160		28.
1,4-Dichlorobenzene	ND		ug/kg	160		29.
3,3'-Dichlorobenzidine	ND		ug/kg	160		44.
2,4-Dinitrotoluene	ND		ug/kg	160		33.
2,6-Dinitrotoluene	ND		ug/kg	160		28.
Fluoranthene	ND		ug/kg	99		19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160		18.
4-Bromophenyl phenyl ether	ND		ug/kg	160		25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200		28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180		16.
Hexachlorobutadiene	ND		ug/kg	160		24.
Hexachlorocyclopentadiene	ND		ug/kg	470		150
Hexachloroethane	ND		ug/kg	130		27.
Isophorone	ND		ug/kg	150		21.
Naphthalene	ND		ug/kg	160		20.
Nitrobenzene	ND		ug/kg	150		24.
NDPA/DPA	ND		ug/kg	130		19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160		25.

ND

ND

ND

ND

ND



160

160

160

160

160

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

57.

42.

31.

56.

15.

Bis(2-ethylhexyl)phthalate

Butyl benzyl phthalate

Di-n-butylphthalate

Di-n-octylphthalate

Diethyl phthalate

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Report Date: 07/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 06/20/19 03:20

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 06/19/19 09:22

arameter	Result	Qualifier	Units	RL		MDL
emivolatile Organics by GC/MS	S - Westborough	Lab for s	ample(s):	07,19	Batch:	WG1250337-1
Dimethyl phthalate	ND		ug/kg	160		35.
Benzo(a)anthracene	ND		ug/kg	99		18.
Benzo(a)pyrene	ND		ug/kg	130		40.
Benzo(b)fluoranthene	ND		ug/kg	99		28.
Benzo(k)fluoranthene	ND		ug/kg	99		26.
Chrysene	ND		ug/kg	99		17.
Acenaphthylene	ND		ug/kg	130		25.
Anthracene	ND		ug/kg	99		32.
Benzo(ghi)perylene	ND		ug/kg	130		19.
Fluorene	ND		ug/kg	160		16.
Phenanthrene	ND		ug/kg	99		20.
Dibenzo(a,h)anthracene	ND		ug/kg	99		19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		23.
Pyrene	ND		ug/kg	99		16.
Biphenyl	ND		ug/kg	380		38.
4-Chloroaniline	ND		ug/kg	160		30.
2-Nitroaniline	ND		ug/kg	160		32.
3-Nitroaniline	ND		ug/kg	160		31.
4-Nitroaniline	ND		ug/kg	160		68.
Dibenzofuran	ND		ug/kg	160		16.
2-Methylnaphthalene	ND		ug/kg	200		20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160		17.
Acetophenone	ND		ug/kg	160		20.
2,4,6-Trichlorophenol	ND		ug/kg	99		31.
p-Chloro-m-cresol	ND		ug/kg	160		24.
2-Chlorophenol	ND		ug/kg	160		20.
2,4-Dichlorophenol	ND		ug/kg	150		26.
2,4-Dimethylphenol	ND		ug/kg	160		54.
2-Nitrophenol	ND		ug/kg	360		62.



Lab Number:

Project Name: 399 EXTERIOR STREET

1,8270D

06/20/19 03:20

Project Number: Report Date: LST1802 07/02/19

Method Blank Analysis Batch Quality Control

Extraction Method: EPA 3546 06/19/19 09:22 **Extraction Date:**

Analyst: RC

Analytical Method:

Analytical Date:

Parameter	Result	Qualifier	Units	RL		MDL	
Semivolatile Organics by GC/MS	- Westboroug	h Lab for s	ample(s):	07,19	Batch:	WG1250337-1	
4-Nitrophenol	ND		ug/kg	230		67.	
2,4-Dinitrophenol	ND		ug/kg	790		77.	_
4,6-Dinitro-o-cresol	ND		ug/kg	430		79.	
Pentachlorophenol	ND		ug/kg	130		36.	
Phenol	ND		ug/kg	160		25.	
2-Methylphenol	ND		ug/kg	160		26.	
3-Methylphenol/4-Methylphenol	ND		ug/kg	240		26.	
2,4,5-Trichlorophenol	ND		ug/kg	160		32.	
Benzoic Acid	ND		ug/kg	530		170	
Benzyl Alcohol	ND		ug/kg	160		50.	
Carbazole	ND		ug/kg	160		16.	
1,4-Dioxane	ND		ug/kg	25		7.6	

		Acceptance	
Surrogate	%Recovery Qual	ifier Criteria	
0.51	0.4	05.400	
2-Fluorophenol	61	25-120	
Phenol-d6	57	10-120	
Nitrobenzene-d5	72	23-120	
2-Fluorobiphenyl	57	30-120	
2,4,6-Tribromophenol	72	10-136	
4-Terphenyl-d14	61	18-120	



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

1,2,4-Trichlorobenzene 82 73 38-107 12 5 Hexachlorobenzene 87 80 40-140 8 5 Bis(2-chloroethyl)ether 78 70 40-140 11 5 2-Chloronaphthalene 88 79 40-140 11 5 1,2-Dichlorobenzene 76 69 40-140 10 5 1,3-Dichlorobenzene 76 68 40-140 11 5 1,4-Dichlorobenzene 76 68 28-104 11 5 3,3-Dichlorobenzene 76 68 28-104 11 5 3,3-Dichlorobenzene 67 60 40-140 11 5 2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bis(2-chloroisopropyl)ether 81 72 40-140 <t< th=""><th>neter</th><th>LCS %Recovery Qu</th><th>LCSD ual %Recover</th><th>%Reco ry Qual Lim</th><th></th><th>RPD Qual Limits</th></t<>	neter	LCS %Recovery Qu	LCSD ual %Recover	%Reco ry Qual Lim		RPD Qual Limits
1.2,4-Trichlorobenzene 82 73 38-107 12 5 Hexachlorobenzene 87 80 40-140 8 5 Bis(2-chloroethyl)lether 78 70 40-140 11 5 2-Chloronaphthalene 88 79 40-140 11 5 1,2-Dichlorobenzene 76 69 40-140 10 5 1,3-Dichlorobenzene 76 68 40-140 11 5 1,4-Dichlorobenzene 76 68 28-104 11 5 3,3-Dichlorobenzidine 67 60 40-140 11 5 2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chlorostopropyl)ether 81 72 40-140	rolatile Organics by GC/MS - Westboroug	gh Lab Associated s	sample(s): 01,21 B	Batch: WG1246368-2 V	VG1246368-3	
Hexachlorobenzene 87 80 40-140 8 5 Bis(2-chloroethyl)ether 78 70 40-140 11 5 2-Chloronaphthalene 88 79 40-140 11 5 1,2-Dichlorobenzene 76 69 40-140 10 5 1,3-Dichlorobenzene 76 68 40-140 11 5 1,4-Dichlorobenzene 76 68 28-104 11 5 3,3'-Dichlorobenzidine 67 60 40-140 11 5 2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 81 72 40-140 12 5 Bis(2-chloroisopropyl)ether 81 72 40-140	enaphthene	84	75	31-13	37 11	50
Bis(2-chloroethyl)ether 78 70 40-140 11 5 2-Chloronaphthalene 88 79 40-140 11 5 1,2-Dichlorobenzene 76 69 40-140 10 5 1,3-Dichlorobenzene 76 68 40-140 11 5 1,4-Dichlorobenzene 76 68 28-104 11 5 3,3'-Dichlorobenzidine 67 60 40-140 11 5 2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-140 <td>2,4-Trichlorobenzene</td> <td>82</td> <td>73</td> <td>38-10</td> <td>07 12</td> <td>50</td>	2,4-Trichlorobenzene	82	73	38-10	07 12	50
2-Chloronaphthalene 88 79 40-140 11 5 1,2-Dichlorobenzene 76 69 40-140 10 5 1,3-Dichlorobenzene 76 68 40-140 11 5 1,4-Dichlorobenzidine 67 60 40-140 11 5 2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroethoxy)methane 87 78 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140	xachlorobenzene	87	80	40-14	40 8	50
1,2-Dichlorobenzene 76 69 40-140 10 5 1,3-Dichlorobenzene 76 68 40-140 11 5 1,4-Dichlorobenzene 76 68 28-104 11 5 3,3-Dichlorobenzidine 67 60 40-140 11 5 2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chlorosethoxy)methane 87 78 40-140 12 5 Bis(2-chlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 1sophorone 86 78 40-140 <td< td=""><td>s(2-chloroethyl)ether</td><td>78</td><td>70</td><td>40-14</td><td>10 11</td><td>50</td></td<>	s(2-chloroethyl)ether	78	70	40-14	10 11	50
1,3-Dichlorobenzene 76 68 40-140 11 5 1,4-Dichlorobenzene 76 68 28-104 11 5 3,3'-Dichlorobenzidine 67 60 40-140 11 5 2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-117 11 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachlorocyclopentadiene 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	Chloronaphthalene	88	79	40-14	10 11	50
1,4-Dichlorobenzene 76 68 28-104 11 5 3,3'-Dichlorobenzidine 67 60 40-140 11 5 2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-140 13 5 Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	2-Dichlorobenzene	76	69	40-14	10	50
3,3'-Dichlorobenzidine 67 60 40-140 11 5 2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-117 11 5 Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	3-Dichlorobenzene	76	68	40-14	10 11	50
2,4-Dinitrotoluene 102 93 40-132 9 5 2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-117 11 5 Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	l-Dichlorobenzene	76	68	28-10	04 11	50
2,6-Dinitrotoluene 107 99 40-140 8 5 Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-117 11 5 Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	3'-Dichlorobenzidine	67	60	40-14	10 11	50
Fluoranthene 90 79 40-140 13 5 4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-117 11 5 Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	l-Dinitrotoluene	102	93	40-13	32 9	50
4-Chlorophenyl phenyl ether 86 78 40-140 10 5 4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-117 11 5 Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	S-Dinitrotoluene	107	99	40-14	40 8	50
4-Bromophenyl phenyl ether 87 79 40-140 10 5 Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-117 11 5 Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	oranthene	90	79	40-14	10 13	50
Bis(2-chloroisopropyl)ether 81 72 40-140 12 5 Bis(2-chloroethoxy)methane 87 78 40-117 11 5 Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	Chlorophenyl phenyl ether	86	78	40-14	10	50
Bis(2-chloroethoxy)methane 87 78 40-117 11 5 Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	Bromophenyl phenyl ether	87	79	40-14	10	50
Hexachlorobutadiene 83 73 40-140 13 5 Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	s(2-chloroisopropyl)ether	81	72	40-14	10 12	50
Hexachlorocyclopentadiene 72 64 40-140 12 5 Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	s(2-chloroethoxy)methane	87	78	40-1	17 11	50
Hexachloroethane 78 70 40-140 11 5 Isophorone 86 78 40-140 10 5	xachlorobutadiene	83	73	40-14	10 13	50
Isophorone 86 78 40-140 10 5	xachlorocyclopentadiene	72	64	40-14	10 12	50
·	xachloroethane	78	70	40-14	10 11	50
	phorone	86	78	40-14	10	50
Naphthalene 83 72 40-140 14 5	phthalene	83	72	40-14	10 14	50
Nitrobenzene 99 87 40-140 13 5	robenzene	99	87	40-14	10 13	50
NDPA/DPA 90 82 36-157 9 5	PA/DPA	90	82	36-1	57 9	50



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	Qual	LCSI %Recov		%Recovery Qual Limits	RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS - West	borough Lab Associ	ated sample(s):	01,21	Batch:	WG1246368-2 WG12463	368-3		
n-Nitrosodi-n-propylamine	85		77		32-121	10	50	
Bis(2-ethylhexyl)phthalate	96		87		40-140	10	50	
Butyl benzyl phthalate	96		85		40-140	12	50	
Di-n-butylphthalate	90		82		40-140	9	50	
Di-n-octylphthalate	94		86		40-140	9	50	
Diethyl phthalate	87		80		40-140	8	50	
Dimethyl phthalate	92		84		40-140	9	50	
Benzo(a)anthracene	86		80		40-140	7	50	
Benzo(a)pyrene	96		85		40-140	12	50	
Benzo(b)fluoranthene	92		81		40-140	13	50	
Benzo(k)fluoranthene	92		84		40-140	9	50	
Chrysene	86		79		40-140	8	50	
Acenaphthylene	91		82		40-140	10	50	
Anthracene	86		77		40-140	11	50	
Benzo(ghi)perylene	86		77		40-140	11	50	
Fluorene	86		77		40-140	11	50	
Phenanthrene	84		75		40-140	11	50	
Dibenzo(a,h)anthracene	86		77		40-140	11	50	
Indeno(1,2,3-cd)pyrene	87		79		40-140	10	50	
Pyrene	88		79		35-142	11	50	
Biphenyl	82		73		54-104	12	50	
4-Chloroaniline	79		71		40-140	11	50	
2-Nitroaniline	106		98		47-134	8	50	



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	Qual	LCSD %Recove		%Recovery Qual Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS - Westb	oorough Lab Associ	iated sample(s):	01,21	Batch:	WG1246368-2 WG12463	68-3	
3-Nitroaniline	84		77		26-129	9	50
4-Nitroaniline	110		100		41-125	10	50
Dibenzofuran	85		77		40-140	10	50
2-Methylnaphthalene	84		75		40-140	11	50
1,2,4,5-Tetrachlorobenzene	78		71		40-117	9	50
Acetophenone	80		72		14-144	11	50
2,4,6-Trichlorophenol	101		90		30-130	12	50
p-Chloro-m-cresol	99		91		26-103	8	50
2-Chlorophenol	89		78		25-102	13	50
2,4-Dichlorophenol	97		88		30-130	10	50
2,4-Dimethylphenol	95		87		30-130	9	50
2-Nitrophenol	118		107		30-130	10	50
4-Nitrophenol	106		94		11-114	12	50
2,4-Dinitrophenol	121		111		4-130	9	50
4,6-Dinitro-o-cresol	132	Q	121		10-130	9	50
Pentachlorophenol	84		76		17-109	10	50
Phenol	83		74		26-90	11	50
2-Methylphenol	90		82		30-130.	9	50
3-Methylphenol/4-Methylphenol	92		82		30-130	11	50
2,4,5-Trichlorophenol	102		93		30-130	9	50
Benzoic Acid	54		46		10-110	16	50
Benzyl Alcohol	88		78		40-140	12	50
Carbazole	88		80		54-128	10	50



Project Name: 399 EXTERIOR STREET

Lab Number:

L1924473

Project Number: LST1802 Report Date:

07/02/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westboro	ugh Lab Associa	ted sample(s)	: 01,21 Batch:	WG124636	68-2 WG124636	68-3		
1,4-Dioxane	62		55		40-140	12		50

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
2-Fluorophenol	77	68	25-120
Phenol-d6	77	67	10-120
Nitrobenzene-d5	92	83	23-120
2-Fluorobiphenyl	77	69	30-120
2,4,6-Tribromophenol	88	82	10-136
4-Terphenyl-d14	77	69	18-120



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS -	- Westborough Lab Associat	ed sample(s):	06,08,15,18	Batch:	WG1246559-2	WG1246559-3			
Acenaphthene	63		69		31-137	9		50	
1,2,4-Trichlorobenzene	57		53		38-107	7		50	
Hexachlorobenzene	61		69		40-140	12		50	
Bis(2-chloroethyl)ether	58		54		40-140	7		50	
2-Chloronaphthalene	64		67		40-140	5		50	
1,2-Dichlorobenzene	56		49		40-140	13		50	
1,3-Dichlorobenzene	54		47		40-140	14		50	
1,4-Dichlorobenzene	56		48		28-104	15		50	
3,3'-Dichlorobenzidine	51		61		40-140	18		50	
2,4-Dinitrotoluene	70		82		40-132	16		50	
2,6-Dinitrotoluene	68		78		40-140	14		50	
Fluoranthene	67		81		40-140	19		50	
4-Chlorophenyl phenyl ether	64		70		40-140	9		50	
4-Bromophenyl phenyl ether	65		74		40-140	13		50	
Bis(2-chloroisopropyl)ether	59		55		40-140	7		50	
Bis(2-chloroethoxy)methane	64		65		40-117	2		50	
Hexachlorobutadiene	58		56		40-140	4		50	
Hexachlorocyclopentadiene	67		68		40-140	1		50	
Hexachloroethane	59		50		40-140	17		50	
Isophorone	68		68		40-140	0		50	
Naphthalene	59		60		40-140	2		50	
Nitrobenzene	71		70		40-140	1		50	
NDPA/DPA	70		77		36-157	10		50	



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS -	Westborough Lab Associated sample	(s): 06,08,15,18	Batch: WG1246559-2 V	VG1246559-3	
n-Nitrosodi-n-propylamine	68	69	32-121	1	50
Bis(2-ethylhexyl)phthalate	68	80	40-140	16	50
Butyl benzyl phthalate	72	86	40-140	18	50
Di-n-butylphthalate	68	80	40-140	16	50
Di-n-octylphthalate	70	83	40-140	17	50
Diethyl phthalate	70	79	40-140	12	50
Dimethyl phthalate	67	74	40-140	10	50
Benzo(a)anthracene	68	81	40-140	17	50
Benzo(a)pyrene	73	89	40-140	20	50
Benzo(b)fluoranthene	69	84	40-140	20	50
Benzo(k)fluoranthene	69	85	40-140	21	50
Chrysene	64	77	40-140	18	50
Acenaphthylene	68	74	40-140	8	50
Anthracene	64	74	40-140	14	50
Benzo(ghi)perylene	67	82	40-140	20	50
Fluorene	68	73	40-140	7	50
Phenanthrene	62	71	40-140	14	50
Dibenzo(a,h)anthracene	66	80	40-140	19	50
Indeno(1,2,3-cd)pyrene	68	85	40-140	22	50
Pyrene	68	81	35-142	17	50
Biphenyl	62	64	54-104	3	50
4-Chloroaniline	72	68	40-140	6	50
2-Nitroaniline	78	89	47-134	13	50



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westboro	ugh Lab Assoc	iated sample(s):	06,08,15,18	Batch:	WG1246559-2	WG1246559-3		
3-Nitroaniline	62		70		26-129	12		50
4-Nitroaniline	77		92		41-125	18		50
Dibenzofuran	66		72		40-140	9		50
2-Methylnaphthalene	62		64		40-140	3		50
1,2,4,5-Tetrachlorobenzene	56		58		40-117	4		50
Acetophenone	60		60		14-144	0		50
2,4,6-Trichlorophenol	70		78		30-130	11		50
p-Chloro-m-cresol	79		86		26-103	8		50
2-Chlorophenol	63		62		25-102	2		50
2,4-Dichlorophenol	68		71		30-130	4		50
2,4-Dimethylphenol	72		75		30-130	4		50
2-Nitrophenol	74		76		30-130	3		50
4-Nitrophenol	80		94		11-114	16		50
2,4-Dinitrophenol	71		82		4-130	14		50
4,6-Dinitro-o-cresol	80		95		10-130	17		50
Pentachlorophenol	69		81		17-109	16		50
Phenol	72		73		26-90	1		50
2-Methylphenol	67		69		30-130.	3		50
3-Methylphenol/4-Methylphenol	69		71		30-130	3		50
2,4,5-Trichlorophenol	73		81		30-130	10		50
Benzoic Acid	44		45		10-110	2		50
Benzyl Alcohol	72		73		40-140	1		50
Carbazole	68		81		54-128	17		50



Project Name: 399 EXTERIOR STREET

Lab Number:

L1924473

07/02/19

Project Number: LST1802

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	/ RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS - Westbord	ugh Lab Associat	ed sample(s)	: 06,08,15,18	Batch:	WG1246559-2	WG1246559-3			
1,4-Dioxane	51		40		40-140	24		50	

Surrogate	LCS %Recovery Qua	LCSD Il %Recovery Qual	Acceptance Criteria
2-Fluorophenol	64	61	25-120
Phenol-d6	65	66	10-120
Nitrobenzene-d5	76	75	23-120
2-Fluorobiphenyl	65	69	30-120
2,4,6-Tribromophenol	69	80	10-136
4-Terphenyl-d14	64	77	18-120



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	Qual	LCSE %Recov		%Recovery Qual Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westboro	ugh Lab Assoc	iated sample(s):	07,19	Batch:	WG1250337-2 WG12503	337-3		
Acenaphthene	69		83		31-137	18		50
1,2,4-Trichlorobenzene	64		75		38-107	16		50
Hexachlorobenzene	90		97		40-140	7		50
Bis(2-chloroethyl)ether	63		69		40-140	9		50
2-Chloronaphthalene	52		72		40-140	32		50
1,2-Dichlorobenzene	56		66		40-140	16		50
1,3-Dichlorobenzene	60		65		40-140	8		50
1,4-Dichlorobenzene	60		65		28-104	8		50
3,3'-Dichlorobenzidine	60		68		40-140	13		50
2,4-Dinitrotoluene	78		93		40-132	18		50
2,6-Dinitrotoluene	59		80		40-140	30		50
Fluoranthene	88		94		40-140	7		50
4-Chlorophenyl phenyl ether	78		91		40-140	15		50
4-Bromophenyl phenyl ether	92		101		40-140	9		50
Bis(2-chloroisopropyl)ether	52		63		40-140	19		50
Bis(2-chloroethoxy)methane	68		78		40-117	14		50
Hexachlorobutadiene	71		84		40-140	17		50
Hexachlorocyclopentadiene	71		96		40-140	30		50
Hexachloroethane	67		74		40-140	10		50
Isophorone	68		83		40-140	20		50
Naphthalene	64		73		40-140	13		50
Nitrobenzene	71		87		40-140	20		50
NDPA/DPA	75		89		36-157	17		50



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	Qual	LCSD %Recove		%Recovery Qual Limits	r RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS - West	borough Lab Associ	ated sample(s):	07,19	Batch:	WG1250337-2 WG12	250337-3		
n-Nitrosodi-n-propylamine	73		87		32-121	18	50	
Bis(2-ethylhexyl)phthalate	74		84		40-140	13	50	
Butyl benzyl phthalate	106		96		40-140	10	50	
Di-n-butylphthalate	98		89		40-140	10	50	
Di-n-octylphthalate	72		90		40-140	22	50	
Diethyl phthalate	77		97		40-140	23	50	
Dimethyl phthalate	55		77		40-140	33	50	
Benzo(a)anthracene	72		86		40-140	18	50	
Benzo(a)pyrene	73		95		40-140	26	50	
Benzo(b)fluoranthene	73		90		40-140	21	50	
Benzo(k)fluoranthene	72		91		40-140	23	50	
Chrysene	68		80		40-140	16	50	
Acenaphthylene	55		78		40-140	35	50	
Anthracene	69		81		40-140	16	50	
Benzo(ghi)perylene	75		77		40-140	3	50	
Fluorene	73		88		40-140	19	50	
Phenanthrene	66		78		40-140	17	50	
Dibenzo(a,h)anthracene	74		75		40-140	1	50	
Indeno(1,2,3-cd)pyrene	78		81		40-140	4	50	
Pyrene	91		92		35-142	1	50	
Biphenyl	50	Q	71		54-104	35	50	
4-Chloroaniline	70		79		40-140	12	50	
2-Nitroaniline	62		90		47-134	37	50	



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	Qual	LCSE %Recov			covery mits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westbo	orough Lab Associ	iated sample(s):	07,19	Batch:	WG1250337-2	WG125033	7-3		
3-Nitroaniline	64		75		26-	129	16		50
4-Nitroaniline	77		92		41-	125	18		50
Dibenzofuran	72		87		40-	140	19		50
2-Methylnaphthalene	55		74		40-	140	29		50
1,2,4,5-Tetrachlorobenzene	53		73		40-	117	32		50
Acetophenone	66		77		14-	144	15		50
2,4,6-Trichlorophenol	65		89		30-	130	31		50
p-Chloro-m-cresol	73		96		26-	103	27		50
2-Chlorophenol	69		78		25-	102	12		50
2,4-Dichlorophenol	78		94		30-	130	19		50
2,4-Dimethylphenol	83		98		30-	130	17		50
2-Nitrophenol	87		96		30-	130	10		50
4-Nitrophenol	75		94		11-	114	22		50
2,4-Dinitrophenol	83		95		4-1	130	13		50
4,6-Dinitro-o-cresol	96		110		10-	130	14		50
Pentachlorophenol	96		101		17-	109	5		50
Phenol	69		79		26-	-90	14		50
2-Methylphenol	68		86		30-	130.	23		50
3-Methylphenol/4-Methylphenol	72		85		30-	130	17		50
2,4,5-Trichlorophenol	65		90		30-	130	32		50
Benzoic Acid	41		39		10-	110	5		50
Benzyl Alcohol	71		92		40-	140	26		50
Carbazole	69		85		54-	128	21		50



Lab Control Sample Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Quality Control Lab Number:

Project Number: LST1802

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS - Westboro	ugh Lab Associat	ed sample(s)	: 07,19 Batch:	WG1250337-2 WG12503	337-3	
1,4-Dioxane	47		51	40-140	8	50

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
2-Fluorophenol	68	79	25-120
Phenol-d6	68	76	10-120
Nitrobenzene-d5	80	95	23-120
2-Fluorobiphenyl	55	74	30-120
2,4,6-Tribromophenol	118	122	10-136
4-Terphenyl-d14	93	90	18-120



PCBS



06/12/19

Cleanup Date:

40.2

ug/kg

3.57

1

Α

Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-01 Date Collected: 06/06/19 16:00

Client ID: SB017(6-8) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 06/11/19 18:11
Analytical Date: 06/14/19 07:09 Cleanup Method: EPA 3665A

Analytical Date: 06/14/19 07:09 Cleanup Method: EPA 3665A
Analyst: KB Cleanup Date: 06/12/19
Percent Solids: 82% Cleanup Method: EPA 3660B

Qualifier RL MDL Result Units **Dilution Factor** Column **Parameter** Polychlorinated Biphenyls by GC - Westborough Lab Aroclor 1016 ND ug/kg 40.2 3.57 1 Α Aroclor 1221 ND ug/kg 40.2 4.03 Α Aroclor 1232 ND ug/kg 40.2 8.53 1 Α ND 1 Aroclor 1242 ug/kg 40.2 5.42 Α Aroclor 1248 ND ug/kg 40.2 6.03 1 Α ND Aroclor 1254 ug/kg 40.2 4.40 1 Α Aroclor 1260 ND 40.2 7.43 1 Α ug/kg Aroclor 1262 ND 40.2 5.11 1 Α ug/kg Aroclor 1268 ND 40.2 1 ug/kg 4.17 Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	Α
Decachlorobiphenyl	61		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	72		30-150	В
Decachlorobiphenyl	91		30-150	В

ND

PCBs, Total

Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-21 Date Collected: 06/06/19 13:00

Client ID: SB016(6-8) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 06/11/19 18:11

Analytical Date: 06/14/19 07:22 Cleanup Method: EPA 3665A
Analyst: KB Cleanup Date: 06/12/19
Percent Solids: 72% Cleanup Method: EPA 3660B

Percent Solids: 72% Cleanup Method: EPA 366 Cleanup Date: 06/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Wes	stborough Lab						
Aroclor 1016	ND		ug/kg	45.4	4.03	1	Α
Aroclor 1221	ND		ug/kg	45.4	4.55	1	Α
Aroclor 1232	ND		ug/kg	45.4	9.63	1	Α
Aroclor 1242	ND		ug/kg	45.4	6.12	1	Α
Aroclor 1248	ND		ug/kg	45.4	6.82	1	Α
Aroclor 1254	ND		ug/kg	45.4	4.97	1	Α
Aroclor 1260	ND		ug/kg	45.4	8.40	1	Α
Aroclor 1262	ND		ug/kg	45.4	5.77	1	Α
Aroclor 1268	ND		ug/kg	45.4	4.71	1	Α
PCBs, Total	ND		ug/kg	45.4	4.03	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	Α
Decachlorobiphenyl	58		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	66		30-150	В
Decachlorobiphenyl	80		30-150	В



L1924473

Lab Number:

Project Name: 399 EXTERIOR STREET

Project Number: LST1802 Report Date: 07/02/19

Method Blank Analysis

Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 06/14/19 04:20

Analyst: KB

Extraction Method: EPA 3546
Extraction Date: 06/11/19 18:11
Cleanup Method: EPA 3665A
Cleanup Date: 06/12/19
Cleanup Date: EPA 3660B
Cleanup Date: 06/12/19

Parameter	Result	Qualifier	Units	RL		MDL	Column
Polychlorinated Biphenyls by GC	- Westboroug	h Lab for s	ample(s):	01,21	Batch:	WG124	7113-1
Aroclor 1016	ND		ug/kg	31.4		2.79	А
Aroclor 1221	ND		ug/kg	31.4		3.14	Α
Aroclor 1232	ND		ug/kg	31.4		6.65	Α
Aroclor 1242	ND		ug/kg	31.4		4.23	Α
Aroclor 1248	ND		ug/kg	31.4		4.71	Α
Aroclor 1254	ND		ug/kg	31.4		3.43	А
Aroclor 1260	ND		ug/kg	31.4		5.80	Α
Aroclor 1262	ND		ug/kg	31.4		3.99	Α
Aroclor 1268	ND		ug/kg	31.4		3.25	Α
PCBs, Total	ND		ug/kg	31.4		2.79	Α

		Acceptance				
Surrogate	%Recovery Qualifie	r Criteria	Column			
2,4,5,6-Tetrachloro-m-xylene	88	30-150	Α			
Decachlorobiphenyl	68	30-150	Α			
2,4,5,6-Tetrachloro-m-xylene	79	30-150	В			
Decachlorobiphenyl	73	30-150	В			



Lab Control Sample Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Lab Number:

L1924473

Project Number: LST1802 Report Date:

07/02/19

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01,21 Batch: WG1247113-2 WG1247113-3									
Aroclor 1016	86		90		40-140	5		50	Α
Aroclor 1260	74		78		40-140	5		50	А

Surrogate	LCS %Recovery Qu	LCSD ual %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	80	85	30-150 A
Decachlorobiphenyl	63	67	30-150 A
2,4,5,6-Tetrachloro-m-xylene	73	77	30-150 B
Decachlorobiphenyl	70	73	30-150 B



PESTICIDES



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-01 Date Collected: 06/06/19 16:00

Client ID: SB017(6-8) Date Received: 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 06/10/19 18:48

Analytical Potes: 06/10/19 18:48

Analyst: 06/13/19 12:04 Cleanup Method: EPA 3620B
Analyst: BM Cleanup Date: 06/12/19

Analyst: BM Clean Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC	- Westborough Lab						
Delta-BHC	ND		ug/kg	1.91	0.374	1	Α
Lindane	ND		ug/kg	0.796	0.356	1	Α
Alpha-BHC	ND		ug/kg	0.796	0.226	1	Α
Beta-BHC	ND		ug/kg	1.91	0.724	1	Α
Heptachlor	ND		ug/kg	0.955	0.428	1	Α
Aldrin	ND		ug/kg	1.91	0.673	1	Α
Heptachlor epoxide	ND		ug/kg	3.58	1.07	1	Α
Endrin	ND		ug/kg	0.796	0.326	1	Α
Endrin aldehyde	ND		ug/kg	2.39	0.836	1	Α
Endrin ketone	ND		ug/kg	1.91	0.492	1	Α
Dieldrin	ND		ug/kg	1.19	0.597	1	Α
4,4'-DDE	ND		ug/kg	1.91	0.442	1	Α
4,4'-DDD	ND		ug/kg	1.91	0.682	1	Α
4,4'-DDT	ND		ug/kg	3.58	1.54	1	Α
Endosulfan I	ND		ug/kg	1.91	0.451	1	Α
Endosulfan II	ND		ug/kg	1.91	0.638	1	Α
Endosulfan sulfate	ND		ug/kg	0.796	0.379	1	Α
Methoxychlor	ND		ug/kg	3.58	1.11	1	Α
Toxaphene	ND		ug/kg	35.8	10.0	1	Α
cis-Chlordane	ND		ug/kg	2.39	0.666	1	Α
trans-Chlordane	3.43	IP	ug/kg	2.39	0.631	1	Α
Chlordane	ND		ug/kg	15.5	6.33	1	Α

Project Name: Lab Number: 399 EXTERIOR STREET L1924473

Project Number: Report Date: LST1802 07/02/19

SAMPLE RESULTS

Lab ID: Date Collected: 06/06/19 16:00 L1924473-01

Date Received: Client ID: 06/07/19 SB017(6-8) Not Specified

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep:

Sample Depth:

Parameter Result Qualifier Units RL MDL **Dilution Factor** Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	В
Decachlorobiphenyl	80		30-150	В
2,4,5,6-Tetrachloro-m-xylene	452	Q	30-150	Α
Decachlorobiphenyl	44		30-150	Α



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-21 Date Collected: 06/06/19 13:00

Client ID: SB016(6-8) Date Received: 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 06/10/19 18:48
Analytical Date: 06/13/19 12:16 Cleanup Method: EPA 3620B

Analytical Date: 06/13/19 12:16 Cleanup Method: EPA 3620
Analyst: BM Cleanup Date: 06/12/19
Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by G	C - Westborough Lab						
Delta-BHC	ND		ug/kg	2.16	0.424	1	Α
Lindane	ND		ug/kg	0.902	0.403	1	Α
Alpha-BHC	ND		ug/kg	0.902	0.256	1	A
Beta-BHC	ND		ug/kg	2.16	0.820	1	A
Heptachlor	ND		ug/kg	1.08	0.485	1	Α
Aldrin	ND		ug/kg	2.16	0.762	1	Α
Heptachlor epoxide	ND		ug/kg	4.06	1.22	1	Α
Endrin	ND		ug/kg	0.902	0.370	1	Α
Endrin aldehyde	ND		ug/kg	2.70	0.947	1	Α
Endrin ketone	ND		ug/kg	2.16	0.557	1	Α
Dieldrin	ND		ug/kg	1.35	0.676	1	Α
4,4'-DDE	ND		ug/kg	2.16	0.500	1	Α
4,4'-DDD	ND		ug/kg	2.16	0.772	1	Α
4,4'-DDT	ND		ug/kg	4.06	1.74	1	Α
Endosulfan I	ND		ug/kg	2.16	0.511	1	Α
Endosulfan II	ND		ug/kg	2.16	0.723	1	Α
Endosulfan sulfate	ND		ug/kg	0.902	0.429	1	Α
Methoxychlor	ND		ug/kg	4.06	1.26	1	Α
Toxaphene	ND		ug/kg	40.6	11.4	1	Α
cis-Chlordane	ND		ug/kg	2.70	0.754	1	А
trans-Chlordane	ND		ug/kg	2.70	0.714	1	Α
Chlordane	ND		ug/kg	17.6	7.17	1	Α



Project Name: Lab Number: 399 EXTERIOR STREET L1924473

Project Number: Report Date: LST1802 07/02/19

SAMPLE RESULTS

Lab ID: Date Collected: 06/06/19 13:00 L1924473-21

Date Received: Client ID: 06/07/19 SB016(6-8) Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Result Qualifier Units RL MDL **Dilution Factor** Column Parameter

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	В
Decachlorobiphenyl	66		30-150	В
2,4,5,6-Tetrachloro-m-xylene	5680	Q	30-150	Α
Decachlorobiphenyl	33		30-150	Α



L1924473

Lab Number:

Project Name: 399 EXTERIOR STREET

1,8081B

06/13/19 09:47

Project Number: LST1802 Report Date: 07/02/19

Method Blank Analysis
Batch Quality Control

Batch Quality Control

Analyst: BM

Analytical Method:

Analytical Date:

Extraction Method: EPA 3546
Extraction Date: 06/10/19 18:47
Cleanup Method: EPA 3620B
Cleanup Date: 06/11/19

Parameter	Result	Qualifier	Units	RL		MDL	Column
Organochlorine Pesticides by GC	- Westboroug	h Lab for	sample(s):	01,21	Batch:	WG124	46652-1
Delta-BHC	ND		ug/kg	1.55		0.304	А
Lindane	ND		ug/kg	0.646		0.289	Α
Alpha-BHC	ND		ug/kg	0.646		0.183	Α
Beta-BHC	ND		ug/kg	1.55		0.588	Α
Heptachlor	ND		ug/kg	0.775		0.348	Α
Aldrin	ND		ug/kg	1.55		0.546	Α
Heptachlor epoxide	ND		ug/kg	2.91		0.872	Α
Endrin	ND		ug/kg	0.646		0.265	Α
Endrin aldehyde	ND		ug/kg	1.94		0.678	А
Endrin ketone	ND		ug/kg	1.55		0.399	А
Dieldrin	ND		ug/kg	0.969		0.484	А
4,4'-DDE	ND		ug/kg	1.55		0.358	А
4,4'-DDD	ND		ug/kg	1.55		0.553	А
4,4'-DDT	ND		ug/kg	2.91		1.25	Α
Endosulfan I	ND		ug/kg	1.55		0.366	Α
Endosulfan II	ND		ug/kg	1.55		0.518	Α
Endosulfan sulfate	ND		ug/kg	0.646		0.307	Α
Methoxychlor	ND		ug/kg	2.91		0.904	Α
Toxaphene	ND		ug/kg	29.1		8.14	Α
cis-Chlordane	ND		ug/kg	1.94		0.540	Α
trans-Chlordane	ND		ug/kg	1.94		0.512	Α
Chlordane	ND		ug/kg	12.6		5.14	Α



Project Name: 399 EXTERIOR STREET **Lab Number:** L1924473

Project Number: LST1802 Report Date: 07/02/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 06/13/19 09:47

Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 06/10/19 18:47
Cleanup Method: EPA 3620B
Cleanup Date: 06/11/19

Parameter	Result	Qualifier	Units	RL		MDL	Column
Organochlorine Pesticides by GC -	Westborou	gh Lab for s	sample(s):	01,21	Batch:	WG124	16652-1

		Acceptance				
Surrogate	%Recovery	Qualifier		Column		
2,4,5,6-Tetrachloro-m-xylene	97		30-150	В		
Decachlorobiphenyl	135		30-150	В		
2,4,5,6-Tetrachloro-m-xylene	84		30-150	Α		
Decachlorobiphenyl	78		30-150	Α		



Lab Control Sample Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

arameter	LCS %Recovery	LC Qual %Rec			covery nits R	PD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westboro	ugh Lab Assoc	ciated sample(s): 01,2	1 Batch:	WG1246652-2	WG1246652-3				
Delta-BHC	89	9	95	30-	150	7	1	30	Α
Lindane	87	(92	30-	150	6		30	А
Alpha-BHC	88	(93	30-	150	6		30	А
Beta-BHC	82	3	37	30-	150	6		30	А
Heptachlor	73	7	75	30-	150	3		30	А
Aldrin	76	3	31	30-	150	6		30	А
Heptachlor epoxide	83	3	37	30-	150	5		30	А
Endrin	86	(93	30-	150	8		30	А
Endrin aldehyde	58	(61	30-	150	5		30	А
Endrin ketone	75	3	30	30-	150	6		30	А
Dieldrin	85	9	92	30-	150	8		30	А
4,4'-DDE	81	3	38	30-	150	8		30	А
4,4'-DDD	87		94	30-	150	8		30	А
4,4'-DDT	88		95	30-	150	8		30	А
Endosulfan I	73	7	78	30-	150	7		30	А
Endosulfan II	81	8	36	30-	150	6		30	А
Endosulfan sulfate	66	7	70	30-	150	6		30	А
Methoxychlor	72	7	7 5	30-	150	4		30	А
cis-Chlordane	76	8	30	30-	150	5		30	А
trans-Chlordane	79		33	30-	150	5		30	Α



Lab Control Sample Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Lab Number: L1924473

Project Number: LST1802

Report Date:

07/02/19

	LCS		LCSD		%Recovery			RPD
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,21 Batch: WG1246652-2 WG1246652-3

Surrogate	LCS %Recovery Q	LCSD ual %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	91	96	30-150 B
Decachlorobiphenyl	100	110	30-150 B
2,4,5,6-Tetrachloro-m-xylene	80	83	30-150 A
Decachlorobiphenyl	73	77	30-150 A

METALS



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-01
 Date Collected:
 06/06/19 16:00

 Client ID:
 SB017(6-8)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 82%

i ercent Johas.	0270					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Arsenic, Total	3.68		mg/kg	0.479	0.100	1	06/12/19 19:1:	3 06/13/19 22:46	EPA 3050B	1,6010D	AB
Barium, Total	66.6		mg/kg	0.479	0.083	1	06/12/19 19:1:	3 06/13/19 22:46	EPA 3050B	1,6010D	AB
Copper, Total	21.8		mg/kg	0.479	0.124	1	06/12/19 19:1:	3 06/13/19 22:46	EPA 3050B	1,6010D	AB
Lead, Total	227		mg/kg	2.39	0.128	1	06/12/19 19:1:	3 06/13/19 22:46	EPA 3050B	1,6010D	AB
Mercury, Total	ND		ma/ka	0.088	0.057	1	06/13/19 16:4	4 06/13/19 19:48	EPA 7471B	1,7471B	EA



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-02
 Date Collected:
 06/06/19 08:00

 Client ID:
 SB003(8-10)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 84%

Dilution Date Drep Analytical
Parameter Result Qualifier Units RL MDL Factor Prepared Analyzed Method Method Analyst

Parameter Result Qualifier Units RL MDL **Analyst** Total Metals - Mansfield Lab 46.1 Lead, Total mg/kg 2.26 0.121 1 06/12/19 19:13 06/13/19 22:51 EPA 3050B 1,6010D AΒ



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-03
 Date Collected:
 06/06/19 08:05

 Client ID:
 SB003(10-12)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 62%

Prep **Analytical** Dilution Date Date Method **Factor Parameter** Result Qualifier Units RL MDL Prepared Analyzed Method

Parameter Result Qualifier Units RL MDL Factor Prepared Analyzed Method Method Analyst

Total Metals - Mansfield Lab

Lead, Total 125 mg/kg 3.09 0.166 1 06/12/19 19:13 06/13/19 22:55 EPA 3050B 1,6010D AB



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-04
 Date Collected:
 06/06/19 08:10

 Client ID:
 SB003(12-14)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 60%

Prep **Analytical** Dilution Date Date Method **Factor Parameter** Result Qualifier Units RL MDL Prepared Analyzed Method

Parameter Result Qualifier Units RL MDL Factor Prepared Analyzed Method Method Analyst

Total Metals - Mansfield Lab

Lead, Total 19.6 mg/kg 3.12 0.168 1 06/12/19 19:13 06/13/19 22:59 EPA 3050B 1,6010D AB



Not Specified

Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-08
 Date Collected:
 06/06/19 10:00

 Client ID:
 SB013(6-8)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY

Sample Depth:

Matrix: Soil
Percent Solids: 88%

reiterit solius.	0070					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Arsenic, Total	2.02		mg/kg	0.440	0.092	1	06/12/19 19:1	3 06/13/19 23:08	EPA 3050B	1,6010D	AB
Barium, Total	65.9		mg/kg	0.440	0.077	1	06/12/19 19:1	3 06/13/19 23:08	EPA 3050B	1,6010D	AB
Copper, Total	23.8		mg/kg	0.440	0.114	1	06/12/19 19:1	3 06/13/19 23:08	EPA 3050B	1,6010D	AB
Lead, Total	10.0		mg/kg	2.20	0.118	1	06/12/19 19:1	3 06/13/19 23:08	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.079	0.052	1	06/13/19 16:4	4 06/13/19 19:54	EPA 7471B	1,7471B	EA

Field Prep:



Not Specified

Project Name: Lab Number: 399 EXTERIOR STREET L1924473 **Project Number:** LST1802 **Report Date:** 07/02/19

SAMPLE RESULTS

399 EXTERIOR ST., BRONX, NY

Lab ID: Date Collected: 06/06/19 08:20 L1924473-11 Client ID: SB011(8-10) Date Received: 06/07/19

Sample Depth:

Sample Location:

Matrix: Soil 78% Percent Solids:

Prep **Analytical** Dilution Date Date Method **Factor Parameter** Result Qualifier Units RL MDL Prepared Analyzed Method

Field Prep:

Analyst Total Metals - Mansfield Lab 189 Lead, Total mg/kg 2.50 0.134 1 06/12/19 19:13 06/13/19 23:22 EPA 3050B 1,6010D AΒ



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-12
 Date Collected:
 06/06/19 08:25

 Client ID:
 SB011(10-12)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 75%

Dilution Date Date Prep Analytical
Parameter Result Qualifier Units RI MDI Factor Prepared Analyzed Method Method Δηραίνει

Parameter Result Qualifier Units RL MDL **Analyst** Total Metals - Mansfield Lab 487 Lead, Total mg/kg 2.65 0.142 1 06/12/19 19:13 06/13/19 23:26 EPA 3050B 1,6010D AΒ



Project Name: Lab Number: 399 EXTERIOR STREET L1924473 07/02/19

SAMPLE RESULTS

Report Date:

Project Number: LST1802

Lab ID: Client ID: L1924473-13

Date Collected: Date Received: 06/06/19 08:25 06/07/19

Sample Location:

SB011(12-14) 399 EXTERIOR ST., BRONX, NY

Field Prep:

Not Specified

Sample Depth:

Matrix:

Soil

84% Percent Solids:

Prep **Analytical** Dilution Date Date Method **Factor Parameter** Result Qualifier Units RL MDL Prepared Analyzed Method **Analyst**

Total Metals - Mansfield Lab 57.6 Lead, Total mg/kg 2.29 0.123 1 06/25/19 13:47 06/25/19 15:16 EPA 3050B 1,6010D LC



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-15
 Date Collected:
 06/06/19 11:05

 Client ID:
 SB005(4-6)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 95%

Dilution Date Date Prep Analytical
Parameter Result Qualifier Units RI MDI Factor Prepared Analyzed Method Method Analyst

Parameter Result Qualifier Units RL MDL **Analyst** Total Metals - Mansfield Lab 3.02 Lead, Total mg/kg 2.05 0.110 1 06/12/19 19:13 06/13/19 23:30 EPA 3050B 1,6010D AΒ



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-16
 Date Collected:
 06/06/19 11:10

 Client ID:
 SB006(8-10)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 91%

Prep **Analytical** Dilution Date Date Method **Factor Parameter** Result Qualifier Units RL MDL Prepared Analyzed Method

Parameter Result Qualifier Units RL MDL Factor Prepared Analyzed Method Method Analyst

Total Metals - Mansfield Lab

Copper, Total 38.3 mg/kg 0.413 0.106 1 06/12/19 19:13 06/13/19 23:35 EPA 3050B 1,6010D AB



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-18
 Date Collected:
 06/06/19 11:20

 Client ID:
 SB001(6-8)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 89%

Dilution Date Date Prep Analytical
Parameter Result Qualifier Units RL MDL Factor Prepared Analyzed Method Method Analyst

Parameter Result Qualifier Units RL MDL Factor Prepared Analyzed Method Method Analyst

Total Metals - Mansfield Lab

Lead, Total 48.3 mg/kg 2.17 0.116 1 06/12/19 20:26 06/13/19 17:52 EPA 3050B 1,6010D AB



Project Name: Lab Number: 399 EXTERIOR STREET L1924473 **Project Number: Report Date:** LST1802 07/02/19

SAMPLE RESULTS

Date Collected: Lab ID: L1924473-21 06/06/19 13:00 Client ID: SB016(6-8) Date Received: 06/07/19

399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified Sample Location:

Sample Depth:

Matrix: Soil 72% Percent Solids:

i crociit conas.						Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Mans	sfield Lab										
Arsenic, Total	16.9		mg/kg	0.552	0.115	1	06/12/19 20:2	6 06/13/19 17:57	EPA 3050B	1,6010D	AB
Barium, Total	44.2		mg/kg	0.552	0.096	1	06/12/19 20:2	6 06/13/19 17:57	EPA 3050B	1,6010D	AB
Copper, Total	5470		mg/kg	5.52	1.42	10	06/12/19 20:2	6 06/13/19 23:02	EPA 3050B	1,6010D	AB
Lead, Total	3160		mg/kg	2.76	0.148	1	06/12/19 20:2	6 06/13/19 17:57	EPA 3050B	1,6010D	AB
Mercury, Total	0.428		mg/kg	0.108	0.070	1	06/13/19 16:4	4 06/13/19 19:56	EPA 7471B	1,7471B	EA



Not Specified

Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-22
 Date Collected:
 06/06/19 13:10

 Client ID:
 SB016(8-10)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep:

Sample Depth:

Matrix: Soil
Percent Solids: 56%

Percent Solids:	30 /6					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Arsenic, Total	22.1		mg/kg	0.709	0.147	1	06/20/19 21:0	6 06/24/19 13:35	EPA 3050B	1,6010D	LC
Copper, Total	16300		mg/kg	7.09	1.83	10	06/20/19 21:0	6 06/24/19 17:42	EPA 3050B	1,6010D	LC
Lead, Total	988		mg/kg	3.54	0.190	1	06/20/19 21:0	6 06/24/19 13:35	EPA 3050B	1,6010D	LC



Project Name: Lab Number: 399 EXTERIOR STREET L1924473 **Project Number:** LST1802

Report Date:

07/02/19

SAMPLE RESULTS

L1924473-23

Date Collected:

06/06/19 13:20

Client ID: SB016(10-12)

Date Received:

06/07/19

Sample Location:

399 EXTERIOR ST., BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix:

Lab ID:

Soil

Percent Solids:

59% Dilution **Analytical** Prep

Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
ansfield Lab										
7.99		mg/kg	0.650	0.135	1	07/02/19 15:0	6 07/02/19 16:52	EPA 3050B	1,6010D	AB
18.1		mg/kg	0.650	0.168	1	07/02/19 15:0	6 07/02/19 16:52	EPA 3050B	1,6010D	AB
13.9		mg/kg	3.25	0.174	1	07/02/19 15:0	6 07/02/19 16:52	EPA 3050B	1,6010D	AB
	7.99	nsfield Lab 7.99 18.1	nnsfield Lab 7.99 mg/kg 18.1 mg/kg	7.99 mg/kg 0.650 18.1 mg/kg 0.650	7.99 mg/kg 0.650 0.135 18.1 mg/kg 0.650 0.168	Result Qualifier Units RL MDL Factor ansfield Lab 7.99 mg/kg 0.650 0.135 1 18.1 mg/kg 0.650 0.168 1	Result Qualifier Units RL MDL Factor Prepared ansfield Lab 7.99 mg/kg 0.650 0.135 1 07/02/19 15:00 18.1 mg/kg 0.650 0.168 1 07/02/19 15:00	Result Qualifier Units RL MDL Factor Prepared Analyzed ansfield Lab 7.99 mg/kg 0.650 0.135 1 07/02/19 15:06 07/02/19 16:52 18.1 mg/kg 0.650 0.168 1 07/02/19 15:06 07/02/19 16:52	Result Qualifier Units RL MDL Factor Prepared Analyzed Method ansfield Lab 7.99 mg/kg 0.650 0.135 1 07/02/19 15:06 07/02/19 16:52 EPA 3050B 18.1 mg/kg 0.650 0.168 1 07/02/19 15:06 07/02/19 16:52 EPA 3050B	Result Qualifier Units RL MDL Factor Prepared Analyzed Method Method ansfield Lab 7.99 mg/kg 0.650 0.135 1 07/02/19 15:06 07/02/19 16:52 EPA 3050B 1,6010D 18.1 mg/kg 0.650 0.168 1 07/02/19 15:06 07/02/19 16:52 EPA 3050B 1,6010D



Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number:

L1924473

Report Date:

07/02/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield	Lab for sample(s):	01-04,08,	11-12,15	5-16 Ba	atch: WG12	247608-1			
Arsenic, Total	ND	mg/kg	0.400	0.083	1	06/12/19 19:13	06/13/19 19:48	3 1,6010D	AB
Barium, Total	ND	mg/kg	0.400	0.070	1	06/12/19 19:13	06/13/19 19:48	3 1,6010D	AB
Copper, Total	ND	mg/kg	0.400	0.103	1	06/12/19 19:13	06/13/19 19:48	3 1,6010D	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	06/12/19 19:13	06/13/19 19:48	3 1,6010D	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield	d Lab for sample(s):	18,21 Ba	atch: WC	312476	24-1				
Arsenic, Total	ND	mg/kg	0.400	0.083	1	06/12/19 20:26	06/13/19 17:19	1,6010D	AB
Barium, Total	ND	mg/kg	0.400	0.070	1	06/12/19 20:26	06/13/19 17:19	1,6010D	AB
Copper, Total	ND	mg/kg	0.400	0.103	1	06/12/19 20:26	06/13/19 17:19	1,6010D	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	06/12/19 20:26	06/13/19 17:19	1,6010D	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfie	eld Lab for sample(s):	01,08,21	Batch:	WG124	8131-1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	06/13/19 16:44	06/13/19 18:52	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B



Project Name: 399 EXTERIOR STREET

000 EXTERIOR OTT

Lab Number:

L1924473

Project Number: LST1802

Report Date:

07/02/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	l Analyst
Total Metals - Mansfield	Lab for sample(s):	22 Batch	: WG12	251112-	1				
Arsenic, Total	ND	mg/kg	0.400	0.083	1	06/20/19 21:06	06/24/19 13:08	1,6010D	LC
Copper, Total	ND	mg/kg	0.400	0.103	1	06/20/19 21:06	06/24/19 13:08	1,6010D	LC
Lead, Total	ND	mg/kg	2.00	0.107	1	06/20/19 21:06	06/24/19 13:08	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 13 Batch: WG1252660-1										
Lead, Total	ND	mg/kg	2.00	0.107	1	06/25/19 10:41	06/25/19 12:22	1,6010D	LC	

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Man	nsfield Lab for sample(s):	23 Batch	n: WG12	255860-	1				
Arsenic, Total	ND	mg/kg	0.400	0.083	1	07/02/19 15:06	07/02/19 16:43	1,6010D	AB
Copper, Total	ND	mg/kg	0.400	0.103	1	07/02/19 15:06	07/02/19 16:43	1,6010D	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	07/02/19 15:06	07/02/19 16:43	3 1,6010D	AB

Prep Information

Digestion Method: EPA 3050B



Lab Control Sample Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number:

L1924473

Report Date:

07/02/19

Parameter	LCS %Recovery	Qual %	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated samp	ole(s): 01-04,08,11-	12,15-16 B	atch: WG1247	608-2	SRM Lot Number: D105	-540		
Arsenic, Total	108		-		70-130	-		
Barium, Total	92		-		75-125	-		
Copper, Total	96		-		75-125	-		
Lead, Total	97		-		71-128	-		
otal Metals - Mansfield Lab Associated samp	ole(s): 18,21 Batc	h: WG124762	24-2 SRM Lo	ot Numb	er: D105-540			
Arsenic, Total	111		-		70-130	-		
Barium, Total	99		-		75-125	-		
Copper, Total	104		-		75-125	-		
Lead, Total	102		-		71-128	-		
otal Metals - Mansfield Lab Associated samp	ole(s): 01,08,21 B	atch: WG124	8131-2 SRN	1 Lot Nu	mber: D105-540			
Mercury, Total	88		-		60-141	-		
otal Metals - Mansfield Lab Associated samp	ole(s): 22 Batch: \	NG1251112-2	2 SRM Lot N	lumber:	D105-540			
Arsenic, Total	110		-		70-130	-		
Copper, Total	101		-		75-125	-		
Lead, Total	102		-		71-128	-		
otal Metals - Mansfield Lab Associated samp	ole(s): 13 Batch: \	WG1252660-2	2 SRM Lot N	lumber:	D105-540			
Lead, Total	102		-		71-128	-		



Lab Control Sample Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated san	nple(s): 23 Batch: WG12	55860-2 SRM Lot Number:	D105-540		
Arsenic, Total	103	-	70-130	-	
Copper, Total	99	-	75-125	-	
Lead, Total	91	-	71-128	-	

Matrix Spike Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number:

L1924473

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD Qı	RPD <u>ıal</u> Limits
Total Metals - Mansfield	Lab Associated san	nple(s): 01-0	4,08,11-12,	15-16 QC Ba	atch ID: \	WG124760	8-3 QC Sar	mple: L1923585-01	Client IE): MS Sample
Arsenic, Total	2.40	10.4	13.6	107		-	-	75-125	-	20
Barium, Total	40.1	174	206	95		-	-	75-125	-	20
Copper, Total	13.8	21.7	35.3	99		-	-	75-125	-	20
Lead, Total	40.8	44.3	82.7	94		-	-	75-125	-	20
Total Metals - Mansfield	Lab Associated san	nple(s): 18,2	1 QC Bato	ch ID: WG1247	7624-3	QC Samp	le: L1924561-	28 Client ID: MS	Sample	
Arsenic, Total	3.84	10.7	15.6	110		-	-	75-125	-	20
Barium, Total	32.1	179	207	98		-	-	75-125	-	20
Copper, Total	6.48	22.3	29.1	101		-	-	75-125	-	20
Lead, Total	7.66	45.6	51.8	97		-	-	75-125	-	20
Total Metals - Mansfield	Lab Associated san	nple(s): 01,0	8,21 QC B	Batch ID: WG1	248131-	3 WG1248	3131-4 QC S	ample: L1924424-0	1 Client	ID: MS Sample
Mercury, Total	ND	0.172	0.176	102		0.169	99	80-120	4	20
Total Metals - Mansfield	Lab Associated san	nple(s): 01,0	8,21 QC B	Batch ID: WG1	248131-	5 WG1248	3131-6 QC S	ample: L1924424-0	3 Client	ID: MS Sample
Mercury, Total	ND	0.151	0.152	101		0.163	101	80-120	7	20
Total Metals - Mansfield	Lab Associated san	nple(s): 22	QC Batch II	D: WG125111	2-3 Q	C Sample:	L1925770-03	Client ID: MS Sa	mple	
Arsenic, Total	1.90	10.7	12.6	100		-	-	75-125	-	20
Copper, Total	15.6	22.3	35.6	90		-	-	75-125	-	20
Lead, Total	12.9	45.6	51.3	84		-	-	75-125	-	20
Total Metals - Mansfield	Lab Associated san	nple(s): 13	QC Batch II	D: WG125266	0-3 Q	C Sample:	L1927515-01	Client ID: MS Sa	mple	
Lead, Total	15.7	46.3	55.0	85		-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield La	ab Associated sam	ple(s): 23	QC Batch II	D: WG1255860-3	QC Sample	: L1924473-23	Client ID: SB016	6(10-12)	
Arsenic, Total	7.99	15.5	21.9	90	-	-	75-125	-	20
Copper, Total	18.1	32.3	42.5	75	-	-	75-125	-	20
Lead, Total	13.9	66	63.8	76	-	-	75-125	-	20

Lab Duplicate Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number:

L1924473

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s) Sample): 01-04,08,11-12,15-16	QC Batch ID: WG1247608	8-4 QC Sam	ple: L1923	585-01 Clie	ent ID: DUP
Arsenic, Total	2.40	4.44	mg/kg	60	Q	20
Barium, Total	40.1	61.3	mg/kg	42	Q	20
Lead, Total	40.8	107	mg/kg	90	Q	20
Total Metals - Mansfield Lab Associated sample(s	: 18,21 QC Batch ID: V	NG1247624-4 QC Sample	e: L1924561-2	28 Client ID	D: DUP Sar	nple
Arsenic, Total	3.84	5.28	mg/kg	32	Q	20
Barium, Total	32.1	32.6	mg/kg	2		20
Copper, Total	6.48	7.47	mg/kg	14		20
Lead, Total	7.66	8.38	mg/kg	9		20
Total Metals - Mansfield Lab Associated sample(s	: 22 QC Batch ID: WG	1251112-4 QC Sample:	L1925770-03	Client ID: I	OUP Sample	е
Arsenic, Total	1.90	1.75	mg/kg	8		20
Copper, Total	15.6	16.8	mg/kg	7		20
Lead, Total	12.9	8.80	mg/kg	38	Q	20
Total Metals - Mansfield Lab Associated sample(s	: 13 QC Batch ID: WG	1252660-4 QC Sample:	L1927515-01	Client ID: I	DUP Sample	е
Lead, Total	15.7	15.1	mg/kg	4		20
Total Metals - Mansfield Lab Associated sample(s	: 23 QC Batch ID: WG	1255860-4 QC Sample:	L1924473-23	Client ID: \$	SB016(10-1	2)
Arsenic, Total	7.99	8.35	mg/kg	4		20
Copper, Total	18.1	19.0	mg/kg	5		20
Lead, Total	13.9	13.5	mg/kg	3		20



INORGANICS & MISCELLANEOUS



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-01
 Date Collected:
 06/06/19 16:00

 Client ID:
 SB017(6-8)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Solids, Total	81.5		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-02
 Date Collected:
 06/06/19 08:00

 Client ID:
 SB003(8-10)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab)								
Solids, Total	84.4		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-03 Date Collected: 06/06/19 08:05

Client ID: SB003(10-12) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	61.5		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-04
 Date Collected:
 06/06/19 08:10

 Client ID:
 SB003(12-14)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Westborough Lab)								
Solids, Total	60.1		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-06 Date Collected: 06/06/19 13:00

Client ID: SB008(8-10) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab)								
Solids, Total	84.5		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-07
 Date Collected:
 06/06/19 13:05

 Client ID:
 SB008(10-12)
 Date Received:
 06/07/19

Client ID: SB008(10-12) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	71.8		%	0.100	NA	1	-	06/18/19 11:00	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-08
 Date Collected:
 06/06/19 10:00

 Client ID:
 SB013(6-8)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result Qua	alifier U	nits	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab									
Solids, Total	88.4		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-11
 Date Collected:
 06/06/19 08:20

 Client ID:
 SB011(8-10)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	77.6		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-12 Date Collected: 06/06/19 08:25

Client ID: SB011(10-12) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab									
Solids, Total	74.9		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-13 Date Collected: 06/06/19 08:25

Client ID: SB011(12-14) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	84.0		%	0.100	NA	1	-	06/15/19 14:38	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-15 Date Collected: 06/06/19 11:05

Client ID: SB005(4-6) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	95.2		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-16
 Date Collected:
 06/06/19 11:10

 Client ID:
 SB006(8-10)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	91.4		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-18
 Date Collected:
 06/06/19 11:20

 Client ID:
 SB001(6-8)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Solids, Total	88.6		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-19 Date Collected: 06/06/19 11:25

Client ID: SB001(8-10) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result Qua	alifier Un	its RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab								
Solids, Total	80.7	%	0.100	NA	1	-	06/18/19 11:00	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-21
 Date Collected:
 06/06/19 13:00

 Client ID:
 SB016(6-8)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Solids, Total	72.4		%	0.100	NA	1	-	06/08/19 12:50	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

Lab ID: L1924473-22 Date Collected: 06/06/19 13:10

Client ID: SB016(8-10) Date Received: 06/07/19
Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	55.7		%	0.100	NA	1	-	06/22/19 09:58	121,2540G	RI



Project Name: 399 EXTERIOR STREET Lab Number: L1924473

Project Number: LST1802 Report Date: 07/02/19

SAMPLE RESULTS

 Lab ID:
 L1924473-23
 Date Collected:
 06/06/19 13:20

 Client ID:
 SB016(10-12)
 Date Received:
 06/07/19

Sample Location: 399 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Westborough Lab									
Solids, Total	59.2		%	0.100	NA	1	-	06/26/19 08:47	121,2540G	RI



Lab Duplicate Analysis Batch Quality Control

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number:

L1924473

Report Date:

07/02/19

Parameter	Native Sample	Duplicate Sample	Units	RPD Qu	al RPD Limits
General Chemistry - Westborough Lab Associated sa	mple(s): 13 QC Batch ID:	: WG1249040-1 QC	Sample: L1924	4899-06 Client II	D: DUP Sample
Solids, Total	84.7	84.7	%	0	20
General Chemistry - Westborough Lab Associated sa	mple(s): 07,19 QC Batch	ID: WG1249853-1	QC Sample: L1	926023-01 Clie	nt ID: DUP Sample
Solids, Total	90.8	91.6	%	1	20
General Chemistry - Westborough Lab Associated sa	mple(s): 22 QC Batch ID:	: WG1251831-1 QC	Sample: L1927	7281-01 Client II	D: DUP Sample
Solids, Total	86.2	88.9	%	3	20
General Chemistry - Westborough Lab Associated sa	mple(s): 23 QC Batch ID:	: WG1253167-1 QC	Sample: L1924	4473-23 Client II	D: SB016(10-12)
Solids, Total	59.2	59.1	%	0	20

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Lab Number: L1924473 **Report Date:** 07/02/19

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Container Information

Custody Seal Cooler

Α Absent

Container Info	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1924473-01A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		AS-TI(180),BA-TI(180),CU-TI(180),PB- TI(180),HG-T(28)
L1924473-01B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYTCL-8270(14),TS(7),NYTCL- 8081(14),NYTCL-8082(14)
L1924473-02A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		PB-TI(180)
L1924473-02B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		TS(7)
L1924473-03A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		PB-TI(180)
L1924473-03B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		TS(7)
L1924473-04A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		PB-TI(180)
L1924473-04B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		TS(7)
L1924473-05A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		HOLD-WETCHEM(),HOLD-METAL(180)
L1924473-06B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYTCL-8270(14),TS(7)
L1924473-07A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYTCL-8270(14),TS(7),HOLD-8270(14)
L1924473-08A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		AS-TI(180),BA-TI(180),CU-TI(180),PB- TI(180),HG-T(28)
L1924473-08B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYTCL-8270(14),TS(7)
L1924473-09A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		HOLD-8270(14),HOLD-METAL(180)
L1924473-10A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		HOLD-8270(14),HOLD-METAL(180)
L1924473-11A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		PB-TI(180)
L1924473-11B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		TS(7)
L1924473-12A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		PB-TI(180)
L1924473-12B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		TS(7)
L1924473-13A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		TS(7)
L1924473-13X	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		PB-TI(180)
L1924473-14A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		HOLD-8270(14),HOLD-METAL(180)



Lab Number: L1924473

Report Date: 07/02/19

Project Name: 399 EXTERIOR STREET

Project Number: LST1802

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1924473-15A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		PB-TI(180)
L1924473-15B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYTCL-8270(14),TS(7)
L1924473-16A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		CU-TI(180)
L1924473-16B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		TS(7)
L1924473-17A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		HOLD-WETCHEM(),HOLD-METAL(180)
L1924473-18A	Glass 60ml unpreserved split	Α	NA		3.1	Υ	Absent		PB-TI(180)
L1924473-18B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYTCL-8270(14),TS(7)
L1924473-19A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYTCL-8270(14),TS(7)
L1924473-20A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		S-EXT-8270(14),HOLD-8270(14),HOLD- METAL(180)
L1924473-21A	Vial MeOH preserved	Α	NA		3.1	Υ	Absent		NYTCL-8260HLW(14)
L1924473-21B	Vial water preserved	Α	NA		3.1	Υ	Absent	08-JUN-19 02:29	NYTCL-8260HLW(14)
L1924473-21C	Vial water preserved	Α	NA		3.1	Υ	Absent	08-JUN-19 02:29	NYTCL-8260HLW(14)
L1924473-21D	Plastic 2oz unpreserved for TS	Α	NA		3.1	Υ	Absent		AS-TI(180),BA-TI(180),CU-TI(180),PB- TI(180),HG-T(28)
L1924473-21E	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYTCL-8270(14),TS(7),NYTCL- 8081(14),NYTCL-8082(14)
L1924473-22A	Vial MeOH preserved	Α	NA		3.1	Υ	Absent		HOLD-8260HLW(14)
L1924473-22B	Vial water preserved	Α	NA		3.1	Υ	Absent	08-JUN-19 07:22	HOLD-8260HLW(14)
L1924473-22C	Vial water preserved	Α	NA		3.1	Υ	Absent	08-JUN-19 02:29	HOLD-8260HLW(14)
L1924473-22D	Plastic 2oz unpreserved for TS	Α	NA		3.1	Υ	Absent		AS-TI(180),CU-TI(180),PB-TI(180)
L1924473-22E	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		HOLD-WETCHEM(),TS(7)
L1924473-23A	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		HOLD-CONTINGENCY(14),AS- TI(180),TS(7),CU-TI(180),PB-TI(180)



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

GLOSSARY

Acronyms

EDL

LOQ

MS

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

SRM

Report Format: DU Report with 'J' Qualifiers



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

 The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- **NJ** Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name:399 EXTERIOR STREETLab Number:L1924473Project Number:LST1802Report Date:07/02/19

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.
Facility: Company-wide
Department: Quality Assurance

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:**17873**

Revision 12

Page 1 of 1

Published Date: 10/9/2018 4:58:19 PM

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; 4-Ethy

Tetramethylbenzene; 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan III, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form Pre-Qualtrax Document ID: 08-113

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ANALYTICAL REPORT

Lab Number: L1929439

Client: P. W. Grosser

630 Johnson Avenue

Suite 7

Bohemia, NY 11716

ATTN: Derek Ersbak
Phone: (631) 589-6353

Project Name: 355 EXTERIOR ST.

Project Number: LST1802 TASK 07

Report Date: 08/05/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: Report Date:

L1929439 08/05/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1929439-01	SB018 (0'-3')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 09:30	07/08/19
L1929439-02	SB018 (3'-6')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 09:35	07/08/19
L1929439-03	SB018 (6'-9')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 09:40	07/08/19
L1929439-04	SB019 (0'-3')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 10:25	07/08/19
L1929439-05	SB019 (3'-6')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 10:30	07/08/19
L1929439-06	SB019 (6'-9')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 10:35	07/08/19
L1929439-07	SB020 (0'-3')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 11:00	07/08/19
L1929439-08	SB021 (0'-3')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 11:45	07/08/19
L1929439-09	SB021 (3'-6')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 11:50	07/08/19
L1929439-10	SB021 (6'-9')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 11:55	07/08/19
L1929439-11	SB022 (0'-3')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 12:45	07/08/19
L1929439-12	SB023 (0'-3')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 13:50	07/08/19
L1929439-13	SB023 (3'-6')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 13:55	07/08/19
L1929439-14	SB023 (6'-9')	SOIL	355 EXTERIOR ST., BRONX, NY	07/05/19 14:00	07/08/19



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

Case Narrative (continued)

Report Submission

August 05, 2019: This final report includes the results of all requested analyses.

July 30, 2019: This preliminary report includes the results of the Total Metals analysis performed on L1929439-06.

July 22, 2019: This preliminary report includes the results of the Semivolatile Organics analysis performed on L1929439-10.

July 19, 2019: This preliminary report includes the results of the TAL Metals analysis performed on L1929439-02, -04, -05, -08, -09, -12, and -13.

July 16, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Metals

L1929439-01, -02, -04, -05, -07, -08, -09, -11, -12, and -13: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1265731-3 MS recovery, performed on L1929439-06, is outside the acceptance criteria for lead (70%). A post digestion spike was performed and yielded an unacceptable recovery (73%). The serial dilution recovery was not acceptable; therefore, this element fails the matrix test and the result reported in the native sample should be considered estimated.

The WG1265731-4 Laboratory Duplicate RPD for lead (37%), performed on L1929439-06, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Kun L. Winter Lisa Westerlind

Authorized Signature:

Title: Technical Director/Representative

Date: 08/05/19



ORGANICS



SEMIVOLATILES



L1929439

08/05/19

07/08/19

Project Name: 355 EXTERIOR ST.

Project Number: LST1802 TASK 07

SAMPLE RESULTS

Date Collected: 07/05/19 09:30

Lab Number:

Report Date:

Date Received:

Lab ID: L1929439-01

Client ID: SB018 (0'-3')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/13/19 06:38

Analyst: CB
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 07/11/19 21:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
Acenaphthene	23	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	17.	1
1,2-Dichlorobenzene	ND		ug/kg	180	31.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	46.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	680		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	31	J	ug/kg	180	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	60.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	50	J	ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-01 Date Collected: 07/05/19 09:30

SB018 (0'-3') Client ID: Date Received: 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - V	Vestborough Lab					
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	380		ug/kg	100	20.	1
Benzo(a)pyrene	360		ug/kg	140	43.	1
Benzo(b)fluoranthene	450		ug/kg	100	29.	1
Benzo(k)fluoranthene	170		ug/kg	100	28.	1
Chrysene	380		ug/kg	100	18.	1
Acenaphthylene	88	J	ug/kg	140	27.	1
Anthracene	98	J	ug/kg	100	34.	1
Benzo(ghi)perylene	240		ug/kg	140	20.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	350		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	57	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	250		ug/kg	140	24.	1
Pyrene	650		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	72.	1
Dibenzofuran	19	J	ug/kg	180	16.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	840	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	84.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	180	26.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-01 Date Collected: 07/05/19 09:30

Client ID: SB018 (0'-3') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	IS - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	38	J	ug/kg	180	17.	1
1,4-Dioxane	ND		ua/ka	26	8.0	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	82	25-120	
Phenol-d6	84	10-120	
Nitrobenzene-d5	85	23-120	
2-Fluorobiphenyl	79	30-120	
2,4,6-Tribromophenol	81	10-136	
4-Terphenyl-d14	77	18-120	

L1929439

Project Name: Lab Number: 355 EXTERIOR ST.

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-02 Date Collected: 07/05/19 09:35

Date Received: Client ID: SB018 (3'-6') 07/08/19 Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil

07/11/19 21:09 **Extraction Date:** Analytical Method: 1,8270D Analytical Date: 07/13/19 06:11

Analyst: CB 90% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	stborough Lab						
Acenaphthene	94	J	ug/kg	150	19.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1	
Hexachlorobenzene	ND		ug/kg	110	20.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1	
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1	
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1	
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1	
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1	
Fluoranthene	1200		ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1	
Hexachlorobutadiene	ND		ug/kg	180	27.	1	
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1	
Hexachloroethane	ND		ug/kg	150	30.	1	
Isophorone	ND		ug/kg	160	24.	1	
Naphthalene	170	J	ug/kg	180	22.	1	
Nitrobenzene	ND		ug/kg	160	27.	1	
NDPA/DPA	ND		ug/kg	150	21.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1	
Butyl benzyl phthalate	ND		ug/kg	180	46.	1	
Di-n-butylphthalate	120	J	ug/kg	180	35.	1	
Di-n-octylphthalate	ND		ug/kg	180	62.	1	



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-02 Date Collected: 07/05/19 09:35

Client ID: Date Received: 07/08/19 SB018 (3'-6')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - \	Westborough Lab					
District about	ND			400	47	4
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	480		ug/kg	110	21.	1
Benzo(a)pyrene	370		ug/kg	150	45.	1
Benzo(b)fluoranthene	520		ug/kg	110	31.	1
Benzo(k)fluoranthene	190		ug/kg	110	29.	1
Chrysene	500		ug/kg	110	19.	1
Acenaphthylene	86	J	ug/kg	150	28.	1
Anthracene	220		ug/kg	110	36.	1
Benzo(ghi)perylene	250		ug/kg	150	22.	1
Fluorene	130	J	ug/kg	180	18.	1
Phenanthrene	1100		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	61	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	250		ug/kg	150	26.	1
Pyrene	1000		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	110	J	ug/kg	180	17.	1
2-Methylnaphthalene	93	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1
71			~⊎′.'⊎			



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-02 Date Collected: 07/05/19 09:35

Client ID: Date Received: 07/08/19 SB018 (3'-6')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	94	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	44	25-120
Phenol-d6	46	10-120
Nitrobenzene-d5	52	23-120
2-Fluorobiphenyl	59	30-120
2,4,6-Tribromophenol	41	10-136
4-Terphenyl-d14	60	18-120



Extraction Method: EPA 3546

Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-04 Date Collected: 07/05/19 10:25

Client ID: SB019 (0'-3') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8270D Extraction Date: 07/11/19 21:09
Analytical Date: 07/13/19 07:59

Analyst: CB Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	stborough Lab						
Acenaphthene	26	J	ug/kg	150	19.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1	
Hexachlorobenzene	ND		ug/kg	110	20.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1	
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1	
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1	
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1	
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1	
Fluoranthene	850		ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1	
Hexachlorobutadiene	ND		ug/kg	180	27.	1	
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1	
Hexachloroethane	ND		ug/kg	150	30.	1	
Isophorone	ND		ug/kg	160	24.	1	
Naphthalene	58	J	ug/kg	180	22.	1	
Nitrobenzene	ND		ug/kg	160	27.	1	
NDPA/DPA	ND		ug/kg	150	21.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1	
Bis(2-ethylhexyl)phthalate	490		ug/kg	180	63.	1	
Butyl benzyl phthalate	ND		ug/kg	180	46.	1	
Di-n-butylphthalate	ND		ug/kg	180	35.	1	
Di-n-octylphthalate	ND		ug/kg	180	62.	1	

Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-04 Date Collected: 07/05/19 10:25

SB019 (0'-3') Client ID: Date Received: 07/08/19 Field Prep: Not Specified

Sample Location: 355 EXTERIOR ST., BRONX, NY

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	620		ug/kg	110	20.	1
Benzo(a)pyrene	580		ug/kg	150	44.	1
Benzo(b)fluoranthene	700		ug/kg	110	31.	1
Benzo(k)fluoranthene	260		ug/kg	110	29.	1
Chrysene	720		ug/kg	110	19.	1
Acenaphthylene	330		ug/kg	150	28.	1
Anthracene	160		ug/kg	110	36.	1
Benzo(ghi)perylene	420		ug/kg	150	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	410		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	110		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	410		ug/kg	150	25.	1
Pyrene	910		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	24	J	ug/kg	180	17.	1
2-Methylnaphthalene	32	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	69.	1
4-Nitrophenol	ND		ug/kg	260	74.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-04 Date Collected: 07/05/19 10:25

Client ID: Date Received: 07/08/19 SB019 (0'-3') Field Prep: Not Specified

Sample Location: 355 EXTERIOR ST., BRONX, NY

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	45	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	81	25-120
Phenol-d6	82	10-120
Nitrobenzene-d5	84	23-120
2-Fluorobiphenyl	79	30-120
2,4,6-Tribromophenol	78	10-136
4-Terphenyl-d14	66	18-120



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-05 Date Collected: 07/05/19 10:30

Client ID: SB019 (3'-6') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1 8270D Extraction Date: 07/11/19 21:09

Analytical Method: 1,8270D Extraction Date: 07/11/19 21:09
Analytical Date: 07/13/19 08:27

Analyst: CB Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	estborough Lab						
Acenaphthene	61	J	ug/kg	160	20.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1	
Hexachlorobenzene	ND		ug/kg	120	22.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1	
2-Chloronaphthalene	ND		ug/kg	200	20.	1	
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1	
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1	
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1	
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1	
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1	
Fluoranthene	780		ug/kg	120	23.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1	
Hexachlorobutadiene	ND		ug/kg	200	29.	1	
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1	
Hexachloroethane	ND		ug/kg	160	32.	1	
Isophorone	ND		ug/kg	180	26.	1	
Naphthalene	72	J	ug/kg	200	24.	1	
Nitrobenzene	ND		ug/kg	180	29.	1	
NDPA/DPA	ND		ug/kg	160	22.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1	
Bis(2-ethylhexyl)phthalate	170	J	ug/kg	200	68.	1	
Butyl benzyl phthalate	ND		ug/kg	200	50.	1	
Di-n-butylphthalate	54	J	ug/kg	200	37.	1	
Di-n-octylphthalate	ND		ug/kg	200	67.	1	



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-05 Date Collected: 07/05/19 10:30

Client ID: SB019 (3'-6') Date Received: 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	Vestborough Lab					
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	580		ug/kg	120	22.	1
Benzo(a)pyrene	540		ug/kg	160	48.	1
Benzo(b)fluoranthene	710		ug/kg	120	33.	1
Benzo(k)fluoranthene	260		ug/kg	120	32.	1
Chrysene	570		ug/kg	120	20.	1
Acenaphthylene	60	J	ug/kg	160	30.	1
Anthracene	140		ug/kg	120	38.	1
Benzo(ghi)perylene	330		ug/kg	160	23.	1
Fluorene	44	J	ug/kg	200	19.	1
Phenanthrene	500		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	96	J	ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	360		ug/kg	160	28.	1
Pyrene	710		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	30	J	ug/kg	200	19.	1
2-Methylnaphthalene	54	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	430	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	95.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-05 Date Collected: 07/05/19 10:30

Client ID: SB019 (3'-6') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	IS - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	67	J	ug/kg	200	19.	1
1,4-Dioxane	ND		ua/ka	30	9.1	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	63	25-120
Phenol-d6	64	10-120
Nitrobenzene-d5	66	23-120
2-Fluorobiphenyl	66	30-120
2,4,6-Tribromophenol	51	10-136
4-Terphenyl-d14	51	18-120



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Report Date: **Project Number:** LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-07 Date Collected: 07/05/19 11:00

Date Received: Client ID: SB020 (0'-3') 07/08/19 355 EXTERIOR ST., BRONX, NY Field Prep:

Sample Location: Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil 07/11/19 21:09 **Extraction Date:** Analytical Method: 1,8270D

Analytical Date: 07/13/19 08:53

Analyst: CB 89% Percent Solids:

Semivolatile Organics by GC/MS - Westbord Acenaphthene 1,2,4-Trichlorobenzene Hexachlorobenzene Bis(2-chloroethyl)ether 2-Chloronaphthalene	ough Lab 120 ND	J				
1,2,4-Trichlorobenzene Hexachlorobenzene Bis(2-chloroethyl)ether		J				
Hexachlorobenzene Bis(2-chloroethyl)ether	ND		ug/kg	150	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	21.	1
	ND		ug/kg	110	20.	1
2-Chloronaphthalene	ND		ug/kg	160	25.	1
	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	2100		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	220		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-07 Date Collected: 07/05/19 11:00

Client ID: Date Received: 07/08/19 SB020 (0'-3')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor			
Semivolatile Organics by GC/MS - Westborough Lab									
Diethyl phthalate	ND		ug/kg	180	17.	1			
Dimethyl phthalate	ND		ug/kg	180	38.	1			
Benzo(a)anthracene	1200		ug/kg	110	20.	1			
Benzo(a)pyrene	1100		ug/kg	150	44.	1			
Benzo(b)fluoranthene	1400		ug/kg	110	31.	1			
Benzo(k)fluoranthene	450		ug/kg	110	29.	1			
Chrysene	1200		ug/kg	110	19.	1			
Acenaphthylene	190		ug/kg	150	28.	1			
Anthracene	390		ug/kg	110	36.	1			
Benzo(ghi)perylene	620		ug/kg	150	21.	1			
Fluorene	150	J	ug/kg	180	18.	1			
Phenanthrene	1600		ug/kg	110	22.	1			
Dibenzo(a,h)anthracene	160		ug/kg	110	21.	1			
Indeno(1,2,3-cd)pyrene	660		ug/kg	150	25.	1			
Pyrene	2000		ug/kg	110	18.	1			
Biphenyl	ND		ug/kg	420	42.	1			
4-Chloroaniline	ND		ug/kg	180	33.	1			
2-Nitroaniline	ND		ug/kg	180	35.	1			
3-Nitroaniline	ND		ug/kg	180	34.	1			
4-Nitroaniline	ND		ug/kg	180	76.	1			
Dibenzofuran	140	J	ug/kg	180	17.	1			
2-Methylnaphthalene	120	J	ug/kg	220	22.	1			
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1			
Acetophenone	ND		ug/kg	180	22.	1			
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1			
p-Chloro-m-cresol	ND		ug/kg	180	27.	1			
2-Chlorophenol	ND		ug/kg	180	22.	1			
2,4-Dichlorophenol	ND		ug/kg	160	29.	1			
2,4-Dimethylphenol	ND		ug/kg	180	60.	1			
2-Nitrophenol	ND		ug/kg	390	69.	1			
4-Nitrophenol	ND		ug/kg	260	74.	1			
2,4-Dinitrophenol	ND		ug/kg	880	85.	1			
4,6-Dinitro-o-cresol	ND		ug/kg	470	88.	1			
Pentachlorophenol	ND		ug/kg	150	40.	1			
Phenol	ND		ug/kg	180	28.	1			
2-Methylphenol	ND		ug/kg	180	28.	1			
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1			



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-07 Date Collected: 07/05/19 11:00

Client ID: Date Received: 07/08/19 SB020 (0'-3')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	130	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

% Recovery	Acceptance Qualifier Criteria
84	25-120
83	10-120
85	23-120
82	30-120
75	10-136
70	18-120
	84 83 85 82 75



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Report Date: **Project Number:** LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-08 Date Collected: 07/05/19 11:45

Date Received: Client ID: SB021 (0'-3') 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil 07/11/19 21:09 **Extraction Date:** Analytical Method: 1,8270D

Analytical Date: 07/15/19 16:09

Analyst: ΕK 90% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - V	Vestborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1	
Hexachlorobenzene	ND		ug/kg	110	20.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1	
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1	
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1	
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1	
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1	
Fluoranthene	270		ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1	
Hexachlorobutadiene	ND		ug/kg	180	26.	1	
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1	
Hexachloroethane	ND		ug/kg	140	29.	1	
Isophorone	ND		ug/kg	160	23.	1	
Naphthalene	31	J	ug/kg	180	22.	1	
Nitrobenzene	ND		ug/kg	160	27.	1	
NDPA/DPA	ND		ug/kg	140	20.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1	
Butyl benzyl phthalate	ND		ug/kg	180	46.	1	
Di-n-butylphthalate	ND		ug/kg	180	34.	1	
Di-n-octylphthalate	ND		ug/kg	180	61.	1	



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-08 Date Collected: 07/05/19 11:45

Client ID: Date Received: 07/08/19 SB021 (0'-3')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	Westborough Lab					
Pinth dahih alata	ND			400	47	4
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	180		ug/kg	110	20.	1
Benzo(a)pyrene	180		ug/kg	140	44.	1
Benzo(b)fluoranthene	250		ug/kg	110	30.	1
Benzo(k)fluoranthene	72	J	ug/kg	110	29.	1
Chrysene	190		ug/kg	110	19.	1
Acenaphthylene	42	J	ug/kg	140	28.	1
Anthracene	48	J	ug/kg	110	35.	1
Benzo(ghi)perylene	130	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	150		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	32	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	160		ug/kg	140	25.	1
Pyrene	290		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	39	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1
· · · · · · · · · · · · · · · · · · ·			. 33			



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-08 Date Collected: 07/05/19 11:45

Client ID: Date Received: 07/08/19 SB021 (0'-3')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.3	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	69	25-120	
Phenol-d6	86	10-120	
Nitrobenzene-d5	98	23-120	
2-Fluorobiphenyl	75	30-120	
2,4,6-Tribromophenol	48	10-136	
4-Terphenyl-d14	59	18-120	



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Report Date: **Project Number:** LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-09 Date Collected: 07/05/19 11:50

Date Received: Client ID: SB021 (3'-6') 07/08/19 355 EXTERIOR ST., BRONX, NY Field Prep:

Sample Location: Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 07/13/19 01:23 Analytical Method: 1,8270D

Analytical Date: 07/15/19 01:56

Analyst: RC 92% Percent Solids:

1,2,4-Trichlorobenzene ND ug/kg 180 20. 1	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,2,4-Trichlorobenzene ND ug/kg 180 20. 1	Semivolatile Organics by GC/MS - V	Vestborough Lab					
1,24-Trichlorobenzene ND	Acenaphthene	1000		ug/kg	140	18.	1
Bis(2-chloroethyl)ether	1,2,4-Trichlorobenzene	ND			180	20.	1
2-Chloronaphthalene ND ug/kg 180 18. 1 1,2-Dichlorobenzene ND ug/kg 180 32. 1 1,3-Dichlorobenzene ND ug/kg 180 31. 1 1,4-Dichlorobenzene ND ug/kg 180 31. 1 1,4-Dichlorobenzene ND ug/kg 180 31. 1 3,3-Dichlorobenzidine ND ug/kg 180 47. 1 2,4-Dinitrotoluene ND ug/kg 180 36. 1 2,6-Dinitrotoluene ND ug/kg 180 30. 1 1,0-Initrotoluene ND ug/kg 180 30. 1 2,6-Dinitrotoluene ND ug/kg 180 30. 1 2,6-Dinitrotoluene ND ug/kg 180 30. 1 4-Chorophenyl phenyl ether ND ug/kg 180 30. 1 4-Browophenyl phenyl ether ND ug/kg 180	Hexachlorobenzene	ND		ug/kg	110	20.	1
1,2-Dichlorobenzene ND ug/kg 180 32. 1 1,3-Dichlorobenzene ND ug/kg 180 31. 1 1,4-Dichlorobenzene ND ug/kg 180 31. 1 3,3-Dichlorobenzidine ND ug/kg 180 47. 1 2,4-Dinitrotoluene ND ug/kg 180 36. 1 2,4-Dinitrotoluene ND ug/kg 180 36. 1 2,6-Dinitrotoluene ND ug/kg 180 30. 1 Fluoranthene 18000 E ug/kg 180 30. 1 Fluoranthene 18000 E ug/kg 180 30. 1 Fluoranthene ND ug/kg 180 27. 1 4-Chlorotophoryl phenyl ether ND ug/kg 180 27. 1 4-Bromophenyl phenyl ether ND ug/kg 180 27. 1 Bis(2-chlorostopotyphyl phenyl ether ND	Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
1,3-Dichlorobenzene ND ug/kg 180 31. 1 1,4-Dichlorobenzene ND ug/kg 180 31. 1 3,3-Dichlorobenzidine ND ug/kg 180 47. 1 2,4-Dinitrotoluene ND ug/kg 180 36. 1 2,6-Dinitrotoluene ND ug/kg 180 30. 1 Fluoranthene 18000 E ug/kg 110 20. 1 4-Chlorophenyl phenyl ether ND ug/kg 180 39. 1 4-Bromophenyl phenyl ether ND ug/kg 180 27. 1 4-Bis(2-chloroisopropyl) ether ND ug/kg 210 30. 1 Bis(2-chloroisopropyl) ether ND ug/kg 190 18. 1 Hexachlorobutadiene ND ug/kg 180 26. 1 Hexachlorocyclopentadiene ND ug/kg 160 1 Hexachlorocyclopentadiene ND ug/kg	2-Chloronaphthalene	ND		ug/kg	180	18.	1
1.4-Dichlorobenzene ND ug/kg 180 31. 1 3.3-Dichlorobenzidine ND ug/kg 180 47. 1 2,4-Dinitrotoluene ND ug/kg 180 36. 1 2,6-Dinitrotoluene ND ug/kg 180 30. 1 Fluoranthene 18000 E ug/kg 110 20. 1 4-Chlorophenyl phenyl ether ND ug/kg 180 19. 1 4-Bromophenyl phenyl ether ND ug/kg 180 27. 1 Bis(2-chloroispropyl)ether ND ug/kg 210 30. 1 Bis(2-chloroethoxy)methane ND ug/kg 190 18. 1 Hexachlorobutadiene ND ug/kg 180 26. 1 Hexachlorocyclopentadiene ND ug/kg 510 160 1 Hexachlorocyclopentadiene ND ug/kg 160 23. 1 Isophorone ND <td< td=""><td>1,2-Dichlorobenzene</td><td>ND</td><td></td><td>ug/kg</td><td>180</td><td>32.</td><td>1</td></td<>	1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3*Dichlorobenzidine ND ug/kg 180 47. 1 2,4*Dinitrotoluene ND ug/kg 180 36. 1 2,6*Dinitrotoluene ND ug/kg 180 30. 1 Fluoranthene 18000 E ug/kg 110 20. 1 4*Chlorophenyl phenyl ether ND ug/kg 180 19. 1 4*Bis(2-chloroisopropyl)ether ND ug/kg 180 27. 1 Bis(2-chloroisopropyl)ether ND ug/kg 190 18. 1 Bis(2-chloroisopropyl)ether ND ug/kg 190 18. 1 Hexachlorobutadiene ND ug/kg 180 26. 1 Hexachlorocyclopentadiene ND ug/kg 510 160 1 Hexachlorocyclopentadiene ND ug/kg 160 23. 1 Isophorone ND ug/kg 160 23. 1 Naphthalene 780 u	1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
2,4-Dinitrotoluene ND ug/kg 180 36. 1 2,6-Dinitrotoluene ND ug/kg 180 30. 1 Fluoranthene 18000 E ug/kg 110 20. 1 4-Chlorophenyl phenyl ether ND ug/kg 180 19. 1 4-Bromophenyl phenyl ether ND ug/kg 180 27. 1 4-Bromophenyl phenyl ether ND ug/kg 190 30. 1 4-Bromophenyl phenyl ether ND ug/kg 190 30. 1 Bis(2-chorostopyl)gether ND ug/kg 180 26. 1 Hexachlorostopropylatione ND ug/kg 160 23. 1 Hexachlorostopropylatione <td>1,4-Dichlorobenzene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>180</td> <td>31.</td> <td>1</td>	1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
2,6-Dinitrotoluene ND ug/kg 180 30. 1 Fluoranthene 18000 E ug/kg 110 20. 1 4-Chlorophenyl phenyl ether ND ug/kg 180 19. 1 4-Bromophenyl phenyl ether ND ug/kg 180 27. 1 Bis(2-chloroisopropyl)ether ND ug/kg 210 30. 1 Bis(2-chloroethoxy)methane ND ug/kg 190 18. 1 Hexachlorobutadiene ND ug/kg 180 26. 1 Hexachloroethane ND ug/kg 510 160 1 Hexachloroethane ND ug/kg 140 29. 1 Isophorone ND ug/kg 160 23. 1 Naphthalene 780 ug/kg 180 22. 1 NItrobenzene ND ug/kg 140 20. 1 NDAPA/DPA ND ug/kg 180 <	3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
Fluoranthene 18000 E ug/kg 110 20. 1	2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
4-Chlorophenyl phenyl ether ND ug/kg 180 19. 1 4-Bromophenyl phenyl ether ND ug/kg 180 27. 1 Bis(2-chloroisopropyl)ether ND ug/kg 210 30. 1 Bis(2-chloroethoxy)methane ND ug/kg 190 18. 1 Hexachlorobutadiene ND ug/kg 180 26. 1 Hexachlorocyclopentadiene ND ug/kg 510 160 1 Hexachlorocyclopentadiene ND ug/kg 140 29. 1 Isophorone ND ug/kg 160 23. 1 Isophorone ND ug/kg 160 23. 1 Naphthalene 780 ug/kg 180 22. 1 Nitrobenzene ND ug/kg 160 26. 1 NDRA/DPA ND ug/kg 160 26. 1 NDRA/DPA ND ug/kg 180 22. 1 Signification ND ug/kg 180 22. 1 Signification ND ug/kg 180 26. 1 Signification ND ug/kg 180 28. 1 Signification ND ug/kg 180 28. 1 Signification ND ug/kg 180 45. 1	2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
4-Bromophenyl phenyl ether ND ug/kg 180 27. 1 Bis(2-chloroisopropyl)ether ND ug/kg 210 30. 1 Bis(2-chloroethoxy)methane ND ug/kg 190 18. 1 Hexachlorobutadiene ND ug/kg 180 26. 1 Hexachlorocyclopentadiene ND ug/kg 510 160 1 Hexachlorocyclopentadiene ND ug/kg 140 29. 1 Isophorone ND ug/kg 160 23. 1 Naphthalene 780 ug/kg 180 22. 1 Nitrobenzene ND ug/kg 160 26. 1 Nitrobenzene ND ug/kg 180 22. 1 Nitrobenzene ND ug/kg 180 22. 1 Nitrobenzene ND ug/kg 180 22. 1 Nitrobenzene ND ug/kg 160 26. 1 ND ug/kg 160 26. 1 ND NDPA/DPA ND ug/kg 160 26. 1 NDPA/DPA ND ug/kg 180 22. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 45. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1	Fluoranthene	18000	E	ug/kg	110	20.	1
Bis(2-chloroisopropyl)ether ND ug/kg 210 30. 1 Bis(2-chloroethoxy)methane ND ug/kg 190 18. 1 Hexachlorobutadiene ND ug/kg 180 26. 1 Hexachlorocyclopentadiene ND ug/kg 510 160 1 Hexachlorocethane ND ug/kg 140 29. 1 Isophorone ND ug/kg 160 23. 1 Naphthalene 780 ug/kg 180 22. 1 Nitrobenzene ND ug/kg 160 26. 1 NDPA/DPA ND ug/kg 140 20. 1 n-Nitrosodi-n-propylamine ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 34. 1	4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
Bis(2-chloroethoxy)methane ND ug/kg 190 18. 1 Hexachlorobutadiene ND ug/kg 180 26. 1 Hexachlorocyclopentadiene ND ug/kg 510 160 1 Hexachloroethane ND ug/kg 140 29. 1 Isophorone ND ug/kg 160 23. 1 Naphthalene 780 ug/kg 180 22. 1 Nitrobenzene ND ug/kg 160 26. 1 NDPA/DPA ND ug/kg 140 20. 1 n-Nitrosodi-n-propylamine ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Hexachlorobutadiene ND ug/kg 180 26. 1 Hexachlorocyclopentadiene ND ug/kg 510 160 1 Hexachloroethane ND ug/kg 140 29. 1 Isophorone ND ug/kg 160 23. 1 Naphthalene 780 ug/kg 180 22. 1 Nitrobenzene ND ug/kg 160 26. 1 NDPA/DPA ND ug/kg 140 20. 1 n-Nitrosodi-n-propylamine ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Hexachlorocyclopentadiene ND ug/kg 510 160 1 Hexachlorocyclopentadiene ND ug/kg 140 29. 1 Isophorone ND ug/kg 160 23. 1 Naphthalene 780 ug/kg 180 22. 1 Nitrobenzene ND ug/kg 160 26. 1 NDPA/DPA ND ug/kg 140 20. 1 n-Nitrosodi-n-propylamine ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachloroethane ND ug/kg 140 29. 1 Isophorone ND ug/kg 160 23. 1 Naphthalene 780 ug/kg 180 22. 1 Nitrobenzene ND ug/kg 160 26. 1 NDPA/DPA ND ug/kg 140 20. 1 n-Nitrosodi-n-propylamine ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	Hexachlorobutadiene	ND		ug/kg	180	26.	1
Sophorone ND	Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Naphthalene 780 ug/kg 180 22. 1 Nitrobenzene ND ug/kg 160 26. 1 NDPA/DPA ND ug/kg 140 20. 1 n-Nitrosodi-n-propylamine ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	Hexachloroethane	ND		ug/kg	140	29.	1
Nitrobenzene ND ug/kg 160 26. 1 NDPA/DPA ND ug/kg 140 20. 1 n-Nitrosodi-n-propylamine ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	Isophorone	ND		ug/kg	160	23.	1
NDPA/DPA ND ug/kg 140 20. 1 n-Nitrosodi-n-propylamine ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	Naphthalene	780		ug/kg	180	22.	1
n-Nitrosodi-n-propylamine ND ug/kg 180 28. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	Nitrobenzene	ND		ug/kg	160	26.	1
Bis(2-ethylhexyl)phthalate ND ug/kg 180 62. 1 Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	NDPA/DPA	ND		ug/kg	140	20.	1
Butyl benzyl phthalate ND ug/kg 180 45. 1 Di-n-butylphthalate ND ug/kg 180 34. 1	n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Di-n-butylphthalate ND ug/kg 180 34. 1	Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
71	Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-octylphthalate ND ug/kg 180 60. 1	Di-n-butylphthalate	ND		ug/kg	180	34.	1
7 T	Di-n-octylphthalate	ND		ug/kg	180	60.	1



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-09 Date Collected: 07/05/19 11:50

Client ID: SB021 (3'-6') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	10000	E	ug/kg	110	20.	1
Benzo(a)pyrene	8400	E	ug/kg	140	43.	1
Benzo(b)fluoranthene	9900	E	ug/kg	110	30.	1
Benzo(k)fluoranthene	3200		ug/kg	110	28.	1
Chrysene	9100	E	ug/kg	110	18.	1
Acenaphthylene	220		ug/kg	140	28.	1
Anthracene	3600		ug/kg	110	35.	1
Benzo(ghi)perylene	5600		ug/kg	140	21.	1
Fluorene	940		ug/kg	180	17.	1
Phenanthrene	12000	E	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	1200		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	5800		ug/kg	140	25.	1
Pyrene	19000	E	ug/kg	110	18.	1
Biphenyl	130	J	ug/kg	410	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	470		ug/kg	180	17.	1
2-Methylnaphthalene	780		ug/kg	210	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	380	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-09 Date Collected: 07/05/19 11:50

Client ID: SB021 (3'-6') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	310		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	112		25-120
Phenol-d6	117		10-120
Nitrobenzene-d5	134	Q	23-120
2-Fluorobiphenyl	114		30-120
2,4,6-Tribromophenol	108		10-136
4-Terphenyl-d14	93		18-120



Project Name: 355 EXTERIOR ST. Lab Number: L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-09 D Date Collected: 07/05/19 11:50

Client ID: SB021 (3'-6') Date Received: 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 07/13/19 01:23

Analytical Date: 07/15/19 12:57

Analyst: EK
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - V	Westborough Lab						
Fluoranthene	16000		ug/kg	530	100	5	
Benzo(a)anthracene	9000		ug/kg	530	100	5	
Benzo(a)pyrene	7200		ug/kg	710	220	5	
Benzo(b)fluoranthene	9200		ug/kg	530	150	5	
Chrysene	6900		ug/kg	530	93.	5	
Phenanthrene	10000		ug/kg	530	110	5	
Pyrene	16000		ug/kg	530	88.	5	



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-10 Date Collected: 07/05/19 11:55

Client ID: SB021 (6'-9') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8270D Extraction Date: 07/19/19 03:22
Analytical Date: 07/21/19 20:15

Analyst: RC Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - V	Vestborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1	
Hexachlorobenzene	ND		ug/kg	110	20.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1	
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1	
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1	
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1	
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1	
Fluoranthene	120		ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1	
Hexachlorobutadiene	ND		ug/kg	180	27.	1	
Hexachlorocyclopentadiene	ND		ug/kg	520	170	1	
Hexachloroethane	ND		ug/kg	150	30.	1	
Isophorone	ND		ug/kg	160	24.	1	
Naphthalene	ND		ug/kg	180	22.	1	
Nitrobenzene	ND		ug/kg	160	27.	1	
NDPA/DPA	ND		ug/kg	150	21.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1	
Butyl benzyl phthalate	ND		ug/kg	180	46.	1	
Di-n-butylphthalate	ND		ug/kg	180	35.	1	
Di-n-octylphthalate	ND		ug/kg	180	62.	1	



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-10 Date Collected: 07/05/19 11:55

Client ID: Date Received: 07/08/19 SB021 (6'-9')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	stborough Lab					
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	67	J	ug/kg	110	21.	1
Benzo(a)pyrene	62	J	ug/kg	150	45.	1
Benzo(b)fluoranthene	80	J	ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	58	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	41	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	77	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	76	J	ug/kg	150	26.	1
Pyrene	120		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-10 Date Collected: 07/05/19 11:55

Client ID: SB021 (6'-9') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1
1,4-Dioxane	ND		ua/ka	28	8.4	1

82	25-120
	20 120
85	10-120
69	23-120
72	30-120
75	10-136
67	18-120
	85 69 72 75



L1929439

Project Name: Lab Number: 355 EXTERIOR ST.

Report Date: **Project Number:** LST1802 TASK 07

08/05/19

SAMPLE RESULTS

Lab ID: L1929439-11 Date Collected: 07/05/19 12:45

Date Received: Client ID: SB022 (0'-3') 07/08/19 Field Prep:

Sample Location: 355 EXTERIOR ST., BRONX, NY Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil 07/11/19 21:09 **Extraction Date:**

Analytical Method: 1,8270D Analytical Date: 07/13/19 09:47

Analyst: CB 91% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	estborough Lab						
Acenaphthene	100	J	ug/kg	150	19.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1	
Hexachlorobenzene	ND		ug/kg	110	20.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1	
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1	
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1	
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1	
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1	
Fluoranthene	1700		ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1	
Hexachlorobutadiene	ND		ug/kg	180	27.	1	
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1	
Hexachloroethane	ND		ug/kg	150	30.	1	
Isophorone	ND		ug/kg	160	24.	1	
Naphthalene	96	J	ug/kg	180	22.	1	
Nitrobenzene	ND		ug/kg	160	27.	1	
NDPA/DPA	ND		ug/kg	150	21.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1	
Butyl benzyl phthalate	ND		ug/kg	180	46.	1	
Di-n-butylphthalate	43	J	ug/kg	180	35.	1	
Di-n-octylphthalate	ND		ug/kg	180	62.	1	



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-11 Date Collected: 07/05/19 12:45

Client ID: Date Received: 07/08/19 SB022 (0'-3')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	960		ug/kg	110	20.	1
Benzo(a)pyrene	870		ug/kg	150	45.	1
Benzo(b)fluoranthene	1100		ug/kg	110	31.	1
Benzo(k)fluoranthene	410		ug/kg	110	29.	1
Chrysene	950		ug/kg	110	19.	1
Acenaphthylene	110	J	ug/kg	150	28.	1
Anthracene	330		ug/kg	110	36.	1
Benzo(ghi)perylene	500		ug/kg	150	21.	1
Fluorene	93	J	ug/kg	180	18.	1
Phenanthrene	1100		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	120		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	520		ug/kg	150	25.	1
Pyrene	1600		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	56	J	ug/kg	180	17.	1
2-Methylnaphthalene	71	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	69.	1
4-Nitrophenol	ND		ug/kg	260	74.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-11 Date Collected: 07/05/19 12:45

Client ID: Date Received: 07/08/19 SB022 (0'-3')

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	100	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	73	25-120
Phenol-d6	76	10-120
Nitrobenzene-d5	75	23-120
2-Fluorobiphenyl	75	30-120
2,4,6-Tribromophenol	62	10-136
4-Terphenyl-d14	63	18-120



L1929439

08/05/19

07/11/19 21:09

Project Name: 355 EXTERIOR ST.

L1929439-12

SB023 (0'-3')

355 EXTERIOR ST., BRONX, NY

Project Number: LST1802 TASK 07

SAMPLE RESULTS

Date Collected: 07/05/19 13:50

Data Callastada 07/05/40 40:50

Lab Number:

Report Date:

Extraction Date:

Date Received: 07/08/19
Field Prep: Not Specified

Extraction Method: EPA 3546

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Matrix: Soil Analytical Method: 1,8270D

Analytical Date: 07/13/19 04:50

Analyst: CB Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS	- Westborough Lab					
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	34.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	78	J	ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-12 Date Collected: 07/05/19 13:50

Client ID: SB023 (0'-3') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	- Westborough Lab					
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	43	J	ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	56	J	ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	45	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	28	J	ug/kg	160	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	39	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	28	J	ug/kg	160	27.	1
Pyrene	70	J	ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	38.	1
3-Nitroaniline	ND		ug/kg	190	37.	1
4-Nitroaniline	ND		ug/kg	190	81.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-12 Date Collected: 07/05/19 13:50

Client ID: Date Received: 07/08/19 SB023 (0'-3') Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	630	200	1
Benzyl Alcohol	ND		ug/kg	190	60.	1
Carbazole	ND		ug/kg	190	19.	1
1,4-Dioxane	ND		ua/ka	29	9.0	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	72	25-120	
Phenol-d6	76	10-120	
Nitrobenzene-d5	76	23-120	
2-Fluorobiphenyl	80	30-120	
2,4,6-Tribromophenol	82	10-136	
4-Terphenyl-d14	72	18-120	

L1929439

08/05/19

Project Name: 355 EXTERIOR ST.

L1929439-13

07/13/19 07:06

Project Number: LST1802 TASK 07

SAMPLE RESULTS

Date Collected: 07/05/19 13:55

Lab Number:

Report Date:

Client ID: SB023 (3'-6') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Analytical Date:

Lab ID:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 07/11/19 21:09

Analyst: CB Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	estborough Lab						
Acenaphthene	19	J	ug/kg	150	19.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1	
Hexachlorobenzene	ND		ug/kg	110	21.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1	
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1	
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1	
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1	
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1	
Fluoranthene	490		ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1	
Hexachlorobutadiene	ND		ug/kg	180	27.	1	
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1	
Hexachloroethane	ND		ug/kg	150	30.	1	
Isophorone	ND		ug/kg	170	24.	1	
Naphthalene	30	J	ug/kg	180	23.	1	
Nitrobenzene	ND		ug/kg	170	28.	1	
NDPA/DPA	ND		ug/kg	150	21.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1	
Butyl benzyl phthalate	ND		ug/kg	180	47.	1	
Di-n-butylphthalate	ND		ug/kg	180	35.	1	
Di-n-octylphthalate	ND		ug/kg	180	63.	1	



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Project Number: Report Date: LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-13 Date Collected: 07/05/19 13:55

Client ID: Date Received: 07/08/19 SB023 (3'-6') Field Prep: Not Specified

Sample Location: 355 EXTERIOR ST., BRONX, NY

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - V	Vestborough Lab					
District white state	ND		4	400	47	_
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	280		ug/kg	110	21.	1
Benzo(a)pyrene	240		ug/kg	150	45.	<u> </u>
Benzo(b)fluoranthene	310		ug/kg	110	31.	1
Benzo(k)fluoranthene	98	J	ug/kg	110	30.	1
Chrysene	260		ug/kg	110	19.	1
Acenaphthylene	49	J	ug/kg	150	29.	1
Anthracene	65	J	ug/kg	110	36.	1
Benzo(ghi)perylene	170		ug/kg	150	22.	1
Fluorene	22	J	ug/kg	180	18.	1
Phenanthrene	310		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	40	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	170		ug/kg	150	26.	1
Pyrene	480		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	18	J	ug/kg	180	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
			- 33			



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-13 Date Collected: 07/05/19 13:55

Client ID: SB023 (3'-6') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	28	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ua/ka	28	8.6	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	43	25-120	
Phenol-d6	80	10-120	
Nitrobenzene-d5	86	23-120	
2-Fluorobiphenyl	81	30-120	
2,4,6-Tribromophenol	26	10-136	
4-Terphenyl-d14	67	18-120	



Project Name: 355 EXTERIOR ST.

Project Number: LST1802 TASK 07

Lab Number: L1929439

Extraction Date:

Report Date: 08/05/19

Extraction Method: EPA 3546

07/11/19 19:25

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D

Analytical Date: 07/13/19 01:37

Analyst: RC

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS WG1258849-1	S - Westboroug	h Lab for s	ample(s):	01-02,04-05	5,07-08,11-13	Batch:
Acenaphthene	ND		ug/kg	130	17.	
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.	
Hexachlorobenzene	ND		ug/kg	98	18.	
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.	
2-Chloronaphthalene	ND		ug/kg	160	16.	
1,2-Dichlorobenzene	ND		ug/kg	160	29.	
1,3-Dichlorobenzene	ND		ug/kg	160	28.	
1,4-Dichlorobenzene	ND		ug/kg	160	28.	
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.	
2,4-Dinitrotoluene	ND		ug/kg	160	32.	
2,6-Dinitrotoluene	ND		ug/kg	160	28.	
Fluoranthene	ND		ug/kg	98	19.	
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.	
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.	
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.	
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.	
Hexachlorobutadiene	ND		ug/kg	160	24.	
Hexachlorocyclopentadiene	ND		ug/kg	460	150	
Hexachloroethane	ND		ug/kg	130	26.	
Isophorone	ND		ug/kg	150	21.	
Naphthalene	ND		ug/kg	160	20.	
Nitrobenzene	ND		ug/kg	150	24.	
NDPA/DPA	ND		ug/kg	130	18.	
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.	
Butyl benzyl phthalate	ND		ug/kg	160	41.	
Di-n-butylphthalate	ND		ug/kg	160	31.	
Di-n-octylphthalate	ND		ug/kg	160	55.	
Diethyl phthalate	ND		ug/kg	160	15.	



Project Name: 355 EXTERIOR ST.

LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/13/19 01:37

Analyst:

RC

Project Number:

Extraction Method: EPA 3546 07/11/19 19:25 **Extraction Date:**

				RL	MDL	
Semivolatile Organics by GC/MS VG1258849-1	- Westboroug	h Lab for s	ample(s):	01-02,04-05	5,07-08,11-13	Batch:
Dimethyl phthalate	ND		ug/kg	160	34.	
Benzo(a)anthracene	ND		ug/kg	98	18.	
Benzo(a)pyrene	ND		ug/kg	130	40.	
Benzo(b)fluoranthene	ND		ug/kg	98	27.	
Benzo(k)fluoranthene	ND		ug/kg	98	26.	
Chrysene	ND		ug/kg	98	17.	
Acenaphthylene	ND		ug/kg	130	25.	
Anthracene	ND		ug/kg	98	32.	
Benzo(ghi)perylene	ND		ug/kg	130	19.	
Fluorene	ND		ug/kg	160	16.	
Phenanthrene	ND		ug/kg	98	20.	
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.	
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.	
Pyrene	ND		ug/kg	98	16.	
Biphenyl	ND		ug/kg	370	38.	
4-Chloroaniline	ND		ug/kg	160	30.	
2-Nitroaniline	ND		ug/kg	160	31.	
3-Nitroaniline	ND		ug/kg	160	31.	
4-Nitroaniline	ND		ug/kg	160	67.	
Dibenzofuran	ND		ug/kg	160	15.	
2-Methylnaphthalene	ND		ug/kg	200	20.	
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.	
Acetophenone	ND		ug/kg	160	20.	
2,4,6-Trichlorophenol	ND		ug/kg	98	31.	
p-Chloro-m-cresol	ND		ug/kg	160	24.	
2-Chlorophenol	ND		ug/kg	160	19.	
2,4-Dichlorophenol	ND		ug/kg	150	26.	
2,4-Dimethylphenol	ND		ug/kg	160	54.	
2-Nitrophenol	ND		ug/kg	350	61.	



L1929439

Project Name: 355 EXTERIOR ST. Lab Number:

Project Number: LST1802 TASK 07 Report Date: 08/05/19

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Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3546
Analytical Date: 07/13/19 01:37 Extraction Date: 07/11/19 19:25

Analyst: RC

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS - WG1258849-1	Westboroug	gh Lab for s	ample(s):	01-02,04-05	5,07-08,11-13	Batch:
4-Nitrophenol	ND		ug/kg	230	66.	
2,4-Dinitrophenol	ND		ug/kg	780	76.	
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.	
Pentachlorophenol	ND		ug/kg	130	36.	
Phenol	ND		ug/kg	160	25.	
2-Methylphenol	ND		ug/kg	160	25.	
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	26.	
2,4,5-Trichlorophenol	ND		ug/kg	160	31.	
Benzoic Acid	ND		ug/kg	530	160	
Benzyl Alcohol	ND		ug/kg	160	50.	
Carbazole	ND		ug/kg	160	16.	
1,4-Dioxane	ND		ug/kg	24	7.5	

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
2-Fluorophenol	80	25-120
Phenol-d6	85	10-120
Nitrobenzene-d5	89	23-120
2-Fluorobiphenyl	83	30-120
2,4,6-Tribromophenol	71	10-136
4-Terphenyl-d14	88	18-120



Project Name: 355 EXTERIOR ST.

Project Number: LST1802 TASK 07

Lab Number: L1929439

Report Date: 08/05/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/14/19 16:38

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/13/19 01:23

Parameter	Result	Qualifier	Units	F	RL	MDL	
Semivolatile Organics by GC/MS -	Westborough	Lab for s	ample(s):	09	Batch:	WG125	9428-1
Acenaphthene	ND		ug/kg	1	30	17.	
1,2,4-Trichlorobenzene	ND		ug/kg	1	70	19.	
Hexachlorobenzene	ND		ug/kg	1	00	19.	
Bis(2-chloroethyl)ether	ND		ug/kg	1	50	22.	
2-Chloronaphthalene	ND		ug/kg	1	70	16.	
1,2-Dichlorobenzene	ND		ug/kg	1	70	30.	
1,3-Dichlorobenzene	ND		ug/kg	1	70	28.	
1,4-Dichlorobenzene	ND		ug/kg	1	70	29.	
3,3'-Dichlorobenzidine	ND		ug/kg	1	70	44.	
2,4-Dinitrotoluene	ND		ug/kg	1	70	33.	
2,6-Dinitrotoluene	ND		ug/kg	1	70	28.	
Fluoranthene	ND		ug/kg	1	00	19.	
4-Chlorophenyl phenyl ether	ND		ug/kg	1	70	18.	
4-Bromophenyl phenyl ether	ND		ug/kg	1	70	25.	
Bis(2-chloroisopropyl)ether	ND		ug/kg	2	00	28.	
Bis(2-chloroethoxy)methane	ND		ug/kg	1	80	17.	
Hexachlorobutadiene	ND		ug/kg	1	70	24.	
Hexachlorocyclopentadiene	ND		ug/kg	4	80	150	
Hexachloroethane	ND		ug/kg	1	30	27.	
Isophorone	ND		ug/kg	1:	50	22.	
Naphthalene	ND		ug/kg	1	70	20.	
Nitrobenzene	ND		ug/kg	1:	50	25.	
NDPA/DPA	ND		ug/kg	1	30	19.	
n-Nitrosodi-n-propylamine	ND		ug/kg	1	70	26.	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1	70	58.	
Butyl benzyl phthalate	ND		ug/kg	1	70	42.	
Di-n-butylphthalate	ND		ug/kg	1	70	32.	
Di-n-octylphthalate	ND		ug/kg	1	70	56.	
Diethyl phthalate	ND		ug/kg	1	70	15.	



Project Name: 355 EXTERIOR ST.

Project Number: LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/14/19 16:38

Analyst:

RC

Extraction Method: EPA 3546
Extraction Date: 07/13/19 01:23

arameter	Result	Qualifier	Units	F	RL	MDL	
Semivolatile Organics by GC/MS	- Westborough	Lab for s	ample(s):	09	Batch:	WG1259428-1	1
Dimethyl phthalate	ND		ug/kg	1	70	35.	
Benzo(a)anthracene	ND		ug/kg	1	00	19.	
Benzo(a)pyrene	ND		ug/kg	1	30	40.	
Benzo(b)fluoranthene	ND		ug/kg	1	00	28.	
Benzo(k)fluoranthene	ND		ug/kg	1	00	26.	
Chrysene	ND		ug/kg	1	00	17.	
Acenaphthylene	ND		ug/kg	1	30	26.	
Anthracene	ND		ug/kg	1	00	32.	
Benzo(ghi)perylene	ND		ug/kg	1	30	20.	
Fluorene	ND		ug/kg	1	70	16.	
Phenanthrene	ND		ug/kg	1	00	20.	
Dibenzo(a,h)anthracene	ND		ug/kg	1	00	19.	
Indeno(1,2,3-cd)pyrene	ND		ug/kg	1	30	23.	
Pyrene	ND		ug/kg	1	00	16.	
Biphenyl	ND		ug/kg	3	80	38.	
4-Chloroaniline	ND		ug/kg	1	70	30.	
2-Nitroaniline	ND		ug/kg	1	70	32.	
3-Nitroaniline	ND		ug/kg	1	70	31.	
4-Nitroaniline	ND		ug/kg	1	70	69.	
Dibenzofuran	ND		ug/kg	1	70	16.	
2-Methylnaphthalene	ND		ug/kg	2	:00	20.	
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1	70	17.	
Acetophenone	ND		ug/kg	1	70	20.	
2,4,6-Trichlorophenol	ND		ug/kg	1	00	32.	
p-Chloro-m-cresol	ND		ug/kg	1	70	25.	
2-Chlorophenol	ND		ug/kg	1	70	20.	
2,4-Dichlorophenol	ND		ug/kg	1	50	27.	
2,4-Dimethylphenol	ND		ug/kg	1	70	55.	
2-Nitrophenol	ND		ug/kg	3	60	62.	



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3546
Analytical Date: 07/14/19 16:38 Extraction Date: 07/13/19 01:23

Analyst: RC

Parameter	Result	Qualifier	Units		RL	MDL	
Semivolatile Organics by GC/MS -	Westboroug	h Lab for s	ample(s):	09	Batch:	WG1259428-1	
4-Nitrophenol	ND		ug/kg	:	230	68.	
2,4-Dinitrophenol	ND		ug/kg		300	77.	
4,6-Dinitro-o-cresol	ND		ug/kg	•	430	80.	
Pentachlorophenol	ND		ug/kg		130	36.	
Phenol	ND		ug/kg		170	25.	
2-Methylphenol	ND		ug/kg		170	26.	
3-Methylphenol/4-Methylphenol	ND		ug/kg	:	240	26.	
2,4,5-Trichlorophenol	ND		ug/kg		170	32.	
Benzoic Acid	ND		ug/kg	;	540	170	
Benzyl Alcohol	ND		ug/kg		170	51.	
Carbazole	ND		ug/kg		170	16.	
1,4-Dioxane	ND		ug/kg		25	7.6	

		Acceptance
Surrogate	%Recovery Qua	llifier Criteria
2-Fluorophenol	98	25-120
Phenol-d6	97	10-120
Nitrobenzene-d5	96	23-120
2-Fluorobiphenyl	100	30-120
2,4,6-Tribromophenol	91	10-136
4-Terphenyl-d14	109	18-120



Project Name: 355 EXTERIOR ST.

LST1802 TASK 07

Lab Number: L1929439

Report Date: 08/05/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/20/19 01:10

Analyst: JG

Project Number:

Extraction Method: EPA 3546
Extraction Date: 07/19/19 03:22

Parameter	Result	Qualifier	Units		RL	MDL	
Semivolatile Organics by GC/MS -	Westborough	Lab for s	ample(s):	10	Batch:	WG1261865-1	
Acenaphthene	ND		ug/kg		130	17.	
1,2,4-Trichlorobenzene	ND		ug/kg		160	19.	
Hexachlorobenzene	ND		ug/kg		99	18.	
Bis(2-chloroethyl)ether	ND		ug/kg		150	22.	
2-Chloronaphthalene	ND		ug/kg		160	16.	
1,2-Dichlorobenzene	ND		ug/kg		160	30.	
1,3-Dichlorobenzene	ND		ug/kg		160	28.	
1,4-Dichlorobenzene	ND		ug/kg		160	29.	
3,3'-Dichlorobenzidine	ND		ug/kg		160	44.	
2,4-Dinitrotoluene	ND		ug/kg		160	33.	
2,6-Dinitrotoluene	ND		ug/kg		160	28.	
Fluoranthene	ND		ug/kg		99	19.	
4-Chlorophenyl phenyl ether	ND		ug/kg		160	18.	
4-Bromophenyl phenyl ether	ND		ug/kg		160	25.	
Bis(2-chloroisopropyl)ether	ND		ug/kg		200	28.	
Bis(2-chloroethoxy)methane	ND		ug/kg		180	16.	
Hexachlorobutadiene	ND		ug/kg		160	24.	
Hexachlorocyclopentadiene	ND		ug/kg		470	150	
Hexachloroethane	ND		ug/kg		130	27.	
Isophorone	ND		ug/kg		150	21.	
Naphthalene	ND		ug/kg		160	20.	
Nitrobenzene	ND		ug/kg		150	24.	
NDPA/DPA	ND		ug/kg		130	19.	
n-Nitrosodi-n-propylamine	ND		ug/kg		160	25.	
Bis(2-ethylhexyl)phthalate	ND		ug/kg		160	57.	
Butyl benzyl phthalate	ND		ug/kg		160	42.	
Di-n-butylphthalate	ND		ug/kg		160	31.	
Di-n-octylphthalate	ND		ug/kg		160	56.	
Diethyl phthalate	ND		ug/kg		160	15.	



Project Name: 355 EXTERIOR ST.

Project Number: LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/20/19 01:10

Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 07/19/19 03:22

arameter	Result	Qualifier	Units		RL	MDL	
Semivolatile Organics by GC/MS	- Westborough	Lab for s	ample(s):	10	Batch:	WG1261865-1	
Dimethyl phthalate	ND		ug/kg		160	35.	
Benzo(a)anthracene	ND		ug/kg		99	18.	
Benzo(a)pyrene	ND		ug/kg	•	130	40.	
Benzo(b)fluoranthene	ND		ug/kg		99	28.	
Benzo(k)fluoranthene	ND		ug/kg		99	26.	
Chrysene	ND		ug/kg		99	17.	
Acenaphthylene	ND		ug/kg	•	130	25.	
Anthracene	ND		ug/kg		99	32.	
Benzo(ghi)perylene	ND		ug/kg	•	130	19.	
Fluorene	ND		ug/kg	•	160	16.	
Phenanthrene	ND		ug/kg		99	20.	
Dibenzo(a,h)anthracene	ND		ug/kg		99	19.	
Indeno(1,2,3-cd)pyrene	ND		ug/kg	•	130	23.	
Pyrene	ND		ug/kg		99	16.	
Biphenyl	ND		ug/kg	:	380	38.	
4-Chloroaniline	ND		ug/kg	•	160	30.	
2-Nitroaniline	ND		ug/kg	•	160	32.	
3-Nitroaniline	ND		ug/kg	•	160	31.	
4-Nitroaniline	ND		ug/kg		160	68.	
Dibenzofuran	ND		ug/kg		160	16.	
2-Methylnaphthalene	ND		ug/kg	2	200	20.	
1,2,4,5-Tetrachlorobenzene	ND		ug/kg		160	17.	
Acetophenone	ND		ug/kg		160	20.	
2,4,6-Trichlorophenol	ND		ug/kg		99	31.	
p-Chloro-m-cresol	ND		ug/kg		160	25.	
2-Chlorophenol	ND		ug/kg	•	160	20.	
2,4-Dichlorophenol	ND		ug/kg	•	150	26.	
2,4-Dimethylphenol	ND		ug/kg		160	54.	
2-Nitrophenol	ND		ug/kg	;	360	62.	



L1929439

Project Name: Lab Number: 355 EXTERIOR ST.

Project Number: Report Date: LST1802 TASK 07 08/05/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3546 Analytical Date: 07/20/19 01:10 07/19/19 03:22 **Extraction Date:**

Analyst: JG

Parameter	Result	Qualifier	Units		RL	MDL	
Semivolatile Organics by GC/MS -	Westboroug	h Lab for s	ample(s):	10	Batch:	WG1261865-1	
4-Nitrophenol	ND		ug/kg		230	67.	
2,4-Dinitrophenol	ND		ug/kg		790	77.	
4,6-Dinitro-o-cresol	ND		ug/kg		430	79.	
Pentachlorophenol	ND		ug/kg		130	36.	
Phenol	ND		ug/kg	,	160	25.	
2-Methylphenol	ND		ug/kg	,	160	26.	
3-Methylphenol/4-Methylphenol	ND		ug/kg	:	240	26.	
2,4,5-Trichlorophenol	ND		ug/kg		160	32.	
Benzoic Acid	ND		ug/kg		540	170	
Benzyl Alcohol	ND		ug/kg		160	50.	
Carbazole	ND		ug/kg		160	16.	
1,4-Dioxane	ND		ug/kg		25	7.6	

Surrogate	%Recovery Qual	Acceptance ifier Criteria
2-Fluorophenol	90	25-120
Phenol-d6	91	10-120
Nitrobenzene-d5	91	23-120
2-Fluorobiphenyl	88	30-120
2,4,6-Tribromophenol	87	10-136
4-Terphenyl-d14	97	18-120
2-Fluorobiphenyl 2,4,6-Tribromophenol	88 87	30-120 10-136



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS -	Westborough Lab Associ	ated sample(s):	01-02,04-05,	07-08,11-13	Batch: WG125	8849-2 WG1	258849-3	
Acenaphthene	80		74		31-137	8	50	
1,2,4-Trichlorobenzene	77		70		38-107	10	50	
Hexachlorobenzene	74		67		40-140	10	50	
Bis(2-chloroethyl)ether	83		75		40-140	10	50	
2-Chloronaphthalene	81		73		40-140	10	50	
1,2-Dichlorobenzene	75		68		40-140	10	50	
1,3-Dichlorobenzene	72		66		40-140	9	50	
1,4-Dichlorobenzene	73		68		28-104	7	50	
3,3'-Dichlorobenzidine	60		54		40-140	11	50	
2,4-Dinitrotoluene	92		84		40-132	9	50	
2,6-Dinitrotoluene	93		83		40-140	11	50	
Fluoranthene	82		74		40-140	10	50	
4-Chlorophenyl phenyl ether	78		71		40-140	9	50	
4-Bromophenyl phenyl ether	76		67		40-140	13	50	
Bis(2-chloroisopropyl)ether	80		74		40-140	8	50	
Bis(2-chloroethoxy)methane	89		82		40-117	8	50	
Hexachlorobutadiene	73		65		40-140	12	50	
Hexachlorocyclopentadiene	81		74		40-140	9	50	
Hexachloroethane	78		72		40-140	8	50	
Isophorone	90		82		40-140	9	50	
Naphthalene	79		72		40-140	9	50	
Nitrobenzene	90		81		40-140	11	50	
NDPA/DPA	83		75		36-157	10	50	

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L19

L1929439

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS - Westbo	rough Lab Associa	ated sample(s)	: 01-02,04-05,	07-08,11-13	Batch: WG125	8849-2 WG1	258849-3	
n-Nitrosodi-n-propylamine	96		87		32-121	10	50	
Bis(2-ethylhexyl)phthalate	96		86		40-140	11	50	
Butyl benzyl phthalate	99		88		40-140	12	50	
Di-n-butylphthalate	91		82		40-140	10	50	
Di-n-octylphthalate	100		89		40-140	12	50	
Diethyl phthalate	85		76		40-140	11	50	
Dimethyl phthalate	85		77		40-140	10	50	
Benzo(a)anthracene	85		77		40-140	10	50	
Benzo(a)pyrene	76		69		40-140	10	50	
Benzo(b)fluoranthene	79		72		40-140	9	50	
Benzo(k)fluoranthene	83		74		40-140	11	50	
Chrysene	80		72		40-140	11	50	
Acenaphthylene	84		76		40-140	10	50	
Anthracene	84		76		40-140	10	50	
Benzo(ghi)perylene	81		75		40-140	8	50	
Fluorene	82		74		40-140	10	50	
Phenanthrene	80		72		40-140	11	50	
Dibenzo(a,h)anthracene	87		80		40-140	8	50	
Indeno(1,2,3-cd)pyrene	74		69		40-140	7	50	
Pyrene	82		73		35-142	12	50	
Biphenyl	88		79		54-104	11	50	
4-Chloroaniline	67		61		40-140	9	50	
2-Nitroaniline	90		81		47-134	11	50	



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
emivolatile Organics by GC/MS - Westboro	ugh Lab Assoc	iated sample(s)	: 01-02,04-05,0	7-08,11-13	Batch: WG12	58849-2 WG1	258849-3	
3-Nitroaniline	61		59		26-129	3		50
4-Nitroaniline	79		70		41-125	12		50
Dibenzofuran	80		72		40-140	11		50
2-Methylnaphthalene	82		74		40-140	10		50
1,2,4,5-Tetrachlorobenzene	78		70		40-117	11		50
Acetophenone	87		80		14-144	8		50
2,4,6-Trichlorophenol	84		76		30-130	10		50
p-Chloro-m-cresol	89		80		26-103	11		50
2-Chlorophenol	82		75		25-102	9		50
2,4-Dichlorophenol	86		78		30-130	10		50
2,4-Dimethylphenol	89		81		30-130	9		50
2-Nitrophenol	90		83		30-130	8		50
4-Nitrophenol	101		91		11-114	10		50
2,4-Dinitrophenol	99		90		4-130	10		50
4,6-Dinitro-o-cresol	102		92		10-130	10		50
Pentachlorophenol	92		84		17-109	9		50
Phenol	94	Q	86		26-90	9		50
2-Methylphenol	88		80		30-130.	10		50
3-Methylphenol/4-Methylphenol	85		78		30-130	9		50
2,4,5-Trichlorophenol	85		76		30-130	11		50
Benzoic Acid	77		69		10-110	11		50
Benzyl Alcohol	90		82		40-140	9		50
Carbazole	82		74		54-128	10		50



Project Name: 355 EXTERIOR ST. Project Number: LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS - Westboro	ugh Lab Associa	ted sample(s)	01-02,04-05,0	07-08,11-13	Batch: WG1258	849-2 WG	1258849-3		
1,4-Dioxane	66		62		40-140	6		50	

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
2-Fluorophenol	88	78	25-120
Phenol-d6	93	83	10-120
Nitrobenzene-d5	102	90	23-120
2-Fluorobiphenyl	89	79	30-120
2,4,6-Tribromophenol	84	71	10-136
4-Terphenyl-d14	91	80	18-120



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS - Westboro	ugh Lab Assoc	iated sample(s):	09 Batch:	WG1259428-2	2 WG1259428-3			
Acenaphthene	58		69		31-137	17	50	
1,2,4-Trichlorobenzene	55		64		38-107	15	50	
Hexachlorobenzene	51		62		40-140	19	50	
Bis(2-chloroethyl)ether	59		69		40-140	16	50	
2-Chloronaphthalene	57		68		40-140	18	50	
1,2-Dichlorobenzene	53		61		40-140	14	50	
1,3-Dichlorobenzene	51		59		40-140	15	50	
1,4-Dichlorobenzene	52		60		28-104	14	50	
3,3'-Dichlorobenzidine	48		57		40-140	17	50	
2,4-Dinitrotoluene	64		77		40-132	18	50	
2,6-Dinitrotoluene	63		76		40-140	19	50	
Fluoranthene	58		69		40-140	17	50	
4-Chlorophenyl phenyl ether	54		65		40-140	18	50	
4-Bromophenyl phenyl ether	52		63		40-140	19	50	
Bis(2-chloroisopropyl)ether	58		67		40-140	14	50	
Bis(2-chloroethoxy)methane	64		74		40-117	14	50	
Hexachlorobutadiene	50		60		40-140	18	50	
Hexachlorocyclopentadiene	49		59		40-140	19	50	
Hexachloroethane	55		63		40-140	14	50	
Isophorone	66		76		40-140	14	50	
Naphthalene	56		67		40-140	18	50	
Nitrobenzene	65		75		40-140	14	50	
NDPA/DPA	59		70		36-157	17	50	



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

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arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
emivolatile Organics by GC/MS - Westbord	ough Lab Assoc	iated sample(s):	09 Batch:	WG1259428-2	WG1259428-3		
n-Nitrosodi-n-propylamine	70		81		32-121	15	50
Bis(2-ethylhexyl)phthalate	66		78		40-140	17	50
Butyl benzyl phthalate	68		81		40-140	17	50
Di-n-butylphthalate	64		76		40-140	17	50
Di-n-octylphthalate	71		85		40-140	18	50
Diethyl phthalate	58		70		40-140	19	50
Dimethyl phthalate	57		69		40-140	19	50
Benzo(a)anthracene	61		74		40-140	19	50
Benzo(a)pyrene	52		64		40-140	21	50
Benzo(b)fluoranthene	57		67		40-140	16	50
Benzo(k)fluoranthene	55		68		40-140	21	50
Chrysene	55		67		40-140	20	50
Acenaphthylene	59		71		40-140	18	50
Anthracene	62		73		40-140	16	50
Benzo(ghi)perylene	56		68		40-140	19	50
Fluorene	58		70		40-140	19	50
Phenanthrene	58		69		40-140	17	50
Dibenzo(a,h)anthracene	60		73		40-140	20	50
Indeno(1,2,3-cd)pyrene	55		66		40-140	18	50
Pyrene	57		69		35-142	19	50
Biphenyl	62		74		54-104	18	50
4-Chloroaniline	55		61		40-140	10	50
2-Nitroaniline	66		79		47-134	18	50



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS - Westbor	ough Lab Associ	ated sample(s):	09 Batch:	WG1259428-2	2 WG1259428-3			
3-Nitroaniline	54		63		26-129	15	50	
4-Nitroaniline	58		70		41-125	19	50	
Dibenzofuran	57		68		40-140	18	50	
2-Methylnaphthalene	58		70		40-140	19	50	
1,2,4,5-Tetrachlorobenzene	55		66		40-117	18	50	
Acetophenone	63		73		14-144	15	50	
2,4,6-Trichlorophenol	60		73		30-130	20	50	
p-Chloro-m-cresol	63		75		26-103	17	50	
2-Chlorophenol	60		69		25-102	14	50	
2,4-Dichlorophenol	62		71		30-130	14	50	
2,4-Dimethylphenol	65		76		30-130	16	50	
2-Nitrophenol	65		76		30-130	16	50	
4-Nitrophenol	70		83		11-114	17	50	
2,4-Dinitrophenol	31		42		4-130	30	50	
4,6-Dinitro-o-cresol	33		44		10-130	29	50	
Pentachlorophenol	67		79		17-109	16	50	
Phenol	64		75		26-90	16	50	
2-Methylphenol	65		75		30-130.	14	50	
3-Methylphenol/4-Methylphenol	63		74		30-130	16	50	
2,4,5-Trichlorophenol	60		72		30-130	18	50	
Benzoic Acid	55		67		10-110	20	50	
Benzyl Alcohol	70		79		40-140	12	50	
Carbazole	59		71		54-128	18	50	



Project Name: 355 EXTERIOR ST.

Lab Number:

L1929439

Project Number: LST1802 TASK 07

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08/05/19

Parameter	LCS %Recovery	Qual	_	SD covery	9 Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS - Westboroo	ugh Lab Associat	ed sample(s):	09	Batch:	WG1259428-2	WG1259428-3				
1,4-Dioxane	45		;	50		40-140	11		50	

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
Surrogate	/intecovery Que	ai /@Necovery Quar	
2-Fluorophenol	58	66	25-120
Phenol-d6	62	71	10-120
Nitrobenzene-d5	69	78	23-120
2-Fluorobiphenyl	57	67	30-120
2,4,6-Tribromophenol	50	60	10-136
4-Terphenyl-d14	55	65	18-120



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS	- Westborough Lab Associ	ated sample(s):	10 Batch:	WG1261865-2	2 WG1261865-3			
Acenaphthene	84		81		31-137	4		50
1,2,4-Trichlorobenzene	73		76		38-107	4		50
Hexachlorobenzene	76		74		40-140	3		50
Bis(2-chloroethyl)ether	77		79		40-140	3		50
2-Chloronaphthalene	81		82		40-140	1		50
1,2-Dichlorobenzene	73		74		40-140	1		50
1,3-Dichlorobenzene	73		76		40-140	4		50
1,4-Dichlorobenzene	72		73		28-104	1		50
3,3'-Dichlorobenzidine	59		58		40-140	2		50
2,4-Dinitrotoluene	88		85		40-132	3		50
2,6-Dinitrotoluene	85		87		40-140	2		50
Fluoranthene	85		86		40-140	1		50
4-Chlorophenyl phenyl ether	83		80		40-140	4		50
4-Bromophenyl phenyl ether	81		81		40-140	0		50
Bis(2-chloroisopropyl)ether	79		81		40-140	3		50
Bis(2-chloroethoxy)methane	80		84		40-117	5		50
Hexachlorobutadiene	72		71		40-140	1		50
Hexachlorocyclopentadiene	79		80		40-140	1		50
Hexachloroethane	73		74		40-140	1		50
Isophorone	83		84		40-140	1		50
Naphthalene	79		80		40-140	1		50
Nitrobenzene	81		83		40-140	2		50
NDPA/DPA	87		84		36-157	4		50



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS - Westborou	igh Lab Assoc	ated sample(s):	10 Batch:	WG1261865-2	WG1261865-3			
n-Nitrosodi-n-propylamine	86		87		32-121	1	50	
Bis(2-ethylhexyl)phthalate	102		103		40-140	1	50	
Butyl benzyl phthalate	90		91		40-140	1	50	
Di-n-butylphthalate	93		93		40-140	0	50	
Di-n-octylphthalate	100		101		40-140	1	50	
Diethyl phthalate	87		86		40-140	1	50	
Dimethyl phthalate	81		82		40-140	1	50	
Benzo(a)anthracene	88		89		40-140	1	50	
Benzo(a)pyrene	81		82		40-140	1	50	
Benzo(b)fluoranthene	84		85		40-140	1	50	
Benzo(k)fluoranthene	86		85		40-140	1	50	
Chrysene	86		87		40-140	1	50	
Acenaphthylene	84		86		40-140	2	50	
Anthracene	86		88		40-140	2	50	
Benzo(ghi)perylene	85		84		40-140	1	50	
Fluorene	85		85		40-140	0	50	
Phenanthrene	83		84		40-140	1	50	
Dibenzo(a,h)anthracene	85		86		40-140	1	50	
Indeno(1,2,3-cd)pyrene	84		83		40-140	1	50	
Pyrene	85		86		35-142	1	50	
Biphenyl	85		87		54-104	2	50	
4-Chloroaniline	66		65		40-140	2	50	
2-Nitroaniline	88		90		47-134	2	50	



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS - Westboro	ough Lab Associ	ated sample(s):	10 Batch:	WG1261865-2	2 WG1261865-3		
3-Nitroaniline	73		70		26-129	4	50
4-Nitroaniline	93		90		41-125	3	50
Dibenzofuran	83		83		40-140	0	50
2-Methylnaphthalene	83		84		40-140	1	50
1,2,4,5-Tetrachlorobenzene	79		79		40-117	0	50
Acetophenone	88		89		14-144	1	50
2,4,6-Trichlorophenol	85		85		30-130	0	50
p-Chloro-m-cresol	92		93		26-103	1	50
2-Chlorophenol	82		85		25-102	4	50
2,4-Dichlorophenol	88		89		30-130	1	50
2,4-Dimethylphenol	89		90		30-130	1	50
2-Nitrophenol	82		83		30-130	1	50
4-Nitrophenol	105		106		11-114	1	50
2,4-Dinitrophenol	78		80		4-130	3	50
4,6-Dinitro-o-cresol	93		94		10-130	1	50
Pentachlorophenol	81		84		17-109	4	50
Phenol	86		89		26-90	3	50
2-Methylphenol	89		89		30-130.	0	50
3-Methylphenol/4-Methylphenol	89		90		30-130	1	50
2,4,5-Trichlorophenol	88		90		30-130	2	50
Benzoic Acid	78		79		10-110	1	50
Benzyl Alcohol	85		88		40-140	3	50
Carbazole	89		89		54-128	0	50



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	% Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS - Westboro	ugh Lab Associa	ated sample(s)	: 10 Batch:	WG1261865-2	WG1261865-3				
1,4-Dioxane	55		54		40-140	2		50	

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
2-Fluorophenol	80	83	25-120
Phenol-d6	83	85	10-120
Nitrobenzene-d5	80	84	23-120
2-Fluorobiphenyl	78	80	30-120
2,4,6-Tribromophenol	75	74	10-136
4-Terphenyl-d14	82	82	18-120



PCBS



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-01 Date Collected: 07/05/19 09:30

Client ID: SB018 (0'-3') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 07/11/19 21:52

Analytical Date: 07/13/19 00:12 Cleanup Method: EPA 3665A
Analyst: WR Cleanup Date: 07/12/19
Percent Solids: 93% Cleanup Method: EPA 3660B

Percent Solids: 93% Cleanup Method: EPA 3660 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column				
Polychlorinated Biphenyls by GC - Westborough Lab											
Aroclor 1016	ND		ug/kg	34.7	3.08	1	Α				
Aroclor 1221	ND		ug/kg	34.7	3.48	1	Α				
Aroclor 1232	ND		ug/kg	34.7	7.37	1	Α				
Aroclor 1242	ND		ug/kg	34.7	4.68	1	Α				
Aroclor 1248	ND		ug/kg	34.7	5.21	1	Α				
Aroclor 1254	ND		ug/kg	34.7	3.80	1	Α				
Aroclor 1260	ND		ug/kg	34.7	6.42	1	Α				
Aroclor 1262	ND		ug/kg	34.7	4.41	1	Α				
Aroclor 1268	4.40	J	ug/kg	34.7	3.60	1	Α				
PCBs, Total	4.40	J	ug/kg	34.7	3.08	1	Α				

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	Α
Decachlorobiphenyl	58		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	48		30-150	В
Decachlorobiphenyl	48		30-150	В



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-07 Date Collected: 07/05/19 11:00

Client ID: SB020 (0'-3') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 07/11/19 21:52

Analytical Date: 07/13/19 00:28 Cleanup Method: EPA 3665A
Analyst: WR Cleanup Date: 07/12/19
Percent Solids: 89% Cleanup Method: EPA 3660B

Percent Solids: 89% Cleanup Method: EPA 366 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column			
Polychlorinated Biphenyls by GC - Westborough Lab										
Aroclor 1016	ND		ug/kg	35.9	3.18	1	А			
Aroclor 1221	ND		ug/kg	35.9	3.59	1	Α			
Aroclor 1232	ND		ug/kg	35.9	7.60	1	Α			
Aroclor 1242	ND		ug/kg	35.9	4.84	1	Α			
Aroclor 1248	ND		ug/kg	35.9	5.38	1	Α			
Aroclor 1254	58.5	Р	ug/kg	35.9	3.92	1	Α			
Aroclor 1260	16.1	J	ug/kg	35.9	6.63	1	В			
Aroclor 1262	ND		ug/kg	35.9	4.56	1	Α			
Aroclor 1268	7.25	J	ug/kg	35.9	3.72	1	Α			
PCBs, Total	81.9	J	ug/kg	35.9	3.18	1	В			

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	Α
Decachlorobiphenyl	61		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	46		30-150	В
Decachlorobiphenyl	51		30-150	В



07/12/19

Cleanup Date:

Project Name: 355 EXTERIOR ST. Lab Number: L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-11 Date Collected: 07/05/19 12:45

Client ID: SB022 (0'-3') Date Received: 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 07/11/19 21:52
Analytical Date: 07/13/19 00:40 Cleanup Method: EPA 3665A

Analytical Date: 07/13/19 00:40 Cleanup Method: EPA 3665A
Analyst: WR Cleanup Date: 07/12/19
Percent Solids: 91% Cleanup Method: EPA 3660B

Qualifier RL MDL Result Units **Dilution Factor** Column **Parameter** Polychlorinated Biphenyls by GC - Westborough Lab Aroclor 1016 ND ug/kg 35.8 3.18 1 Α Aroclor 1221 ND ug/kg 35.8 3.59 Α Aroclor 1232 ND ug/kg 35.8 7.60 1 Α ND 35.8 1 Aroclor 1242 ug/kg 4.83 Α Aroclor 1248 ND ug/kg 35.8 5.38 1 Α Р Aroclor 1254 40.8 ug/kg 35.8 3.92 1 Α J Aroclor 1260 19.4 35.8 6.62 1 Α ug/kg Aroclor 1262 ND ug/kg 35.8 4.55 1 Α J Aroclor 1268 6.98 35.8 3.71 1 ug/kg Α PCBs, Total 67.2 J 35.8 3.18 1 Α ug/kg

Cumanata	Acceptance						
Surrogate	% Recovery	Qualifier	Criteria	Column			
2,4,5,6-Tetrachloro-m-xylene	60		30-150	Α			
Decachlorobiphenyl	56		30-150	Α			
2,4,5,6-Tetrachloro-m-xylene	49		30-150	В			
Decachlorobiphenyl	49		30-150	В			



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 07/12/19 01:22

Analyst: HT

Extraction Method: EPA 3546
Extraction Date: 07/11/19 10:09
Cleanup Method: EPA 3665A
Cleanup Date: 07/11/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC	- Westborougl	n Lab for s	ample(s):	01,07,11	Batch: WG12	258585-1
Aroclor 1016	ND		ug/kg	31.9	2.84	Α
Aroclor 1221	ND		ug/kg	31.9	3.20	Α
Aroclor 1232	ND		ug/kg	31.9	6.77	Α
Aroclor 1242	ND		ug/kg	31.9	4.30	Α
Aroclor 1248	ND		ug/kg	31.9	4.79	Α
Aroclor 1254	ND		ug/kg	31.9	3.49	Α
Aroclor 1260	ND		ug/kg	31.9	5.90	Α
Aroclor 1262	ND		ug/kg	31.9	4.05	Α
Aroclor 1268	ND		ug/kg	31.9	3.31	Α
PCBs, Total	ND		ug/kg	31.9	2.84	Α

		Acceptance			
Surrogate	%Recovery Q	ualifier	Criteria	Column	
2,4,5,6-Tetrachloro-m-xylene	60		30-150	Α	
Decachlorobiphenyl	63		30-150	Α	
2,4,5,6-Tetrachloro-m-xylene	60		30-150	В	
Decachlorobiphenyl	68		30-150	В	



Project Name: 355 EXTERIOR ST. Project Number: LST1802 TASK 07

Lab Number: L1929439

Report Date:

08/05/19

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	Column
Polychlorinated Biphenyls by GC - Westbo	ough Lab Associa	ated sample(s)	: 01,07,11 Ba	atch: WG1	258585-2 WG125	8585-3			
Aroclor 1016	75		72		40-140	4		50	Α
Aroclor 1260	66		64		40-140	3		50	Α

Surrogate	LCS %Recovery Q	LCSD ual %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	76	72	30-150 A
Decachlorobiphenyl	74	71	30-150 A
2,4,5,6-Tetrachloro-m-xylene	73	71	30-150 B
Decachlorobiphenyl	78	75	30-150 B



PESTICIDES



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-01 Date Collected: 07/05/19 09:30

Client ID: SB018 (0'-3') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 07/11/19 21:56

Analytical Date: 07/13/19 12:39 Cleanup Method: EPA 3620B
Analyst: BM Cleanup Date: 07/12/19

Analyst: BM Clean Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - W	estborough Lab						
Delta-BHC	ND		ug/kg	1.66	0.326	1	Α
Lindane	ND		ug/kg	0.693	0.310	1	Α
Alpha-BHC	ND		ug/kg	0.693	0.197	1	Α
Beta-BHC	ND		ug/kg	1.66	0.631	1	Α
Heptachlor	ND		ug/kg	0.832	0.373	1	Α
Aldrin	ND		ug/kg	1.66	0.586	1	Α
Heptachlor epoxide	ND		ug/kg	3.12	0.936	1	Α
Endrin	ND		ug/kg	0.693	0.284	1	Α
Endrin aldehyde	ND		ug/kg	2.08	0.728	1	Α
Endrin ketone	ND		ug/kg	1.66	0.428	1	Α
Dieldrin	1.77		ug/kg	1.04	0.520	1	В
4,4'-DDE	ND		ug/kg	1.66	0.385	1	Α
4,4'-DDD	1.95		ug/kg	1.66	0.593	1	В
4,4'-DDT	3.05	J	ug/kg	3.12	1.34	1	В
Endosulfan I	ND		ug/kg	1.66	0.393	1	Α
Endosulfan II	ND		ug/kg	1.66	0.556	1	Α
Endosulfan sulfate	ND		ug/kg	0.693	0.330	1	Α
Methoxychlor	ND		ug/kg	3.12	0.970	1	Α
Toxaphene	ND		ug/kg	31.2	8.73	1	Α
cis-Chlordane	0.699	J	ug/kg	2.08	0.579	1	Α
trans-Chlordane	ND	IP	ug/kg	2.08	0.549	1	Α
Chlordane	ND		ug/kg	13.5	5.51	1	Α



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Report Date: **Project Number:** LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-01 Date Collected: 07/05/19 09:30

Date Received: Client ID: 07/08/19 SB018 (0'-3') Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Result Qualifier Units RL MDL **Dilution Factor** Column Parameter

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	В
Decachlorobiphenyl	80		30-150	В
2,4,5,6-Tetrachloro-m-xylene	83		30-150	Α
Decachlorobiphenyl	79		30-150	Α



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-07 Date Collected: 07/05/19 11:00

Client ID: SB020 (0'-3') Date Received: 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8081B Extraction Date: 07/11/19 21:56

Analytical Date: 07/16/19 19:23 Cleanup Method: EPA 3620B
Analyst: KEG Cleanup Date: 07/12/19
Percent Solids: 89% Cleanup Method: EPA 3660B

Cleanup Date: 07/16/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westbo	rough Lab						
Delta-BHC	ND		ug/kg	1.77	0.347	1	Α
Lindane	ND			0.738	0.330	<u>'</u> 1	A
	ND ND		ug/kg		0.330		
Alpha-BHC			ug/kg	0.738		1	Α
Beta-BHC	ND		ug/kg	1.77	0.671	1	Α
Heptachlor	ND		ug/kg	0.885	0.397	1	Α
Aldrin	ND		ug/kg	1.77	0.623	1	Α
Heptachlor epoxide	ND		ug/kg	3.32	0.996	1	Α
Endrin	ND		ug/kg	0.738	0.302	1	Α
Endrin aldehyde	ND		ug/kg	2.21	0.774	1	Α
Endrin ketone	ND		ug/kg	1.77	0.456	1	Α
Dieldrin	ND		ug/kg	1.11	0.553	1	Α
4,4'-DDE	3.18	IP	ug/kg	1.77	0.409	1	В
4,4'-DDD	4.78		ug/kg	1.77	0.631	1	Α
4,4'-DDT	ND		ug/kg	3.32	1.42	1	Α
Endosulfan I	ND		ug/kg	1.77	0.418	1	Α
Endosulfan II	ND		ug/kg	1.77	0.592	1	Α
Endosulfan sulfate	ND		ug/kg	0.738	0.351	1	Α
Methoxychlor	ND		ug/kg	3.32	1.03	1	Α
Toxaphene	ND		ug/kg	33.2	9.29	1	Α
cis-Chlordane	1.08	J	ug/kg	2.21	0.617	1	В
trans-Chlordane	ND		ug/kg	2.21	0.584	1	Α
Chlordane	ND		ug/kg	14.4	5.86	1	Α



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-07 Date Collected: 07/05/19 11:00

Client ID: SB020 (0'-3') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	В
Decachlorobiphenyl	161	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	100		30-150	Α
Decachlorobiphenyl	102		30-150	Α



Project Name: Lab Number: 355 EXTERIOR ST. L1929439

Report Date: **Project Number:** LST1802 TASK 07 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-11 Date Collected: 07/05/19 12:45

Date Received: Client ID: 07/08/19 SB022 (0'-3') Field Prep:

Sample Location: 355 EXTERIOR ST., BRONX, NY Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 07/11/19 21:56 Analytical Method: 1,8081B

Cleanup Method: EPA 3620B Analytical Date: 07/13/19 13:05 Cleanup Date: 07/12/19

Analyst: BM 91% Percent Solids:

Organochlorine Pesticides by GC - Westbo Delta-BHC Lindane Alpha-BHC Beta-BHC	ND ND ND ND ND		ug/kg ug/kg ug/kg ug/kg ug/kg	1.69 0.705 0.705 1.69 0.846	0.331 0.315 0.200 0.642 0.379	1 1 1	A A A
Lindane Alpha-BHC Beta-BHC	ND ND ND ND		ug/kg ug/kg ug/kg	0.705 0.705 1.69	0.315 0.200 0.642	1	A A
Alpha-BHC Beta-BHC	ND ND ND		ug/kg ug/kg	0.705 1.69	0.200 0.642	1	А
Beta-BHC	ND ND ND		ug/kg	1.69	0.642		
	ND ND					1	^
	ND		ug/kg	0.846	0.379		Α
Heptachlor					0.073	1	Α
Aldrin			ug/kg	1.69	0.596	1	Α
Heptachlor epoxide	ND		ug/kg	3.17	0.952	1	Α
Endrin	ND		ug/kg	0.705	0.289	1	Α
Endrin aldehyde	ND		ug/kg	2.12	0.740	1	Α
Endrin ketone	ND		ug/kg	1.69	0.436	1	Α
Dieldrin	1.72	IP	ug/kg	1.06	0.529	1	Α
4,4'-DDE	2.28	Р	ug/kg	1.69	0.391	1	Α
4,4'-DDD	2.31		ug/kg	1.69	0.604	1	В
4,4'-DDT	7.40	IP	ug/kg	3.17	1.36	1	Α
Endosulfan I	ND		ug/kg	1.69	0.400	1	Α
Endosulfan II	0.568	JIP	ug/kg	1.69	0.566	1	Α
Endosulfan sulfate	ND		ug/kg	0.705	0.336	1	Α
Methoxychlor	ND		ug/kg	3.17	0.987	1	Α
Toxaphene	ND		ug/kg	31.7	8.88	1	Α
cis-Chlordane	ND		ug/kg	2.12	0.590	1	Α
trans-Chlordane	ND		ug/kg	2.12	0.558	1	Α
Chlordane	ND		ug/kg	13.8	5.61	1	Α

Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-11 Date Collected: 07/05/19 12:45

Client ID: SB022 (0'-3') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	В
Decachlorobiphenyl	73		30-150	В
2,4,5,6-Tetrachloro-m-xylene	86		30-150	Α
Decachlorobiphenyl	76		30-150	Α



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 07/11/19 15:13

Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 07/11/19 09:05
Cleanup Method: EPA 3620B
Cleanup Date: 07/11/19

Parameter	Result	Qualifier	Units	RL		MDL	Column
Organochlorine Pesticides b	y GC - Westborough	n Lab for	sample(s):	01,11	Batch:	WG12	58538-1
Delta-BHC	ND		ug/kg	1.55		0.304	А
Lindane	ND		ug/kg	0.646		0.289	Α
Alpha-BHC	ND		ug/kg	0.646		0.184	Α
Beta-BHC	ND		ug/kg	1.55		0.588	Α
Heptachlor	ND		ug/kg	0.776		0.348	Α
Aldrin	ND		ug/kg	1.55		0.546	Α
Heptachlor epoxide	ND		ug/kg	2.91		0.873	Α
Endrin	ND		ug/kg	0.646		0.265	Α
Endrin aldehyde	ND		ug/kg	1.94		0.679	Α
Endrin ketone	ND		ug/kg	1.55		0.399	Α
Dieldrin	ND		ug/kg	0.970		0.485	Α
4,4'-DDE	ND		ug/kg	1.55		0.359	А
4,4'-DDD	ND		ug/kg	1.55		0.553	Α
4,4'-DDT	ND		ug/kg	2.91		1.25	Α
Endosulfan I	ND		ug/kg	1.55		0.366	Α
Endosulfan II	ND		ug/kg	1.55		0.518	Α
Endosulfan sulfate	ND		ug/kg	0.646		0.308	Α
Methoxychlor	ND		ug/kg	2.91		0.905	Α
Toxaphene	ND		ug/kg	29.1		8.14	А
cis-Chlordane	ND		ug/kg	1.94		0.540	А
trans-Chlordane	ND		ug/kg	1.94		0.512	А
Chlordane	ND		ug/kg	12.6		5.14	А



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B Extraction Method: EPA 3546

 Analytical Date:
 07/11/19 15:13
 Extraction Date:
 07/11/19 09:05

 Analyst:
 KEG
 Cleanup Method:
 EPA 3620B

Cleanup Date: 07/11/19

ParameterResultQualifierUnitsRLMDLColumnOrganochlorine Pesticides by GC - Westborough Lab for sample(s):01,11Batch:WG1258538-1

		Acceptance			
Surrogate	%Recovery	Qualifier	Criteria	Column	
2,4,5,6-Tetrachloro-m-xylene	49		30-150	В	
Decachlorobiphenyl	52		30-150	В	
2,4,5,6-Tetrachloro-m-xylene	49		30-150	Α	
Decachlorobiphenyl	57		30-150	Α	



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 07/16/19 18:07

Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 07/11/19 09:05
Cleanup Method: EPA 3620B
Cleanup Date: 07/11/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/16/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - '	Westborough	Lab for s	sample(s):	07 Batch:	WG126063	3-1
Delta-BHC	ND		ug/kg	1.55	0.304	Α
Lindane	ND		ug/kg	0.646	0.289	Α
Alpha-BHC	ND		ug/kg	0.646	0.184	Α
Beta-BHC	ND		ug/kg	1.55	0.588	Α
Heptachlor	ND		ug/kg	0.776	0.348	А
Aldrin	ND		ug/kg	1.55	0.546	Α
Heptachlor epoxide	ND		ug/kg	2.91	0.873	Α
Endrin	ND		ug/kg	0.646	0.265	Α
Endrin aldehyde	ND		ug/kg	1.94	0.679	Α
Endrin ketone	ND		ug/kg	1.55	0.399	Α
Dieldrin	ND		ug/kg	0.970	0.485	Α
4,4'-DDE	ND		ug/kg	1.55	0.359	Α
4,4'-DDD	ND		ug/kg	1.55	0.553	Α
4,4'-DDT	ND		ug/kg	2.91	1.25	Α
Endosulfan I	ND		ug/kg	1.55	0.366	Α
Endosulfan II	ND		ug/kg	1.55	0.518	Α
Endosulfan sulfate	ND		ug/kg	0.646	0.308	Α
Methoxychlor	ND		ug/kg	2.91	0.905	Α
Toxaphene	ND		ug/kg	29.1	8.14	Α
cis-Chlordane	ND		ug/kg	1.94	0.540	Α
trans-Chlordane	ND		ug/kg	1.94	0.512	Α
Chlordane	ND		ug/kg	12.6	5.14	А



Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439

Project Number: LST1802 TASK 07 Report Date: 08/05/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B Analytical Date: 07/16/19 18:07

Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 07/11/19 09:05
Cleanup Method: EPA 3620B
Cleanup Date: 07/11/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/16/19

ParameterResultQualifierUnitsRLMDLColumnOrganochlorine Pesticides by GC - Westborough Lab for sample(s):07Batch:WG1260633-1

		Acceptance			
Surrogate	%Recovery Quali	fier Criteria	Column		
2,4,5,6-Tetrachloro-m-xylene	53	30-150	В		
Decachlorobiphenyl	66	30-150	В		
2,4,5,6-Tetrachloro-m-xylene	47	30-150	Α		
Decachlorobiphenyl	44	30-150	Α		



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	LCS %Recovery	LCS Qual %Reco		%Recovery Limits	RPD	RPD Qual Limits	Column
Organochlorine Pesticides by GC	- Westborough Lab Assoc	ciated sample(s): 01,11	Batch: WG1258	3538-2 WG12585	538-3		
Delta-BHC	74	85		30-150	14	30	Α
Lindane	74	84		30-150	13	30	А
Alpha-BHC	78	89		30-150	13	30	А
Beta-BHC	66	75		30-150	13	30	А
Heptachlor	65	75		30-150	14	30	А
Aldrin	73	83		30-150	13	30	А
Heptachlor epoxide	74	84		30-150	13	30	А
Endrin	76	88		30-150	15	30	А
Endrin aldehyde	50	57		30-150	13	30	А
Endrin ketone	54	64		30-150	17	30	А
Dieldrin	73	85		30-150	15	30	А
4,4'-DDE	72	81		30-150	12	30	А
4,4'-DDD	63	75		30-150	17	30	А
4,4'-DDT	65	75		30-150	14	30	А
Endosulfan I	65	75		30-150	14	30	А
Endosulfan II	65	74		30-150	13	30	А
Endosulfan sulfate	44	48		30-150	9	30	А
Methoxychlor	56	65		30-150	15	30	А
cis-Chlordane	66	73		30-150	10	30	А
trans-Chlordane	65	74		30-150	13	30	Α



Project Name: 355 EXTERIOR ST.

Lab Number:

L1929439

Project Number: LST1802 TASK 07

Report Date:

08/05/19

	LCS	LCSD %Recovery					RPD		
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,11 Batch: WG1258538-2 WG1258538-3

Surrogate	LCS %Recovery Qu	LCSD ual %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	75	83	30-150 B
Decachlorobiphenyl	77	89	30-150 B
2,4,5,6-Tetrachloro-m-xylene	74	82	30-150 A
Decachlorobiphenyl	81	95	30-150 A

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Delta-BHC Lindane Alpha-BHC Beta-BHC Heptachlor Aldrin Heptachlor epoxide Endrin	%Recovery	Qual	%Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Lindane Alpha-BHC Beta-BHC Heptachlor Aldrin Heptachlor epoxide	gh Lab Assoc	iated sample(s)	: 07 Batch:	WG1260633-	2 WG1260633-3				
Alpha-BHC Beta-BHC Heptachlor Aldrin Heptachlor epoxide	73		90		30-150	21		30	Α
Beta-BHC Heptachlor Aldrin Heptachlor epoxide	77		94		30-150	20		30	А
Heptachlor Aldrin Heptachlor epoxide	80		93		30-150	15		30	А
Aldrin Heptachlor epoxide	75		88		30-150	16		30	А
Heptachlor epoxide	69		80		30-150	15		30	А
· ·	69		82		30-150	17		30	А
Endrin	36		84		30-150	80	Q	30	А
LIMIII	73		87		30-150	18		30	А
Endrin aldehyde	49		58		30-150	17		30	А
Endrin ketone	55		70		30-150	24		30	А
Dieldrin	71		87		30-150	20		30	А
4,4'-DDE	66		83		30-150	23		30	А
4,4'-DDD	71		87		30-150	20		30	А
4,4'-DDT	66		84		30-150	24		30	А
Endosulfan I	62		76		30-150	20		30	А
Endosulfan II	61		80		30-150	27		30	А
Endosulfan sulfate	30		52		30-150	54	Q	30	А
Methoxychlor	56		71		30-150	24		30	А
cis-Chlordane	66		78		30-150	17		30	А
trans-Chlordane	70		80		30-150	13		30	А



Project Name: 355 EXTERIOR ST.

Lab Number:

L1929439

Project Number: LST1802 TASK 07

Report Date:

08/05/19

LCS LCSD %Recovery RPD Parameter %Recovery Qual %Recovery Qual Limits RPD Qual Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 07 Batch: WG1260633-2 WG1260633-3

Surrogate	LCS %Recovery Q	LCSD ual %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	89	89	30-150 B
Decachlorobiphenyl	105	104	30-150 B
2,4,5,6-Tetrachloro-m-xylene	72	84	30-150 A
Decachlorobiphenyl	69	75	30-150 A

METALS



SAMPLE RESULTS

 Lab ID:
 L1929439-01
 Date Collected:
 07/05/19 09:30

 Client ID:
 SB018 (0'-3')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 93%

Percent Solids: Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Man	sfield Lab										
Aluminum, Total	10700		mg/kg	8.47	2.29	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.23	0.322	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Arsenic, Total	1.77		mg/kg	0.847	0.176	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Barium, Total	86.7		mg/kg	0.847	0.147	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Beryllium, Total	0.279	J	mg/kg	0.423	0.028	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.847	0.083	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Calcium, Total	1920		mg/kg	8.47	2.96	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Chromium, Total	24.3		mg/kg	0.847	0.081	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Cobalt, Total	9.65		mg/kg	1.69	0.140	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Copper, Total	28.9		mg/kg	0.847	0.218	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Iron, Total	19200		mg/kg	4.23	0.765	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Lead, Total	23.9		mg/kg	4.23	0.227	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Magnesium, Total	3580		mg/kg	8.47	1.30	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Manganese, Total	191		mg/kg	0.847	0.135	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Mercury, Total	0.078		mg/kg	0.067	0.044	1	07/11/19 07:30	07/11/19 12:12	EPA 7471B	1,7471B	GD
Nickel, Total	13.5		mg/kg	2.12	0.205	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Potassium, Total	4310		mg/kg	212	12.2	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.69	0.218	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.847	0.240	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Sodium, Total	228		mg/kg	169	2.67	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.69	0.267	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Vanadium, Total	34.8		mg/kg	0.847	0.172	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC
Zinc, Total	65.0		mg/kg	4.23	0.248	2	07/11/19 21:54	07/12/19 23:02	EPA 3050B	1,6010D	LC



SAMPLE RESULTS

 Lab ID:
 L1929439-02
 Date Collected:
 07/05/19 09:35

 Client ID:
 SB018 (3'-6')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 90%

Total Metals - Mans	sfield Lab										Analyst
	4880										
Aluminum, Total			mg/kg	8.88	2.40	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Antimony, Total	0.835	J	mg/kg	4.44	0.338	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Arsenic, Total	5.94		mg/kg	0.888	0.185	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Barium, Total	83.4		mg/kg	0.888	0.155	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Beryllium, Total	0.231	J	mg/kg	0.444	0.029	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Cadmium, Total	0.240	J	mg/kg	0.888	0.087	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Calcium, Total	14500		mg/kg	8.88	3.11	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Chromium, Total	13.4		mg/kg	0.888	0.085	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Cobalt, Total	5.81		mg/kg	1.78	0.148	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Copper, Total	44.6		mg/kg	0.888	0.229	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Iron, Total	12200		mg/kg	4.44	0.802	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Lead, Total	190		mg/kg	4.44	0.238	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Magnesium, Total	6740		mg/kg	8.88	1.37	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Manganese, Total	209		mg/kg	0.888	0.141	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Mercury, Total	0.530		mg/kg	0.070	0.046	1	07/17/19 05:20	07/17/19 11:07	EPA 7471B	1,7471B	GD
Nickel, Total	13.1		mg/kg	2.22	0.215	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Potassium, Total	1040		mg/kg	222	12.8	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Selenium, Total	0.640	J	mg/kg	1.78	0.229	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.888	0.251	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Sodium, Total	201		mg/kg	178	2.80	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.78	0.280	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Vanadium, Total	17.4		mg/kg	0.888	0.180	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB
Zinc, Total	160		mg/kg	4.44	0.260	2	07/16/19 21:55	07/18/19 21:58	EPA 3050B	1,6010D	AB



SAMPLE RESULTS

 Lab ID:
 L1929439-04
 Date Collected:
 07/05/19 10:25

 Client ID:
 SB019 (0'-3')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 89%

Percent Solids: Parameter	89% Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
- arameter	Nesun	Qualifier	Office	NL .	IVIDL						Allalyst
Total Metals - Man	sfield Lab										
Aluminum, Total	10700		mg/kg	8.72	2.35	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Antimony, Total	1.46	J	mg/kg	4.36	0.331	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Arsenic, Total	4.92		mg/kg	0.872	0.181	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Barium, Total	185		mg/kg	0.872	0.152	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Beryllium, Total	0.410	J	mg/kg	0.436	0.029	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Cadmium, Total	0.837	J	mg/kg	0.872	0.085	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Calcium, Total	6400		mg/kg	8.72	3.05	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Chromium, Total	24.9		mg/kg	0.872	0.084	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Cobalt, Total	9.68		mg/kg	1.74	0.145	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Copper, Total	81.7		mg/kg	0.872	0.225	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Iron, Total	19800		mg/kg	4.36	0.787	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Lead, Total	182		mg/kg	4.36	0.234	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Magnesium, Total	3710		mg/kg	8.72	1.34	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Manganese, Total	234		mg/kg	0.872	0.138	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Mercury, Total	0.826		mg/kg	0.071	0.047	1	07/17/19 05:20	07/17/19 11:08	EPA 7471B	1,7471B	GD
Nickel, Total	22.4		mg/kg	2.18	0.211	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Potassium, Total	3220		mg/kg	218	12.6	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Selenium, Total	0.296	J	mg/kg	1.74	0.225	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.872	0.247	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Sodium, Total	150	J	mg/kg	174	2.74	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.74	0.274	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Vanadium, Total	49.1		mg/kg	0.872	0.177	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB
Zinc, Total	375		mg/kg	4.36	0.255	2	07/16/19 21:55	5 07/18/19 22:02	EPA 3050B	1,6010D	AB



SAMPLE RESULTS

 Lab ID:
 L1929439-05
 Date Collected:
 07/05/19 10:30

 Client ID:
 SB019 (3'-6')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 83%

Percent Solids: Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Man	sfield Lab										
Aluminum, Total	6900		mg/kg	9.57	2.58	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Antimony, Total	9.27		mg/kg	4.79	0.364	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Arsenic, Total	21.3		mg/kg	0.957	0.199	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Barium, Total	275		mg/kg	0.957	0.166	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Beryllium, Total	0.373	J	mg/kg	0.479	0.032	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Cadmium, Total	3.40		mg/kg	0.957	0.094	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Calcium, Total	15100		mg/kg	9.57	3.35	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Chromium, Total	49.1		mg/kg	0.957	0.092	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Cobalt, Total	7.63		mg/kg	1.91	0.159	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Copper, Total	183		mg/kg	0.957	0.247	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Iron, Total	28200		mg/kg	4.79	0.864	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Lead, Total	1060		mg/kg	4.79	0.256	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Magnesium, Total	4060		mg/kg	9.57	1.47	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Manganese, Total	236		mg/kg	0.957	0.152	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Mercury, Total	0.784		mg/kg	0.077	0.050	1	07/17/19 05:20	07/17/19 11:10	EPA 7471B	1,7471B	GD
Nickel, Total	43.1		mg/kg	2.39	0.232	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Potassium, Total	1280		mg/kg	239	13.8	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Selenium, Total	1.77	J	mg/kg	1.91	0.247	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Silver, Total	0.680	J	mg/kg	0.957	0.271	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Sodium, Total	334		mg/kg	191	3.02	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.91	0.302	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Vanadium, Total	82.2		mg/kg	0.957	0.194	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB
Zinc, Total	1250		mg/kg	4.79	0.280	2	07/16/19 21:55	5 07/18/19 22:06	EPA 3050B	1,6010D	AB



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

 Lab ID:
 L1929439-06
 Date Collected:
 07/05/19 10:35

 Client ID:
 SB019 (6'-9')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 83%

reiteilt Solius.	0070					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Arsenic, Total	1.01		mg/kg	0.474	0.099	1	07/29/19 10:30	0 07/29/19 12:28	EPA 3050B	1,6010D	PS
Lead, Total	71.8		mg/kg	2.37	0.127	1	07/29/19 10:30	0 07/29/19 12:28	EPA 3050B	1,6010D	PS



07/05/19 11:00

Date Collected:

 Project Name:
 355 EXTERIOR ST.
 Lab Number:
 L1929439

 Project Number:
 LST1802 TASK 07
 Report Date:
 08/05/19

SAMPLE RESULTS

Lab ID: L1929439-07 Client ID: SB020 (0'-3')

Client ID: SB020 (0'-3') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 89%

Dilution Date Date Prep **Analytical** Method Qualifier Factor **Prepared** Analyzed Method Parameter Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 7440 mg/kg 8.80 2.38 2 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC 4.40 0.334 2 1,6010D LC Antimony, Total 5.49 mg/kg 07/11/19 21:54 07/12/19 23:06 EPA 3050B 2 Arsenic, Total 10.2 mg/kg 0.880 0.183 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC 2 Barium, Total 217 0.880 0.153 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC mg/kg 0.290 J 0.029 2 1,6010D LC Beryllium, Total mg/kg 0.440 07/11/19 21:54 07/12/19 23:06 EPA 3050B 2 0.086 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC Cadmium, Total 0.932 mg/kg 0.880 07/11/19 21:54 07/12/19 23:06 EPA 3050B Calcium, Total 11400 8.80 3.08 2 1,6010D mg/kg LC 2 1,6010D LC Chromium, Total 25.4 0.880 0.084 07/11/19 21:54 07/12/19 23:06 EPA 3050B mg/kg 2 1,6010D LC Cobalt, Total 11.0 mg/kg 1.76 0.146 07/11/19 21:54 07/12/19 23:06 EPA 3050B 2 1,6010D Copper, Total 133 mg/kg 0.880 0.227 07/11/19 21:54 07/12/19 23:06 EPA 3050B LC 0.794 2 1,6010D LC Iron, Total 39000 4.40 07/11/19 21:54 07/12/19 23:06 EPA 3050B mg/kg 389 2 Lead, Total mg/kg 4.40 0.236 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC Magnesium, Total 4350 8.80 1.35 2 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC mg/kg 385 0.880 0.140 2 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC Manganese, Total mg/kg 1 Mercury, Total 0.924 mg/kg 0.071 0.046 07/11/19 07:30 07/11/19 12:18 EPA 7471B 1,7471B GD Nickel, Total 23.9 2.20 0.213 2 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC mg/kg 2090 2 1,6010D LC Potassium, Total mg/kg 220 12.7 07/11/19 21:54 07/12/19 23:06 EPA 3050B Selenium, Total ND mg/kg 1.76 0.227 2 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC J Silver, Total 0.352 mg/kg 0.880 0.249 2 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC Sodium, Total 288 mg/kg 176 2.77 2 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC Thallium, Total ND mg/kg 1.76 0.277 2 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC Vanadium, Total 30.0 0.880 2 07/11/19 21:54 07/12/19 23:06 EPA 3050B 1,6010D LC mg/kg 0.178 2 1,6010D LC 360 4.40 0.258 07/11/19 21:54 07/12/19 23:06 EPA 3050B Zinc, Total mg/kg



 Project Name:
 355 EXTERIOR ST.
 Lab Number:
 L1929439

 Project Number:
 LST1802 TASK 07
 Report Date:
 08/05/19

SAMPLE RESULTS

 Lab ID:
 L1929439-08
 Date Collected:
 07/05/19 11:45

 Client ID:
 SB021 (0'-3')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 90%

Dilution Date Date Prep **Analytical** Method Qualifier Factor **Prepared** Analyzed Method Parameter Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 11400 mg/kg 8.29 2.24 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D ΑB ND 2 1,6010D Antimony, Total mg/kg 4.14 0.315 07/16/19 21:55 07/18/19 22:10 EPA 3050B AB 2 Arsenic, Total 2.84 mg/kg 0.829 0.172 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D AΒ 2 Barium, Total 83.4 0.829 0.144 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D ΑB mg/kg J 0.027 2 1,6010D Beryllium, Total 0.315 mg/kg 0.414 07/16/19 21:55 07/18/19 22:10 EPA 3050B AΒ J 2 0.081 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D AΒ Cadmium, Total 0.091 mg/kg 0.829 Calcium, Total 2790 8.29 2.90 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D mg/kg AΒ 0.080 2 1,6010D Chromium, Total 24.3 0.829 07/16/19 21:55 07/18/19 22:10 EPA 3050B AΒ mg/kg 2 1,6010D Cobalt, Total 12.1 mg/kg 1.66 0.138 07/16/19 21:55 07/18/19 22:10 EPA 3050B AΒ 2 1,6010D Copper, Total 28.2 mg/kg 0.829 0.214 07/16/19 21:55 07/18/19 22:10 EPA 3050B AΒ 20800 2 1,6010D AΒ Iron, Total 4.14 0.748 07/16/19 21:55 07/18/19 22:10 EPA 3050B mg/kg 32.7 2 1,6010D Lead, Total mg/kg 4.14 0.222 07/16/19 21:55 07/18/19 22:10 EPA 3050B AΒ Magnesium, Total 3820 8.29 1.28 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D AB mg/kg 747 0.829 0.132 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D Manganese, Total mg/kg AΒ Mercury, Total ND mg/kg 0.070 0.045 1 07/17/19 05:20 07/17/19 11:12 EPA 7471B 1,7471B GD Nickel, Total 15.5 2.07 0.200 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D AB mg/kg 2 1,6010D Potassium, Total 5110 mg/kg 207 11.9 07/16/19 21:55 07/18/19 22:10 EPA 3050B AΒ Selenium, Total ND mg/kg 1.66 0.214 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D AB Silver, Total ND mg/kg 0.829 0.234 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D AΒ Sodium, Total 249 mg/kg 166 2.61 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D AΒ Thallium, Total ND mg/kg 1.66 0.261 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D AB Vanadium, Total 33.4 0.829 2 07/16/19 21:55 07/18/19 22:10 EPA 3050B 1,6010D AΒ mg/kg 0.168 2 1.6010D 83.2 0.243 07/16/19 21:55 07/18/19 22:10 EPA 3050B AΒ Zinc, Total mg/kg 4.14



SAMPLE RESULTS

 Lab ID:
 L1929439-09
 Date Collected:
 07/05/19 11:50

 Client ID:
 SB021 (3'-6')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 92%

Dilution Date Date Prep **Analytical** Method Qualifier Factor **Prepared** Analyzed Method Parameter Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 8250 mg/kg 8.46 2.28 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D ΑB J 4.23 0.321 2 1,6010D Antimony, Total 1.18 mg/kg 07/16/19 21:55 07/18/19 22:15 EPA 3050B AB 2 Arsenic, Total 7.84 mg/kg 0.846 0.176 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D AΒ 2 Barium, Total 121 0.846 0.147 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D ΑB mg/kg 0.288 J 0.423 0.028 2 1,6010D Beryllium, Total mg/kg 07/16/19 21:55 07/18/19 22:15 EPA 3050B AΒ J 2 0.083 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D AΒ Cadmium, Total 0.524 mg/kg 0.846 Calcium, Total 11300 8.46 2.96 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D mg/kg AΒ 2 1,6010D Chromium, Total 16.0 0.846 0.081 07/16/19 21:55 07/18/19 22:15 EPA 3050B AΒ mg/kg 2 8.08 1,6010D Cobalt, Total mg/kg 1.69 0.140 07/16/19 21:55 07/18/19 22:15 EPA 3050B AΒ 2 1,6010D Copper, Total 189 mg/kg 0.846 0.218 07/16/19 21:55 07/18/19 22:15 EPA 3050B AΒ 26300 0.764 2 1,6010D AΒ Iron, Total 4.23 07/16/19 21:55 07/18/19 22:15 EPA 3050B mg/kg 145 2 1,6010D Lead, Total mg/kg 4.23 0.227 07/16/19 21:55 07/18/19 22:15 EPA 3050B AΒ Magnesium, Total 3480 8.46 1.30 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D AB mg/kg 278 0.846 0.134 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D Manganese, Total mg/kg AΒ 1 Mercury, Total 0.143 mg/kg 0.069 0.045 07/17/19 05:20 07/17/19 11:14 EPA 7471B 1,7471B GD Nickel, Total 26.1 0.205 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D AB mg/kg 2.11 1960 2 1,6010D Potassium, Total mg/kg 211 12.2 07/16/19 21:55 07/18/19 22:15 EPA 3050B AΒ Selenium, Total 0.364 J mg/kg 1.69 0.218 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D AB Silver, Total 0.651 J mg/kg 0.846 0.239 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D AΒ Sodium, Total 320 mg/kg 169 2.66 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D AΒ Thallium, Total ND mg/kg 1.69 0.266 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D AB Vanadium, Total 20.5 0.846 2 07/16/19 21:55 07/18/19 22:15 EPA 3050B 1,6010D AΒ mg/kg 0.172 2 1.6010D 207 4.23 0.248 07/16/19 21:55 07/18/19 22:15 EPA 3050B AΒ Zinc, Total mg/kg



SAMPLE RESULTS

 Lab ID:
 L1929439-11
 Date Collected:
 07/05/19 12:45

 Client ID:
 SB022 (0'-3')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 91%

Percent Solids: Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Man	sfield Lab										
Aluminum, Total	5680		mg/kg	8.47	2.29	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Antimony, Total	4.29		mg/kg	4.23	0.322	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Arsenic, Total	7.99		mg/kg	0.847	0.176	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Barium, Total	300		mg/kg	0.847	0.147	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Beryllium, Total	0.220	J	mg/kg	0.423	0.028	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Cadmium, Total	0.881		mg/kg	0.847	0.083	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Calcium, Total	9490		mg/kg	8.47	2.96	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Chromium, Total	13.3		mg/kg	0.847	0.081	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Cobalt, Total	6.76		mg/kg	1.69	0.140	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Copper, Total	137		mg/kg	0.847	0.218	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Iron, Total	24100		mg/kg	4.23	0.765	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Lead, Total	240		mg/kg	4.23	0.227	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Magnesium, Total	4450		mg/kg	8.47	1.30	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Manganese, Total	279		mg/kg	0.847	0.135	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Mercury, Total	0.341		mg/kg	0.070	0.046	1	07/11/19 07:30	07/11/19 12:20	EPA 7471B	1,7471B	GD
Nickel, Total	13.7		mg/kg	2.12	0.205	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Potassium, Total	1120		mg/kg	212	12.2	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.69	0.218	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.847	0.240	2	07/11/19 21:54	1 07/12/19 23:11	EPA 3050B	1,6010D	LC
Sodium, Total	120	J	mg/kg	169	2.67	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.69	0.267	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Vanadium, Total	24.9		mg/kg	0.847	0.172	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC
Zinc, Total	285		mg/kg	4.23	0.248	2	07/11/19 21:54	107/12/19 23:11	EPA 3050B	1,6010D	LC



SAMPLE RESULTS

 Lab ID:
 L1929439-12
 Date Collected:
 07/05/19 13:50

 Client ID:
 SB023 (0'-3')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 85%

Dilution Date Date Prep **Analytical** Method Qualifier Factor **Prepared** Analyzed Method Parameter Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 7720 mg/kg 9.08 2.45 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AΒ 4.54 2 1,6010D Antimony, Total 9.20 mg/kg 0.345 07/16/19 21:55 07/18/19 22:19 EPA 3050B AB 2 Arsenic, Total 2.67 mg/kg 0.908 0.189 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AΒ 2 Barium, Total 54.0 0.908 0.158 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D ΑB mg/kg 0.309 J 0.030 2 1,6010D Beryllium, Total mg/kg 0.454 07/16/19 21:55 07/18/19 22:19 EPA 3050B AΒ 2 ND 0.089 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AΒ Cadmium, Total mg/kg 0.908 Calcium, Total 14300 9.08 3.18 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D mg/kg AΒ 2 1,6010D Chromium, Total 15.3 0.908 0.087 07/16/19 21:55 07/18/19 22:19 EPA 3050B AΒ mg/kg 2 1,6010D Cobalt, Total 7.14 mg/kg 1.82 0.151 07/16/19 21:55 07/18/19 22:19 EPA 3050B AΒ 2 1,6010D Copper, Total 17.4 mg/kg 0.908 0.234 07/16/19 21:55 07/18/19 22:19 EPA 3050B AΒ 0.820 2 1,6010D AΒ Iron, Total 12600 4.54 07/16/19 21:55 07/18/19 22:19 EPA 3050B mg/kg 2 1,6010D Lead, Total 317 mg/kg 4.54 0.243 07/16/19 21:55 07/18/19 22:19 EPA 3050B AΒ Magnesium, Total 4600 9.08 1.40 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AB mg/kg 233 0.908 0.144 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D Manganese, Total mg/kg AΒ Mercury, Total 0.247 mg/kg 0.075 0.049 1 07/17/19 05:20 07/17/19 11:16 EPA 7471B 1,7471B GD Nickel, Total 11.7 2.27 0.220 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AB mg/kg 2530 2 1,6010D Potassium, Total mg/kg 227 13.1 07/16/19 21:55 07/18/19 22:19 EPA 3050B AΒ Selenium, Total ND mg/kg 1.82 0.234 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AB Silver, Total ND mg/kg 0.908 0.257 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AΒ J Sodium, Total 109 mg/kg 182 2.86 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AΒ Thallium, Total ND mg/kg 1.82 0.286 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AB Vanadium, Total 19.5 0.908 0.184 2 07/16/19 21:55 07/18/19 22:19 EPA 3050B 1,6010D AΒ mg/kg 2 1,6010D 49.1 4.54 0.266 07/16/19 21:55 07/18/19 22:19 EPA 3050B AΒ Zinc, Total mg/kg



07/05/19 13:55

Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

Lab ID: L1929439-13 Date Collected:
Client ID: SB023 (3'-6') Date Received:

Client ID: SB023 (3'-6') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Man	sfield Lab										
Aluminum, Total	11600		mg/kg	8.46	2.28	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.23	0.322	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Arsenic, Total	2.38		mg/kg	0.846	0.176	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Barium, Total	113		mg/kg	0.846	0.147	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Beryllium, Total	0.558		mg/kg	0.423	0.028	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.846	0.083	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Calcium, Total	2440		mg/kg	8.46	2.96	2	07/16/19 21:55	07/18/19 22:37	EPA 3050B	1,6010D	AB
Chromium, Total	21.9		mg/kg	0.846	0.081	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Cobalt, Total	13.1		mg/kg	1.69	0.140	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Copper, Total	28.0		mg/kg	0.846	0.218	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Iron, Total	18100		mg/kg	4.23	0.764	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Lead, Total	66.3		mg/kg	4.23	0.227	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Magnesium, Total	5410		mg/kg	8.46	1.30	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Manganese, Total	213		mg/kg	0.846	0.134	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.071	0.046	1	07/17/19 05:20	07/17/19 11:18	EPA 7471B	1,7471B	GD
Nickel, Total	24.1		mg/kg	2.12	0.205	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Potassium, Total	5520		mg/kg	212	12.2	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.69	0.218	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.846	0.239	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Sodium, Total	142	J	mg/kg	169	2.66	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.69	0.266	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Vanadium, Total	32.8		mg/kg	0.846	0.172	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB
Zinc, Total	75.1		mg/kg	4.23	0.248	2	07/16/19 21:55	5 07/18/19 22:37	EPA 3050B	1,6010D	AB



Project Name: 355 EXTERIOR ST.

Project Number: LST1802 TASK 07

Lab Number: L1929439 **Report Date:** 08/05/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansfi	ield Lab for sample(s):	01,07,11	Batch:	WG125	8441-1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	07/11/19 07:30	07/11/19 11:57	7 1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Antimony, Total Arsenic, Total Barium, Total	ab for sample(s ND ND ND ND ND ND	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Batch: 4.00 2.00 0.400 0.400	1.08 0.152 0.083	8800-1 1 1	07/11/19 21:54 07/11/19 21:54	07/12/19 20:54 07/12/19 20:54	1,6010D	LC
Antimony, Total Arsenic, Total Barium, Total	ND ND ND ND	mg/kg mg/kg mg/kg	2.00 0.400	0.152				,	LC
Arsenic, Total Barium, Total	ND ND ND	mg/kg	0.400		1	07/11/19 21:54	07/12/19 20:54		
Barium, Total	ND ND	mg/kg		0.083			0.712/10 20.04	1,6010D	LC
,	ND		0.400		1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Beryllium, Total		ma/ka		0.070	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
	ND	פיי יפיי	0.200	0.013	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Cadmium, Total	110	mg/kg	0.400	0.039	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Calcium, Total	ND	mg/kg	4.00	1.40	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Chromium, Total	ND	mg/kg	0.400	0.038	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Cobalt, Total	ND	mg/kg	0.800	0.066	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Copper, Total	ND	mg/kg	0.400	0.103	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Iron, Total	ND	mg/kg	2.00	0.361	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Lead, Total	ND	mg/kg	2.00	0.107	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Magnesium, Total	ND	mg/kg	4.00	0.616	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Manganese, Total	ND	mg/kg	0.400	0.064	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Nickel, Total	ND	mg/kg	1.00	0.097	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Potassium, Total	ND	mg/kg	100	5.76	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Selenium, Total	ND	mg/kg	0.800	0.103	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Silver, Total	ND	mg/kg	0.400	0.113	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Sodium, Total	5.67 J	mg/kg	80.0	1.26	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Thallium, Total	ND	mg/kg	0.800	0.126	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Vanadium, Total	ND	mg/kg	0.400	0.081	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC
Zinc, Total	ND	mg/kg	2.00	0.117	1	07/11/19 21:54	07/12/19 20:54	1,6010D	LC



Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansfield	d Lab for sample(s):	02,04-05,	08-09,12	2-13 Ba	atch: WG12	260620-1			
Aluminum, Total	ND	mg/kg	4.00	1.08	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Antimony, Total	ND	mg/kg	2.00	0.152	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Arsenic, Total	ND	mg/kg	0.400	0.083	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Barium, Total	ND	mg/kg	0.400	0.070	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Beryllium, Total	ND	mg/kg	0.200	0.013	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Cadmium, Total	ND	mg/kg	0.400	0.039	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Calcium, Total	ND	mg/kg	4.00	1.40	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Chromium, Total	ND	mg/kg	0.400	0.038	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Cobalt, Total	ND	mg/kg	0.800	0.066	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Copper, Total	ND	mg/kg	0.400	0.103	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Iron, Total	ND	mg/kg	2.00	0.361	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Magnesium, Total	ND	mg/kg	4.00	0.616	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Manganese, Total	ND	mg/kg	0.400	0.064	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Nickel, Total	ND	mg/kg	1.00	0.097	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Potassium, Total	ND	mg/kg	100	5.76	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Selenium, Total	ND	mg/kg	0.800	0.103	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Silver, Total	ND	mg/kg	0.400	0.113	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Sodium, Total	ND	mg/kg	80.0	1.26	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Thallium, Total	ND	mg/kg	0.800	0.126	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Vanadium, Total	ND	mg/kg	0.400	0.081	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB
Zinc, Total	ND	mg/kg	2.00	0.117	1	07/16/19 21:55	07/18/19 20:57	1,6010D	AB

Prep Information

Digestion Method: EPA 3050B



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number:

L1929439

Report Date: 08/05/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansfiel	ld Lab for sample(s):	02,04-05,	08-09,12	2-13 Ba	atch: WG1	260778-1			
Mercury, Total	ND	mg/kg	0.083	0.054	1	07/17/19 05:20	07/17/19 10:49	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield	Lab for sample(s):	06 Batch	: WG12	265731-	1				
Arsenic, Total	ND	mg/kg	0.400	0.083	1	07/29/19 10:30	07/29/19 12:18	3 1,6010D	PS
Lead, Total	ND	mg/kg	2.00	0.107	1	07/29/19 10:30	07/29/19 12:18	3 1,6010D	PS

Prep Information

Digestion Method: EPA 3050B



Lab Control Sample Analysis Batch Quality Control

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

Parameter	LCS %Recovery	Qual	LCSD %Recove	ery Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Total Metals - Mansfield Lab Associated sample	e(s): 01,07,11	Batch: WG1	1258441-2	SRM Lot Number	er: D105-540				
Mercury, Total	94		-		60-141	-			



Lab Control Sample Analysis Batch Quality Control

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	LCS %Recovery	LCSD %Recove		RPD	RPD Limits
Total Metals - Mansfield Lab Associated san	nple(s): 01,07,11	Batch: WG1258800-2	SRM Lot Number: D105-540		
Aluminum, Total	69		51-149	-	
Antimony, Total	138	-	19-249	-	
Arsenic, Total	92	-	70-130	-	
Barium, Total	91		75-125	-	
Beryllium, Total	101		75-125	-	
Cadmium, Total	96	-	75-125	-	
Calcium, Total	84	-	73-127	-	
Chromium, Total	86	-	70-130	-	
Cobalt, Total	91	-	75-125	-	
Copper, Total	89	-	75-125	-	
Iron, Total	78	-	38-162	-	
Lead, Total	81	-	71-128	-	
Magnesium, Total	81	-	63-137	-	
Manganese, Total	89	-	76-124	-	
Nickel, Total	94	-	70-131	-	
Potassium, Total	79	-	60-140	-	
Selenium, Total	90		63-137	-	
Silver, Total	87	-	69-131	-	
Sodium, Total	96	-	37-162	-	
Thallium, Total	90		68-132	-	
Vanadium, Total	86	-	65-135	-	

L1929439

Lab Control Sample Analysis Batch Quality Control

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number:

Parameter	LCS %Recovery	LCSD %Recove	%Recove ery Limits	ry RPD	RPD Limits
Total Metals - Mansfield Lab	Associated sample(s): 01,07,11	Batch: WG1258800-2	SRM Lot Number: D105-540		
Zinc, Total	88		70-130	-	



Lab Control Sample Analysis Batch Quality Control

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
otal Metals - Mansfield Lab Associated sample	e(s): 02,04-05,08-09,12-13	Batch: WG1260620-2	SRM Lot Number: D10	5-540	
Aluminum, Total	67	-	51-149	-	
Antimony, Total	160	-	19-249	-	
Arsenic, Total	105	-	70-130	-	
Barium, Total	102	-	75-125	-	
Beryllium, Total	114	-	75-125	-	
Cadmium, Total	108	-	75-125	-	
Calcium, Total	97	-	73-127	-	
Chromium, Total	98	-	70-130	-	
Cobalt, Total	104	-	75-125	-	
Copper, Total	101	-	75-125	-	
Iron, Total	84	-	38-162	-	
Lead, Total	95	-	71-128	-	
Magnesium, Total	87	-	63-137	-	
Manganese, Total	98	-	76-124	-	
Nickel, Total	105	-	70-131	-	
Potassium, Total	85	-	60-140	-	
Selenium, Total	101	-	63-137	-	
Silver, Total	98	-	69-131	-	
Sodium, Total	103	-	37-162	-	
Thallium, Total	97	-	68-132	-	
Vanadium, Total	94	-	65-135	-	

08/05/19

Lab Control Sample Analysis Batch Quality Control

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Report Date:

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated	sample(s): 02,04-05,08-09,12-13	Batch: WG1260620-2	SRM Lot Number: D10	5-540	
Zinc, Total	102	-	70-130	-	
Total Metals - Mansfield Lab Associated	sample(s): 02,04-05,08-09,12-13	Batch: WG1260778-2	SRM Lot Number: D10	5-540	
Mercury, Total	114	-	60-141	-	
Total Metals - Mansfield Lab Associated	sample(s): 06 Batch: WG126573	31-2 SRM Lot Number	: D105-540		
Arsenic, Total	101	-	70-130	-	

71-128

90



Lead, Total

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

<u>Parameter</u>	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery Qu	Recovery ual Limits	RPD Qual	RPD Limits
Total Metals - Mansfield Lab As	ssociated sam	nple(s): 01,07	7,11 QC	Batch ID: WG1	258441-3	3 WG125	8441-4 QC Sam	ole: L1930158-0	1 Client ID:	MS Sample
Mercury, Total	ND	0.154	0.124	80		0.125	82	80-120	1	20



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

arameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Гotal Metals - Mansfield Lal	b Associated sar	mple(s): 01,07,	11 QC	Batch ID: WG1	258800-	3 QCS	ample: L1928859-04	Client ID:	MS Sample	
Aluminum, Total	15400	183	16400	545	Q	-	-	75-125	-	20
Antimony, Total	39.6	45.8	110	154	Q	-	-	75-125	-	20
Arsenic, Total	7.25	11	22.3	137	Q	-	-	75-125	-	20
Barium, Total	28.5	183	189	88		-	-	75-125	-	20
Beryllium, Total	0.140J	4.58	3.87	84		-	-	75-125	-	20
Cadmium, Total	0.880	4.68	5.74	104		-	-	75-125	-	20
Calcium, Total	35000	917	31100	0	Q	-	-	75-125	-	20
Chromium, Total	22.0	18.3	47.9	141	Q	-	-	75-125	-	20
Cobalt, Total	13.0	45.8	54.9	91		-	-	75-125	-	20
Copper, Total	76000	22.9	63900	0	Q	-	-	75-125	-	20
Iron, Total	15200	91.7	20800	6110	Q	-	-	75-125	-	20
Lead, Total	2020	46.8	2720	1500	Q	-	-	75-125	-	20
Magnesium, Total	8980	917	9130	16	Q	-	-	75-125	-	20
Manganese, Total	493	45.8	558	142	Q	-	-	75-125	-	20
Nickel, Total	5610	45.8	5740	284	Q	-	-	75-125	-	20
Potassium, Total	593	917	1340	81		-	-	75-125	-	20
Selenium, Total	2.04	11	14.6	114		-	-	75-125	-	20
Silver, Total	11.4	27.5	40.2	105		-	-	75-125	-	20
Sodium, Total	155	917	984	90		-	-	75-125	-	20
Thallium, Total	ND	11	8.15	74	Q	-	-	75-125	-	20
Vanadium, Total	10.3	45.8	50.1	87		-	-	75-125	-	20

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

Parameter Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD ound	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield L	ab Associated sam	ple(s): 01,0	7,11 QC	Batch ID: WG125	58800-3	QC S	ample: L1928859-04	Client ID:	MS Sample	
Zinc, Total	5110	45.8	4860	0	Q	-	-	75-125	-	20



Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

arameter	Native Sample	MS Added	MS Found	MS %Recove	ry	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab	b Associated sar	mple(s): 02,0	04-05,08-09	,12-13 Q0	Batch ID:	WG12606	20-3 QC Sample	e: L1929104-01	Client ID:	MS Sample
Aluminum, Total	3860	173	4310	260	Q	-	-	75-125	-	20
Antimony, Total	1.06J	43.3	43.2	100		-	-	75-125	-	20
Arsenic, Total	10.4	10.4	19.6	88		-	-	75-125	-	20
Barium, Total	22.5	173	182	92		-	-	75-125	-	20
Beryllium, Total	0.336	4.33	4.76	102		-	-	75-125	-	20
Cadmium, Total	0.134J	4.42	4.27	97		-	-	75-125	-	20
Calcium, Total	6380	866	10400	464	Q	-	-	75-125	-	20
Chromium, Total	14.5	17.3	31.2	96		-	-	75-125	-	20
Cobalt, Total	5.64	43.3	42.1	84		-	-	75-125	-	20
Copper, Total	74.8	21.6	69.8	0	Q	-	-	75-125	-	20
Iron, Total	10100	86.6	9180	0	Q	-	-	75-125	-	20
Lead, Total	3540	44.2	174	0	Q	-	-	75-125	-	20
Magnesium, Total	2890	866	3560	77		-	-	75-125	-	20
Manganese, Total	81.8	43.3	116	79		-	-	75-125	-	20
Nickel, Total	16.1	43.3	53.8	87		-	-	75-125	-	20
Potassium, Total	1380	866	2070	80		-	-	75-125	-	20
Selenium, Total	ND	10.4	10.6	102		-	-	75-125	-	20
Silver, Total	ND	26	26.4	102		-	-	75-125	-	20
Sodium, Total	2620	866	3900	148	Q	-	-	75-125	-	20
Thallium, Total	ND	10.4	8.08	78		-	-	75-125	-	20
Vanadium, Total	11.9	43.3	51.4	91		-	-	75-125	-	20

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number: L1929439

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield I	Lab Associated sam	ple(s): 02,0	04-05,08-09,	12-13 QC B	atch ID:	WG126062	0-3 QC Samp	le: L1929104-01	Client ID:	MS Sample
Zinc, Total	224	43.3	218	0	Q	-	-	75-125	-	20
Total Metals - Mansfield I	Lab Associated sam	ple(s): 02,0	04-05,08-09,	12-13 QC B	atch ID:	WG126077	8-3 QC Samp	le: L1920721-02	Client ID:	MS Sample
Mercury, Total	ND	0.523	0.534	102		-	-	80-120	-	20
Total Metals - Mansfield I	Lab Associated sam	ple(s): 06	QC Batch	ID: WG126573	31-3 (QC Sample:	L1929439-06 (Client ID: SB019	(6'-9')	
Arsenic, Total	1.01	11.1	11.8	97		-	-	75-125	-	20
Lead, Total	71.8	47	105	70	Q	-	-	75-125	-	20

Lab Duplicate Analysis Batch Quality Control

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

 Lab Number:
 L1929439

 Report Date:
 08/05/19

Parameter Nat	ive Sample	Duplicate Sar	mple Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,07,11	QC Batch ID:	WG1258800-4 Q	C Sample: L1928859	9-04 Client	ID: DUP S	Sample
Antimony, Total	39.6	59.4	mg/kg	40	Q	20
Arsenic, Total	7.25	10.1	mg/kg	33	Q	20
Beryllium, Total	0.140J	0.135J	mg/kg	NC		20
Cadmium, Total	0.880	1.35	mg/kg	42	Q	20
Chromium, Total	22.0	23.1	mg/kg	5		20
Lead, Total	2020	2660	mg/kg	27	Q	20
Selenium, Total	2.04	2.96	mg/kg	37	Q	20
Silver, Total	11.4	14.5	mg/kg	24	Q	20
Thallium, Total	ND	ND	mg/kg	NC		20
otal Metals - Mansfield Lab Associated sample(s): 01,07,11	QC Batch ID:	WG1258800-4 Q	C Sample: L1928859	9-04 Client	ID: DUP S	Sample
Nickel, Total	5610	5550	mg/kg	1		20
Zinc, Total	5110	5040	mg/kg	1		20
otal Metals - Mansfield Lab Associated sample(s): 01,07,11	QC Batch ID:	WG1258800-4 Q	C Sample: L1928859	9-04 Client	ID: DUP S	Sample
Copper, Total	76000	72100	mg/kg	5		20



Lab Duplicate Analysis Batch Quality Control

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

Parameter		Native Sample	<u>Dupli</u>	cate Sample	Units	RPD		RPD Limits
Fotal Metals - Mansfield Lab Sample	Associated sample(s): 02,	04-05,08-09,12-1	3 QC Batch ID): WG1260620-4	QC Sam	ple: L192910	4-01 Clier	nt ID: DUP
Arsenic, Total		10.4		5.28	mg/kg	65	Q	20
Barium, Total		22.5		32.2	mg/kg	35	Q	20
Cadmium, Total		0.134J		ND	mg/kg	NC		20
Chromium, Total		14.5		20.9	mg/kg	36	Q	20
Lead, Total		3540		502	mg/kg	150	Q	20
Selenium, Total		ND		ND	mg/kg	NC		20
Silver, Total		ND		ND	mg/kg	NC		20
otal Metals - Mansfield Lab ample	Associated sample(s): 02,	04-05,08-09,12-1	3 QC Batch ID	D: WG1260778-4	QC Sam	ple: L192072	1-02 Clier	nt ID: DUP
Mercury, Total		ND		ND	mg/kg	NC		20
otal Metals - Mansfield Lab	Associated sample(s): 06	QC Batch ID: V	VG1265731-4	QC Sample: L19	29439-06	Client ID: SB	019 (6'-9')	
Arsenic, Total		1.01		0.841	mg/kg	18		20
Lead, Total		71.8		49.2	mg/kg	37	Q	20



INORGANICS & MISCELLANEOUS



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

 Lab ID:
 L1929439-01
 Date Collected:
 07/05/19 09:30

 Client ID:
 SB018 (0'-3')
 Date Received:
 07/08/19

 Sample Location:
 355 EXTERIOR ST., BRONX, NY
 Field Prep:
 Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab)								
Solids, Total	93.2		%	0.100	NA	1	-	07/09/19 01:53	121,2540G	SL



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

Lab ID: L1929439-02 Date Collected: 07/05/19 09:35

Client ID: SB018 (3'-6') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab									
Solids, Total	89.6		%	0.100	NA	1	-	07/09/19 01:53	121,2540G	SL



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

 Lab ID:
 L1929439-04
 Date Collected:
 07/05/19 10:25

 Client ID:
 SB019 (0'-3')
 Date Received:
 07/08/19

 Sample Location:
 355 EXTERIOR ST., BRONX, NY
 Field Prep:
 Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab									
Solids, Total	89.0		%	0.100	NA	1	_	07/09/19 01:53	121,2540G	SL



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

 Lab ID:
 L1929439-05
 Date Collected:
 07/05/19 10:30

 Client ID:
 SB019 (3'-6')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	82.9		%	0.100	NA	1	-	07/09/19 01:53	121,2540G	SL



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

 Lab ID:
 L1929439-06
 Date Collected:
 07/05/19 10:35

 Client ID:
 SB019 (6'-9')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	83.3		%	0.100	NA	1	-	07/24/19 11:37	121,2540G	RI



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

 Lab ID:
 L1929439-07
 Date Collected:
 07/05/19 11:00

 Client ID:
 SB020 (0'-3')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Solids, Total	88.6		%	0.100	NA	1	-	07/09/19 01:53	121,2540G	SL



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

 Lab ID:
 L1929439-08
 Date Collected:
 07/05/19 11:45

 Client ID:
 SB021 (0'-3')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab									
Solids, Total	90.4		%	0.100	NA	1	-	07/09/19 01:53	121,2540G	SL



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

TAOK 07

SAMPLE RESULTS

 Lab ID:
 L1929439-09
 Date Collected:
 07/05/19 11:50

 Client ID:
 SB021 (3'-6')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	91.5		%	0.100	NA	1	-	07/09/19 01:53	121,2540G	SL



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

Lab ID: L1929439-10 Date Collected: 07/05/19 11:55

Client ID: SB021 (6'-9') Date Received: 07/08/19
Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result C	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab									
Solids, Total	89.4		%	0.100	NA	1	-	07/17/19 00:23	121,2540G	YA



Project Name: Lab Number: 355 EXTERIOR ST. L1929439 Project Number: LST1802 TASK 07 08/05/19

Report Date:

SAMPLE RESULTS

Lab ID: Date Collected: L1929439-11 07/05/19 12:45 Client ID: SB022 (0'-3') Date Received: 07/08/19 Not Specified

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep:

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	90.9		%	0.100	NA	1	-	07/09/19 01:53	121,2540G	SL



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

SAMPLE RESULTS

 Lab ID:
 L1929439-12
 Date Collected:
 07/05/19 13:50

 Client ID:
 SB023 (0'-3')
 Date Received:
 07/08/19

Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab)								
Solids, Total	84.8		%	0.100	NA	1	-	07/09/19 03:27	121,2540G	YA



Project Name: Lab Number: 355 EXTERIOR ST. L1929439 Project Number: LST1802 TASK 07 08/05/19

Report Date:

SAMPLE RESULTS

Lab ID: Date Collected: L1929439-13 07/05/19 13:55 Client ID: SB023 (3'-6') Date Received: 07/08/19

Not Specified Sample Location: 355 EXTERIOR ST., BRONX, NY Field Prep:

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	88.6		%	0.100	NA	1	-	07/09/19 03:27	121,2540G	YA



Lab Duplicate Analysis Batch Quality Control

Project Name: 355 EXTERIOR ST. **Project Number:** LST1802 TASK 07

Lab Number:

L1929439

Report Date:

08/05/19

Parameter	Native Sample	Duplicate Sample	e Units	RPD	Qual RPD Limits
General Chemistry - Westborough Lab Associated samp SB018 (0'-3')	ele(s): 01-02,04-05,07-09	,11 QC Batch ID:	WG1257322-1	QC Sample:	L1929439-01 Client ID:
Solids, Total	93.2	93.0	%	0	20
General Chemistry - Westborough Lab Associated samp	ele(s): 12-13 QC Batch	ID: WG1257335-1	QC Sample: L	.1929537-05 C	Client ID: DUP Sample
Solids, Total	66.5	61.8	%	7	20
General Chemistry - Westborough Lab Associated samp	ele(s): 10 QC Batch ID:	WG1260683-1 Q	C Sample: L19	29439-10 Clie	nt ID: SB021 (6'-9')
Solids, Total	89.4	90.3	%	1	20
General Chemistry - Westborough Lab Associated samp	ele(s): 06 QC Batch ID:	WG1263811-1 Q	C Sample: L19	32600-03 Clie	nt ID: DUP Sample
Solids, Total	81.4	81.0	%	0	20

Project Name: 355 EXTERIOR ST. **Lab Number:** L1929439 Project Number: LST1802 TASK 07

Report Date: 08/05/19

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Custody Seal Cooler

Absent Α

Container Information			Initial		Temp			Frozen	
Container ID	Container Type	Cooler	pН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1929439-01A	Glass 60mL/2oz unpreserved	Α	NA		2.7	Υ	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL- TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA- TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-01B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7),NYTCL- 8081(14),NYTCL-8082(14)
L1929439-02A	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		2.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL- TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA- TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-02B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7)
L1929439-03A	Glass 60mL/2oz unpreserved	Α	NA		2.7	Υ	Absent		HOLD-8270(14)
L1929439-03B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		HOLD-8270(14)
L1929439-04A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SE-TI(180),ZH-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-04B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7)
L1929439-05A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.7	Υ	Absent		BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-05B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7)
L1929439-06A	Glass 60mL/2oz unpreserved	Α	NA		2.7	Υ	Absent		AS-TI(180),PB-TI(180),HOLD-8270(14)
L1929439-06B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		TS(7),HOLD-8270(14)



Lab Number: L1929439

Report Date: 08/05/19

Project Name: 355 EXTERIOR ST.Project Number: LST1802 TASK 07

Container Information			Initial	nitial Final				Frozen	
Container ID	Container Type	Cooler	рН	pН	Temp deg C	Pres	Seal	Date/Time	Analysis(*)
L1929439-07A	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		2.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL- TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA- TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-07B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7),NYTCL- 8081(14),NYTCL-8082(14)
L1929439-08A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SE-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-08B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7)
L1929439-09A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CD-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-09B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7)
L1929439-10A	Glass 60mL/2oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7),HOLD-8270(14)
L1929439-10B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7),HOLD-8270(14)
L1929439-11A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL- TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA- TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-11B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7),NYTCL- 8081(14),NYTCL-8082(14)
L1929439-12A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-12B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7)



Lab Number: L1929439

Report Date: 08/05/19

Container Info	Container Information				Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1929439-13A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.7	Y	Absent		BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1929439-13B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		NYTCL-8270(14),TS(7)
L1929439-14A	Glass 60mL/2oz unpreserved	Α	NA		2.7	Υ	Absent		HOLD-8270(14)
L1929439-14B	Glass 250ml/8oz unpreserved	Α	NA		2.7	Υ	Absent		HOLD-8270(14)



Project Name:

355 EXTERIOR ST.

Project Number: LST1802 TASK 07

Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

GLOSSARY

Acronyms

EDL

LOQ

MS

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

DU Report with 'J' Qualifiers



Footnotes

Report Format:

Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

 The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a "Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- **NJ** Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- \boldsymbol{R} Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name:355 EXTERIOR ST.Lab Number:L1929439Project Number:LST1802 TASK 07Report Date:08/05/19

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 13

Published Date: 7/30/2019 3:17:52 PM

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-

Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kieldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

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APPENDIX B USEPA LOW-FLOW GROUNDWATER SAMPLING PROCEDURE

U.S. ENVIRONMENTAL PROTECTION AGENCY REGION I

LOW STRESS (low flow) PURGING AND SAMPLING PROCEDURE FOR THE COLLECTION OF GROUNDWATER SAMPLES FROM MONITORING WELLS

Quality Assurance Unit
U.S. Environmental Protection Agency – Region 1
11 Technology Drive
North Chelmsford, MA 01863

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Prepared by:		
(Robert Reinhart, Quality Assurance Unit)	Date	
Approved by:		
(John Smaldone, Quality Assurance Unit)	Date	

Revision Page

Date	Rev	Summary of changes	Sections
	#		
7/30/96	1	Finalized	
01/19/10	2	Updated	All sections
3/23/17	3	Updated	All sections
9/20/17	4	Updated	Section 7.0

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1.0 USE OF TERMS

<u>Equipment blank</u>: The equipment blank shall include the pump and the pump's tubing. If tubing is dedicated to the well, the equipment blank needs only to include the pump in subsequent sampling rounds. If the pump and tubing are dedicated to the well, the equipment blank is collected prior to its placement in the well. If the pump and tubing will be used to sample multiple wells, the equipment blank is normally collected after sampling from contaminated wells and not after background wells.

<u>Field duplicates</u>: Field duplicates are collected to determine precision of the sampling procedure. For this procedure, collect duplicate for each analyte group in consecutive order (VOC original, VOC duplicate, SVOC original, SVOC duplicate, etc.).

<u>Indicator field parameters</u>: This SOP uses field measurements of turbidity, dissolved oxygen, specific conductance, temperature, pH, and oxidation/reduction potential (ORP) as indicators of when purging operations are sufficient and sample collection may begin.

<u>Matrix Spike/Matrix Spike Duplicates</u>: Used by the laboratory in its quality assurance program. Consult the laboratory for the sample volume to be collected.

<u>Potentiometric Surface</u>: The level to which water rises in a tightly cased well constructed in a confined aquifer. In an unconfined aquifer, the potentiometric surface is the water table.

QAPP: Quality Assurance Project Plan

SAP: Sampling and Analysis Plan

SOP: Standard operating procedure

<u>Stabilization</u>: A condition that is achieved when all indicator field parameter measurements are sufficiently stable (as described in the "Monitoring Indicator Field Parameters" section) to allow sample collection to begin.

<u>Temperature blank</u>: A temperature blank is added to each sample cooler. The blank is measured upon receipt at the laboratory to assess whether the samples were properly cooled during transit.

<u>Trip blank (VOCs)</u>: Trip blank is a sample of analyte-free water taken to the sampling site and returned to the laboratory. The trip blanks (one pair) are added to each sample cooler that contains VOC samples.

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2.0 SCOPE & APPLICATION

The goal of this groundwater sampling procedure is to collect water samples that reflect the total mobile organic and inorganic loads (dissolved and colloidal sized fractions) transported through the subsurface under ambient flow conditions, with minimal physical and chemical alterations from sampling operations. This standard operating procedure (SOP) for collecting groundwater samples will help ensure that the project's data quality objectives (DQOs) are met under certain low-flow conditions.

The SOP emphasizes the need to minimize hydraulic stress at the well-aquifer interface by maintaining low water-level drawdowns, and by using low pumping rates during purging and sampling operations. Indicator field parameters (e.g., dissolved oxygen, pH, etc.) are monitored during purging in order to determine when sample collection may begin. Samples properly collected using this SOP are suitable for analysis of groundwater contaminants (volatile and semi-volatile organic analytes, dissolved gases, pesticides, PCBs, metals and other inorganics), or naturally occurring analytes. This SOP is based on Puls, and Barcelona (1996).

This procedure is designed for monitoring wells with an inside diameter (1.5-inches or greater) that can accommodate a positive lift pump with a screen length or open interval ten feet or less and with a water level above the top of the screen or open interval (Hereafter, the "screen or open interval" will be referred to only as "screen interval"). This SOP is not applicable to other well-sampling conditions.

While the use of dedicated sampling equipment is not mandatory, dedicated pumps and tubing can reduce sampling costs significantly by streamlining sampling activities and thereby reducing the overall field costs.

The goal of this procedure is to emphasize the need for consistency in deploying and operating equipment while purging and sampling monitoring wells during each sampling event. This will help to minimize sampling variability.

This procedure describes a general framework for groundwater sampling. Other site specific information (hydrogeological context, conceptual site model (CSM), DQOs, etc.) coupled with systematic planning must be added to the procedure in order to develop an appropriate site specific SAP/QAPP. In addition, the site specific SAP/QAPP must identify the specific equipment that will be used to collect the groundwater samples.

This procedure does not address the collection of water or free product samples from wells containing free phase LNAPLs and/or DNAPLs (light or dense non-aqueous phase

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liquids). For this type of situation, the reader may wish to check: Cohen, and Mercer (1993) or other pertinent documents.

This SOP is to be used when collecting groundwater samples from monitoring wells at all Superfund, Federal Facility and RCRA sites in Region 1 under the conditions described herein. Request for modification of this SOP, in order to better address specific situations at individual wells, must include adequate technical justification for proposed changes. <u>All changes and modifications must be approved and included in a revised SAP/QAPP before implementation in field.</u>

3.0 BACKGROUND FOR IMPLEMENTATION

It is expected that the monitoring well screen has been properly located (both laterally and vertically) to intercept existing contaminant plume(s) or along flow paths of potential contaminant migration. Problems with inappropriate monitoring well placement or faulty/improper well installation cannot be overcome by even the best water sampling procedures. This SOP presumes that the analytes of interest are moving (or will potentially move) primarily through the more permeable zones intercepted by the screen interval.

Proper well construction, development, and operation and maintenance cannot be overemphasized. The use of installation techniques that are appropriate to the hydrogeologic setting of the site often prevent "problem well" situations from occurring. During well development, or redevelopment, tests should be conducted to determine the hydraulic characteristics of the monitoring well. The data can then be used to set the purging/sampling rate, and provide a baseline for evaluating changes in well performance and the potential need for well rehabilitation. Note: if this installation data or well history (construction and sampling) is not available or discoverable, for all wells to be sampled, efforts to build a sampling history should commence with the next sampling event.

The pump intake should be located within the screen interval and at a depth that will remain under water at all times. It is recommended that the intake depth and pumping rate remain the same for all sampling events. The mid-point or the lowest historical midpoint of the saturated screen length is often used as the location of the pump intake. For new wells, or for wells without pump intake depth information, the site's SAP/QAPP must provide clear reasons and instructions on how the pump intake depth(s) will be selected, and reason(s) for the depth(s) selected. If the depths to top and bottom of the well screen are not known, the SAP/QAPP will need to describe how the sampling depth will be determined and how the data can be used.

Stabilization of indicator field parameters is used to indicate that conditions are suitable for sampling to begin. Achievement of turbidity levels of less than 5 NTU, and stable drawdowns of less than 0.3 feet, while desirable, are not mandatory. Sample collection

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may still take place provided the indicator field parameter criteria in this procedure are met. If after 2 hours of purging indicator field parameters have not stabilized, one of three optional courses of action may be taken: a) continue purging until stabilization is achieved, b) discontinue purging, do not collect any samples, and record in log book that stabilization could not be achieved (documentation must describe attempts to achieve stabilization), c) discontinue purging, collect samples and provide full explanation of attempts to achieve stabilization (note: there is a risk that the analytical data obtained, especially metals and strongly hydrophobic organic analytes, may reflect a sampling bias and therefore, the data may not meet the data quality objectives of the sampling event).

It is recommended that low-flow sampling be conducted when the air temperature is above 32°F (0°C). If the procedure is used below 32°F, special precautions will need to be taken to prevent the groundwater from freezing in the equipment. Because sampling during freezing temperatures may adversely impact the data quality objectives, the need for water sample collection during months when these conditions are likely to occur should be evaluated during site planning and special sampling measures may need to be developed. Ice formation in the flow-through-cell will cause the monitoring probes to act erratically. A transparent flow-through-cell needs to be used to observe if ice is forming in the cell. If ice starts to form on the other pieces of the sampling equipment, additional problems may occur.

4.0 HEALTH & SAFETY

When working on-site, comply with all applicable OSHA requirements and the site's health/safety procedures. All proper personal protection clothing and equipment are to be worn. Some samples may contain biological and chemical hazards. These samples should be handled with suitable protection to skin, eyes, etc.

5.0 CAUTIONS

The following cautions need to be considered when planning to collect groundwater samples when the below conditions occur.

If the groundwater degasses during purging of the monitoring well, dissolved gases and VOCs will be lost. When this happens, the groundwater data for dissolved gases (e.g., methane, ethene, ethane, dissolved oxygen, etc.) and VOCs will need to be qualified. Some conditions that can promote degassing are the use of a vacuum pump (e.g., peristaltic pumps), changes in aperture along the sampling tubing, and squeezing/pinching the pump's tubing which results in a pressure change.

When collecting the samples for dissolved gases and VOCs analyses, avoid aerating the groundwater in the pump's tubing. This can cause loss of the dissolved gases and VOCs in

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the groundwater. Having the pump's tubing completely filled prior to sampling will avoid this problem when using a centrifugal pump or peristaltic pump.

Direct sun light and hot ambient air temperatures may cause the groundwater in the tubing and flow-through-cell to heat up. This may cause the groundwater to degas which will result in loss of VOCs and dissolved gases. When sampling under these conditions, the sampler will need to shade the equipment from the sunlight (e.g., umbrella, tent, etc.). If possible, sampling on hot days, or during the hottest time of the day, should be avoided. The tubing exiting the monitoring well should be kept as short as possible to avoid the sun light or ambient air from heating up the groundwater.

Thermal currents in the monitoring well may cause vertical mixing of water in the well bore. When the air temperature is colder than the groundwater temperature, it can cool the top of the water column. Colder water which is denser than warm water sinks to the bottom of the well and the warmer water at the bottom of the well rises, setting up a convection cell. "During low-flow sampling, the pumped water may be a mixture of convecting water from within the well casing and aquifer water moving inward through the screen. This mixing of water during low-flow sampling can substantially increase equilibration times, can cause false stabilization of indicator parameters, can give false indication of redox state, and can provide biological data that are not representative of the aquifer conditions" (Vroblesky 2007).

Failure to calibrate or perform proper maintenance on the sampling equipment and measurement instruments (e.g., dissolved oxygen meter, etc.) can result in faulty data being collected.

Interferences may result from using contaminated equipment, cleaning materials, sample containers, or uncontrolled ambient/surrounding air conditions (e.g., truck/vehicle exhaust nearby).

Cross contamination problems can be eliminated or minimized through the use of dedicated sampling equipment and/or proper planning to avoid ambient air interferences. Note that the use of dedicated sampling equipment can also significantly reduce the time needed to complete each sampling event, will promote consistency in the sampling, and may reduce sampling bias by having the pump's intake at a constant depth.

Clean and decontaminate all sampling equipment prior to use. All sampling equipment needs to be routinely checked to be free from contaminants and equipment blanks collected to ensure that the equipment is free of contaminants. Check the previous equipment blank data for the site (if they exist) to determine if the previous cleaning procedure removed the contaminants. If contaminants were detected and they are a concern, then a more vigorous cleaning procedure will be needed.

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6.0 PERSONNEL QUALIFICATIONS

All field samplers working at sites containing hazardous waste must meet the requirements of the OSHA regulations. OSHA regulations may require the sampler to take the 40 hour OSHA health and safety training course and a refresher course prior to engaging in any field activities, depending upon the site and field conditions.

The field samplers must be trained prior to the use of the sampling equipment, field instruments, and procedures. Training is to be conducted by an experienced sampler before initiating any sampling procedure.

The entire sampling team needs to read, and be familiar with, the site Health and Safety Plan, all relevant SOPs, and SAP/QAPP (and the most recent amendments) before going onsite for the sampling event. It is recommended that the field sampling leader attest to the understanding of these site documents and that it is recorded.

7.0 EQUIPMENT AND SUPPLIES

A. Informational materials for sampling event

A copy of the current Health and Safety Plan, SAP/QAPP, monitoring well construction data, location map(s), field data from last sampling event, manuals for sampling, and the monitoring instruments' operation, maintenance, and calibration manuals should be brought to the site.

B. Well keys.

C. Extraction device

Adjustable rate, submersible pumps (e.g., centrifugal, bladder, etc.) which are constructed of stainless steel or polytetrafluoroethylene (PTFE, i.e. Teflon®) are preferred. PTFE, however, should not be used when sampling for per- and polyfluoroalkyl substances (PFAS) as it is likely to contain these substances.

Note: If extraction devices constructed of other materials are to be used, adequate information must be provided to show that the substituted materials do not leach contaminants nor cause interferences to the analytical procedures to be used. Acceptance of these materials must be obtained before the sampling event.

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If bladder pumps are selected for the collection of VOCs and dissolved gases, the pump setting should be set so that one pulse will deliver a water volume that is sufficient to fill a 40 mL VOC vial. This is not mandatory, but is considered a "best practice". For the proper operation, the bladder pump will need a minimum amount of water above the pump; consult the manufacturer for the recommended submergence. The pump's recommended submergence value should be determined during the planning stage, since it may influence well construction and placement of dedicated pumps where water-level fluctuations are significant.

Adjustable rate, peristaltic pumps (suction) are to be used with caution when collecting samples for VOCs and dissolved gases (e.g., methane, carbon dioxide, etc.) analyses. Additional information on the use of peristaltic pumps can be found in Appendix A. If peristaltic pumps are used, the inside diameter of the rotor head tubing needs to match the inside diameter of the tubing installed in the monitoring well.

Inertial pumping devices (motor driven or manual) are not recommended. These devices frequently cause greater disturbance during purging and sampling, and are less easily controlled than submersible pumps (potentially increasing turbidity and sampling variability, etc.). This can lead to sampling results that are adversely affected by purging and sampling operations, and a higher degree of data variability.

D. Tubing

PTFE (Teflon®) or PTFE-lined polyethylene tubing are preferred when sampling is to include VOCs, SVOCs, pesticides, PCBs and inorganics. As discussed in the previous section, PTFE tubing should not be used when sampling for PFAS. In this case, a suitable alternative such as high-density polyethylene tubing should be used.

PVC, polypropylene or polyethylene tubing may be used when collecting samples for metal and other inorganics analyses.

Note: If tubing constructed of other materials is to be used, adequate information must be provided to show that the substituted materials do not leach contaminants nor cause interferences to the analytical procedures to be used. Acceptance of these materials must be obtained before the sampling event.

The use of 1/4 inch or 3/8 inch (inside diameter) tubing is recommended. This will help ensure that the tubing remains liquid filled when operating at very low pumping rates when using centrifugal and peristaltic pumps.

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Silastic tubing should be used for the section around the rotor head of a peristaltic pump. It should be less than a foot in length. The inside diameter of the tubing used at the pump rotor head must be the same as the inside diameter of tubing placed in the well. A tubing connector is used to connect the pump rotor head tubing to the well tubing. Alternatively, the two pieces of tubing can be connected to each other by placing the one end of the tubing inside the end of the other tubing. The tubing must not be reused.

E. The water level measuring device

Electronic "tape", pressure transducer, water level sounder/level indicator, etc. should be capable of measuring to 0.01 foot accuracy. Recording pressure transducers, mounted above the pump, are especially helpful in tracking water levels during pumping operations, but their use must include check measurements with a water level "tape" at the start and end of each sampling event.

F. Flow measurement supplies

Graduated cylinder (size according to flow rate) and stopwatch usually will suffice.

Large graduated bucket used to record total water purged from the well.

G. Interface probe

To be used to check on the presence of free phase liquids (LNAPL, or DNAPL) before purging begins (as needed).

H. Power source (generator, nitrogen tank, battery, etc.)

When a gasoline generator is used, locate it downwind and at least 30 feet from the well so that the exhaust fumes do not contaminate samples.

I. Indicator field parameter monitoring instruments

Use of a multi-parameter instrument capable of measuring pH, oxidation/reduction potential (ORP), dissolved oxygen (DO), specific conductance, temperature, and coupled with a flow-through-cell is required when measuring all indicator field parameters, except turbidity. Turbidity is collected using a separate instrument. Record equipment/instrument identification (manufacturer, and model number).

Transparent, small volume flow-through-cells (e.g., 250 mLs or less) are preferred. This allows observation of air bubbles and sediment buildup in the cell, which can interfere with the operation of the monitoring instrument probes, to be easily detected. A small volume

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cell facilitates rapid turnover of water in the cell between measurements of the indicator field parameters.

It is recommended to use a flow-through-cell and monitoring probes from the same manufacturer and model to avoid incompatibility between the probes and flow-through-cell.

Turbidity samples are collected before the flow-through-cell. A "T" connector coupled with a valve is connected between the pump's tubing and flow-through-cell. When a turbidity measurement is required, the valve is opened to allow the groundwater to flow into a container. The valve is closed and the container sample is then placed in the turbidimeter.

Standards are necessary to perform field calibration of instruments. A minimum of two standards are needed to bracket the instrument measurement range for all parameters except ORP which use a Zobell solution as a standard. For dissolved oxygen, a wet sponge used for the 100% saturation and a zero dissolved oxygen solution are used for the calibration.

Barometer (used in the calibration of the Dissolved Oxygen probe) and the conversion formula to convert the barometric pressure into the units of measure used by the Dissolved Oxygen meter are needed.

J. Decontamination supplies

Includes (for example) non-phosphate detergent, distilled/deionized water, isopropyl alcohol, etc.

K. Record keeping supplies

Logbook(s), well purging forms, chain-of-custody forms, field instrument calibration forms, etc.

L. Sample bottles

- M. Sample preservation supplies (as required by the analytical methods)
- N. Sample tags or labels
- O. PID or FID instrument

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If appropriate, to detect VOCs for health and safety purposes, and provide qualitative field evaluations.

P. Miscellaneous Equipment

Equipment to keep the sampling apparatus shaded in the summer (e.g., umbrella) and from freezing in the winter. If the pump's tubing is allowed to heat up in the warm weather, the cold groundwater may degas as it is warmed in the tubing.

8.0 EQUIPMENT/INSTRUMENT CALIBRATION

Prior to the sampling event, perform maintenance checks on the equipment and instruments according to the manufacturer's manual and/or applicable SOP. This will ensure that the equipment/instruments are working properly before they are used in the field.

Prior to sampling, the monitoring instruments must be calibrated and the calibration documented. The instruments are calibrated using U.S Environmental Protection Agency Region 1 *Calibration of Field Instruments (temperature, pH, dissolved oxygen, conductivity/specific conductance, oxidation/reduction [ORP], and turbidity),* March 23, 2017, or latest version or from one of the methods listed in 40CFR136, 40CFR141 and SW-846.

The instruments shall be calibrated at the beginning of each day. If the field measurement falls outside the calibration range, the instrument must be re-calibrated so that all measurements fall within the calibration range. At the end of each day, a calibration check is performed to verify that instruments remained in calibration throughout the day. This check is performed while the instrument is in measurement mode, not calibration mode. If the field instruments are being used to monitor the natural attenuation parameters, then a calibration check at mid-day is highly recommended to ensure that the instruments did not drift out of calibration. Note: during the day if the instrument reads zero or a negative number for dissolved oxygen, pH, specific conductance, or turbidity (negative value only), this indicates that the instrument drifted out of calibration or the instrument is malfunctioning. If this situation occurs the data from this instrument will need to be qualified or rejected.

9.0 PRELIMINARY SITE ACTIVITIES (as applicable)

Check the well for security (damage, evidence of tampering, missing lock, etc.) and record pertinent observations (include photograph as warranted).

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If needed, lay out a sheet of clean polyethylene for monitoring and sampling equipment, unless equipment is elevated above the ground (e.g., on a table, etc.).

Remove well cap and if appropriate measure VOCs at the rim of the well with a PID or FID instrument and record reading in field logbook or on the well purge form.

If the well casing does not have an established reference point (usually a V-cut or indelible mark in the well casing), make one. Describe its location and record the date of the mark in the logbook (consider a photographic record as well). All water level measurements must be recorded relative to this reference point (and the altitude of this point should be determined using techniques that are appropriate to site's DQOs.

If water-table or potentiometric surface map(s) are to be constructed for the sampling event, perform synoptic water level measurement round (in the shortest possible time) before any purging and sampling activities begin. If possible, measure water level depth (to 0.01 ft.) and total well depth (to 0.1 ft.) the day before sampling begins, in order to allow for re-settlement of any particulates in the water column. This is especially important for those wells that have not been recently sampled because sediment buildup in the well may require the well to be redeveloped. If measurement of total well depth is not made the day before, it should be measured after sampling of the well is complete. All measurements must be taken from the established referenced point. Care should be taken to minimize water column disturbance.

Check newly constructed wells for the presence of LNAPLs or DNAPLs before the initial sampling round. If none are encountered, subsequent check measurements with an interface probe may not be necessary unless analytical data or field analysis signal a worsening situation. This SOP cannot be used in the presence of LNAPLs or DNAPLs. If NAPLs are present, the project team must decide upon an alternate sampling method. All project modifications must be approved and documented prior to implementation.

If available check intake depth and drawdown information from previous sampling event(s) for each well. Duplicate, to the extent practicable, the intake depth and extraction rate (use final pump dial setting information) from previous event(s). If changes are made in the intake depth or extraction rate(s) used during previous sampling event(s), for either portable or dedicated extraction devices, record new values, and explain reasons for the changes in the field logbook.

10.0 PURGING AND SAMPLING PROCEDURE

Purging and sampling wells in order of increasing chemical concentrations (known or anticipated) are preferred.

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The use of dedicated pumps is recommended to minimize artificial mobilization and entrainment of particulates each time the well is sampled. Note that the use of dedicated sampling equipment can also significantly reduce the time needed to complete each sampling event, will promote consistency in the sampling, and may reduce sampling bias by having the pump's intake at a constant depth.

A. Initial Water Level

Measure the water level in the well before installing the pump if a non-dedicated pump is being used. The initial water level is recorded on the purge form or in the field logbook.

B. Install Pump

Lower pump, safety cable, tubing and electrical lines slowly (to minimize disturbance) into the well to the appropriate depth (may not be the mid-point of the screen/open interval). The Sampling and Analysis Plan/Quality Assurance Project Plan should specify the sampling depth (used previously), or provide criteria for selection of intake depth for each new well. If possible keep the pump intake at least two feet above the bottom of the well, to minimize mobilization of particulates present in the bottom of the well.

Pump tubing lengths, above the top of well casing should be kept as short as possible to minimize heating the groundwater in the tubing by exposure to sun light and ambient air temperatures. Heating may cause the groundwater to degas, which is unacceptable for the collection of samples for VOC and dissolved gases analyses.

C. Measure Water Level

Before starting pump, measure water level. Install recording pressure transducer, if used to track drawdowns, to initialize starting condition.

D. Purge Well

From the time the pump starts purging and until the time the samples are collected, the purged water is discharged into a graduated bucket to determine the total volume of groundwater purged. This information is recorded on the purge form or in the field logbook.

Start the pump at low speed and slowly increase the speed until discharge occurs. Check water level. Check equipment for water leaks and if present fix or replace the affected equipment. Try to match pumping rate used during previous sampling event(s). Otherwise, adjust pump speed until there is little or no water level drawdown. If the

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minimal drawdown that can be achieved exceeds 0.3 feet, but remains stable, continue purging.

Monitor and record the water level and pumping rate every five minutes (or as appropriate) during purging. Record any pumping rate adjustments (both time and flow rate). Pumping rates should, as needed, be reduced to the minimum capabilities of the pump to ensure stabilization of the water level. Adjustments are best made in the first fifteen minutes of pumping in order to help minimize purging time. During pump start-up, drawdown may exceed the 0.3 feet target and then "recover" somewhat as pump flow adjustments are made. Purge volume calculations should utilize stabilized drawdown value, not the initial drawdown. If the initial water level is above the top of the screen do not allow the water level to fall into the well screen. The final purge volume must be greater than the stabilized drawdown volume plus the pump's tubing volume. If the drawdown has exceeded 0.3 feet and stabilizes, calculate the volume of water between the initial water level and the stabilized water level. Add the volume of the water which occupies the pump's tubing to this calculation. This combined volume of water needs to be purged from the well after the water level has stabilized before samples are collected.

Avoid the use of constriction devices on the tubing to decrease the flow rate because the constrictor will cause a pressure difference in the water column. This will cause the groundwater to degas and result in a loss of VOCs and dissolved gasses in the groundwater samples.

Note: the flow rate used to achieve a stable pumping level should remain constant while monitoring the indicator parameters for stabilization and while collecting the samples.

Wells with low recharge rates may require the use of special pumps capable of attaining very low pumping rates (e.g., bladder, peristaltic), and/or the use of dedicated equipment. For new monitoring wells, or wells where the following situation has not occurred before, if the recovery rate to the well is less than 50 mL/min., or the well is being essentially dewatered during purging, the well should be sampled as soon as the water level has recovered sufficiently to collect the volume needed for all anticipated samples. The project manager or field team leader will need to make the decision when samples should be collected, how the sample is to be collected, and the reasons recorded on the purge form or in the field logbook. A water level measurement needs to be performed and recorded before samples are collected. If the project manager decides to collect the samples using the pump, it is best during this recovery period that the pump intake tubing not be removed, since this will aggravate any turbidity problems. Samples in this specific situation may be collected without stabilization of indicator field parameters. Note that field conditions and efforts to overcome problematic situations must be recorded in order to support field decisions to deviate from normal procedures described in this SOP. If this type of problematic situation persists in a well, then water sample collection should be

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changed to a passive or no-purge method, if consistent with the site's DQOs, or have a new well installed.

E. Monitor Indicator Field Parameters

After the water level has stabilized, connect the "T" connector with a valve and the flow-through-cell to monitor the indicator field parameters. If excessive turbidity is anticipated or encountered with the pump startup, the well may be purged for a while without connecting up the flow-through-cell, in order to minimize particulate buildup in the cell (This is a judgment call made by the sampler). Water level drawdown measurements should be made as usual. If possible, the pump may be installed the day before purging to allow particulates that were disturbed during pump insertion to settle.

During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a frequency of five minute intervals or greater. The pump's flow rate must be able to "turn over" at least one flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mLs/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly. Note: during the early phase of purging, emphasis should be put on minimizing and stabilizing pumping stress, and recording those adjustments followed by stabilization of indicator parameters. Purging is considered complete and sampling may begin when all the above indicator field parameters have stabilized. Stabilization is considered to be achieved when three consecutive readings are within the following limits:

Turbidity (10% for values greater than 5 NTU; if three Turbidity values are less than 5 NTU, consider the values as stabilized), **Dissolved Oxygen** (10% for values greater than 0.5 mg/L, if three Dissolved Oxygen values are less than 0.5 mg/L, consider the values as stabilized).

Specific Conductance (3%), Temperature (3%), pH (± 0.1 unit), Oxidation/Reduction Potential (±10 millivolts).

All measurements, except turbidity, must be obtained using a flow-through-cell. Samples for turbidity measurements are obtained before water enters the flow-through-cell. Transparent flow-through-cells are preferred, because they allow field personnel to watch for particulate build-up within the cell. This build-up may affect indicator field parameter values measured within the cell. If the cell needs to be cleaned during purging operations, continue pumping and disconnect cell for cleaning, then reconnect after cleaning and

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continue monitoring activities. Record start and stop times and give a brief description of cleaning activities.

The flow-through-cell must be designed in a way that prevents gas bubble entrapment in the cell. Placing the flow-through-cell at a 45 degree angle with the port facing upward can help remove bubbles from the flow-through-cell (see Appendix B Low-Flow Setup Diagram). Throughout the measurement process, the flow-through-cell must remain free of any gas bubbles. Otherwise, the monitoring probes may act erratically. When the pump is turned off or cycling on/off (when using a bladder pump), water in the cell must not drain out. Monitoring probes must remain submerged in water at all times.

F. Collect Water Samples

When samples are collected for laboratory analyses, the pump's tubing is disconnected from the "T" connector with a valve and the flow-through-cell. The samples are collected directly from the pump's tubing. Samples must not be collected from the flow-through-cell or from the "T" connector with a valve.

VOC samples are normally collected first and directly into pre-preserved sample containers. However, this may not be the case for all sampling locations; the SAP/QAPP should list the order in which the samples are to be collected based on the project's objective(s). Fill all sample containers by allowing the pump discharge to flow gently down the inside of the container with minimal turbulence.

If the pump's flow rate is too high to collect the VOC/dissolved gases samples, collect the other samples first. Lower the pump's flow rate to a reasonable rate and collect the VOC/dissolved gases samples and record the new flow rate.

During purging and sampling, the centrifugal/peristaltic pump tubing must remain filled with water to avoid aeration of the groundwater. It is recommended that 1/4 inch or 3/8 inch (inside diameter) tubing be used to help ensure that the sample tubing remains water filled. If the pump tubing is not completely filled to the sampling point, use the following procedure to collect samples: collect non-VOC/dissolved gases samples first, then increase flow rate slightly until the water completely fills the tubing, collect the VOC/dissolved gases samples, and record new drawdown depth and flow rate.

For bladder pumps that will be used to collect VOC or dissolved gas samples, it is recommended that the pump be set to deliver long pulses of water so that one pulse will fill a 40 mL VOC vial.

Use pre-preserved sample containers or add preservative, as required by analytical methods, to the samples immediately after they are collected. Check the analytical methods

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(e.g. EPA SW-846, 40 CFR 136, water supply, etc.) for additional information on preservation.

If determination of filtered metal concentrations is a sampling objective, collect filtered water samples using the same low flow procedures. The use of an in-line filter (transparent housing preferred) is required, and the filter size (0.45 µm is commonly used) should be based on the sampling objective. Pre-rinse the filter with groundwater prior to sample collection. Make sure the filter is free of air bubbles before samples are collected. Preserve the filtered water sample immediately. Note: filtered water samples are not an acceptable substitute for unfiltered samples when the monitoring objective is to obtain chemical concentrations of total mobile contaminants in groundwater for human health or ecological risk calculations.

Label each sample as collected. Samples requiring cooling will be placed into a cooler with ice or refrigerant for delivery to the laboratory. Metal samples after acidification to a pH less than 2 do not need to be cooled.

G. Post Sampling Activities

If a recording pressure transducer is used to track drawdown, re-measure water level with tape.

After collection of samples, the pump tubing may be dedicated to the well for re-sampling (by hanging the tubing inside the well), decontaminated, or properly discarded.

Before securing the well, measure and record the well depth (to 0.1 ft.), if not measured the day before purging began. Note: measurement of total well depth annually is usually sufficient after the initial low stress sampling event. However, a greater frequency may be needed if the well has a "silting" problem or if confirmation of well identity is needed.

Secure the well.

11.0 DECONTAMINATION

Decontaminate sampling equipment prior to use in the first well, and then following sampling of each subsequent well. Pumps should not be removed between purging and sampling operations. The pump, tubing, support cable and electrical wires which were in contact with the well should be decontaminated by one of the procedures listed below.

The use of dedicated pumps and tubing will reduce the amount of time spent on decontamination of the equipment. If dedicated pumps and tubing are used, only the initial sampling event will require decontamination of the pump and tubing.

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Note if the previous equipment blank data showed that contaminant(s) were present after using the below procedure or the one described in the SAP/QAPP, a more vigorous procedure may be needed.

Procedure 1

Decontaminating solutions can be pumped from either buckets or short PVC casing sections through the pump and tubing. The pump may be disassembled and flushed with the decontaminating solutions. It is recommended that detergent and alcohol be used sparingly in the decontamination process and water flushing steps be extended to ensure that any sediment trapped in the pump is removed. The pump exterior and electrical wires must be rinsed with the decontaminating solutions, as well. The procedure is as follows:

Flush the equipment/pump with potable water.

Flush with non-phosphate detergent solution. If the solution is recycled, the solution must be changed periodically.

Flush with potable or distilled/deionized water to remove all of the detergent solution. If the water is recycled, the water must be changed periodically.

Optional - flush with isopropyl alcohol (pesticide grade; must be free of ketones {e.g., acetone}) or with methanol. This step may be required if the well is highly contaminated or if the equipment blank data from the previous sampling event show that the level of contaminants is significant.

Flush with distilled/deionized water. This step must remove all traces of alcohol (if used) from the equipment. The final water rinse must not be recycled.

Procedure 2

Steam clean the outside of the submersible pump.

Pump hot potable water from the steam cleaner through the inside of the pump. This can be accomplished by placing the pump inside a three or four inch diameter PVC pipe with end cap. Hot water from the steam cleaner jet will be directed inside the PVC pipe and the pump exterior will be cleaned. The hot water from the steam cleaner will then be pumped from the PVC pipe through the pump and collected into another container. Note: additives or solutions should not be added to the steam cleaner.

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Pump non-phosphate detergent solution through the inside of the pump. If the solution is recycled, the solution must be changed periodically.

Pump potable water through the inside of the pump to remove all of the detergent solution. If the solution is recycled, the solution must be changed periodically.

Pump distilled/deionized water through the pump. The final water rinse must not be recycled.

12.0 FIELD QUALITY CONTROL

Quality control samples are required to verify that the sample collection and handling process has not compromised the quality of the groundwater samples. All field quality control samples must be prepared the same as regular investigation samples with regard to sample volume, containers, and preservation. Quality control samples include field duplicates, equipment blanks, matrix spike/matrix spike duplicates, trip blanks (VOCs), and temperature blanks.

13.0 FIELD LOGBOOK

A field log shall be kept to document all groundwater field monitoring activities (see Appendix C, example table), and record the following for each well:

Site name, municipality, state.

Well identifier, latitude-longitude or state grid coordinates.

Measuring point description (e.g., north side of PVC pipe).

Well depth, and measurement technique.

Well screen length.

Pump depth.

Static water level depth, date, time and measurement technique.

Presence and thickness of immiscible liquid (NAPL) layers and detection method.

Pumping rate, drawdown, indicator parameters values, calculated or measured total volume pumped, and clock time of each set of measurements.

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Type of tubing used and its length.

Type of pump used.

Clock time of start and end of purging and sampling activity.

Types of sample bottles used and sample identification numbers.

Preservatives used.

Parameters requested for analyses.

Field observations during sampling event.

Name of sample collector(s).

Weather conditions, including approximate ambient air temperature.

QA/QC data for field instruments.

Any problems encountered should be highlighted.

Description of all sampling/monitoring equipment used, including trade names, model number, instrument identification number, diameters, material composition, etc.

14.0 DATA REPORT

Data reports are to include laboratory analytical results, QA/QC information, field indicator parameters measured during purging, field instrument calibration information, and whatever other field logbook information is needed to allow for a full evaluation of data usability.

Note: the use of trade, product, or firm names in this sampling procedure is for descriptive purposes only and does not constitute endorsement by the U.S. EPA.

15.0 REFERENCES

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APPENDIX A

PERISTALTIC PUMPS

Before selecting a peristaltic pump to collect groundwater samples for VOCs and/or dissolved gases, (e.g., methane, carbon dioxide, etc.) consideration should be given to the following:

- The decision of whether or not to use a peristaltic pump is dependent on the intended use of the data.
- If the additional sampling error that may be introduced by this device is NOT of concern for the VOC/dissolved gases data's intended use, then this device may be acceptable.
- If minor differences in the groundwater concentrations could affect the decision, such as to continue or terminate groundwater cleanup or whether the cleanup goals have been reached, then this device should NOT be used for VOC/dissolved gases sampling. In these cases, centrifugal or bladder pumps are a better choice for more accurate results.

EPA and USGS have documented their concerns with the use of the peristaltic pumps to collect water sample in the below documents.

- "Suction Pumps are not recommended because they may cause degassing, pH modification, and loss of volatile compounds" *A Compendium of Superfund Field Operations Methods*, EPA/540/P-87/001, December 1987.
- "The agency does not recommend the use of peristaltic pumps to sample ground water particularly for volatile organic analytes" *RCRA Ground-Water Monitoring Draft Technical Guidance*, EPA Office of Solid Waste, November 1992.
- "The peristaltic pump is limited to shallow applications and can cause degassing resulting in alteration of pH, alkalinity, and volatiles loss", *Low-flow (Minimal drawdown) Ground-Water Sampling Procedures*, by Robert Puls & Michael Barcelona, April 1996, EPA/540/S-95/504.
- "Suction-lift pumps, such as peristaltic pumps, can operate at a very low pumping rate; however, using negative pressure to lift the sample can result in the loss of volatile analytes", USGS Book 9 Techniques of Water-Resources Investigation, Chapter A4. (Version 2.0, 9/2006).

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APPENDIX B

SUMMARY OF SAMPLING INSTRUCTIONS

These instructions are for using an adjustable rate, submersible pump or a peristaltic pump with the pump's intake placed at the midpoint of a 10 foot or less well screen or an open interval. The water level in the monitoring well is above the top of the well screen or open interval, the ambient temperature is above 32°F, and the equipment is not dedicated. Field instruments are already calibrated. The equipment is setup according to the diagram at the end of these instructions.

- 1. Review well installation information. Record well depth, length of screen or open interval, and depth to top of the well screen. Determine the pump's intake depth (e.g., mid-point of screen/open interval).
- 2. On the day of sampling, check security of the well casing, perform any safety checks needed for the site, lay out a sheet of polyethylene around the well (if necessary), and setup the equipment. If necessary a canopy or an equivalent item can be setup to shade the pump's tubing and flow-through-cell from the sun light to prevent the sun light from heating the groundwater.
- 3. Check well casing for a reference mark. If missing, make a reference mark. Measure the water level (initial) to 0.01 ft. and record this information.
- 4. Install the pump's intake to the appropriate depth (e.g., midpoint) of the well screen or open interval. Do not turn-on the pump at this time.
- 5. Measure water level and record this information.
- 6. Turn-on the pump and discharge the groundwater into a graduated waste bucket. Slowly increase the flow rate until the water level starts to drop. Reduce the flow rate slightly so the water level stabilizes. Record the pump's settings. Calculate the flow rate using a graduated container and a stop watch. Record the flow rate. Do not let the water level drop below the top of the well screen.

If the groundwater is highly turbid or discolored, continue to discharge the water into the bucket until the water clears (visual observation); this usually takes a few minutes. The turbid or discolored water is usually from the well-being disturbed during the pump installation. If the water does not clear, then you need to make a choice whether to continue purging the well (hoping that it will clear after a reasonable time) or continue to

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the next step. Note, it is sometimes helpful to install the pump the day before the sampling event so that the disturbed materials in the well can settle out.

If the water level drops to the top of the well screen during the purging of the well, stop purging the well, and do the following:

Wait for the well to recharge to a sufficient volume so samples can be collected. This may take a while (pump may be removed from well, if turbidity is not a problem). The project manager will need to make the decision when samples should be collected and the reasons recorded in the site's log book. A water level measurement needs to be performed and recorded before samples are collected. When samples are being collected, the water level must not drop below the top of the screen or open interval. Collect the samples from the pump's tubing. Always collect the VOCs and dissolved gases samples first. Normally, the samples requiring a small volume are collected before the large volume samples are collected just in case there is not sufficient water in the well to fill all the sample containers. All samples must be collected, preserved, and stored according to the analytical method. Remove the pump from the well and decontaminate the sampling equipment.

If the water level has dropped 0.3 feet or less from the initial water level (water level measure before the pump was installed); proceed to Step 7. If the water level has dropped more than 0.3 feet, calculate the volume of water between the initial water level and the stabilized water level. Add the volume of the water which occupies the pump's tubing to this calculation. This combined volume of water needs to be purged from the well after the water level has stabilized before samples are be collected.

7. Attach the pump's tubing to the "T" connector with a valve (or a three-way stop cock). The pump's tubing from the well casing to the "T" connector must be as short as possible to prevent the groundwater in the tubing from heating up from the sun light or from the ambient air. Attach a short piece of tubing to the other end of the end of the "T" connector to serve as a sampling port for the turbidity samples. Attach the remaining end of the "T" connector to a short piece of tubing and connect the tubing to the flow-through-cell bottom port. To the top port, attach a small piece of tubing to direct the water into a calibrated waste bucket. Fill the cell with the groundwater and remove all gas bubbles from the cell. Position the flow-through-cell in such a way that if gas bubbles enter the cell they can easily exit the cell. If the ports are on the same side of the cell and the cell is cylindrical shape, the cell can be placed at a 45-degree angle with the ports facing upwards; this position should keep any gas bubbles entering the cell away from the monitoring probes and allow the gas bubbles to exit the cell easily (see Low-Flow Setup Diagram). Note:

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make sure there are no gas bubbles caught in the probes' protective guard; you may need to shake the cell to remove these bubbles.

- 8. Turn-on the monitoring probes and turbidity meter.
- 9. Record the temperature, pH, dissolved oxygen, specific conductance, and oxidation/reduction potential measurements. Open the valve on the "T" connector to collect a sample for the turbidity measurement, close the valve, do the measurement, and record this measurement. Calculate the pump's flow rate from the water exiting the flow-through-cell using a graduated container and a stop watch, and record the measurement. Measure and record the water level. Check flow-through-cell for gas bubbles and sediment; if present, remove them.
- 10. Repeat Step 9 every 5 minutes or as appropriate until monitoring parameters stabilized. Note: at least one flow-through-cell volume must be exchanged between readings. If not, the time interval between readings will need to be increased. Stabilization is achieved when three consecutive measurements are within the following limits:

Turbidity (10% for values greater than 5 NTUs; if three Turbidity values are less than 5 NTUs, consider the values as stabilized),

Dissolved Oxygen (10% for values greater than 0.5 mg/L, if three Dissolved Oxygen values are less than 0.5 mg/L, consider the values as stabilized),

Specific Conductance (3%), Temperature (3%), pH (± 0.1 unit), Oxidation/Reduction Potential (±10 millivolts).

If these stabilization requirements do not stabilize in a reasonable time, the probes may have been coated from the materials in the groundwater, from a buildup of sediment in the flow-through-cell, or a gas bubble is lodged in the probe. The cell and the probes will need to be cleaned. Turn-off the probes (not the pump), disconnect the cell from the "T" connector and continue to purge the well. Disassemble the cell, remove the sediment, and clean the probes according to the manufacturer's instructions. Reassemble the cell and connect the cell to the "T" connector. Remove all gas bubbles from the cell, turn-on the probes, and continue the measurements. Record the time the cell was cleaned.

11. When it is time to collect the groundwater samples, turn-off the monitoring probes, and disconnect the pump's tubing from the "T" connector. If you are using a centrifugal or peristaltic pump check the pump's tubing to determine if the tubing is completely filled with water (no air space).

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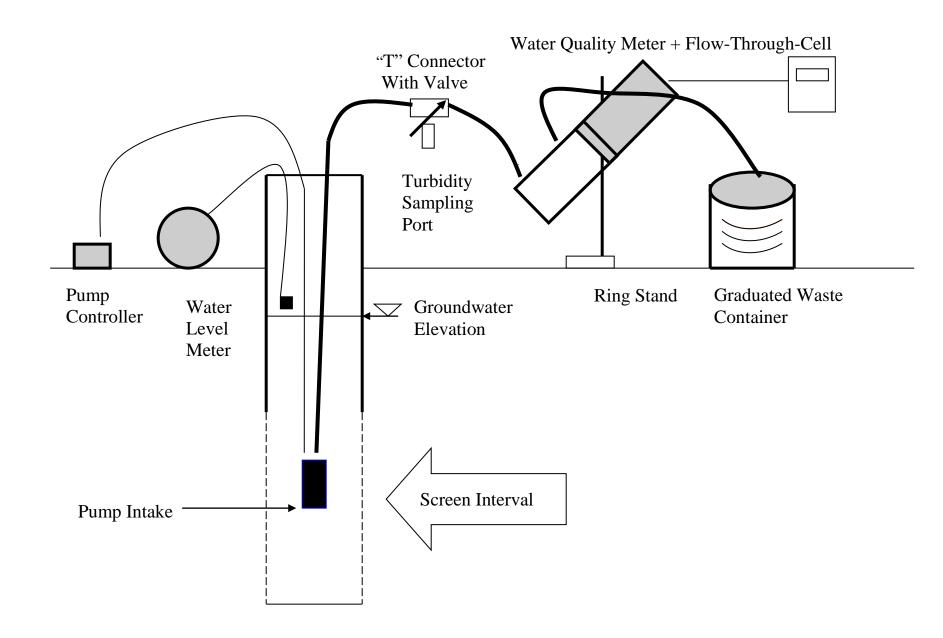
All samples must be collected and preserved according to the analytical method. VOCs and dissolved gases samples are normally collected first and directly into pre-preserved sample containers. However, this may not be the case for all sampling locations; the SAP/QAPP should list the order in which the samples are to be collected based on the project's objective(s). Fill all sample containers by allowing the pump discharge to flow gently down the inside of the container with minimal turbulence.

If the pump's tubing is not completely filled with water and the samples are being collected for VOCs and/or dissolved gases analyses using a centrifugal or peristaltic pump, do the following:

All samples must be collected and preserved according to the analytical method. The VOCs and the dissolved gases (e.g., methane, ethane, ethene, and carbon dioxide) samples are collected last. When it becomes time to collect these samples increase the pump's flow rate until the tubing is completely filled. Collect the samples and record the new flow rate.

- 12. Store the samples according to the analytical method.
- 13. Record the total purged volume (graduated waste bucket). Remove the pump from the well and decontaminate the sampling equipment.

Low-Flow Setup Diagram



EXAMPLE (Minimum Requirements) WELL PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) Well Number Date Field Personnel Sampling Organization Identify MP					(below MP) top bottom Pump Intake at (ft. below MP)						
Clock Time 24 HR	Water Depth below MP ft	Pump Dial ¹	Purge Rate ml/min	Cum. Volume Purged liters	Temp.	Spec. Cond. ² μS/cm	рН	ORP ³ mv	DO mg/L	Tur- bidity NTU	Comments

Stabilization Criteria

3% ±0.1 ±10 mv 10% 10%

- 1. Pump dial setting (for example: hertz, cycles/min, etc).
- 2. μSiemens per cm(same as μmhos/cm)at 25°C.
- 3. Oxidation reduction potential (ORP)



APPENDIX C PROJECT TEAM RESUMES



Derek Ersbak, PG • SR. PROJECT MANAGER

PROFESSIONAL EXPERIENCE

PWGC: 13 years PRIOR: 4 years

AREAS OF EXPERTISE

Environmental Due Diligence Petroleum Bulk Storage Regulations ASTM Standards for Phase I and II Environmental Site Assessments Preparation of Investigative and Remedial Plans and Reports Preparation of Remedial Cost Estimates and Remedial Alternatives **Health & Safety Protocols** Air Monitoring Protocols **Environmental Compliance** Landfill Operations, Compliance, and Monitoring State and Federal Remedial Programs (BCP, VCP, ERP, Hazardous Waste Sites, RCRA) Wetland Delineation Fish and Wildlife Resource Impact Assessments



BS, Biology (Concentration: Ecological/Environmental Study), SUNY Binghamton, NY New York State Professional Geologist OSHA Supervisor 8-hr; HazWoper 40-hr; Construction Safety & Health 10-hr Completed a course for Radon Measurement Operators Introduction to Wetland Identification Course (Rutgers) QN Fit Tested for Respirator Use ASTM Training on Phase I and Phase II Environmental Site Assessments for Commercial Real Estate



PROFILE

Mr. Ersbak has extensive experience in environmental due diligence, state and federal remedial programs, and landfill operations. He coordinates field activities, subcontractors, and personnel to satisfy client and regulatory agency project objectives. Mr. Ersbak prepares work plans, field reports, laboratory analysis summaries, and provides recommendations to integrate his findings into client's environmental strategies and business goals.

NOTABLE PROJECTS

Garvies Point Waterfront Revitalization Project (GPWRP)

RXR-Glen-Isle Partners, LLC

The GPWRP is a \$1 billion, 56-acre mixed-use development on Glen Cove's waterfront. Representing one of the most significant site redevelopments on Long Island, the efforts at Garvies Point have been years in the making and has involved the remediation and repositioning of several parcels on and in proximity to the northern side of Glen Cove Creek. Most of the parcels required significant environmental assessment, remediation and regulatory reporting based on their past, heavy industrial uses; most notably the Li Tungsten Federal superfund site and the Captain Cove State superfund site.

The Garvies Point redevelopment is slated for the construction of 555 rental apartments, 555 for-sale condominiums, and approximately 75,000 square feet of retail and office space. In addition, 28 acres of the development will consist of waterfront esplanades and parks.

PWGC has played a lead role in assisting RXR with the environmental assessment, remediation and reporting of the assembly of parcels that make up the Garvies Point project. Mr. Ersbak has held an active role through various stages of the GPWRP since 2012. He now acts as the senior project manager overseeing numerous environmental consulting programs for this major waterfront redevelopment project in the City of Glen Cove.

Project Stages and Milestones

Investigation of Development Area - Mr. Ersbak implemented subsurface investigations designed to establish existing conditions throughout the project area. To accomplish this goal, Mr. Ersbak developed a workplan to address data gaps and establish existing conditions throughout the development area.

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This subsurface investigation included more than 200 soil and groundwater borings to fully characterize the site. Mr. Ersbak prepared and coordinated a full spectrum of environmental documents including health and safety plans, community air monitoring plans, radiological monitoring plan, MARSSIM survey support, geotechnical support services, TOGS sampling and waste characterization and disposal oversight. With this information, Mr. Ersbak worked closely with the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) evaluating site data and preparing and implementing a pre-development remediation plan that has been completed to the satisfaction of these agencies. As part of the evaluation, Mr. Ersbak performed and coordinated Synthetic Precipitation Leachate (SP/LP) sampling and analysis. The results of this investigation and in conjunction with the NYSDEC and USEPA established site specific cleanup objectives protective of the public health and environment.

Remedial Program - The completion of the investigation lead to Amended Records of Decisions (ARODS) for both the Li Tungsten and Captain Cove sites, which established the remedial objectives for the sites. With this information, Mr. Ersbak prepared pre-construction/closing remedial action workplans designed to remediate the site so they can be developed for their intended use. Once approved, Mr. Ersbak managed the remedial program on both sites which included extensive excavation on multiple parcels while coordinating the appropriate monitoring, endpoint sampling and waste disposal aspects of the project following completion RXR received No Further Action notices from the agencies indicating remediation was complete.

Lead Environmental Monitor – Given our extensive knowledge, PWGC was retained as the environmental monitor for the construction portion of the project by RXR and the City of Glen Cove. As part of the role, Mr. Ersbak has been tasked with finalizing multiple Site Management Plans (SMP) and the preparation of Excavation Work Plans (EWP) that describe specific procedures and protocols that are designed to implement the appropriate engineering/environmental controls needed for construction. Mr. Ersbak continues to manage the monitoring activities and works with the NYSDEC and USEPA on a daily basis documenting that the appropriate plans are being followed, including the collection of confirmation samples, re-use samples, and overseeing the appropriate engineering control installation which includes a composite cap with multiple demarcation barriers and sub-slab depressurization systems (SSDS).

Brownfield Cleanup Program (BCP)/Environmental Restoration Program (ERP)

Bellport Gas Station Site - ERP- He performed a remedial investigation to determine the extent of contamination present. Developed several remedial alternatives and presented them to Suffolk County for preferred remedial selection. Assisted NYSDEC in the preparation of PRAP and ROD for the site. Developed Remedial Design Work Plan, Final Engineering Report, and Site Management Plan which resulted in issuance of Certificate of Completion. He currently oversees implementation of operation, maintenance, and monitoring at the site and prepares Periodic Review Reports.

Ronkonkoma Wallpaper Site - ERP - He performed field investigations to determine the extent of historical site usage to on-site drainage and sanitary systems as well as delineate the extents of a historical contamination. Specifically, performed a fish and wildlife resource impact assessment, oversaw the excavation and exposure of underground leaching structures, collection of soil and groundwater samples, coordination with SCDHS officials, and preparation of reports and data management.

Arkansas Chemical Company Site - BCP- He managed all aspects of the project. Specifically, he prepared all work plans and reports, coordinated with regulatory agencies, developers, and contractors, managed field activities and construction schedules. The site was successfully remediated and a Certificate of Completion was issued.

Town of Brookhaven Landfill - Landfill Air Monitoring - In the wake of Hurricane Sandy, The Town of Brookhaven accepted vegetative debris at the Town of Brookhaven Municipal Landfill where the debris was burned to reduce the sheer volume. In response to air pollution complaints, PWGC was retained to performed perimeter air monitoring at the landfill for airborne particulates. In order to monitor the air quality surrounding the burn area, three Beta Mass Monitors (EBAM) were set up near the burn area, one in the prevailing upwind direction, one in the prevailing downwind direction, and one in the local community where complaints have been filed. PWGC maintained the monitors and analyzed the data, preparing daily reports for SCDPW.

Town of Ronkonkoma and Town of Southampton - Post Closure Operation and Maintenance - He currently manages the towns post closure OM&M requirements for the landfills in accordance with Part 360 requirements. He coordinates directly with the towns and regulators, schedules field activities, reviews collected data, prepares reports and provides recommendations for maintenance of the landfills.

NYCOER "E" Designation & NYCOER VCP Projects

30-17 40th Avenue (LIC Taxi Site)- Provided services for all phases of the "E" Designation Program including, Phase I Environmental Site Assessment, development of site specific Subsurface Investigation Work Plan and Health and Safety Plan, management of Subsurface Investigation, development of Subsurface Investigation Report, coordination with petroleum spill investigation, remediation and closure, development of Remedial Action Plan and Construction Health and Safety Plan, and management of remedial action.

100 Varick Street (SOHO Tower Site)- Provided services for all phases of the "E" Designation Program including, Phase I Environmental Site Assessment, property acquisition support, development of site specific Subsurface Investigation Work Plan and Health and Safety Plan, management of Subsurface Investigation, development of Subsurface Investigation Report, management of waste characterization and construction contract support.

2211 Third Avenue (HAP Site)- Provided services for the remedial phase of the VCP site including assistance with establishment of new BCP Agreement, preparation and implementation of waste characterization / beneficial reuse analysis for soils to be excavated at the site, management of remedial construction activities, and coordination with NYSDEC for petroleum spill identification and remediation.

State and Federal Superfund Sites

MATTEO Superfund Site - Mr. Ersbak performed environmental oversight associated with remedial investigation services, including sonic drilling, well development, subsurface sampling, and GPS surveying oversight and support.



Lead Sampling Analysis - New York, NY

Mr. Ersbak performed water sampling to test for lead in accordance with the Lead and Copper Rule (LCR). Mr. Ersbak coordinated with the building staff to access the sites and assess the building to determine which plumbing fixtures were to be sampled. He accessed the building, after school hours, to create site plan layouts of each floor and the fixtures to be sampled. Samples were drawn within a specific time frame in accordance with clients requests.



James Rhodes, PG · coo

PROFESSIONAL EXPERIENCE

PWGC: 25 years PRIOR: 5 years

AREAS OF EXPERTISE

Brownfields/Redevelopment Management Environmental Compliance Management Property/Real Estate Due Diligence Expert - Transaction & Environmental Site Assessment & Reuse Analysis Environmental & Remedial Investigations - Soil/Groundwater and Air Quality

EDUCATION & TRAINING/CERTIFICATION

MS, Earth Science/Hydrogeology, Adelphi University, NY BS, Geology, SUNY Oneonta, NY Executive Education (ACEC) Leading Professional Service Firms - Harvard Business School Licensed Professional Geologist - NYS Phase I Environmental Inspector - Environmental Assessment Association Professional Geologist - American Institute of Professional Geologists Licensed Real Estate Salesperson - NY OSHA HAZWOPER 40-hr.



PROFILE

In 2017, James Rhodes was named PWGC's Chief Operating Officer. In this role Mr. Rhodes is responsible for the operations of the business, working in tandem with the CEO and President. Roles will vary by industry but they will typically be involved in day every-day management, particularly business strategy, business planning and monitoring business performance. The COO provides leadership, management and vision necessary to ensure that the firm has the proper operational controls, administrate and reporting procedures and people systems in place to effectively grow the organization and ensure financial strength and operating efficiency. The position accomplishes this through respectful, constructive and energetic communications styles guided by the objectives of the company.

Prior to his promotion, Mr. Rhodes led PWGC's Environmental Unit. There he utilized his 30 years' experience as an expert in managing environmental concerns unique to the real estate market, serving public and private sectors. Through his tenure he has provided guidance to associates and clients, maintains established working relationships with regulators at multiple levels of government. His expertise enables clear communication on project requirements and speeds the approval process.

Mr. Rhodes' expertise in environmental remediation and redevelopment fields includes environmental site assessments (ESA), such as Phase I/II ESAs, RI/FS, NYS Brownfield studies, NYC "E" Designation Program, and cost to cure estimates for real estate tax purposes. His experience with soil and groundwater investigations, air quality studies and remedial measures has benefitted clients that include attorneys and developers, insurance companies and municipal agencies. His resourcefulness to pinpoint key environmental concerns quickly helps avoid unexpected delays and cost overruns, benefitting the client.

NOTABLE PROJECTS

PWGC Environmental Real Estate Sector Services

Phase I & Phase II Environmental Site Assessment (ESA) Management - As Program Director for Property Transactions & Real Estate Environmental Management Services & Support for PWGC, Rhodes oversees Phase I & II ESA planning, implementation and completion. He ensures that each ESA is tailored to client needs and long-term goals. For each project, a targeted scope of work and relevant documentation is prepared for clients to allow them to make cost-effective business decisions. PWGC typically performs more than 60 Phase I & Phase II ESA's annually with clients that include attorneys, lending institutions and municipalities. Given his experience, Rhodes provides clients workable environmental solutions for real estate issues. Under his management, PWGC Phase I/II reports are recognized by peers and clients for effectively utilizing escrow agreements, environmental insurance and cost-to-cure estimates. Mr. Rhodes acts as the Project Director for these projects and is the main liaison with the SCDHS. As part of his duties, Mr. Rhodes participated in meetings with the New York State Department of Environmental Conservation and collaborated with SCDHS to streamline the brownfield restoration process.

Garvies' Point Redevelopment Project

RXR-Glen-Isle Partners, LLC - Mr. Rhodes has been acting as project director overseeing numerous environmental consulting programs for this major waterfront redevelopment project in the City of Glen Cove. PWGC was brought into the project to perform full spectrum environmental due diligence services for the waterfront area when RXR Realty, LLC entered into the

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project. The waterfront area includes sites in both the New York State and Federal Superfund programs - including the Li Tungsten and Captain's Cove sites - and the initial due diligence services, which focused on current remedial status and what needed to be completed in order for the redevelopment to proceed. Over the last several years, PWGC has been working closely with the development team including RXR-Glen-Isle Partners, LLC, the City of Glen Cove, regulatory agencies including the NYSDEC, NYSDOH, NCDH, and USEPA to move the project toward redevelopment. Towards this goal, PWGC continues to work with and coordinate services of other consultants to obtain the necessary information to allow the project to proceed. To accomplish this goal, PWGC has prepared numerous plans and reports including a work plan to address data gaps throughout the multiple parcels along the waterfront. The subsurface investigation performed under this plan included more than 200 soil borings to fully characterize the site to eliminate data gaps, which will allow the project to obtain environmental insurance. PWGC has been involved in all aspects of environmental consulting on this project as it readies for redevelopment including evaluation of site specific soil cleanup objectives, SWPPP preparation and oversight, petroleum remediation oversight, radiological monitoring plan preparation, MARSSIM survey support services, building demolition support services, geotechnical support services, TOGS sampling support services, waste characterization and disposal oversight, and dredge spoil characterization and handling. Project related documents prepared by PWGC include the Data Gap Workplan and Report, Visual Stained Petroleum Soil Remediation Report, Synthetic Precipitation Leachate Procedure (SPLP)/Red Flag Area Characterization Plan and Report. Li Tungsten Existing Condition Report and Captains Cove Existing Condition Report. PWGC continues to provide field oversight services for all aspect of the project, including health and safety and community air monitoring services.

Bellport Gas Station-Bellport, NY

Brownfield's Consulting Support Services - This Suffolk County Brownfields site is currently in the New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program. Mr. Rhodes oversaw the preparation of a remedial investigation work plan and the Remedial Investigation/Alternative Analysis report. In addition, an Interim Remedial Measure was performed and a final Remedial Action Plan with NYSDEC was negotiated. He submitted a final site management plan with an environmental easement. The site has been remediated and PWGC continues to monitor the site as required.

Avalon Bay Communities - Rockville Center, NY

Brownfields Project Management - & Planning - As project director, Mr. Rhodes provided technical support and acted as a liaison between the New York State Department of Environmental Conservation (NYSDEC), the Village of Rockville Centre, the site's previous owner and new owner, Avalon Bay Communities. He was an advocate for Avalon Bay's needs and goals to redevelop the former industrial site as residential in meetings with NYSDEC and collaborated with the client and project team to develop the most effective strategy to streamline the project's representation with the state under the BCP program. Mr. Rhodes provided invaluable guidance in regard to the project's scope of work and documentation preparation, which included work plans, sampling and RI reporting. He was instrumental in obtaining all permits to complete the IRM work plan as well as throughout the performance of the IRM. The site then went to final remedial action work plan, design and oversight of final remediation, completion of site management plan and easement, which was first project of its type on Long Island to obtain COC and was a winner of ACEC Diamond Award for engineering excellence.

Expeditors c/o Cargo Ventures LLC - Inwood, NY

Environmental Site Assessment, Remediation, & Redevelopment - Mr. Rhodes supervised the investigation, remediation and redevelopment of a New York State Department of Environmental Conservation (NYSDEC) designated spill site on 4.25 acres at a former Shell Oil terminal located along Negro Bar Channel in Inwood, NY. As part of this multifaceted project,

Suffolk County Department of Health Services (SCDHS)

Brownfield Program Engineering Consulting Services Agreement - Through a competitive bidding process, PWGC was chosen by SCDHS as its engineering consultant related to County-owned Brownfield sites. Currently, PWGC is working on five sites for SCDHS in various stages of the Brownfield Cleanup Program (BCP). These sites are in both the municipal Environmental Restoration Program (ERP) and BCP in situations where the county assumed responsibility for the site. PWGC prepared a Phase I Environmental Site Assessment and documented historic environmental work performed at the site to satisfy requirements from associated lending institutions. Rhodes oversaw the completion of a subsurface investigation to determine site conditions to prepare appropriate NYSDEC-approved Corrective and Remedial Action Plans. Further, he oversaw the removal of petroleum-impacted soils, which resulted in an excavation measuring 60,000 square feet and more than 40,000 tons of impacted soils processed.

Benjamin Beechwood, LLC, Arverne Urban Renewal Area (URA) - Far Rockaway, NY
Consulting Services, Multi-Site Phase II Planning & Management - As project director, Mr. Rhodes collaborated with representatives from Benjamin Beechwood, LLC and served as liaison to the New York City Departments of Environmental Protection (NYCDEP) and Housing Preservation and Development (HPD) effectively advocating for their project goals. He supervised environmental due diligence for the development of the site - measuring 25 city blocks wide - and prepared the scope of work for a multi-site Phase II investigation. The result was incorporated into project documents along with work plans, health and safety plans, special area management, and submitted to NYCDEP and HPD. Once approved, Rhodes coordinated with NYCDEP on extensive geophysical and geo-probe investigations, test pits and soil pile characterizations. He directed the multi-faceted project, with tank removals and NYSDEC spill closures, successfully clearing the way for the area's redevelopment and revitalization.

Town of Babylon - Wyandanch, NY

Phase II Site Investigation & Redevelopment - Mr. Rhodes worked with the Town of Babylon's Community Development Agency and private interests, which resulted in the first new supermarket built in the hamlet of Wyandanch in more than 20 years.



Rhodes developed a soil and groundwater investigation scope that revealed low tetrachloroethane (PCE) levels in the soil and higher levels in the groundwater generated by a dry cleaner formerly located at the site. Rhodes documented the PCE was degrading naturally and only low-impact levels were migrating off-site. To determine the off-site plumes' real and potential effect, PWGC conducted an extensive well survey down-gradient of the property to identify potential receptors of the off-site groundwater contamination. The results prompted the Town of Babylon to connect potentially affected residences to public water, safeguarding the contaminant pathway and clearing the site for redevelopment.

Groundwater Specialists, Inc. - Ronkonkoma, NY

QA/QC for Phase I & II Engineering Oversight Services - To assure quality of the remedial investigation, Mr. Rhodes reviewed the proposed work plan, analyses; progress and activities monitoring for the soil-boring program; monitoring well installation; groundwater sampling; and spot-checking of field records. He further reviewed the third party's data evaluation, risk assessment, draft report, and results' documentation to assure completeness and rationality; and assisted the client with the sealing of the final report upon approval.

Village of Lindenhurst - Lindenhurst, NY

Environmental Site Assessment for Property Redevelopment - Mr. Rhodes acted as liaison between Village of Lindenhurst officials and the Suffolk County Department of Health Services (SCDHS) representatives during the environmental assessment facet of a condemnation proceeding ordered by the Village as part of the site's proposed redevelopment into a court complex. Faced with access issues during the initial Phase I and II, PWGC collected enough evidence for SCDHS to obtain a court order for gaining entry to the property. Working in conjunction with the SCDHS, Mr. Rhodes finalized a scope of work and tasks, divided between PWGC and SCDHS personnel. Information collected in the joint venture documented the site's environmental integrity allowing for formulating the proper remedial action plan.

Krumenacker Florist and Nursery - Amityville, NY

Phase II Investigation & Site Remediation - After reviewing an existing Phase I report, Mr. Rhodes performed a Phase II investigation and site remediation to bring the facility into regulatory compliance and clear the path for future development. The Phase II strategy focused on specific areas of concern that could negatively affect the client in the form of greater expense and unexpected delays. The environmental concerns focused on an existing Class V Underground Injection Control Well, underground gasoline storage tanks, potential environmental assessment format issues and impacted soils beneath the former greenhouse. During the greenhouse demolition, Rhodes met with regulatory agencies to ensure that on-going soil sampling and health and safety measures met regulatory requirements.

New York City "E" Designation and Voluntary Cleanup Program (VCP)

In response to the rezoning activities in New York City, its Office of Environmental Remediation (NYCOER) oversees environmental investigation and remediation at suspect sites prior to redevelopment. Rhodes develops scopes of work for environmental investigation required to redevelop the "E" designated property. He oversees Phase I & II work plans, Health and Safety Plan and Construction Health and Safety Plan, which NYCOER must approve prior to the start of work. To assess the soil quality he coordinates and oversees subsurface investigations, including geophysical surveys and soil and groundwater sampling programs. Based on the findings, Rhodes develops and implements remedial strategies and prepares Remedial Action Plans for NYCOER approval. Rhodes provides technical oversight and support on vapor intrusion mitigation, such as vapor barriers and sub-slab depressurization systems, and is experienced with New York State Department of Health requirements on evaluating soil vapor intrusions.

Current NYCOER VCP projects Mr. Rhodes is overseeing include a nine-story affordable housing development for Phipps Houses and a 12-story residential complex in Harlem, NY for HAP Investment Developers, which also includes an affordable housing component.

Mr. Rhodes is also currently overseeing sites within the NYCOER "E" Program. He is working with Bizzi & Partners Development, LLC, in NYC's SoHo location, which will be redeveloped into a 25-story, mixed-use, high-end residential building. And in Long Island City, Mr. Rhodes is working with the Lightstone Group on the redevelopment of a former taxi site, which is being developed into a 10-story mixed-use facility.

Sive, Paget & Riesel, PC (SPR) - New York, NY

Expert Evaluation & Analysis, Carnegie Hill, New York, NY - The law firm of Sive, Paget & Riesel, PC contracted Rhodes to provide an environmental engineering evaluation to determine the source of petroleum contamination in a commercial corridor. A previous investigation conducted by the New York State Department of Environmental Conservation (NYSDEC) contractor identified SPR's client as the responsible party for an oil spill negatively affecting an adjacent building. He used the evaluation of previous reports, proper closure of a 10,000 gallon underground storage tank (UST), and cross match analysis of fuel oil to compare chemical fingerprints of several sources. PWGC prepared a comprehensive project document to illustrate hydrogeologic cross sections, a study of the bedrock, UST construction details, hydrographs and photos. The comprehensive document ultimately proved favorable for the client.

Baumann Bus site, Francis S. Gabreski Airport - Westhampton Beach, NY

UIC Investigation/Remediation - Through New York State's "Rebuild Now" Program, Mr. Rhodes oversaw the investigation/remediation for Underground Injection Control (UIC) sites on 58 acres at Suffolk County's Francis S. Grabreski Airport, a 1,500 acre former US Air Force base in Westhampton. A 2004 site investigation revealed elevated levels of semi-volatile organic compounds. Through analysis of historical maps and geophysical methods, a remedial work plan was prepared for the site to properly locate, characterize and close more than 100 UIC sites. Mr. Rhodes provided technical support to verify protocols on local, state and federal levels, corresponded with the County to negotiate the scope of work, provided quality assurance and verified that all work was done in accordance associated guidelines permitting site redevelopment. PWGC's



efforts included a supplemental remedial investigation, final remedial design and preparation of a site management plan and post remedial monitoring, which is allowing for the development of the Hampton Business District business park by Plainview, NY-based Rechler Equities.

In addition to be UIC work, Mr. Rhodes oversaw remediation efforts at Gabreski associated with the Suffolk County Department of Health Services Brownfield Program, which is administered by PWGC. Other projects successfully completed by Mr. Rhodes and PWGC, or nearing completion, under the Brownfield Program include the Blue Point Laundry site in Blue Point, the Canine Kennel at Gabreski Airport and the Ronkonkoma Wallpaper site in Ronkonkoma.

Jain Center of America - Lake Success, NY

Sub-Surface Investigation Review - Mr. Rhodes reviewed a subsurface investigation of a former gasoline station. While adhering to Village of Lake Success requirements to address past environmental problems at the site, he supported client efforts to obtain construction approval for the property. As part of the SEQRA review process, the Village required the client perform a subsurface investigation. After a review of Nassau County records, Mr. Rhodes discovered an open UIC file resulting from an acceptable endpoint result having not been obtained. He designed a subsurface investigation to address the UIC issue, the former gasoline spill, a sanitary system at the site, and other environmental concerns resulting in an expedited review process.

Penetrex Processing, Glenwood Landing - New York

Subsurface Investigation, NYS Class II Inactive Hazardous Waste Site - As project principal, Mr. Rhodes lead the investigation of an inactive hazardous waste site in accordance with a New York State Department of Environmental Conservation (NYSDEC)approved work plan, which included sub-slab vapor and indoor air sampling and a sub-slab depressurization system. In addition, he oversaw the preparation of a feasibility study for the site that NYSDEC used to prepare a proposed remedial action plan, which lead to a Record of Decision.

Allstate Insurance Services - Hauppauge, NY

Spill Site Project Management - Mr. Rhodes oversees multiple residential fuel oil spills a year in New York City, Westchester, Nassau, and Suffolk Counties and Upstate New York on behalf of Allstate Insurance Services. He directs PWGC's Allstate team in providing technical oversight to document that spill remediation performed by the homeowner's contractor sufficiently addresses the contamination present and to achieve closure by the New York State Department of Environmental Conservation (NYSDEC). He ensures professional representation at all levels, and coordination with the NYSDEC and the environmental contractor. PWGC addresses all spills in a timely fashion, effectively reducing or eliminating Allstate's liability in such cases.

Sub-Surface Investigation Management & Client Representation Texaco Station, NY - Mr. Rhodes reviewed and supervised a sub-surface investigation to determine whether two underground storage tanks at a Texaco gas station were the potential source of soil and groundwater contamination under remediation at the time. He reviewed existing site data and supervised a subsurface investigation to determine the responsible party. The investigation showed the two storage tanks were not the source of contamination and that the current remediation system appeared ineffective.

Water Authority of Great Neck North - Great Neck NY

Groundwater Study - As project manager, Mr. Rhodes directed multiple studies using groundwater models in conjunction with the Nassau County Department of Public Works, to evaluate the pumpage of Great Neck's public water supply wells for potential for saltwater intrusion to determine the most favorable locations for a proposed well field. Rhodes used the results to prepare an aguifer management plan (AMP) for the authority that described short-term and long-term pumping scenarios. By following the AMP, the Authority has indicated the advancement of multiple saltwater wedges has slowed and/or ceased. He also prepared the water supply application and engineering report for the installation of new wells located off of the Great Neck Peninsula, which was part of the Authority's long term plans contained in the AMP.

John deCuevas, et al. v. East Hampton Golf Club, LLC, et al - East Hampton, NY

Expert Evaluation - Mr. Rhodes conducted an investigation to assess the potential environmental impact of a golf course development on the groundwater resource and to provide testimony on behalf of John DeCuevas. He researched and evaluated the hydrogeologic characteristic beneath the site, local groundwater quality concerns and potential chemical usage of the future golf course. The evaluation identified the potential for groundwater impact and the threat to nearby private drinking water wells from the proposed development. The findings prompted the two parties to agree on the development of a groundwater monitoring program to protect the private wells. Further, the golf course implemented an Integrated Pest Management program to control chemical use at the site. After developing the monitoring program that includes two wells required by Suffolk County Department of Health Services (SCDHS), Rhodes reviewed the data to determine if impacts had occurred and submitted his findings with SCDHS for incorporation in the county's database.

Fong and Wong, PC - New York, NY

New Best Cleaners & Tailors, Inc., Centereach, NY, Environmental Investigation & Remediation - He provided professional consulting services and expert testimony for the attorney who represented the site lessee in litigation with the property owner over the environmental condition and a lease buy-out agreement. He oversaw the soil and groundwater study to evaluate potential impacts and determine multiple sources of contamination, and remediation of sources associated with the dry cleaners, and participated in an on-site meeting with the presiding judge to demonstrate the conditions at the site first hand.

Minmilt Realty - East Farmingdale, NY

Remedial Project Management - As field manager, Mr. Rhodes coordinated a full remedial investigation and provided technical direction during the installation of a deep monitoring well - 180 feet - and defined the vertical extent of contamination and



hydrophobic dyes to determine the movement of dense non-aqueous phase liquids (DNAPL) using groundwater quality screening. He prepared the RI/FS report and oversaw the operation and maintenance of the system.

Computer Circuits - Hauppauge, NY

Remedial Investigation and Feasibility Study (RI/FS) - Mr. Rhodes was a project director for a characterization of a contamination's nature and extent at the former Computer Circuits industrial site, a US Environmental Protection Agency Superfund Site. He coordinated the use of multiple geophysical techniques to determine if unknown buried objects such as drums, tanks, or leaching structures existed. Techniques employed during the course of the project were interior/exterior soil borings, multiple drilling/probe methods, EnCore™ sampler, to preserve VOC sample integrity, and off-site groundwater vertical profile sampling to depths in excess of 200 feet below grade. PWGC utilized an on-site laboratory grade gas chromatograph to screen both soil and groundwater samples and followed New York State Department of Environmental Conservation procedures during the investigation.

Brookhaven National Laboratory - Upton, NY

Major Cesspools Closure - Mr. Rhodes coordinated sampling efforts to comply with the EPA and States regulated UIC program for the closure. He monitored closely the full ASP-B protocol and, after analysis of laboratory data, submitted reports to the client

Village of Sands Point, NY

Hydrogeologic Investigation - To assess the impact of proposed irrigation wells on the surrounding area, Mr. Rhodes determined the potential screen zones of the wells, considered potentially vulnerable to salt water intrusion. In addition, he assessed the impact on nearby public supply wells operated by the Village.

PUBLICATIONS & PRESENTATIONS

The Significance of the New Brownfields Legislation (NY Real Estate Journal, 03/04; Business Industry Connection (BIC), 03/04 issue)

Brownfields: Timing is Everything (Empire State Report, 09/2004)

Watershed Strategy & Management as a Most Valuable Resource (Watershed Conference, 1996)

Watershed Management for a Limited Coastal Aquifer System (North American Water and Environment Congress '96)



Kaitlyn Crosby • PROJECT HYDRO/ES

PROFESSIONAL EXPERIENCE

PWGC: 5 years

AREAS OF EXPERTISE

Water, Soil, Air Sampling Field Work (Protocol, Oversight, Documentation) Site Investigation/Analysis Health & Safety Monitoring Soil/Groundwater Investigations, Analysis, Sampling (Manual; Direct Push Technology Techniques) UST Remediation Hazardous Waste Site Investigation/Cleanup **Underground Injection Well Monitoring**

EDUCATION & TRAINING/CERTIFICATION

BA, Environmental Studies (Sustainability Studies; Public Policy & Human Impact), Stony Brook University OSHA HAZWOPER 40-hr; OSHA HAZWOPER 8-hr refresher **OSHA 10-Hour Construction**



PROFILE

Kaitlyn Crosby earned her Bachelor of Arts degree in Environmental Studies with a Minor in Sustainability Studies concentrating on Public Policy & Human Impact from Stony Brook University. She proved herself in the realm of hydrogeology, soil sampling and field studies and is continuously improving her skills as a field inspector in the areas of civil, structural, and environmental engineering. She has an excellent record in timely completion and maintenance of project coordination, monitoring, and document preparation, while successfully maintaining communication between clients, government agencies, and other parties involved.

NOTABLE PROJECTS

Computer Circuits, Hauppauge, New York

Ms. Crosby performed groundwater and air sampling in accordance with the USEPA-approved work plan for the investigation at this Federal Superfund site. The investigation consisted of soil, groundwater, and air sampling, and the installation and operation of a soil/vapor extraction system. Ms. Crosby performed sampling activities following the QA/QC procedures detailed in the work plan.

GTJ-Group/Green Bus Lines, Inc. - Queens/Brooklyn, NY

Hydrogeology/Environmental Services - Services range from Site Remediation Management & Baseline Environmental Report Preparation (Project Coordination, Oversight and Sample Collection) at large bus facilities. Ms. Crosby conducted site/facility investigations and provided, on an accelerated time schedule, site investigations, remedial action planning and design for dissolved and free phase groundwater contamination treatment systems.

83 Walker Street, Manhattan, New York

New York City Office of Environmental Remediation (NYCOER) Redevelopment Project - Ms. Crosby provided field oversight services to an "E" Designation site at 83 Walker Street. Her responsibilities included, but were not limited to, soil sampling, groundwater sampling, soil vapor samplings, air monitoring for dust and VOCs during earthwork, and inspection of vapor barrier installations. Ms. Crosby documented daily soil removal and noted any soils that may be contaminated. In addition to these services, she completed daily logs, communicated with the NYCOER, clients, government agencies and other parties involved and ensured proper handling and distribution of the soil samples.

Carco Builders Corp., Freeport, NY

Underground Injection Control (UIC) Remediation - Ms. Crosby performs endpoint sampling of storm drains and sanitary systems, coordinates and performs sampling in conjunction with the Suffolk County Department of Health Services (SCDHS) and Nassau County Department of Health (NCDH), and ensures proper soil and sediment removal.

North Eight NY LLC, Brooklyn, NY

NYCOER "E" Designation Services - Ms. Crosby provided field oversight services to an "E" Designation site at 207 North 8th Street. Her responsibilities included, but were not limited to, soil sampling, groundwater sampling, water level measurement and soil vapor samplings. She conducted site inspections to identify AOCs and physical obstructions and provided oversight on the installation of five soil borings. Ms. Crosby documented daily soil removal and noted



any soils and groundwater that may be contaminated. In addition to these services, she completed daily logs, communicated with the NYCOER, clients, government agencies and other parties involved and ensured proper handling and distribution of the soil samples.



Paul K. Boyce, PE, PG · CEO/PRESIDENT

PROFESSIONAL EXPERIENCE

PWGC: 25 years

AREAS OF EXPERTISE

Water Resource/Supply Design Civil Site Design Remedial System Design Geothermal Systems Groundwater Hydrology Groundwater Modeling

EDUCATION & TRAINING/CERTIFICATION

MS, Environmental Engineering, Polytechnic University, NY (now NYU) BS, Civil Engineering, SUNY Buffalo, NY Professional Engineer, NY, PA New York State Professional Geologist OSHA HAZWOPER 40-hr (29CRR 1910.120)

AFFILIATIONS

American Society of Civil Engineers (ASCE) NYS Society of Professional Engineers American Council of Engineering Companies (ACEC) Long Island Professional Geologists Association American Water Works Association (AWWA) National Groundwater Association (NGWA)



PROFILE

An environmental engineering professional Mr. Boyce has amassed an impressive portfolio of successful project in the New York Metropolitan region. He is an expert at providing public and private clients with targeted analyses, designs, modeling services, investigations, master planning development, construction oversight, regulatory, and sustainability consulting.

For more than 25 years at PWGC, Mr. Boyce has been immersed in some of the most innovative and successful environmental engineering projects on Long Island, playing key roles in developments that have improved the region's economy and environment. Whether using cutting-edge geothermal technology to assist Amneal Pharmaceuticals in the development of its base of operations in Yaphank or conducting detailed groundwater modeling at Brookhaven National Laboratory, his client expertise covers a wide spectrum of applications including targeted design and analysis, groundwater modeling, environmental investigations, construction oversight, and sustainability consulting.

Overall, Mr. Boyce develops project-specific civil and environmental engineering designs, implementation strategies and project management plans. He is an expert on the design and construction oversight related to the application of geothermal technologies. He assists clients with selecting the appropriate system and location, feasibility assessment, design preparation, system development and startup.

In his tenure at PWGC, Mr. Boyce has earned an industry-recognized reputation for his ability to assess project parameters and design and developing economical environmental engineering solutions that meet the stringent demands of our clients.

NOTABLE PROJECTS

Mr. Boyce's responsibilities with regards to lead sampling and analysis include interpretation of regulatory requirements and federal action levels as they pertain to lead in potable systems, investigations into causes for high lead concentrations in drinking water, recommending solutions to remedy high lead levels, cost estimates for lead treatment strategies, designs for remedial solutions involving flushing, plumbing material replacements and chemical treatment and water chemistry modeling. He provided coordination and supervision of field teams performing lead sample collection. Mr. Boyce was the regulatory agency liaison for all parties involved.



NYC School Construction Authority (SCA)

Discolored Water Investigations and Remedies at Numerous Schools across New York City - Notable projects included: 229K, 163K, R062, Q316. Mr. Boyce's responsibilities included aiding STV and SCA in investigating causes, overseeing field investigation services, water quality sampling, metallurgy of pipe sections, water quality/chemistry analyses, recommending remedies, report preparation, oversight of remedy implementation and follow-up samplings.

Disinfection Oversight - Mr. Boyce's responsibilities included overseeing field teams who were responsible for witnessing disinfection of potable water systems at new or renovated school buildings.

Disinfection Specification Update - Mr. Boyce was responsible for updating the SCA's standard disinfection specification for potable water systems.

Brooklyn Army Terminal Pre-K Site - Incoming potable water into the leased space was experiencing bacteriological issues. Mr. Boyce was responsible for investigating the cause and designing a remedy which consisted of new piping system and filtration

Lead Sampling - Mr. Boyce served as a lead consultant to SCA for a major sampling program of all schools in the New York City school system. His responsibilities included assembling lead sampling teams, coordinating and scheduling sampling events with STV and SCA, coordinating with analytical laboratories, review sampling results and consulting with SCA regarding results and potential remedies.

Diocese of Rockville Center

Lead Sampling - Mr. Boyce was responsible for overall project management and coordination of sampling for lead in the potable drinking water systems at more than 25 Long Island Catholic schools in Nassau and Suffolk Counties. His responsibilities included coordinating field sampling teams, working directly with individual school staffs, reviewing lead results and recommending remedies. Once a remedy was implemented, Mr. Boyce oversaw follow-up sampling. Mr. Boyce is the primary point of contact for Senior Diocese management staff.

Northwell Health - Long Island Jewish Medical Center (LIJMC), New Hyde Park, NY Environmental Policy & Procedures for the Prevention of Legionella Contamination

Mr. Boyce's responsibilities for this project included researching local, state, and federal legionella standards and guidelines and updating a pre-existing environmental policy and procedures manual for the prevention of legionella contamination in LIJMC healthcare facilities. Mr. Boyce coordinated with the New York State Health Department to determine the present status of legionella updates on the state level. Following extensive research on revisions undertaken to various guidelines and standards pertinent to legionella, Mr. Boyce updated the routine legionella sampling program, disinfection procedures, maintenance and long-term control measures to prevent legionellae contamination and the requirements for the development of a water safety management program.

Water Resource Management

Ross School, East Hampton, NY

Master Planning & Campus Design - Mr. Boyce provided civil engineering design services to develop a master plan for the private school campus, which was to be a "one of a kind," transforming the school into a state-of-the-art learning institution, situated in a rural, wooded groundwater recharge area.

Civil Engineering Services - Civil engineering and consulting were provided for grading, drainage, utility layout, roadways, parking, site lighting, athletic playing fields, irrigation, water supply, sanitary, wastewater collection, and open loop geothermal heating/cooling water systems. Throughout the project, Mr. Boyce collaborated with other project consultants, foremost planners, architects, landscape architects, MEP engineers, surveyors, contractors, the construction manager and the school administration. He oversaw and participated in the conceptualization and preliminary design of the campus' proposed layout, which included eco-friendly engineering designs consulting/development and integration of civil engineering design aspects with other important features such as academic programs, architecture, landscaping and pedestrian walkways.

Environmental Engineering Services - The campus was to be as green as possible utilizing available eco-friendly technologies for the most environmentally sensitive and appealing design. The campus' sensitive environmental location as well as sanitary density issues required a sewage treatment plant. Mr. Boyce investigated and evaluated different sewage treatment technologies capable to meet the school's projected needs functionally, aesthetically and academically. Mr. Boyce took into consideration some sustainability goals and follow regulatory requirements.

Environmental Consulting/Conceptual Design Services After researching the latest sewage treatment technologies. Mr. Bovce recommended to the master planning team and school administration a wastewater treatment system that naturally treats sewage and industrial waste to re-use quality that met the Master Plan goals: aesthetics, economic/environmental advantages and well below regulatory discharge standards. The panel accepted his recommendation and he created conceptualized layouts, sited for possible plant locations and designed a preliminary ecologically engineered sewage collection system.

Geothermal Well System Design - Mr. Boyce managed the site assessment, design, construction oversight and preparation of O&M manuals for the systems and conducted a feasibility study of using open-loop geothermal systems to heat and cool two of the school's most prominent buildings - The Center for Well Being (Bldg. 5) and the Media Pavilion (Bldg. 2). He researched local hydrogeological and groundwater quality conditions and analyzed the effects of required flow rates on a nearby Suffolk County Water Authority (SCWA) well field. Mr. Boyce employed Groundwater Vistas by ESI, to create a detailed 3-dimensional model for the area. His analysis illustrated the potential effects of supply and recharge wells on (1) each other, (2) nearby neighboring shallow wells, (3) the SCWA well field, and (4) the local water table (The model also took into account of the local groundwater divide). Once he had demonstrated that operating two separate open-loop geothermal well systems in close proximity would not have an impact, he prepared the engineering report for the NYS Department of Environmental Conservation, along with the appropriate Long Island Well permit applications for approval.



Northwell Health - Glen Cove Hospital, Glen Cove, NY

Northwell Health - Glen Cove Hospital, Glen Cove, NY, Geothermal Wells Project - As project manager, Mr. Boyce prepared the feasibility study, well permits, construction documents, oversaw the construction and fieldwork for the installation of a 400 GPM open-loop groundwater heat pump system. Before design, Mr. Boyce conducted the study to assess the feasibility of augmenting the AC's geothermal well system; he investigated size and location options for new wells and prepared construction cost estimates based on minimizing potential conflicts with existing site constraints and the likelihood of regulatory agency approval. He determined that expansion to the existing system would be feasible based on cost, local hydrogeology, and his modeling results. He advised the client that construction would cause significant disruptions to the hospital's daily operations. In accordance with NYSDEC guidelines, he investigated the potential effects of the proposed project on a nearby inactive hazardous waste site, obtained baseline water quality data, estimated aquifer characteristics to refine and calibrate the model and drafted a design and construction plan of a test and monitoring well to determine local geologic conditions. As liaison between NSUH, the NYSDEC, and the local regulatory agencies, Mr. Boyce established that a scaled-down, relocated system would have negligible effects on the hazardous waste site, and consequently, obtained approval for the proposed construction. NSUH selected Mr. Boyce to design, plan, and oversee the construction of the new system, which involved developing the design and strategy for a supply and recharge well system with inter-connecting process piping, detailed hydraulic analyses, sizing the various system components, and coordination with other project consultants on the installation of piping and process equipment.

Water Supply & Treatment

Suffolk County Department of Public Works, Yaphank, NY

Timber Point Country Club, Great River, Water Supply System & Irrigation Well Upgrades - Mr. Boyce directed the well's condition assessment, including pump test, to determine capacity and water quality and prepared specifications/plans to upgrade supply well with new pump and motor. Further, he designed new piping configurations to integrate an irrigation well with distribution and cross-connection to the Suffolk County Water Authority and specified new variable frequency drive for well pump motor.

West Sayville Golf Course, Sanitary System Improvements - Mr. Boyce oversaw construction phases through completion including, supervised design, development of permitting, bidding and administrative buildings sub-surface sanitary disposal

Peconic Dunes Park, Peconic, NY, Water Distribution System Improvements - Mr. Boyce supervised design/development of permitting, bidding, and construction documents to upgrade the existing water distribution system's components including backflow prevention devices water mains/meters, hydrants, and internal plumbing. Further, he oversaw construction phase services through to completion.

BOMARC Police Firing Range Westhampton, Drainage Improvements - Mr. Boyce directed design/development of permitting, bidding, and construction documents for drainage conditions improvements (i.e. stormwater collection/conveyance systems, new recharge system), and oversaw construction phase services through to completion.

Suffolk County Fire Academy, Yaphank, Water Supply Well Improvements - Mr. Boyce supervised design/development of bidding and construction documents for the re-circulated supply system. This included: physical/chemical rehabilitation, electrical service upgrades, a new motor starter, and replacement of a diesel driven booster pump with an electrically operated one, as well as the deep well vertical turbine pump and motor with a new submersible pumping unit. He managed construction phase services (administration, observation) to project completion.

SUNY Stony Brook, Sewer District 21, Groundwater Modeling Study, Stony Brook NY - Mr. Boyce performed a 3-d numerical groundwater modeling to estimate flow path and travel time of sewage treatment plant effluent from recharge basins to the Long Island Sound and prepared an engineering report documenting findings and modeling results.

Water Authority of Great Neck North, Nassau County, NY

Weybridge Road Clearwell Design - Mr. Boyce prepared a design for a new air stripper clearwell, upgraded the booster pump, piping, controls modifications, coordinated with NCDOH, and performed cost estimates. The design is completed and NCDOH has approved it, however, funding constraints have put the project on hold.

SCADA System Design - Mr. Boyce prepared a design for a new Supervisory Control and Data Acquisition System. He prepared bidding and construction documents, providing construction administration and observation services, and cost estimates.

Emergency Water Main Replacement, Berkshire Road - Mr. Boyce prepared design, construction and bidding documents for emergency water main replacements, expedited NCDOH review and approval, and provided PE certification services.

Air Stripper Cap at Watermill Lane - Mr. Boyce coordinated with contractor and WAGNN regarding design and sizing of appropriate air exit cap atop existing air stripper at Watermill Lane treatment plant.

Valve Book Review/Updates - Mr. Boyce updated valve location sketches as new valves are being installed in the distribution

Municipal Supply Well Design, Well #14 - Mr. Boyce oversaw the design services for the new 1,400 gpm municipal supply well. The design included an engineering report for NYSDEC and NCDOH review/approval, preparation of plans and specifications for a new well, associated piping, well house, electric, controls, instrumentation, chemical treatment, safeties, etc. Project is just underway as of Sept 2007. Construction phase services will also be provided.

Weybridge Road Ground Storage Tank Replacement - Mr. Boyce lead the project team charged with designing a new 500,000gallon steel ground storage tank to replace a deteriorated and dilapidated existing 400,000-gallon ground storage tank. The team prepared bidding/construction documents, inclusive plans and specifications, obtained NCDOH approval, provided construction administration and oversight services.



General Consulting Services - Mr. Boyce attended Board of Directors meetings to present monthly engineering report, assist with hydrogeological issues, contaminant fate and transport concerns, well maintenance, water main rehabilitation, etc.

Hampton Bays Water District, Suffolk, NY

Well Field Construction & Integration - Mr. Boyce prepared the structural, mechanical, and electrical designs for a new well field including two pump stations. In addition to construction plans and specifications, Mr. Boyce oversaw the integration of a new well field with an existing distribution system via hydraulic analyses and guided the client through the regulatory agency review and approval process. In a subsequent project phase, he partook in creating the layout of several residential water main projects, for which he analyzed the proposed water main layouts and prepared conceptual designs based on Health Department and ISO

Caustic Feed Systems Design - Mr. Boyce was responsible for the design of caustic feed systems at all eight District supply wells. He prepared existing conditions drawings by conducting field visits to obtain the necessary information. He then designed caustic feed systems consisting of double-walled underground storage tanks, piping, metering pumps, safety interlocks, controls, alarms and injection equipment to raise the ambient pH of the groundwater withdrawn from the shallow aquifer system to between seven and eight and a half. He was responsible for preparing plans and specifications, obtaining Health Department approval, and then overseeing the construction administration and observation aspects of the project.

Isolated Pressure Zone Design - Mr. Boyce was responsible for designing an isolated pressure zone in an area that was experiencing chronic low-pressure conditions within the District's distribution system. He worked with existing distribution system maps and survey data to identify the boundaries of the proposed zone, he worked with available hydraulic data to estimate pressure conditions and developed a planned approach on how to isolate the zone and create a booster pumping station to raise pressures within the zone to acceptable levels. Mr. Boyce was responsible for preparing the project plans and specifications that included a new packaged booster pumping station, water main and valve work, electrical service and site work. The SCDHS approved the plans and the pressure zones were constructed closely to his design and construction cost

Good Samaritan Hospital, West Islip NY

Well Turbidity Study - After review of existing water quality data, Mr. Boyce recommended sampling and analyses for additional parameters. He applied a water quality model, using the existing raw water quality data. To achieve optimal water quality pHlevel, hardness, and alkalinity, he performed trial and error solutions using a numerical model. Different treatment chemicals were included in the model in various combinations or by themselves. Concluding modeling efforts led to a realistic chemical concentration.

Copper & Lead Desktop Study - The results of the study Mr. Boyce performed served to identify the possible cases for turbid water condition and proposing alternative options for corrective actions to restore acceptable water quality. He presented each alternative for evaluation and comparison to determine most advantageous choice, based on potential for success, technical complexity, and cost. In addition, he prepared a treatment specification and coordinated with an experienced well driller, resulting in a successful chemical treatment, and restoration of the water quality to acceptable conditions.

Town of Oyster Bay, Syosset, NY

Potable Water Supply System Upgrade Design & Compliance Management Services - As Project Manager, Mr. Boyce coordinates inspection and assessment services for the town's Tobay Beach Park & Marina potable water supply system. PWGC focuses on the water supply system's status of compliance with NYSDOH, NCDOH, 10-State Standards, and provides feasible engineering designs to in response to the town's objectives: Safe, potable water for Tobay Beach patrons, in an economically sound fashion. Mr. Boyce managed the authoring of a feasibility report and selected/recommended minimum corrections and system upgrades. In addition, he prepared the design of a dry-briquette calcium hypochlorite chlorination system and other upgrades at Well House 3 of the Tobay Beach Park & Marina. To date, he continues to provide engineering services and design specifications for wellhead improvements. He also directs PWGC water quality monitoring and assessment services at the beach to determine compliance with local and state health department water quality and equipment quidance.

Civil Site

Three Mile Harbor Boat Yard, East Hampton, NY

Site Planning Analysis - After evaluating site conditions, Mr. Boyce recommended feasible improvements to enhance an existing boat yard facility. He investigated local zoning/building codes, sized/located sanitary facilities, sized/designed layout and arrangement of parking facilities, sized/located/orientated a new proposed structure to house a marine shop, offices, storage, and industrial space. He effectively addressed critical issues such as the site's location in a harbor protection area and no public water access, which put severe constraints on sizing and locating the sanitary facilities. He prepared plans and reports delineating suitable site alternatives and requirements for implementation in compliance with regulatory agencies and utility companies.

Inlet Seafood, East Hampton, NY

Site Plan Application - As senior engineer, Mr. Boyce designed and coordinated the preparation of site-plan application drawings for the commercial/industrial fishing marina looking to expand the site from a commercial to a multiple use area that included retail, restaurant, and commercial fishing. He managed civil/site concerns, which included grading, drainage, sanitary, water supply, utilities, parking, traffic controls, site lighting, and building locations/elevations. Mr. Boyce worked with the owners and other project consultants to conceptualize and plan the site layout for optimum use and compliance with local zoning and building codes. In addition, he prepared site-plan application drawings for the Town Planning Board and local regulatory



agencies. He supervised development of designs and bidding/construction documents for new water mains/services/flow meters, hydrants, and drinking water fountains. Mr. Boyce oversaw construction, and supervised wetlands delineation and permitting with the NYSDEC through to project completion.

Jay Construction Corp, NY

Pile Foundation Designs for Residential Homes - Mr. Boyce was responsible for designing foundations for four residential homes in Patchogue, New York. The design included investigating existing soil conditions, reviewing architectural plans, sizing piles based on soil conditions, locating piles based on architectural layout, determining number of piles based on loads including selfweight, building dead, live, snow and wind load, and worst-case combination of loads based on building code. He created designs for reinforced concrete pile caps in accordance with ACI requirements and created foundation walls to serve as grade beams between pile caps. In addition, Mr. Boyce prepared construction documents including plans and specifications and acted as the primary client contact throughout the project.

Times Square Construction, New York, NY

Geotechnical Report for 47 East 34th Street Building Construction - Mr. Boyce oversaw a rock core boring program, characterized rock core samples and developed a geotechnical report based upon findings of the rock core boring program. He provided foundation recommendations for a new 38 story residential building being erected upon Manhattan schist on the east side of midtown Manhattan. Mr. Boyce assisted with the rock anchor design and specification. He supervised and managed field observation services for rock anchor testing. Supervised and managed the September 2007 design and development of a foundation waterproofing system.

Storm Water Management

Benjamin Beechwood, LLC, Arverne Urban Renewal Area (URA), Far Rockaway, NY

Design/Engineering Management Services, Stormwater Collection & Conveyance System - Mr. Boyce managed the design and siting of a stormwater collection and conveyance system for an 80+ acre development along the south shore of Queens County. He coordinated catch basins locating, grading design, sizing interconnected piping networks and tie-ins with the local NYC storm sewer system. Mr. Boyce was also responsible for incorporating BMP's in the system design.

Stormwater Quality Impact Assessment on Local Surface Water Body - Mr. Boyce was responsible for determining stormwater roadway run-off concentrations for TPH's, suspended solids, metals, coli forms, pH, and dissolved oxygen. To estimate the influence of these parameters on the nearby canal basins into which they were to be discharged, he employed chemical and mathematical relations using chemical properties and mass balances based on flow rates and tidal flushing volumes to estimate potential effects. Subsequently, he assisted in preparing the stormwater portion section of a Draft Environmental Impact Statement.

NYSDOT, Kensico Reservoir Route, Westchester, NY

120 Expansion Stormwater Management System Stormwater Quality Pre-Construction Baseline Assessment - Mr. Boyce directed the roadway run-off sampling of 15 storm events and 5 outfalls along the Reservoir. He oversaw installation of automated sampling equipment to monitor weather conditions, sampling events, and system/statistical data analyses for a stormwaterrunoff quality report.

Allied Aviation Services, LaGuardia Airport, NY

Storm water Sediment & pH Control Investigation, LaGuardia Airport, Queens, NY - Mr. Boyce was responsible for reviewing and investigating an ongoing problem of storm water discharge to a surface water body with a too high solids content level. Storm water runoff collected at the fuel tank farm for LGA is passed through a treatment system to remove oils and organic contaminants. Under severe rainfall events, the treated storm water effluent had been discharged to the adjacent harbor with unusually high amounts of suspended solids, which were temporary violations of the facility's State Pollutant Discharge Elimination System permit. To find a cost-effective solution for the continuing problem, he evaluated various alternatives from in line cartridge filters, to settling tanks, to storm drain separators. Aside from cost, he considered other restrictions, such as limited space for installation, maintenance, durability, and reliability. Mr. Boyce studied peak hydrologic events and recommended the most efficient and effective treatment option for the owner to implement. Elevated pH of the discharged treated storm water effluent presented an unexpected, and separate, water quality issue. In addition, he was responsible for investigating the cause of the problem and recommending a course of corrective action.

AIL Systems Inc. Deer Park, NY

Recharge Basin Size Analysis - To assess the feasibility of reclaiming land used for recharge purposes, to sell or alter its land use, Mr. Boyce analyzed the industrial facility's existing cooling water recharge system. His analysis included an investigation of the facility's hydrological and drainage characteristics, and the existing storm water handling facilities' capability to accommodate various storm events. Mr. Boyce reviewed local building codes to make sure any proposed alterations could handle the minimum required storm events. He investigated the cooling water discharge rates to the recharge basins, to determine how much of the existing basins were required to handle the cooling water. With his report, AIL Systems was able to effectively evaluate its real estate options.



Groundwater Remediation

Brookhaven National Laboratory, Upton, NY

Engineering Services for the Glass Holes & Animal Chemical Pits CERCLA Remedial Excavation - Mr. Boyce prepared the excavation plan and design drawings for a remedial excavation of over 50 individual waste pits at the client's site. He managed the waste pits' initial delineation, oversaw the geophysical survey using electromagnetic survey equipment, and prepared the excavation plan detailing technical guidelines for the hazardous waste site's remediation. The plan provided direction for the removal/recovery of organic, inorganic, biological and radioactive buried wastes, as well as explosive, reactive, and corrosive materials. His engineering drawings detailed excavation layout, work/stockpiling areas, grading, drainage, haul routes, utilities, and site restoration. He acted as a field engineer during the field operations, oversaw excavation/waste removal, stockpiling, characterization and segregation of excavated materials, and monitored daily logistics for field crews.

Mercury-Contaminated Soil Treatment Alternatives Evaluation Report - Mr. Boyce's report evaluated various appropriate remedial treatment technologies, including visual and technical system descriptions, a comparison study of each alternative's technology, treatment process efficiency in the types, quantities and concentrations of mercury present in the soil, as well as the overall economics and cost effectiveness. He called attention to the presence of other contaminants such as organics and radioactive parameters and studied the available technologies. He also presented recommendations for a soil stabilization process and options for the remediated soil's disposal.

OUIII Western South Boundary Remedial System Design - Mr. Boyce was responsible for assisting in selecting the appropriate remedial technology for a groundwater pump treatment system for a volatile organic contaminant plume clean up. He suggested appropriate technologies and reviewed them from a feasibility standpoint. He recommended the most applicable one, based on effectiveness, available capital and O&M costs, implementation, reliability, operation, and maintenance. Mr. Boyce was then responsible for preparing a portion of the design of the recommended treatment technology, which included sizing and optimizing the primary treatment equipment (4-foot diameter x 35-foot tall air stripping tower).

Ash Pits Capping -Mr. Boyce was responsible for preparing the design of a capping system for an area formerly used as incinerator ash repository. He conducted the initial investigation to assess the area's extent by reviewing old aerial photographs, digging test pits, and conducting interviews with BNL personnel. Once he had delineated and surveyed the area, Mr. Boyce designed a soil-cap cover system in accordance with NYSDEC regulations to prevent surface exposure to ash and to minimize rainfall infiltration through the area. He was responsible for repairing design/construction drawings that included grading, drainage, slope stabilization details, limits of clearing and coverage and site restoration work such as fencing, roadways, signage, etc.

Minmilt Realty, Farmingdale NY

Groundwater & Soil Remediation Systems Design - Mr. Boyce evaluated, selected and designed appropriate remediation systems to cleanup a large industrial solvent plume that had contaminated nearby soil and groundwater. The chosen groundwater remediation consisted of an air-stripping tower, granular activated carbon (GAC) filters for off gas treatment and recharge structures; the soil treatment system was a soil-vapor extraction system (SVE) and GAC filters. Mr. Boyce's design responsibilities included sizing and selecting remediation system equipment, structural, mechanical, electrical, hydraulic, well, controls and instrumentation design. Mr. Boyce also performed three-dimensional numerical groundwater modeling to evaluate the effectiveness of the proposed groundwater remediation system and to size and locate a series of deep and shallow wells. Mr. Boyce prepared plans and specifications, a technical report for the NYSDEC detailing the choice of the specific components overall design process. He was involved in the construction administration and oversight of the remediation systems and was responsible for reviewing and approving shop drawings and performing routine construction observation services.

Brentwood Water District (BWD) Air Stripper, Plant No. 2, Brentwood, NY

Treatment Alternatives Study & System Design - As Project Engineer, Mr. Boyce conducted the treatment alternatives study for a VOC contaminated well field at BWD. The study ultimately recommended air stripping as the most effective and cost efficient technology to treat groundwater withdrawn from Plant No. 2. Upon the study's completion and acceptance, he prepared the design for the treatment system, which encompassed mechanical, electrical, structural, hydraulic, architectural and site components. Specific design components included an 11' diameter by 30' packed bed depth aluminum air stripper, a 100,000gallon ground storage clearwell, and booster pumps. Specific design aspects include restaging an existing well pump, electrical service upgrade, a new natural gas engine generator set, stripping tower enclosure and three existing pumping stations refinish. Mr. Boyce prepared the plans and specifications, which were approved by the SCDHS and ultimately used to construct the air stripper and related facilities. Following the design phase of the project Mr. Boyce was responsible for providing construction administration and observation services.

Nitrate Study & Analysis - Mr. Boyce prepared a statistical analysis to compare increasing groundwater nitrate concentrations with pumpage from Plant No. 2 of the BWD. The analysis involved compiling water quality data to measure levels in three wells of Plant No. 2, reviewing the data, and using statistical methods to forecast the water quality of pumpage from the aquifers utilized by the BWD. He superimposed pumpage data from Plant No. 2 over his water quality findings to create a trend analysis, which showed nitrate concentrations fluctuated in the different wells based on pumpage. Mr. Boyce recommended available treatment technologies which eventually would be necessary to slow the deterioration rate of water quality caused by nitrate level changes. He advised that, based on the statistical analysis, establishing pumping sequences would slow the rate of water quality deterioration. His report also included estimates for when treatment of nitrate will become necessary and appropriate treatment technologies available.



Roanoke Sand & Gravel, Mid Island, NY

Sand Mining Design and Permitting - As the primary client contact, Mr. Boyce oversaw the application submittal to the Town of Brookhaven and NYSDEC to expand mining operations at an existing sand and gravel mine. The scope of services included assembling engineering drawings for proposed mining operations by excavating deeper through the bottom; preparing an engineering report addressing environmental, geotechnical and hydrogeological issues; preparing volume estimates to determine how much more sand and gravel could be mined by expanding the operations at the existing site and acting as regulatory liaison for the client.

PUBLICATIONS

- Not Just a Chemical Interaction: Complementary Roles of Geologist & Engineer on a Hazardous Waste Remediation Project at BNL (5th Conference: Metropolitan & Long Island Association of Prof'l Geologists (M/LIPAG, 04/98, SUNY Stony Brook)
- Much Ado About Mercury: Evaluation of Treatment Options for Mercury Contaminated Soil at Brookhaven Nat'l Laboratory (BNL) (6th Conference, M/LIPAG, 04/99, SUNY Stony Brook)
- Open-Loop Geothermal Well Systems on Long Island (10th Conference, M/LIPAG, 04/03, SUNY Stony Brook)



APPENDIX D LABORATORY SOPS FOR PFAS ANALYSIS

Published Date: February 01, 2019 Title: PFAS by LC/MS/MS by EPA 537

Determination of Selected Perfluorinated Alkyl Substances in **Drinking Water by Solid Phase Extraction and Liquid** Chromatography/Tandem Mass Spectrometry (LC/MS/MS)

Reference: EPA Method 537, Version 1.1, September 2009, EPA Document #: EPA/600/R-08/092

ID No.:**23511**

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Revision 7

EPA Method 537.1, Version 1, November 2018, EPA Document #: EPA/600/R-18/352

Department of Defense, Quality Systems Manual for Environmental Laboratories, Version 5.1, 2017

Scope and Application

Matrices: Drinking Water, Non-potable water

Definitions: Refer to Alpha Analytical Quality Manual.

- 1.1 This is a liquid chromatography/tandem mass spectrometry (LC/MS/MS) method for the determination of selected perfluorinated alkyl substances (PFASs) in drinking water. Accuracy and precision data have been generated in reagent water, and finished ground and surface waters for the compounds listed in Table 1.
- 1.2 The data report packages present the documentation of any method modification related to the samples tested. Depending upon the nature of the modification and the extent of intended use, the laboratory may be required to demonstrate that the modifications will produce equivalent results for the matrix. Approval of all method modifications is by one or more of the following laboratory personnel before performing the modification: Area Supervisor, Department Supervisor, Laboratory Director, or Quality Assurance Officer.
- 1.3 This method is restricted to use by or under the supervision of analysts experienced in the operation of the LC/MS/MS and in the interpretation of LC/MS/MS data. Each analyst must demonstrate the ability to generate acceptable results with this method by performing an initial demonstration of capability.

Table 1

Parameter	Acronym	CAS
Hexafluoropropylene oxide dimer acid ¹	HFPO-DA	13252-13-6
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorodecanoic acid	PFDA	335-76-2
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluorohexanoic acid	PFHxA	307-24-4

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Table 1 (cont.)

Perfluorononanoic acid	PFNA	375-95-1
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorotetradecanoic acid	PFTA	376-06-7
Perfluorotridecanoic acid	PFTrDA	72629-94-8
Perfluoroundecanoic acid	PFUnA	2058-94-8
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid ¹	11CI-PF3OUdS	763051-92-9
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid ¹	9CI-PF3ONS	756426-58-1
4,8-dioxa-3H-perfluorononanoic acid ¹	ADONA	919005-14-4

¹ Compounds included as part of EPA 537.1 only.

2. Summary of Method

2.1 A 250-mL water sample is fortified with surrogates and passed through a solid phase extraction (SPE) cartridge containing polystyrenedivinylbenzene (SDVB) to extract the method analytes and surrogates. The compounds are eluted from the solid phase with a small amount of methanol. The extract is concentrated to dryness with nitrogen in a heated water bath, and then adjusted to a 1-mL volume with 96:4% (vol/vol) methanol: water after adding the IS(s). A 3μL injection is made into an LC equipped with a C18 column that is interfaced to an MS/MS. The analytes are separated and identified by comparing the acquired mass spectra and retention times to reference spectra and retention times for calibration standards acquired under identical LC/MS/MS conditions. The concentration of each analyte is determined by using the internal standard technique. Surrogate analytes are added to all Field and QC Samples to monitor the extraction efficiency of the method analytes.

2.2 Method Modifications from Reference

2.2.1 None.

3. Reporting Limits

3.1 The reporting limit for PFAS's is 2 ng/L (4ng/L for HFPO-DA).

4. Interferences

- **4.1** PFAS standards, extracts and samples should not come in contact with any glass containers or pipettes as these analytes can potentially adsorb to glass surfaces. PFAS analyte, IS and SUR standards commercially purchased in glass ampoules are acceptable; however, all subsequent transfers or dilutions performed by the analyst must be prepared and stored in polypropylene containers.
- **4.2** Method interferences may be caused by contaminants in solvents, reagents (including reagent water), sample bottles and caps, and other sample processing hardware that lead to discrete artifacts and/or elevated baselines in the chromatograms. The method analytes

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> in this method can also be found in many common laboratory supplies and equipment, such as PTFE (polytetrafluoroethylene) products, LC solvent lines, methanol, aluminum foil, SPE sample transfer lines, etc. All items such as these must be routinely demonstrated to be free from interferences (less than 1/3 the RL for each method analyte) under the conditions of the analysis by analyzing laboratory reagent blanks as described in Section 9.2. Subtracting blank values from sample results is not permitted.

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- **4.3** Matrix interferences may be caused by contaminants that are co-extracted from the sample. The extent of matrix interferences will vary considerably from source to source, depending upon the nature of the water. Humic and/or fulvic material can be co-extracted during SPE and high levels can cause enhancement and/or suppression in the electrospray ionization source or low recoveries on the SPE sorbent. Total organic carbon (TOC) is a good indicator of humic content of the sample. Under the LC conditions used during method development, matrix effects due to total organic carbon (TOC) were not observed.
- **4.4** Relatively large quantities of the preservative (Sect. 6.2.1) are added to sample bottles. The potential exists for trace-level organic contaminants in these reagents. Interferences from these sources should be monitored by analysis of laboratory reagent blanks (Sect. 9.2.1). particularly when new lots of reagents are acquired.
- **4.5** SPE cartridges can be a source of interferences. The analysis of field and laboratory reagent blanks can provide important information regarding the presence or absence of such interferences. Brands and lots of SPE devices should be tested to ensure that contamination does not preclude analyte identification and quantitation.

5. **Health and Safety**

- **5.1** The toxicity or carcinogenicity of each reagent and standard used in this method is not fully established; however, each chemical compound should be treated as a potential health hazard. From this viewpoint, exposure to these chemicals must be reduced to the lowest possible level by whatever means available. A reference file of material safety data sheets is available to all personnel involved in the chemical analysis. Additional references to laboratory safety are available in the Chemical Hygiene Plan.
- **5.2** All personnel handling environmental samples known to contain or to have been in contact with municipal waste must follow safety practices for handling known disease causative agents.
- **5.3** PFOA has been described as "likely to be carcinogenic to humans." Pure standard materials and stock standard solutions of these method analytes should be handled with suitable protection to skin and eyes, and care should be taken not to breathe the vapors or ingest the materials.

Sample Collection, Preservation, Shipping and Handling

6.1 Sample Collection

- Samples must be collected in three (3) 250-mL high density polyethylene (HDPE) 6.1.1 container with an unlined plastic screw cap.
- 6.1.2 The sample handler must wash their hands before sampling and wear nitrile gloves while filling and sealing the sample bottles. PFAS contamination during sampling can occur from a number of common sources, such as food packaging

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and certain foods and beverages. Proper hand washing and wearing nitrile gloves will aid in minimizing this type of accidental contamination of the samples.

- **6.1.3** Open the tap and allow the system to flush until the water temperature has stabilized (approximately 3 to 5 min). Collect samples from the flowing system.
- **6.1.4** Fill sample bottles, taking care not to flush out the sample preservation reagent. Samples do not need to be collected headspace free.
- **6.1.5** After collecting the sample, cap the bottle and agitate by hand until preservative is dissolved. Keep the sample sealed from time of collection until extraction.
- **6.1.6** Field Reagent Blank (FRB)
 - 6.1.6.1 A FRB must be handled along with each sample set. The sample set is composed of samples collected from the same sample site and at the same time. At the laboratory, fill the field blank sample bottle with reagent water and preservatives, seal, and ship to the sampling site along with the sample bottles. For each FRB shipped, an empty sample bottle (no preservatives) must also be shipped. At the sampling site, the sampler must open the shipped FRB and pour the preserved reagent water into the empty shipped sample bottle, seal and label this bottle as the FRB. The FRB is shipped back to the laboratory along with the samples and analyzed to ensure that PFASs were not introduced into the sample during sample collection/handling.
 - **6.1.6.2** The same batch of preservative must be used for the FRBs as for the field samples.
 - **6.1.6.3** The reagent water used for the FRBs must be initially analyzed for method analytes as a MB and must meet the MB criteria in Section 9.2.1 prior to use. This requirement will ensure samples are not being discarded due to contaminated reagent water rather than contamination during sampling.

6.2 Sample Preservation

6.2.1 The preservation reagent, listed in the table below, is added to each sample bottle as a solid prior to shipment to the field (or prior to sample collection).

Table 2

Compound	Amount	Purpose	
Trizma	5.0 g/l	Buffering reagent and removes free chlorine	

6.3 Sample Shipping

6.3.1 Samples must be chilled during shipment and must not exceed 10 °C during the first 48 hours after collection. Sample temperature must be confirmed to be at or below 10 °C when the samples are received at the laboratory. Samples stored in the lab must be held at or below 6 °C until extraction, but should not be frozen.

NOTE: Samples that are significantly above 10° C, at the time of collection, may need to be iced or refrigerated for a period of time, in order to chill them prior to shipping. This will allow them to be shipped with sufficient ice to meet the above requirements.

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6.4 Sample Handling

6.4.1 Holding Times

6.4.1.1 Water samples should be extracted as soon as possible but must be extracted within 14 days. Extracts must be stored at room temperature and analyzed within 28 days after extraction.

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7. Equipment and Supplies

- **7.1** SAMPLE CONTAINERS 250-mL high density polyethylene (HDPE) bottles fitted with unlined screw caps. Sample bottles must be discarded after use.
- **7.2** POLYPROPYLENE BOTTLES 4-mL narrow-mouth polypropylene bottles.
- **7.3** CENTRIFUGE TUBES 15-mL conical polypropylene tubes with polypropylene screw caps for storing standard solutions and for collection of the extracts.
- **7.4** AUTOSAMPLER VIALS Polypropylene 0.7-mL autosampler vials with polypropylene caps.
 - **7.4.1** NOTE: Polypropylene vials and caps are necessary to prevent contamination of the sample from PTFE coated septa. However, polypropylene caps do not reseal, so evaporation occurs after injection. Thus, multiple injections from the same vial are not possible.
- **7.5** POLYPROPYLENE GRADUATED CYLINDERS Suggested sizes include 25, 50, 100 and 1000-mL cylinders.
- **7.6** MICRO SYRINGES Suggested sizes include 5, 10, 25, 50, 100, 250, 500 and 1000-μL syringes.
- **7.7** PLASTIC PIPETS Polypropylene or polyethylene disposable pipets.
- 7.8 ANALYTICAL BALANCE Capable of weighing to the nearest 0.0001 g.
- 7.9 SOLID PHASE EXTRACTION (SPE) APPARATUS FOR USING CARTRIDGES
 - **7.9.1** SPE CARTRIDGES 0.5 g, 6-mL SPE cartridges containing styrenedivinylbenzene (SDVB) sorbent phase.
 - 7.9.2 VACUUM EXTRACTION MANIFOLD A manual vacuum manifold with large volume sampler for cartridge extractions, or an automatic/robotic sample preparation system designed for use with SPE cartridges, may be used if all QC requirements discussed in Section 9 are met. Extraction and/or elution steps may not be changed or omitted to accommodate the use of an automated system. Care must be taken with automated SPE systems to ensure the PTFE commonly used in these systems does not contribute to unacceptable analyte concentrations in the MB (Sect. 9.2.1).
 - **7.9.3** SAMPLE DELIVERY SYSTEM Use of a polypropylene transfer tube system, which transfers the sample directly from the sample container to the SPE cartridge, is recommended, but not mandatory. Standard extraction manifolds come equipped with PTFE transfer tube systems. These can be replaced with 1/8" O.D. x 1/16" I.D. polypropylene or polyethylene tubing cut to an appropriate length to ensure no sample contamination from the sample transfer lines. Other types of non-PTFE tubing may be used provided it meets the MB (Sect. 9.2.1)

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and LCS (Sect. 9.3) QC requirements. The PTFE transfer tubes may be used, but an MB must be run on each PFTE transfer tube and the QC requirements in Section 13.2.2 must be met. In the case of automated SPE, the removal of PTFE lines may not be feasible; therefore, MBs will need to be rotated among the ports and must meet the QC requirements of Sections 13.2.2 and 9.2.1.

- **7.10** EXTRACT CONCENTRATION SYSTEM Extracts are concentrated by evaporation with nitrogen using a water bath set no higher than 65 °C.
- **7.11** LABORATORY OR ASPIRATOR VACUUM SYSTEM Sufficient capacity to maintain a vacuum of approximately 10 to 15 inches of mercury for extraction cartridges.
- 7.12 LIQUID CHROMATOGRAPHY (LC)/TANDEM MASS SPECTROMETER (MS/MS) WITH DATA SYSTEM
 - 7.12.1 LC SYSTEM Instrument capable of reproducibly injecting up to 10-µL aliquots, and performing binary linear gradients at a constant flow rate near the flow rate used for development of this method (0.3 mL/min). The LC must be capable of pumping the water/methanol mobile phase without the use of a degasser which pulls vacuum on the mobile phase bottle (other types of degassers are acceptable). Degassers which pull vacuum on the mobile phase bottle will volatilize the ammonium acetate mobile phase causing the analyte peaks to shift to earlier retention times over the course of the analysis batch. The usage of a column heater is optional.

NOTE: During the course of method development, it was discovered that while idle for more than one day, PFASs built up in the PTFE solvent transfer lines. To prevent long delays in purging high levels of PFASs from the LC solvent lines, they were replaced with PEEK tubing and the PTFE solvent frits were replaced with stainless steel frits. It is not possible to remove all PFAS background contamination, but these measures help to minimize their background levels.

- 7.12.2 LC/TANDEM MASS SPECTROMETER The LC/MS/MS must be capable of negative ion electrospray ionization (ESI) near the suggested LC flow rate of 0.3 mL/min. The system must be capable of performing MS/MS to produce unique product ions for the method analytes within specified retention time segments. A minimum of 10 scans across the chromatographic peak is required to ensure adequate precision.
- 7.12.3 DATA SYSTEM An interfaced data system is required to acquire, store, reduce, and output mass spectral data. The computer software should have the capability of processing stored LC/MS/MS data by recognizing an LC peak within any given retention time window. The software must allow integration of the ion abundance of any specific ion within specified time or scan number limits. The software must be able to calculate relative response factors, construct linear regressions or quadratic calibration curves, and calculate analyte concentrations.
- **7.12.4** ANALYTICAL COLUMN An LC C_{18} column (2.1 x 150 mm) packed with 5 μ m d_p C_{18} solid phase particles was used. Any column that provides adequate resolution, peak shape, capacity, accuracy, and precision (Sect. 9) may be used.

8. Reagents and Standards

8.1 GASES, REAGENTS, AND SOLVENTS – Reagent grade or better chemicals should be used.

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> REAGENT WATER - Purified water which does not contain any measurable 8.1.1 quantities of any method analytes or interfering compounds greater than 1/3 the RL for each method analyte of interest. Prior to daily use, at least 3 L of reagent water should be flushed from the purification system to rinse out any build-up of analytes in the system's tubing.

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- 8.1.2 METHANOL (CH₃OH, CAS#: 67-56-1) – High purity, demonstrated to be free of analytes and interferences.
- 8.1.3 AMMONIUM ACETATE ($NH_4C_2H_3O_2$, CAS#: 631-61-8) – High purity, demonstrated to be free of analytes and interferences.
- 8.1.4 2 mM AMMONIUM ACETATE/REAGENT WATER - To prepare 1 L, add .154 g ammonium acetate to 1 L of reagent water. This solution is prone to volatility losses and should be replaced at least every 48 hours.
- TRIZMA PRESET CRYSTALS, pH 7.0 Reagent grade. A premixed blend of 8.1.5 [Tris(hydroxymethyl)aminomethane] and Tris [Tris(hydroxymethyl)aminomethane hydrochloride]. Alternatively, a mix of the two components with a weight ratio of 15.5/1 Tris HCL/Tris may be used. These blends are targeted to produce a pH near 7.0 at 25 °C in reagent water. Trizma functions as a buffer, and removes free chlorine in chlorinated finished waters (Sect. 6.2.1).
- 8.1.6 NITROGEN - Used for the following purposes: Nitrogen aids in aerosol generation of the ESI liquid spray and is used as collision gas in some MS/MS instruments. The nitrogen used should meet or exceed instrument manufacturer's specifications. In addition, Nitrogen is used to concentrate sample extracts (Ultra High Purity or equivalent).
- 8.1.7 ARGON - Used as collision gas in MS/MS instruments. Argon should meet or exceed instrument manufacturer's specifications. Nitrogen gas may be used as the collision gas provided sufficient sensitivity (product ion formation) is achieved.
- **8.2** STANDARD SOLUTIONS When a compound purity is assayed to be 96% or greater, the weight can be used without correction to calculate the concentration of the stock standard. PFAS analyte, IS and SUR standards commercially purchased in glass ampoules are acceptable; however, all subsequent transfers or dilutions performed by the analyst must be prepared and stored in polypropylene containers. Standards for sample fortification generally should be prepared in the smallest volume that can be accurately measured to minimize the addition of excess organic solvent to aqueous samples.

NOTE: Stock standards (Sect. 8.2.1, 8.2.3 and 8.2.5) are stored at ≤4 °C. Primary dilution standards (Sect. 8.2.2 and 8.2.4) are stored at room temperature to prevent adsorption of the method analytes onto the container surfaces that may occur when refrigerated. Storing the standards at room temperature will also minimize daily imprecision due to the potential of inadequate room temperature stabilization.

IS STOCK STANDARD SOLUTIONS - IS stock standard solutions are stable for 8.2.1 at least 6 months when stored at 4 °C. The stock solution is purchased at a concentration range of 1-4 ng/µl.

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8.2.2 INTERNAL STANDARD PRIMARY DILUTION (IS PDS) STANDARD (0.5-2 ng/μL) – Prepare the IS PDS at a concentration of 0.5-2 ng/μL. The IS PDS is prepared in 96:4% (vol/vol) methanol:water. The IS PDS is stable for at least two months when stored in polypropylene centrifuge tubes at room temperature.

Table 3

Internal Standard	Conc. of IS Stock (ng/uL)	Vol. of IS Stock (mL)	Final Vol. of IS PDS (mL)	Final Conc. of IS PDS (ng/µL)
¹³ C-PFOA	1	1.0	2.0	0.5
¹³ C-PFOS	3	1.0	2.0	1.5
d ₃ -NMeFOSAA	4	1.0	2.0	2.0

- **8.2.3** SUR STOCK STANDARD SOLUTIONS SUR stock standard solutions are stable for at least 6 months when stored at 4 °C.
- 8.2.4 SURROGATE PRIMARY DILUTION STANDARD (SUR PDS) (0.5-2 ng/μL) Prepare the SUR PDS at a concentration of 0.5-2 ng/μL. The SUR PDS is prepared in 96:4% (vol/vol) methanol:water. This solution is used to fortify all QC and Field Samples. The PDS is stable for one year when stored in polypropylene centrifuge tubes at room temperature.

Table 4

Surrogate	Conc. of SUR Stock (ng/μL)	Vol. of SUR Stock (mL)	Final Vol. of SUR PDS (,L)	Final Conc. of SUR PDS (ng/µL)
¹³ C-PFHxA	1.0	1.0	2.0	0.5
¹³ C-PFDA	1.0	1.0	2.0	0.5
d ₅ -NEtFOSAA	4.0	1.0	2.0	2.0
Tetrafluoro-2- heptafluoropropoxy- 13C3-propanoic acid ¹	50	1.0	2.0	0.5

¹ EPA 537.1 Surrogate only

8.2.5 ANALYTE STOCK STANDARD SOLUTION – Analyte stock standards are stable for at least 6 months when stored at -15 °C. When using these stock standards to prepare a PDS, care must be taken to ensure that these standards are at room temperature and adequately vortexed.

Table 5

Analyte	Analyte Stock Solvent	Concentration (ug/mL)
PFHxA	100% methanol	1.0
PFHpA	100% methanol	1.0
PFOA	100% methanol	1.0
PFNA	100% methanol	1.0
PFDA	100% methanol	1.0
PFUnA	100% methanol	1.0
PFDoA	100% methanol	1.0

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PFTrDA	100% methanol	1.0
PFTA	100% methanol	1.0
PFBS	100% methanol	1.0

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Table 5 (cont.)

Analyte	Analyte Stock Solvent	Concentration (ug/mL)
PFHxS	100% methanol	1.0
PFOS	100% methanol	1.0
NEtFOSAA	100% methanol	1.0
NMeFOSAA	100% methanol	1.0
HFPO-DA	100% methanol	50.0
11-chloroeicosafluoro-3-	100% methanol	50.0
oxaundecane-1-sulfonic acid		
9-chlorohexadecafluoro-3-oxanone-	100% methanol	50.0
1-sulfonic acid		
4,8-dioxa-3H-perfluorononanoic	100% methanol	50.0
acid		

8.2.6 LOW, MEDIUM AND HIGH LEVEL LCS – The LCS's will be prepared at the following concentrations and rotated per batch; 2 ng/L, 40 ng/L, 500 ng/l. The analyte PDS contains all the method analytes of interest at various concentrations in methanol containing 4% water. The analyte PDS has been shown to be stable for 6 months when stored at room temperature.

8.2.7 CALIBRATION STANDARDS (CAL) -

Current Concentrations (ng/mL): 0.5, 1.0, 5.0, 10.0, 50.0, 125 and 150 (optional)

Prepare the CAL standards over the concentration range of interest from dilutions of the analyte PDS in methanol containing 4% reagent water. The IS and SUR are added to the CAL standards at a constant concentration (10-40 ng/L). The lowest concentration CAL standard must be at or below the RL (2 ng/L), which may depend on system sensitivity. The CAL standards may also be used as CCVs (Sect. 9.9). The CAL standards are stable for at least two weeks when stored at room temperature. Longer storage times are acceptable provided appropriate QC measures are documented demonstrating the CAL standard stability.

9. Quality Control

The laboratory must maintain records to document the quality of data that is generated. Ongoing data quality checks are compared with established performance criteria to determine if the results of analyses meet the performance characteristics of the method.

9.1 REPORTING LIMIT (RL) CONFIRMATION

9.1.1 Fortify, extract, and analyze seven replicate LCSs at 2 ng/l. These LCSs must contain all method preservatives described in Section 6.2.1. Calculate the mean measured concentration (Mean) and standard deviation for these replicates. Determine the Half Range for the prediction interval of results (HR_{PIR}) using the equation below

 $HR_{PIR} = 3.963s$

Where:

s = the standard deviation

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3.963 = a constant value for seven replicates.

9.1.2 Confirm that the upper and lower limits for the Prediction Interval of Result ($PIR = Mean \pm HR_{PIR}$) meet the upper and lower recovery limits as shown below

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The Upper PIR Limit must be ≤150% recovery.

<u>Mean + HR</u> $_{PIR}$ x 100% ≤ 150% Fortified Concentration

The Lower PIR Limit must be ≥ 50% recovery.

<u>Mean − HR</u> $_{PlR}$ x 100% ≥ 50% Fortified Concentration

9.1.3 The RL is validated if both the Upper and Lower PIR Limits meet the criteria described above. If these criteria are not met, the RL has been set too low and must be determined again at a higher concentration.

9.2 Blank(s)

- 9.2.1 METHOD BLANK (MB) - A Method Blank (MB) is required with each extraction batch to confirm that potential background contaminants are not interfering with the identification or quantitation of method analytes. If more than 20 Field Samples are included in a batch, analyze an MB for every 20 samples. If the MB produces a peak within the retention time window of any analyte that would prevent the determination of that analyte, determine the source of contamination and eliminate the interference before processing samples. Background contamination must be reduced to an acceptable level before proceeding. Background from method analytes or other contaminants that interfere with the measurement of method analytes must be below 1/3 of the RL. Blank contamination is estimated by extrapolation, if the concentration is below the lowest CAL standard. This extrapolation procedure is not allowed for sample results as it may not meet data quality objectives. If the method analytes are detected in the MB at concentrations equal to or greater than this level, then all data for the problem analyte(s) must be considered invalid for all samples in the extraction batch. Because background contamination is a significant problem for several method analytes, it is highly recommended that the analyst maintain a historical record of MB data.
- 9.2.2 FIELD REAGENT BLANK (FRB) The purpose of the FRB is to ensure that PFASs measured in the Field Samples were not inadvertently introduced into the sample during sample collection/handling. Analysis of the FRB is required only if a Field Sample contains a method analyte or analytes at or above the RL. The FRB is processed, extracted and analyzed in exactly the same manner as a Field Sample. If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the RL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed.

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9.3 Laboratory Control Sample (LCS)

An LCS is required with each extraction batch. The fortified concentration of the LCS must be rotated between low, medium, and high concentrations from batch to batch.

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- 9.3.2 The low concentration LCS must be as near as practical to, but no more than two times, the RL. Similarly, the high concentration LCS should be near the high end of the calibration range established during the initial calibration (Sect. 10.6).
- 9.3.3 Results of the low-level LCS analyses must be 50-150% of the true value. Results of the medium and high-level LCS analyses must be 70-130% of the true value. If the LCS results do not meet these criteria for method analytes, then all data for the problem analyte(s) must be considered invalid for all samples in the extraction batch.
- 9.3.4 It is the responsibility of the extraction chemist to view the previous extraction batch to determine the next spiking concentration. (Low → Medium → High)

9.4 Internal Standards (IS)

The analyst must monitor the peak areas of the IS(s) in all injections during each analysis day. The IS responses (peak areas) in any chromatographic run must be within 70-140% of the response in the most recent CCV and must not deviate by more than 50% from the average area measured during initial analyte calibration. If the IS areas in a chromatographic run do not meet these criteria, inject a second aliquot of that extract aliquoted into a new capped autosampler vial. Random evaporation losses have been observed with the polypropylene caps causing high IS(s) areas.

- 9.4.1 If the reinjected aliquot produces an acceptable IS response, report results for that aliquot.
- If the reinjected extract fails again, the analyst should check the calibration by reanalyzing the most recently acceptable CAL standard. If the CAL standard fails the criteria of Section 9.9, recalibration is in order per Section 10.6. If the CAL standard is acceptable, extraction of the sample may need to be repeated provided the sample is still within the holding time. Otherwise, report results obtained from the reinjected extract, but annotate as suspect. Alternatively, collect a new sample and re-analyze.

9.5 Surrogate Recovery

The SUR standard is fortified into all samples, CCVs, MBs, LCSs, MSs, MSDs, FD, and FRB prior to extraction. It is also added to the CAL standards. The SUR is a means of assessing method performance from extraction to final chromatographic measurement. Calculate the recovery (%R) for the SUR using the following equation

$$%R = (A / B) x 100$$

Where:

A = calculated SUR concentration for the QC or Field Sample

B = fortified concentration of the SUR.

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9.5.1.1 SUR recovery must be in the range of 70-130%. When SUR recovery from a sample, blank, or CCV is less than 70% or greater than 130%, check 1) calculations to locate possible errors, 2) standard solutions for degradation, 3) contamination, and 4) instrument performance. Correct the problem and reanalyze the extract.

- **9.5.1.2** If the extract reanalysis meets the SUR recovery criterion, report only data for the reanalyzed extract.
- 9.5.1.3 If the extract reanalysis fails the 70-130% recovery criterion, the analyst should check the calibration by injecting the last CAL standard that passed. If the CAL standard fails the criteria of Section 10.7, recalibration is in order per Section 10.6. If the CAL standard is acceptable, extraction of the sample should be repeated provided the sample is still within the holding time. If the re-extracted sample also fails the recovery criterion, report all data for that sample as suspect/SUR recovery to inform the data user that the results are suspect due to SUR recovery. Alternatively, collect a new sample and re-analyze.

9.6 Matrix Spike (MS)

- 9.6.1 Analysis of an MS is required in each extraction batch and is used to determine that the sample matrix does not adversely affect method accuracy. Assessment of method precision is accomplished by analysis of a Field Duplicate (FD) (Sect. 9.7); however, infrequent occurrence of method analytes would hinder this assessment. If the occurrence of method analytes in the samples is infrequent, or if historical trends are unavailable, a second MS, or MSD, must be prepared, extracted, and analyzed from a duplicate of the Field Sample. Extraction batches that contain MSDs will not require the extraction of a field sample duplicate. If a variety of different sample matrices are analyzed regularly, for example, drinking water from groundwater and surface water sources, method performance should be established for each. Over time, MS data should be documented by the laboratory for all routine sample sources.
- **9.6.2** Within each extraction batch, a minimum of one Field Sample is fortified as an MS for every 20 Field Samples analyzed. The MS is prepared by spiking a sample with an appropriate amount of the Analyte Stock Standard (Sect. 8.2.5). Use historical data and rotate through the low, mid and high concentrations when selecting a fortifying concentration. Calculate the percent recovery (%R) for each analyte using the equation

$$%R = (A - B) \times 100$$

Where:

A = measured concentration in the fortified sample

B = measured concentration in the unfortified sample

C = fortification concentration.

9.6.3 Analyte recoveries may exhibit matrix bias. For samples fortified at or above their native concentration, recoveries should range between 70-130%, except for low-level fortification near or at the RL (within a factor of 2-times the RL concentration) where 50-150% recoveries are acceptable. If the accuracy of any analyte falls outside the designated range, and the laboratory performance for

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that analyte is shown to be in control in the CCVs, the recovery is judged to be matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.

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9.7 Laboratory Duplicate

- **9.7.1** FIELD DUPLICATE OR LABORATORY FORTIFIED SAMPLE MATRIX DUPLICATE (FD or MSD) Within each extraction batch (not to exceed 20 Field Samples), a minimum of one FD or MSD must be analyzed. Duplicates check the precision associated with sample collection, preservation, storage, and laboratory procedures. If method analytes are not routinely observed in Field Samples, an MSD should be analyzed rather than an FD.
- **9.7.2** Calculate the relative percent difference (*RPD*) for duplicate measurements (*FD1* and *FD2*) using the equation

RPD =
$$\frac{|FD1 - FD2|}{(FD1 + FD2)/2}$$
 x 100

- 9.7.3 RPDs for FDs should be ≤30%. Greater variability may be observed when FDs have analyte concentrations that are within a factor of 2 of the RL. At these concentrations, FDs should have RPDs that are ≤50%. If the RPD of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the CCV, the recovery is judged to be matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.
- **9.7.4** If an MSD is analyzed instead of a FD, calculate the relative percent difference (RPD) for duplicate MSs (MS and MSD) using the equation

$$RPD = \frac{|MS - MSD|}{(MS + MSD)/2} \times 100$$

9.7.5 RPDs for duplicate MSs should be ≤30% for samples fortified at or above their native concentration. Greater variability may be observed when MSs are fortified at analyte concentrations that are within a factor of 2 of the RL. MSs fortified at these concentrations should have RPDs that are ≤50% for samples fortified at or above their native concentration. If the RPD of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the CCV, the recovery is judged to be matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.

9.8 Initial Calibration Verification (ICV)

9.8.1 As part of the IDC (Sect. 13.2), each time a new Analyte Stock Standard solution (Sect. 8.2.5) is used, and at least quarterly, analyze a QCS sample from a source different from the source of the CAL standards. If a second vendor is not available, then a different lot of the standard should be used. The QCS should be prepared and analyzed just like a CCV. Acceptance criteria for the QCS are identical to the CCVs; the calculated amount for each analyte must be ± 30% of the expected value. If measured analyte concentrations are not of acceptable

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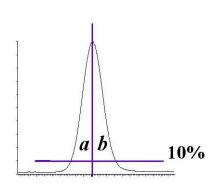
> accuracy, check the entire analytical procedure to locate and correct the problem.

9.9 Continuing Calibration Verification (CCV)

CCV Standards are analyzed at the beginning of each analysis batch, after every 10 Field Samples, and at the end of the analysis batch. See Section 10.7 for concentration requirements and acceptance criteria.

9.10 Method-specific Quality Control Samples

9.10.1 PEAK ASYMMETRY FACTOR - A peak asymmetry factor must be calculated using the equation below during the IDL and every time a calibration curve is generated. The peak asymmetry factor for the first two eluting peaks in a midlevel CAL standard (if only two analytes are being analyzed, both must be evaluated) must fall in the range of 0.8 to 1.5. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted. See guidance in Section 10.6.4.1 if the calculated peak asymmetry factors do not meet the criteria.



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 $A_s = b/a$

Where:

 A_s = peak asymmetry factor

b = width of the back half of the peak measured (at 10% peak height) from the trailing edge of the peak to a line dropped perpendicularly from the peak apex

a = the width of the front half of the peak measured (at 10% peak height) from the leading edge of the peak to a line dropped perpendicularly from the apex.

9.11 Method Sequence

ICV

CCV-LOW

MB

LCS

LCSD

MS

Duplicate or MSD

Field Samples (1-10)

CCV-MID

Field Samples (11-20)

CCV-HIGH

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10. Procedure

10.1 Equipment Set-up

10.1.1 This procedure may be performed manually or in an automated mode using a robotic or automatic sample preparation device. If an automated system is used to prepare samples, follow the manufacturer's operating instructions, but all extraction and elution steps must be the same as in the manual procedure. Extraction and/or elution steps may not be changed or omitted to accommodate the use of an automated system. If an automated system is used, the MBs should be rotated among the ports to ensure that all the valves and tubing meet the MB requirements (Sect. 9.2).

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- **10.1.2** Some of the PFASs adsorb to surfaces, including polypropylene. Therefore, the aqueous sample bottles must be rinsed with the elution solvent (Sect 10.3.4) whether extractions are performed manually or by automation. The bottle rinse is passed through the cartridge to elute the method analytes and is then collected (Sect. 10.3.4).
- **10.1.3 NOTE:** The SPE cartridges and sample bottles described in this section are designed as single use items and should be discarded after use. They may not be refurbished for reuse in subsequent analyses.

10.2 Sample Preparation

10.2.1 Samples are preserved, collected and stored as presented in Section 6. All Field and QC Samples, including the MB, LCS and FRB, must contain the dechlorinating agent listed in Section 6.2.1. Determine sample volume. An indirect measurement may be done in one of two ways: by marking the level of the sample on the bottle or by weighing the sample and bottle to the nearest 10 g. After extraction, proceed to Section 10.5 for final volume determination. Some of the PFASs adsorb to surfaces, thus the sample volume may NOT be transferred to a graduated cylinder for volume measurement. The MB, LCS and FRB may be prepared by measuring 250 mL of reagent water with a polypropylene graduated cylinder or filling a 250-mL sample bottle to near the top.

The entire sample that is received must be sent through the SPE cartridge. In addition, the bottle must be solvent rinsed and this rinse must be sent through the SPE cartridge as well. The method blank (MB) and laboratory control sample (LCS) must be extracted in exactly the same manner (i.e., must include the bottle solvent rinse). It should be noted that a water rinse alone is not sufficient. This does not apply to samples with high concentrations of PFAS that are prepared using serial dilution and not SPE.

- 10.2.2 Add 20 μ L of the SUR PDS (Sect. 8.2.4) to each sample, cap and invert to mix for a final concentration of 10 ng/L for 13 C-PFHxA and 13 C-PFDA and 40 ng/L for d_5 -NEtFOSAA.
- **10.2.3** In addition to the SUR(s) and dechlorination agent, if the sample is an LCS, MS, or MSD, add the necessary amount of analyte PDS (Sect. 8.2.5). Cap and invert each sample to mix.

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10.3 Cartridge SPE Procedure

- 10.3.1 CARTRIDGE CLEAN-UP AND CONDITIONING DO NOT allow cartridge packing material to go dry during any of the conditioning steps. Rinse each cartridge with 15 mL of methanol. Next, rinse each cartridge with 18 mL of reagent water, without allowing the water to drop below the top edge of the packing. If the cartridge goes dry during the conditioning phase, the conditioning must be started over. Add 4-5 mL of reagent water to each cartridge, attach the sample transfer tubes (Sect. 7.2.3), turn on the vacuum, and begin adding sample to the cartridge.
- **10.3.2** SAMPLE EXTRACTON Adjust the vacuum so that the approximate flow rate is 10-15 mL/min. Do not allow the cartridge to go dry before all the sample has passed through.
- 10.3.3 SAMPLE BOTTLE AND CARTRIDGE RINSE After the entire sample has passed through the cartridge, rinse the sample bottles with two 7.5-mL aliquots of reagent water and draw each aliquot through the sample transfer tubes and the cartridges. Draw air or nitrogen through the cartridge for 5 min at high vacuum (10-15 in. Hg).

NOTE: If empty plastic reservoirs are used in place of the sample transfer tubes to pass the samples through the cartridges, these reservoirs must be treated like the transfer tubes. After the entire sample has passed through the cartridge, the reservoirs must be rinsed to waste with reagent water.

10.3.4 SAMPLE BOTTLE AND CARTRIDGE ELUTION – Turn off and release the vacuum. Lift the extraction manifold top and insert a rack with collection tubes into the extraction tank to collect the extracts as they are eluted from the cartridges. Rinse the sample bottles with 4 mL of methanol and elute the analytes from the cartridges by pulling the 4 mL of methanol through the sample transfer tubes and the cartridges. Use a low vacuum such that the solvent exits the cartridge in a dropwise fashion. Repeat sample bottle rinse and cartridge elution with a second 4-mL aliquot of methanol.

NOTE: If empty plastic reservoirs are used in place of the sample transfer tubes to pass the samples through the cartridges, these reservoirs must be treated like the transfer tubes. After the reservoirs have been rinsed in Section 10.3.3, the elution solvent used to rinse the sample bottles must be swirled down the sides of the reservoirs while eluting the cartridge to ensure that any method analytes on the surface of the reservoirs are transferred to the extract.

10.4 Extract Concentration

10.4.1 Concentrate the extract to dryness under a gentle stream of nitrogen in a heated water bath (60-65 °C) to remove all the water/methanol mix. Add the appropriate amount of 96:4% (vol/vol) methanol:water solution and the IS PDS (Sect. 8.2.2) to the collection vial to bring the volume to 1 mL and vortex. Transfer a small aliquot with a plastic pipet (Sect. 7.6) to a polypropylene autosampler vial.

NOTE: It is recommend that the entire 1-mL aliquot not be transferred to the autosampler vial because the polypropylene autosampler caps do not reseal after injection. Therefore, do not store the extracts in the

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autosampler vials as evaporation losses can occur occasionally in these autosampler vials. Extracts can be stored in 15-mL centrifuge tubes (Sect. 7.3).

10.5 Sample Volume Determination

- 10.5.1 If the level of the sample was marked on the sample bottle, use a graduated cylinder to measure the volume of water required to fill the original sample bottle to the mark made prior to extraction. Determine to the nearest 10 mL. If using weight to determine volume, weigh the empty bottle to the nearest 10 g and determine the sample weight by subtraction of the empty bottle weight from the original sample weight (Sect. 10.2.1). Assume a sample density of 1.0 g/mL. In either case, the sample volume will be used in the final calculations of the analyte concentration (Sect. 11.2).
- **10.6 Initial Calibration** Demonstration and documentation of acceptable initial calibration is required before any samples are analyzed. After the initial calibration is successful, a CCV is required at the beginning and end of each period in which analyses are performed, and after every tenth Field Sample.

10.6.1 ESI-MS/MS TUNE

- **10.6.1.1** Calibrate the mass scale of the MS with the calibration compounds and procedures prescribed by the manufacturer.
- 10.6.1.2 Optimize the [M-H]- for each method analyte by infusing approximately 0.5-1.0 μg/mL of each analyte (prepared in the initial mobile phase conditions) directly into the MS at the chosen LC mobile phase flow rate (approximately 0.3 mL/min). This tune can be done on a mix of the method analytes. The MS parameters (voltages, temperatures, gas flows, etc.) are varied until optimal analyte responses are determined. The method analytes may have different optima requiring some compromise between the optima.
- 10.6.1.3 Optimize the product ion for each analyte by infusing approximately 0.5-1.0 μg/mL of each analyte (prepared in the initial mobile phase conditions) directly into the MS at the chosen LC mobile phase flow rate (approximately 0.4 mL/min). This tune can be done on a mix of the method analytes. The MS/MS parameters (collision gas pressure, collision energy, etc.) are varied until optimal analyte responses are determined. Typically, the carboxylic acids have very similar MS/MS conditions and the sulfonic acids have similar MS/MS conditions.
- **10.6.2** Establish LC operating parameters that optimize resolution and peak shape. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted.

Cautions: LC system components, as well as the mobile phase constituents, contain many of the method analytes in this method. Thus, these PFASs will build up on the head of the LC column during mobile phase equilibration. To minimize the background PFAS peaks and to keep background levels constant, the time the LC column sits at initial conditions must be kept constant and as short as possible (while ensuring reproducible retention times). In addition, prior to daily use, flush the column with 100% methanol for at least 20 min before initiating a sequence. It may be necessary on some systems to flush other LC components such as wash

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syringes, sample needles or any other system components before daily use.

Mobile phase modifiers other than 20 mM ammonium acetate may be used at the discretion of the analyst, provided that the retention time stability criteria in Sect. 10.9.2 can be met over a period of two weeks. During method development, retention times shifted to shorter and shorter times as days progressed when mobile phases with less than 20 mM ammonium acetate were used.

- 10.6.3 Inject a mid-level CAL standard under LC/MS conditions to obtain the retention times of each method analyte. If analyzing for PFTA, ensure that the LC conditions are adequate to prevent co-elution of PFTA and the mobile phase interferants. These interferants have the same precursor and products ions as PFTA, and under faster LC conditions may co-elute with PFTA. Divide the chromatogram into retention time windows each of which contains one or more chromatographic peaks. During MS/MS analysis, fragment a small number of selected precursor ions ([M-H]-) for the analytes in each window and choose the most abundant product ion. For maximum sensitivity, small mass windows of ±0.5 daltons around the product ion mass were used for quantitation. If sufficient sensitivity exists to meet the RL, wider mass ranges may be used to obtain more confirmation ions.
 - 10.6.3.1 As recommended by the EPA Advisory on September 2016, both linear and branched isomers should be included in the quantitation. NOTE: As the NOTE in Section 10.6.4.1 indicates, PFOS has linear and branched isomers. There have been reports that not all the products ions in the linear PFOS are produced in all the branched PFOS isomers. (This phenomenon probably exists for PFHxS and PFBS also, although it has not been studied to date.) Thus, in an attempt to reduce PFOS bias, it is required that the m/z 499 $\rightarrow m/z$ 80 transition be used as the quantitation transition. Some MS/MS instruments, such as conventional ion traps, may not be able to scan a product ion with such a wide mass difference from the precursor ion; therefore, they may not be used for this method if PFOS. PFBS. or PFHxS analysis is to be conducted. Literature reports indicate for the most abundant PFOS isomer, which is the linear isomer, that all the products ions obtained on an ion trap have less than 10% relative abundance. In addition, there is not a single ion trap MS/MS transition that encompasses the linear isomer and the majority of the branch isomers; thus, the bias would be unacceptably high.
- **10.6.4** Inject a mid-level CAL standard under optimized LC/MS/MS conditions to ensure that each method analyte is observed in its MS/MS window and that there are at least 10 scans across the peak for optimum precision.
 - 10.6.4.1 If broad, split or fronting peaks are observed for the first two eluting chromatographic peaks (if only two analytes are being analyzed, both must be evaluated), change the initial mobile phase conditions to higher aqueous content until the peak asymmetry ratio for each peak is 0.8 1.5. The peak asymmetry factor is calculated as described in Section 9.10.1 on a mid-level CAL standard. The peak asymmetry factor must meet the above criteria for the first two eluting peaks during the IDL and every time a new calibration curve is generated. Modifying the standard

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> or extract composition to more aqueous content to prevent poor shape is not permitted.

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NOTE: PFHxS, PFOS, NMeFOSAA, and NEtFOSAA have multiple chromatographic peaks using the LC conditions in Table 5 due to chromatographic resolution of the linear and branched isomers of these compounds. According to the EPA Advisory, September 2016, the branched isomers are identified by analyzing a qualitative/semi-qualitative mixed PFOA standard and the quantitation of PFOA is accomplished by integration the total response which includes peaks identified as linear and branched isomers. Most PFASs are produced by two different processes. One process gives rise to linear PFASs only while the other process produces both linear and branched isomers. Thus, both branched and linear PFASs can potentially be found in the environment. For the aforementioned compounds that give rise to more than one peak, all the chromatographic peaks observed in the standard must be integrated and the areas totaled. Chromatographic peaks in a sample must be integrated in the same way as the CAL standard.

- 10.6.5 Prepare a set of CAL standards as described in Section 8.2.7. The lowest concentration CAL standard must be at or below the RL (2 ng/L), which may depend on system sensitivity. It is recommended that at least four of the CAL standards are at a concentration greater than or equal to the RL.
- 10.6.6 The LC/MS/MS system is calibrated using the IS technique. Use the LC/MS/MS data system software to generate a linear regression or quadratic calibration curve for each of the analytes. This curve must always be forced through zero and may be concentration weighted, if necessary. Forcing zero allows for a better estimate of the background levels of method analytes.
 - **10.6.6.1** The isotopically labeled IS(s) in this method may undergo suppression in the ESI source if the concentration of the co-eluting unlabeled method analyte(s) is too high. The analyte concentration at which suppression may occur can vary depending on the instrument, LC conditions, ESI conditions, IS concentration, etc. To evaluate whether suppression is occurring during calibration, calculate the relative percent difference (RPD) between the high (H) and low (L) areas for each IS using the equation

RPD =
$$(H - L)$$
 x 100 $(H + L) / 2$

- **10.6.6.2** The RPD calculated above must be <20% for each IS during calibration. If the calculated RPD is >20% for any IS, the analyst must recalibrate at lower analyte concentrations until the IS RPDs are <20%.
- 10.6.7 CALIBRATION ACCEPTANCE CRITERIA When quantitated using the initial calibration curve, each calibration point, except the lowest point, for each analyte should calculate to be within 70-130% of its true value. The lowest CAL point should calculate to be within 50-150% of its true value. If these criteria cannot be met, the analyst will have difficulty meeting ongoing QC criteria. It is recommended that corrective action is taken to reanalyze the CAL standards, restrict the range of calibration, or select an alternate method of calibration (forcing the curve through zero is still required).

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10.6.7.1 CAUTION: When acquiring MS/MS data, LC operating conditions must be carefully reproduced for each analysis to provide reproducible retention times. If this is not done, the correct ions will not be monitored at the appropriate times. As a precautionary measure, the chromatographic peaks in each window must not elute too close to the edge of the segment time window.

- 10.7 CONTINUING CALIBRATION CHECK (CCV) Minimum daily calibration verification is as follows. Verify the initial calibration at the beginning and end of each group of analyses, and after every tenth sample during analyses. In this context, a "sample" is considered to be a Field Sample. MBs, CCVs, LCSs, MSs, FDs FRBs and MSDs are not counted as samples. The beginning CCV of each analysis batch must be at or below the RL in order to verify instrument sensitivity prior to any analyses. If standards have been prepared such that all low CAL points are not in the same CAL solution, it may be necessary to analyze two CAL standards to meet this requirement. Alternatively, the analyte concentrations in the analyte PDS may be customized to meet this criterion. Subsequent CCVs should alternate between a medium and high concentration CAL standard.
 - **10.7.1** Inject an aliquot of the appropriate concentration CAL standard and analyze with the same conditions used during the initial calibration.
 - 10.7.2 Determine that the absolute areas of the quantitation ions of the IS(s) are within 70-140% of the areas measured in the most recent continuing calibration check, and within 50-150% from the average areas measured during initial calibration. If any of the IS areas has changed by more than these amounts, adjustments must be made to restore system sensitivity. These adjustments may include cleaning of the MS ion source, or other maintenance as indicated in Section 10.7.4. Major instrument maintenance requires recalibration (Sect 10.6) and verification of sensitivity by analyzing a CCV at or below the RL (Sect 10.7). Control charts are useful aids in documenting system sensitivity changes.
 - 10.7.3 Calculate the concentration of each analyte and SUR in the CCV. The calculated amount for each analyte and SUR for medium and high level CCVs must be within ± 30% of the true value. The calculated amount for the lowest calibration point for each analyte must be within ± 50% and the SUR must be within ± 30% of the true value. If these conditions do not exist, then all data for the problem analyte must be considered invalid, and remedial action should be taken (Sect. 10.7.4) which may require recalibration. Any Field or QC Samples that have been analyzed since the last acceptable calibration verification should be reanalyzed after adequate calibration has been restored, with the following exception. If the CCV fails because the calculated concentration is greater than 130% (150% for the low-level CCV) for a particular method analyte, and Field Sample extracts show no detection for that method analyte, non-detects may be reported without re-analysis.
 - 10.7.4 REMEDIAL ACTION Failure to meet CCV QC performance criteria may require remedial action. Major maintenance, such as cleaning the electrospray probe, atmospheric pressure ionization source, cleaning the mass analyzer, replacing the LC column, etc., requires recalibration (Sect 10.6) and verification of sensitivity by analyzing a CCV at or below the RL (Sect 10.7).

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10.8 EXTRACT ANALYSIS

10.8.1 Establish operating conditions equivalent to those summarized in Tables 5-8 of Section 16. Instrument conditions and columns should be optimized prior to the initiation of the IDC.

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- 10.8.2 Establish an appropriate retention time window for each analyte. This should be based on measurements of actual retention time variation for each method analyte in CAL standard solutions analyzed on the LC over the course of time. A value of plus or minus three times the standard deviation of the retention time obtained for each method analyte while establishing the initial calibration and completing the IDC can be used to calculate a suggested window size. However, the experience of the analyst should weigh heavily on the determination of the appropriate retention window size.
- **10.8.3** Calibrate the system by either the analysis of a calibration curve (Sect. 10.6) or by confirming the initial calibration is still valid by analyzing a CCV as described in Section 10.7. If establishing an initial calibration, complete the IDC as described in Section 13.2.
- **10.8.4** Begin analyzing Field Samples, including QC samples, at their appropriate frequency by injecting the same size aliquots, under the same conditions used to analyze the CAL standards.
- 10.8.5 At the conclusion of data acquisition, use the same software that was used in the calibration procedure to identify peaks of interest in predetermined retention time windows. Use the data system software to examine the ion abundances of the peaks in the chromatogram. Identify an analyte by comparison of its retention time with that of the corresponding method analyte peak in a reference standard.
- **10.8.6** Comparison of the MS/MS mass spectra is not particularly useful given the limited ±0.5 dalton mass range around a single product ion for each method analyte.
- 10.8.7 The analyst must not extrapolate beyond the established calibration range. If an analyte peak area exceeds the range of the initial calibration curve, the extract may be diluted with 96%:4% vol/vol) methanol:water solution and the appropriate amount of IS added to match the original concentration. Re-inject the diluted extract. Incorporate the dilution factor into the final concentration calculations. Acceptable SUR performance (Sect. 9.5.1.1) should be determined from the undiluted sample extract. The resulting data should be documented as a dilution, with an increased RL.

11. Data Evaluation, Calculations and Reporting

- **11.1** Complete chromatographic resolution is not necessary for accurate and precise measurements of analyte concentrations using MS/MS. In validating this method, concentrations were calculated by measuring the product ions listed in Table 8. Other ions may be selected at the discretion of the analyst.
- **11.2** Calculate analyte and SUR concentrations using the multipoint calibration established in Section 10.6. Do not use daily calibration verification data to quantitate analytes in samples. Adjust final analyte concentrations to reflect the actual sample volume determined in Section 10.5.

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11.3 Prior to reporting the data, the chromatogram should be reviewed for any incorrect peak identification or poor integration.

- 11.4 PFHxS, PFOS, NMeFOSAA, and NEtFOSAA have multiple chromatographic peaks using the LC conditions in Table 5 due to the linear and branch isomers of these compounds (Sect. 10.6.4.1). The areas of all the linear and branched isomer peaks observed in the CAL standards for each of these analytes must be summed and the concentrations reported as a total for each of these analytes.
- **11.5** Calculations must utilize all available digits of precision, but final reported concentrations should be rounded to an appropriate number of significant figures (one digit of uncertainty), typically two, and not more than three significant figures.

12. Contingencies for Handling Out-of-Control Data or Unacceptable Data

- 12.1 Section 9.0 outlines sample batch QC acceptance criteria. If non-compliant organic compound results are to be reported, the Organic Section Head and/or the Laboratory Director, and the Operations Manager must approve the reporting of these results. The laboratory Project Manager shall be notified, and may choose to relay the non-compliance to the client, for approval, or other corrective action, such as re-sampling and re-analysis. The analyst, Data Reviewer, or Department Supervisor performing the secondary review initiates the project narrative, and the narrative must clearly document the non-compliance and provide a reason for acceptance of these results.
- **12.2** All results for the organic compounds of interest are reportable without qualification if extraction and analytical holding times are met, preservation requirements (including cooler temperatures) are met, all QC criteria defined in the table below are met, and matrix interference is not suspected during extraction or analysis of the samples. If any of the below QC parameters are not met, all associated samples must be evaluated for reextraction and/or re-analysis.

13. Method Performance

13.1 Detection Limit Study (DL) / Limit of Detection Study (LOD) / Limit of Quantitation (LOQ)

13.1.1 The laboratory follows the procedure to determine the DL, LOD, and/or LOQ as outlined in Alpha SOP ID 1732. These studies performed by the laboratory are maintained on file for review.

13.2 Demonstration of Capability Studies

- **13.2.1** The IDC must be successfully performed prior to analyzing any Field Samples. Prior to conducting the IDC, the analyst must first generate an acceptable Initial Calibration following the procedure outlined in Section 10.6.
- **13.2.2** INITIAL DEMONSTRATION OF LOW SYSTEM BACKGROUND Any time a new lot of SPE cartridges, solvents, centrifuge tubes, disposable pipets, and autosampler vials are used, it must be demonstrated that an MB is reasonably free of contamination and that the criteria in Section 9.2.1 are met. If an automated extraction system is used, an MB should be extracted on each port to ensure that all the valves and tubing are free from potential PFAS contamination.

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13.2.3 INITIAL DEMONSTRATION OF PRECISION (IDP) – Prepare, extract, and analyze four to seven replicate LCSs fortified near the midrange of the initial calibration curve according to the procedure described in Section 10. Sample preservatives as described in Section 6.2.1 must be added to these samples. The relative standard deviation (RSD) of the results of the replicate analyses must be less than 20%.

- **13.2.4** INITIAL DEMONSTRATION OF ACCURACY (IDA) Using the same set of replicate data generated for Section 13.2.3, calculate average recovery. The average recovery of the replicate values must be within ± 30% of the true value.
- **13.2.5** INITIAL DEMONSTRATION OF PEAK ASYMMETRY FACTOR Peak asymmetry factors must be calculated using the equation in Section 9.10.1 for the first two eluting peaks (if only two analytes are being analyzed, both must be evaluated) in a mid-level CAL standard. The peak asymmetry factors must fall in the range of 0.8 to 1.5. See guidance in Section 10.6.4.1 if the calculated peak asymmetry factors do not meet the criteria.
- **13.2.6** Refer to Alpha SOP ID 1739 for further information regarding IDC/DOC Generation.
- **13.2.7** The analyst must make a continuing, annual, demonstration of the ability to generate acceptable accuracy and precision with this method.

14. Pollution Prevention and Waste Management

- **14.1** Refer to Alpha's Chemical Hygiene Plan and Hazardous Waste Management and Disposal SOP for further pollution prevention and waste management information.
- **14.2** This method utilizes SPE to extract analytes from water. It requires the use of very small volumes of organic solvent and very small quantities of pure analytes, thereby minimizing the potential hazards to both the analyst and the environment as compared to the use of large volumes of organic solvents in conventional liquid-liquid extractions.
- 14.3 The analytical procedures described in this method generate relatively small amounts of waste since only small amounts of reagents and solvents are used. The matrices of concern are finished drinking water or source water. However, laboratory waste management practices must be conducted consistent with all applicable rules and regulations, and that laboratories protect the air, water, and land by minimizing and controlling all releases from fume hoods and bench operations. Also, compliance is required with any sewage discharge permits and regulations, particularly the hazardous waste identification rules and land disposal restrictions.

15. Referenced Documents

- **15.1** Chemical Hygiene Plan ID 2124
- **15.2** SOP ID 1732 Detection Limit (DL), Limit of Detection (LOD) & Limit of Quantitation (LOQ) SOP
- 15.3 SOP ID 1739 Demonstration of Capability (DOC) Generation SOP
- **15.4** SOP ID 1728 Hazardous Waste Management and Disposal SOP

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16. Attachments

Table 6: LC Method Conditions

Time (min)	2 mM Ammonium Acetate (5:95 MeOH/H ₂ O)	2 mM Ammonium Acetate (100% Methanol)
Initial	100.0	0.0
1.0	100.0	0.0
2.2	85.0	15.0
11	20.0	80.0
11.4	0.0	100.0
12.4	100.0	0.0
14.0	100.0	0.0

Waters Aquity UPLC ® BEHC₁₈ 2.1 x 50 mm packed with 1.7 µm BEH C₁₈ stationary phase
Flow rate of 0.4 mL/min
2-5 µL injection

Table 7: ESI-MS Method Conditions

ESI Conditions					
Polarity	Negative ion				
Capillary needle voltage	.5 kV				
Cone Gas Flow	20 L/hr				
Nitrogen desolvation gas	1100 L/hr				
Desolvation gas temp.	500 °C				

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Table 8: Method Analyte Source, Retention Times (RTs), and IS References

Analyte	Peak #	IS# Ref
PFBS	1	2
PFHxA	3	1
HFPO-DA	5	1
PFHpA	6	1
PFHxS	7	2
ADONA	8	1
PFOA	10	1
PFNA	11	1
PFOS	12	2
PFDA	14	1
9CL-PF3ONS	15	1
NMeFOSAA	17	3
PFUnA	18	3
NEtFOSAA	20	1
PFDoA	21	1
11CL-PFOUdS	22	1
PFTrDA	23	1
PFTA	24	1
¹³ C-PFHxA	2	1
¹³ C-HFPO-DA	4	1
¹³ C-PFDA	13	1
d ₅ -NEtFOSAA	19	3
¹³ C-PFOA-IS#1	9	-
¹³ C-PFOS-IS#2	10	-
d ₃ -NMeFOSAA-IS#3	16	-

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Table 9: MS/MS Method Conditions

Segmenta	Analyte	Precursor Ion b	Product Ion b,c
		(m/z)	(m/z)
1	PFBS	299	80
2	PFHxA	313	269
4	HFPO-DA	285	169
5	PFHpA	363	319
6	PFHxS ^e	399	80
7	ADONA	377	251
9	PFOA	413	369
10	PFNA	463	419
11	9CL-PF3ONS	531	351
13	PFOS e	499	80
15	PFDA	513	469
17	NMeFOSAA e	570	419
19	NEtFOSAA e	584	419
20	11CL-PFOUdS	631	451
21	PFUnA	563	519
22	PFDoA	613	569
23	PFTrDA	663	619
24	PFTA	713	669
2	¹³ C-PFHxA	315	270
3	¹³ C-HFPO-DA	287	169
14	¹³ C-PFDA	515	470
16	d ₅ -NEtFOSAA	589	419
8	¹³ C-PFOA	415	370
12	¹³ C-PFOS	503	80
18	d ₃ -NMeFOSAA	573	419

^a Segments are time durations in which single scan events occur; segments overlap where R.T. dictate.

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b Precursor and product ions listed in this table are nominal masses. During MS and MS/MS optimization. the analyst should determine the precursor and product ion masses to one decimal place by locating the apex of the mass spectral peak place. These precursor and product ion masses (with one decimal place) should be used in the MS/MS method for all analyses.

^c lons used for quantitation purposes.

d Argon used as collision gas at a flow rate of 0.4 mL/min

e Analyte has multiple resolved chromatographic peaks due to linear and branched isomers. All peaks summed for quantitation purposes.

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Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (LC/MS/MS)

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Reference: EPA Method 537, Version 1.1, September 2009, EPA Document #: EPA/600/R-08/09

EPA Method 537.1, Version 1, November 2018, EPA Document #: EPA/600/R-18/352

Department of Defense, Quality Systems Manual for Environmental Laboratories, Version 5.2, .2019

1. Scope and Application

Matrices: Drinking water, Non-potable Water, and Soil Matrices

Definitions: Refer to Alpha Analytical Quality Manual.

- 1.1 This is a liquid chromatography/tandem mass spectrometry (LC/MS/MS) method for the determination of selected perfluorinated alkyl substances (PFAS) in Non-Drinking Water and soil Matrices. Accuracy and precision data have been generated in reagent water, and finished ground and surface waters for the compounds listed in Table 1.
- 1.2 The data report packages present the documentation of any method modification related to the samples tested. Depending upon the nature of the modification and the extent of intended use, the laboratory may be required to demonstrate that the modifications will produce equivalent results for the matrix. Approval of all method modifications is by one or more of the following laboratory personnel before performing the modification: Area Supervisor, Department Supervisor, Laboratory Director, or Quality Assurance Officer.
- 1.3 This method is restricted to use by or under the supervision of analysts experienced in the operation of the LC/MS/MS and in the interpretation of LC/MS/MS data. Each analyst must demonstrate the ability to generate acceptable results with this method by performing an initial demonstration of capability.

2. Summary of Method

2.1 A 250-mL water sample is fortified with extracted internal standards (EIS) and passed through a solid phase extraction (WAX) cartridge containing a mixed mode, Weak Anion Exchange, reversed phase, water-wettable polymer to extract the method analytes and isotopically-labeled compounds. The compounds are eluted from the solid phase in two fractions with methanol followed by a small amount of 2% ammonium hydroxide in methanol solution. The extract is concentrated with nitrogen in a heated water bath, and then adjusted to a 1-mL volume with 80:20% (vol/vol) methanol:water. A 3 µl injection is made into an LC equipped with a C18 column that is interfaced to an MS/MS. The analytes are separated and identified by comparing the acquired mass spectra and retention times to reference spectra and retention times for calibration standards acquired under identical LC/MS/MS conditions. The concentration of each analyte is determined by using the isotope dilution technique. Extracted Internal Standards (EIS) analytes are used to monitor the extraction efficiency of the method analytes.

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2.2 Method Modifications from Reference

None

Table 1

Parameter	Acronym	CAS					
PERFLUOROALKYL ETHER CARBOXYLIC ACIDS (PFECAs)							
Tetrafluoro-2-(heptafluoropropoxy)propanoic acid	HFPO-DA	62037-80-3					
4,8-dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4					
PERFLUOROALKYLCARBOXILIC ACIDS (PFCAs)	1						
Perfluorobutanoic acid	PFBA	375-22-4					
Perfluoropentanoic acid	PFPeA	2706-90-3					
Perfluorohexanoic acid	PFHxA *	307-24-4					
Perfluoroheptanoic acid	PFHpA *	375-85-9					
Perfluorooctanoic acid	PFOA *	335-67-1					
Perfluorononanoic acid	PFNA *	375-95-1					
Perfluorodecanoic acid	PFDA *	335-76-2					
Perfluoroundecanoic acid	PFUnA *	2058-94-8					
Perfluorododecanoic acid	PFDoA *	307-55-1					
Perfluorotridecanoic acid	PFTrDA *	72629-94-8					
Perfluorotetradecanoic acid	PFTA *	376-06-7					
Perfluorohexadecanoic acid	PFHxDA	67905-19-5					
Perfluorooctadecanoic acid	PFODA	16517-11-6					
PERFLUOROALKYLSULFONATES (PFASs)							
Perfluorobutanesulfonic acid	PFBS *	375-73-5					
Perfluoropentanesulfonic acid	PFPeS	2706-91-4					
Perfluorohexanesulfonic acid	PFHxS *	355-46-4					
Perfluoroheptanesulfonic acid	PFHpS	375-92-8					
Perfluorooctanesulfonic acid	PFOS *	1763-23-1					
Perfluorononanesulfonic acid	PFNS	68259-12-1					
Perfluorodecanesulfonic acid	PFDS	335-77-3					
Perfluorododecanesulfonic acid	PFDoS	79780-39-5					

^{*} also reportable via the standard 537 method

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Table 1 Cont.

Parameter	Acronym	CAS					
CHLORO-PERFLUOROALKYLSULFONATE							
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11CI- PF3OUdS	763051-92-9					
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9CI-PF3ONS	756426-58-1					
PERFLUOROOCTANESULFONAMIDES (FOSAs)							
Perfluorooctanesulfonamide	PFOSA	754-91-6					
N-methylperfluoro-1-octanesulfonamide	NMeFOSA	31506-32-8					
N-ethylperfluoro-1-octanesulfonamide	NEtFOSA	4151-50-2					
TELOMER SULFONATES							
1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	4:2FTS	27619-93-8					
1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	6:2FTS	27619-97-2					
1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	8:2FTS	39108-34-4					
1H,1H,2H,2H-perfluorododecane sulfonate (10:2)	10:2FTS	120226-60-0					
PERFLUOROOCTANESULFONAMIDOACETIC ACID	s						
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA *	2355-31-9					
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA *	2991-50-6					
NATIVE PERFLUOROOCTANESULFONAMIDOETHA	ANOLS (FOSEs)						
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol	NMeFOSE	24448-09-7					
2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol	NEtFOSE	1691-99-2					

^{*} also reportable via the standard 537 method

3. Reporting Limits

The reporting limit for PFAS's is 2 ng/L for aqueous samples (20 ng/L for HFPO-DA) and 1 ng/g (10 ng/g for HFPO-DA) for soil samples.

4. Interferences

- **4.1** PFAS standards, extracts and samples should not come in contact with any glass containers or pipettes as these analytes can potentially adsorb to glass surfaces. PFAS analyte and EIS standards commercially purchased in glass ampoules are acceptable; however, all subsequent transfers or dilutions performed by the analyst must be prepared and stored in polypropylene containers.
- **4.2** Method interferences may be caused by contaminants in solvents, reagents (including reagent water), sample bottles and caps, and other sample processing hardware that lead to discrete artifacts and/or elevated baselines in the chromatograms. The method analytes in this method can also be found in many common laboratory supplies and equipment, such

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as PTFE (polytetrafluoroethylene) products, LC solvent lines, methanol, aluminum foil, SPE sample transfer lines, etc. All items such as these must be routinely demonstrated to be free from interferences (less than 1/3 the RL for each method analyte) under the conditions of the analysis by analyzing laboratory reagent blanks as described in Section 9.2. Subtracting blank values from sample results is not permitted.

- **4.3** Matrix interferences may be caused by contaminants that are co-extracted from the sample. The extent of matrix interferences will vary considerably from source to source, depending upon the nature of the water. Humic and/or fulvic material can be co-extracted during SPE and high levels can cause enhancement and/or suppression in the electrospray ionization source or low recoveries on the SPE sorbent. Total organic carbon (TOC) is a good indicator of humic content of the sample.
- **4.4** SPE cartridges can be a source of interferences. The analysis of field and laboratory reagent blanks can provide important information regarding the presence or absence of such interferences. Brands and lots of SPE devices should be tested to ensure that contamination does not preclude analyte identification and quantitation.

5. Health and Safety

- **5.1** The toxicity or carcinogenicity of each reagent and standard used in this method is not fully established; however, each chemical compound should be treated as a potential health hazard. From this viewpoint, exposure to these chemicals must be reduced to the lowest possible level by whatever means available. A reference file of material safety data sheets is available to all personnel involved in the chemical analysis. Additional references to laboratory safety are available in the Chemical Hygiene Plan.
- **5.2** All personnel handling environmental samples known to contain or to have been in contact with municipal waste must follow safety practices for handling known disease causative agents.
- **5.3** PFOA has been described as "likely to be carcinogenic to humans." Pure standard materials and stock standard solutions of these method analytes should be handled with suitable protection to skin and eyes, and care should be taken not to breathe the vapors or ingest the materials.

6. Sample Collection, Preservation, Shipping and Handling

6.1 Sample Collection for Aqueous Samples

- **6.1.1** Samples must be collected in two (2) 250-mL high density polyethylene (HDPE) container with an unlined plastic screw cap.
- 6.1.2 The sample handler must wash their hands before sampling and wear nitrile gloves while filling and sealing the sample bottles. PFAS contamination during sampling can occur from a number of common sources, such as food packaging and certain foods and beverages. Proper hand washing and wearing nitrile gloves will aid in minimizing this type of accidental contamination of the samples.
- **6.1.3** Open the tap and allow the system to flush until the water temperature has stabilized (approximately 3 to 5 min). Collect samples from the flowing system.

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> 6.1.4 Fill sample bottles. Samples do not need to be collected headspace free.

- 6.1.5 After collecting the sample and cap the bottle. Keep the sample sealed from time of collection until extraction.
- 6.1.6 Field Reagent Blank (FRB)
 - 6.1.6.1 A FRB must be handled along with each sample set. The sample set is composed of samples collected from the same sample site and at the same time. At the laboratory, fill the field blank sample bottle with reagent water and preservatives, seal, and ship to the sampling site along with the sample bottles. For each FRB shipped, an empty sample bottle (no preservatives) must also be shipped. At the sampling site, the sampler must open the shipped FRB and pour the reagent water into the empty shipped sample bottle, seal and label this bottle as the FRB. The FRB is shipped back to the laboratory along with the samples and analyzed to ensure that PFAS's were not introduced into the sample during sample collection/handling.

The reagent water used for the FRBs must be initially analyzed for method analytes as a MB and must meet the MB criteria in Section 9.2.1 prior to use. This requirement will ensure samples are not being discarded due to contaminated reagent water rather than contamination during sampling.

6.2 Sample Collection for Soil and Sediment samples.

Grab samples are collected in polypropylene containers. Sample containers and contact surfaces containing PTFE shall be avoided.

6.3 Sample Preservation

Not applicable.

6.4 Sample Shipping

Samples must be chilled during shipment and must not exceed 10 °C during the first 48 hours after collection. Sample temperature must be confirmed to be at or below 10 °C when the samples are received at the laboratory. Samples stored in the lab must be held at or below 6 °C until extraction, but should not be frozen.

NOTE: Samples that are significantly above 10° C, at the time of collection, may need to be iced or refrigerated for a period of time, in order to chill them prior to shipping. This will allow them to be shipped with sufficient ice to meet the above requirements.

6.5 Sample Handling

- 6.5.1 **Holding Times**
 - 6.5.1.1 Water samples should be extracted as soon as possible but must be extracted within 14 days. Soil samples should be extracted within 28 days. Extracts are stored at < 10 ° C and analyzed within 28 days after extraction.

7. **Equipment and Supplies**

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7.1 SAMPLE CONTAINERS – 250-mL high density polyethylene (HDPE) bottles fitted with unlined screw caps. Sample bottles must be discarded after use.

- **7.2** POLYPROPYLENE BOTTLES 4-mL narrow-mouth polypropylene bottles.
- **7.3** CENTRIFUGE TUBES 50-mL conical polypropylene tubes with polypropylene screw caps for storing standard solutions and for collection of the extracts.
- **7.4** AUTOSAMPLER VIALS Polypropylene 0.7-mL autosampler vials with polypropylene caps.
 - **7.4.1** NOTE: Polypropylene vials and caps are necessary to prevent contamination of the sample from PTFE coated septa. However, polypropylene caps do not reseal, so evaporation occurs after injection. Thus, multiple injections from the same vial are not possible.
- **7.5** POLYPROPYLENE GRADUATED CYLINDERS Suggested sizes include 25, 50, 100 and 1000-mL cylinders.
- **7.6** Auto Pipets Suggested sizes include 5, 10, 25, 50, 100, 250, 500, 1000, 5000 and 10,000-µls.
- 7.7 PLASTIC PIPETS Polypropylene or polyethylene disposable pipets.
- 7.8 ANALYTICAL BALANCE Capable of weighing to the nearest 0.0001 g.

7.9 SOLID PHASE EXTRACTION (SPE) APPARATUS FOR USING CARTRIDGES

- **7.9.1** SPE CARTRIDGES 0.5 g SPE cartridges containing a reverse phase copolymer characterized by a weak anion exchanger (WAX) sorbent phase.
- 7.9.2 VACUUM EXTRACTION MANIFOLD A manual vacuum manifold with large volume sampler for cartridge extractions, or an automatic/robotic sample preparation system designed for use with SPE cartridges, may be used if all QC requirements discussed in Section 9 are met. Extraction and/or elution steps may not be changed or omitted to accommodate the use of an automated system. Care must be taken with automated SPE systems to ensure the PTFE commonly used in these systems does not contribute to unacceptable analyte concentrations in the MB (Sect. 9.2.1).
- 7.9.3 SAMPLE DELIVERY SYSTEM Use of a polypropylene transfer tube system, which transfers the sample directly from the sample container to the SPE cartridge, is recommended, but not mandatory. Standard extraction manifolds come equipped with PTFE transfer tube systems. These can be replaced with 1/8" O.D. x 1/16" I.D. polypropylene or polyethylene tubing cut to an appropriate length to ensure no sample contamination from the sample transfer lines. Other types of non-PTFE tubing may be used provided it meets the MB (Sect. 9.2.1) and LCS (Sect. 9.3) QC requirements. The PTFE transfer tubes may be used, but an MB must be run on each PFTE transfer tube and the QC requirements in Section 13.2.2 must be met. In the case of automated SPE, the removal of PTFE lines may not be feasible; therefore, MBs will need to be rotated among the ports and must meet the QC requirements of Sections 13.2.2 and 9.2.1.
- **7.10** Extract Clean-up Cartridge 250 mg 6ml SPE Cartridge containing graphitized polymer carbon

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7.11 EXTRACT CONCENTRATION SYSTEM – Extracts are concentrated by evaporation with nitrogen using a water bath set no higher than 65 °C.

- **7.12** LABORATORY OR ASPIRATOR VACUUM SYSTEM Sufficient capacity to maintain a vacuum of approximately 10 to 15 inches of mercury for extraction cartridges.
- 7.13 LIQUID CHROMATOGRAPHY (LC)/TANDEM MASS SPECTROMETER (MS/MS) WITH DATA SYSTEM
 - 7.13.1 LC SYSTEM Instrument capable of reproducibly injecting up to 10-µL aliquots, and performing binary linear gradients at a constant flow rate near the flow rate used for development of this method (0.4 mL/min). The LC must be capable of pumping the water/methanol mobile phase without the use of a degasser which pulls vacuum on the mobile phase bottle (other types of degassers are acceptable). Degassers which pull vacuum on the mobile phase bottle will volatilize the ammonium acetate mobile phase causing the analyte peaks to shift to earlier retention times over the course of the analysis batch. The usage of a column heater is optional.

NOTE: During the course of method development, it was discovered that while idle for more than one day, PFAS's built up in the PTFE solvent transfer lines. To prevent long delays in purging high levels of PFAS's from the LC solvent lines, they were replaced with PEEK tubing and the PTFE solvent frits were replaced with stainless steel frits. It is not possible to remove all PFAS background contamination, but these measures help to minimize their background levels.

- 7.13.2 LC/TANDEM MASS SPECTROMETER The LC/MS/MS must be capable of negative ion electrospray ionization (ESI) near the suggested LC flow rate of 0.4 mL/min. The system must be capable of performing MS/MS to produce unique product ions for the method analytes within specified retention time segments. A minimum of 10 scans across the chromatographic peak is required to ensure adequate precision.
- 7.13.3 DATA SYSTEM An interfaced data system is required to acquire, store, reduce, and output mass spectral data. The computer software should have the capability of processing stored LC/MS/MS data by recognizing an LC peak within any given retention time window. The software must allow integration of the ion abundance of any specific ion within specified time or scan number limits. The software must be able to calculate relative response factors, construct linear regressions or quadratic calibration curves, and calculate analyte concentrations.
- **7.13.4** ANALYTICAL COLUMN An LC BEH C_{18} column (2.1 x 50 mm) packed with 1.7 μ m d_p C_{18} solid phase particles was used. Any column that provides adequate resolution, peak shape, capacity, accuracy, and precision (Sect. 9) may be used.

8. Reagents and Standards

- **8.1** GASES, REAGENTS, AND SOLVENTS Reagent grade or better chemicals should be used.
 - **8.1.1** REAGENT WATER Purified water which does not contain any measurable quantities of any method analytes or interfering compounds greater than 1/3 the RL for each method analyte of interest. Prior to daily use, at least 3 L of reagent water should be flushed from the purification system to rinse out any build-up of analytes in the system's tubing.

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8.1.2 METHANOL (CH₃OH, CAS#: 67-56-1) - High purity, demonstrated to be free of analytes and interferences.

- 8.1.3 AMMONIUM ACETATE (NH₄C₂H₃O₂, CAS#: 631-61-8) – High purity, demonstrated to be free of analytes and interferences.
- 8.1.4 ACETIC ACID (H₃CCOOH, CAS#: 64-19-7) - High purity, demonstrated to be free of analytes and interferences.
- 8.1.5 1M AMMONIUM ACETATE/REAGENT WATER - High purity, demonstrated to be free of analytes and interferences.
- 8.1.6 2mM AMMONIUM ACETATE/METHANOL:WATER (5:95) - To prepare, mix 2 ml of 1M AMMONIUM ACETATE,1 ml ACETIC ACID and 50 ml METHANOL into I Liter of REAGENT WATER.
- 8.1.7 Methanol/Water (80:20) - To prepare a 1 Liter bottle, mix 200 ml of REAGENT WATER with 800 ml of METHANOL.
- 8.1.8 AMMONIUM HYDROXIDE (NH₃, CAS#: 1336-21-6) – High purity, demonstrated to be free of analytes and interferences.
- 8.1.9 Sodium Acetate (NaOOCCH₃, CAS#: 127-09-3) - High purity, demonstrated to be free of analytes and interferences.
- 8.1.10 25 mM Sodium Acetate Buffer To prepare 250mls, dissolve .625 grams of sodium acetate into 100 mls of reagent water. Add 4 mls Acetic Acid and adjust the final volume to 250 mls with reagent water.
- 8.1.11 NITROGEN Used for the following purposes: Nitrogen aids in aerosol generation of the ESI liquid spray and is used as collision gas in some MS/MS instruments. The nitrogen used should meet or exceed instrument manufacturer's specifications. In addition, Nitrogen is used to concentrate sample extracts (Ultra High Purity or equivalent).
- **8.1.12** ARGON Used as collision gas in MS/MS instruments. Argon should meet or exceed instrument manufacturer's specifications. Nitrogen gas may be used as the collision gas provided sufficient sensitivity (product ion formation) is achieved.
- **8.2** STANDARD SOLUTIONS When a compound purity is assayed to be 96% or greater, the weight can be used without correction to calculate the concentration of the stock standard. PFAS analyte and IS standards commercially purchased in glass ampoules are acceptable; however, all subsequent transfers or dilutions performed by the analyst must be prepared and stored in polypropylene containers. Standards for sample fortification generally should be prepared in the smallest volume that can be accurately measured to minimize the addition of excess organic solvent to aqueous samples.

NOTE: Stock standards and diluted stock standards are stored at ≤4 °C.

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8.2.1 ISOTOPE DILUTION Extracted Internal Standard (ID EIS) STOCK SOLUTIONS - ID EIS stock standard solutions are stable for at least 6 months when stored at 4 °C. The stock solution is purchased at a concentration of 1000 ng/mL.

8.2.2 ISOTOPE DILUTION Extracted Internal Standard PRIMARY DILUTION STANDARD (ID EIS PDS) – Prepare the ID EIS PDS at a concentration of 500 ng/mL. The ID PDS is prepared in 80:20% (vol/vol) methanol:water. The ID PDS is stable for 6 months when stored at ≤4 °C.

Table 2

Isotope Labeled	Conc. of EIS	Vol. of EIS Stock	Final Vol. of EIS	Final Conc. of
Standard	Stock (ng/mL)	(mL)	PDS (mL)	EIS PDS (ng/mL)
M4PFBA	1000	1.0	2.0	500
M5PFPeA	1000	1.0	2.0	500
M5PFHxA	1000	1.0	2.0	500
M4PFHpA	1000	1.0	2.0	500
M8PFOA	1000	1.0	2.0	500
M9PFNA	1000	1.0	2.0	500
M6PFDA	1000	1.0	2.0	500
M7PFUdA	1000	1.0	2.0	500
MPFDoA	1000	1.0	2.0	500
M2PFTeDA	1000	1.0	2.0	500
M2PFHxDA	50,000	.02	2.0	500
d3-N-MeFOSA	50,000	.02	2.0	500
d5-N-EtFOSA	50,000	.02	2.0	500
d7-N-MeFOSE	50,000	.02	2.0	500
d9-N-EtFOSE	50,000	.02	2.0	500
M8FOSA	1000	1.0	2.0	500
d3-N-MeFOSAA	1000	1.0	2.0	500
d5-N-EtFOSAA	1000	1.0	2.0	500
M3PFBS	929	1.0	2.0	464.5
M3PFHxS	946	1.0	2.0	473
M8PFOS	957	1.0	2.0	478.5
M2-4:2FTS	935	1.0	2.0	467.5
M2-6:2FTS	949	1.0	2.0	474.5
M2-8:2FTS	958	1.0	2.0	479
M3HFPO-DA	50,000	.4	2.0	10,000

- **8.2.3** ANALYTE STOCK STANDARD SOLUTION Analyte stock standards are stable for at least 6 months when stored at 4 °C. When using these stock standards to prepare a PDS, care must be taken to ensure that these standards are at room temperature and adequately vortexed.
- 8.2.4 Analyte Secondary Spiking Standard Prepare the spiking solution of additional add on components for project specific requirements only. ANALYTE PRIMARY SPIKING STANDARD Prepare the spiking standard at a concentration of 500 ng/mL in methanol. The spiking standard is stable for at least two months when stored in polypropylene centrifuge tubes at room temperature.

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Table 3

Table 5						
Analyte	Conc. of IS	Vol. of IS	Final Vol. of IS PDS	Final Conc. of IS		
	Stock (ng/mL)	Stock (mL)	(mL)	PDS (ng/mL)		
PFBA	2000	1	4	500		
PFPeA	2000	1	4	500		
PFHxA	2000	1	4	500		
PFHpA	2000	1	4	500		
PFOA	2000	1	4	500		
PFNA	2000	1	4	500		
PFDA	2000	1	4	500		
PFUdA	2000	1	4	500		
PFDoA	2000	1	4	500		
PFTrDA	2000	1	4	500		
PFTeDA	2000	1	4	500		
FOSA	2000	1	4	500		
N-MeFOSAA	2000	1	4	500		
N-EtFOSAA	2000	1	4	500		
L-PFBS	1770	1	4	442.5		
L-PFPeS	1880	1	4	470		
L-PFHxSK	1480	1	4	370		
Br-PFHxSK	344	1	4	86		
L-PFHpS	1900	1	4	475		
L-PFOSK	1460	1	4	365		
Br-PFOSK	391	1	4	97.75		
L-PFNS	1920	1	4	480		
L-PFDS	1930	1	4	482.5		
4:2FTS	1870	1	4	467.5		
6:2FTS	1900	1	4	475		
8:2FTS	1920	1	4	480		

8.2.5 Analyte Secondary Spiking Standard Prepare the spiking solution of additional add on components for project specific requirements only.

Table 4

Analyte	Conc. of IS	Vol. of IS Stock	Final Vol. of IS PDS	Final Conc. of IS
_	Stock (ng/mL)	(mL)	(mL)	PDS (ng/mL)
ADONA	2000	1	4	500
PFHxDA	2000	1	4	500
PFODA	2000	1	4	500
HFPO-DA	100,000	.4	4	10,000
9CIPF3ONS	50,000	0.04	4	500
11CIPF3OUdS	50,000	0.04	4	500

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8.2.6 LOW, MEDIUM AND HIGH LEVEL LCS – The LCS's will be prepared at the following concentrations and rotated per batch; 2 ng/L, 40 ng/L, 500 ng/l for drinking waters. The analyte PDS contains all the method analytes of interest at

stable for six months when stored at ≤4 °C.

8.2.7 Isotope Dilution Labeled Recovery Stock Solutions (ID REC) – ID REC Stock solutions are stable for at least 6 months when stored at 4 °C. The stock solution is purchased at a concentration of 1000 ng/mL.

various concentrations in methanol. The analyte PDS has been shown to be

8.2.8 Isotope Dilution Labeled Recovery Primary Dilution Standard (ID REC PDS) - Prepare the ID REC PDS at a concentration of 500 ng/mL. The ID REC PDS is prepared in 80:20% (vol/vol) methanol:water. The ID REC PDS is stable for at least six months when stored in polypropylene centrifuge tubes at ≤4 °C.

Table 5

Analyte	Conc. of REC Stock (ng/mL)	Vol. of REC Stock (mL)	Final Vol. of REC PDS (mL)	Final Conc. of REC PDS (ng/mL)
M2PFOA	2000	1	4	500
M2PFDA	2000	1	4	500
M3PFBA	2000	1	4	500
M4PFOS	2000	1	4	500

8.2.9 CALIBRATION STANDARDS (CAL) -

Current Concentrations (ng/mL): 0.5, 1.0, 5.0, 10.0, 50.0, 125, 150, 250, 500

Prepare the CAL standards over the concentration range of interest from dilutions of the analyte PDS in methanol containing 20% reagent water. 20 µl of the EIS PDS and REC PDS are added to the CAL standards to give a constant concentration of 10 ng/ml. The lowest concentration CAL standard must be at or below the RL (2 ng/L), which may depend on system sensitivity. The CAL standards may also be used as CCVs (Sect. 9.8). To make calibration stock standards:

Table 6

Calibration Standard Concentration	Final Aqueous Cal STD Level Concentration	Final Soil Cal STD Level Concentration	24 compound stock added (ul)	PFHxDA Stock added (ul)	500 ng/ml PFHxDA dilution added (ul)	PFODA Stock added (ul)	500 ng/ml PFODA dilution added (ul)	ADONA, HFPO-DA, 11CI- PF3OUdS, 9CI- PF3ONS Stock added (ul)	500 ng/ml ADONA dilution added (ul)	Final Volume in MeOH/H ₂ O (82:20)
.5 ng/ml	2 ng/L	.25 ng/g	6.25		25		25		25	25 mls
1 ng/ml	4 ng/L	.5 ng/g	5		20		20		20	10 mls
5 ng/ml	20 ng/L	1 ng/g	25		100		100		100	10 mls
10 ng/ml	40 ng/L	5 ng/g	125	5		5		5		25 mls

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50 ng/ml	200 ng/L	25 ng/g	250	10	10	10	10 mls
125 ng/ml	500 ng/L	62.5 ng/g	625	25	25	25	10 mls
150 ng/ml	600 ng/L	75 ng/g	750	30	30	30	10 mls
250 ng/ml	1000 ng/L	125 ng/g	625				5 mls
500 ng/ml	2000 ng/L	250 ng/g	1250				5 mls

9. Quality Control

The laboratory must maintain records to document the quality of data that is generated. Ongoing data quality checks are compared with established performance criteria to determine if the results of analyses meet the performance characteristics of the method.

9.1 MINIMUM REPORTING LIMIT (MRL) CONFIRMATION

9.1.1 Fortify, extract, and analyze seven replicate LCSs at 2 ng/l. Calculate the mean measured concentration (Mean) and standard deviation for these replicates. Determine the Half Range for the prediction interval of results (HR_{PIR}) using the equation below

$$HR_{PIR} = 3.963s$$

Where:

s = the standard deviation3.963 = a constant value for seven replicates.

9.1.2 Confirm that the upper and lower limits for the Prediction Interval of Result ($PIR = Mean \pm HR_{PIR}$) meet the upper and lower recovery limits as shown below

The Upper PIR Limit must be ≤150% recovery.

$$\underline{Mean + HR}_{PIR}$$
 x 100% ≤ 150%
Fortified Concentration

The Lower PIR Limit must be ≥ 50% recovery.

$$\underline{Mean - HR}_{PIR}$$
 x 100% ≥ 50% Fortified Concentration

9.1.3 The RL is validated if both the Upper and Lower PIR Limits meet the criteria described above. If these criteria are not met, the RL has been set too low and must be determined again at a higher concentration.

9.2 Blank(s)

9.2.1 METHOD BLANK (MB) - A Method Blank (MB) is required with each extraction batch to confirm that potential background contaminants are not interfering with the identification or quantitation of method analytes. Prep and analyze a MB for every 20 samples. If the MB produces a peak within the retention time window of any analyte that would prevent the determination of that analyte, determine the source of contamination and eliminate the interference before processing samples. Background contamination must be reduced to an acceptable level before proceeding. Background from method analytes or other contaminants that

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interfere with the measurement of method analytes must be below the RL. If the method analytes are detected in the MB at concentrations equal to or greater than this level, then all data for the problem analyte(s) must be considered invalid for all samples in the extraction batch. Because background contamination is a significant problem for several method analytes, it is highly recommended that the analyst maintain a historical record of MB data.

9.2.2 FIELD REAGENT BLANK (FRB) - The purpose of the FRB is to ensure that PFAS's measured in the Field Samples were not inadvertently introduced into the sample during sample collection/handling. Analysis of the FRB is required only if a Field Sample contains a method analyte or analytes at or above the RL. The FRB is processed, extracted and analyzed in exactly the same manner as a Field Sample.

9.3 Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicates (LCSD)

9.3.1 An LCS is required with each extraction batch. The fortified concentration of the LCS may be rotated between low, medium, and high concentrations from batch to batch. Default limits of 50-150% of the true value may be used for analytes until sufficient replicates have been analyzed to generate proper control limits. Calculate the percent recovery (%R) for each analyte using the equation

$$%R = A \times 100$$
B

Where:

A = measured concentration in the fortified sample B = fortification concentration.

9.3.2 Where applicable, LCSD's are to be extracted and analyzed. The concentration and analyte recovery criteria for the LCSD must be the same as the batch LCS The RSD's must fall within ≤30% of the true value for medium and high level replicates, and ≤50% for low level replicates. Calculate the relative percent difference (RPD) for duplicate MSs (MS and MSD) using the equation

$$RPD = \underline{|LCS - LCSD|} \times 100$$

$$(LCS + LCSD) / 2$$

9.3.3 If the LCS and or LCSD results do not meet these criteria for method analytes, then all data for the problem analyte(s) must be considered invalid for all samples in the extraction batch.

9.4 Labeled Recovery Standards (REC)

The analyst must monitor the peak areas of the REC(s) in all injections during each analysis day.

9.5 Extracted Internal Standards (EIS)

9.5.1 The EIS standard is fortified into all samples, CCVs, MBs, LCSs, MSs, MSDs, FD, and FRB prior to extraction. It is also added to the CAL standards. The EIS is a means of assessing method performance from extraction to final

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> chromatographic measurement. Calculate the recovery (%R) for the EIS using the following equation

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 $%R = (A / B) \times 100$

Where:

A = calculated EIS concentration for the QC or Field Sample

B =fortified concentration of the EIS.

9.5.2 Default limits of 50-150% may be used for analytes until sufficient replicates have been analyzed to generate proper control limits. A low or high percent recovery for a sample, blank, or CCV does not require discarding the analytical data but it may indicate a potential problem with future analytical data. When EIS recovery from a sample, blank, or CCV are outside control limits, check 1) calculations to locate possible errors, 2) standard solutions for degradation, 3) contamination, and 4) instrument performance. For CCVs and QC elements spiked with all target analytes, if the recovery of the corresponding target analytes meet the acceptance criteria for the EIS in question, the data can be used but all potential biases in the recovery of the EIS must be documented in the sample report. If the associated target analytes do not meet the acceptance criteria, the data must be reanalyzed.

9.6 Matrix Spike (MS)

- Analysis of an MS is required in each extraction batch and is used to determine that the sample matrix does not adversely affect method accuracy. Assessment of method precision is accomplished by analysis of a Field Duplicate (FD) (Sect. 9.6); however, infrequent occurrence of method analytes would hinder this assessment. If the occurrence of method analytes in the samples is infrequent, or if historical trends are unavailable, a second MS, or MSD, must be prepared, extracted, and analyzed from a duplicate of the Field Sample. Extraction batches that contain MSDs will not require the extraction of a field sample duplicate. If a variety of different sample matrices are analyzed regularly, for example, drinking water from groundwater and surface water sources, method performance should be established for each. Over time, MS data should be documented by the laboratory for all routine sample sources.
- 9.6.2 Within each extraction batch, a minimum of one Field Sample is fortified as an MS for every 20 Field Samples analyzed. The MS is prepared by spiking a sample with an appropriate amount of the Analyte Stock Standard (Sect. 8.2.3). Use historical data and rotate through the low, mid and high concentrations when selecting a fortifying concentration. Calculate the percent recovery (%R) for each analyte using the equation

$$%R = (A - B) \times 100$$

Where:

A = measured concentration in the fortified sample

B = measured concentration in the unfortified sample

C = fortification concentration.

9.6.3 Analyte recoveries may exhibit matrix bias. For samples fortified at or above their native concentration, recoveries should range between 50-150%. If the accuracy of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the LCS, the recovery is judged to be

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matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.

9.7 Laboratory Duplicate

- **9.7.1** FIELD DUPLICATE OR LABORATORY FORTIFIED SAMPLE MATRIX DUPLICATE (FD or MSD) Within each extraction batch (not to exceed 20 Field Samples), a minimum of one FD or MSD must be analyzed. Duplicates check the precision associated with sample collection, preservation, storage, and laboratory procedures. If method analytes are not routinely observed in Field Samples, an MSD should be analyzed rather than an FD.
- **9.7.2** Calculate the relative percent difference (*RPD*) for duplicate measurements (*FD1* and *FD2*) using the equation

RPD =
$$|FD1 - FD2|$$
 x 100
(FD1 + FD2) / 2

- 9.7.3 RPDs for FDs should be ≤30%. Greater variability may be observed when FDs have analyte concentrations that are within a factor of 2 of the RL. At these concentrations, FDs should have RPDs that are ≤50%. If the RPD of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the CCV, the recovery is judged to be matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.
- **9.7.4** If an MSD is analyzed instead of a FD, calculate the relative percent difference (RPD) for duplicate MSs (MS and MSD) using the equation

$$RPD = \underline{|MS - MSD|}_{(MS + MSD)/2} \times 100$$

9.7.5 RPDs for duplicate MSs should be ≤30% for samples fortified at or above their native concentration. Greater variability may be observed when MSs are fortified at analyte concentrations that are within a factor of 2 of the RL. MSs fortified at these concentrations should have RPDs that are ≤50% for samples fortified at or above their native concentration. If the RPD of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the LCSD where applicable, the result is judged to be matrix biased. If no LCSD is present, the associated MS and MSD are to be re-analyzed to determine if any analytical has occurred. If the resulting RPDs are still outside control limits, the result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.

9.8 Initial Calibration Verification (ICV)

9.8.1 As part of the IDC (Sect. 13.2), and after each ICAL, analyze a QCS sample from a source different from the source of the CAL standards. If a second vendor is not available, then a different lot of the standard should be used. The QCS should be prepared and analyzed just like a CCV. Acceptance criteria for the QCS are identical to the CCVs; the calculated amount for each analyte must be ±

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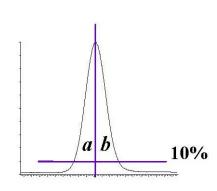
> 30% of the expected value. If measured analyte concentrations are not of acceptable accuracy, check the entire analytical procedureto locate and correct the problem.

9.9 Continuing Calibration Verification (CCV)

CCV Standards are analyzed at the beginning of each analysis batch, after every 9.9.1 10 Field Samples, and at the end of the analysis batch. See Section 10.7 for concentration requirements and acceptance criteria.

9.10 Method-specific Quality Control Samples

9.10.1 PEAK ASYMMETRY FACTOR - A peak asymmetry factor must be calculated using the equation below during the IDL and every time a calibration curve is generated. The peak asymmetry factor for the first two eluting peaks in a midlevel CAL standard (if only two analytes are being analyzed, both must be evaluated) must fall in the range of 0.8 to 1.5. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted. See guidance in Section 10.6.4.1 if the calculated peak asymmetry factors do not meet the criteria.



 $A_s = b/a$

Where:

 A_s = peak asymmetry factor

- b = width of the back half of the peak measured (at 10% peak height) from the trailing edge of the peak to a line dropped perpendicularly from the peak apex
- a = the width of the front half of the peak measured (at 10% peak height) from the leading edge of the peak to a line dropped perpendicularly from the apex.

9.11 Method Sequence

- **CCV-LOW**
- MB
- LCS
- **LCSD**
- MS
- **Duplicate or MSD**
- Field Samples (1-10)
- **CCV-MID**
- Field Samples (11-20)
- **CCV-LOW**

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10. Procedure

10.1 Equipment Set-up

- 10.1.1 This procedure may be performed manually or in an automated mode using a robotic or automatic sample preparation device. If an automated system is used to prepare samples, follow the manufacturer's operating instructions, but all extraction and elution steps must be the same as in the manual procedure. Extraction and/or elution steps may not be changed or omitted to accommodate the use of an automated system. If an automated system is used, the MBs should be rotated among the ports to ensure that all the valves and tubing meet the MB requirements (Sect. 9.2).
- **10.1.2** Some of the PFAS's adsorb to surfaces, including polypropylene. Therefore, the aqueous sample bottles must be rinsed with the elution solvent (Sect 10.3.4) whether extractions are performed manually or by automation. The bottle rinse is passed through the cartridge to elute the method analytes and is then collected (Sect. 10.3.4).
- 10.1.3 NOTE: The SPE cartridges and sample bottles described in this section are designed as single use items and should be discarded after use. They may not be refurbished for reuse in subsequent analyses.

10.2 Sample Preparation and Extraction of Aqueous Samples

10.2.1 Samples are preserved, collected and stored as presented in Section 6.

The entire sample that is received must be sent through the SPE cartridge. In addition, the bottle must be solvent rinsed and this rinse must be sent through the SPE cartridge as well. The method blank (MB) and laboratory control sample (LCS) must be extracted in exactly the same manner (i.e., must include the bottle solvent rinse). It should be noted that a water rinse alone is not sufficient. This does not apply to samples with high concentrations of PFAS that are prepared using serial dilution and not SPE.

- 10.2.2 Determine sample volume. Weigh all samples to the nearest 1g. If visible sediment is present, centrifuge and decant into a new 250mL HDPE bottle and record the weight of the new container.
 - NOTE: Some of the PFAS's adsorb to surfaces, thus the sample volume may **NOT** be transferred to a graduated cylinder for volume measurement.
- 10.2.3 The MB, LCS and FRB may be prepared by measuring 250 mL of reagent water with a polypropylene graduated cylinder or filling a 250-mL sample bottle to near the top.
- 10.2.4 Adjust the QC and sample pH to 3 by adding acetic acid in water dropwise
- 10.2.5 Add 20 µL of the EIS PDS (Sect. 8.2.2) to each sample and QC, cap and invert to mix.
- 10.2.6 If the sample is an LCS, LCSD, MS, or MSD, add the necessary amount of analyte PDS (Sect. 8.2.3). Cap and invert each sample to mix.

10.3 Cartridge SPE Procedure

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10.3.1 CARTRIDGE CLEAN-UP AND CONDITIONING – DO NOT allow cartridge packing material to go dry during any of the conditioning steps. Rinse each cartridge with 3 X 5 mL of 2% ammonium hydroxide in methanol, followed by 5mls of methanol. Next, rinse each cartridge with 5 mls of the 25 mM acetate buffer, followed by 15 mL of reagent water, without allowing the water to drop below the top edge of the packing. If the cartridge goes dry during the conditioning phase, the conditioning must be started over. Add 4-5 mL of reagent water to each cartridge, attach the sample transfer tubes (Sect. 7.9.3), turn on the vacuum, and begin adding sample to the cartridge.

- **10.3.2** SAMPLE EXTRACTON Adjust the vacuum so that the approximate flow rate is approximately 4 mL/min. Do not allow the cartridge to go dry before all the sample has passed through.
- 10.3.3 SAMPLE BOTTLE AND CARTRIDGE RINSE After the entire sample has passed through the cartridge, rinse the sample bottles with 4 ml reagent water followed by 4 ml 25 mM acetate buffer at pH 4 and draw the aliquot through the sample transfer tubes and the cartridges. Draw air or nitrogen through the cartridge for 5-10 min at high vacuum (10-15 in. Hg). NOTE: If empty plastic reservoirs are used in place of the sample transfer tubes to pass the samples through the cartridges, these reservoirs must be treated like the transfer tubes. After the entire sample has passed through the cartridge, the reservoirs must be rinsed to waste with reagent water.
- 10.3.4 SAMPLE BOTTLE AND CARTRIDGE ELUTION, Fraction 1 Turn off and release the vacuum. Lift the extraction manifold top and insert a rack with collection tubes into the extraction tank to collect the extracts as they are eluted from the cartridges. Rinse the sample bottles with 12 mls of methanol and draw the aliquot through the sample transfer tubes and cartridges. Use a low vacuum such that the solvent exits the cartridge in a dropwise fashion.

SAMPLE BOTTLE AND CARTRIDGE ELUTION, Fraction 2 In a separate collection vial, rinse the sample bottles with 12 mL of 2% ammonium hydroxide in methanol and elute the analytes from the cartridges by pulling the 4 mL of methanol through the sample transfer tubes and the cartridges. Use a low vacuum such that the solvent exits the cartridge in a dropwise fashion. To the final extract, add 50 ul of acetic acid.

NOTE: If empty plastic reservoirs are used in place of the sample transfer tubes to pass the samples through the cartridges, these reservoirs must be treated like the transfer tubes. After the reservoirs have been rinsed in Section 10.3.3, the elution solvent used to rinse the sample bottles must be swirled down the sides of the reservoirs while eluting the cartridge to ensure that any method analytes on the surface of the reservoirs are transferred to the extract.

CLEAN-UP CARTRIDGE ELUTION, Elute the clean-up cartridge with 8 additional mls of methanol and draw the aliquot through the cartridge. Use a low vacuum such that the solvent exits the cartridge in a dropwise fashion.

10.3.5 Fractions 1 and 2 are to be combined during the concentration stage (section 10.6)

10.4 Sample Prep and Extraction Protocol for Soils

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- **10.4.1** Homogenize and weigh 2 grams of sample (measured to the nearest hundredth of a gram) into a 50 ml polypropylene centrifuge tube. For laboratory control blanks and spikes, 2 grams of clean sand is used.
- **10.4.2** Add 20 μL of the EIS PDS (Sect. 8.2.2) to each sample and QC.
- **10.4.3** If the sample is an LCS, LCSD, MS, or MSD, add the necessary amount of analyte PDS (Sect. 8.2.3). Cap and invert each sample to mix.
- **10.4.4** To all samples, add 10 mls of methanol, cap, vortex for 25 seconds at 3000RPM and mix for 30 minutes using a shaker table of tumbler at 120RPM.
- **10.4.5** Following mixing, sonicate each sample for 30 minutes and let samples sit overnight (at least 2 hours is required for RUSH samples).
- **10.4.6** Centrifuge each sample at 3500RPM for 10 minutes.
- **10.4.7** Remove supernatant, and reserve for clean-up.

10.5 Extract Clean-up

- **10.5.1** CARTRIDGE CLEAN-UP AND CONDITIONING –. Rinse each cartridge with 15 mL of methanol and discard. If the cartridge goes dry during the conditioning phase, the conditioning must be started over. Attach the sample transfer tubes (Sect. 7.9.3), turn on the vacuum, and begin adding sample to the cartridge.
- **10.5.2** Adjust the vacuum so that the approximate flow rate is 1-2 mL/min. Do not allow the cartridge to go dry before all the sample has passed through.
- **10.5.3** SAMPLE BOTTLE AND CARTRIDGE RINSE After the entire sample has passed through the cartridge, rinse the sample collection vial with two 1-mL aliquots of methanol and draw each aliquot through the cartridges. Draw air or nitrogen through the cartridge for 5 min at high vacuum (10-15 in. Hg).
- **10.5.4** If extracts are not to be immediately evaporated, cover collection tubes and store at ambient temperature till concentration.

10.6 Extract Concentration

10.6.1 Concentrate the extract to dryness under a gentle stream of nitrogen in a heated water bath (60-65 °C) to remove all the water/methanol mix. Add the appropriate amount of 80:20% (vol/vol) methanol:water solution and 20 µl of the ID REC PDS (Sect. 8.2.7) to the collection vial to bring the volume to 1 mL and vortex. Transfer two aliquots with a plastic pipet (Sect. 7.6) into 2 polypropylene autosampler vials.

NOTE: It is recommended that the entire 1-mL aliquot not be transferred to the autosampler vial because the polypropylene autosampler caps do not reseal after injection. Therefore, do not store the extracts in the autosampler vials as evaporation losses can occur occasionally in these autosampler vials. Extracts can be split between 2 X 700 μ l vials (Sect. 7.4).

10.7 Sample Volume Determination

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10.7.1 If the level of the sample was marked on the sample bottle, use a graduated cylinder to measure the volume of water required to fill the original sample bottle to the mark made prior to extraction. Determine to the nearest 10 mL.

- 10.7.2 If using weight to determine volume, weigh the empty bottle to the nearest 10 g and determine the sample weight by subtraction of the empty bottle weight from the original sample weight (Sect. 10.2.2). Assume a sample density of 1.0 g/mL. In either case, the sample volume will be used in the final calculations of the analyte concentration (Sect. 11.2).
- **10.8 Initial Calibration** Demonstration and documentation of acceptable initial calibration is required before any samples are analyzed. After the initial calibration is successful, a CCV is required at the beginning and end of each period in which analyses are performed, and after every tenth Field Sample.

10.8.1 ESI-MS/MS TUNE

- **10.8.1.1** Calibrate the mass scale of the MS with the calibration compounds and procedures prescribed by the manufacturer.
- 10.8.1.2 Optimize the [M-H]- for each method analyte by infusing approximately 0.5-1.0 μg/mL of each analyte (prepared in the initial mobile phase conditions) directly into the MS at the chosen LC mobile phase flow rate (approximately 0.4 mL/min). This tune can be done on a mix of the method analytes. The MS parameters (voltages, temperatures, gas flows, etc.) are varied until optimal analyte responses are determined. The method analytes may have different optima requiring some compromise between the optima.
- 10.8.1.3 Optimize the product ion for each analyte by infusing approximately 0.5-1.0 μg/mL of each analyte (prepared in the initial mobile phase conditions) directly into the MS at the chosen LC mobile phase flow rate (approximately 0.4 mL/min). This tune can be done on a mix of the method analytes. The MS/MS parameters (collision gas pressure, collision energy, etc.) are varied until optimal analyte responses are determined. Typically, the carboxylic acids have very similar MS/MS conditions and the sulfonic acids have similar MS/MS conditions.
- **10.8.2** Establish LC operating parameters that optimize resolution and peak shape. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted.

Cautions: LC system components, as well as the mobile phase constituents, contain many of the method analytes in this method. Thus, these PFAS's will build up on the head of the LC column during mobile phase equilibration. To minimize the background PFAS peaks and to keep background levels constant, the time the LC column sits at initial conditions must be kept constant and as short as possible (while ensuring reproducible retention times). In addition, prior to daily use, flush the column with 100% methanol for at least 20 min before initiating a sequence. It may be necessary on some systems to flush other LC components such as wash syringes, sample needles or any other system components before daily use.

10.8.3 Inject a mid-level CAL standard under LC/MS conditions to obtain the retention times of each method analyte. If analyzing for PFTA, ensure that the LC

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conditions are adequate to prevent co-elution of PFTA and the mobile phase interferants. These interferants have the same precursor and products ions as PFTA, and under faster LC conditions may co-elute with PFTA. Divide the chromatogram into retention time windows each of which contains one or more chromatographic peaks. During MS/MS analysis, fragment a small number of selected precursor ions ([M-H]-) for the analytes in each window and choose the most abundant product ion. For maximum sensitivity, small mass windows of ±0.5 daltons around the product ion mass were used for quantitation.

- **10.8.4** Inject a mid-level CAL standard under optimized LC/MS/MS conditions to ensure that each method analyte is observed in its MS/MS window and that there are at least 10 scans across the peak for optimum precision.
 - 10.8.4.1 If broad, split or fronting peaks are observed for the first two eluting chromatographic peaks (if only two analytes are being analyzed, both must be evaluated), change the initial mobile phase conditions to higher aqueous content until the peak asymmetry ratio for each peak is 0.8 1.5. The peak asymmetry factor is calculated as described in Section 9.9.1 on a mid-level CAL standard. The peak asymmetry factor must meet the above criteria for the first two eluting peaks during the IDL and every time a new calibration curve is generated. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted.

NOTE: PFHxS, PFOS, NMeFOSAA, and NEtFOSAA have multiple chromatographic peaks using the LC conditions in Table 5 due to chromatographic resolution of the linear and branched isomers of these compounds. Most PFAS's are produced by two different processes. One process gives rise to linear PFAS's only while the other process produces both linear and branched isomers. Thus, both branched and linear PFAS's can potentially be found in the environment. For the aforementioned compounds that give rise to more than one peak, all the chromatographic peaks observed in the standard must be integrated and the areas totaled. Chromatographic peaks in a sample must be integrated in the same way as the CAL standard.

- **10.8.5** Prepare a set of CAL standards as described in Section 8.2.5. The lowest concentration CAL standard must be at or below the RL (2 ng/L), which may depend on system sensitivity.
- 10.8.6 The LC/MS/MS system is calibrated using the IS technique. Use the LC/MS/MS data system software to generate a linear regression or quadratic calibration curve for each of the analytes. This curve must always be forced through zero and may be concentration weighted, if necessary. Forcing zero allows for a better estimate of the background levels of method analytes. A minimum of 5 levels are required for a linear calibration model and a minimum of 6 levels are required for a quadratic calibration model.
- 10.8.7 CALIBRATION ACCEPTANCE CRITERIA A linear fit is acceptable if the coefficient of determination (r²) is greater than 0.99. When quantitated using the initial calibration curve, each calibration point, except the lowest point, for each analyte should calculate to be within 70-130% of its true value. The lowest CAL point should calculate to be within 50-150% of its true value. If these criteria cannot be met, the analyst will have difficulty meeting ongoing QC criteria. It is

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recommended that corrective action is taken to reanalyze the CAL standards, restrict the range of calibration, or select an alternate method of calibration (forcing the curve through zero is still required).

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- **10.8.7.1 CAUTION:** When acquiring MS/MS data, LC operating conditions must be carefully reproduced for each analysis to provide reproducible retention times. If this is not done, the correct ions will not be monitored at the appropriate times. As a precautionary measure, the chromatographic peaks in each window must not elute too close to the edge of the segment time window.
- 10.9 CONTINUING CALIBRATION CHECK (CCV) Minimum daily calibration verification is as follows. Verify the initial calibration at the beginning and end of each group of analyses, and after every tenth sample during analyses. In this context, a "sample" is considered to be a Field Sample. MBs, CCVs, LCSs, MSs, FDs FRBs and MSDs are not counted as samples. The beginning CCV of each analysis batch must be at or below the RL in order to verify instrument sensitivity prior to any analyses. If standards have been prepared such that all low CAL points are not in the same CAL solution, it may be necessary to analyze two CAL standards to meet this requirement. Alternatively, the analyte concentrations in the analyte PDS may be customized to meet these criteria. Subsequent CCVs should alternate between a medium and Low concentration CAL standard.
 - **10.9.1** Inject an aliquot of the appropriate concentration CAL standard and analyze with the same conditions used during the initial calibration.
 - 10.9.2 Calculate the concentration of each analyte and EIS in the CCV. The calculated amount for each analyte for medium level CCVs must be within ± 30% of the true value with an allowance of 10% of the reported analytes to be greater than 30%, but less than 40%. The calculated amount for each EIS must be within ± 50% of the true value. The calculated amount for the lowest calibration point for each analyte must be within ± 50%. If these conditions do not exist, then all data for the problem analyte must be considered invalid, and remedial action should be taken (Sect. 10.7.4) which may require recalibration. Any Field or QC Samples that have been analyzed since the last acceptable calibration verification should be reanalyzed after adequate calibration has been restored, with the following exception. If the CCV fails because the calculated concentration is greater than 130% (150% for the low-level CCV) for a particular method analyte, and Field Sample extracts show no detection for that method analyte, non-detects may be reported without re-analysis.
 - 10.9.3 REMEDIAL ACTION Failure to meet CCV QC performance criteria may require remedial action. Major maintenance, such as cleaning the electrospray probe, atmospheric pressure ionization source, cleaning the mass analyzer, replacing the LC column, etc., requires recalibration (Sect 10.6) and verification of sensitivity by analyzing a CCV at or below the RL (Sect 10.7).

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10.10 EXTRACT ANALYSIS

- **10.10.1** Establish operating conditions equivalent to those summarized in Tables 6-8 of Section 16. Instrument conditions and columns should be optimized prior to the initiation of the IDC.
- 10.10.2 Establish an appropriate retention time window for each analyte. This should be based on measurements of actual retention time variation for each method analyte in CAL standard solutions analyzed on the LC over the course of time. A value of plus or minus three times the standard deviation of the retention time obtained for each method analyte while establishing the initial calibration and completing the IDC can be used to calculate a suggested window size. However, the experience of the analyst should weigh heavily on the determination of the appropriate retention window size.
- **10.10.3** Calibrate the system by either the analysis of a calibration curve (Sect. 10.6) or by confirming the initial calibration is still valid by analyzing a CCV as described in Section 10.7. If establishing an initial calibration, complete the IDC as described in Section 13.2.
- **10.10.4** Begin analyzing Field Samples, including QC samples, at their appropriate frequency by injecting the same size aliquots under the same conditions used to analyze the CAL standards.
- 10.10.5 At the conclusion of data acquisition, use the same software that was used in the calibration procedure to identify peaks of interest in predetermined retention time windows. Use the data system software to examine the ion abundances of the peaks in the chromatogram. Identify an analyte by comparison of its retention time with that of the corresponding method analyte peak in a reference standard.
- 10.10.6 The analyst must not extrapolate beyond the established calibration range. If an analyte peak area exceeds the range of the initial calibration curve, the sample should be re-extracted with a reduced sample volume in order to bring the out of range target analytes into the calibration range. If a smaller sample size would not be representative of the entire sample, the following options are recommended. Re-extract an additional aliquot of sufficient size to insure that it is representative of the entire sample. Spike it with a higher concentration of internal standard. Prior to LC/MS analysis, dilute the sample so that it has a concentration of internal standard equivalent to that present in the calibration standard. Then, analyze the diluted extract.

11. Data Evaluation, Calculations and Reporting

- **11.1** Complete chromatographic resolution is not necessary for accurate and precise measurements of analyte concentrations using MS/MS. In validating this method, concentrations were calculated by measuring the product ions listed in Table 7.
- **11.2** Calculate analyte concentrations using the multipoint calibration established in Section 10.6. Do not use daily calibration verification data to quantitate analytes in samples. Adjust final analyte concentrations to reflect the actual sample volume determined in Section 10.6 where:

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Cex = (Area of target analyte * Concentration of Labeled analog) / (area of labeled analog *

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 $C_s = (C_{ex} / sample volume in ml) * 1000$

 C_{ex} = The concentration of the analyte in the extract

CF = calibration factor from calibration.

- 11.3 Prior to reporting the data, the chromatogram should be reviewed for any incorrect peak identification or poor integration.
- **11.4** PFHxS, PFOS, PFOA, NMeFOSAA, and NEtFOSAA have multiple chromatographic peaks using the LC conditions in Table 5 due to the linear and branch isomers of these compounds (Sect. 10.6.4.1). The areas of all the linear and branched isomer peaks observed in the CAL standards for each of these analytes must be summed and the concentrations reported as a total for each of these analytes.
- 11.5 Calculations must utilize all available digits of precision, but final reported concentrations should be rounded to an appropriate number of significant figures (one digit of uncertainty), typically two, and not more than three significant figures.

12. Contingencies for Handling Out-of-Control Data or Unacceptable Data

- 12.1 Section 9.0 outlines sample batch QC acceptance criteria. If non-compliant organic compound results are to be reported, the Organic Section Head and/or the Laboratory Director, and the Operations Manager must approve the reporting of these results. The laboratory Project Manager shall be notified, and may choose to relay the non-compliance to the client, for approval, or other corrective action, such as re-sampling and re-analysis. The analyst, Data Reviewer, or Department Supervisor performing the secondary review initiates the project narrative, and the narrative must clearly document the non-compliance and provide a reason for acceptance of these results.
- **12.2** All results for the organic compounds of interest are reportable without qualification if extraction and analytical holding times are met, preservation requirements (including cooler temperatures) are met, all QC criteria are met, and matrix interference is not suspected during extraction or analysis of the samples. If any of the below QC parameters are not met, all associated samples must be evaluated for re-extraction and/or re-analysis.

13. Method Performance

13.1 Detection Limit Study (DL) / Limit of Detection Study (LOD) / Limit of Quantitation (LOQ)

13.1.1 The laboratory follows the procedure to determine the DL, LOD, and/or LOQ as outlined in Alpha SOP ID 1732. These studies performed by the laboratory are maintained on file for review.

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13.2 Demonstration of Capability Studies

13.2.1 The IDC must be successfully performed prior to analyzing any Field Samples. Prior to conducting the IDC, the analyst must first generate an acceptable Initial Calibration following the procedure outlined in Section 10.6.

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- 13.2.2 INITIAL DEMONSTRATION OF LOW SYSTEM BACKGROUND Any time a new lot of SPE cartridges, solvents, centrifuge tubes, disposable pipets, and autosampler vials are used, it must be demonstrated that an MB is reasonably free of contamination and that the criteria in Section 9.2.1 are met. If an automated extraction system is used, an MB should be extracted on each port to ensure that all the valves and tubing are free from potential PFAS contamination.
- 13.2.3 INITIAL DEMONSTRATION OF PRECISION (IDP) Prepare, extract, and analyze four to seven replicate LCSs fortified near the midrange of the initial calibration curve according to the procedure described in Section 10. Sample preservatives as described in Section 6.2.1 must be added to these samples. The relative standard deviation (RSD) of the results of the replicate analyses must be less than 20%.
- 13.2.4 INITIAL DEMONSTRATION OF ACCURACY (IDA) Using the same set of replicate data generated for Section 13.2.3, calculate average recovery. The average recovery of the replicate values must be within ± 30% of the true value.
- 13.2.5 INITIAL DEMONSTRATION OF PEAK ASYMMETRY FACTOR Peak asymmetry factors must be calculated using the equation in Section 9.10.1 for the first two eluting peaks (if only two analytes are being analyzed, both must be evaluated) in a mid-level CAL standard. The peak asymmetry factors must fall in the range of 0.8 to 1.5. See guidance in Section 10.6.4.1 if the calculated peak asymmetry factors do not meet the criteria.
- 13.2.6 Refer to Alpha SOP ID 1739 for further information regarding IDC/DOC Generation.
- 13.2.7 The analyst must make a continuing, annual, demonstration of the ability to generate acceptable accuracy and precision with this method.

14. Pollution Prevention and Waste Management

- **14.1** Refer to Alpha's Chemical Hygiene Plan and Hazardous Waste Management and Disposal SOP for further pollution prevention and waste management information.
- 14.2 This method utilizes SPE to extract analytes from water. It requires the use of very small volumes of organic solvent and very small quantities of pure analytes, thereby minimizing the potential hazards to both the analyst and the environment as compared to the use of large volumes of organic solvents in conventional liquid-liquid extractions.
- 14.3 The analytical procedures described in this method generate relatively small amounts of waste since only small amounts of reagents and solvents are used. The matrices of concern are finished drinking water or source water. However, laboratory waste management practices must be conducted consistent with all applicable rules and regulations, and that laboratories protect the air, water, and land by minimizing and controlling all releases from fume hoods and bench operations. Also, compliance is required with any sewage discharge permits and regulations, particularly the hazardous waste identification rules and land disposal restrictions.

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15. Referenced Documents

Chemical Hygiene Plan - ID 2124

SOP ID 1732 Detection Limit (DL), Limit of Detection (LOD) & Limit of Quantitation (LOQ) SOP

SOP ID 1739 Demonstration of Capability (DOC) Generation SOP

SOP ID 1728 Hazardous Waste Management and Disposal SOP

16. Attachments

Table 7: LC Method Conditions

Time (min)	2 mM Ammonium Acetate (5:95 MeOH/H ₂ O)	100% Methanol
Initial	100.0	0.0
1.0	100.0	0.0
2.2	85.0	15.0
11	20.0	80.0
11.4	0.0	100.0
12.4	100.0	00.0
15.5	100.0	0.0

Waters Aquity UPLC ® BEHC₁₈ 2.1 x 50 mm packed with 1.7 µm BEH C₁₈ stationary phase
Flow rate of 0.4 mL/min
2-5 µL injection

Table 8: ESI-MS Method Conditions

ESI Conditions				
Polarity Negative ion				
Capillary needle voltage	.5 kV			
Cone Gas Flow	25 L/hr			
Nitrogen desolvation gas	1000 L/hr			
Desolvation gas temp.	500 °C			

Table 9: Method Analyte Source, Retention Times (RTs), and EIS References

#	Analyte	Transition	RT	IS	Туре
1	МЗРВА	216>171	2.65		REC
2	PFBA	213 > 169	2.65	2: M4PFBA	
3	M4PFBA	217 > 172	2.65	1: M3PBA	EIS
4	PFPeA	263 > 219	5.67	4: M5PFPEA	
5	M5PFPEA	268 > 223	5.66	1: M3PBA	EIS
6	PFBS	299 > 80	6.35	6: M3PFBS	
7	M3PFBS	302 > 80	6.35	29:M4PFOS	EIS
8	FtS 4:2	327 > 307	7.47	9: M2-4:2FTS	

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#	Analyte	Transition	RT	IS	Туре
9	M2-4:2FTS	329 > 81	7.47	29:M4PFOS	EIS
10	PFHxA	303 > 269	7.57	10: M5PFHxA	
11	M5PFHxA	318 > 273	7.57	19:M2PFOA	EIS
12	PFPeS	349 > 80	7.88	18: M3PFHxS	
13	PFHpA	363 > 319	8.80	14: M4PFHpA	
14	M4PFHpA	367 > 322	8.80	19:M2PFOA	EIS
15	L-PFHxS	399 > 80	8.94	18: M3PFHxS	
16	br-PFHxS	399 > 80	8.72	18: M3PFHxS	
17	PFHxS Total	399 > 80	8.94	18: M3PFHxS	
18	M3PFHxS	402 > 80	8.94	29:M4PFOS	EIS
19	MPFOA	415 > 370	9.7		REC
20	PFOA	413 > 369	9.7	23: M8PFOA	
21	br-PFOA	413 > 369	9.48	23: M8PFOA	
22	PFOA Total	413 > 369	9.7	23: M8PFOA	
23	M8PFOA	421 > 376	9.7	19: M2PFOA	EIS
24	FtS 6:2	427 > 407	9.66	25: M2-6:2FTS	
25	M2-6:2FTS	429 > 409	9.66	29:M4PFOS	EIS
26	PFHpS	449 > 80	9.78	33: M8PFOS	
27	PFNA	463 > 419	10.41	33: M8PFOS	
28	M9PFNA	472 > 427	10.41	19: M2PFOA	EIS
29	M4PFOS	501 > 80	10.45		REC
30	PFOS	499 > 80	10.45	33: M8PFOS	
31	br-PFOS	499 > 80	10.27	33: M8PFOS	
32	PFOS Total	499 > 80	10.45	33: M8PFOS	
33	M8PFOS	507 > 80	10.45	29: M4PFOS	EIS
34	FtS 8:2	527 > 507	10.99	38: M2-8:2FTS	
35	M2-8:2FTS	529 > 509	10.99	29:M4PFOS	EIS
36	M2PFDA	515 > 470	11.00		REC
37	PFDA	513 > 469	11.00	38: M6PFDA	
38	M6PFDA	519 > 474	11.00	36: M2PFDA	EIS
39	PFNS	549 > 80	11.02	33:M8PFOS	
40	NMeFOSAA	570 > 419	11.41	41: D3-NMeFOSAA	
41	d3-NMeFOSAA	573 > 419	11.41	36: M2PFDA	EIS
42	PFOSA	498 > 78	11.48	29: M8FOSA	
43	M8FOSA	506 > 78	11.48	19: M2PFOA	EIS
44	PFUnDA	563 > 519	11.51	41: M7-PFUDA	
45	M7-PFUDA	570 > 525	11.51	36: M2PFDA	EIS
46	PFDS	599 > 80	11.51	33:M8PFOS	
47	NEtFOSAA	584 > 419	11.68	48: d5-NEtFOSAA	

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#	Analyte	Transition	RT	IS	Туре
48	d5-NEtFOSAA	589 > 419	11.68	36: M2PFDA	EIS
49	PFDoA	613 > 569	11.96	50: MPFDOA	
50	MPFDOA	615 > 570	11.96	36: M2PFDA	EIS
51	PFTriA	663 > 619	12.34	50: MPFDOA	
52	PFTeA	713 > 669	12.6	53: M2PFTEDA	
53	M2PFTEDA	715 > 670	12.6	36: M2PFDA	EIS
54	M3HFPO-DA	329>285	7.97	19: M2PFOA	EIS
55	HFPO-DA	332>287	7.97	54: M3HFPO-DA	
56	ADONA	377>251	8.00	23: M8PFOA	
57	PFHxDA	813>769	13.20	59: M2PFHxDA	
58	PFODA	913>869	13.50	59: M2PFHxDA	
59	M2PFHxDA	815>770	13.20	36:M2PFDA	EIS
60	NEtFOSA	526>169	11.00	61: NMeFOSA	
61	NMeFOSA	512>169	10.50	63: d3-NMeFOSA	
62	d3-NMeFOSA	515>169	10.50	29: M4PFOS	EIS
63	d5-NEtFOSA	531>169	11.00	29: M4PFOS	EIS
64	NMeFOSE	556>122	11.25	66: d7-NMeFOSE	
65	NEtFOSE	570>136	10.75	67: d9-NEtFOSE	
66	d7-NMeFOSE	563>126	11.25	29: M4PFOS	EIS
67	d9-NEtFOSE	579>142	10.75	29: M4PFOS	EIS
68	FtS 10:2	627>607	11.50	25: M2-6:2FTS	
69	PFDoS	699>99	12.50	33: M8PFOS	



APPENDIX E MSDS

1,2,4-TRIMETHYLBENZENE

1433

March 2002

CAS No: 95-63-6

RTECS No: DC3325000

UN No: 1993

EC No: 601-043-00-3

Pseudocumene

 C_9H_{12}

Molecular mass: 120,2

TYPES OF HAZARD/	ACLITE HAZADDS/SVADTORAS	DREVENTION	EIDST AID/EIDE EIGHTING
EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Flammable.	NO open flames, NO sparks, and NO smoking.	Alcohol-resistant foam, dry powder, carbon dioxide.
EXPLOSION	Above 44/C explosive vapour/air mixtures may be formed.	Above 44/C use a closed system, ventilation, and explosion-proof electrical equipment. Prevent build-up of electrostatic charges (e.g., by grounding).	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		PREVENT GENERATION OF MISTS!	
Inhalation	Confusion. Cough. Dizziness. Drowsiness. Headache. Sore throat. Vomiting.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness. Dry skin.	Protective gloves.	Rinse skin with plenty of water or shower.
Eyes	Redness. Pain.	Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	(See Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.
SPILLAGE DIS	 BPOSAL	PACKAGING & LABELLING	
as far as possil inert absorbent wash away into enter the enviro	and spilled liquid in sealable containers ble. Absorb remaining liquid in sand or t and remove to safe place. Do NOT o sewer. Do NOT let this chemical conment. Personal protection: filter rganic gases and vapours.	Xn Symbol N Symbol R: 10-20-36/37/38-51/53 S: (2-)26-61 UN Hazard Class: 3 UN Pack Group: III	
EMERGENCY	RESPONSE	SAFE STORAGE	
Transport Eme	ergency Card: TEC (R)-30GF1-III	Fireproof. Separated from strong oxidants. Well closed. Keep in a well-ventilated room.	









IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Chemical dangers

The substance decomposes on burning producing toxic and irritating fumes. Reacts violently with strong oxidants causing fire and explosion hazard.

Occupational exposure limits

TLV: (as mixed isomers) 25 ppm as TWA; (ACGIH 2004). MAK: (as mixed isomers) 20 ppm, 100 mg/m³; Peak limitation category: II(2); Pregnancy risk group: C; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation.

Inhalation risk

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20/C; on spraying or dispersing, however, much faster.

Effects of short-term exposure

The substance is irritating to the eyes the skin and the respiratory tract. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. The substance may cause effects on the central nervous system.

Effects of long-term or repeated exposure

The liquid defats the skin. Lungs may be affected by repeated or prolonged exposure, resulting in chronic bronchitis. The substance may have effects on the central nervous system and blood. See Notes.

PHYSICAL PROPERTIES

Boiling point: 169/C Melting point: -44/C

Relative density (water = 1): 0.88 Solubility in water: very poor Relative vapour density (air = 1): 4.1 Relative density of the vapour/air-mixture at 20/C (air = 1): 1.01

Flash point: 44/C c.c.

Auto-ignition temperature: 500/C Explosive limits, vol% in air: 0.9-6.4

Octanol/water partition coefficient as log Pow: 3.8

ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish.

NOTES

Use of alcoholic beverages enhances the harmful effect.

Depending on the degree of exposure, periodic medical examination is suggested.

See also ICSC 1155 1,3,5-Trimethylbenzene (Mesitylene), ICSC 1362 1,2,3-Trimethylbenzene (Hemimellitene), ICSC 1389 Trimethylbenzene (mixed isomers).

1,3,5-Trimethylbenzene (Mesitylene) is classified as a marine pollutant.

Card has been partly updated in October 2004. See sections Occupational Exposure Limits, EU classification, Emergency Response.

ADDITIONAL INFORMATION

LEGAL NOTICE

1,3,5-TRIMETHYLBENZENE

March 2002

CAS No: 108-67-8 RTECS No: OX6825000

UN No: 2325

Mesitylene C. H.

C₉H₁₂ Molecular mass: 120.2

EC No: 601-025-00-5

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Flammable.	NO open flames, NO sparks, and NO smoking.	Alcohol-resistant foam, dry powder carbon dioxide.
EXPLOSION	Above 50/C explosive vapour/air mixtures may be formed.	Above 50/C use a closed system, ventilation, and explosion-proof electrical equipment. Prevent build-up of electrostatic charges (e.g., by grounding).	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		PREVENT GENERATION OF MISTS!	
Inhalation	Confusion. Cough. Dizziness. Drowsiness. Headache. Sore throat. Vomiting.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness. Dry skin.	Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eyes	Redness. Pain.	Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	(See Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.
SPILLAGE DI	SPOSAL	PACKAGING & LABELLING	
containers as liquid in sand of place. Do NO this chemical of	g and spilled liquid in sealable far as possible. Absorb remaining or inert absorbent and remove to safe I wash away into sewer. Do NOT let enter the environment. Personal er respirator for organic gases and	Xi Symbol N Symbol R: 10-37-51/53 S: (2-)61 UN Hazard Class: 3 UN Pack Group: III	Marine pollutant.
EMERGENCY	' RESPONSE	SAFE STORAGE	
Transport Emergency Card: TEC (R)-30S2325 NFPA Code: H0; F2; R0		Fireproof. Separated from strong oxidants. Well closed. Keep in a well-ventilated room.	









IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Chemical dangers

The substance decomposes on burning producing toxic and irritating fumes. Reacts violently with strong oxidants causing fire and explosion hazard.

Occupational exposure limits

TLV: 25 ppm as TWA; (ACGIH 2004).

MAK: (all isomers) 20 ppm, 100 mg/m³; Peak limitation category:

II(2); Pregnancy risk group: C; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation.

Inhalation risk

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20/C; on spraying or dispersing, however, much faster.

Effects of short-term exposure

The substance is irritating to the eyes, the skin and the respiratory tract. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. The substance may cause effects on the central nervous system.

Effects of long-term or repeated exposure

The liquid defats the skin. Lungs may be affected by repeated or prolonged exposure, resulting in chronic bronchitis. The substance may have effects on the central nervous system and blood. See Notes.

PHYSICAL PROPERTIES

Boiling point: 165/C

Melting point: -45/C

Relative density (water = 1): 0.86 Solubility in water: very poor

Vapour pressure, kPa at 20/C: 0.25

Relative vapour density (air = 1): 4.1

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.01

Flash point: 50/C (c.c.)

Auto-ignition temperature: 550/C

Octanol/water partition coefficient as log Pow: 3.42

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms. Bioaccumulation of this chemical may occur in fish.

NOTES

Use of alcoholic beverages enhances the harmful effect.

Depending on the degree of exposure, periodic medical examination is suggested.

See ICSC 1433 1,2,4-Trimethylbenzene (Pseudocumene), ICSC 1362 1,2,3-Trimethylbenzene (Hemimellitene), ICSC 1389 Trimethyl benzene (mixed isomers).

Card has been partly updated in April 2005. See section Occupational Exposure Limits.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible

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ARSENIC 0013 October 1999

CAS No: 7440-38-2 RTECS No: CG0525000 UN No: 1558

EC No: 033-001-00-X

Grey arsenic

As

Atomic mass: 74.9

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames. NO contact with strong oxidizers. NO contact with hot surfaces.	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Risk of fire and explosion is slight when exposed to hot surfaces or flames in the form of fine powder or dust.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		PREVENT DISPERSION OF DUST! AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Cough. Sore throat. Shortness of breath. Weakness. See Ingestion.	Closed system and ventilation.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
Skin	Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eyes	Redness.	Face shield or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal pain. Diarrhoea. Nausea. Vomiting. Burning sensation in the throat and chest. Shock or collapse. Unconsciousness.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Induce vomiting (ONL' IN CONSCIOUS PERSONS!). Refer for medical attention.
SPILLAGE DIS	SPOSAL	PACKAGING & LABELLING	
Evacuate danger area! Sweep spilled substance into sealable containers. Carefully collect remainder, then remove to safe place. Chemical protection suit including self-contained breathing apparatus. Do NOT let this chemical enter the environment.		T Symbol Do not transport with food and feedstuffs. Marine pollutant. R: 23/25-50/53 S: (1/2-)20/21-28-45-60-61 UN Hazard Class: 6.1 UN Pack Group: II	
EMERGENCY	RESPONSE	SAFE STORAGE	
Transport Emergency Card: TEC (R)-61GT5-II		Separated from strong oxidants, acids, halogens, food and feedstuffs. Well closed.	









0013 ARSENIC

IMPORTANT DATA

Physical State: Appearance

ODOURLESS, BRITTLE, GREY, METALLIC-LOOKING CRYSTALS.

Chemical dangers

Upon heating, toxic fumes are formed. Reacts violently with strong oxidants and halogens, causing fire and explosion hazard. Reacts with acids to produce toxic arsine gas (see: ICSC 0222).

Occupational exposure limits

TLV: 0.01 mg/m³ as TWA; A1 (confirmed human carcinogen); BEI issued; (ACGIH 2004).

MAK: Carcinogen category: 1; Germ cell mutagen group: 3A; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

Inhalation risk

Evaporation at 20/C is negligible; a harmful concentration of airborne particles can, however, be reached quickly, when dispersed.

Effects of short-term exposure

The substance is irritating to the eyes, the skin and the respiratory tract. The substance may cause effects on the gastrointestinal tract, cardiovascular system, central nervous system and kidneys, resulting in severe gastroenteritis, loss of fluid, and electrolytes, cardiac disorders, shock, convulsions and kidney impairment. Exposure above the OEL may result in death. The effects may be delayed. Medical observation is indicated.

Effects of long-term or repeated exposure

Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the mucous membranes, skin, peripheral nervous system, liver and bone marrow, resulting in pigmentation disorders, hyperkeratosis, perforation of nasal septum, neuropathy, liver impairment, anaemia. This substance is carcinogenic to humans. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES

Sublimation point: 613/C Density: 5.7 g/cm³

Solubility in water: none

ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms. It is strongly advised that this substance does not enter the environment.

NOTES

The substance is combustible but no flash point is available in literature.

Depending on the degree of exposure, periodic medical examination is suggested.

Do NOT take working clothes home.

Refer also to cards for specific arsenic compounds, e.g., Arsenic pentoxide (ICSC 0377), Arsenic trichloride (ICSC 0221), Arsenic trioxide (ICSC 0378), Arsine (ICSC 0222).

Card has been partly updated in October 2004. See sections Occupational Exposure Limits, EU classification, Emergency Response. Card has been partly updated in October 2005 in section Effects of long-term or repeated exposure.

ADDITIONAL INFORMATION

LEGAL NOTICE

BENZ(a)ANTHRACENE

October 1995

CAS No: 56-55-3 RTECS No: CV9275000 EC No: 601-033-00-9

1,2-Benzoanthracene Benzo(a)anthracene 2,3-Benzphenanthrene Naphthanthracene

C₁₈H₁₂ Molecular mass: 228.3

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING	
FIRE	Combustible.		Water spray, powder. In case of fire in the surroundings: use appropriate extinguishing media.	
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.		
EXPOSURE		AVOID ALL CONTACT!		
Inhalation		Local exhaust or breathing protection.	Fresh air, rest.	
Skin		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.	
Eyes		Safety goggles, face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.	
Ingestion		Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth.	
SPILLAGE DIS	SPOSAL	PACKAGING & LABELLING		
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Personal protection: complete protective clothing including self-contained breathing apparatus.		T Symbol N Symbol R: 45-50/53 S: 53-45-60-61		
EMERGENCY	RESPONSE	SAFE STORAGE		
		Well closed.		









0385

BENZ(a)ANTHRACENE

IMPORTANT DATA

Physical State; Appearance

COLOURLESS TO YELLOW - BROWN FLUORESCENT FLAKES OR POWDER.

Physical dangers

Dust explosion possible if in powder or granular form, mixed with air

Occupational exposure limits

TLV: A2 (suspected human carcinogen); (ACGIH 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

Inhalation risk

Evaporation at 20/C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

Effects of long-term or repeated exposure

This substance is probably carcinogenic to humans.

PHYSICAL PROPERTIES

Sublimation point: 435/C Melting point: 162/C

Relative density (water = 1): 1.274

Solubility in water: none

Vapour pressure, Pa at 20/C: 292

Octanol/water partition coefficient as log Pow: 5.61

ENVIRONMENTAL DATA

Bioaccumulation of this chemical may occur in seafood.

NOTES

This substance is one of many polycyclic aromatic hydrocarbons - standards are usually established for them as mixtures, e.g., coal tar pitch volatiles. However, it may be encountered as a laboratory chemical in its pure form.

Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

Do NOT take working clothes home.

Tetraphene is a common name.

Card has been partly updated in October 2005. See sections Occupational Exposure Limits, EU classification.

ADDITIONAL INFORMATION

LEGAL NOTICE

BENZO(a)PYRENE

0104

October 2005

CAS No: 50-32-8 RTECS No: DJ3675000 EC No: 601-032-00-3 Benz(a)pyrene 3,4-Benzopyrene Benzo(d,e,f)chrysene

C₂₀H₁₂

Molecular mass: 252.3

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray, foam, powder, carbon dioxide.
EXPLOSION			
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
Inhalation		Local exhaust or breathing protection.	Fresh air, rest.
Skin	MAY BE ABSORBED!	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Safety goggles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion		Do not eat, drink, or smoke during work.	Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer fo medical attention.
SPILLAGE DIS	POSAL	PACKAGING & LABELLING	
protective clothi apparatus. Do N environment. Sv containers; if ap	er area! Personal protection: complete ng including self-contained breathing NOT let this chemical enter the weep spilled substance into sealable propriate, moisten first to prevent lly collect remainder, then remove to	T Symbol N Symbol R: 45-46-60-61-43-50/53 S: 53-45-60-61	
EMERGENCY	RESPONSE	SAFE STORAGE	
•		Separated from strong oxidants.	









0104 BENZO(a)PYRENE

IMPORTANT DATA

Physical State; Appearance

PALE-YELLOW CRYSTALS

Chemical dangers

Reacts with strong oxidants causing fire and explosion hazard.

Occupational exposure limits

TLV: Exposure by all routes should be carefully controlled to levels as low as possible A2 (suspected human carcinogen); (ACGIH 2005).

MAK: Carcinogen category: 2; Germ cell mutagen group: 2; (DFG 2005).

Routes of exposure

The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

Inhalation risk

Evaporation at 20/C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

Effects of long-term or repeated exposure

This substance is carcinogenic to humans. May cause heritable genetic damage to human germ cells. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES

Boiling point: 496/C Solubility in water: none (<0.1 g/100 ml)

Melting point: 178.1/C Vapour pressure : negligible

Density: 1.4 g/cm³ Octanol/water partition coefficient as log Pow: 6.04

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish, in plants and in molluscs. The substance may cause long-term effects in the aquatic environment.

NOTES

Do NOT take working clothes home.

Benzo(a)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAHs) in the environment, usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.

ADDITIONAL INFORMATION

LEGAL NOTICE

BENZO(b)FLUORANTHENE

0720 March 1999

CAS No: 205-99-2 RTECS No: CU1400000 EC No: 601-034-00-4 Benz(e)acephenanthrylene 2,3-Benzofluoroanthene Benzo(e)fluoranthene 3,4-Benzofluoranthene

 $C_{20}H_{12}$

Molecular mass: 252.3

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
Inhalation		Local exhaust or breathing protection.	Fresh air, rest.
Skin		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.
SPILLAGE DI	SPOSAL	PACKAGING & LABELLING	
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.		T Symbol N Symbol R: 45-50/53 S: 53-45-60-61	
EMERGENC	/ RESPONSE	SAFE STORAGE	
		Provision to contain effluent from fire ex	ktinguishing Well closed









0720

BENZO(b)FLUORANTHENE

IMPORTANT DATA

Physical State; Appearance

COLOURLESS CRYSTALS

Chemical dangers

Upon heating, toxic fumes are formed.

Occupational exposure limits

TLV: A2 (suspected human carcinogen); (ACGIH 2004).

MAK: Carcinogen category: 2; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation of its aerosol and through the skin.

Inhalation risk

Evaporation at 20/C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

Effects of long-term or repeated exposure

This substance is possibly carcinogenic to humans. May cause genetic damage in humans.

PHYSICAL PROPERTIES

Boiling point: 481/C Melting point: 168/C Solubility in water: none

Octanol/water partition coefficient as log Pow: 6.12

ENVIRONMENTAL DATA

This substance may be hazardous to the environment; special attention should be given to air quality and water quality.

NOTES

Benzo(b)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco. ACGIH recommends environment containing benzo(b)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m³.

Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken. Card has been partly updated in October 2005. See section Occupational Exposure Limits.

ADDITIONAL INFORMATION

LEGAL NOTICE

BENZO(k)FLUORANTHENE

March 1999

CAS No: 207-08-9 RTECS No: DF6350000 EC No: 601-036-00-5

Dibenzo(b,jk)fluorene 8,9-Benzofluoranthene 11,12-Benzofluoranthene

C₂₀H₁₂

	Molec	cular mass: 252.3		
TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING	
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.	
EXPLOSION				
EXPOSURE		AVOID ALL CONTACT!		
Inhalation		Local exhaust or breathing protection.	Fresh air, rest.	
Skin		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.	
Eyes		Safety spectacles or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.	
Ingestion		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.	
SPILLAGE DIS	SPOSAL	PACKAGING & LABELLING		
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.		T Symbol N Symbol R: 45-50/53 S: 53-45-60-61		
EMERGENCY	RESPONSE	SAFE STORAGE		
		Provision to contain effluent from fire extinguishing. Well closed.		









0721

BENZO(k)FLUORANTHENE

IMPORTANT DATA

Physical State; Appearance

YELLOW CRYSTALS

Chemical dangers

Upon heating, toxic fumes are formed.

Occupational exposure limits

TLV not established.

MAK: Carcinogen category: 2; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation of its aerosol and through the skin.

Inhalation risk

Evaporation at 20/C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

Effects of long-term or repeated exposure

This substance is possibly carcinogenic to humans.

PHYSICAL PROPERTIES

Boiling point: 480/C Melting point: 217/C Solubility in water: none

Octanol/water partition coefficient as log Pow: 6.84

ENVIRONMENTAL DATA

This substance may be hazardous to the environment; special attention should be given to air quality and water quality. Bioaccumulation of this chemical may occur in crustacea and in fish.

NOTES

Benzo(k)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco. ACGIH recommends environment containing benzo(k)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m³.

Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken. Card has been partly updated in October 2005. See section Occupational Exposure Limits.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information

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Safety (MSDS) data for chrysene



General

Synonyms: 1,2-benzophenanthrene, benzo(a)phenanthrene, 1,2-benzphenanthrene, coal tar pitch, benz(a)phenanthrene, 1,2,5,6-

dibenzonaphthalene

Molecular formula: C₁₈H₁₂

CAS No: 218-01-9 EC No: 205-923-4

Physical data

Appearance: crystalline powder

Melting point: 253 C Boiling point: 448 C Vapour density: Vapour pressure:

Density (g cm⁻³): 1.27

Flash point: Explosion limits:

Autoignition temperature: Water solubility: insoluble

Stability

Stable. Combustible. Incompatible with strong oxidizing agents.

Toxicology

Toxic. Confirmed animal carcinogen, possible human carcinogen. Harmful if

swallowed, inhaled or absorbed through the skin.

Toxicity data

(The meaning of any abbreviations which appear in this section is given $\underline{\text{here.}}$) IPR-MUS LD50 >320 mg kg⁻¹

Risk phrases

(The meaning of any risk phrases which appear in this section is given <u>here.</u>) R20 R21 R22 R45 R46.

Transport information

(The meaning of any UN hazard codes which appear in this section is given here.)

UN No 2811. Packing group I. Hazard class 6.1. CDG UK Transport category 1. EMS No 6.1-04.

Personal protection

Safety glasses, good ventilation, gloves. Handle as a carcinogen. A COSHH assessment is required.

Safety phrases

(The meaning of any safety phrases which appear in this section is given here.)

S3 S7 S9 S36 S37 S39 S45.

[Return to Physical & Theoretical Chemistry Lab. Safety home page.]

This information was last updated on April 1, 2005. We have tried to make it as accurate and useful as possible, but can take no responsibility for its use, misuse, or accuracy. We have not verified this information, and cannot guarantee that it is up-to-date.

COPPER 0240

September 1993

CAS No: 7440-50-8

RTECS No: GL5325000

UN No: EC No:

Ingestion

Cu

Atomic mass: 63.5

	_		
TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Special powder, dry sand, NO other agents.
EXPLOSION			
	•		
EXPOSURE		PREVENT DISPERSION OF DUST!	
Inhalation	Cough. Headache. Shortness of breath. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness. Pain.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take

SPILLAGE DISPOSAL	PACKAGING & LABELLING	
Sweep spilled substance into containers. Carefully collect remainder. Then remove to safe place (extra personal protection: P2 filter respirator for harmful particles).	Symbol R: S:	

work.

Do not eat, drink, or smoke during

EMERGENCY RESPONSE	STORAGE	
	Separated from: see Chemical Dangers.	







Abdominal pain. Nausea.

Vomiting.





to a doctor.

attention.

Rinse mouth. Refer for medical

0240 COPPER

IMPORTANT DATA

Physical State; Appearance

RED POWDER, TURNS GREEN ON EXPOSURE TO MOIST AIR.

Chemical Dangers

Shock-sensitive compounds are formed with acetylenic compounds, ethylene oxides and azides. Reacts with strong oxidants like chlorates, bromates and iodates, causing explosion hazard.

Occupational Exposure Limits

TLV: ppm; 0.2 mg/m³ fume (ACGIH 1992-1993). TLV (as Cu, dusts & mists): ppm; 1 mg/m3 (ACGIH 1992-1993).

Routes of Exposure

The substance can be absorbed into the body by inhalation and by ingestion.

Inhalation Risk

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

Effects of Short-term Exposure

Inhalation of fume may cause metal fever (see Notes).

Effects of Long-term or Repeated Exposure

Repeated or prolonged contact may cause skin sensitization.

PHYSICAL PROPERTIES

Boiling point: 2595°C Relative density (water = 1): 8.9 Melting point: 1083°C Solubility in water: none

ENVIRONMENTAL DATA

NOTES

The symptoms of metal fume fever do not become manifest until several hours.

ADDITIONAL INFORMATION

LEGAL NOTICE

DIBENZO(a,h)ANTHRACENE

0431

October 1995

CAS No: 53-70-3

1,2:5,6-Dibenzanthracene

C₂₂H₁₄

RTECS No: HN2625000 FC No: 601-041-00-2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray, powder.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
Inhalation		Local exhaust or breathing protection.	Fresh air, rest.
Skin	Redness. Swelling. Itching.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness.	Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion		Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth.
SPILLAGE DIS	SPOSAL	PACKAGING & LABELLING	
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Personal protection: P3 filter respirator for toxic particles.		T Symbol N Symbol R: 45-50/53 S: 53-45-60-61	
EMERGENCY	RESPONSE	SAFE STORAGE	
		Well closed.	









0431 **DIBENZO(a,h)ANTHRACENE IMPORTANT DATA** Physical State; Appearance Routes of exposure COLOURLESS CRYSTALLINE POWDER. The substance can be absorbed into the body by inhalation, through the skin and by ingestion. Occupational exposure limits Inhalation risk TLV not established. Evaporation at 20/C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. Effects of long-term or repeated exposure The substance may have effects on the skin, resulting in photosensitization. This substance is probably carcinogenic to humans. **PHYSICAL PROPERTIES** Boiling point: 524/C Solubility in water: none Melting point: 267/C Octanol/water partition coefficient as log Pow: 6.5 Relative density (water = 1): 1.28 **ENVIRONMENTAL DATA** Bioaccumulation of this chemical may occur in seafood. **NOTES** This is one of many polycyclic aromatic hydrocarbons - standards are usually established for them as mixtures, e.g., coal tar pitch volatiles. However, it may be encountered as a laboratory chemical in its pure form. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken. Do NOT take working clothes home. DBA is a commonly used name. This substance is one of many polycyclic aromatic hydrocarbons (PAH). Card has been partly updated in October 2005. See section EU classification. **ADDITIONAL INFORMATION**

LEGAL NOTICE

INDENO(1,2,3-cd)PYRENE

March 1999

CAS No: 193-39-5 RTECS No: NK9300000

o-Phenylenepyrene 2,3-Phenylenepyrene

C₂₂H₁₂ Molecular mass: 276.3

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
Inhalation		Local exhaust or breathing protection.	Fresh air, rest.
Skin		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.
SPILLAGE DIS	POSAL	PACKAGING & LABELLING	
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.			
EMERGENCY RESPONSE		SAFE STORAGE	
		Provision to contain effluent from fire ex	ktinguishing. Well closed.









0730

INDENO(1,2,3-cd)PYRENE

IMPORTANT DATA

Physical State; Appearance

YELLOW CRYSTALS

Chemical dangers

Upon heating, toxic fumes are formed.

Occupational exposure limits

TLV not established.

MAK: Carcinogen category: 2; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation of its aerosol and through the skin.

Inhalation risk

Evaporation at 20/C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

Effects of long-term or repeated exposure

This substance is possibly carcinogenic to humans.

PHYSICAL PROPERTIES

Boiling point: 536/C Melting point: 164/C Solubility in water: none

Octanol/water partition coefficient as log Pow: 6.58

ENVIRONMENTAL DATA

This substance may be hazardous to the environment; special attention should be given to air quality and water quality. Bioaccumulation of this chemical may occur in fish.

NOTES

Indeno(1,2,3-cd)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco. ACGIH recommends environment containing Indeno(1,2,3-c,d)pyrene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m³.

Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken. Card has been partly updated in October 2005. See section Occupational Exposure Limits.

ADDITIONAL INFORMATION

LEGAL NOTICE

LEAD0052 October 2002

CAS No: 7439-92-1 Lead metal Plumbum (powder) Pb

Atomic mass: 207.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
	<u> </u>		
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	PREVENT DISPERSION OF DUST! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
Inhalation		Local exhaust or breathing protection.	Fresh air, rest.
Skin		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal pain. Nausea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give plenty of water to drink. Refer for medical attention.
		İ	
SPILLAGE DIS	POSAL	PACKAGING & LABELLING	
appropriate, mo Carefully collect place. Do NOT	substance into containers; if bisten first to prevent dusting. It remainder, then remove to safe let this chemical enter the ersonal protection: P3 filter respirator es.		
EMEDGENCY	PESDONSE	SAFE STORAGE	
EMERGENCY RESPONSE			
		Separated from food and feedstuffs ar Chemical Dangers.	nd incompatible materials. See









0052 LEAD

IMPORTANT DATA

Physical State; Appearance

BLUISH-WHITE OR SILVERY-GREY SOLID IN VARIOUS FORMS. TURNS TARNISHED ON EXPOSURE TO AIR.

Physical dangers

Dust explosion possible if in powder or granular form, mixed with air

Chemical dangers

On heating, toxic fumes are formed. Reacts with oxidants. Reacts with hot concentrated nitric acid, boiling concentrated hydrochloric acid and sulfuric acid. Attacked by pure water and by weak organic acids in the presence of oxygen.

Occupational exposure limits

TLV: 0.05 mg/m³ as TWA; A3 (confirmed animal carcinogen with unknown relevance to humans); BEI issued; (ACGIH 2004). MAK: Carcinogen category: 3B; Germ cell mutagen group: 3A; (DFG 2004).

EU OEL: as TWA 0.15 mg/m³; (EU 2002).

Routes of exposure

The substance can be absorbed into the body by inhalation and by ingestion.

Inhalation risk

A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

Effects of long-term or repeated exposure

The substance may have effects on the blood, bone marrow, central nervous system, peripheral nervous system and kidneys, resulting in anaemia, encephalopathy (e.g., convulsions), peripheral nerve disease, abdominal cramps and kidney impairment. Causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES

Boiling point: 1740/C Density: 11.34 g/cm³
Melting point: 327.5/C Solubility in water: none

ENVIRONMENTAL DATA

Bioaccumulation of this chemical may occur in plants and in mammals. It is strongly advised that this substance does not enter the environment.

NOTES

Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home.

Card has been partly updated in April 2005. See section Occupational Exposure Limits.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible

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MERCURY April 2004

CAS No: 7439-97-6 Quicksilver RTECS No: OV4550000 Liquid silver UN No: 2809 Hg

EC No: 080-001-00-0 Atomic mass: 200.6

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING	
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.	
EXPLOSION	Risk of fire and explosion.		In case of fire: keep drums, etc., cool by spraying with water.	
EXPOSURE		STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	IN ALL CASES CONSULT A DOCTOR!	
Inhalation	Abdominal pain. Cough. Diarrhoea. Shortness of breath. Vomiting. Fever or elevated body temperature.	Local exhaust or breathing protection.	Fresh air, rest. Artificial respiration i indicated. Refer for medical attention.	
Skin	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with wate and soap. Refer for medical attention.	
Eyes		Face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.	
Ingestion		Do not eat, drink, or smoke during work. Wash hands before eating.	Refer for medical attention.	
SPILLAGE DIS	SPOSAL SPOSAL	PACKAGING & LABELLING		
Evacuate danger area in case of a large spill! Consult an expert! Ventilation. Collect leaking and spilled liquid in sealable non-metallic containers as far as possible. Do NOT wash away into sewer. Do NOT let this chemical enter the environment. Chemical protection suit including self-contained breathing apparatus.		T Symbol N Symbol R: 23-33-50/53 S: (1/2-)7-45-60-61 UN Hazard Class: 8 UN Pack Group: III	/mbol with food and feedstuffs. 3-33-50/53 1/2-)7-45-60-61 Hazard Class: 8	
EMERGENCY RESPONSE		STORAGE		
Transport Emergency Card: TEC (R)-80GC9-II+III		Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs. Well closed.		











0056 MERCURY

IMPORTANT DATA

Physical State; Appearance

ODOURLESS, HEAVY AND MOBILE SILVERY LIQUID METAL.

Chemical dangers

Upon heating, toxic fumes are formed. Reacts violently with ammonia and halogens causing fire and explosion hazard. Attacks aluminium and many other metals forming amalgams.

Occupational exposure limits

TLV: 0.025 mg/m³ as TWA; (skin); A4; BEI issued; (ACGIH 2004).

MAK: 0.1 mg/m³; Sh; Peak limitation category: II(8); Carcinogen category: 3B; (DFG 2003).

Routes of exposure

The substance can be absorbed into the body by inhalation of its vapour and through the skin, also as a vapour!

Inhalation risk

A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20/C.

Effects of short-term exposure

The substance is irritating to the skin. Inhalation of the vapours may cause pneumonitis. The substance may cause effects on the central nervous system and kidneys. The effects may be delayed. Medical observation is indicated.

Effects of long-term or repeated exposure

The substance may have effects on the central nervous system and kidneys, resulting in irritability, emotional instability, tremor, mental and memory disturbances, speech disorders. May cause inflammation and discoloration of the gums. Danger of cumulative effects. Animal tests show that this substance possibly causes toxic effects upon human reproduction.

PHYSICAL PROPERTIES

Boiling point: 357/C Melting point: -39/C

Relative density (water = 1): 13.5

Solubility in water: none

Vapour pressure, Pa at 20/C: 0.26 Relative vapour density (air = 1): 6.93

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.009

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. In the food chain important to humans, bioaccumulation takes place, specifically in fish.

NOTES

Depending on the degree of exposure, periodic medical examination is indicated.

No odour warning if toxic concentrations are present.

Do NOT take working clothes home.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible

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APPENDIX F FIELD ACCIDENT REPORT



FIELD ACCIDENT REPORT

This report is to be filled out by the designated Site Safety Officer after **EVERY** accident.

PROJECT NAME: _			_PROJECT. NO.:
Date of Accident:		Time:	_Report By:
Type of Accident (Che	eck One):		
	() Vehicular	() Personal	() Property
Name of Injured:			_DOB or Age
How Long Employed:			
Names of Witnesses:			
Description of Accide	nt:		
Action Taken:			
Did the Injured Lose A	Any Time?	How	Much (Days/Hrs.)?
	nt in Use at the Time	of the Accident	(Hard Hat, Safety Glasses, Gloves,
and Welfare Fund.)	·	, .	s his/her claims through his/her Health