REMEDIAL INVESTIGATION WORK PLAN

Saranac Lofts

120 Broadway
Village of Saranac Lake
Franklin County, New York

NYSDEC BCP Site: C517015

January 2022 Draft

GBTS Project: 21003-0066

Technical Services Division

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GBTS Project: 21003-0066

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The undersigned have reviewed this Remedial Investigation Work Plan and certify to Parkview Development & Construction, LLC and to the New York State Department of Environmental Conservation that the information provided in this document is accurate as of the date of issuance by this office.

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

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1.0 INTRODUCTION

1.1 Purpose

This Remedial Investigation Work Plan (RIWP) describes actions that are proposed by Gallagher Bassett Technical Services (GBTS) to investigate the property located at 120 Broadway, Village of Saranac Lake, Franklin County, New York (the Site) in accordance with the requirements of the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). The Brownfield Cleanup Agreement (BCA), dated December 15, 2021, identifies the Site as "Saranac Lofts" (Site No. C517015).

This RIWP proposes an investigation to document environmental conditions at the Site (this work supplements earlier fieldwork conducted during previous due diligence activities). Work will be conducted in accordance with a Site-specific Health and Safety Plan (HASP, Appendix A), which includes a Community Air Monitoring Plan (CAMP).

1.2 Site Location and Description

The Site consists of the 1.11-acre property located at 120 Broadway, Village of Saranac Lake, Franklin County, New York (identified as Village of Saranac Lake tax lot parcels: Section 446.68, Block 6, Lots 11 and 12). The property is located in a developed village area comprised primarily of commercial and residential uses. Figure 1 shows the Site location.

The Site is an irregularly-shaped mixed-use (small commercial and vacant) parcel comprised of two contiguous tax lots (Lot 12 fronting the northern side of Broadway, with Lot 11 to the rear). A two-story tire shop (a former filling station) is located at the southern portion of Lot 12. The remainder of the property is comprised of a gravel parking lot at the rear of the building, and a maintained yard (entirety of Lot 11). All Figures show the BCP Site boundaries.

Uses at adjoining properties include railroad tracks to the north, Saranac Lake Volunteer Rescue Squad to the east, multi-family residential developments to the west of Lot 12 and south of Lot 11, bookstore to the south, and a propane storage facility (Hyde Fuel) to the west.

Current development plans for the Site (to be finalized) include construction of affordable housing on Lot 11, and mixed use (commercial and affordable housing) on Lot 12.

1.3 Physical Setting

1.3.1 Site Topography

Local topography is hilly and varied, and the Site lies in a somewhat-level relatively low area, with overall downward slopes to the southeast, towards the Saranac River. Approximate Site elevations range from 1,556 feet near Broadway, decrease to 1547 feet at the rear of Lot 12, and rise to 1,558 feet at the northern end of Lot 11.

1.3.2 Site Geology and Hydrogeology

Subsurface soils encountered at the Site during previous environmental investigations (22 borings - see Section 1.4) generally consisted of variable texture sands and loams, with gravel, silt and/or clay. Likely fill, containing fragments of coal and glass, as well as ash, was observed in the 0 to 4 feet interval at 11 locations. Peat was observed in upper soil, or below the presumed fill, throughout Lot 11 and at the northern end of Lot 12. Boring refusal (likely on bedrock) was reported at all locations at approximately 6 to 12 feet bgs, except for SB-03 (far southwestern corner of Lot 12 near the roadway), where refusal was reported at 1 foot bgs. Bedrock outcrops were not observed on the property

Saturated soils were encountered only at SB-11 (southeast portion of Lot 11) at approximately 6 feet bgs (refusal depth 8 feet), and soils at the bottom interval at eight locations on Lot 12 (near the building) were reported as "very moist" (these borings generally correspond to areas where petroleum contamination was observed – see Section 1.4). These findings, recorded in summer, suggest that groundwater may only be seasonally present in Site soils, or is irregularly perched upon the bedrock surface. Overall groundwater flow in the vicinity of the property is likely to generally follow surficial topography and be southeasterly, toward the Saranac River (located approximately 0.2-mile from the property).

1.4 Summary of Previous Environmental Investigations

Site history and environmental conditions are documented in a *Combined Phase I and Phase II Environmental Site Assessment Report* issued by GBTS (July 2021) provided in Appendix C.

Site History

Available historical records show that the southern portion of the subject property (Lot 12) was in use for commercial purposes (as a hotel) as early as 1895 and was developed for use as a filling station and automotive maintenance facility sometime between 1916 and 1924. This portion of the property contains a small structure that has been used as a tire shop since circa 1969. The northern portion of the property (Lot 11) contained a woodworking factory from at least 1916 through 1965 (remaining portions of these buildings were present on the property as late as 1977). The property owner stated that gasoline underground storage tanks (USTs) may be present on Lot 12 and a geophysical survey confirmed a suspect tank or tank grave located at the southwestern corner.

Subsurface Investigation

GBTS performed a subsurface investigation to evaluate impacts from: 1) historical use of Lot 12 as a filling station/service facility and Lot 11 for manufacturing operations; and, 2) off-Site uses at adjoining and nearby properties (e.g., former drycleaning, storage tanks, and repair facilities).

Twenty-two (22) mechanized soil borings (SB-01 to SB-22) were advanced (SB-01 to SB-08 in the vicinity of former gasoline USTs and fuel pumps, SB-09, SB-10, and SB-19 to SB-22 north of the building, and SB-11 to SB-18 throughout Lot 11). Four borings were extended for collection of soil vapor samples (SV-01 north portion of Lot 12 and SV-02 to SV-04 throughout Lot 11). Soil was additionally collected (using manual equipment) from immediately beneath the vegetative layer at thirteen (13) locations throughout Lot 11.

Fieldwork Observations

Field evidence of gross petroleum contamination, including moderate to strong odors, staining, and elevated photoionization detector (PID) readings (up to 3,310 parts per million [ppm]) was observed below 8 feet in borings SB-01 and SB-04 located north of the suspect UST (southwest corner of Lot 12), and starting at approximately 4 feet bgs in five of the six borings (SB-09, SB-10, and SB-19 to SB-21) north of the building. Light nonaqueous-phase liquid (LNAPL), in the form of sheens, was observed below 4 feet bgs at borings SB-20 and SB-21. All significant field evidence of contamination was observed in moist to very moist/saturated soil. No elevated PID readings were recorded during the collection of soil vapor samples.

Laboratory Results

Samples from all locations with field evidence of petroleum contamination were submitted for laboratory analysis of volatile organic compounds (VOCs; USEPA 8260), and semi-volatile organic compounds (SVOCs, USEPA 8270) or polycyclic aromatic hydrocarbons (PAHs; subset of SVOCs). Samples from locations throughout the property were analyzed for SVOCs, PAHs, Target Analyte List (TAL) metals (USEPA 6010/7043), polychlorinated biphenyls (PCBs; USEPA 8082) and/or pesticides (USEPA 8081). Soil vapor samples were submitted for analysis of VOCs (USEPA TO-15).

Laboratory results for all compounds in soils were compared to NYSDEC Remedial Program Soil Cleanup Objectives (SCOs) for Unrestricted Use (UU) and Restricted-Residential Use (RRU) as provided in 6 NYCRR Subpart 375, Tables 375-6.8(a) and 375-6.8(b), and Soil Cleanup Levels (for soil impacted by gasoline and fuel oil) presented in NYSDEC CP-51 Soil Cleanup Guidance, Tables 2 through 3. Soil vapor results were compared to environmental investigation findings as a whole (New York does not have any standards, criteria or guidance values for volatile chemicals in subsurface vapors) and to applicable New York State Depart of Health (NYSDOH) guidance for evaluating potential soil vapor intrusion.

Laboratory results are summarized below. Results are reported as milligrams per kilogram (ppm) for soil and micrograms per cubic meter ($\mu g/m^3$) for soil vapor.

VOCs above RRU SCOs were reported in petroleum-impacted soil at SB-01, SB-04, SB-09 and SB-19, including 1,2,4-trimethylbenzene (750 ppm, SCO 52 ppm), 1,3,5-trimethylbenzene (70 ppm, SCO 52 ppm), and total xylenes (120 ppm, SCO 100 ppm). One or more other VOCs associated with gasoline (substituted benzenes) were found in all samples collected from grossly impacted soil (except for SB-10).

2-Butanone (a solvent) was reported above the UU SCO at SB-20. Surface soil sample SS-13 collected at the far northwestern corner of the Site contained multiple PAHs above RRU SCOs, including indeno(1,2,3-cd)pyrene (47 ppm, SCO 0.5 ppm; also found above the RRU SCO at SB-20) and seven other compounds. Metals above RRU SCOs were reported in samples from SB-09, SB-10, SB-20 and SS-10, including barium (493 ppm, SCO 400 ppm), cadmium (5.45 ppm, SCO 4.3 ppm), and lead (555 ppm, SCO 400 ppm). Copper, lead, mercury, nickel, silver, and/or zinc were above UU SCOs in fourteen of twenty-four samples. No PCBs or pesticides were reported in soil.

Low-grade contamination related to gasoline was reported in all soil vapor samples. Peak values include cyclohexane (136 $\mu g/m^3$), toluene (89 $\mu g/m^3$), and total xylenes (170 $\mu g/m^3$). VOC levels are consistent at all four locations, suggesting that the source of these impacts may be related to groundwater contamination. Multiple other VOCs were reported at low levels typical of urban and/or commercial settings. No solvents (or breakdown products) associated with dry cleaning activities were found in any samples.

One VOC identified in NYSDOH decision matrices, methylene chloride, was reported at a peak value of 3.75 $\mu g/m^3$, potentially indicating that monitoring or mitigation would be required if high levels of this compound were found inside an overlying structure.

Previous sampling data are shown on Figure 2, Site Map and Known Contamination Conditions.

1.5 Areas of Concern

Based on documented Site history and the results of previous environmental investigations, the following areas of concern (AOC), requiring additional investigation, have been identified:

AOC 1: Soil Impacts from Historical Releases

An open spill (#2103108) is reported due to petroleum contamination in soil near the western suspect UST and north of the building on Lot 12. In addition to high levels of VOCs, PAHs and metals have also been identified in soil above RRU SCOs (potentially from historical commercial releases and/or poor-quality fill). Previous soil sampling results are limited and do not provide delineation data. There are no data for soil located beneath the Site building.

AOC 2: Unknown Groundwater Quality

Existing data support the conclusion that the open spill event occurred due to a release of gasoline. The presence of gross field evidence of contamination in moist soil at and near the likely bedrock surface suggests that local groundwater may have been impacted by petroleum; no groundwater sampling, however, has been conducted at the Site.

AOC 3: Soil Vapor Contamination

Low-level soil vapor impacts from gasoline are present at multiple locations, potentially due to known contaminated soil or from groundwater contamination. Existing data are insufficient to define Site conditions or evaluate the potential for impacts to off-Site receptors.

2.0 REMEDIAL INVESTIGATION WORK PLAN

This RIWP details activities proposed by GBTS to further characterize the Site so that a comprehensive assessment of Site conditions, as required by the NYSDEC BCP guidelines, is completed.

Previous investigations will be supplemented by the work described below to complete a Site Characterization in compliance with NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, Section 3. Additional investigation will be completed to fully characterize contamination associated with the identified areas of concern (known significant impacts to soil and soil vapor, and suspect groundwater contamination), and establish a comprehensive data set for all Part 375 analytical parameters in accordance with BCP requirements.

A Proposed Remedial Investigation Map depicting relevant Site features, and previous and proposed sampling locations, is provided as Figure 3. All proposed work will be conducted according to a site-specific Health and Safety Plan (Appendix A).

For the purpose of the work detailed in this RIWP, the Volunteer is Parkview Development & Construction, LLC, who will contract with the environmental consultant/remediation firm (hereafter referred to as the On-site Coordinator [OSC]) to provide the services detailed below. The OSC shall be a firm with experience in investigating NYSDEC BCP sites, with the capability to certify the final Remedial Investigation Report (RIR) in conformance with DER-10 Section 1.5.

2.1 Overview of Proposed Investigative Services

The proposed investigative services described in detail in subsequent sections of this RIWP consist of the following:

- Documentation of Underground Structures (2.2.3);
- Initiation of air monitoring during ground intrusive activities (Section 2.3.1);
- Collection of eleven (11) exterior soil vapor samples and two (2) interior sub-slab vapor samples to further define on-Site contamination and any potential off-Site impacts (Section 2.3.3);
- Extension of twenty-eight (28) exterior soil borings, and collection of one or more soil samples from each boring, to document soil conditions (Section 2.3.4);
- Installation of eleven (11) permanent groundwater monitoring wells, and sampling to document groundwater quality (Section 2.3.5); and,
- Preparation of a RIR for the Volunteer and NYSDEC (Section 2.4)

Prior to, or in conjunction with, the initiation of these actions (see Section 2.3), the tasks detailed in Section 2.2, below, will also be conducted.

2.2 Proposed Site Preparation Services

This section of the RIWP provides details of activities and services necessary to be initiated and/or completed prior to the implementation of Site remediation services.

2.2.1 Agency Notification

The NYSDEC will be notified in writing at least five (5) business days prior to the start of fieldwork. Notification of subsequent field activities will be in accordance with reasonable business practice, with verbal notification for immediate (within 48 hours) activities and written notification otherwise. Written notifications will be transmitted to the NYSDEC via facsimile or electronic mail.

2.2.2 Utility Markout

Prior to the implementation of any of the investigative tasks outlined in Section 2.3, below, a request for a complete utility markout of the Site will be submitted as required by New York State Department of Labor regulations. Confirmation of underground utility locations will be secured, a field check of the utility markout will be conducted prior to the initiation of work.

2.2.3 Documentation of Underground Structures

The presence or absence of relevant Site underground structures was previously documented; additional geophysical-survey work will be performed, as warranted, based on planned sampling locations and/or encountered Site conditions.

2.2.4 Quality Assurance Project Plan

The Quality Assurance Project Plan (QAPP) provided in Appendix B details necessary procedures to generate data of sufficient quality and quantity to represent successful performance of the Remedial Investigation at the Site. The QAPP includes a Sampling and Analysis Plan (SAP) for all media, which identifies methods for sample collection and handling.

A photo-ionization detector will be utilized to screen encountered materials for the presence of volatile vapors. The PID will be calibrated at the onset of each workday, and a written calibration log will be maintained for this project. The PID will be calibrated to read ppm gas equivalents of isobutylene in accordance with protocols set forth by the equipment manufacturer.

All samples will be collected in accordance with applicable DER-10 requirements and NYSDEC and NYSDOH guidance documents and will be submitted to a NYSDOH ELAP-certified laboratory using appropriate chain of custody procedures. Dedicated, laboratory supplied containers will be used for sample collection. Field personnel will maintain all samples at cold temperatures, as necessary, and complete all chain of custody forms. Laboratory reports will include detailed Quality Assurance/Quality Control (QA/QC) analyses, including sample duplicates, rinse blanks (for non-dedicated sampling equipment), and trip blanks.

A Data Usability Summary Report (DUSR) will be prepared by a third, independent party, which maintains NYSDOH ELAP CLP Certification.

2.2.5 Subcontractor Coordination

Subcontractors will perform services under the direct supervision of the OSC and will be given a copy of the Health and Safety Plan (Section 2.2.6) prior to the start of fieldwork. All insurance certificates will be secured from subcontractors by the Volunteer and/or OSC. It is anticipated that the following subcontractors will be used during the RI: geophysical, driller, laboratory and data validator.

2.2.6 Health and Safety Plan

The Site-specific Health and Safety Plan provided in Appendix A will be reviewed with on-Site personnel (including subcontractors) prior to the initiation of fieldwork. It is anticipated that all work will be performed in “Level D” personal protective equipment; however, all field personnel will be prepared to continue services wearing more protective levels of equipment as warranted by field conditions.

2.3 Proposed Specific Investigation Services

This section of the RIWP provides a detailed description of the investigative tasks that will be conducted at the Site.

2.3.1 Community Air Monitoring

A Community Air Monitoring Plan (provided in the HASP) will be initiated during all ground intrusive activities. The implementation of the CAMP will document the presence or absence of specific compounds in the air surrounding the work zone, which may migrate off-site due to fieldwork activities.

This plan provides guidance on the need for implementing more stringent dust and emission controls based on air quality data. Air monitoring will be conducted for VOCs and dust. Water misting will be used to control dust (as needed) during all ground intrusive activities, which will be limited to the extension of soil borings and installation of the monitoring wells (hand-held equipment and portable water tanks will be supplied by the driller). Water spray will include use of an odor/vapor suppressant (e.g., BioSolve) if required.

2.3.2 General Fieldwork Methodology

Fieldwork methodology will be in conformance with the QAPP (including sample handling and custody for per- and polyfluoroalkyl substances [PFAS] and 1,4-dioxane), which includes copies of applicable Standard Operating Procedures (SOPs) for fieldwork activities. The QAPP provides tables indicating appropriate types of sample containers, sampling frequency and the approved USEPA Methods for laboratory analysis.

All sampling locations will be determined in the field, measured to the nearest 0.5-foot relative to a permanent fixed on-site marker, and will be recorded in logbooks for inclusion in all final maps. Anticipated sampling locations, and planned new monitoring wells, are depicted on the Proposed Remedial Investigation Map (Figure 3).

An assessment of media characteristics, including soil type, presence or absence of foreign materials, field indications of contamination (e.g., unusual coloration patterns or odors), and instrument readings, will be made by the OSC during all Site investigative work.

The OSC will be responsible for identifying any materials that require special handling (media that may contain elevated contaminant levels or is grossly contaminated, hazardous materials, etc.) and will ensure that they are properly securely stored on-Site (soil stockpiled on plastic and covered, or soil and water placed in approved containers) pending characterization and proper disposition. The OSC will ensure that unforeseen environmental conditions are managed in accordance with applicable federal and state regulations.

2.3.3 Vapor

A total of eleven (11) exterior soil vapor samples and two (2) interior sub-slab vapor samples will be collected to further define and delineate VOC contamination, and determine the potential for any off-Site migration of impacted vapor. All sampling will be in accordance with applicable NYSDOH guidance.

Sampling Methodology

Interior vapor probes will be constructed by drilling a small diameter hole (generally ½ inch) through the slab and extending the bit to 6 inches below the base of the concrete and exterior probes will be constructed by advancing a boring using mechanized direct-push equipment (approximate depth of 4 feet bgs). Sampling tubing with an attached "air stone" will be placed near the invert of the hole/boring and covered with clean silica sand. The upper portions of the borehole will be backfilled, with the near surface interval sealed with hydrated bentonite clay to prevent surface air from entering the system.

All locations will utilize approved tubing (0.188-inch inner diameter Teflon), be screened with a PID for VOCs prior to purging, and will be checked for a proper surface seal. A tracer gas will be used to verify that there is no significant infiltration of outside air. The space surrounding the sampling point will be enclosed and sealed (e.g., with a metal hemisphere and clay seal, and plastic sheeting at exterior locations) in order to introduce helium into the area surrounding the probe. Real-time sampling equipment (Radiodetection Multi-vapor Leak Locator, model MDG 2002, or equivalent) will be utilized to determine when the interior atmosphere in the enclosure reaches a concentration of 80%, and the tubing for the vapor implant will then be sampled for helium. If helium is detected in vapor at a concentration greater than 10%, the annular seal will be repaired and gas tracing performed again until less than 10% helium is detected.

Successful exclusion of the tracer gas will be considered adequate documentation that sampling techniques are sufficiently preventing air infiltration (screening will be conducted at additional locations, as needed, based on any variable conditions encountered in the field).

For all vapor sampling locations, the exact purge volume will be dependent on boring depth and tubing length. Three borehole and tubing volumes will be purged prior to collection. The purge rate will not exceed 0.2 liters per minute.

All vapor and air samples will be collected into laboratory-certified clean Summa canisters (rate not exceeding 0.2 L/minute), equipped with two-hour flow regulators.

Sample Submission

Vapor and air samples will be analyzed for VOCs using USEPA method TO-15.

2.3.4 Soil Assessment

Soil Borings

An initial total of twenty-eight (28) soil borings will be extended, with additional “step out” borings as needed based on field and instrument observations of contamination, in order to define the extent of soil contaminated above SCOs. Additional fieldwork rounds for the advancement of soil borings and/or installation of monitoring wells may be required to fully delineate identified contamination, and to determine if contamination extends or is migrating off-site (the need for an expanded investigation scope will be determine in consultation with NYSDEC).

All borings will be extended using mechanized equipment, to at least the deeper of 15 feet bgs or to a sample interval below the groundwater interface, or until refusal (all borings to be completed as groundwater wells will be extended to a minimum depth that allows for proper installation of the well screen). Boring equipment will be capable of collecting soil cores at discreet intervals.

Soil is anticipated to be collected using coring barrels lined with disposable acetate sleeves (split spoons may be utilized based on Site conditions and equipment availability).

Sampling Methodology

Soil will be continuously recovered from borings, and material in each sampling interval will be characterized in order to identify existing subsurface physical conditions and any overt evidence of contamination. Sampling of recovered material for laboratory submission will be conducted from all boring intervals, as warranted, to fully define contaminants in soil and provide sufficient areal and vertical delineation. Samples will be collected (at a minimum) from the soil stratum intercepting the groundwater table, any fill material, and from soil exhibiting field evidence of impacts (if encountered) or at soil strata corresponding to previously identified contamination in nearby boring locations (for delineation).

Sampling may occur in multiple rounds to ensure complete Site characterization in compliance with DER-10, Chapter 3, including a full characterization of any existing soils proposed to remain in place as a clean cover system (based on Site development requirements, the characterization of *in situ* cover soils may be conducted in full or part during a Pre-design Investigation).

Samples will be collected directly from the freshly cut open sleeve, using disposable plastic trowels or properly decontaminated stainless steel instruments, or may be manually collected directly from exposed soil or the sampling instrument using dedicated disposable latex gloves.

Soil sampling for VOCs will follow USEPA Method 5035 protocols, using disposable 5-gram plastic syringes to place material into laboratory-supplied glass vials (prepared with stirs bars and appropriate preservatives).

Sample Submission

Soil samples will be analyzed for NYSDEC Part 375-6.8 parameters, including USEPA Target Compound List (TCL) VOCs and SVOCs plus 30 tentatively identified compounds (TICs), USEPA TAL metals including Cr^{+6}, PCBs, pesticides, herbicides and cyanide, and 1,4-dioxane and PFAS in accordance with the most current NYSDEC guidance. Methods of analysis for all analyte classes are specified in the QAPP.

Analysis of samples may be modified in consultation with the NYSDEC Project Manager based on initial sampling results, including the presence or absence of field evidence of contamination. Additional analysis may be performed based repository requirements for waste characterization prior to off-site disposal.

2.3.5 Groundwater Assessment

A minimum of eleven (11) permanent monitoring wells are proposed for locations throughout the Site. Monitoring wells may be relocated in consultation with NYSDEC, or additional wells be installed, based on subsurface conditions, including the presence of non-aqueous phase liquids (NAPL) or other indications of gross contamination. All monitoring wells will be sampled.

Well installation, well development, and sample collection and laboratory submission are detailed below.

Monitoring Well Installation

Given only limited data from the previous subsurface investigation, likely completion depths for new wells it is not known at this time, and wells may require installation within the underlying bedrock. All well casings above bedrock will be constructed of two-inch PVC, with 0.01-inch slotted PVC screening across the water table (minimum of 2 feet of screening above the water table, as practicable). No glue will be used to thread the casing lengths. If paired, deeper wells are required, they will be constructed with the screening located to intercept the lowest level of the water column.

The annular space between the well screen and the borehole will be backfilled with clean silica sand to a depth of approximately two feet above the well screen. A seal consisting of hydrated bentonite clay will be placed above the sand pack (minimum of least 12 inches at shallow wells, and the depth required to exclude the upper water column at deep wells) and the remaining annular space will be grouted with cement.

A locked cap with vent will be installed at the top of the PVC riser and the wells will be protected by secure metal covers or casings. A transit level will be used to determine the elevation of the top of the PVC well riser, relative to a permanent on-site marker, for use in determining relative groundwater elevations. Well locations and relative elevations will be recorded in field logs and indicated on all fieldwork maps.

Monitoring Well Development

One week following installation, wells will be developed with a decontaminated mechanical pump and dedicated polyethylene tubing in order to clear fine-grained material that may have settled around the well screen and to enhance the natural hydraulic connection between the well screen and the surrounding soils. Well development will begin at the top of the screened interval to prevent pump clogging. Development will be discontinued when the discharge water is free of obvious sediment, turbidity is below 50 NTUs and indicator parameters (e.g., dissolved oxygen, temperature, etc.) have stabilized. The pump assembly will be removed from the well while the pump is running to avoid discharge of purged water back into the well. Development water will be securely stored on-site pending laboratory analysis.

Sampling Methodology

All Site monitoring wells will be sampled one week following development using USEPA Low-Stress ("low flow") methodology. Sampling will be conducted using the following protocol:

1. Basic weather conditions and all field observations will be recorded in the field logbook. Sampling will begin at the potentially least contaminated well (as determined from well location and/or previous data) and proceed to the potentially most contaminated well. Wells will be checked for damage or evidence of tampering before initiating sampling.
2. If permissible under QAPP requirements, plastic sheeting will be placed around wells to minimize potential contamination of sampling equipment from the ground surface, and all monitoring, purging and sampling equipment will be placed on the sheeting.
3. The protective casing on the well will be unlocked, the air in the well head will be screened with a PID, and the static water level (relative to the top of the casing) will be measured with a decontaminated water-level meter. A peristaltic pump with plastic tubing (or equivalent equipment) will be used for sampling. The tubing (or a submersible pump attached to tubing, if required by Site conditions) will be slowly lowered until reaching two to three feet off of the well bottom to prevent disturbance of sediment.

4. The water level will be measured before the pump is started and at three to five minute intervals. Pumping rates will be reduced (as needed) to the minimum capabilities of the pump to ensure stabilization of the water level (drawdown of 0.3 feet or less).
5. During pumping, field indicator parameters (turbidity, temperature, specific conductance, pH, redox potential, and dissolved oxygen) will be monitored and recorded approximately every five minutes. The well will be considered stabilized when the indicator parameters have stabilized for three consecutive readings (the minimum purge interval will be at least 15 minutes).
6. All groundwater samples will be collected in a manner consistent with the QAPP.
7. The protective cap on the well will be replaced and locked, and the field sampling crew will move to the next most contaminated well and the process will be repeated.

Sample Submission

Groundwater samples will be analyzed for NYSDEC Part 375-6.8 parameters, including USEPA TCL VOCs and SVOCs plus 30 TICs, USEPA TAL metals including Cr^{+6}, PCBs, pesticides, herbicides and cyanide, and 1,4-dioxane and PFAS in accordance with the most current NYSDEC guidance. Methods of analysis are specified in the QAPP.

Analysis of samples may be modified in consultation with the NYSDEC Project Manager based on initial sampling results, including the presence or absence of field evidence of contamination.

Groundwater Flow Calculations

The direction of groundwater flow will be determined based on elevations of static groundwater as measured at all wells, measured prior to water quality sample collection. Measurements will be collected with an electronic depth meter with an accuracy of +/- 0.01 foot. All data will be recorded in field logs and presented on a Direction of Groundwater Flow Map in the RIR.

2.3.6 Management of Investigation-Derived Waste

Any soil cuttings will be backfilled within the originating borehole to within 12-inches of the surface, unless the following conditions exist: soil is grossly contaminated; the boring has penetrated a confining layer; a path for vertical migration would be completed; cuttings do not fit in the borehole; or, the boring will be converted to a monitoring point for groundwater or vapor.

Waste soil generated during the investigation will be stored on plastic sheeting or within approved DOT containers prior to being returned to the bore hole. Any materials remaining at the Site at the end of the workday will be properly covered and secured and all materials remaining after completion of the fieldwork will be containerized and disposed off-site at a permitted facility.

Monitoring well purge water and other fluids will be securely stored on-site in closed containers, pending the results of groundwater sampling and/or waste characterization, and disposed at an appropriate facility. Discarded personal protective equipment and other fieldwork supplies will be disposed as municipal solid waste.

2.4 Documentation of Environmental Conditions

A RIR will be prepared at the completion of all fieldwork services, in accordance with DER-10, summarizing the nature of environmental conditions for all identified areas of concern. The RIR will: summarize Site history and all previous investigations; document Site conditions and the investigative work performed during implementation of the RIWP; provide complete analytical findings and compare results to applicable Standards, Criteria, and Guidance (SCG); and, include an on-site and off-site Qualitative Human Health Exposure Assessment in accordance with DER-10(3.3)(c)(4).

An on-site and off-site qualitative fish and wildlife resource exposure assessment (identification of impacts to fish and wildlife resources from Site contaminants of ecological concern) will be completed if it is determined that there are likely to be ecological resources present on or in the vicinity of the Site.

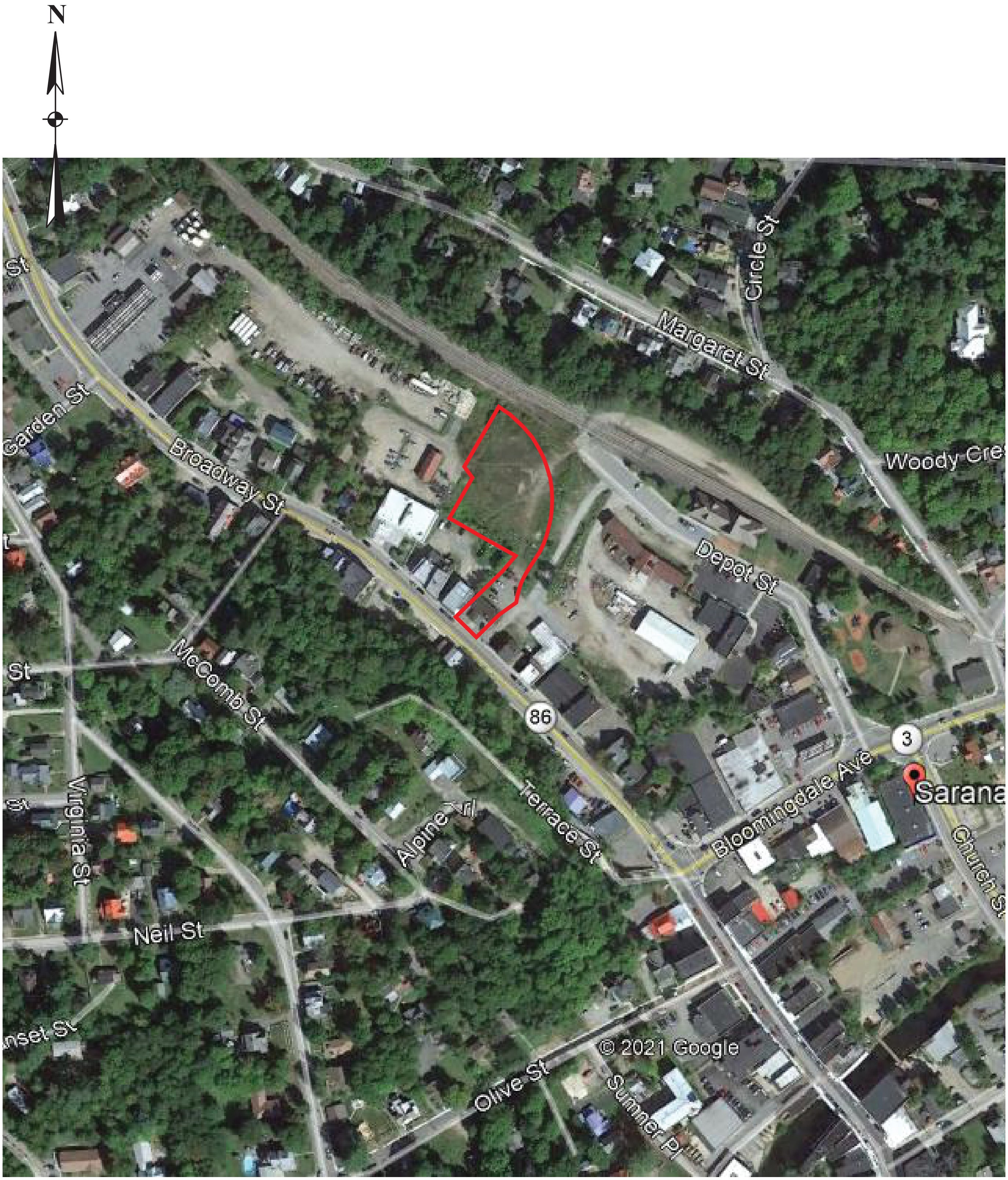
The RIR will provide complete data summary tables, figures showing all exceedances of SCGs, fieldwork and construction logs, laboratory and data validation reports, CAMP monitoring data and waste disposal documentation. All laboratory data presented in the RIR will be submitted to NYSDEC in an acceptable electronic data deliverable (EDD) format.

3.0 PROJECT SCHEDULE

The following schedule is anticipated for this project (Week 0 based on date of RIWP approval):

Week	Task(s)
1	Utility markout (may include supplemental private markout, if warranted); selection of driller; secure insurance, NYSDEC notification of fieldwork
2 to 3	Installation of borings; collection of soil and vapor samples, completion of monitoring wells
4 to 5	Well development; collection of groundwater samples; establish groundwater elevations
5-7	Laboratory analysis of soil and groundwater samples
8-11	Preparation of RIR
12	Submission of RIR to NYSDEC (a Remedial Alternatives Report and Remedial Action Work Plan may be submitted at this time)

FIGURES



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 1: Site Location Map

Saranac Lofts BCP Site C517015
120 Broadway
Village of Saranac Lake
Franklin County, New York

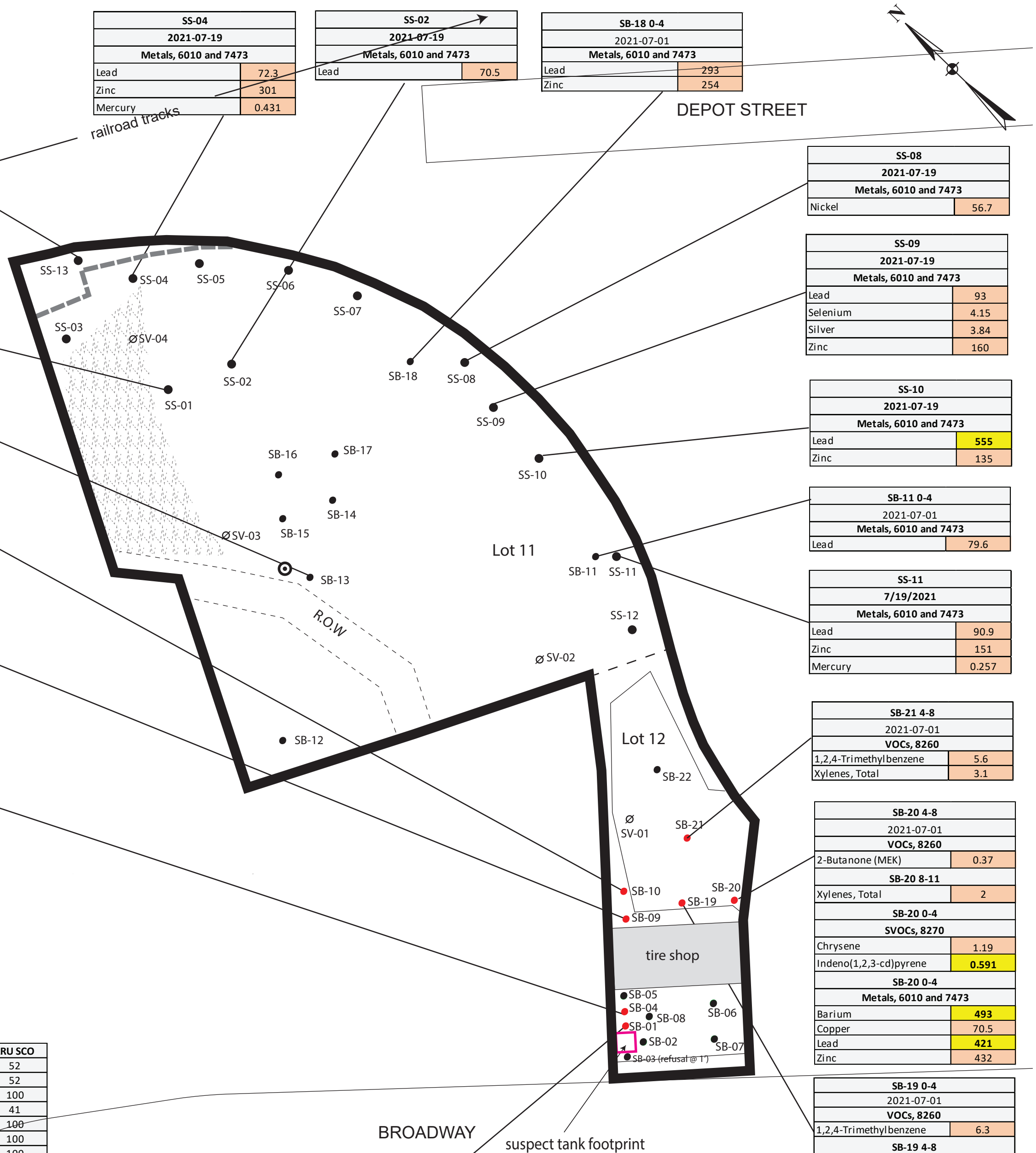
Legend: subject property border

0 150 300
SCALE IN FEET (APPROXIMATELY)

File: 21003-0066

January 2022

Figures



SS-13	
2021-07-19	
SVOCs, 8270	
3- & 4-Methylphenols	1.1
Benzo(a)anthracene	68.5
Benzo(a)pyrene	63.5
Benzo(b)fluoranthene	70.8
Benzo(k)fluoranthene	72
Chrysene	74.1
Dibenzo(a,h)anthracene	16.4
Indeno(1,2,3-cd)pyrene	47
Phenol	0.866
Pyrene	105
Metals, 6010 and 7473	
Copper	57
Lead	66.9

SS-04	
2021-07-19	
Metals, 6010 and 7473	
Lead	72.3
Zinc	301
Mercury	0.431

SS-02	
2021-07-19	
Metals, 6010 and 7473	
Lead	70.5

SB-18 0-4	
2021-07-01	
Metals, 6010 and 7473	
Lead	293
Zinc	254

SS-08	
2021-07-19	
Metals, 6010 and 7473	
Nickel	56.7

SS-09	
2021-07-19	
Metals, 6010 and 7473	
Lead	93
Selenium	4.15
Silver	3.84
Zinc	160

SS-01	
2021-07-19	
Metals, 6010 and 7473	
Selenium	4.28
Zinc	1.63

SB-13 3-4	
2021-07-01	
Metals, 6010 and 7473	
Lead	434
Zinc	171

SS-10	
2021-07-19	
Metals, 6010 and 7473	
Lead	555
Zinc	135

SB-10 5-5.5	
2021-06-30	
Metals, 6010 and 7473	
Cadmium	5.45
Copper	193
Lead	146
Zinc	2,420

SB-11 0-4	
2021-07-01	
Metals, 6010 and 7473	
Lead	79.6

SS-11	
7/19/2021	
Metals, 6010 and 7473	
Lead	90.9
Zinc	151
Mercury	0.257

SB-09 4-7	
2021-06-30	
VOCs, 8260	
1,2,4-Trimethylbenzene	11
Ethyl Benzene	2.4
Xylenes, Total	5.7
Metals, 6010 and 7473	
Lead	430

SB-21 4-8	
2021-07-01	
VOCs, 8260	
1,2,4-Trimethylbenzene	5.6
Xylenes, Total	3.1

SB-04 8-11	
2021-06-30	
VOCs, 8260	
1,2,4-Trimethylbenzene	750
1,3,5-Trimethylbenzene	70
Ethyl Benzene	7.7
Isopropylbenzene	4.1
n-Butylbenzene	31
n-Propylbenzene	17
Xylenes, Total	32

SB-20 4-8	
2021-07-01	
VOCs, 8260	
2-Butanone (MEK)	0.37
SB-20 8-11	
Xylenes, Total	2
SB-20 0-4	
SVOCs, 8270	
Chrysene	1.19
Indeno(1,2,3-cd)pyrene	0.591
SB-20 0-4	
Metals, 6010 and 7473	
Barium	493
Copper	70.5
Lead	421
Zinc	432

VOCs, 8260	UU SCO	RRU SCO
1,2,4-Trimethylbenzene	3.6	52
1,3,5-Trimethylbenzene	8.4	52
2-Butanone (MEK)	0.12	100
Ethyl Benzene	1	41
Isopropylbenzene	2.3	100
n-Butylbenzene	12	100
n-Propylbenzene	3.9	100
Xylenes, Total	0.26	100
SVOCs, 8270	UU SCO	RRU SCO
3- & 4-Methylphenols	0.33	100
Benzo(a)anthracene	1	1
Benzo(a)pyrene	1	1
Benzo(b)fluoranthene	1	1
Benzo(k)fluoranthene	0.8	3.9
Chrysene	1	3.9
Dibenzo(a,h)anthracene	0.33	0.33
Indeno(1,2,3-cd)pyrene	0.5	0.5
Phenol	0.33	100
Pyrene	100	100
Metals, 6010 and 7473	UU SCO	RRU SCO
Barium	350	400
Cadmium	2.5	4.3
Copper	50	270
Lead	63	400
Mercury	0.18	0.81
Selenium	3.9	180
Silver	2	180
Zinc	109	10,000

SB-19 0-4	
2021-07-01	
VOCs, 8260	
1,2,4-Trimethylbenzene	6.3
SB-19 4-8	
1,2,4-Trimethylbenzene	59
1,3,5-Trimethylbenzene	21
Ethyl Benzene	12
Isopropylbenzene	3.4
n-Propylbenzene	7.1
Xylenes, Total	61
SB-19 0-4	
Metals, 6010 and 7473	
Lead	315
Mercury	0.801
Zinc	171

SB-01 8-11	
2021-06-30	
VOCs, 8260	
1,2,4-Trimethylbenzene	110
1,3,5-Trimethylbenzene	25
Ethyl Benzene	14
Isopropylbenzene	3.5
n-Propylbenzene	14
Xylenes, Total	120

All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 2: Site Map of Known Contamination Conditions

Saranac Lofts BCP Site C517015
120 Broadway
Village of Saranac Lake
Franklin County, New York

Legend:

- subject property border
- lot line
- retaining wall
- wetlands
- manhole cover
- soil sample location
- soil boring with evidence of petroleum contamination
- soil vapor location

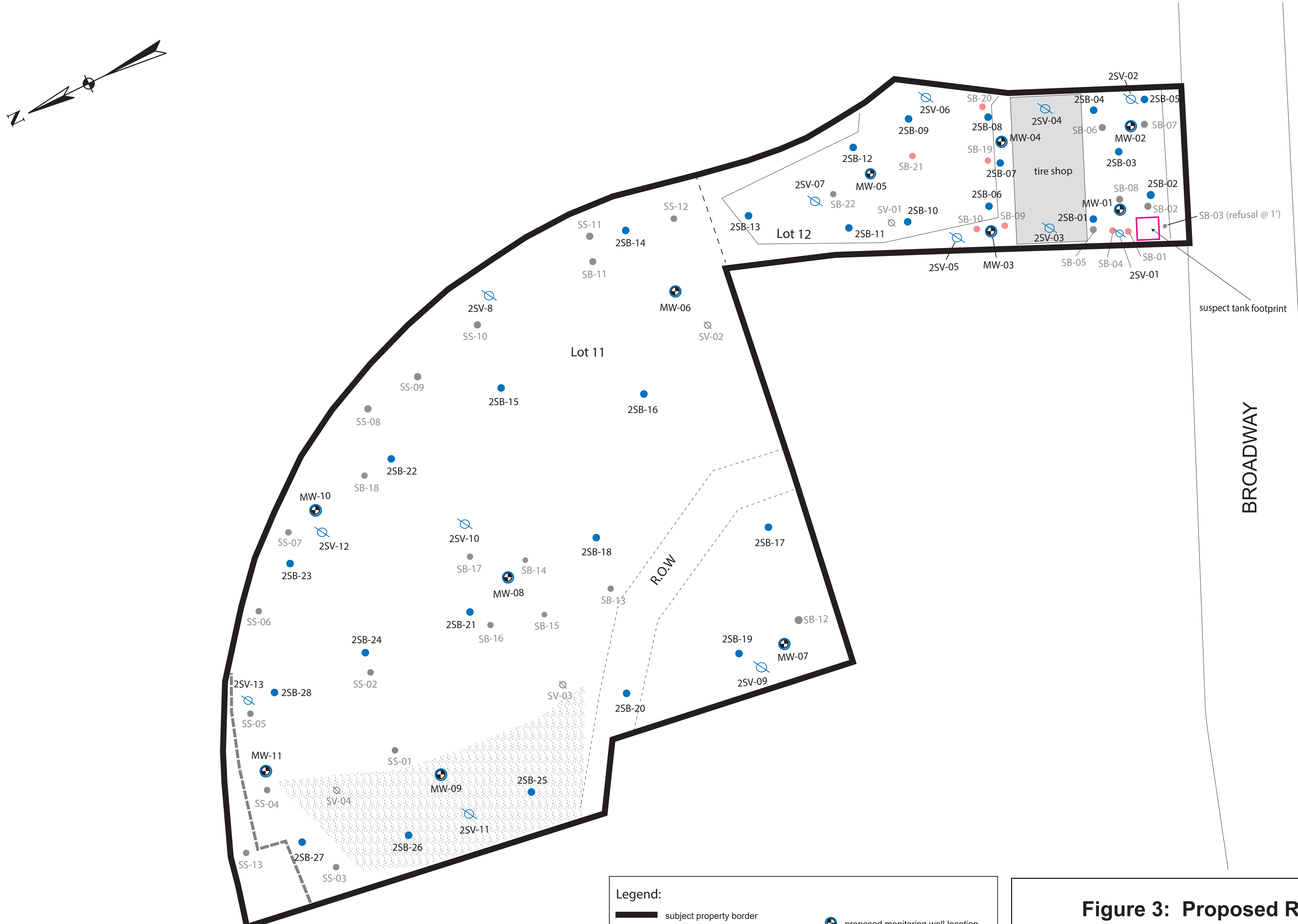
All data in mg/Kg (ppm)
Analyte Above UU SCO
Analyte Above RRU SCO

File: 21003-0066

January 2022

Scale as shown

Figures



Legend:

- subject property border
- lot line
- retaining wall
- wetlands
- previous soil sample location
- previous soil boring with evidence of petroleum contamination
- previous soil vapor location
- proposed monitoring well location
- proposed soil vapor location
- proposed boring location

Figure 3: Proposed Remedial Investigation Map

Saranac Lofts BCP Site C517015 120 Broadway Village of Saranac Lake Franklin County, New York	File: 21003-0066 Scale as shown January 2022	Figures

All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

APPENDIX A

Health and Safety Plan

SITE INVESTIGATION
HEALTH AND SAFETY PLAN

Saranac Lofts

120 Broadway
Village of Saranac Lake
Franklin County, New York

NYSDEC BCP Site: C517015

January 2022 Draft

GBTS Project: 21003-0066

Technical Services Division

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SITE INVESTIGATION
HEALTH AND SAFETY PLAN

January 2022

GBTS Project: 21003-0066

Prepared By:

Gallagher Bassett Technical Services
22 IBM Road, Suite 101
Poughkeepsie, New York 12601

Prepared For:

Parkview Development & Construction, LLC
57 Route 6, Suite 207
Baldwin Place, New York 10505

The undersigned have reviewed this Site Investigation Health And Safety Plan and certify to Parkview Development & Construction, LLC and to the New York State Department of Environmental Conservation that the information provided in this document is accurate as of the date of issuance by this office.

Scott Spitzer
Gallagher Bassett Technical Services
Technical Director – Environmental Consulting

Richard Hooker
Gallagher Bassett Technical Services
Manager – Environmental Consulting

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Purpose

This Site Investigation Health and Safety Plan (HASP) has been developed to provide the requirements and general procedures to be followed by Gallagher Bassett Technical Services (GBTS) and on-Site subcontractors while performing investigative services at the Saranac Lofts BCP Site (ID: C517015) located in the Village of Saranac Lake, Franklin County, New York.

This HASP incorporates policies, guidelines and procedures intended to protect the public health of the community during fieldwork activities, and therefore serves as a Community Health and Safety Plan. The objectives of the HASP are met by establishing guidelines to minimize potential exposures during fieldwork, and by planning for and responding to emergencies affecting the public adjacent to the site.

This HASP describes the responsibilities, training requirements, protective equipment and standard operating procedures to be utilized by all personnel while on the Site. All on-site personnel and visitors shall follow the guidelines, rules, and procedures contained in this HASP. The Project Manager or Site Health and Safety Officer (SHSO) may impose any other procedures or prohibitions necessary for safe operations. This HASP incorporates by reference applicable Occupational Safety and Health Administration (OSHA) requirements in 29 CFR 1910 and 1926.

The requirements and guidelines in this HASP are based on a review of available information and evaluation of potential on-site hazards. This HASP will be discussed with Site personnel and will be available on-site for review while work is underway. On-site personnel will report to the SHSO in matters of health and safety. The on-site project supervisor(s) are responsible for the enforcement and implementation of this HASP, which is applicable to all on-site field personnel, including contractors and subcontractors.

This HASP is specifically intended for the conduct of activities within the defined scope of work in specified areas of the Site. Changes in conditions or future actions that may be conducted at the Site may necessitate the modification of the requirements of the HASP. Although this HASP can be made available to interested persons for informational purposes, GBTS cannot be held accountable for the interpretations or activities of any other persons or entities other than the employees of GBTS or its subcontractors.

1.2 Site Location and Description

The Site is defined as the property located at 120 Broadway, Village of Saranac Lake, Franklin County, New York. A Proposed Fieldwork Map illustrating the Site configuration and areas of fieldwork activities is included as an Attachment to this HASP.

1.3 Work Activities

Environmental investigative activities are detailed in the NYSDEC-approved Remedial Investigation Work Plan (RIWP), which describes the tasks required to investigate any environmental contamination at the Site. The specific tasks detailed in the RIWP are wholly incorporated by reference into this HASP.

Previous investigations of the Site documented gross petroleum contamination in soil at the front and to the rear of the Site building, and a spill event (#2103108) was reported (released material is likely to have been gasoline, which may have impacted groundwater). Volatile organic compounds (VOCs; related to petroleum), metals and semi-volatile organic compounds (SVOCs) in soil are above NYSDEC Soil Cleanup Objectives (SCOs) for both Unrestricted and Restricted-Residential Use. Soil vapor impacts are limited to low but relatively elevated levels of VOCs related to petroleum, and low-grade levels of other VOCs typically encountered in urban environments (vapor impacts may be related to groundwater contamination).

2.0 HEALTH AND SAFETY HAZARDS

2.1 Hazard Overview for On-Site Personnel

Elevated concentrations of VOCs are documented in Site soil (and potentially groundwater) and soil vapor. The possibility exists for on-site personnel to have contact with contaminated soils, groundwater and/or vapor during investigative activities. Contact with contaminated substances may present a skin contact, inhalation and/or ingestion hazard. These potential hazards are addressed in Sections 3.0 through 11.0, below.

2.2 Potential Hazards to the Public from Fieldwork Activities

The potential exists for the public to be exposed to contaminated soils, groundwater and/or vapor, which may present a skin contact, inhalation and/or ingestion hazard. Additional potential hazards to the public that are associated with fieldwork activities include mechanical/physical hazards, traffic hazards from fieldwork vehicles, and noise impacts associated with operation of mechanical equipment.

Impacts to public health and safety are expected to be limited to hazards that could directly affect on-Site visitors and/or trespassers. These effects will be mitigated through site access and control measures (see Section 6.0, below). Specific actions taken to protect the public health (presented in Sections 3.0 through 11, below) are anticipated to minimize any potential off-site impacts from contaminant migration, noise and traffic hazards.

3.0 PERSONAL PROTECTIVE EQUIPMENT

The levels of protection identified for the services specified in the RAWP represent a best estimate of exposure potential and protective equipment needed for that exposure.

Determination of levels was based on data provided by previous studies of the Site and information reviewed on current and past Site usage. The SHSO may recommend revisions to these levels based on an assessment of actual exposures and may at any time require Site workers, supervisors and/or visitors to use specific safety equipment.

The level of protective clothing and equipment selected for this project is Level D. Level D PPE provides minimal skin protection and no respiratory protection, and is used when the atmosphere contains no known hazard, oxygen concentrations are not less than 19.5%, and work activities exclude splashes, immersion or the potential for unexpected inhalation or contact with hazardous levels of chemicals. Workers will wear Level D protective clothing including, but not limited to, a hard hat, steel-toed boots, nitrile gloves (when handling soils and/or groundwater), hearing protection (foam ear plugs or ear muffs, as required), and safety goggles (in areas of exposed groundwater and when decontaminating equipment). Personal protective equipment (PPE) will be worn at all times, as designated by this HASP.

Disposable gloves will be changed immediately following the handling of contaminated soils, water, or equipment. Tyvek suits will be worn during activities likely to excessively expose work clothing to contaminated dust or soil (chemically-resistant over garments will be required in situations where exposures could lead to penetration of clothing and direct dermal contact by contaminants).

The requirement for the use of PPE by official on-site visitors shall be determined by the SHSO, based on the most restrictive PPE requirement for a particular Work Zones (see Section 6 for Work Zone definitions). All on-site visitors shall, at a minimum, be required to wear an approved hardhat and be provided with appropriate hearing protection as necessary.

The need for an upgrade in PPE will be determined based upon encountered Site conditions, including measurements taken in the breathing zone of the work area using a photo-ionization detector (PID). An upgrade to a higher level of protection (Level C) will begin when specific action levels are reached (see Section 5.0, below), or as otherwise required by the SHSO. Level C PPE includes a full-face or half-mask air-purifying respirator (NIOSH approved for compound[s] of concern), hooded chemical-resistant clothing, outer and inner chemical-resistant gloves, and (as needed) coveralls, outer boots/boot covers, escape mask, and face shield. Level C PPE may be used only when: oxygen concentrations are not less than 19.5%; contaminant contact will not adversely affect exposed skin; types of air contaminants have been identified, concentrations measured, and a cartridge/canister is available that can remove the contaminant; atmospheric contaminant concentrations do not exceed immediately dangerous to life or health (IDLH) levels; and job functions do not require self-contained breathing apparatus (SCBAs). The need for Level B or Level A PPE is not anticipated for the planned remedial activities at this Site.

If any equipment fails and/or any employee experiences a failure or other alteration of their protective equipment that may affect its protective ability, that person will immediately leave the work area. The Project Manager and the SHSO will be notified and, after reviewing the situation, determine the effect of the failure on the continuation of on-going operations. If the failure affects the safety of personnel, the work site, or the surrounding environment, personnel will be evacuated until appropriate corrective actions have been taken.

4.0 CONTAMINANT CONTROL

Precautions will be taken during dry weather (e.g., wetting or covering exposed soils) to avoid generating and breathing dust-generated from soils. A PID (or equivalent equipment) will be used to monitor potential contaminant levels. Response to the monitoring will be in accordance with the action levels provided in Section 5.0.

5.0 MONITORING AND ACTION LEVELS

Concentrations of petroleum compounds in the air are expected to be below the OSHA Permissible Exposure Limits (PELs). Air monitoring will be conducted for VOCs and dust according to the NYSDOH Generic Community Air Monitoring Plan (provided as an Attachment). Monitoring will be conducted at all times that fieldwork activities which are likely to generate emissions are occurring. PID and dust readings consistently in excess of CAMP limits will be used as an indication of the need to initiate personnel monitoring, increase worker protective measures, and/or modify or cease on-site operations in order to mitigate off-site community exposure.

PID readings that consistently exceed background in the breathing zone (during any proposed tasks) will necessitate moving away from the source or implementing a higher PPE level.

6.0 SITE CONTROL/WORK ZONES

Site control procedures will be established to reduce the possibility of worker/visitor contact with environmental contaminants, to protect the public in the area surrounding the Site and to limit access to the Site to only those persons required to be in the work zone. Notices placed near the Site will warn the public not to enter fieldwork areas and direct visitors to report to the Project Manager or SHSO. Measures will be taken to limit the entry of unauthorized personnel into the specific areas of field activity and to safely direct and control all vehicular traffic in and near the Site (e.g., placement of traffic cones and warning tape).

Work Areas are defined as follows:

Exclusion Zone - The exclusion zone will be that area immediately surrounding the work being performed to accomplish fieldwork activities involving the handling or potential exposures to contaminated media. Only individuals with appropriate PPE and training are allowed into this zone. It is the responsibility of the SHSO to prevent unauthorized personnel from entering the exclusion zone. When necessary (e.g., high traffic areas) the exclusion zone will be delineated with barricade tape, cones and/or barricades.

Dedicated Decontamination Area - A dedicated decontamination area for personnel and equipment (including contamination reduction and support zones) is not anticipated to be required during completion of fieldwork activities, but will be established and utilized, as warranted, based on changes in Site conditions. Care will be taken at all times to remove gloves, excess soil from boots, and soiled clothing (if necessary) before entering the Intermediate Zone.

Intermediate Zone - The intermediate zone, also known as the decontamination zone, is where patient decontamination should take place, if necessary. A degree of contamination still is found in this zone and some PPE is required, although it is usually of a lesser degree than that required for the exclusion zone.

Command Zone - The command zone is located outside the decontamination zone. All exposed individuals and equipment from the exclusion zone and the decontamination zone should be decontaminated before entering the command zone. Access to all zones must be controlled. Keeping onlookers, media, etc. well away from the Site is critical and will be the responsibility of both the SHSO and the Project Manager, and other Site personnel as appropriate.

7.0 NOISE CONTROL

All fieldwork activities will be conducted in a manner designed to reduce unnecessary noise generation, and to minimize the potential for both on-site and off-site harmful noise levels. The Project Manager and SHSO will establish noise reduction procedures (as appropriate to the Site and the work) to meet these requirements.

8.0 PERSONNEL TRAINING

Work zones that will accomplish the general objective stated above will be established by the Project Manager and the SHSO. Site access will be monitored by the SHSO, who will maintain a log-in sheet for personnel that will include, at the minimum, personnel on the Site, their arrival and departure times and their destination on the Site. All workers will be properly trained in accordance with OSHA requirements (29 CFR 1910). Personnel exiting the work zone(s) will be decontaminated prior to exiting the Site.

Site-specific training will be provided to each employee. Personnel will be briefed by the SHSO as to the potential hazards to be encountered.

Topics will include:

- Availability of this HASP;
- General site hazards and specific hazards in the work areas, including those attributable to known of suspect on-site contaminants;
- Selection, use, testing, and care of the body, eye, hand, and foot protection being worn, with the limitations of each;

- Decontamination procedures for personnel, their personal protective equipment, and other equipment used on the Site;
- Emergency response procedures and requirements;
- Emergency alarm systems and other forms of notification, and evacuation routes to be followed; and,
- Methods to obtain emergency assistance and medical attention.

9.0 DECONTAMINATION

The SHSO will establish a decontamination system and decontamination procedures (appropriate to the Site and the work) that will prevent potentially hazardous materials from leaving the Site. Vehicles will be brushed to remove materials adhering to surfaces. Sampling equipment will be segregated and, after decontamination, stored separately from PPE. All decontaminated or clean sampling equipment not in use will be protected and stored in a designated, controlled storage area.

10.0 EMERGENCY RESPONSE

10.1 Notification of Site Emergencies

In the event of an emergency, the SHSO will be immediately notified of the nature and extent of the emergency (the names and contact information for key site safety and management personnel, as well as other site safety contact telephone numbers, shall be posted at the Site).

Table 1 in this HASP contains Emergency Response Telephone Numbers, and immediately following is a map detailing the directions to the nearest hospital emergency room. This information will be maintained at the work Site by the SHSO. The location of the nearest telephone will be determined prior to the initiation of on-site activities. In addition to any permanent phone lines, a cellular phone will be in the possession of the SHSO, or an authorized designee, at all times.

10.2 Responsibilities

Prior to the initiation of on-site work activities, the SHSO will:

- Notify individuals, authorities and/or health care facilities of the potentially hazardous activities and potential wastes that may develop as a result of the remedial activities;
- Confirm that first aid supplies and a fire extinguisher are available on-site;
- Have a working knowledge of safety equipment available; and,
- Confirm that a map detailing the most direct route to the hospital is prominently posted with the emergency telephone numbers.

The SHSO will be responsible for directing notification, response and follow-up actions and for contacting outside response personnel (ambulance, fire department, or others). In the case of an evacuation, the SHSO will account for personnel. A log of individuals entering and leaving the Site will be kept so that everyone can be accounted for in an emergency.

Upon notification of an exposure incident, the SHSO will contact the appropriate emergency response personnel for recommended medical diagnosis and, if necessary, treatment. The SHSO will determine whether and at what levels exposure actually occurred, the cause of such exposure, and the means to prevent similar incidents from occurring.

10.3 Accidents and Injuries

In the event of an accident or injury, measures will be taken to assist those who have been injured or exposed and to protect others from hazards. If an individual is transported to a hospital or doctor, a copy of the HASP will accompany the individual.

The SHSO will be notified and respond according to the severity of the incident. The SHSO will investigate the incident and prepare a signed and dated report documenting the investigation. An exposure-incident report will also be completed by the SHSO and the exposed individual. The form will be filed with the employee's medical and safety records to serve as documentation of the incident and the actions taken.

10.4 Communication

No special hand signals will be utilized within the work zone. Field personnel will utilize standard hand signals during the operation of heavy equipment.

10.5 Safe Refuge

Vehicles and on-site structures will serve as the immediate place of refuge in the event of an emergency. If evacuation from the area is necessary, project vehicles will be used to transport on-site personnel to safety.

10.6 Site Security and Control

Site security and control during emergencies, accidents and incidents will be monitored by the SHSO. The SHSO is responsible for limiting access to the Site to authorized personnel and for oversight of reaction activities.

10.7 Emergency Evacuation

In case of an emergency, personnel will evacuate to the safe refuge identified by the SHSO, both for their personal safety and to prevent the hampering of response/rescue efforts.

10.8 Resuming Work

A determination that it is safe to return to work will be made by the SHSO and/or any personnel assisting in the emergency, e.g., fire department, police department, utility company, etc. No personnel will be allowed to return to the work areas until a full determination has been made by the above-identified personnel that all field activities can continue unobstructed. Such a determination will depend upon the nature of the emergency (e.g., downed power lines -- removal of all lines from the property; fire -- extinguished fire; injury -- safe transport of the injured party to a medical facility with either assurance of acceptable medical care present or completion of medical care; etc.). Before on-site work is resumed following an emergency, necessary emergency equipment will be recharged, refilled or replaced. Government agencies will be notified as appropriate. An Incident Report Form will be filed.

10.9 Fire Fighting Procedures

A fire extinguisher will be available in the work zone during on-site activities. This extinguisher is intended for small fires. When a fire cannot be controlled with the extinguisher, the area will be evacuated immediately. The SHSO will be responsible for directing notification, response and follow-up actions and for contacting ambulance and fire department personnel.

10.10 Emergency Decontamination Procedure

The extent of emergency decontamination depends on the severity of the injury or illness and the nature of the contamination. Whenever possible, minimum decontamination will consist of washing, rinsing and/or removal of contaminated outer clothing and equipment. If time does not permit decontamination, the person will be given first aid treatment and then wrapped in plastic or a blanket prior to transport.

10.11 Emergency Equipment

The SHSO will maintain a dedicated vehicle containing the following on-site equipment for safety and emergency response: fire extinguisher; first-aid kit; and, extra copy of this HASP.

11.0 SPECIAL PRECAUTIONS AND PROCEDURES

The activities associated with this remediation may involve potential risks of exposure to both chemical and physical hazards. The potential for chemical exposure to hazardous or regulated substances will be significantly reduced through the use of monitoring, personal protective clothing, engineering controls, and implementation of safe work practices.

11.1 Heat/Cold Stress

Training in prevention of heat/cold stress will be provided as part of the site-specific training. The timing of this project is such that heat/cold stress may pose a threat to the health and safety of personnel. Work/rest regimens will be employed, as necessary, so that personnel do not suffer adverse effects from heat/cold stress. Special clothing and appropriate diet and fluid intake regimens will be recommended to personnel to further reduce this temperature-related hazard. Rest periods will be recommended in the event of high/low temperatures and/or humidity to counter the negative effects of heat/cold stress.

11.2 Heavy Equipment

Working in the vicinity of heavy equipment is the primary safety hazard at the Site. Physical hazards in working near heavy construction equipment include the following: overhead hazards, slips/trip/falls, hand and foot injuries, moving part hazards, improper lifting/back injuries and noise. All workers will be properly trained in accordance with OSHA requirements (29 CFR 1910). No workers will be permitted within any excavated areas without proper personal protective equipment (PPE), including, as warranted, any necessary Level C equipment (e.g., respirators and protective suits). Air monitoring in excavation areas will be conducted for VOCs in accordance with Section 5.0.

11.3 Additional Safety Practices

The following are important safety precautions to be enforced during the remedial activities.

Medicine and alcohol can aggravate the effect of exposure to certain compounds. Controlled substances and alcoholic beverages will not be consumed during remedial activities. Consumption of prescribed drugs will only be at the discretion of a physician familiar with the person's work.

Eating, drinking, chewing gum or tobacco, smoking, or other practices that increase the probability of hand-to-mouth transfer and ingestion of material is prohibited except in areas designated by the SHSO.

Contact with potentially contaminated surfaces will be avoided whenever possible. Workers will not unnecessarily walk through puddles, mud or other discolored surfaces; kneel on the ground; or lean, sit, or place equipment on drums, containers, vehicles, or the ground.

Personnel and equipment in the work areas will be minimized, consistent with site operations.

Unsafe equipment left unattended will be identified by a "DANGER, DO NOT OPERATE" tag.

Work areas for various operational activities will be established.

11.4 Daily Log Contents

The SHSO will establish a system appropriate to the Site, the work and the work zones that will record, at a minimum, the following information:

- Personnel on the Site (arrival and departure times) and their destination on the Site;

- Incidents and unusual activities Site such as (but not limited to) accidents, spills, breaches of security, injuries, equipment failures and weather-related problems;
- Changes to the HASP; and,
- Daily information, such as: changes to work and health and safety plans, work accomplished and the current Site status, and monitoring results.

12.0 COVID-19 POLICIES AND PROCEDURES

The Coronavirus 2019 (COVID-19) is a highly infectious respiratory disease caused by the SARS-CoV-2 virus, and has created a global pandemic. The virus may be transferred by person-to-person contact via respiratory droplets or touching, and may be transferred by touching a contaminated surface and then touching your eyes, nose and/or mouth. As a response to the pandemic, general guidelines have been established by the Centers for Disease Control and Prevention (CDC), the world health organization (WHO), the Occupational Safety and Health Administration (OSHA) and New York State (see State website for current Governor's Executive Orders), as well as localized jurisdictions. The following policies and procedures have been established specifically for this Site in order to mitigate risks associated with potential COVID-19 exposure.

12.1 At-Home Screening

GBTS personnel, associated sub-contractors, and authorized guests will be required to conduct at-home screening procedures prior to arriving at the site. The at-home screening will consist of individuals measuring their body temperature and answering COVID-19 related questions in the attached questionnaire. If the individual's temperature exceeds 100.4^{o}F, or if the individual answers "yes" to any of the questions presented on the questionnaire, the individual must remain at home and notify appropriate personnel at the Site.

12.2 Site Temperature Screening

GBTS personnel, associated sub-contractors, and authorized guest will be required to conduct temperature screening once at the Site. Upon arriving at the Site, the individual's body temperature will be measured by the Site Safety and Health Officer (SSHO) by using a medical grade touchless infrared thermometer or thermal scanning equipment. The individual's body temperature and associated signature will be recorded on the attached field form. If the individual's temperature exceeds 100.4^{o}F, the individual will not be permitted on Site.

12.3 Site Practices

The following practices will be enforced by GBTS personnel, associated sub-contractors, and authorized guests.

12.3.1 Hand Hygiene

Hand sanitizing with an alcohol-based product (at least 60% ethanol or 70% isopropanol) should be conducted upon entering and/or returning to the Site (a sanitizing station will be located at the Site entrance). The sanitizing solutions/gel should be applied to hands, and rubbed together until dry (at least 20 seconds), making sure to cover all surfaces. Avoid touching your eyes, nose and mouth while at the Site. Hand sanitizing should be conducted prior to donning (i.e., putting on) any type of face covering and/or respirator.

12.3.2 Social Distancing

Where possible maintain a minimum of six (6) feet between individuals.

Do not occupy an individual's work area.

Do not use someone else's tools and/or equipment (if applicable).

Where a minimum of six (6) feet between individuals cannot be maintained, engineering controls such as repositioning equipment may be warranted to maintain social distancing guidelines.

12.2.3 Respiratory Etiquette

Properly use face coverings (e.g., dust masks, surgical masks, cloth face coverings). Hand sanitizing should be conducted before putting on any/all face coverings or respirators.

Cover your mouth and nose with a tissue when coughing or sneezing, and dispose of the tissue in a designated non-touch waste bin.

Perform hand hygiene after having contact with respiratory secretions and/or contaminated objects/materials.

12.2.4 Other Procedures

Cleaning and disinfection of equipment/tools should be conducted prior to and after use. All disinfecting products used shall be registered and approved by the Environmental Protection Agency (EPA), and located on the List N: Disinfectant for Use Against SARS-CoV-2.

General housekeeping activities should be performed in work area to prevent accumulation of dust/debris, including use of no-touch waste bins.

Encourage individuals to report any safety and health concerns.

Signage such as posters, banners, flyers and/or stickers that illustrate the importance of hand hygiene, social distancing, respiratory etiquette, etc. may be appropriate in certain location throughout the Site (e.g. entrances/exits, restrooms, break areas, etc.).

12.2.5 Illness Response

If an individual becomes ill, or develops symptoms associated with COVID-19 (e.g., fever, persistent cough, shortness of breath, chills/shakes, muscle pain, headaches, sore throat, and new loss of smell or taste) while on Site, the individual must immediately put on appropriate face covering (if not already wearing) and report symptoms to SSHO.

All other individuals on Site must immediately put on appropriate face coverings (if not already wearing). Hand sanitizing should be conducted before putting on any/all face coverings or respirators.

The affected individual must perform a temperature self-screen. The individual must return home to monitor their symptoms. Appropriate measures should be taken to by the affected individual as to not impact their family and others. Ongoing monitoring of symptoms should be conducted by the affected individual according to CDC guidelines, and medical attention may be warranted if symptoms progress.

Ongoing monitoring of symptoms should also be conducted by non-affected individuals, and if COVID-19 related symptoms develop, self-quarantine and/or medical testing may be warranted.

13.0 EMERGENCY INFORMATION

13.1 Emergency Contact Information

The following page presents a table indicating emergency contact information. This table should be copied and freely distributed and/or posted at the Site to ensure ready access.

Emergency Contact Information

Emergency Agencies	Phone Numbers
EMERGENCY	**911**
HOSPITAL Adirondack Medical Center - Saranac Lake 2233 State Route 86, Saranac Lake, New York 12983	**(518) 891-4141 or 911**
POLICE Village of Saranac Lake - Police Department 1 Main Street, Saranac Lake, New York 12983	**(518) 891-4428 or 911**
FIRE Village of Saranac Lake - Fire Department 100 Broadway, Saranac Lake, New York 12983	**911** (office 518-891-2333)
Saranac Lake Village Hall	(518) 891-4150
Village of Saranac Lake - Department of Public Works	(518) 891-4160
Site Health and Safety Officer, Scott Spitzer, GBTS	(845) 452-1658 (845) 867-4717

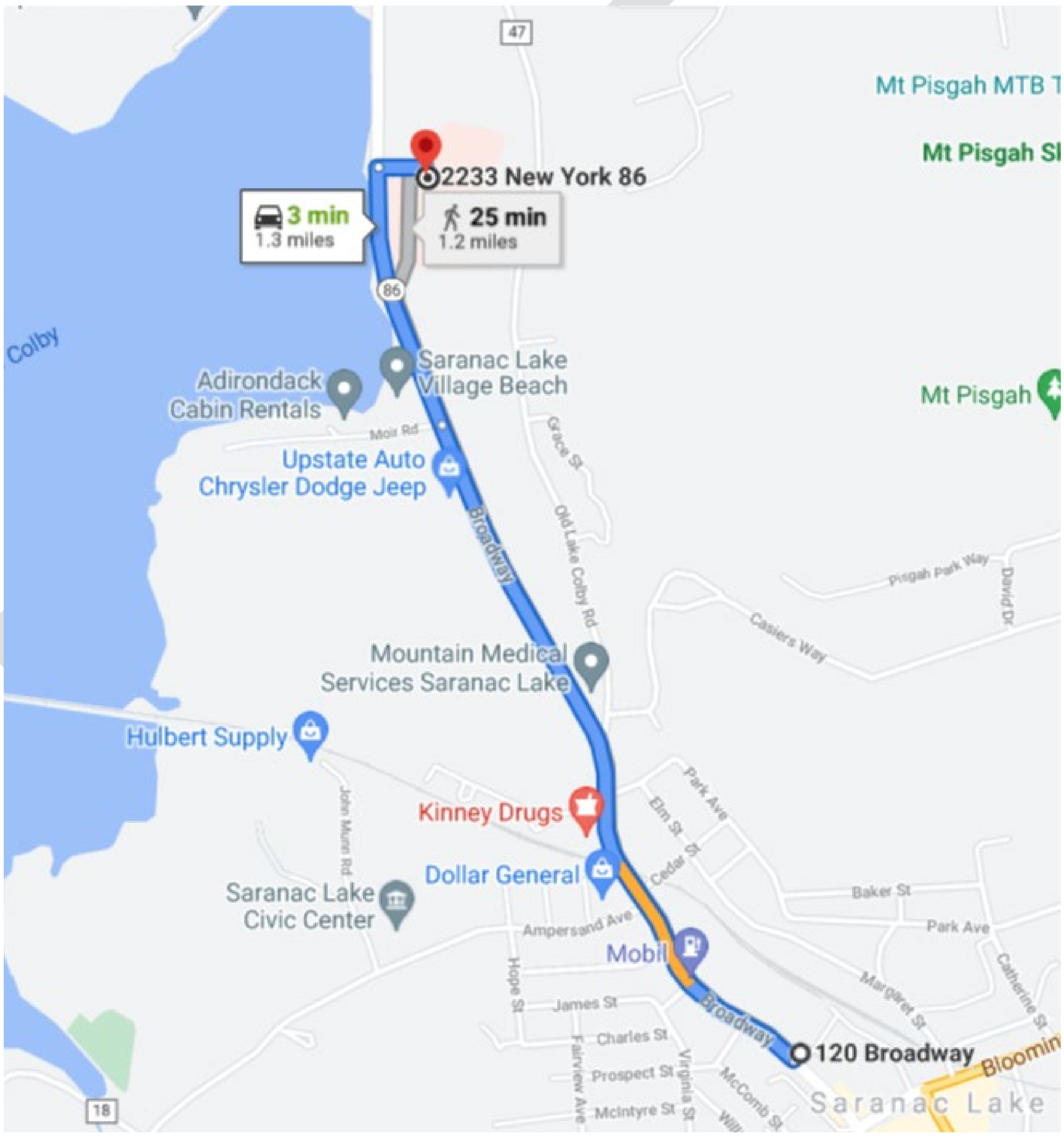
13.2 Directions to Hospital

Approximately 4 minutes travel time – 1.3 miles

North on Broadway/NY Route 86 (1.3 mile)

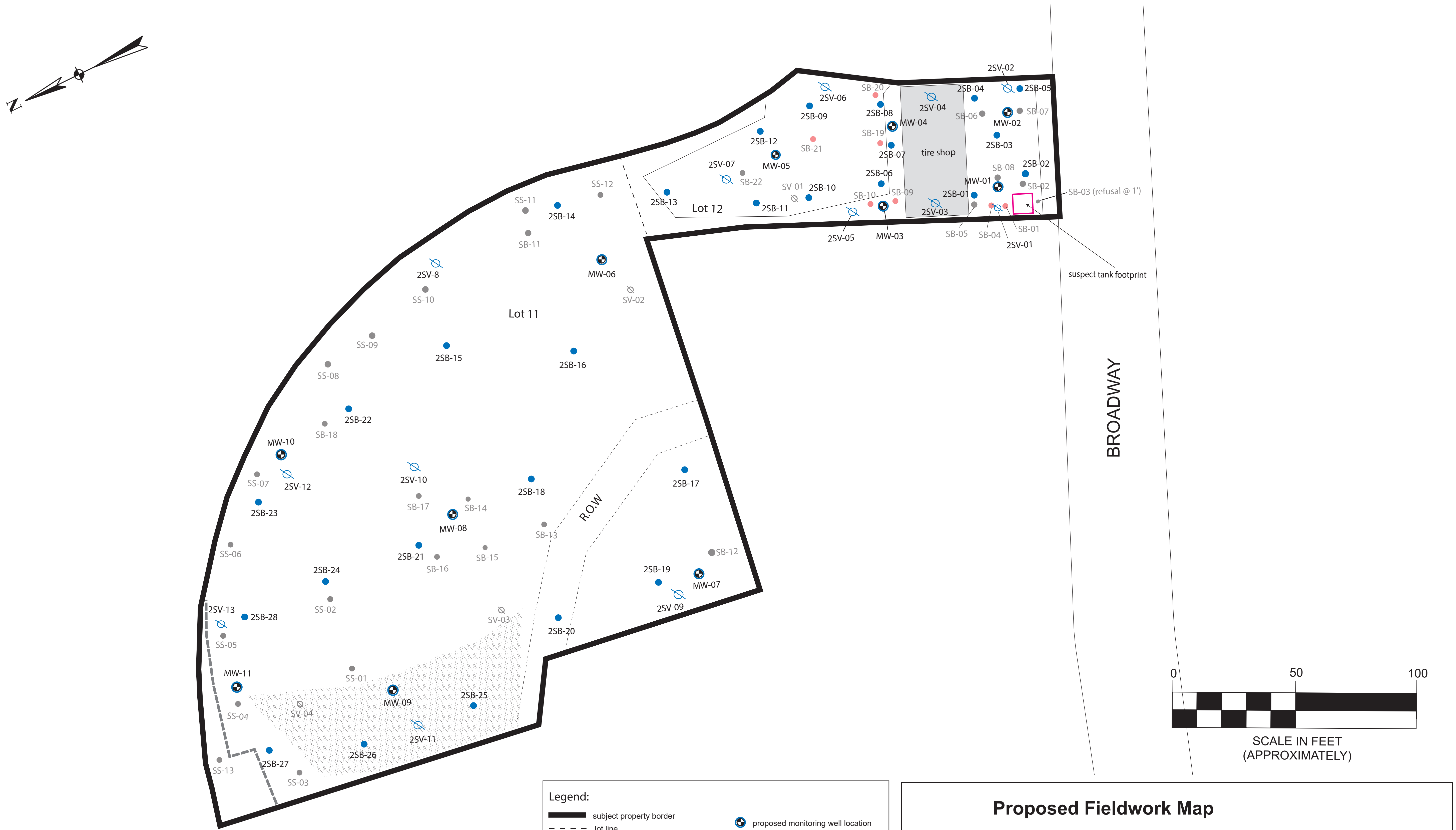
Follow signs on Left for Adirondack Health Emergency Room

13.3 Map to Hospital



Attachment: Proposed Fieldwork Map

GALLAGHER BASSETT | TECHNICAL SERVICES



Legend:

- subject property border
- lot line
- retaining wall
- wetlands
- previous soil sample location
- previous soil boring with evidence of petroleum contamination
- previous soil vapor location
- proposed monitoring well location
- proposed soil vapor location
- proposed boring location

All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Proposed Fieldwork Map

Saranac Lofts BCP Site C517015
120 Broadway
Village of Saranac Lake
Franklin County, New York

File: 21003-0066

Scale as shown

January 2022 | Figures

Attachment: NYSDOH Generic CAMP

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required 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 might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required 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.

<u>VOC Monitoring, Response Levels, and Actions</u>

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone 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.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

<u>Particulate Monitoring, Response Levels, and Actions</u>

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should 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 must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/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 must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

APPENDIX B

Quality Assurance Project Plan

SITE INVESTIGATION
QUALITY ASSURANCE PROJECT PLAN

Saranac Lofts

120 Broadway
Village of Saranac Lake
Franklin County, New York

NYSDEC BCP Site: C517015

January 2022 Draft

GBTS Project: 21003-0066

Technical Services Division

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SITE INVESTIGATION
QUALITY ASSURANCE PROJECT PLAN

January 2022

GBTS Project: 21003-0066

Prepared By:

Gallagher Bassett Technical Services
22 IBM Road, Suite 101
Poughkeepsie, New York 12601

Prepared For:

Parkview Development & Construction, LLC
Route 6, Suite 207
Baldwin Place, New York 10505

The undersigned have reviewed this Site Investigation Quality Assurance Project Plan and certify to Parkview Development & Construction, LLC and to the New York State Department of Environmental Conservation that the information provided in this document is accurate as of the date of issuance by this office.

Scott Spitzer
Gallagher Bassett Technical Services
Technical Director – Environmental Consulting

Richard Hooker
Gallagher Bassett Technical Services
Manager – Environmental Consulting

TABLE OF CONTENTS

1.0 PROJECT MANAGEMENT

1.1 Project/Task Organization

Major participants in the project are shown below along with their specific responsibilities and authorities. Resumes for Gallagher Bassett Technical Services (GBTS) personnel and for the Data Validator are provided in Attachment D this Quality Assurance Project Plan (QAPP).

Kaleigh Zappia New York State Department of Environmental Conservation (NYSDEC)

Kaleigh Zappia is the project manager for the NYSDEC. She is responsible for review and approval of all project submittals.

James Blaney Operations Manager, Environmental, GBTS

James Blaney, CHMM is the Qualified Environmental Professional (QEP) for the project, responsible for overview of all project activities. Mr. Blaney has authority over all GBTS personnel and subcontractors and will be responsible for final review and approval of all project submittals prior to submission to the NYSDEC.

Scott Spitzer Technical Director, Environmental Consulting, GBTS

Scott Spitzer will be the Project Manager, responsible for directing and coordinating all project activities, reviewing all project documents, and ensuring that project plans are followed. Mr. Spitzer has authority to direct the activities of the field team (OSC and subcontractors).

Richard Hooker Quality Assurance Officer, GBTS

Richard Hooker, PhD will be responsible for reviewing all sampling procedures and certifying that the data was collected and analyzed using the appropriate procedures, and will assist in the development of the sampling and analytical portion of a site-specific quality assurance project plan (QAPP).

Erick Salazar On-Site Coordinator (OSC), GBTS

The OSC will be responsible for the completion of all on-site fieldwork, collection of all samples, completion of the field log, and chains of custody. The OSC will have authority over all on-site subcontractors.

Laboratory York Analytical Laboratories

York Analytical Laboratories, will be responsible for analysis of samples, and is New York State Department of Health (NYSDOH) Environmental Laboratory Approved Program (ELAP) certified in the appropriate categories, including PFOA and PFOS in drinking water by EPA Method 537.1 or ISO 25101.

Subcontractors *To be determined*

Subcontractors will be responsible for the operation of special equipment and providing technical assistance as needed. The laboratory subcontractor will be responsible for analysis of samples and will be New York State Department of Health (NYSDOH) Environmental Laboratory Approved Program (ELAP) certified in the appropriate categories.

1.2 Principal Data Users

The principal users of the generated data in this project are listed below.

1. Residents of the Village of Saranac Lake, especially those residing near the Site
2. Parkview Development & Construction, LLC
3. NYSDEC

1.3 Problem Definition/Background

Site investigation is planned under the NYSDEC Brownfields Cleanup Program (BCP ID: C517015), in accordance with the Remedial Investigation Work Plan (RIWP). The specific tasks detailed in the RIWP are wholly incorporated by reference into this QAPP.

Previous investigations of the Site documented gross petroleum contamination in soil at the front and to the rear of the Site building, and a spill event (#2103108) was reported (released material is likely to have been gasoline, which may have impacted groundwater). Volatile organic compounds (VOCs; related to petroleum), metals and semi-volatile organic compounds (SVOCs) in soil are above NYSDEC Soil Cleanup Objectives (SCOs) for both Unrestricted and Restricted-Residential Use. Soil vapor impacts are limited to low but relatively elevated levels of VOCs related to petroleum, and low-grade levels of other VOCs typically encountered in urban environments (vapor impacts may be related to groundwater contamination).

1.4 Project/Task Description

The project will meet its objective through compliance with NYSDEC DER-10 Technical Guidance for site investigations.

1.5 Quality Objectives and Criteria

The data collected in this project will be used to document Site environmental conditions. In order to meet the data quality objectives of precision, accuracy, representation, comparability, and completeness the following actions will be taken:

- Soil, groundwater and vapor samples will be collected based on the procedures in the RIWP and this QAPP, to ensure data consistency.
- Data generated during sampling will be submitted for review by a third, independent party (see Section 3.2.1, below).

Prior to field activities, the QEP, Project Manager and the OSC will review the RIWP to ensure that the data quality objectives of precision, accuracy, representation, comparability, and completeness will be met during the field activities. At the completion of field activities, the Project Manager will review field logs and chains of custody to ensure that field activities met the intent of the RIWP. If a problem is identified, Mr. Richard Hooker and the Project Manager will meet to determine corrective measures necessary to meet data quality objectives.

1.6 Documents and Records

Electronic and paper copies of all fieldwork observations and measurements will be retained by GBTS.

2.0 SAMPLING AND ANALYSIS PLAN

Sample collection, handling and laboratory analysis is summarized below. A Proposed Fieldwork Map showing Site features and fieldwork locations is provided as Attachment A.

2.1 Sampling Overview

Borings will be extended in order to recover representative soil samples at various depths and to allow for the collection of soil vapor samples. Several borings will be completed as permanent groundwater monitoring wells to allow for the collection of reproducible groundwater quality samples.

2.2 Fieldwork and Sampling Methodology

All fieldwork activities, including collection and handling of media samples, will be in accordance with the Standard Operating Procedures (SOPs) provided in Attachment B. Sampling will occur for per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane (“emerging contaminants”, ECs) and guidelines for such sampling will be strictly followed by all field and laboratory personnel. Basic SOP components are summarized below.

2.2.1. General Fieldwork

The OSC will be responsible for compliance with the SOPs, including:

- Documentation of all fieldwork activities in logbooks for inclusion in final reports;
- Assessment of media characteristics (soil type, presence or absence of foreign materials, field indications of contamination), and instrument readings using properly calibrated and operated precision instruments;
- Identification of materials requiring special handling (media that may contain elevated concentrations of contaminants or is grossly contaminated, hazardous materials, etc.) and ensuring proper secure on-site storage, pending characterization and disposition;

- Ensuring that unforeseen environmental conditions are managed in accordance with applicable federal and state regulations;
- Sample collection, including procedures to minimize potential cross-contamination; and,
- Implementation of decontamination procedures.

Sample collection and laboratory analysis for PFAS and 1,4-dioxane will comply with NYSDEC guidance (*Sampling, Analysis, and Assessment of Polyfluoroalkyl Substances Under NYSDEC's Part 375 Remedial Programs*, January 2021), provided in Attachment B (SOPs), which includes a target list of PFAS compounds.

Guidelines for sampling of soil and/or groundwater for PFAS include the following (detailed protocols, including lists of prohibited behaviors and materials, are provided in the SOP):

- Sampling for PFAS will be conducted prior to sampling for other analytes, as practicable, to minimize cross contamination from sample containers utilized for other methods;
- Sampling personnel will comply with specific prohibitions in regards to field equipment, PPE, rain gear, personal clothing and body-care, food, etc.;
- Sample coolers will be held at low temperature using only ice (plastic freezer packs are prohibited);
- Decontamination protocols specific to PFAS will be followed, including use of "PFAS free" water and approved cleaning agents (Liquinox is prohibited); and,
- Compliance with laboratory requirements for sampling containers, field blanks, etc.

2.2.2. Vapor

Vapor sampling will be in accordance with applicable NYSDOH guidance, including use of a tracer gas to confirm adequate surface seals. Purge and sample rates will not exceed 0.2 liters per minute. Vapor samples will be collected over a two-hour period into laboratory-certified clean Summa canisters equipped with applicable flow regulators.

2.2.3. Extension of Borings and Soil Sampling

An initial total of twenty-eight (28) soil borings will be extended, with additional "step out" borings as needed based on field and instrument observations of contamination, in order to define the extent of Site soil containing analyte concentrations above applicable Soil Cleanup Objectives (SCOs). Additional fieldwork rounds for the advancement of soil borings and/or installation of monitoring wells may be required to fully delineate identified contamination, and to determine if contamination extends or is migrating off-site (the need for an expanded investigation scope will be determine in consultation with NYSDEC).

Borings will be extended using mechanized equipment capable of collecting soil cores at discreet intervals. Borings will be extended to at least the deeper of 15 feet below ground surface or to a sample interval below the groundwater interface, or until refusal (all borings to be completed as groundwater wells will be extended to a minimum depth that allows for proper installation of the well screen). Soil is anticipated to be collected using coring barrels lined with disposable acetate sleeves (split spoons may be utilized based on Site conditions/equipment availability).

Soil will be continuously recovered from borings, and material in each sampling interval will be characterized in order to identify existing subsurface physical conditions and any overt evidence of contamination. Sampling of recovered material for laboratory submission will be conducted from all boring intervals, as warranted, to fully define contaminants in soil and provide sufficient areal and vertical delineation. Samples will be collected (at a minimum) from the soil stratum intercepting the groundwater table, any fill material, and from soil exhibiting field evidence of impacts (if encountered) or at soil strata corresponding to previously identified contamination in nearby boring locations (for delineation).

Sampling may occur in multiple rounds to ensure complete Site characterization in compliance with DER-10, Chapter 3, including a full characterization of any existing soils proposed to remain in place as a clean cover system (based on Site development requirements, the characterization of *in situ* cover soils may be conducted in full or part during a Pre-design Investigation).

Samples will be collected directly from the freshly cut open sleeve, using disposable plastic trowels or properly decontaminated stainless steel instruments, or may be manually collected directly from exposed soil or the sampling instrument using dedicated disposable latex gloves. Soil sampling for VOCs will follow USEPA Method 5035 protocols, using disposable 5-gram plastic syringes to place material into laboratory-supplied glass vials (prepared with stirs bars and appropriate preservatives).

2.2.4. Installation of Monitoring Wells and Groundwater Sampling

A minimum of eleven (11) permanent monitoring wells will be installed. The completion depths for new wells are not known at this time (wells may need to be installed within the underlying bedrock). All well casings above bedrock will be constructed of two-inch PVC, with 0.01-inch slotted PVC screening across the water table (minimum of 2 feet of screening above the water table, as practicable). No glue will be used to thread the casing lengths. If paired, deeper wells are required, they will be constructed with the screening located to intercept the lowest level of the water column. The annular space between the well screen/casing and the borehole will be backfilled with clean silica sand and hydrated bentonite and/or cement grout. Wells will be secured with locked caps and metal covers. The elevation of the top of the well riser, relative to a permanent on-site marker, will be documented for use in determining relative groundwater elevations. The wells will be developed one week following installation.

All Site monitoring wells will be purged and sampled using USEPA Low Flow methodology. Sampling will begin at the potentially least contaminated well and proceed to the potentially most contaminated well.

Prior to purging, the air in the well head will be screened with a PID and the static water level (relative to the top of the casing) will be measured with a decontaminated water-level meter. A peristaltic pump with plastic tubing (or equivalent equipment) will be used for sampling. The tubing (or a submersible pump attached to tubing, if required by Site conditions) will be slowly lowered until reaching two to three feet off of the well bottom to prevent disturbance and re-suspension of any remaining sediment.

The water level will be measured before the pump is started and at intervals of every three to five minutes. Pumping rates will be reduced (as needed) to the minimum capabilities of the pump to ensure stabilization of the water level (drawdown of 0.3 feet or less). During pumping, field indicator parameters (turbidity, temperature, specific conductance, pH, redox potential, and dissolved oxygen) will be monitored and recorded approximately every five minutes. The well will be considered stabilized, and sampling may proceed, when the indicator parameters have stabilized for three consecutive readings (minimum purge interval at least 15 minutes).

2.2.5. Other Materials

Any non-soil solid materials requiring laboratory analysis will be placed into laboratory supplied glassware when possible, or will alternatively be placed into double locking plastic bags and then boxed in order to prevent a tear or other breach in the bags. Liquid samples from excavations, collection pits, or drums/tanks, etc., will be sampled using a dedicated disposal sampling device.

2.3 Sample Handling and Custody

2.3.1 Sample Containers

The following laboratory-supplied containers will be used for sample collection (as applicable):

Media	Analyte Class	Collection Container (subject to laboratory requirements)	Preservation
Vapor	VOCs	1, 6-liter Summa canister (or equivalent)	none
Soil	PFAS	1, 250-ml HDPE plastic (fill halfway)	4° C
Soil	VOCs	Laboratory 5035 VOA kit, (4, 40-ml glass vials)	Method 5035
Soil	SVOCs, metals, PCBs, pesticides, herbicides, cyanide	1, 8-oz. glass jar	4° C
Soil	PFAS MS/MSD	1, 250-ml HDPE plastic (fill halfway), (may use soil from a sample container)	4° C
Soil	All other MS/MSD	additional 8-oz. glass jar	4° C

Media	Analyte Class	Collection Container (subject to laboratory requirements)	Preservation
Water	PFAS	2, 250-ml HDPE plastic (fill to neck)	4° C
Water	VOCs	4, 40-ml prepared glass vials	4° C, HCl
Water	SVOCs, PCBs, pesticides, herbicides	1-liter amber glass (specified by laboratory)	4° C
Water	Metals - total	1, 500-ml HDPE plastic	4° C
Water	Metals - dissolved	1, 500-ml HDPE plastic	4° C, HNO_3
Water	Cyanide	1, 500-ml HDPE plastic	4° C, NaOH
Water	Trip blank (PFAS)	2, 250-ml HDPE plastic (fill to neck)	4° C
Water	Field blank (PFAS)	1, 250-ml HDPE plastic (fill to neck)	4° C
Water	Trip blank (VOCs)	3, 40-ml prepared glass vials	4° C, HCl
Water	Field blank (other analytes)	As per sample collection requirements	See above

2.3.2 Sampling Frequency

VAPOR

Eleven (11) exterior soil vapor and two (2) interior sub-slab vapor samples will be collected.

SOIL

An initial total of twenty-eight (28) soil borings will be extended, with additional “step out” borings as needed based on field and instrument observations of contamination, in order to define the extent of Site soil containing analyte concentrations above the applicable SCOs.

Additional fieldwork rounds for the advancement of soil borings and/or installation of monitoring wells may be required to fully delineate identified contamination, and to determine if contamination extends or is migrating off-site (the need for an expanded investigation scope will be determine in consultation with NYSDEC).

All boring locations will be sampled for soil. Based on three 5-foot intervals per boring, a likely maximum of eighty-four (84) soil samples will be submitted for laboratory analysis.

Samples will be analyzed for NYSDEC Part 375-6.8 parameters, including USEPA Target Compound List (TCL) VOCs and semi-volatile organic compounds (SVOCs) plus 30 tentatively identified compounds (TICs), USEPA Target Analyte List (TAL) metals, Cr^{+6}, polychlorinated biphenyls (PCBs), pesticides, herbicides and cyanide, as well as ECs (1,4-dioxane and PFAS, in accordance with the most current NYSDEC guidance).

Analysis of samples may be modified in consultation with the NYSDEC Project Manager based on initial sampling results, including the presence or absence of field evidence of contamination. Additional analysis may be performed based repository requirements for waste characterization prior to off-site disposal.

GROUNDWATER

All monitoring wells will be sampled for NYSDEC Part 375-6.8 parameters, including USEPA Target Compound List (TCL) VOCs and SVOCs plus 30 TICs, USEPA TAL metals including Cr^{+6}, PCBs, pesticides, herbicides and cyanide, as well as ECs (1,4-dioxane and PFAS, in accordance with the most current NYSDEC guidance).

Analysis of samples may be modified in consultation with the NYSDEC Project Manager based on initial sampling results, including the presence or absence of field evidence of contamination.

SUMMARY OF PROPOSED SOIL BORINGS AND MONITORING WELLS

The proposed number of soil boring and new monitoring wells is summarized below (the actual number of borings extended and wells completed may be higher, based on encountered field conditions).

Quantity	Fieldwork Element	Purpose
13	Install Vapor Implants	Collect soil vapor/sub-slab vapor samples
28	Extend Soil Borings	Collect soil samples from multiple depth
11	Install Monitoring Wells	Collect groundwater samples from fixed location

The estimated approximate number of samples to be collected is outlined below (actual number of samples may vary based on conditions encountered during the investigation).

Media /QC Parameter	Number of Samples [a]	Analytes (USEPA Method) [b, c]
Vapor	13	VOCs (TO-15)
Soil	84	PFAS: NYSDEC target list (537, modified) TCL: VOCs +10 and SVOCs +20 (8260C/8270D) TAL: metals (6010D and 7473); chromium^{+6} (7196A); cyanide (9010C) Other: pesticides (8081); herbicides (8151A); PCBs (8082)
Groundwater	11	PFAS: NYSDEC target list (537, modified) TCL: VOCs +10 and SVOCs +20 (8260C/8270D) TAL: metals, total & dissolved (6010D and 7473); chromium^{+6} (7196A); cyanide (9010C) Other: pesticides (8081); herbicides (8151A); PCBs (8082)

Media /QC Parameter	Number of Samples [a]	Analytes (USEPA Method) [b, c]
Trip Blank (PFAS)	1 per sample cooler (each day of sampling)	PFAS NYSDEC target list (537, modified)
Trip Blank (VOCs)	1 per sample cooler (each day of sampling)	TCL VOCs +10 (8260)
Field Blank (PFAS)	1 per sample day	PFAS NYSDEC target list (537, modified)
Equipment Blank (PFAS)	1 per sampling day (non-dedicated)	PFAS NYSDEC target list (537, modified)
Field Blank (other)	1 for every 20 samples (non-dedicated)	As per sample collection requirements
Duplicates, MS/MSD	1 for every 20 samples (minimum 1/week)	As per sample collection requirements; PFAS soil MS/MSD may be from same container as sample

Notes

a Assumes a maximum of 3 soil samples from each of 28 borings. Equipment blanks (when required) to be collected at a minimum of one per day for each matrix.

b PFAS will be analyzed by LC-MS/MS for PFAS using methodologies based on EPA Method 537; additional laboratory methods may include Synthetic Precipitation Leaching Procedure (SPLP, by 1312, and/or Total Oxidizable Precursor Assay (TOP Assay).

c 1,4-dioxane by 8270 SIM

2.3.3 Sample Custody

Samples will be handled by the OSC and maintained at cold temperatures (4 +/- 2 °C), as warranted. Upon the completion of each day of sample collection activities, all samples will be shipped via either courier or overnight delivery (per laboratory requirements) to a NYSDOH ELAP certified laboratory under proper chain of custody.

Laboratory personnel will record the cooler temperature upon receipt and analyze the samples prior to the expiration of the hold times specified in NYSDEC Analytical Services Protocols (ASP).

2.4 Analytical Methods

Media samples will be analyzed as indicated in Section 2.3.2, above. Analytical methods for the samples will be implemented as follows:

Matrix	Sample Analysis (Holding Time)	USEPA Analytical Method
Vapor	VOCs (30 days)	TO-15
Soil	PFAS (14 days)	537, modified (reporting limit 1 µg/kg)
Soil	TCL VOCs+10 (14 days)	8260C; 8270 for 1,4-dioxane (1,4-dioxane reporting limit 0.1 mg/kg) [a]

Matrix	Sample Analysis (Holding Time)	USEPA Analytical Method
Soil	TCL SVOCs+20 (14 days)	8270B
Soil	TAL metals (180 days; mercury 28 days)	6010C/7471B
Soil	cyanide (14 days)	9010C
Soil	pesticides/PCBs/herbicides (14 days [b])	8081A/8082/8151A
Water	PFAS (14 days)	537, modified (reporting limit 2 ng/L)
Water	TCL VOCs+10 (14 days)	8260C; 8270 SIM for 1,4-dioxane (1,4-dioxane reporting limit 0.35 µg/L) [a]
Water	TCL SVOCs+20 (7 days [b])	8270B
Water	TAL metals (180 days; mercury 28 days)	6010C/7471B
Water	cyanide (14 days)	9010C
Water	pesticides/PCBs/herbicides (7 days [b])	8081A/8082/8151A

a Laboratory will meet required reporting limits running standard USEPA Method 8270

b Days for extraction, 40 days after extraction for laboratory analysis

2.5 Quality Control

Accuracy and precision will be determined by repeated analysis of laboratory standards, and matrix effects and recovery will be determined through use of spiked samples. The laboratory will run standards, blanks, and spiked samples during sample analysis.

Duplicate sampling (for all parameters), and matrix spike (MS)/matrix spike duplicate (MSD) analyses, will be performed in accordance with Section 2.3.2. For each day of sampling, a trip blank will be included with each sample cooler and be analyzed for PFAS or VOCs, as applicable.

Samples will be identified using a unique ID number. This ID will be recorded on the sampling log and/or field record and the sampling container (samples for each fieldwork day will be assigned to a Sample Delivery Group [SDG] by the laboratory). In accordance with current best fieldwork practices, permanent marker will not be utilized to label samples planned for analysis for PFAS. Samples for each day of fieldwork will be shipped via courier to the laboratory under proper chain of custody procedures.

2.6 Quality Assurance

2.6.1 Instrument/Equipment, Testing, Inspection, and Maintenance

Field measurements will be conducted using monitoring equipment specialized for each task, including use of a PID during fieldwork to screen for volatile organic vapors. All equipment will be properly stored (within buildings or construction trailers when not in use) and calibrated (as warranted) in accordance with the manufacturer's instructions (instrument malfunction is normally apparent during calibration). In the event of malfunction, equipment will be cleaned and tested. Equipment testing, inspection and maintenance will be the responsibility of the Project Manager and OSC. Any other equipment selected for field measurements will be similarly managed.

2.6.2 Inspection/Acceptance of Supplies and Consumables

All supplies and consumables will be inspected and tested (if necessary) by either the Project Manager or the OSC upon receipt.

The following supplies and consumables will be used for each sample:

- Laboratory-supplied sampling containers, as specified in Section 2.3.1
- Laboratory-supplied materials for PFAS sampling, including trip blanks and PFAS-free cooler
- Plastic tubing for groundwater and vapor sampling
- PFAS-free water for decontamination
- Disposable gloves (nitrile or equivalent)

2.6.3 Data Management

For the purpose of data management, the data can be divided into field and laboratory data.

Field data will be recorded at the time of measurement on written field logs.

Laboratory data will be reviewed upon receipt and summarized in data summary tables. The NYSDEC electronic data deliverable format for the analytical data will be requested from the testing laboratory.

NYSDEC ASP Category B Data Deliverables will be requested from the testing laboratory and forwarded to an independent third party data validator for the development of Data Usability Summary Report (DUSR).

3.0 DATA REVIEW, VALIDATION AND USABILITY

3.1 Field Measurements

If field instruments are determined to be functioning correctly through calibration and measurements of standards, and if there are no inconsistencies between written records and data recorded in the meters, the data will be assumed to be valid and will be accepted as an indication of field conditions. If instruments malfunction prior to field measurement, they will be restored to proper function prior to re-use. If they malfunction immediately after field measurements are taken, the measurements will be retaken as soon as possible. Inconsistencies between written records and recorded meter data will be resolved by re-testing the material, if possible. If re-testing is not possible, (i.e. the sample has been shipped to the laboratory), the inconsistency will be described in appropriate subsequent reporting and the laboratory analysis will be utilized to classify the material. In addition, all field data will be reviewed by the Project Manager for consistency and plausibility.

3.2 Laboratory Analysis

A NYSDOH ELAP-certified laboratory will provide a NYSDEC ASP Category B data package and NYSDEC Electronic Data Deliverable format for the determinative sample analyses.

3.3 Standards, Criteria and Guidance

The following Standards, Criteria and Guidance (SCGs) are applicable for this Site:

Soil

Soil results are compared to SCOs provided in 6 NYCRR Subpart 375, Table 375-6.8(a) Unrestricted Use and 6.8(b) Restricted-Residential Use, Supplemental SCOs and/or Soil Cleanup Levels in NYSDEC CP-51 Soil Cleanup Guidance, Tables 1 to 3, and current NYSDEC guidance for PFAS. SCOs are provided as Attachment C.

Water

Water results are compared to NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values (AWQS), provided in Technical and Operational Guidance Series 1.1.1, and current NYSDEC guidance for PFAS.

Vapor

The State of New York does not have any SCG for volatile chemicals in subsurface vapors. Vapor results will be evaluated in terms of Site data as a whole, and will include any needed discussion of potential vapor intrusion concerns (may include references to applicable NYSDOH guidance).

3.4 Verification and Validation Methods

3.4.1 Verification Method

Once collected, all data will go to the Project Manager for review and verification. Review will involve determining that data has been collected at the proper locations by the proper persons and that all field and laboratory logs are complete. In addition, a Data Usability Summary Report (DUSR) will be prepared by a third, independent party. A resume outlining the education and data validation experience of the individual preparing the DUSR is provided in Attachment D.

3.4.2 Authority for Verification

Authority for verification, validation, and resolution of data issues will be distributed among the investigators. Authority to resolve issues regarding verification of field measurements will rest with the QEP, Project Manager and Mr. Richard Hooker.

4.0 REPORTING REQUIREMENTS

Following review, validation, and verification, all data will be conveyed to users via a Remedial Investigation Report (RIR) in accordance with the requirements of NYSDEC DER-10 Section 3.1.4.

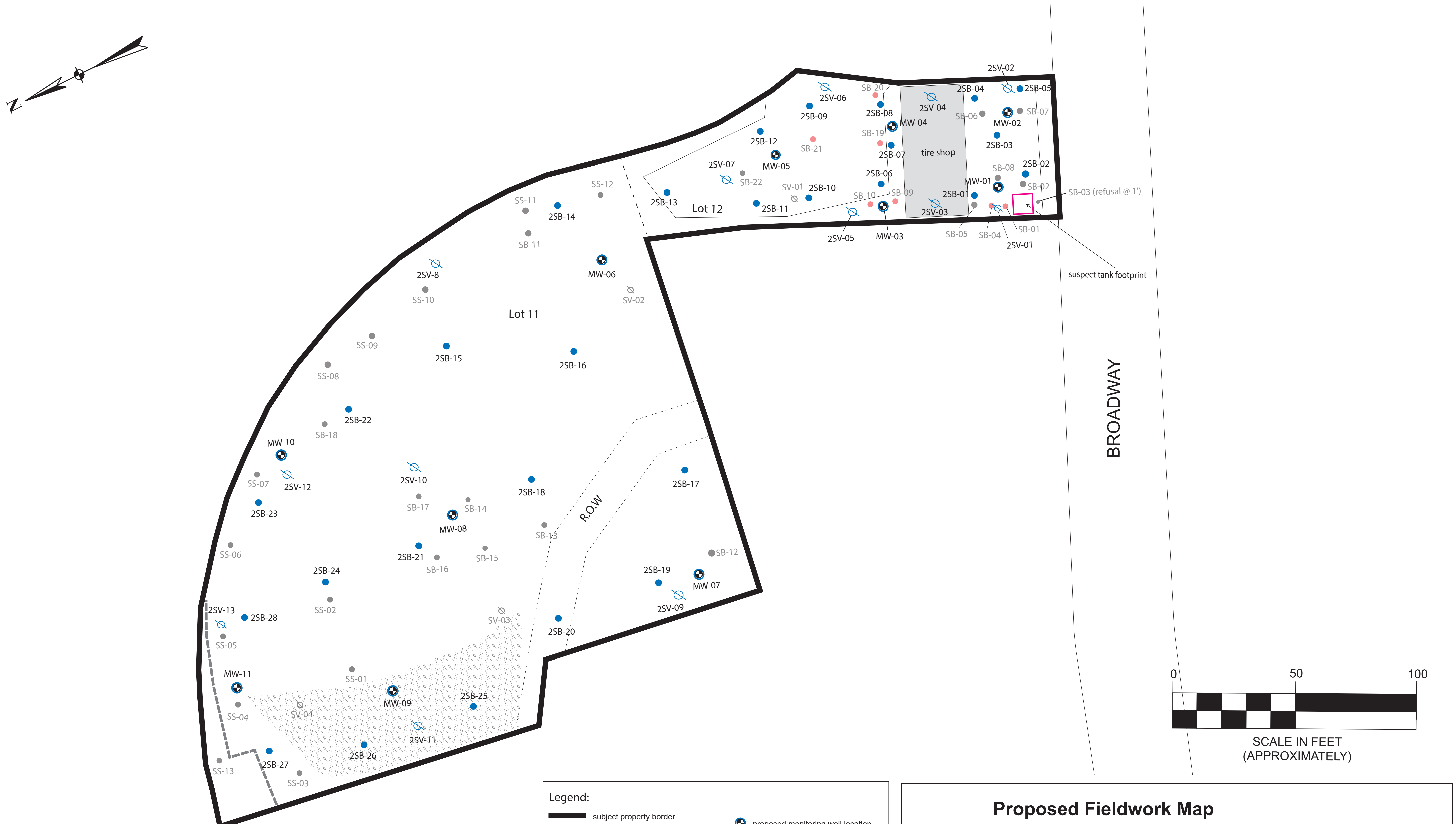
The RIR will summarize all data collected during implementation of the RIWP (and any additional work), and will include, at a minimum:

- Descriptions of fieldwork activities and observations;
- Summaries of laboratory analytical results from sampling events, described in the report text and provided in data summary tables, as well as DUSRs for all data;
- Characterization of contamination sources (including environmental fate and transport);
- A qualitative human exposure assessment;
- Accounts of any deviations from RIWP procedural requirements; and,
- Conclusions drawn from applicable, available data.

ATTACHMENT A

Figures

GALLAGHER BASSETT | TECHNICAL SERVICES



Legend:

- subject property border
- lot line
- retaining wall
- wetlands
- previous soil sample location
- previous soil boring with evidence of petroleum contamination
- previous soil vapor location
- proposed monitoring well location
- proposed soil vapor location
- proposed boring location

Proposed Fieldwork Map

Saranac Lofts BCP Site C517015
120 Broadway
Village of Saranac Lake
Franklin County, New York

File: 21003-0066

Scale as shown

January 2022 | Figures

All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

ATTACHMENT B

Standard Operating Procedures

GALLAGHER BASSETT | TECHNICAL SERVICES

STANDARD OPERATING PROCEDURES

Fieldwork Sampling
and
Decontamination

Updated April 2021

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TABLE OF CONTENTS

ATTACHED SUPPLEMENTS

I. INTRODUCTION

This document provides Standard Operating Procedures (SOPs) for use by Gallagher Bassett Technical Services (GBTS) personnel during fieldwork events that require the collection of soil, groundwater, soil vapor and/or air samples. General procedures are presented below; detailed protocols, as available, are provided as supplemental attachments. Equipment checklists, forms and calibration documents are maintained at GBTS offices. All SOPs and supporting documentation are periodically updated.

II. FIELDWORK SAMPLING

Fieldwork sampling procedures are described below. Selection of field equipment will be based on anticipated site conditions (updated check-lists of equipment and supplies required for sampling activities are maintained at the local field office). All equipment operations will be in accordance with applicable operating manuals and specifications, and will be conducted (as needed) by an experienced subcontractor holding applicable permits/licenses. Decontamination procedures will be implemented as warranted during all fieldwork activities. Special requirements for PFAS sampling are noted in Section III.

A. Procedures to be Conducted Prior to Fieldwork

Prior to the initiation of any ground-intrusive fieldwork, a request for a complete utility markout of the fieldwork site will be submitted to an appropriate service, as required by state regulations. Confirmation of underground utility locations will be secured and a field check of the utility markout will be conducted prior to the extension of soil borings[1].

A Fieldwork Map and Work Plan, indicating sampling locations and objectives, will be prepared prior to fieldwork activities, and sampling locations will be confirmed and located prior to starting work.

B. General Fieldwork Methodology

At the start of the wok day, all on-site personnel, including environmental subcontractors and observers, will be briefed on planned activities and the contents of the site-specific Health and Safety Plan (HASP). Independent field logs will be utilized to document relevant information, including arrival and departure times of on-site personnel, safety meetings, basic weather conditions, and detailed notes and drawings documenting all fieldwork activities and/or any other relevant events and conditions.

On-site personnel will be properly dressed for the intended activities[2] and the anticipated weather conditions, including use of personnel protective equipment in accordance with the HASP.

Sampling locations will be determined in the field, measured to the nearest 0.5-foot relative to a fixed on-site marker, and will be recorded in logbooks for inclusion in all final maps.

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1 Markout requirements apply to any ground intrusive methodologies, including the extension of test pits.

2 Special care is required when for sampling of PFAS; see Section IV

Media will be collected in accordance with the Quality Assurance Project Plan (QAPP) and in a manner consistent with NYSDEC and/or NYSDOH requirements, including protocols for handling and custody. New, dedicated disposable nitrile gloves will be worn at each sampling location, and will be changed frequently based on field conditions. Fieldwork personnel will assess media characteristics (e.g., soil type, presence of debris, indications of contamination, etc.) and record all observations in log books.

On-site senior personnel will be responsible for: a) identifying any materials that require special handling, such as media that may contain high levels of contaminants or is grossly contaminated or likely to be hazardous; b) ensuring that identified materials are properly securely stored on-site (stockpiled on plastic and covered, or placed in approved containers), pending characterization and proper disposition; and, c) ensuring that unforeseen environmental conditions are managed in accordance with applicable federal and state regulations.

Sample collection from recovered media will be performed without unnecessary delay. Samples will be placed into labeled containers provided by the laboratory, stored in dedicated coolers kept at 4 (+/-2) °C and handled under proper chain of custody. All samples will be shipped to a NYSDOH ELAP certified laboratory via laboratory courier (either upon completion of each day of sample collection activities, or the following day after overnight storage in a dedicated sample refrigerator).

C. Extension of Soil Borings

Soil borings will be extended using either hand-held or mechanized equipment, based on site conditions and Work Plan requirements. Mechanized equipment includes using either direct push technology (DPT) or rotary methods, including hollow stem auger (HSA) and sonic drilling. The small size of DPT rigs allows for sampling in tight spaces and areas that are sensitive to the use of heavy equipment. DPT can be used in overburden soils where the soil texture allows for direct push of sampling equipment. A HSA or sonic rig will be utilized if significant subsurface obstructions (e.g., large cobbles, boulders, concrete, etc) are (or are expected to be) encountered.

Hand borings will be extended (as warranted) using manual DPT equipment (e.g., Geoprobe), which includes a collection barrel lined with disposable acetate sleeves, extension rods and a slide hammer. The barrel will collect samples from discreet intervals of 2 feet. Hand boring methods are generally restricted to shallow soil sampling (0 to 6' below grade) and may be employed/attempted if access by mechanized equipment is not practical.

DPT will typically be utilized during the extension of borings in overburden soils. The DPT rig will be equipped with a macro-core sampling barrel (minimum diameter 4") lined with disposable acetate sleeves. The barrel will collect samples from discreet intervals of either 4 or 5 feet. HSA rigs will use a continuous hollow stem auger with a split-spoon (collection interval of 2 feet) or other collection device. This system drives drill cuttings to the surface as drilling progresses, which will require management. Sonic drill rigs will utilize coring barrels of various lengths lined with plastic tubing.

Bore hole openings will be periodically screened with a photoionization detector (PID).

D. Installation and Development of Monitoring wells

Groundwater monitoring wells will be installed by the drilling subcontractor. Unless otherwise specified, monitoring wells will be constructed of two-inch PVC casing with a ten-foot length of 0.01-inch slotted PVC well screening across the water table. No glue will be used to thread the casing lengths. A minimum of 2 feet of screening will extend above the water table, with approximately 8 feet below the water level (depth to water will be inferred based on saturated soils encountered during installation, or from data from existing groundwater monitoring wells).

The annular space between the well screen and the borehole will be backfilled with clean silica sand to approximately two feet above the screen. A seal consisting of at least 12 inches of hydrated bentonite clay will be placed above the sand pack and the remaining annular space will be grouted with cement.

A locked cap with vent will be installed at the top of the PVC riser (well protection will be in accordance with the Work Plan, including use of secure "drive-over" metal cover or stick-up metal outer casing). A surveyor's transit level will be used to determine the elevation of the top of the PVC well riser, relative to a permanent on-site marker, for use in determining relative groundwater elevations. Well locations and relative elevations will be recorded in field logs and indicated on all fieldwork maps.

The wells will be developed one week following installation. The wells will be developed with a properly decontaminated mechanical pump and dedicated polyethylene tubing in order to clear fine-grained material that may have settled around the well screen and to enhance the natural hydraulic connection between the well screen and the surrounding soils. Well development will begin at the top of the screened interval to prevent clogging of the pump within the well casing. Well development will be discontinued when the discharge water is free of obvious sediment, turbidity is below 50 NTUs and indicator parameters (e.g., dissolved oxygen, temperature, etc.) have stabilized. Upon completion, the pump assembly will be removed from the well while the pump is still running to avoid discharge of purged water back into the well. Development water will be securely stored on-site pending laboratory analysis.

E. Soil Sampling

Recovered sampling equipment will be placed on a clean surface (folding table, plastic sheeting, etc.) and opened (liners will be sliced with a clean razor knife). Recovered soils will be observed for potential contamination through observation and use of properly calibrated field instruments, e.g., PID. Samples will be collected directly from the sampling device. The volume of material collected will be sufficient for the required analyses and for reasonably anticipated potential additional analyses. Soil to be analyzed for volatile organic compounds (VOCs) will be collected following USEPA Method 5035 protocols, using laboratory sampling kits. Samples to be analyzed for parameters other than VOCs will be collected as either grab or composite samples, using disposable plastic trowels or properly decontaminated stainless steel instruments, or directly by the fieldwork technician using dedicated, fresh disposable nitrile gloves.

F. Groundwater Sampling

Groundwater sampling will be conducted using USEPA "Low-Stress" protocols, which are detailed in Supplement A. Sampling will be conducted using the following general procedures:

1. Groundwater sampling will begin at the potentially least contaminated well (as determined from well location and/or previous data) and proceed to the potentially most contaminated well. The field technician will check and record the condition of all monitoring wells for damage or evidence of tampering before initiating sampling. Plastic will be placed around wells to minimize potential contamination of sampling equipment from the ground surface, and all monitoring, purging and sampling equipment will be placed on the sheeting.
2. The protective casing on the well will be unlocked, the air in the well head will be screened with a PID, and static water level (from the top of the casing) will be measured with a decontaminated water-level meter. A peristaltic pump with plastic tubing, or a submersible pump attached to tubing (if required by Site conditions, e.g., well depth) will be used for sampling. The tubing (or pump attached to tubing) will be slowly lowered until reaching two to three feet off of the well bottom to prevent disturbance and re-suspension of any remaining sediment.
3. Depth to water will be measured to nearest 0.01 feet, relative to a reference measuring point on the well casing (if no pre-existing reference point is found, a reference point will be marked on the inner casing and noted in the field logbook). The water level will be measured before the pump is started and at intervals of every three to five minutes. Pumping rates will be reduced (as needed) to the minimum capabilities of the pump to ensure stabilization of the water level (drawdown of 0.3 feet or less).
4. During pumping, field indicator parameters (turbidity, temperature, specific conductance, pH, redox potential, and dissolved oxygen) will be monitored and recorded approximately every five minutes. The well will be considered stabilized when the indicator parameters have stabilized for three consecutive readings (the minimum purge interval will be at least 15 minutes).
5. All groundwater samples will be collected in a manner consistent with the QAPP.
6. The protective cap on the well will be replaced and locked following sampling, and the field sampling crew will move to the next most contaminated well and the process will be repeated.

G. Soil Vapor Sampling

Soil vapor sampling will be conducted consistent with applicable NYSDOH guidance and fieldwork protocols detailed in Supplement B. Sampling will be conducted using the following general procedures:

Soil vapor samples may be collected from beneath building foundations or paved areas, or from exterior areas not otherwise covered by material that trap soil vapor at the surface. Concrete slabs and exterior pavement will generally be breached with rotary equipment, which produce a small-diameter hole. The hole will be extended into underlying soil/sub-base to a depth required by the sampling technology (typically 6 to 12 inches below the base of the overlying materials for temporary installations). Sampling at exterior areas will require extension of a borehole to at least 3 to 4 feet below the surface (greater depths may be specified by the Work Plan).

Construction details for both temporary and permanent soil vapor implants are provided in the Supplement. All soil vapor probes will be installed with a properly sealed surface opening to prevent ambient air from entering the system.

A tracer gas (e.g., helium) will be used at soil vapor sampling locations to verify that adequate sampling techniques are being implemented (i.e. to verify the absence of significant infiltration of outside air), in accordance with applicable NYSDOH guidance. The space around the sampling point will be enclosed and sealed (with a metal hemisphere and clay) in order to introduce a tracer gas (helium) into the area surrounding the probe point. Real-time sampling equipment (Radiodetection Multi-vapor Leak Locator, model MDG 2002, or equivalent) will be utilized to determine when the interior atmosphere in the enclosure reaches a concentration of 80%, and the tubing for the vapor implant will then be sampled for the tracer gas. If helium is detected in vapor at a concentration greater than 10%, the annular seal will be repaired and gas tracing performed again until less than 10% helium is detected.

Vapor in the sampling tubing will be screened with a PID for VOCs prior to purging. For all sampling locations, the exact purge volume will be dependent on the boring depth and subsequent length of tubing. Three borehole and tubing volumes will be purged prior to collection. The purge rate will not exceed 0.2 liters per minute. Following purging of ambient air from the collection device, soil vapor samples will be (at a rate not exceeding 0.2 liters per minute) into individual laboratory-certified clean Summa canisters equipped with flow regulators (sampling period as specified in the Work Plan).

III. GENERAL DECONTAMINATION PROTOCOL

Consistent decontamination methods will be used to reduce or eliminate contamination and cross-contamination of samples by field equipment, other samples or personnel, and to minimize potential exposures caused by the spread of contaminants. Decontamination will occur any time a sampling tool or instrument used in field investigations contacts sampled media or personnel using the equipment. These procedures will be used in conjunction with all non-dedicated (i.e. reusable) equipment used during the handling, sampling or measuring of environmental media, and will be implemented primarily on-site at the point of use or at a designated equipment decontamination station at the project site.

Types of equipment usually requiring decontamination include pumps, gauges, augers and sampling barrels. Drilling equipment, water level meters, submersible pumping equipment, and any other non-dedicated monitoring and sampling equipment will be decontaminated prior to the start of fieldwork, after the collection of each media sample, and between boring intervals and/or sampling locations. Water quality parameter sensors and flow-through cell will be cleaned between sampling locations in accordance with the manufacturer's recommendations.

Materials and methods for decontamination are provided in Supplement C.

IV. PFAS SAMPLING - SPECIAL REQUIREMENTS

Special requirements apply to all fieldwork procedures during sampling for per- and polyfluoroalkyl substances (PFAS). Because of the potential presence of PFAS in common consumer products and in equipment typically used to collect media and the need for very low reporting limits, special handling and care must be taken when collecting samples for PFAS analysis to avoid sample contamination. There is only limited research regarding how the use of various procedures and materials affect sample results, and this SOP therefore represent a conservative approach. Field personnel should take precautions to avoid items that are likely to contain PFAS at the sampling site as well as avoid specific items during the sampling event, and must frequently check for updates to this SOP. The most recent NYSDEC guidance document (June 2019), as well as a *PFAS Sampling Quick Reference Field Guide* (provided by Michigan Department of Environmental Quality), are provided in Supplement D.

A. EQUIPMENT AND SUPPLIES

Avoid personal protective equipment (PPE, including clothing chemically treated for UV protection) and field supplies that may include PFAS and which could cross-contaminate field samples. Personal body products such as shampoos, moisturizers and cosmetics may contain PFAS and should be used with care the day of sampling. Sunblock and insect repellent ingredients need to be verified to ensure that they do not contain PFAS before use in the field.

Food and food packaging should not enter the sampling zone.

Water resistant, waterproof, stain-treated, clothing recently washed with fabric softeners, and new clothing should be avoided. If sampling in inclement weather a canopy tent may be a good option (note, however, that water resistant/waterproof material likely contains PFAS and disposable gloves should be worn when putting up and/or moving the tent.

Waterproof field books may contain PFAS and should not be used. Documentation of field activities should be on loose paper on an aluminum clipboard or in a waterproof field book that does not use PFAS. Field notes should be taken with a ball point pen (avoid large felt tip markers; fine and ultra-fine point Sharpie® markers are acceptable). Sticky notes, etc., may contain PFAS and should be avoided (pre-printed labels should be verified PFAS-free.

Disposable, powderless, nitrile gloves must be worn during PFAS sampling and handling activities and should be changed frequently during and between sampling activities.

Sealed laboratory-supplied sampling containers may be placed into LDPE resealable storage bags (e.g., Ziploc®) that will not contact the sample media.

Chemical ice packs should not be used unless it is verified that they are PFAS-free. Samples for PFAS analysis should be placed on water ice immediately and should ideally be received by the laboratory at a temperature less than 6º Celsius.

B. GENERAL SAMPLING PROCEDURES

Sampling must be conducted in accordance with the project-specific QAPP, including use of laboratory-supplied sample containers.

If non-dedicated non-disposable equipment is used for sampling, proper decontamination is necessary. Decontamination reagents should be checked to ensure that they do not contain PFAS before use. Similarly, water used for decontamination should be checked (i.e. field equipment blanks) to verify that it does not contain PFAS. It may be necessary to collect samples of decontamination water prior to use to ensure that water being used for decontamination does not contain PFAS.

Soil samples should be collected using stainless steel, acetate, or polypropylene constructed equipment. Liners for soil sampling should not contain PFAS.

If a monitoring well has dedicated tubing that may contain PFAS, the dedicated tubing should be removed, and silicone or HDPE tubing should be used to sample for PFAS following at least one well volume purge prior to sampling for PFAS. The recommended length of time that dedicated tubing should be removed, and the recommended amount of purging conducted prior to sampling where dedicated tubing has been present is variable. If it is anticipated that dedicated tubing may be a source of PFAS cross contamination extra precaution, such as removal of the tubing 14 days prior to sampling or purging of three well volumes, should be considered.

Care should be taken to not cross contaminate PFAS samples if samples for non-PFAS analyses are being collected. For example, if VOCs and PFAS water samples are being collected, the VOCs would be collected using a peristaltic pump with HDPE and silicone tubing, and then a second set of samples would be collected for PFAS after changing gloves and switching sample container sets.

If transfer bottles are necessary for surface water sample collection, they should be PFAS-free and made of the same material as the laboratory provided sample containers.

If a water supply is to be sampled, both a pre- and post-treatment sample may be necessary. Carbon filtration, reverse osmosis, and other filter media may bias laboratory results for PFAS. Water should be allowed to run freely until water quality parameter stabilization has occurred, typically between 3 and 5 minutes. Water flow rate should be reduced for minimal aeration.

Do not filter samples for PFAS analysis.

C. DECONTAMINATION OF PFAS SAMPLING EQUIPMENT

Special requirements apply to decontaminating non-dedicated equipment used for PFAS sampling. Laboratory supplied PFAS-free deionized water is preferred for decontamination (commercially available deionized water in an HDPE container, and municipal drinking water, may be used for decontamination if verified to be PFAS-free. Sampling equipment can be scrubbed using a polyethylene or polyvinyl chloride (PVC) brush to remove particulates. Decontamination procedures should include triple rinsing with PFAS-free water. Note that a QAPP prepared for NYSDEC program sites prohibits use of Liquinox®.

V. INVESTIGATION DERIVED WASTES

Disposal of any waste materials will be in accordance with provisions of the applicable site-specific Work Plan. If not otherwise specified: 1) discarded personal protective equipment and other fieldwork supplies not significantly impacted by free petroleum or other gross contaminants will be disposed as municipal solid waste; and, 2) well development purge water, spent absorbents or other significantly contaminated materials, and/or any recovered free-petroleum, will be properly stored on-site, in properly labeled and secured containers, pending final off-site disposal at a permitted facility.

SUPPLEMENT A

USEPA Groundwater Sampling Methods

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

Table of Contents

1.0 USE OF TERMS

Equipment blank: 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.

Field duplicates: 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.).

Indicator field parameters: 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.

Matrix Spike/Matrix Spike Duplicates: Used by the laboratory in its quality assurance program. Consult the laboratory for the sample volume to be collected.

Potentiometric Surface: 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

Stabilization: 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.

Temperature blank: 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.

Trip blank (VOCs): 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.

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 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 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 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.

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.

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.

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 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

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).

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.

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 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 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. <u>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:</u>

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 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 (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.

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.

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.

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

Cohen, R.M. and J.W. Mercer, 1993, *DNAPL Site Evaluation*; C.K. Smoley (CRC Press), Boca Raton, Florida.

Robert W. Puls and Michael J. Barcelona, *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*, April 1996 (EPA/540/S-95/504).

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U.S. Environmental Protection Agency, 1987, *A Compendium of Superfund Field Operations Methods*; Washington, DC (EPA/540/P-87/001).

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.

U.S Environmental Protection Agency, EPA SW-846.

U.S Environmental Protection Agency, 40 CFR 136.

U.S Environmental Protection Agency, 40 CFR 141.

Vroblesky, Don A., Clifton C. Casey, and Mark A. Lowery, Summer 2007, Influence of Dissolved Oxygen Convection on Well Sampling, *Ground Water Monitoring & Remediation* 27, no. 3: 49-58.

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).

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 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:

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).

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.

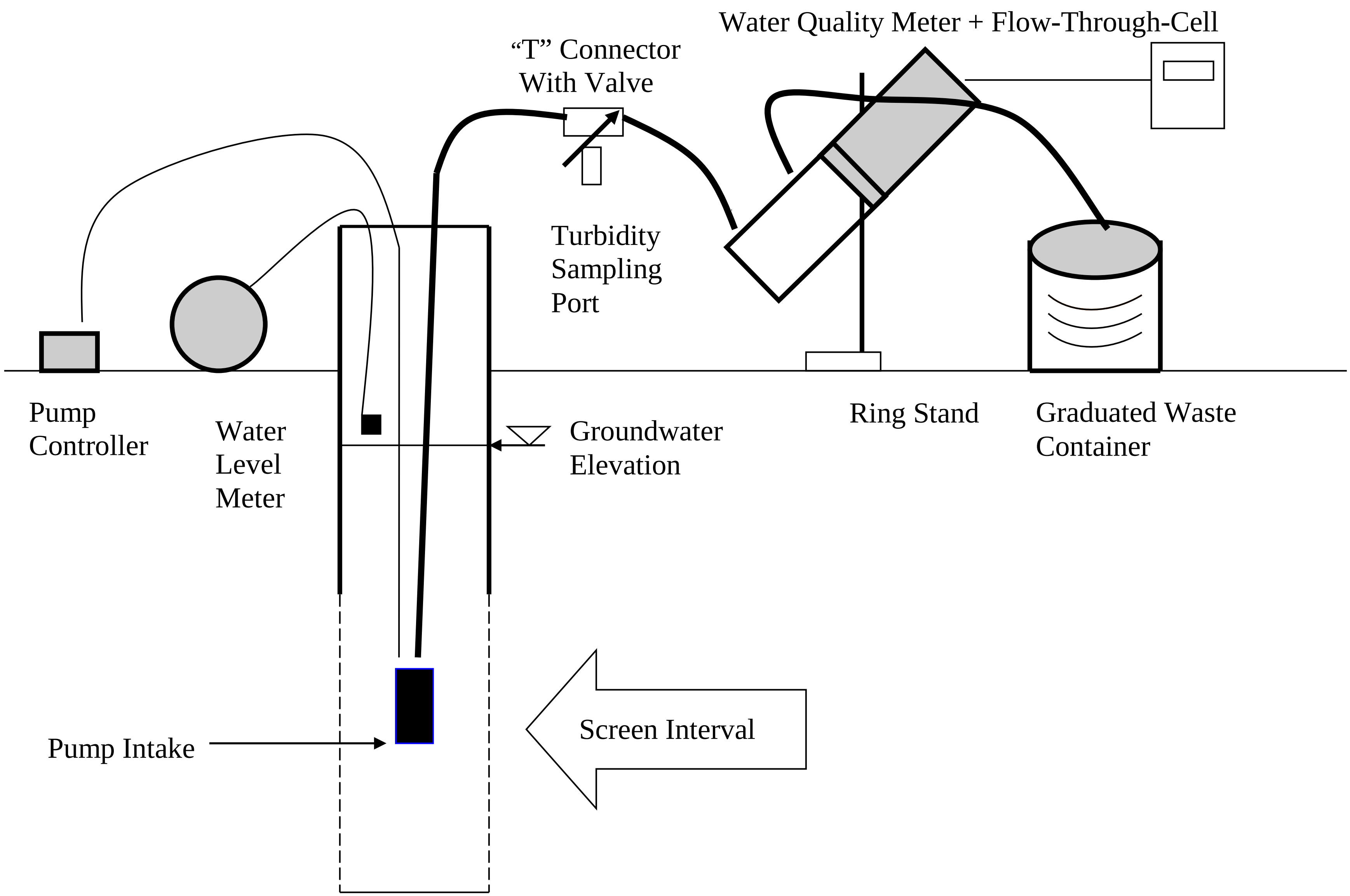
If the pump's tubing is not completely filled with water and the samples are being collected for VOCs and/or dissolved gases analyses using a centrifugal or peristaltic pump, do the following:

> 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



APPENDIX C

EXAMPLE (Minimum Requirements)

WELL PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name)________________________________
Well Number________________ Date________________________
Field Personnel____
Sampling Organization______________________________________
Identify MP____

Depth to _______/________ of screen
(below MP) top bottom
Pump Intake at (ft. below MP)_________
Purging Device; (pump type)__________
Total Volume Purged _______________

Clock Time 24 HR	Water Depth below MP ft	Pump Dial[1]	Purge Rate ml/min	Cum. Volume Purged liters	Temp. "C	Spec. Cond.[2] µS/cm	pH	ORP[3] mv	DO mg/L	Tur-bidity NTU	Comments
Stabilization Criteria					3%	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)

SUPPLEMENT B

NYSDOH Vapor and Air Sampling Methods

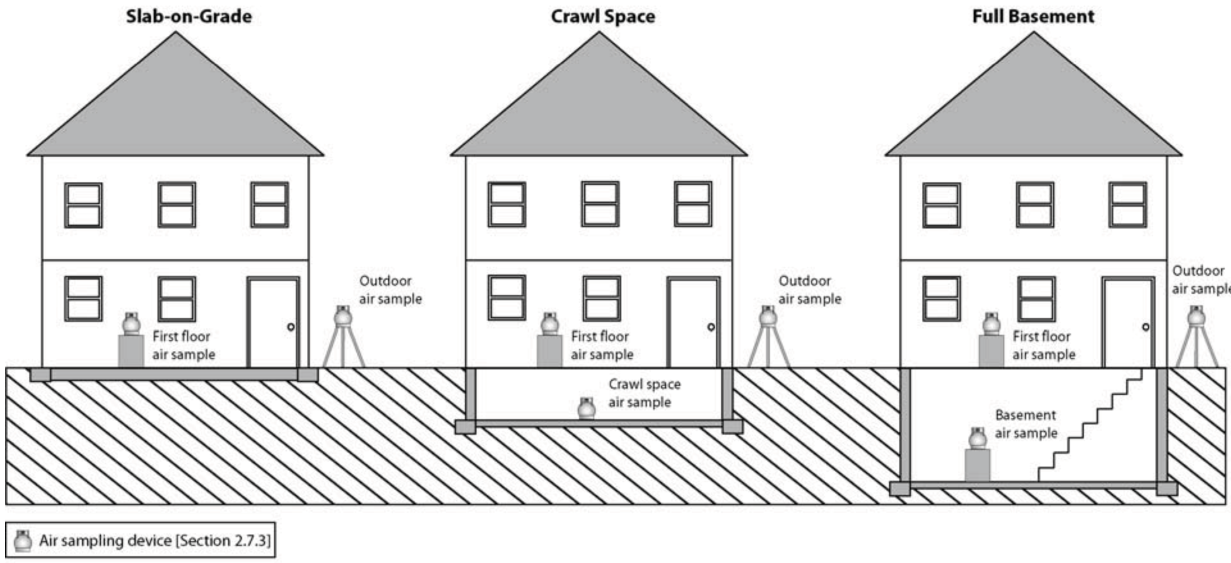


Figure 2.1
Schematic of indoor and outdoor air sampling locations

2.6.4 <u>Outdoor air</u>

Typically, an outdoor air sample is collected outside of each building where an indoor air sample is collected. However, if several buildings are being sampled within a localized area, representative outdoor air samples may be appropriate. For example, one outdoor air sample may be sufficient for three houses being sampled in a cul-de-sac. Outdoor air samples should be collected from a representative upwind location, away from wind obstructions (e.g., trees or bushes), and at a height above the ground to represent breathing zones (3 to 5 feet) [Figure 2.1]. A representative sample is one that is not biased toward obvious sources of volatile chemicals (e.g., automobiles, lawn mowers, oil storage tanks, gasoline stations, industrial facilities, etc.). For buildings with HVAC systems that draw outdoor air into the building, an outdoor air sample collected near the outdoor air intake may be appropriate.

2.7 Sampling protocols

The procedures recommended here may be modified depending on site-specific conditions, the sampling objectives, or emerging technologies and methodologies. Alternative sampling procedures should be described thoroughly and proposed in a work plan submitted for review by the State. The State will review and comment on the proposed procedure and consider the efficacy of the alternative sampling procedure based on the objectives of investigation. In all cases, work plans should thoroughly describe the proposed sampling procedure. Similarly, the procedures that were implemented in the field should be documented and included in the final report of the sampling results.

2.7.1 Soil vapor

Soil vapor probe installations [Figure 2.2] may be permanent, semi-permanent or temporary. In general, permanent or semi-permanent installations are preferred for data consistency reasons and to ensure outdoor air infiltration does not occur. Temporary probes should only be used if measures are taken to ensure that an adequate surface seal is created to prevent outdoor air infiltration and if tracer gas is used at every sampling location. [See Section 2.7.5 for additional information about the use of tracer gas when collecting soil vapor samples.] Soil vapor implants or probes should be constructed in the same manner at all sampling locations to minimize possible discrepancies. The following procedures should be included in any permanent construction protocol:

a. implants should be installed using an appropriate method based on site conditions (e.g., direct push, manually driven, auger — if necessary to attain the desired depth or if sidewall smearing is a concern, etc.);

b. porous, inert backfill material (e.g., glass beads, washed #1 crushed stone, etc.) should be used to create a sampling zone 1 to 2 feet in length;

c. implants should be fitted with inert tubing (e.g., polyethylene, stainless steel, nylon, Teflon®, etc.) of the appropriate size (typically 1/8 inch to 1/4 inch diameter) and of laboratory or food grade quality to the surface;

d. soil vapor probes should be sealed above the sampling zone with a bentonite slurry for a minimum distance of 3 feet to prevent outdoor air infiltration and the remainder of the borehole backfilled with clean material;

e. for multiple probe depths, the borehole should be grouted with bentonite between probes to create discrete sampling zones or separate nested probes should be installed [Figure 2.2]; and

f. steps should be taken to minimize infiltration of water or outdoor air and to prevent accidental damage (e.g., setting a protective casing around the top of the probe tubing and grouting in place to the top of bentonite, sloping the ground surface to direct water away from the borehole like a groundwater monitoring well, etc.).

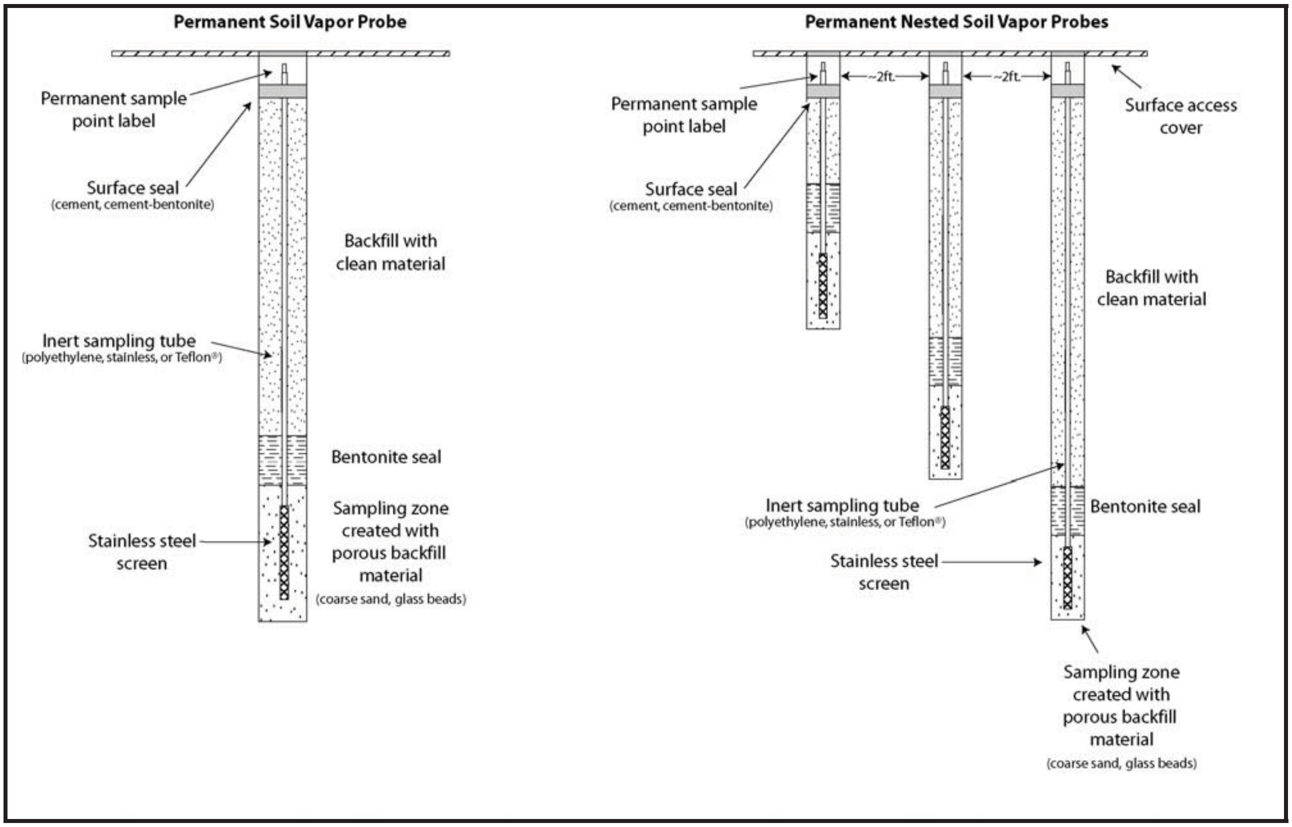


Figure 2.2

Schematics of a generic permanent soil vapor probe
and permanent nested soil vapor probes

[Note: Many variations exist and may be proposed in a work plan. Proposed installations should meet the sampling objectives and requirements of the analytical methods.]

To obtain representative samples and to minimize possible discrepancies, soil vapor samples should be collected in the following manner at all locations:

a. at least 24 hours after the installation of permanent probes and shortly after the installation of temporary probes, one to three implant volumes (i.e., the volume of the sample probe and tube) should be purged prior to collecting the samples;

b. flow rates for both purging and collecting should not exceed 0.2 liters per minute to minimize outdoor air infiltration during sampling;

c. samples should be collected, using conventional sampling methods, in an appropriate container — one which

    i. meets the objectives of the sampling (e.g., investigation of areas where low or high concentrations of volatile chemicals are expected; to minimize losses of volatile chemicals that are susceptible to photodegradation),

    ii. is consistent with the sampling and analytical methods (e.g., low flow rate; Summa® canisters if analyzing by using EPA Method TO-15), and

    iii. is certified clean by the laboratory;

d. sample size depends upon the volume of that will achieve minimum reporting limits [Section 2.9]; and

e. a tracer gas (e.g., helium, butane, sulfur hexafluoride, etc.) should be used when collecting soil vapor samples to verify that adequate sampling techniques are being implemented (i.e., to verify infiltration of outdoor air is not occurring) [Section 2.7.5].

In some cases, weather conditions may present certain limitations on soil vapor sampling. For example, condensation in the sample tubing may be encountered during winter sampling due to low outdoor air temperatures. Devices, such as tube warmers, may be used to address these conditions. Anticipated limitations to the sampling should be discussed prior to the sampling event so appropriate measures can be taken to address these difficulties and produce representative and reliable data.

When soil vapor samples are collected, the following actions should be taken to document local conditions during sampling that may influence interpretation of the results:

a. if sampling near a commercial or industrial building, uses of volatile chemicals during normal operations of the facility should be identified;

b. outdoor plot sketches should be drawn that include the site, area streets, neighboring commercial or industrial facilities (with estimated distance to the site), outdoor air sampling locations (if applicable), and compass orientation (north);

c. weather conditions (e.g., precipitation and outdoor temperature) should be noted for the past 24 to 48 hours; and

d. any pertinent observations should be recorded, such as odors and readings from field instrumentation.

Additional information that could be gathered to assist in the interpretation of the results includes barometric pressure, wind speed and wind direction.

The field sampling team should maintain a sample log sheet summarizing the following:

a. sample identification,

b. date and time of sample collection,

c. sampling depth,

d. identity of samplers,

e. sampling methods and devices,

f. purge volumes,

g. volume of soil vapor extracted,

h. if canisters used, the vacuum before and after samples were collected,

i. apparent moisture content (dry, moist, saturated, etc.) of the sampling zone, and

j. chain of custody protocols and records used to track samples from sampling point to analysis.

2.7.2 Sub-slab vapor

During colder months, heating systems should be operating to maintain normal indoor air temperatures (i.e., 65 – 75 °F) for at least 24 hours prior to and during the scheduled sampling time. Prior to installation of the sub-slab vapor probe, the building floor should be inspected and any penetrations (cracks, floor drains, utility perforations, sumps, etc.) should be noted and recorded. Probes should be installed at locations where the potential for ambient air infiltration via floor penetrations is minimal.

Sub-slab vapor probe installations [Figure 2.3] may be permanent, semi-permanent or temporary. A vacuum should not be used to remove drilling debris from the sampling port. Sub-slab implants or probes should be constructed in the same manner at all sampling locations to minimize possible discrepancies. The following procedures should be included in any construction protocol:

a. permanent recessed probes should be constructed with brass or stainless steel tubing and fittings;
b. temporary probes should be constructed with inert tubing (e.g., polyethylene, stainless steel, nylon, Teflon®, etc.) of the appropriate size (typically 1/8 inch to 1/4 inch diameter), and of laboratory or food grade quality;
c. tubing should not extend further than 2 inches into the sub-slab material;
d. porous, inert backfill material (e.g., glass beads, washed #1 crushed stone, etc.) should be added to cover about 1 inch of the probe tip for permanent installations; and
e. the implant should be sealed to the surface with non-VOC-containing and non-shrinking products for temporary installations (e.g., permagum grout, melted beeswax, putty, etc.) or cement for permanent installations.

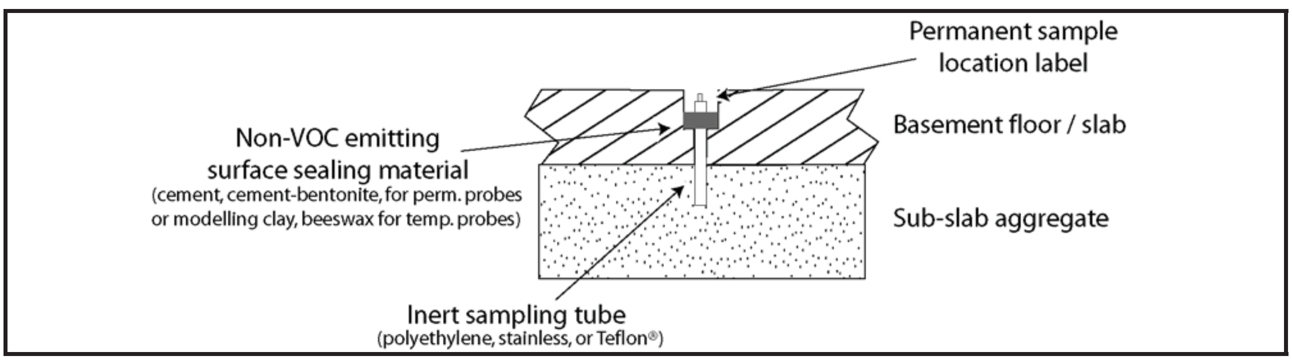


Figure 2.3

Schematic of a generic sub-slab vapor probe

[Note: Many variations exist and may be proposed in a work plan. Proposed installations should meet the sampling objectives and requirements of the analytical methods.]

To obtain representative samples that meet the data quality objectives, sub-slab vapor samples should be collected in the following manner:

a. after installation of the probes, one to three volumes (i.e., the volume of the sample probe and tube) must be purged prior to collecting the samples to ensure samples collected are representative;

b. flow rates for both purging and collecting must not exceed 0.2 liters per minute to minimize ambient air infiltration during sampling; and

c. samples should be collected, using conventional sampling methods, in an appropriate container — one which

    i. meets the objectives of the sampling (e.g., investigation of areas where low or high concentrations of volatile chemicals are expected; to minimize losses of volatile chemicals that are susceptible to photodegradation),

    ii. is consistent with the sampling and analytical methods (e.g., low flow rate; Summa® canisters if analyzing by using EPA Method TO-15), and

    iii. is certified clean by the laboratory;

d. sample size depends upon the volume of that will achieve minimum reporting limits [Section 2.9], the flow rate, and the sampling duration; and

e. ideally, samples should be collected over the same period of time as concurrent indoor and outdoor air samples.

When sub-slab vapor samples are collected, the following actions should be taken to document conditions during sampling and ultimately to aid in the interpretation of the sampling results [Section 3]:

a. historic and current storage and uses of volatile chemicals should be identified, especially if sampling within a commercial or industrial building (e.g., use of volatile chemicals in commercial or industrial processes and/or during building maintenance);

b. the use of heating or air conditioning systems during sampling should be noted;

c. floor plan sketches should be drawn that include the floor layout with sampling locations, chemical storage areas, garages, doorways, stairways, location of basement sumps or subsurface drains and utility perforations through building foundations, HVAC system air supply and return registers, compass orientation (north), footings that create separate foundation sections, and any other pertinent information should be completed;

d. outdoor plot sketches should be drawn that include the building site, area streets, outdoor air sampling locations (if applicable), compass orientation (north), and paved areas;

e. weather conditions (e.g., precipitation and indoor and outdoor temperature) and ventilation conditions (e.g., heating system active and windows closed) should be reported; and

f. any pertinent observations, such as spills, floor stains, smoke tube results, odors and readings from field instrumentation (e.g., vapors via PID, ppbRAE, Jerome Mercury Vapor Analyzer, etc.), should be recorded.

Additional documentation that could be gathered to assist in the interpretation of the results includes information about air flow patterns and pressure relationships obtained by using smoke tubes or other devices (especially between floor levels and between suspected contaminant sources and other areas), the barometric pressure and photographs to accompany floor plan sketches.

The field sampling team should maintain a sample log sheet summarizing the following:

a. sample identification,
b. date and time of sample collection,
c. sampling depth,
d. identity of samplers,
e. sampling methods and devices,
f. soil vapor purge volumes,
g. volume of soil vapor extracted,
h. if canisters used, vacuum of canisters before and after samples collected,
i. apparent moisture content (dry, moist, saturated, etc.) of the sampling zone, and
j. chain of custody protocols and records used to track samples from sampling point to analysis.

2.7.3 Indoor air

[Reference: NYSDOH's *Indoor Air Sampling & Analysis Guidance (February 1, 2005)*]

During colder months, heating systems should be operating to maintain normal indoor air temperatures (i.e., 65 – 75 °F) for at least 24 hours prior to and during the scheduled sampling time. If possible, prior to collecting indoor samples, a pre-sampling inspection [Section 2.11.1] should be performed to evaluate the physical layout and conditions of the building being investigated, to identify conditions that may affect or interfere with the proposed sampling, and to prepare the building for sampling. This process is described in Section 2.11.1.

In general, indoor air samples should be collected in the following manner:

a. sampling duration should reflect the exposure scenario being evaluated without compromising the detection limit or sample collection flow rate (e.g., an 8 hour sample from a workplace with a single shift versus a 24 hour sample from a workplace with multiple shifts). To ensure that air is representative of the locations sampled and to avoid undue influence from sampling personnel, samples should be collected for at least 1 hour. If the goal of the sampling is to represent average concentrations over longer periods, then longer duration sampling periods may be appropriate. Typically, 24 hour samples are collected from residential settings;
b. personnel should avoid lingering in the immediate area of the sampling device while samples are being collected;
c. sample flow rates must conform to the specifications in the sample collection method and, if possible, should be consistent with the flow rates for concurrent outdoor air and sub-slab samples; and
d. samples must be collected, using conventional sampling methods, in an appropriate container — one which

i. meets the objectives of the sampling (e.g., investigation of areas where low or high concentrations of volatile chemicals are expected; to minimize losses of volatile chemicals that are susceptible to photodegradation),

ii. is consistent with the sampling and analytical methods (e.g., low flow rate; Summa® canisters if analyzing by using EPA Method TO-15), and

iii. is certified clean by the laboratory.

At sites with tetrachloroethene contamination, passive air monitors that are specifically analyzed for tetrachloroethene (i.e., "perc badges") are commonly used to collect indoor and outdoor air samples. If site characterization activities indicate that degradation products of tetrachloroethene also represent a vapor intrusion concern, perc badges may be used to indicate the likelihood of vapor intrusion (i.e., by using tetrachloroethene as a surrogate) followed, as appropriate, by more comprehensive sampling and laboratory analyses to quantify both tetrachloroethene and its degradation products. Perc badge samples ideally should be collected over a twenty-four hour period, but for no less than eight hours.

The following actions should be taken to document conditions during indoor air sampling and ultimately to aid in the interpretation of the sampling results [Section 3]:

a. historic and current uses and storage of volatile chemicals should be identified, especially if sampling within a commercial or industrial building (e.g., use of volatile chemicals in commercial or industrial processes and/or during building maintenance);

b. a product inventory survey documenting sources of volatile chemicals present in the building during the indoor air sampling that could potentially influence the sample results should be completed [Section 2.11.2];

c. the use of heating or air conditioning systems during sampling should be noted;

d. floor plan sketches should be drawn that include the floor layout with sampling locations, chemical storage areas, garages, doorways, stairways, location of basement sumps or subsurface drains and utility perforations through building foundations, HVAC system supply and return registers, compass orientation (north), footings that create separate foundation sections, and any other pertinent information should be completed;

e. outdoor plot sketches should be drawn that include the building site, area streets, outdoor air sampling locations (if applicable), compass orientation (north), and paved areas;

f. weather conditions (e.g., precipitation and indoor and outdoor temperature) and ventilation conditions (e.g., heating system active and windows closed) should be reported; and

g. any pertinent observations, such as spills, floor stains, smoke tube results, odors and readings from field instrumentation (e.g., vapors via PID, ppbRAE, Jerome Mercury Vapor Analyzer, etc.), should be recorded.

Additional documentation that could be gathered to assist in the interpretation of the results includes information about air flow patterns and pressure relationships obtained by using smoke tubes or other devices (especially between floor levels and between suspected contaminant sources and other areas), the barometric pressure and photographs to accompany floor plan sketches.

The field sampling team should maintain a sample log sheet summarizing the following:

a. sample identification,
b. date and time of sample collection,
c. sampling height,
d. identity of samplers,
e. sampling methods and devices,
f. depending upon the method, volume of air sampled,
g. if canisters are used, vacuum of canisters before and after samples collected, and
h. chain of custody protocols and records used to track samples from sampling point to analysis.

2.7.4 Outdoor air

Outdoor air samples should be collected simultaneously with indoor air samples to evaluate the potential influence, if any, of outdoor air on indoor air quality. They may also be collected simultaneously with soil vapor samples to identify potential outdoor air interferences associated with infiltration of outdoor air into the sampling apparatus while the soil vapor was collected. To obtain representative samples that meet the data quality objectives, outdoor air samples should be collected in a manner consistent with that for indoor air samples (described in Section 2.7.3).

The following actions should be taken to document conditions during outdoor air sampling and ultimately to aid in the interpretation of the sampling results [Section 3]:

a. outdoor plot sketches should be drawn that include the building site, area streets, outdoor air sampling locations, the location of potential interferences (e.g., gasoline stations, factories, lawn movers, etc.), compass orientation (north), and paved areas;
b. weather conditions (e.g., precipitation and outdoor temperature) should be reported; and
c. any pertinent observations, such as odors, readings from field instrumentation, and significant activities in the vicinity (e.g., operation of heavy equipment or dry cleaners) should be recorded.

2.7.5 Tracer gas

When collecting soil vapor samples as part of a vapor intrusion evaluation, a tracer gas serves as a quality assurance/quality control measure to verify the integrity of the soil vapor probe seal. Without the use of a tracer, there is no way to verify that a soil vapor sample has not been diluted by outdoor air.

Depending on the nature of the contaminants of concern, a number of different compounds can be used as a tracer. Typically, sulfur hexafluoride (SF_6) or helium are used as tracers because they are readily available, have low toxicity, and can be monitored with portable measurement devices. Butane and propane (or other gases) could also be used as a tracer in some situations. Compounds other than those mentioned here may be appropriate, provided they meet project-specific data quality objectives. Where applicable, steps should be taken to ensure that the gas used by the laboratory to clean the air sampling container is different from the gas used as a tracer during sampling (e.g., helium).

The protocol for using a tracer gas is straightforward: simply enrich the atmosphere in the immediate vicinity of the area where the probe intersects the ground surface with the tracer gas, and measure a vapor sample from the probe for the presence of high concentrations (> 10%) of the tracer. A cardboard box, a plastic pail, or even a garbage bag can serve to keep the tracer gas in contact with the probe during the testing. If there are concerns about infiltration of ambient air through other parts of the sampling train (such as around the fittings, not just at the probe/ground interface), then consideration should be given to ensuring that the tracer gas is in contact with the entire sampling apparatus. In these cases, field personnel may prefer to use a liquid tracer — soaking paper towels with a liquid tracer and placing the towels around the probe/ground interface, around fittings, and/or in the corner of a shroud.

There are two basic approaches to testing for the tracer gas:

1. include the tracer gas in the list of target analytes reported by the laboratory; or
2. use a portable monitoring device to analyze a sample of soil vapor for the tracer prior to and after sampling for the compounds of concern. (Note that the tracer gas samples can be collected via syringe, Tedlar® bag etc. They need not be collected in Summa® canisters or minicans.)

The advantage of the second approach is that the real time tracer sampling results can be used to confirm the integrity of the probe seals prior to formal sample collection.

Figure 2.4 depicts common methods for using tracer gas. In examples a, b and c, the tracer gas is released in the enclosure prior to initially purging the sample point. Care should be taken to avoid excessive purging prior to sample collection. Care should also be taken to prevent pressure build-up in the enclosure during introduction of the tracer gas. Inspection of the installed sample probe, specifically noting the integrity of the surface seal and the porosity of the soil in which the probe is installed, will help to determine the tracer gas setup. Figure 2.4a may be most effective at preventing tracer gas infiltration, however, it may not be appropriate in some situations depending on site-specific conditions. Figures 2.4b and 2.4c may be sufficient for probes installed in tight soils with well-constructed surface seals. Figure 2d provides an example of using a liquid tracer. In all cases, the same tracer gas application should be used for all probes at any given site.

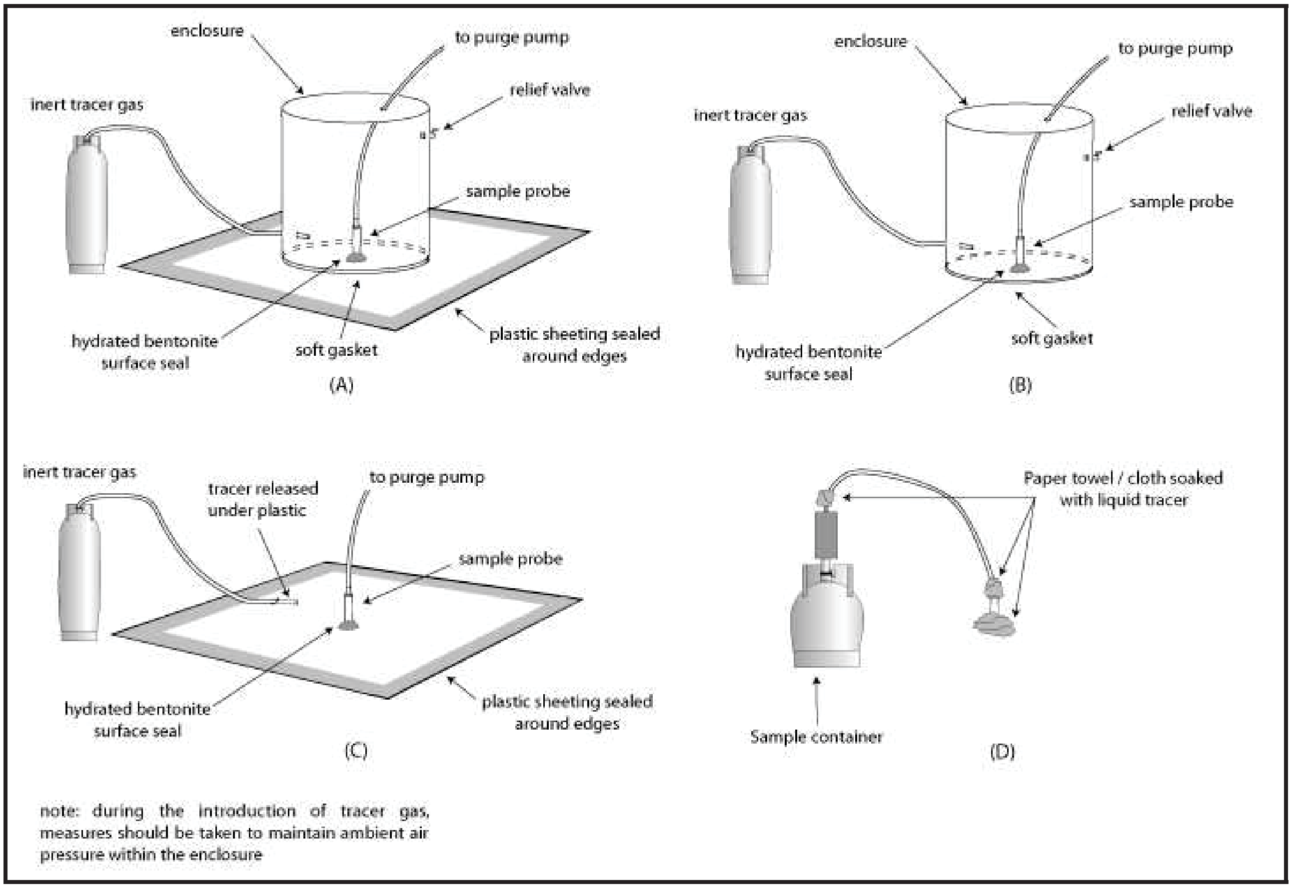


Figure 2.4
Schematics of generic tracer gas applications when collecting soil vapor samples

Because minor leakage around the probe seal should not materially affect the usability of the soil vapor sampling results, the mere presence of the tracer gas in the sample should not be a cause for alarm. Consequently, portable field monitoring devices with detection limits in the low ppm range are more than adequate for screening samples for the tracer. If high concentrations (> 10%) of tracer gas are observed in a sample, the probe seal should be enhanced to reduce the infiltration of outdoor air.

Where permanent or semi-permanent sampling probes are used, tracer gas samples should be collected at each of the sampling probes during the initial stages of a soil vapor sampling program. If the results of the initial samples indicate that the probe seals are adequate, reducing the number of locations at which tracer gas samples are employed may be considered. At a minimum, tracer gas samples should be collected with at least 10% of the soil vapor samples collected in subsequent sampling rounds. When using permanent soil vapor probes as part of a long-term monitoring program, annual testing of the probe integrity is recommended. Where temporary probes are used, tracer gas should be used at every sampling location, every time.

SUPPLEMENT C

Decontamination Materials and Procedures

SOP SUPPLEMENT: DECONTAMINATION

1.0 Objectives

Decontamination will occur any time a sampling tool or instrument used in field investigations contacts sampled media or personnel using the equipment. This procedure will be used in conjunction with all non-dedicated (i.e. reusable) equipment used during the handling, sampling or measuring of media. Special precautions are required when sampling for PFAS.

These procedures will be implemented primarily on-site at the point of use or at a designated equipment decontamination station at the project site. Examples of equipment usually requiring decontamination include pumps, depth gauges, hand augers, macro-core sampling barrels and other related equipment used for the collection of samples or the measurement of field parameters.

2.0 Required Materials

The equipment and supplies required for this SOP include the following:

- Plastic sheeting for the decontamination area
- Properly labeled drums to hold waste decontamination solutions and expendable supplies
- Plastic bags and/or aluminum foil to keep decontaminated equipment clean until the next use
- Gloves, aprons, safety glasses, and any other PPE required in the Site HASP
- Disposable towels and wipes
- Clean buckets or tubs to hold wash and rinse solutions, of a size appropriate to the equipment to be decontaminated
- Long-handled brushes for scrubbing and flat-bladed scrapers
- Dispensing bottles
- Tap water
- Deionized or distilled water (grade determined by project requirements)
- Non-phosphate detergent such as Alconox
- Methanol, nitric acid, etc. as required by the project work plan or quality assurance plan

Some Work Plans may include additional equipment rinses based on the contaminants being investigated. Examples of this are 0.1N nitric acid when cross-contamination from metals is a concern, and solvents such as methanol, isopropanol, or hexane, when cross-contamination from organics is a concern. If these are required, labeled inert dispensing bottles and Safety Data Sheets (SDS) for these rinses will be filed on site.

3.0 Methods

A decontamination station will be established for small equipment decontamination and PPE decontamination, either in the contaminant reduction zone or at the sampling location or well (if contamination zones are not established). A separate station may be utilized in close proximity to any mechanized apparatus, as practical, for the decontamination of relatively large or heavy equipment such as Geoprobe macro-core barrels and metal rods. Containers with cleaning solutions and clean buckets or tubs (5 gallon buckets are most common) will be used for this station. Containers and buckets will be placed on plastic sheeting to prevent spillage to the ground, and to help keep the decontamination area and equipment as clean as possible.

Decontamination procedures (scrapping, brushing, washing and rinsing) will be performed over buckets in order to catch all scrapings and spent rinsate. In conjunction with this procedure, pre-rinsing with water (as warranted) and/or cleaning with a detergent/water mixture may be accomplished by immersion within a clean bucket containing the cleaning solution (overflow due to submersion should be avoided). The buckets will not be allowed to accumulate waste liquids above three quarters of their capacity.

The decontamination sequence will be as follows (not all steps apply):

- Scrape, brush and wipe as warranted to removed bulk materials
- Pre-rinse with water
- Brush and/or rinse with a detergent/tap water mixture (e.g., Alconox or Liqui-Nox, made up as directed by the manufacturer)
- Rinse with tap water to remove soap residue
- Rinse with 2% nitric acid solution (if required, depending on work plan), followed by tap water
- Rinse with methanol or hexane (if required, depending on work plan) followed by tap water
- Final rinse with deionized or distilled water
- Allow to air dry on clean plastic (foil may only be used if no sampling is being conducted for PFAS)
- Cover dry equipment to keep clean

Submersible pumps may be allowed to run fully submerged in water and detergent/water mixes in order to clean and rinse all internal parts (care must be taken to avoid accidental discharge of water outside of the container).

Disposable gloves will be worn during all sampling and decontamination procedures (gloves will be changed frequently). All disposable supplies (gloves, towels, absorbent pads, etc.) will be placed into heavy-duty plastic garbage bags.

SUPPLEMENT D

PFAS Sampling Guidance

PFAS Field Sampling Guidelines for Groundwater and Soil

For Waters: 2 x 125 mL Bottles per sample filled to the neck of the bottle

PLEASE READ THESE INSTRUCTIONS PRIOR TO CONDUCTING SAMPLING

Sampling for PFAS for determination using EPA 537m can be challenging due to the prevalence of these compounds in consumer products. The following guidelines reflect current knowledge and are recommended when conducting sampling.

Consider Sampling for PFAS First...

Sample containers for other methods may have PFAS present on their sampling containers which could cross-contaminate your sample(s). We are analyzing down to the low parts-per-trillion (ppt) range so cross-contamination prevention is an important consideration.

SAMPLING

All Sampling done with Nitrile Gloves, provided by YORK

SAMPLE CONTAINERS

All sample containers - PP ONLY (Target list of 21 PFAS) Caps are unlined and made of PP (no Teflon® lined caps) Bottles are Batch Certified to be Target PFAS-free (< Reporting Limit)

FIELD EQUIPMENT

-Must not contain Teflon® (aka PTFE) or LDPE materials

-All sampling materials must be made from stainless steel, HDPE, acetate, silicone, or polypropylene

-No waterproof field notebooks can be used

-No plastic clipboards, binders, or the like

-No adhesives (e.g.Post-It® Notes, Duct tape) can be used

-Sharpies and permanent markers not allowed; regular ball point pens are acceptable

-Aluminum foil must not be used

-Keep PFAS samples in separate cooler, away from sampling containers that may contain PFAS

-Coolers filled with regular ice only - Do not use chemical (blue) ice packs

EQUIPMENT DECON

-"PFAS-free" water (e.g. Poland Spring*)-on-site for decontamination

-Only Alconox and Liquinox can be used for decontamination

* *Poland Spring has been demonstrated to be PFAS -free when freshly opened*

FIELD SAMPLING CLOTHING CONSIDERATIONS

Do not use fabric softener on clothing to be worn in field

Do not used cosmetics, moisturizers, hand cream, or other related products the morning of sampling

Do not use sunscreen or insect repellants

No materials containing Tyvek®

All safety boots made from polyurethane and PVC

No clothing or boots containing Gore-Tex®

Wet weather gear made of polyurethane and PVC only

FOOD CONSIDERATIONS

No food or drink when PFAS Sampling with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area.

SAMPLE CONTAINER HANDLING

-For **AQUEOUS** Samples: Each sample set contains 2 x 125 mL containers. Fill each container to the neck

-For **SOILS**-1 x 250 mL container, FILL HALF WAY ONLY

-No preservative is necessary for this appliction at this time.

-Place closed, labeled Sample bottles into ZipLock bag.

-Dispose of Nitrile gloves in provided waste bag.

-Place in separate cooler from other samples, WET ICE only

-Follow instructions on next page for more detail.

-If you have a Quality Assurance Project Plan follow that guidance

PFAS -Recommended Field Sampling Guidelines

PLEASE READ INSTRUCTIONS ENTIRELY PRIOR TO SAMPLING EVENT

Sampler should wash hands before wearing nitrile gloves in order to limit contamination during sampling. Each sample set* requires a set of containers to comply with the method as indicated below. **Sample set is composed of samples collected from the same sample site and at the same time.* **A pair of Nitrile gloves is included with each sample Zip-lock bag/bottle set. One Field Blank set per day is provided.**

Note: PP is Polypropylene

Sample Containers	Bottle Type	Preservation
2 Sampling Containers - Empty- per sample-Waters **SOILS- 1 Container-fill only half way**	125 mL PP container-Waters 250 mL PP for Soils	None, Cool <6C
1 PP Bottle with PFAS-free Water for Field Blank	125 mL PP container	None, Cool <6C
1 Field Blank (FRB) - Empty-per sampling day	125 mL PP container	None, Cool <6C
2 - Empty PP bottles for MS/DUP when needed (Soils MS/DUP come from same Bottle)	125 mL PP container	None, Cool <6C

NOTE: Sampling containers for WATERS must be filled to the neck. **SOILS, fill bottle only 1/2 full**

FIELD BLANK and MS/DUP Bottles are labeled with NEON GREEN LABELS

Field blanks are required per sampling event day and the containers have been provided. Follow the instructions below.

Field Blank Instructions:

1. Locate the PFAS Field Blank bottle (empty, labeled) supplied The PFAS Field Blank Water container is pre-filled at YORK with PFAS-free water to transfer to the empty PFAS Field Blank bottle.
2. Locate the empty container labeled "Field Blank" with Neon green labels
3. Open both containers and proceed to transfer contents of the "PFAS FIELD BLANK WATER" container into the "PFAS FIELD BLANK" Bottle
4. Field Blanks to be analyzed must be listed on the Chain-of-Custody.
5. Both the empty Field Blank water container and the filled Field Blank container must be returned to YORK along with the samples taken.

Matrix Spike/ Matrix Dup Instructions: Note: Soil MS/MSD can be from the same container as the sample

1. Locate the PFAS MS and DUP bottles (empty, labeled-NEON GREEN) supplied -normally 1 set per 20 field samples
2. Transfer chosen Field MS /Dup as a normal sample and indicate sample ID on container and on Chain-of-Custody

Sampling Instructions: ALL SAMPLE BOTTLES HAVE NEON YELLOW LABELS

1. Do not overfill or rinse the container. Any sample(s) for Matrix Spike and Matrix Duplicates are treated similarly.
2. Close containers securely. Label legibly and place containers in ZipLoc® bags, and in a separate cooler (no other container types).
3. Ensure Chain-of-Custody and all sample labels contain required information. Place all samples in separate coolers (separate from other samples for different parameters). Place wet ice (bagged) on samples for return to YORK.
Samples should be kept at 4°C ±2. Samples must not exceed 10°C during first 48 hours after collection. **Hold time is 14 days.**

York Analytical Laboratories, Inc. ***Emerging Contaminants Laboratory***
132-02 89th Avenue SUITE 217 Richmond Hill, NY 11418

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SAMPLING, ANALYSIS, AND ASSESSMENT OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Under NYSDEC's Part 375 Remedial Programs

January 2021

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January 2021

Department of Environmental Conservation

ERRATA SHEET for

SAMPLING, ANALYSIS, AND ASSESSMENT OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) Under NYSDEC's Part 375 Remedial Programs Issued January 17, 2020

Citation and Page Number	Current Text	Corrected Text	Date
Title of Appendix I, page 32	Appendix H	Appendix I	2/25/2020
Document Cover, page 1	Guidelines for Sampling and Analysis of PFAS	Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs	9/15/2020
Routine Analysis, page 9	"However, laboratories analyzing environmental samples…PFOA and PFOS in drinking water by EPA Method 537, 537.1 or ISO 25101."	"However, laboratories analyzing environmental samples…PFOA and PFOS in drinking water by EPA Method 537, 537.1, ISO 25101, or Method 533."	9/15/2020
Additional Analysis, page 9, new paragraph regarding soil parameters	None	"In cases where site-specific cleanup objectives for PFOA and PFOS are to be assessed, soil parameters, such as Total Organic Carbon (EPA Method 9060), soil pH (EPA Method 9045), clay content (percent), and cation exchange capacity (EPA Method 9081), should be included in the analysis to help evaluate factors affecting the leachability of PFAS in site soils."	9/15/2020
Data Assessment and Application to Site Cleanup Page 10	Until such time as Ambient Water Quality Standards (AWQS) and Soil Cleanup Objectives (SCOs) for PFAS are published, the extent of contaminated media potentially subject to remediation should be determined on a case-by-case basis using the procedures discussed below and the criteria in DER-10. Target levels for cleanup of PFAS in other media, including biota and sediment, have not yet been established by the DEC.	Until such time as Ambient Water Quality Standards (AWQS) and Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published, the extent of contaminated media potentially subject to remediation should be determined on a case-by-case basis using the procedures discussed below and the criteria in DER-10. Preliminary target levels for cleanup of PFOA and PFOS in other media, including biota and sediment, have not yet been established by the DEC.	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Water Sample Results Page 10	PFAS should be further assessed and considered as a potential contaminant of concern in groundwater or surface water (…) If PFAS are identified as a contaminant of concern for a site, they should be assessed as part of the remedy selection process in accordance with Part 375 and DER-10.	PFOA and PFOS should be further assessed and considered as potential contaminants of concern in groundwater or surface water (…) If PFOA and/or PFOS are identified as contaminants of concern for a site, they should be assessed as part of the remedy selection process in accordance with Part 375 and DER-10.	9/15/2020
Soil Sample Results, page 10	“The extent of soil contamination for purposes of delineation and remedy selection should be determined by having certain soil samples tested by Synthetic Precipitation Leaching Procedure (SPLP) and the leachate analyzed for PFAS. Soil exhibiting SPLP results above 70 ppt for either PFOA or PFOS (individually or combined) are to be evaluated during the cleanup phase.”	“Soil cleanup objectives for PFOA and PFOS will be proposed in an upcoming revision to 6 NYCRR Part 375-6. Until SCOs are in effect, the following are to be used as guidance values. “ [Interim SCO Table] “PFOA and PFOS results for soil are to be compared against the guidance values listed above. These guidance values are to be used in determining whether PFOA and PFOS are contaminants of concern for the site and for determining remedial action objectives and cleanup requirements. Site-specific remedial objectives for protection of groundwater can also be presented for evaluation by DEC. Development of site-specific remedial objectives for protection of groundwater will require analysis of additional soil parameters relating to leachability. These additional analyses can include any or all the parameters listed above (soil pH, cation exchange capacity, etc.) and/or use of SPLP. As the understanding of PFAS transport improves, DEC welcomes proposals for site-specific remedial objectives for protection of groundwater. DEC will expect that those may be dependent on additional factors including soil pH, aqueous pH, % organic carbon, % Sand/Silt/Clay, soil cations: K, Ca, Mg, Na, Fe, Al, cation exchange capacity, and anion exchange capacity. Site-specific remedial objectives should also consider the dilution attenuation factor (DAF). The NJDEP publication on DAF can be used as a reference: https://www.nj.gov/dep/srp/guidance/rs/daf.pdf. ”	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Testing for Imported Soil Page 11	Soil imported to a site for use in a soil cap, soil cover, or as backfill is to be tested for PFAS in general conformance with DER-10, Section 5.4(e) for the PFAS Analyte List (Appendix F) using the analytical procedures discussed below and the criteria in DER-10 associated with SVOCs. If PFOA or PFOS is detected in any sample at or above 1 µg/kg, then soil should be tested by SPLP and the leachate analyzed for PFAS. If the SPLP results exceed 10 ppt for either PFOA or PFOS (individually) then the source of backfill should be rejected, unless a site-specific exemption is provided by DER. SPLP leachate criteria is based on the Maximum Contaminant Levels proposed for drinking water by New York State's Department of Health, this value may be updated based on future Federal or State promulgated regulatory standards. Remedial parties have the option of analyzing samples concurrently for both PFAS in soil and in the SPLP leachate to minimize project delays. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.	Testing for PFAS should be included any time a full TAL/TCL analyte list is required. Results for PFOA and PFOS should be compared to the applicable guidance values. If PFOA or PFOS is detected in any sample at or above the guidance values then the source of backfill should be rejected, unless a site-specific exemption is provided by DER based on SPLP testing, for example. If the concentrations of PFOA and PFOS in leachate are at or above 10 ppt (the Maximum Contaminant Levels established for drinking water by the New York State Department of Health), then the soil is not acceptable. PFOA, PFOS and 1,4-dioxane are all considered semi-volatile compounds, so composite samples are appropriate for these compounds when sampling in accordance with DER-10, Table 5.4(e)10. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.	9/15/2020

Citation and Page Number	Current Text	Corrected Text	Date
Footnotes	None	[1] TOP Assay analysis of highly contaminated samples, such as those from an AFFF (aqueous film-forming foam) site, can result in incomplete oxidation of the samples and an underestimation of the total perfluoroalkyl substances. [2] The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the soil cleanup objective for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).	9/15/2020
Additional Analysis, page 9	In cases… soil parameters, such as Total Organic Carbon (EPA Method 9060), soil…	In cases… soil parameters, such as Total Organic Carbon (Lloyd Kahn), soil…	1/8/2021
Appendix A, General Guidelines, fourth bullet	List the ELAP-approved lab(s) to be used for analysis of samples	List the ELAP- certified lab(s) to be used for analysis of samples	1/8/2021
Appendix E, Laboratory Analysis and Containers	Drinking water samples collected using this protocol are intended to be analyzed for PFAS by ISO Method 25101.	Drinking water samples collected using this protocol are intended to be analyzed for PFAS by EPA Method 537, 537.1, 533, or ISO Method 25101	1/8/2021

Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs

Objective

New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) performs or oversees sampling of environmental media and subsequent analysis of PFAS as part of remedial programs implemented under 6 NYCRR Part 375. To ensure consistency in sampling, analysis, reporting, and assessment of PFAS, DER has developed this document which summarizes currently accepted procedures and updates previous DER technical guidance pertaining to PFAS.

Applicability

All work plans submitted to DEC pursuant to one of the remedial programs under Part 375 shall include PFAS sampling and analysis procedures that conform to the guidelines provided herein.

As part of a site investigation or remedial action compliance program, whenever samples of potentially affected media are collected and analyzed for the standard Target Analyte List/Target Compound List (TAL/TCL), PFAS analysis should also be performed. Potentially affected media can include soil, groundwater, surface water, and sediment. Based upon the potential for biota to be affected, biota sampling and analysis for PFAS may also be warranted as determined pursuant to a Fish and Wildlife Impact Analysis. Soil vapor sampling for PFAS is not required.

Field Sampling Procedures

DER-10 specifies technical guidance applicable to DER's remedial programs. Given the prevalence and use of PFAS, DER has developed "best management practices" specific to sampling for PFAS. As specified in DER-10 Chapter 2, quality assurance procedures are to be submitted with investigation work plans. Typically, these procedures are incorporated into a work plan, or submitted as a stand-alone document (e.g., a Quality Assurance Project Plan). Quality assurance guidelines for PFAS are listed in Appendix A - Quality Assurance Project Plan (QAPP) Guidelines for PFAS.

Field sampling for PFAS performed under DER remedial programs should follow the appropriate procedures outlined for soils, sediments or other solids (Appendix B), non-potable groundwater (Appendix C), surface water (Appendix D), public or private water supply wells (Appendix E), and fish tissue (Appendix F).

QA/QC samples (e.g. duplicates, MS/MSD) should be collected as specified in DER-10, Section 2.3(c). For sampling equipment coming in contact with aqueous samples only, rinsate or equipment blanks should be collected. Equipment blanks should be collected at a minimum frequency of one per day per site or one per twenty samples, whichever is more frequent.

Analysis and Reporting

As of October 2020, the United States Environmental Protection Agency (EPA) does not have a validated method for analysis of PFAS for media commonly analyzed under DER remedial programs (non-potable waters, solids). DER has developed the following guidelines to ensure consistency in analysis and reporting of PFAS.

The investigation work plan should describe analysis and reporting procedures, including laboratory analytical procedures for the methods discussed below. As specified in DER-10 Section 2.2, laboratories should provide a full Category B deliverable. In addition, a Data Usability Summary Report (DUSR) should be prepared by an independent, third party data validator. Electronic data submissions should meet the requirements provided at: https://www.dec.ny.gov/chemical/62440.html.

DER has developed a *PFAS Analyte List* (Appendix F) for remedial programs to understand the nature of contamination at sites. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. If lab and/or matrix specific issues are encountered for any analytes, the DER project manager, in consultation with the DER chemist, will make case-by-case decisions as to whether certain analytes may be temporarily or permanently discontinued from analysis at each site. As with other contaminants that are analyzed for at a site, the *PFAS Analyte List* may be refined for future sampling events based on investigative findings.

Routine Analysis

Currently, New York State Department of Health's Environmental Laboratory Approval Program (ELAP) does not offer certification for PFAS in matrices other than finished drinking water. However, laboratories analyzing environmental samples for PFAS (e.g., soil, sediments, and groundwater) under DER's Part 375 remedial programs need to hold ELAP certification for PFOA and PFOS in drinking water by EPA Method 537, 537.1, ISO 25101, or Method 533. Laboratories should adhere to the guidelines and criteria set forth in the DER's laboratory guidelines for PFAS in non-potable water and solids (Appendix H - Laboratory Guidelines for Analysis of PFAS in Non-Potable Water and Solids). Data review guidelines were developed by DER to ensure data comparability and usability (Appendix H - Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids).

LC-MS/MS analysis for PFAS using methodologies based on EPA Method 537.1 is the procedure to use for environmental samples. Isotope dilution techniques should be utilized for the analysis of PFAS in all media. Reporting limits for PFOA and PFOS in aqueous samples should not exceed 2 ng/L. Reporting limits for PFOA and PFOS in solid samples should not exceed 0.5 µg/kg. Reporting limits for all other PFAS in aqueous and solid media should be as close to these limits as possible. If laboratories indicate that they are not able to achieve these reporting limits for the entire *PFAS Analyte List*, site-specific decisions regarding acceptance of elevated reporting limits for specific PFAS can be made by the DER project manager in consultation with the DER chemist.

Additional Analysis

Additional laboratory methods for analysis of PFAS may be warranted at a site, such as the Synthetic Precipitation Leaching Procedure (SPLP) and Total Oxidizable Precursor Assay (TOP Assay).

In cases where site-specific cleanup objectives for PFOA and PFOS are to be assessed, soil parameters, such as Total Organic Carbon (Lloyd Kahn), soil pH (EPA Method 9045), clay content (percent), and cation exchange capacity (EPA Method 9081), should be included in the analysis to help evaluate factors affecting the leachability of PFAS in site soils.

SPLP is a technique used to determine the mobility of chemicals in liquids, soils and wastes, and may be useful in determining the need for addressing PFAS-containing material as part of the remedy. SPLP by EPA Method 1312 should be used unless otherwise specified by the DER project manager in consultation with the DER chemist.

Impacted materials can be made up of PFAS that are not analyzable by routine analytical methodology. A TOP Assay can be utilized to conceptualize the amount and type of oxidizable PFAS which could be liberated in the environment, which approximates the maximum concentration of perfluoroalkyl substances that could be generated if all polyfluoroalkyl substances were oxidized. For example, some polyfluoroalkyl substances may degrade or transform to form perfluoroalkyl substances (such as PFOA or PFOS), resulting in an increase in perfluoroalkyl substance concentrations as contaminated groundwater moves away from a source. The TOP Assay converts, through oxidation, polyfluoroalkyl substances (precursors) into perfluoroalkyl substances that can be detected by routine analytical methodology.[1]

Commercial laboratories have adopted methods which allow for the quantification of targeted PFAS in air and biota. The EPA's Office of Research and Development (ORD) is currently developing methods which allow for air emissions characterization of PFAS, including both targeted and non-targeted analysis of PFAS. Consult with the DER project manager and the DER chemist for assistance on analyzing biota/tissue and air samples.

Data Assessment and Application to Site Cleanup

Until such time as Ambient Water Quality Standards (AWQS) and Soil Cleanup Objectives (SCOs) for PFOA and PFOS are published, the extent of contaminated media potentially subject to remediation should be determined on a case-by-case basis using the procedures discussed below and the criteria in DER-10. Preliminary target levels for cleanup of PFOA and PFOS in other media, including biota and sediment, have not yet been established by the DEC.

Water Sample Results

PFOA and PFOS should be further assessed and considered as potential contaminants of concern in groundwater or surface water if PFOA or PFOS is detected in any water sample at or above 10 ng/L (ppt) and is determined to be attributable to the site, either by a comparison of upgradient and downgradient levels, or the presence of soil source areas, as defined below. In addition, further assessment of water may be warranted if either of the following screening levels are met:

a. any other individual PFAS (not PFOA or PFOS) is detected in water at or above 100 ng/L; or
b. total concentration of PFAS (including PFOA and PFOS) is detected in water at or above 500 ng/L

If PFOA and/or PFOS are identified as contaminants of concern for a site, they should be assessed as part of the remedy selection process in accordance with Part 375 and DER-10.

Soil Sample Results

Soil cleanup objectives for PFOA and PFOS will be proposed in an upcoming revision to 6 NYCRR Part 375-6. Until SCOs are in effect, the following are to be used as guidance values.

Guidance Values for Anticipated Site Use	PFOA (ppb)	PFOS (ppb)
Unrestricted	0.66	0.88
Residential	6.6	8.8
Restricted Residential	33	44
Commercial	500	440
Industrial	600	440
Protection of Groundwater[2]	1.1	3.7

[1] TOP Assay analysis of highly contaminated samples, such as those from an AFFF (aqueous film-forming foam) site, can result in incomplete oxidation of the samples and an underestimation of the total perfluoroalkyl substances.
[2] The movement of PFAS in the environment is being aggressively researched at this time; that research will eventually result in more accurate models for the behaviors of these chemicals. In the meantime, DEC has calculated the guidance value for the protection of groundwater using the same procedure used for all other chemicals, as described in Section 7.7 of the Technical Support Document (http://www.dec.ny.gov/docs/remediation_hudson_pdf/techsuppdoc.pdf).

PFOA and PFOS results for soil are to be compared against the guidance values listed above. These guidance values are to be used in determining whether PFOA and PFOS are contaminants of concern for the site and for determining remedial action objectives and cleanup requirements. Site-specific remedial objectives for protection of groundwater can also be presented for evaluation by DEC. Development of site-specific remedial objectives for protection of groundwater will require analysis of additional soil parameters relating to leachability. These additional analyses can include any or all the parameters listed above (soil pH, cation exchange capacity, etc.) and/or use of SPLP.

As the understanding of PFAS transport improves, DEC welcomes proposals for site-specific remedial objectives for protection of groundwater. DEC will expect that those may be dependent on additional factors including soil pH, aqueous pH, % organic carbon, % Sand/Silt/Clay, soil cations: K, Ca, Mg, Na, Fe, Al, cation exchange capacity, and anion exchange capacity. Site-specific remedial objectives should also consider the dilution attenuation factor (DAF). The NJDEP publication on DAF can be used as a reference: https://www.nj.gov/dep/srp/guidance/rs/daf.pdf.

Testing for Imported Soil

Testing for PFAS should be included any time a full TAL/TCL analyte list is required. Results for PFOA and PFOS should be compared to the applicable guidance values. If PFOA or PFOS is detected in any sample at or above the guidance values then the source of backfill should be rejected, unless a site-specific exemption is provided by DER based on SPLP testing, for example. If the concentrations of PFOA and PFOS in leachate are at or above 10 ppt (the Maximum Contaminant Levels established for drinking water by the New York State Department of Health), then the soil is not acceptable.

PFOA, PFOS and 1,4-dioxane are all considered semi-volatile compounds, so composite samples are appropriate for these compounds when sampling in accordance with DER-10, Table 5.4(e)10. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.

Appendix A - Quality Assurance Project Plan (QAPP) Guidelines for PFAS

The following guidelines (general and PFAS-specific) can be used to assist with the development of a QAPP for projects within DER involving sampling and analysis of PFAS.

General Guidelines in Accordance with DER-10

- Document/work plan section title – Quality Assurance Project Plan
- Summarize project scope, goals, and objectives
- Provide project organization including names and resumes of the project manager, Quality Assurance Officer (QAO), field staff, and Data Validator
  - The QAO should not have another position on the project, such as project or task manager, that involves project productivity or profitability as a job performance criterion
- List the ELAP certified lab(s) to be used for analysis of samples
- Include a site map showing sample locations
- Provide detailed sampling procedures for each matrix
- Include Data Quality Usability Objectives
- List equipment decontamination procedures
- Include an “Analytical Methods/Quality Assurance Summary Table” specifying:
  - Matrix type
  - Number or frequency of samples to be collected per matrix
  - Number of field and trip blanks per matrix
  - Analytical parameters to be measured per matrix
  - Analytical methods to be used per matrix with minimum reporting limits
  - Number and type of matrix spike and matrix spike duplicate samples to be collected
  - Number and type of duplicate samples to be collected
  - Sample preservation to be used per analytical method and sample matrix
  - Sample container volume and type to be used per analytical method and sample matrix
  - Sample holding time to be used per analytical method and sample matrix
- Specify Category B laboratory data deliverables and preparation of a DUSR

Specific Guidelines for PFAS

- Include in the text that sampling for PFAS will take place
- Include in the text that PFAS will be analyzed by LC-MS/MS for PFAS using methodologies based on EPA Method 537.1
- Include the list of PFAS compounds to be analyzed (*PFAS Analyte List*)
- Include the laboratory SOP for PFAS analysis
- List the minimum method-achievable Reporting Limits for PFAS
  - Reporting Limits should be less than or equal to:
    - Aqueous – 2 ng/L (ppt)
    - Solids – 0.5 µg/kg (ppb)
- Include the laboratory Method Detection Limits for the PFAS compounds to be analyzed
- Laboratory should have ELAP certification for PFOA and PFOS in drinking water by EPA Method 537, 537.1, EPA Method 533, or ISO 25101
- Include detailed sampling procedures
  - Precautions to be taken
  - Pump and equipment types
  - Decontamination procedures
  - Approved materials only to be used
- Specify that regular ice only will be used for sample shipment
- Specify that equipment blanks should be collected at a minimum frequency of 1 per day per site for each matrix

Appendix B - Sampling Protocols for PFAS in Soils, Sediments and Solids

General

The objective of this protocol is to give general guidelines for the collection of soil, sediment and other solid samples for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Containers

Samples collected using this protocol are intended to be analyzed for PFAS using methodologies based on EPA Method 537.1.

The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in to contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer.

A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.

- stainless steel spoon
- stainless steel bowl
- steel hand auger or shovel without any coatings

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Sampling is often conducted in areas where a vegetative turf has been established. In these cases, a pre-cleaned trowel or shovel should be used to carefully remove the turf so that it may be replaced at the conclusion of sampling. Surface soil samples (e.g. 0 to 6 inches below surface) should then be collected using a pre-cleaned, stainless steel spoon. Shallow subsurface soil samples (e.g. 6 to ~36 inches below surface) may be collected by digging a hole using a pre-cleaned hand auger or shovel. When the desired subsurface depth is reached, a pre-cleaned hand auger or spoon shall be used to obtain the sample.

When the sample is obtained, it should be deposited into a stainless steel bowl for mixing prior to filling the sample containers. The soil should be placed directly into the bowl and mixed thoroughly by rolling the material into the middle until the material is homogenized. At this point the material within the bowl can be placed into the laboratory provided container.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- Request appropriate data deliverable (Category B) and an electronic data deliverable

Documentation

A soil log or sample log shall document the location of the sample/borehole, depth of the sample, sampling equipment, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate. Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen should be used that does not contain PFAS. Well washed cotton coveralls may be used as an alternative to bug spray and/or sunscreen.

PPE that contains PFAS is acceptable when site conditions warrant additional protection for the samplers and no other materials can be used to be protective. Documentation of such use should be provided in the field notes.

Appendix C - Sampling Protocols for PFAS in Monitoring Wells

General

The objective of this protocol is to give general guidelines for the collection of groundwater samples for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Container

Samples collected using this protocol are intended to be analyzed for PFAS using methodologies based on EPA Method 537.1.

The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include: stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials including plumbers tape and sample bottle cap liners with a PTFE layer.

A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.

- stainless steel inertia pump with HDPE tubing
- peristaltic pump equipped with HDPE tubing and silicone tubing
- stainless steel bailer with stainless steel ball
- bladder pump (identified as PFAS-free) with HDPE tubing

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Monitoring wells should be purged in accordance with the sampling procedure (standard/volume purge or low flow purge) identified in the site work plan, which will determine the appropriate time to collect the sample. If sampling using standard purge techniques, additional purging may be needed to reduce turbidity levels, so samples contain a limited amount of sediment within the sample containers. Sample containers that contain sediment may cause issues at the laboratory, which may result in elevated reporting limits and other issues during the sample preparation that can compromise data usability. Sampling personnel should don new nitrile gloves prior to sample collection due to the potential to contact PFAS containing items (not related to the sampling equipment) during the purging activities.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- Collect one equipment blank per day per site and minimum 1 equipment blank per 20 samples. The equipment blank shall test the new and decontaminated sampling equipment utilized to obtain a sample for residual PFAS contamination. This sample is obtained by using laboratory provided PFAS-free water and passing the water over or through the sampling device and into laboratory provided sample containers
- Additional equipment blank samples may be collected to assess other equipment that is utilized at the monitoring well
- Request appropriate data deliverable (Category B) and an electronic data deliverable

Documentation

A purge log shall document the location of the sample, sampling equipment, groundwater parameters, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate. Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen should be used that does not contain PFAS. Well washed cotton coveralls may be used as an alternative to bug spray and/or sunscreen.

PPE that contains PFAS is acceptable when site conditions warrant additional protection for the samplers and no other materials can be used to be protective. Documentation of such use should be provided in the field notes.

Appendix D - Sampling Protocols for PFAS in Surface Water

General

The objective of this protocol is to give general guidelines for the collection of surface water samples for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Container

Samples collected using this protocol are intended to be analyzed for PFAS using methodologies based on EPA Method 537.1.

The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include: stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer.

A list of acceptable equipment is provided below, but other equipment may be considered appropriate based on sampling conditions.

- stainless steel cup

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Where conditions permit, (e.g. creek or pond) sampling devices (e.g. stainless steel cup) should be rinsed with site medium to be sampled prior to collection of the sample. At this point the sample can be collected and poured into the sample container.

If site conditions permit, samples can be collected directly into the laboratory container.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2º Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- Collect one equipment blank per day per site and minimum 1 equipment blank per 20 samples. The equipment blank shall test the new and decontaminated sampling equipment utilized to obtain a sample for residual PFAS contamination. This sample is obtained by using laboratory provided PFAS-free water and passing the water over or through the sampling device and into laboratory provided sample containers
- Request appropriate data deliverable (Category B) and an electronic data deliverable

Documentation

A sample log shall document the location of the sample, sampling equipment, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate. Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appropriate rain gear (PVC, polyurethane, or rubber rain gear are acceptable), bug spray, and sunscreen should be used that does not contain PFAS. Well washed cotton coveralls may be used as an alternative to bug spray and/or sunscreen.

PPE that contains PFAS is acceptable when site conditions warrant additional protection for the samplers and no other materials can be used to be protective. Documentation of such use should be provided in the field notes.

Appendix E - Sampling Protocols for PFAS in Private Water Supply Wells

General

The objective of this protocol is to give general guidelines for the collection of water samples from private water supply wells (with a functioning pump) for PFAS analysis. The sampling procedure used should be consistent with Sampling Guidelines and Protocols – Technological Background and Quality Control/Quality Assurance for NYS DEC Spill Response Program – March 1991 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf), with the following limitations.

Laboratory Analysis and Container

Drinking water samples collected using this protocol are intended to be analyzed for PFAS by EPA Method 537, 537.1, 533, or ISO Method 25101. The preferred material for containers is high density polyethylene (HDPE). Pre-cleaned sample containers, coolers, sample labels, and a chain of custody form will be provided by the laboratory.

Equipment

Acceptable materials for sampling include stainless steel, HDPE, PVC, silicone, acetate, and polypropylene. Additional materials may be acceptable if pre-approved by New York State Department of Environmental Conservation's Division of Environmental Remediation.

No sampling equipment components or sample containers should come in contact with aluminum foil, low density polyethylene, glass, or polytetrafluoroethylene (PTFE, Teflon™) materials (e.g. plumbers tape), including sample bottle cap liners with a PTFE layer.

Equipment Decontamination

Standard two step decontamination using detergent (Alconox is acceptable) and clean, PFAS-free water will be performed for sampling equipment. All sources of water used for equipment decontamination should be verified in advance to be PFAS-free through laboratory analysis or certification.

Sampling Techniques

Locate and assess the pressure tank and determine if any filter units are present within the building. Establish the sample location as close to the well pump as possible, which is typically the spigot at the pressure tank. Ensure sampling equipment is kept clean during sampling as access to the pressure tank spigot, which is likely located close to the ground, may be obstructed and may hinder sample collection.

Prior to sampling, a faucet downstream of the pressure tank (e.g., washroom sink) should be run until the well pump comes on and a decrease in water temperature is noted which indicates that the water is coming from the well. If the homeowner is amenable, staff should run the water longer to purge the well (15+ minutes) to provide a sample representative of the water in the formation rather than standing water in the well and piping system including the pressure tank. At this point a new pair of nitrile gloves should be donned and the sample can be collected from the sample point at the pressure tank.

Sample Identification and Logging

A label shall be attached to each sample container with a unique identification. Each sample shall be included on the chain of custody (COC).

Quality Assurance/Quality Control

- Immediately place samples in a cooler maintained at 4 ± 2° Celsius using ice
- Collect one field duplicate for every sample batch, minimum 1 duplicate per 20 samples. The duplicate shall consist of an additional sample at a given location
- Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, minimum 1 MS/MSD per 20 samples. The MS/MSD shall consist of an additional two samples at a given location and identified on the COC
- If equipment was used, collect one equipment blank per day per site and a minimum 1 equipment blank per 20 samples. The equipment blank shall test the new and decontaminated sampling equipment utilized to obtain a sample for residual PFAS contamination. This sample is obtained by using laboratory provided PFAS-free water and passing the water over or through the sampling device and into laboratory provided sample containers.
- A field reagent blank (FRB) should be collected at a rate of one per 20 samples. The lab will provide a FRB bottle containing PFAS free water and one empty FRB bottle. In the field, pour the water from the one bottle into the empty FRB bottle and label appropriately.
- Request appropriate data deliverable (Category B) and an electronic data deliverable
- For sampling events where multiple private wells (homes or sites) are to be sampled per day, it is acceptable to collect QC samples at a rate of one per 20 across multiple sites or days.

Documentation

A sample log shall document the location of the private well, sample point location, owner contact information, sampling equipment, purge duration, duplicate sample, visual description of the material, and any other observations or notes determined to be appropriate and available (e.g. well construction, pump type and location, yield, installation date). Additionally, care should be performed to limit contact with PFAS containing materials (e.g. waterproof field books, food packaging) during the sampling process.

Personal Protection Equipment (PPE)

For most sampling Level D PPE is anticipated to be appropriate. The sampler should wear nitrile gloves while conducting field work and handling sample containers.

Field staff shall consider the clothing to be worn during sampling activities. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials should be avoided. All clothing worn by sampling personnel should have been laundered multiple times.

Appendix F - Sampling Protocols for PFAS in Fish

This appendix contains a copy of the latest guidelines developed by the Division of Fish and Wildlife (DFW) entitled "General Fish Handling Procedures for Contaminant Analysis" (Ver. 8).

Procedure Name: General Fish Handling Procedures for Contaminant Analysis

Number: FW-005

Purpose: This procedure describes data collection, fish processing and delivery of fish collected for contaminant monitoring. It contains the chain of custody and collection record forms that should be used for the collections.

Organization: Environmental Monitoring Section
Bureau of Ecosystem Health
Division of Fish and Wildlife (DFW)
New York State Department of Environmental Conservation (NYSDEC)
625 Broadway
Albany, New York 12233-4756

Version: 8

Previous Version Date: 21 March 2018

Summary of Changes to this Version: Updated bureau name to Bureau of Ecosystem Health. Added direction to list the names of all field crew on the collection record. Minor formatting changes on chain of custody and collection records.

Originator or Revised by: Wayne Richter, Jesse Becker

Date: 26 April 2019

Quality Assurance Officer and Approval Date: Jesse Becker, 26 April 2019

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

GENERAL FISH HANDLING PROCEDURES FOR CONTAMINANT ANALYSES

A. Original copies of all continuity of evidence (i.e., Chain of Custody) and collection record forms must accompany delivery of fish to the lab. A copy shall be directed to the Project Leader or as appropriate, Wayne Richter. All necessary forms will be supplied by the Bureau of Ecosystem Health. Because some samples may be used in legal cases, it is critical that each section is filled out completely. Each Chain of Custody form has three main sections:

1. The top box is to be filled out **and signed** by the person responsible for the fish collection (e.g., crew leader, field biologist, researcher). This person is responsible for delivery of the samples to DEC facilities or personnel (e.g., regional office or biologist).

2. The second section is to be filled out **and signed** by the person responsible for the collections while being stored at DEC, before delivery to the analytical lab. This may be the same person as in (1), but it is still required that they complete the section. Also important is the **range of identification numbers** (i.e., tag numbers) included in the sample batch.

3. Finally, the bottom box is to record any transfers between DEC personnel and facilities. Each subsequent transfer should be **identified, signed, and dated**, until laboratory personnel take possession of the fish.

B. The following data are required on each **Fish Collection Record** form:

1. Project and Site Name.

2. DEC Region.

3. All personnel (and affiliation) involved in the collection.

4. Method of collection (gill net, hook and line, etc.)

5. Preservation Method.

C. The following data are to be taken on each fish collected and recorded on the **Fish Collection Record** form:

1. Tag number - Each specimen is to be individually jaw tagged at time of collection with a unique number. Make sure the tag is turned out so that the number can be read without opening the bag. Use tags in sequential order. For small fish or composite samples place the tag inside the bag with the samples. The Bureau of Ecosystem Health can supply the tags.

2. Species identification (please be explicit enough to enable assigning genus and species). Group fish by species when processing.

3. Date collected.

4. Sample location (waterway and nearest prominent identifiable landmark).

5. Total length (nearest mm or smallest sub-unit on measuring instrument) and weight (nearest g or

smallest sub-unit of weight on weighing instrument). Take all measures as soon as possible with calibrated, protected instruments (e.g. from wind and upsets) and prior to freezing.

6. Sex - fish may be cut enough to allow sexing or other internal investigation, but do not eviscerate. Make any incision on the right side of the belly flap or exactly down the midline so that a left-side fillet can be removed.

D. General data collection recommendations:

1. It is helpful to use an ID or tag number that will be unique. It is best to use metal striped bass or other uniquely numbered metal tags. If uniquely numbered tags are unavailable, values based on the region, water body and year are likely to be unique: for example, R7CAY11001 for Region 7, Cayuga Lake, 2011, fish 1. If the fish are just numbered 1 through 20, we have to give them new numbers for our database, making it more difficult to trace your fish to their analytical results and creating an additional possibility for errors.

2. Process and record fish of the same species sequentially. Recording mistakes are less likely when all fish from a species are processed together. Starting with the bigger fish species helps avoid missing an individual.

3. If using Bureau of Ecosystem Health supplied tags or other numbered tags, use tags in sequence so that fish are recorded with sequential Tag Numbers. This makes data entry and login at the lab and use of the data in the future easier and reduces keypunch errors.

4. Record length and weight as soon as possible after collection and before freezing. Other data are recorded in the field upon collection. An age determination of each fish is optional, but if done, it is recorded in the appropriate "Age" column.

5. For composite samples of small fish, record the number of fish in the composite in the Remarks column. Record the length and weight of each individual in a composite. All fish in a composite sample should be of the same species and members of a composite should be visually matched for size.

6. Please submit photocopies of topographic maps or good quality navigation charts indicating sampling locations. GPS coordinates can be entered in the Location column of the collection record form in addition to or instead for providing a map. These records are of immense help to us (and hopefully you) in providing documented location records which are not dependent on memory and/or the same collection crew. In addition, they may be helpful for contaminant source trackdown and remediation/control efforts of the Department.

7. When recording data on fish measurements, it will help to ensure correct data recording for the data recorder to call back the numbers to the person making the measurements.

E. Each fish is to be placed in its own individual plastic bag. For small fish to be analyzed as a composite, put all of the fish for one composite in the same bag but use a separate bag for each composite. It is important to individually bag the fish to avoid difficulties or cross contamination when processing the fish for chemical analysis. Be sure to include the fish's tag number inside the bag, preferably attached to the fish with the tag number turned out so it can be read. Tie or otherwise secure the bag closed. **<u>The Bureau of Ecosystem Health will supply the bags.</u>** If necessary, food grade bags may be procured from a suitable vendor (e.g., grocery store). It is preferable to redundantly label each bag with a manila tag tied between the knot and the body of the bag. This tag should be labeled with the project name, collection location, tag number, collection date, and fish species. If scales are collected, the scale envelope should be labeled with the same information.

F. Groups of fish, by species, are to be placed in one large plastic bag per sampling location. **The Bureau of Ecosystem Health will supply the larger bags.** Tie or otherwise secure the bag closed. Label the site bag with a manila tag tied between the knot and the body of the bag. The tag should contain: project, collection location, collection date, species and **tag number ranges**. Having this information on the manila tag enables lab staff to know what is in the bag without opening it.

G. Do not eviscerate, fillet or otherwise dissect the fish unless specifically asked to. If evisceration or dissection is specified, the fish must be cut along the exact midline or on the right side so that the left side fillet can be removed intact at the laboratory. If filleting is specified, the procedure for taking a standard fillet (SOP PREPLAB 4) must be followed, including removing scales.

H. Special procedures for PFAS: Unlike legacy contaminants such as PCBs, which are rarely found in day to day life, PFAS are widely used and frequently encountered. Practices that avoid sample contamination are therefore necessary. While no standard practices have been established for fish, procedures for water quality sampling can provide guidance. The following practices should be used for collections when fish are to be analyzed for PFAS:
   No materials containing Teflon.
   No Post-it notes.
   No ice packs; only water ice or dry ice.
   Any gloves worn must be powder free nitrile.
   No Gore-Tex or similar materials (Gore-Tex is a PFC with PFOA used in its manufacture).
   No stain repellent or waterproof treated clothing; these are likely to contain PFCs.
   Avoid plastic materials, other than HDPE, including clipboards and waterproof notebooks.
   Wash hands after handling any food containers or packages as these may contain PFCs. Keep pre-wrapped food containers and wrappers isolated from fish handling.
   Wear clothing washed at least six times since purchase.
   Wear clothing washed without fabric softener.
   Staff should avoid cosmetics, moisturizers, hand creams and similar products on the day of sampling as many of these products contain PFCs (Fujii et al. 2013). Sunscreen or insect repellent should not contain ingredients with “fluor” in their name. Apply any sunscreen or insect repellent well downwind from all materials. Hands must be washed after touching any of these products.

I. All fish must be kept at a temperature <45° F (<8° C) immediately following data processing. As soon as possible, freeze at -20° C ± 5° C. Due to occasional freezer failures, daily freezer temperature logs are required. The freezer should be locked or otherwise secured to maintain chain of custody.

J. In most cases, samples should be delivered to the Analytical Services Unit at the Hale Creek field station. Coordinate delivery with field station staff and send copies of the collection records, continuity of evidence forms and freezer temperature logs to the field station. For samples to be analyzed elsewhere, non-routine collections or other questions, contact Wayne Richter, Bureau of Ecosystem Health, NYSDEC, 625 Broadway, Albany, New York 12233-4756, 518-402-8974, or the project leader about sample transfer. Samples will then be directed to the analytical facility and personnel noted on specific project descriptions.

K. A recommended equipment list is at the end of this document.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF FISH AND WILDLIFE
FISH COLLECTION RECORD

Project and Site Name ____ DEC Region ____________

Collections made by (include all crew) ____

Sampling Method: ☐Electrofishing ☐Gill netting ☐Trap netting ☐Trawling ☐Seining ☐Angling ☐Other ____________________

Preservation Method: ☐Freezing ☐Other ____________________ Notes (SWFDB survey number): ____________________

FOR LAB USE ONLY- LAB ENTRY NO.	COLLECTION OR TAG NO.	SPECIES	DATE TAKEN	LOCATION	AGE	SEX &/OR REPROD. CONDIT	LENGTH ( )	WEIGHT ( )	REMARKS

richter: revised 2011, 5/7/15, 10/4/16, 3/20/17; becker: 3/23/17, 4/26/19

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CHAIN OF CUSTODY

I, ______________________________, of ____ collected the
(Print Name) (Print Business Address)

following on ____________________, 20____ from ____
(Date) (Water Body)

in the vicinity of ____
(Landmark, Village, Road, etc.)

Town of _______________________________________, in _________________________________ County.

Item(s) ____

____

Said sample(s) were in my possession and handled according to standard procedures provided to me prior to collection. The sample(s) were placed in the custody of a representative of the New York State Department of Environmental Conservation on ____________________________________, 20______.

____ ___________________________
Signature Date

I, __________________________________, received the above mentioned sample(s) on the date specified and assigned identification number(s) ____ to the sample(s). I have recorded pertinent data for the sample(s) on the attached collection records. The sample(s) remained in my custody until subsequently transferred, prepared or shipped at times and on dates as attested to below.

______________________________________ ___________________
Signature Date

SECOND RECIPIENT (Print Name)	TIME & DATE	PURPOSE OF TRANSFER
SIGNATURE	UNIT	
THIRD RECIPIENT (Print Name)	TIME & DATE	PURPOSE OF TRANSFER
SIGNATURE	UNIT	
FOURTH RECIPIENT (Print Name)	TIME & DATE	PURPOSE OF TRANSFER
SIGNATURE	UNIT	
RECEIVED IN LABORATORY BY (Print Name)	TIME & DATE	REMARKS
SIGNATURE	UNIT	
LOGGED IN BY (Print Name)	TIME & DATE	ACCESSION NUMBERS
SIGNATURE	UNIT	

richter: revised 21 April 2014; becker: 23 March 2017, 26 April, 2019

NOTICE OF WARRANTY

By signature to the chain of custody (reverse), the signatory warrants that the information provided is truthful and accurate to the best of his/her ability. The signatory affirms that he/she is willing to testify to those facts provided and the circumstances surrounding the same. Nothing in this warranty or chain of custody negates responsibility nor liability of the signatories for the truthfulness and accuracy of the statements provided.

HANDLING INSTRUCTIONS

On day of collection, collector(s) name(s), address(es), date, geographic location of capture (attach a copy of topographic map or navigation chart), species, number kept of each species, and description of capture vicinity (proper noun, if possible) along with name of Town and County must be indicated on reverse.

Retain organisms in manila tagged plastic bags to avoid mixing capture locations. Note appropriate information on each bag tag.

Keep samples as cool as possible. Put on ice if fish cannot be frozen within 12 hours. If fish are held more than 24 hours without freezing, they will not be retained or analyzed.

Initial recipient (either DEC or designated agent) of samples from collector(s) is responsible for obtaining and recording information on the collection record forms which will accompany the chain of custody. This person will seal the container using packing tape and writing his signature, the time and the date across the tape onto the container with indelible marker. Any time a seal is broken, for whatever purpose, the incident must be recorded on the Chain of Custody (reason, time, and date) in the purpose of transfer block. Container then is resealed using new tape and rewriting signature, with time and date.

EQUIPMENT LIST

Scale or balance of appropriate capacity for the fish to be collected.

Fish measuring board.

Plastic bags of an appropriate size for the fish to be collected and for site bags.

Individually numbered metal tags for fish.

Manila tags to label bags.

Small envelops, approximately 2” x 3.5”, if fish scales are to be collected.

Knife for removing scales.

Chain of custody and fish collection forms.

Clipboard.

Pens or markers.

Paper towels.

Dish soap and brush.

Bucket.

Cooler.

Ice.

Duct tape.

Appendix G – PFAS Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonates	Perfluorobutanesulfonic acid	PFBS	375-73-5
	Perfluorohexanesulfonic acid	PFHxS	355-46-4
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	Perfluorooctanesulfonic acid	PFOS	1763-23-1
	Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluoroalkyl carboxylates	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
Fluorinated Telomer Sulfonates	6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
	8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluorooctane-sulfonamides	Perfluroroctanesulfonamide	FOSA	754-91-6
Perfluorooctane-sulfonamidoacetic acids	N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6

Appendix H - Laboratory Guidelines for Analysis of PFAS in Non-Potable Water and Solids

General

New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) developed the following guidelines for laboratories analyzing environmental samples for PFAS under DER programs. If laboratories cannot adhere to the following guidelines, they should contact DER's Quality Assurance Officer, Dana Barbarossa, at dana.barbarossa@dec.ny.gov prior to analysis of samples.

Isotope Dilution

Isotope dilution techniques should be utilized for the analysis of PFAS in all media.

Extraction

For water samples, the entire sample bottle should be extracted, and the sample bottle rinsed with appropriate solvent to remove any residual PFAS.

For samples with high particulates, the samples should be handled in one of the following ways:

1. Spike the entire sample bottle with isotope dilution analytes (IDAs) prior to any sample manipulation. The sample can be passed through the SPE and if it clogs, record the volume that passed through.
2. If the sample contains too much sediment to attempt passing it through the SPE cartridge, the sample should be spiked with isotope dilution analytes, centrifuged and decanted.
3. If higher reporting limits are acceptable for the project, the sample can be diluted by taking a representative aliquot of the sample. If isotope dilution analytes will be diluted out of the sample, they can be added after the dilution. The sample should be homogenized prior to taking an aliquot.

If alternate sample extraction procedures are used, please contact the DER remedial program chemist prior to employing. Any deviations in sample preparation procedures should be clearly noted in the case narrative.

Signal to Noise Ratio

For all target analyte ions used for quantification, signal to noise ratio should be 3:1 or greater.

Blanks

There should be no detections in the method blanks above the reporting limits.

Ion Transitions

The ion transitions listed below should be used for the following PFAS:

PFOA	413 > 369
PFOS	499 > 80
PFHxS	399 > 80
PFBS	299 > 80
6:2 FTS	427 > 407
8:2 FTS	527 > 507
N-EtFOSAA	584 > 419
N-MeFOSAA	570 > 419

Branched and Linear Isomers

Standards containing both branched and linear isomers should be used when standards are commercially available. Currently, quantitative standards are available for PFHxS, PFOS, NMeFOSAA, and NEtFOSAA. As more standards become available, they should be incorporated in to the method. All isomer peaks present in the standard should be integrated and the areas summed. Samples should be integrated in the same manner as the standards.

Since a quantitative standard does not exist for branched isomers of PFOA, the instrument should be calibrated using just the linear isomer and a technical (qualitative) PFOA standard should be used to identify the retention time of the branched PFOA isomers in the sample. The total response of PFOA branched and linear isomers should be integrated in the samples and quantitated using the calibration curve of the linear standard.

Secondary Ion Transition Monitoring

Quantifier and qualifier ions should be monitored for all target analytes (PFBA and PFPeA are exceptions). The ratio of quantifier ion response to qualifier ion response should be calculated for each target analyte and the ratio compared to standards. Lab derived criteria should be used to determine if the ratios are acceptable.

Reporting

Detections below the reporting limit should be reported and qualified with a J qualifier.

The acid form of PFAS analytes should be reported. If the salt form of the PFAS was used as a stock standard, the measured mass should be corrected to report the acid form of the analyte.

Appendix I - Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids

General

These guidelines are intended to be used for the validation of PFAS analytical results for projects within the Division of Environmental Remediation (DER) as well as aid in the preparation of a data usability summary report. Data reviewers should understand the methodology and techniques utilized in the analysis. Consultation with the end user of the data may be necessary to assist in determining data usability based on the data quality objectives in the Quality Assurance Project Plan. A familiarity with the laboratory's Standard Operating Procedure may also be needed to fully evaluate the data. If you have any questions, please contact DER's Quality Assurance Officer, Dana Barbarossa, at dana.barbarossa@dec.ny.gov.

Preservation and Holding Time

Samples should be preserved with ice to a temperature of less than 6°C upon arrival at the lab. The holding time is 14 days to extraction for aqueous and solid samples. The time from extraction to analysis for aqueous samples is 28 days and 40 days for solids.

Temperature greatly exceeds 6ºC upon arrival at the lab*	Use professional judgement to qualify detects and non-detects as estimated or rejected
Holding time exceeding 28 days to extraction	Use professional judgement to qualify detects and non-detects as estimated or rejected if holding time is grossly exceeded

*Samples that are delivered to the lab immediately after sampling may not meet the thermal preservation guidelines. Samples are considered acceptable if they arrive on ice or an attempt to chill the samples is observed.

Initial Calibration

The initial calibration should contain a minimum of five standards for linear fit and six standards for a quadratic fit. The relative standard deviation (RSD) for a quadratic fit calibration should be less than 20%. Linear fit calibration curves should have an R^2 value greater than 0.990.

The low-level calibration standard should be within 50% - 150% of the true value, and the mid-level calibration standard within 70% - 130% of the true value.

%RSD >20%	J flag detects and UJ non detects
R^2 >0.990	J flag detects and UJ non detects
Low-level calibration check <50% or >150%	J flag detects and UJ non detects
Mid-level calibration check <70% or >130%	J flag detects and UJ non detects

Initial Calibration Verification

An initial calibration verification (ICV) standard should be from a second source (if available). The ICV should be at the same concentration as the mid-level standard of the calibration curve.

ICV recovery <70% or >130%	J flag detects and non-detects

Continuing Calibration Verification

Continuing calibration verification (CCV) checks should be analyzed at a frequency of one per ten field samples. If CCV recovery is very low, where detection of the analyte could be in question, ensure a low level CCV was analyzed and use to determine data quality.

CCV recovery <70 or >130%	J flag results

Blanks

There should be no detections in the method blanks above the reporting limits. Equipment blanks, field blanks, rinse blanks etc. should be evaluated in the same manner as method blanks. Use the most contaminated blank to evaluate the sample results.

Blank Result	Sample Result	Qualification
Any detection	<Reporting limit	Qualify as ND at reporting limit
Any detection	>Reporting Limit and >10x the blank result	No qualification
>Reporting limit	>Reporting limit and <10x blank result	J+ biased high

Field Duplicates

A blind field duplicate should be collected at rate of one per twenty samples. The relative percent difference (RPD) should be less than 30% for analyte concentrations greater than two times the reporting limit. Use the higher result for final reporting.

RPD >30%	Apply J qualifier to parent sample

Lab Control Spike

Lab control spikes should be analyzed with each extraction batch or one for every twenty samples. In the absence of lab derived criteria, use 70% - 130% recovery criteria to evaluate the data.

Recovery <70% or >130% (lab derived criteria can also be used)	Apply J qualifier to detects and UJ qualifier to non detects

Matrix Spike/Matrix Spike Duplicate

One matrix spike and matrix spike duplicate should be collected at a rate of one per twenty samples. Use professional judgement to reject results based on out of control MS/MSD recoveries.

Recovery <70% or >130% (lab derived criteria can also be used)	Apply J qualifier to detects and UJ qualifier to non detects of parent sample only
RPD >30%	Apply J qualifier to detects and UJ qualifier to non detects of parent sample only

Extracted Internal Standards (Isotope Dilution Analytes)

Problematic analytes (e.g. PFBA, PFPeA, fluorotelomer sulfonates) can have wider recoveries without qualification. Qualify corresponding native compounds with a J flag if outside of the range.

Recovery <50% or >150%	Apply J qualifier
Recovery <25% or >150% for poor responding analytes	Apply J qualifier
Isotope Dilution Analyte (IDA) Recovery <10%	Reject results

Secondary Ion Transition Monitoring

Quantifier and qualifier ions should be monitored for all target analytes (PFBA and PFPeA are exceptions). The ratio of quantifier ion response to qualifier ion response should be calculated from the standards for each target analyte. Lab derived criteria should be used to determine if the ratios are acceptable. If the ratios fall outside of the laboratory criteria, qualify results as an estimated maximum concentration.

Signal to Noise Ratio

The signal to noise ratio for the quantifier ion should be at least 3:1. If the ratio is less than 3:1, the peak is discernable from the baseline noise and symmetrical, the result can be reported. If the peak appears to be baseline noise and/or the shape is irregular, qualify the result as tentatively identified.

Branched and Linear Isomers

Observed branched isomers in the sample that do not have a qualitative or quantitative standard should be noted and the analyte should be qualified as biased low in the final data review summary report. Note: The branched isomer peak should also be present in the secondary ion transition.

Reporting Limits

If project-specific reporting limits were not met, please indicate that in the report along with the reason (e.g. over dilution, dilution for non-target analytes, high sediment in aqueous samples).

Peak Integrations

Target analyte peaks should be integrated properly and consistently when compared to standards. Ensure branched isomer peaks are included for PFAS where standards are available. Inconsistencies should be brought to the attention of the laboratory or identified in the data review summary report.

Michigan Department of Environmental Quality

MDEQ PFAS Sampling Quick Reference Field Guide[1]

All Items Used During Sampling Event

● Prohibited
• Items or materials that contain fluoropolymers such as ○ Polytetrafluoroethylene (PTFE), that includes the trademarks Teflon® and Hostaflon® ○ Polyvinylidene fluoride (PVDF), that includes the trademark Kynar® ○ Polycholotrifluoroethylene (PCTFE), that includes the trademark Neoflon ® ○ Ethylene-tetrafluoro-ethylene (ETFE), that includes the trademark Tefzel® ○ Fluorinated ethylene propylene (FEP), that includes the trademarks Teflon® FEP and Hostaflon® FEP • Items or materials that contain any other fluoropolymer

Pumps, Tubing, and Sampling Equipment

● Prohibited	■ Allowable	▲ Needs Screening[2]
• Items or materials containing any fluoropolymer (potential items include tubing, valves, or pipe thread seal tape)	• High-density polyethylene (HDPE) • Low-density polyethylene (LDPE) tubing • Polypropylene • Silicone • Stainless-steel • Any items used to secure sampling bottles made from: ○ Natural rubber ○ Nylon (cable ties) ○ Uncoated metal springs ○ Polyethylene	• Any items or materials that will come into direct contact with the sample that have **not** been verified to be PFAS-free ○ Do not assume that any sampling items or materials are PFAS-free based on composition alone

Sample Storage and Preservation

● Prohibited	■ Allowable	▲ Needs Screening[2]
• Polytetrafluoroethylene (PTFE): Teflon® lined bottles or caps	• Glass jars[4] • Laboratory-provided PFAS-Free bottles: ○ HDPE or polypropylene • Regular wet ice • Thin HDPE sheeting • LDPE resealable storage bags (i.e. Ziploc®) that will not contact the sample media[6]	• Aluminium foil[4] • Chemical or blue ice[5] • Plastic storage bags other than those listed as ■ Allowable • Low-density polyethylene (LDPE) bottles

Field Documentation

● Prohibited	■ Allowable	▲ Needs Screening[2]
• Clipboards coated with PFAS • Notebooks made with PFAS treated paper • PFAS treated loose paper • PFAS treated adhesive paper products	• Loose paper (non-waterproof, non-recycled) • Rite in the Rain® notebooks • Aluminium, polypropylene, or Masonite field clipboards • Ballpoint pens, pencils, and Fine or Ultra-Fine Point Sharpie® markers	• Plastic clipboards, binders, or spiral hard cover notebooks • All markers not listed as ■ Allowable • Post-It® Notes or other adhesive paper products • Waterproof field books

Decontamination

● Prohibited	■ Allowable	▲ Needs Screening[2]
• Decon 90® • PFAS treated paper towel	• Alconox®, Liquinox®, or Citranox® • Triple rinse with PFAS-free deionized water • Cotton cloth or untreated paper towel	• Municipal water • Recycled paper towels or chemically treated paper towels

Clothing, Boots, Rain Gear, and PPE

● Prohibited	■ Allowable	▲Needs Screening[2]
• New or unwashed clothing • Anything made of or with: ○ Gore-Tex™ or other water-resistant synthetics • Anything applied with or recently washed with: ○ Fabric softeners ○ Fabric protectors, including UV protection ○ Insect resistant chemicals ○ Water, dirt, and/or stain resistant chemicals	• Powderless nitrile gloves • Well-laundered synthetic or 100% cotton clothing, with most recent launderings not using fabric softeners • Made of or with: ○ Polyurethane ○ Polyvinyl chloride (PVC) ○ Wax coated fabrics ○ Rubber / Neoprene ○ Uncoated Tyvek®	• Latex gloves • Water and/or dirt resistant leather gloves • Any special gloves required by a HASP • Tyvek® suits, clothing that contains Tyvek®, or coated Tyvek®

Food and Beverages

● Prohibited	■ Allowable
• No food should be consumed in the staging or sampling areas, including pre-packaged food or snacks. ■ If consuming food on-site becomes necessary, move to the staging area and remove PPE. After eating, wash hands thoroughly and put on new PPE.	• Brought and consumed only outside the vicinity of the sampling area: ○ Bottled water ○ Hydration drinks (i.e. Gatorade®, Powerade®)

Personal Care Products (PCPs) - for day of sample collection[6]

● Prohibited	■ Allowable	▲Needs Screening[2]
• Any PCPs[6], sunscreen, and insect repellent applied in the sampling area.	PCPs[6], sunscreens, and insect repellents applied in the staging area, away from sampling bottles and equipment followed by thoroughly washing hands: **PCPs[6]:** • Cosmetics, deodorants/antiperspirants, moisturizers, hand creams, and other PCPs[6] **Sunscreens:** • Banana Boat® for Men Triple Defense Continuous Spray Sunscreen SPF 30 • Banana Boat® Sport Performance Coolzone Broad Spectrum SPF 30 • Banana Boat® Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 • Banana Boat® Sport Performance Sunscreen Stick SPF 50 • Coppertone® Sunscreen Lotion Ultra Guard Broad Spectrum SPF 50 • Coppertone® Sport High Performance AccuSpray Sunscreen SPF 30 • Coppertone® Sunscreen Stick Kids SPF 55 • L'Oréal® Silky Sheer Face Lotion 50 • Meijer® Clear Zinc Sunscreen Lotion Broad Spectrum SPF 50 • Meijer® Sunscreen Continuous Spray Broad Spectrum SPF 30 • Meijer® Clear Zinc Sunscreen Lotion Broad Spectrum SPF 15, 30 and 50 • Meijer® Wet Skin Kids Sunscreen Continuous Spray Broad Spectrum SPF 70 • Neutrogena® Beach Defense Water+Sun Barrier Lotion SPF 70 • Neutrogena® Beach Defense Water+Sun Barrier Spray Broad Spectrum SPF 30 • Neutrogena® Pure & Free Baby Sunscreen Broad Spectrum SPF 60+ • Neutrogena® UltraSheer Dry-Touch Sunscreen Broad Spectrum SPF 30 **Insect Repellents:** • OFF® Deep Woods • Sawyer® Permethrin	• Products other than those listed as ■Allowable

[1] This table is not considered to be a complete listing of prohibited or allowable materials. All materials should be evaluated prior to use during sampling. The manufacturers of various products should be contacted in order to determine if PFAS was used in the production of any particular product.

[2] Equipment blank samples should be taken to verify these products are PFAS-free prior to use during sampling.

[3] **For surface water foam samples:** LDPE storage bags may be used in the sampling of foam on surface waters. In this instance, it is allowable for the LDPE bag to come into direct contact with the sample media.

[4] **For fish and other wildlife samples:** Depending on the project objectives, glass jars and aluminum foil might be used for PFAS sampling. PFAS has been found to bind to glass and if the sample is stored in a glass jar, a rinse of the jar is required during the sample analysis. PFAS are sometimes used as a protective layer for some aluminum foils. An equipment blank sample should be collected prior to any aluminum foil use.

[5] Regular ice is recommended as there are concerns that chemical and blue ice may not cool and maintain the sample at or below 42.8˚F (6°C) (as determined by EPA 40 CFR 136 – NPDES) during collection and through transit to the laboratory.

[6] Based on evidence, avoidance of PCPs is considered to be precautionary because none have been documented as having cross-contaminated samples due to their use. However, if used, application of PCPs must be done at the staging area and away from sampling bottles and equipment, and hands must be thoroughly washed after the use of any PCPs prior to sampling.

●- Prohibited ■- Allowable ▲- Needs Screening

ATTACHMENT C

SCO Tables

Department of Environmental Conservation

Division of Environmental Remediation

6 NYCRR PART 375

Environmental Remediation Programs

Subparts 375-1 to 375- 4 & 375-6

Effective December 14, 2006

New York State Department of Environmental Conservation

Subpart 375-6
Remedial Program Soil Cleanup Objectives

375-6.1 Purpose; applicability.

(a) This subpart applies to the development and implementation of the remedial programs for soil and other media set forth in subparts 375-2 through
375-4.

(b) This subpart includes the soil cleanup objective tables developed pursuant to ECL 27-1415(6).

375-6.2 Definitions.

(a) "Contract required quantitation limit" or "CRQL" means the minimum level of quantitation acceptable for Department analytical services contracts. The value represents minimum quantitation limits, not absolute detection limits. The minimum quantitation limit is the lowest level at which the analytical instrument can determine the concentration of a chemical that exists in the sample. The detection limit is the minimum level at which the analytical instrument can confirm the presence of the chemical in the sample. At the detection limit, the analytical instrument can confirm that there is some amount of the chemical in the sample but can not determine the concentration that exists with certainty.

(b) "Technical Support Document" means the "New York State Brownfield Cleanup Program Development of Soil Cleanup Objectives Technical Support Document" dated September 2006, which is the document that presents the assumptions, rationale, algorithms and calculations utilized by the Department and the New York State Department of Health to develop the soil cleanup objectives in ECL 27-1415(6).

375-6.3 Unrestricted use soil cleanup objectives.

(a) Applicability. The unrestricted use soil cleanup objectives represent the concentration of a contaminant in soil which, when achieved at a site, will require no use restrictions on the site for the protection of public health, groundwater and ecological resources due to the presence of contaminants in the soil.

(b) Soil cleanup objectives.

(1) The calculated values for the protection of groundwater, ecological resources and public health were considered in developing the unrestricted use soil cleanup objectives. The unrestricted soil cleanup objectives in Table 375-6.8(a) represent the lowest of the three values for protection of groundwater, ecological resources and public health developed as set forth in ECL 27-1415(6).

(2) Unrestricted use, as set forth in subparagraph 375-1.8(g)(1)(i), is achieved when a remedial program for soil meets the unrestricted use soil cleanup objectives in Table 375-6.8(a).

375-6.4 Restricted use soil cleanup objectives for the protection of public health.

(a) Applicability. A protection of public health soil cleanup objective is applicable for the protection of public health at every restricted use site where contamination has been identified in soil above the residential use soil cleanup objectives for a compound included in Table 375-6.8(b), and the Department has determined that remediation is required to protect public health.

(b) Soil cleanup objectives. Protection of public health soil cleanup objectives have been developed for:

(1) Residential use, as set forth in subparagraph 375-1.8(g)(2)(i). The residential use soil cleanup objectives are presented in the protection of public health-residential use column of Table 375-6.8(b).

(2) Restricted-residential use, as set forth in subparagraph 375-1.8(g)(2)(ii). The restricted-residential use soil cleanup objectives are presented in the protection of public health, restricted-residential use column of Table 375-6.8(b).

(3) Commercial use, as set forth in subparagraph 375-1.8(g)(2)(iii). The commercial use soil cleanup objectives are presented in the protection of public health-commercial use column of Table 375-6.8(b).

(4) Industrial use, as set forth in subparagraph 375-1.8(g)(2)(iv). The industrial use soil cleanup objectives are presented in the protection of public health-industrial use column of Table 375-6.8(b).

(c) Selection of the restricted use soil cleanup objectives. In addition to the protection of public health soil cleanup objective for the identified use of the site, protection of groundwater and ecological resources soil cleanup objectives shall be considered where applicable. The contaminant-specific soil cleanup objectives for the soil cleanup component of the remedial program shall be the lowest of the applicable contaminant-specific soil cleanup objectives which are identified for the site as set forth in paragraphs (1) through (3) below.

(1) The protection of groundwater soil cleanup objectives in Table 375-6.8(b) will be applicable to the site and evaluated in determining the soil cleanup objectives for a site as set forth in section 375-6.5.

(2) The protection of ecological resources soil cleanup objectives in Table 375-6.8(b) will be applicable to the site and evaluated in determining the soil cleanup objectives in section 375-6.6

(3) The protection of public health soil cleanup objective for the current, intended and reasonably anticipated future use of the site in Table 375-6.8(b) will be applicable and evaluated in determining the soil cleanup objectives for every site, unless a site-specific soil cleanup objective is proposed.

375-6.5 Soil cleanup objectives for the protection of groundwater.

(a) Applicability. Except as provided in paragraph (1) and (2) below, the protection of groundwater soil cleanup objectives are applicable at restricted use sites where contamination has been identified in on-site soil by the remedial investigation and groundwater standards are, or are threatened to be, contravened by the presence of soil contamination at concentrations above the protection of groundwater soil cleanup objectives.

(1) The protection of groundwater soil cleanup objectives may not be applicable where:

(i) the groundwater standard contravention is the result of an on-site source which is addressed by the remedial program;

(ii) an environmental easement will be put in place which provides for a groundwater use restriction on the site as set forth in paragraph 375-1.8(h)(2);

(iii) the Department determines that contaminated groundwater at the site:

(a) is not migrating, or likely to migrate, off-site; or

(b) is migrating, or is likely to migrate, off-site, however, the remedy includes controls or treatment to address off-site migration; and

(iv) the Department determines the groundwater quality will improve over time.

(2) The protection of groundwater soil cleanup objectives are not applicable if the contravention of groundwater standards at the site is determined to be the result of an off-site source, as set forth in paragraph 375-1.8(d)(2).

(b) Soil cleanup objectives. The protection of groundwater soil cleanup objectives are in Table 375-6.8(b) in the protection of groundwater column.

375-6.6 Soil cleanup objectives for the protection of ecological resources.

(a) Applicability. The soil cleanup objectives for protection of ecological resources must be considered and applied as set forth in this section for the upland soils at sites where terrestrial flora and fauna and the habitats that support them are identified.

(1) Protection of ecological resources soil cleanup objectives apply to sites or portions of sites where the Department determines:

(i) ecological resources at or adjacent to a site, as set forth in subdivision 375-6.6(b):

(a) are present, or will be present under the reasonably anticipated future use of the site; and

(b) constitute an important component of the environment at, or in the vicinity of, the site;

(ii) an impact or threat to the ecological resource has been identified as set forth in subdivision 375-6.6(c); and

(iii) soil contaminant concentrations exceed the protection of ecological resources soil cleanup objectives, as set forth in subdivision 375-6.6(d).

(2) Protection of ecological resources soil cleanup objectives do not and/or will not apply to:

(i) sites or portions of sites where the condition of the land (e.g., paved, covered by impervious surfaces, buildings and other structures) precludes the existence of an ecological resource which constitutes an important component of the environment;

(ii) protection of the aquatic environment; or

(iii) such non-wild biota as:

(1) pets or livestock;

(2) agricultural or horticultural crops; and

(3) landscaping in developed areas.

(b) Identification of ecological resources. The presence of ecological resources shall be determined during the investigation of a site.

(1) The remedial party for a remedial program undertaken pursuant to either subparts 375-2 or 375-4 shall conduct an ecological resource characterization as part of a fish and wildlife impact analysis according to Department guidance to document the presence of fish, wildlife, plants and habitats both on and adjacent to the site.

(2) The remedial party for a remedial program undertaken pursuant to subpart 375-3 shall conduct a resource characterization as part of the qualitative exposure assessment required by ECL 27-1415(2)(b) and in accordance with Department guidance to document the presence of fish, wildlife, plants and habitats both on and adjacent to the site.

(3) The Department shall determine whether the characterization conducted as set forth in paragraphs (1) and (2) above:

(i) has identified ecological resources to be present at or adjacent to a site, or a portion thereof; and

(ii) if such ecological resources constitute an important component of the environment at, or in the vicinity of, the site.

(c) Consideration of impact or threat of impact. If ecological resources that constitute an important component of the environment at, or adjacent to, the site are determined to be present the protection of ecological resources soil cleanup objectives must be considered in the remedial program for the site.

(1) An impact or theat of impact exists when:

(i) a threat to the environment exists, as set forth in subparagraphs 375-2.7(a)(1)(i) to (iv), as a result of contaminants in the soil of the site, unless the Department determines that a more stringent cleanup is necessary to met the requirements of subdivision 375-2.8(a) and paragraph 375-2.8(b)(1); or

(ii) an ecological resource is, or is potentially, impacted by contaminants in the soil of the site.

(d) Soil cleanup objectives. The protection of ecological resources soil cleanup objectives are the same for both unrestricted and restricted use and are incorporated in the soil cleanup objective tables.

(1) For an unrestricted use site, Table 375-6.8(a) presents the lower of the protection of groundwater, ecological resources and unrestricted public health soil cleanup objectives, as calculated and presented in the Technical Support Document.

(2) For a restricted use site, Table 375-6.8(b) includes a protection of ecological resources column, which is applicable to a site regardless of the identified use, as set forth in subdivision (a) above.

(3) Protection of ecological resources soil cleanup objectives were not developed for contaminants identified in Table 375-6.8(b) as "NS". For such contaminants, the applicant may be required to calculate a protection of ecological resources soil cleanup objective for any site, as set forth in section 375-6.9.

375-6.7 Other considerations and media.

(a) Soil vapor and vapor intrusion.

(1) The soil cleanup objectives presented in this subpart do not account for the impact of concentrations of contaminants in soil relative to soil vapor or vapor intrusion attributable to a remedial site.

(2) The nature and extent of any contamination of the soil vapor media, if present at the site, will be evaluated by the remedial investigation.

(3) The remedy will be protective for soil vapor and vapor intrusion and shall address through appropriate removal or engineering controls the migration of contaminants in soil and groundwater at levels which could impact the indoor air of buildings.

(b) Surface water and sediments.

(1) The soil cleanup objectives presented in this subpart do not account for the impact of contaminants in soil relative to surface water and surface water sediments attributable to a remedial site.

(2) The nature and extent of any contamination of the surface water and sediment, if present at the site, will be evaluated by the remedial investigation.

(3) The remedy for a site will eliminate or mitigate the threat to public health and the environment from contaminated surface water and surface water sediments and shall, to the extent feasible:

(i) remove, contain or treat the source of a discharge of contaminants from the site to the surface water and sediments;

(ii) address through appropriate removal or engineering controls the migration of contaminants in soil and groundwater at levels which could impact the water quality or adversely impact the sediments of a surface water body on or adjacent to the site; and

(iii) remove, contain or treat the impacted surface water and surface water sediments based upon the cleanup objectives developed for the remedial program.

(c) Adjacent residential properties.

(1) The soil cleanup objectives presented for commercial or industrial use in this subpart do not directly account for the impact of concentrations of contaminants in soil relative to adjacent residential properties attributable to a remedial site.

(2) The remedy for a site using the commercial or industrial soil cleanup objectives will be protective of adjacent residential properties and shall address, through appropriate removal or engineering controls, the migration of contaminants in soil which could impact residential properties adjacent to the site.

(d) Soil covers and backfill.

(1) Soil brought to the site for use as a soil cover or backfill must:

(i) be comprised of soil or other unregulated material as set forth in Part 360 of this title;

(ii) not exceed the applicable soil cleanup objectives for the use of the site, as set forth in Tables 375-6.8(a) or (b), as follows:

(a) for unrestricted use sites, as set forth in Table 375-6.8(a);

(b) for residential, restricted-residential, and commercial use sites use the lower of the protection of groundwater or the protection of public health soil cleanup objectives, for the identified use of the site as set forth in Table 375-6.8(b);

(c) for industrial use sites, use the lower of the protection of groundwater or the protection of public health soil cleanup objectives for commercial use as set forth in Table 375-6.8(b);

(d) for restricted use sites where an ecological resource that constitutes an important component of the environment is determined to be present, the protection of ecological resources soil cleanup objective must also be considered, so as not to preclude the growth and development of plants and soil dwelling organisms nor inhibit the activity of burrowing organisms; or

(e) a site specific modification to a soil cleanup objective, as set forth in subdivision 375-6.9(c), may also be utilized in compliance with clauses (ii)*(a)* through *(d)* above.

(2) Analytical data is required to demonstrate that the material complies with the requirements of paragraph (1) above. The number of samples required to confirm compliance will be approved in the work plan. The Department may issue a site specific exemption for the analytical testing requirements, based upon documentation of the origin and composition of the material.

(3) The Department may issue a site specific exemption for one or more of the requirements set forth in paragraph (1) above, based upon site specific conditions, including but not limited to, the following:

(i) the use and redevelopment of the site;

(ii) the depth of placement of the backfill material;

(iii) the depth of placement of the backfill material relative to groundwater;

(iv) the volume of backfill material;

(v) the potential for odor from the backfill material;

(vi) the presence of historic fill in the vicinity of the site;

(vii) a Department issued beneficial use determination, pursuant to Part 360 of this title; or

(viii) background levels of contamination in areas surrounding the site.

375-6.8 Soil cleanup objective tables.

(a) Unrestricted use soil cleanup objectives.

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
Metals		
Arsenic	7440-38-2	13 [c]
Barium	7440-39-3	350 [c]
Beryllium	7440-41-7	7.2
Cadmium	7440-43-9	2.5 [c]
Chromium, hexavalent [e]	18540-29-9	1[b]
Chromium, trivalent [e]	16065-83-1	30 [c]
Copper	7440-50-8	50
Total Cyanide [e, f]		27
Lead	7439-92-1	63 [c]
Manganese	7439-96-5	1600 [c]
Total Mercury		0.18 [c]
Nickel	7440-02-0	30
Selenium	7782-49-2	3.9[c]
Silver	7440-22-4	2
Zinc	7440-66-6	109 [c]
PCBs/Pesticides		
2,4,5-TP Acid (Silvex) [f]	93-72-1	3.8
4,4'-DDE	72-55-9	0.0033 [b]
4,4'-DDT	50-29-3	0.0033 [b]
4,4'-DDD	72-54-8	0.0033 [b]
Aldrin	309-00-2	0.005 [c]
alpha-BHC	319-84-6	0.02
beta-BHC	319-85-7	0.036
Chlordane (alpha)	5103-71-9	0.094

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
delta-BHC [g]	319-86-8	0.04
Dibenzofuran [f]	132-64-9	7
Dieldrin	60-57-1	0.005 [c]
Endosulfan I [d, f]	959-98-8	2.4
Endosulfan II [d, f]	33213-65-9	2.4
Endosulfan sulfate [d, f]	1031-07-8	2.4
Endrin	72-20-8	0.014
Heptachlor	76-44-8	0.042
Lindane	58-89-9	0.1
Polychlorinated biphenyls	1336-36-3	0.1
Semivolatile organic compounds		
Acenaphthene	83-32-9	20
Acenapthylene [f]	208-96-8	100 [a]
Anthracene [f]	120-12-7	100 [a]
Benz(a)anthracene [f]	56-55-3	1[c]
Benzo(a)pyrene	50-32-8	1[c]
Benzo(b)fluoranthene [f]	205-99-2	1[c]
Benzo(g,h,i)perylene [f]	191-24-2	100
Benzo(k)fluoranthene [f]	207-08-9	0.8 [c]
Chrysene [f]	218-01-9	1[c]
Dibenz(a,h)anthracene [f]	53-70-3	0.33 [b]
Fluoranthene [f]	206-44-0	100 [a]
Fluorene	86-73-7	30
Indeno(1,2,3-cd)pyrene [f]	193-39-5	0.5 [c]
m-Cresol [f]	108-39-4	0.33 [b]
Naphthalene [f]	91-20-3	12
o-Cresol [f]	95-48-7	0.33 [b]

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
p-Cresol [f]	106-44-5	0.33 [b]
Pentachlorophenol	87-86-5	0.8 [b]
Phenanthrene [f]	85-01-8	100
Phenol	108-95-2	0.33 [b]
Pyrene [f]	129-00-0	100
Volatile organic compounds		
1,1,1-Trichloroethane [f]	71-55-6	0.68
1,1-Dichloroethane [f]	75-34-3	0.27
1,1-Dichloroethene [f]	75-35-4	0.33
1,2-Dichlorobenzene [f]	95-50-1	1.1
1,2-Dichloroethane	107-06-2	0.02 [c]
cis -1,2-Dichloroethene [f]	156-59-2	0.25
trans-1,2-Dichloroethene [f]	156-60-5	0.19
1,3-Dichlorobenzene [f]	541-73-1	2.4
1,4-Dichlorobenzene	106-46-7	1.8
1,4-Dioxane	123-91-1	0.1 [b]
Acetone	67-64-1	0.05
Benzene	71-43-2	0.06
n-Butylbenzene [f]	104-51-8	12
Carbon tetrachloride [f]	56-23-5	0.76
Chlorobenzene	108-90-7	1.1
Chloroform	67-66-3	0.37
Ethylbenzene [f]	100-41-4	1
Hexachlorobenzene [f]	118-74-1	0.33[b]
Methyl ethyl ketone	78-93-3	0.12
Methyl tert-butyl ether [f]	1634-04-4	0.93
Methylene chloride	75-09-2	0.05

Table 375-6.8(a):Unrestricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Unrestricted Use
n - Propylbenzene [f]	103-65-1	3.9
sec-Butylbenzene [f]	135-98-8	11
tert-Butylbenzene [f]	98-06-6	5.9
Tetrachloroethene	127-18-4	1.3
Toluene	108-88-3	0.7
Trichloroethene	79-01-6	0.47
1,2,4-Trimethylbenzene [f]	95-63-6	3.6
1,3,5-Trimethylbenzene[f]	108-67-8	8.4
Vinyl chloride[f]	75-01-4	0.02
Xylene (mixed)	1330-20-7	0.26

All soil cleanup objectives (SCOs) are in parts per million (ppm).

Footnotes

[a] The SCOs for unrestricted use were capped at a maximum value of 100 ppm. See Technical Support Document (TSD), section 9.3.

[b] For constituents where the calculated SCO was lower than the contract required quantitation limit (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, as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

[d] SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.

[e] 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.

[f] Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with “NS”. Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.

(b) Restricted use soil cleanup objectives.

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Metals							
Arsenic	7440-38-2	16[f]	16[f]	16[f]	16[f]	13[f]	16[f]
Barium	7440-39-3	350[f]	400	400	10,000 [d]	433	820
Beryllium	7440-41-7	14	72	590	2,700	10	47
Cadmium	7440-43-9	2.5[f]	4.3	9.3	60	4	7.5
Chromium, hexavalent [h]	18540-29-9	22	110	400	800	1[e]	19
Chromium, trivalent [h]	16065-83-1	36	180	1,500	6,800	41	NS
Copper	7440-50-8	270	270	270	10,000 [d]	50	1,720
Total Cyanide [h]		27	27	27	10,000 [d]	NS	40
Lead	7439-92-1	400	400	1,000	3,900	63[f]	450
Manganese	7439-96-5	2,000[f]	2,000[f]	10,000 [d]	10,000 [d]	1600[f]	2,000[f]
Total Mercury		0.81[j]	0.81[j]	2.8[j]	5.7[j]	0.18[f]	0.73
Nickel	7440-02-0	140	310	310	10,000 [d]	30	130
Selenium	7782-49-2	36	180	1,500	6,800	3.9[f]	4[f]
Silver	7440-22-4	36	180	1,500	6,800	2	8.3
Zinc	7440-66-6	2200	10,000 [d]	10,000 [d]	10,000 [d]	109[f]	2,480
PCBs/Pesticides							
2,4,5-TP Acid (Silvex)	93-72-1	58	100[a]	500[b]	1,000[c]	NS	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 [e]	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 [e]	136
4,4'- DDD	72-54-8	2.6	13	92	180	0.0033 [e]	14
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04[g]	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09
Chlordane (alpha)	5103-71-9	0.91	4.2	24	47	1.3	2.9

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
delta-BHC	319-86-8	100[a]	100[a]	500[b]	1,000[c]	0.04[g]	0.25
Dibenzofuran	132-64-9	14	59	350	1,000[c]	NS	210
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	4.8[i]	24[i]	200[i]	920[i]	NS	102
Endosulfan II	33213-65-9	4.8[i]	24[i]	200[i]	920[i]	NS	102
Endosulfan sulfate	1031-07-8	4.8[i]	24[i]	200[i]	920[i]	NS	1,000[c]
Endrin	72-20-8	2.2	11	89	410	0.014	0.06
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36-3	1	1	1	25	1	3.2
Semivolatiles							
Acenaphthene	83-32-9	100[a]	100[a]	500[b]	1,000[c]	20	98
Acenapthylene	208-96-8	100[a]	100[a]	500[b]	1,000[c]	NS	107
Anthracene	120-12-7	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Benz(a)anthracene	56-55-3	1[f]	1[f]	5.6	11	NS	1[f]
Benzo(a)pyrene	50-32-8	1[f]	1[f]	1[f]	1.1	2.6	22
Benzo(b)fluoranthene	205-99-2	1[f]	1[f]	5.6	11	NS	1.7
Benzo(g,h,i)perylene	191-24-2	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Benzo(k)fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1[f]	3.9	56	110	NS	1[f]
Dibenz(a,h)anthracene	53-70-3	0.33[e]	0.33[e]	0.56	1.1	NS	1,000[c]
Fluoranthene	206-44-0	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Fluorene	86-73-7	100[a]	100[a]	500[b]	1,000[c]	30	386
Indeno(1,2,3-cd)pyrene	193-39-5	0.5[f]	0.5[f]	5.6	11	NS	8.2
m-Cresol	108-39-4	100[a]	100[a]	500[b]	1,000[c]	NS	0.33[e]
Naphthalene	91-20-3	100[a]	100[a]	500[b]	1,000[c]	NS	12

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
o-Cresol	95-48-7	100[a]	100[a]	500[b]	1,000[c]	NS	0.33[e]
p-Cresol	106-44-5	34	100[a]	500[b]	1,000[c]	NS	0.33[e]
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8[e]	0.8[e]
Phenanthrene	85-01-8	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Phenol	108-95-2	100[a]	100[a]	500[b]	1,000[c]	30	0.33[e]
Pyrene	129-00-0	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Volatiles							
1,1,1-Trichloroethane	71-55-6	100[a]	100[a]	500[b]	1,000[c]	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100[a]	100[a]	500[b]	1,000[c]	NS	0.33
1,2-Dichlorobenzene	95-50-1	100[a]	100[a]	500[b]	1,000[c]	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02[f]
cis-1,2-Dichloroethene	156-59-2	59	100[a]	500[b]	1,000[c]	NS	0.25
trans-1,2-Dichloroethene	156-60-5	100[a]	100[a]	500[b]	1,000[c]	NS	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1[e]	0.1[e]
Acetone	67-64-1	100[a]	100[b]	500[b]	1,000[c]	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100[a]	100[a]	500[b]	1,000[c]	NS	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76
Chlorobenzene	108-90-7	100[a]	100[a]	500[b]	1,000[c]	40	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1
Hexachlorobenzene	118-74-1	0.33[e]	1.2	6	12	NS	3.2
Methyl ethyl ketone	78-93-3	100[a]	100[a]	500[b]	1,000[c]	100[a]	0.12

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Methyl tert-butyl ether	1634-04-4	62	100[a]	500[b]	1,000[c]	NS	0.93
Methylene chloride	75-09-2	51	100[a]	500[b]	1,000[c]	12	0.05
n-Propylbenzene	103-65-1	100[a]	100[a]	500[b]	1,000[c]	NS	3.9
sec-Butylbenzene	135-98-8	100[a]	100[a]	500[b]	1,000[c]	NS	11
tert-Butylbenzene	98-06-6	100[a]	100[a]	500[b]	1,000[c]	NS	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3
Toluene	108-88-3	100[a]	100[a]	500[b]	1,000[c]	36	0.7
Trichloroethene	79-01-6	10	21	200	400	2	0.47
1,2,4-Trimethylbenzene	95-63-6	47	52	190	380	NS	3.6
1,3,5- Trimethylbenzene	108-67-8	47	52	190	380	NS	8.4
Vinyl chloride	75-01-4	0.21	0.9	13	27	NS	0.02
Xylene (mixed)	1330-20-7	100[a]	100[a]	500[b]	1,000[c]	0.26	1.6

All soil cleanup objectives (SCOs) are in parts per million (ppm).
NS=Not specified. See Technical Support Document (TSD).

Footnotes

[a] The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
[b] The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
[c] The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
[d] The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.
[e] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.
[f] For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.
[g] This SCO is derived from data on mixed isomers of BHC.
[h] 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.
[i] This SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate.
[j] This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

375-6.9 Development or modification of soil cleanup objectives.

(a) Applicability. This section identifies when and the procedures under which a contaminant-specific soil cleanup objective may be developed or modified.

(1) Soil cleanup objectives for contaminants not included in Tables 375-6.8(a) and (b) may be developed by the remedial party or required by the Department.

(2) Soil cleanup objectives for contaminants included in Tables 375-6.8(a) and (b), may be modified based on site-specific data if desired by the remedial party; as set forth in:

(i) subpart 375-3 for Tracks 3 or 4, as set forth in paragraphs 375-3.8(e)(3) or (4), respectively; or

(ii) subparts 375-2 and 375-4, as set forth in subparagraph 375-2.8(b)(1)(iii) and subparagraph 375-4.8(c)(1)(iii).

(3) Protection of ecological resources soil cleanup objectives were not developed for certain contaminants, which are identified in Table 375-6.8(b) as "NS". Where such contaminants:

(i) appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources soil cleanup objective for the contaminant for use in Track 1 and apply such soil cleanup objective where it is lower than the soil cleanup objective set forth in Table 375-6.8(a); or

(ii) are identified as impacting or threatening an ecological resource for a restricted use remedial program the Department may require a protection of ecological resources soil cleanup objective be developed.

(b) New soil cleanup objectives must:

(1) Be developed utilizing the same methodologies that were used by the Department to develop the respective soil cleanup objective, as provided in the Technical Support Document.

(2) Apply the following caps, as set forth in section 9.3 of the Technical Support Document, on any soil cleanup objective included in Tables 375-6.8(a) and (b), with the exception of metals, as set forth in paragraph (3) below, developed for:

(i) unrestricted use, residential use, restricted-residential use and the protection of ecological resources, a maximum value of 100 ppm;

(ii) commercial use, a maximum value of 500 ppm; and

(iii) industrial use and the protection of groundwater a maximum value of 1000 ppm, and

(3) Apply a cap for metals at a maximum value of 10,000 ppm.

(c) Development of unrestricted use soil cleanup objectives. The unrestricted use soil cleanup objective for a compound will be the lowest of the soil cleanup values, calculated as set forth in appendix E of the Technical Support Document, for the protection of groundwater, protection of ecological resources and protection of public health.

(d) Development of restricted use soil cleanup objectives. The protection of:

(1) Groundwater soil cleanup objective will be the values calculated for the protection of groundwater as set forth in appendix E of the Technical Support Document;

(2) Ecological resources soil cleanup objectives will be the values calculated for the protection of ecological resources as set forth in appendix E of the Technical Support Document; and

(3) Public health cleanup objective will be the values calculated for the protection of public health for the identified use of the site, as set forth in appendix E of the Technical Support Document.

(e) Modification of soil cleanup objectives. The contaminant-specific soil cleanup objectives set forth at Tables 675-6.8(a) and (b)[1] may be modified by site specific data as set forth in this subdivision.

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[1] Original should read "Tables 375-6.8(a) and (b)"

(1) Contaminant-specific soil cleanup objectives modified in accordance with this subdivision may be utilized by the remedial party for a site remedial program undertaken pursuant to:

(i) subpart 375-3 in Tracks 3 or 4, as set forth in paragraphs 375-3.8(e)(3) or (4), respectively; or

(ii) subparts 375-2 and 375-4, as set forth in subparagraph 375-2.8(b)(1)(ii) and subparagraph 375-4.8(c)(1)(ii).

(2) For the calculation of a protection of groundwater or ecological resources contaminant -specific soil cleanup objective, the site-specific percentage of total organic carbon in the soil at the site may be substituted in the algorithms provided in appendix E of the Technical Support Document.

(3) For the calculation of a protection of public health contaminant-specific soil cleanup objective, site-specific data may be used to modify two of the five exposure pathways, as follows:

(i) for the particulate inhalation pathway six parameters rely on site-specific data; and

(ii) for the volatile inhalation pathway, four parameters rely on site-specific data.

(4) The algorithms to be used for each protection of public health pathway and details on the parameters which can be substituted are included in appendix E of the Technical Support Document.

(f) Use of soil cleanup objectives developed or modified. Once approved by the Department, contaminant-specific soil cleanup objectives developed or modified as set forth in this section may be utilized by the Department at other sites consistent with paragraphs (1) and (2) below.

(1) Contaminant-specific soil cleanup objectives developed for contaminants not included in Tables 375-6.8(a) and (b), as set forth in subdivision 375-6.9(b) above, will be used as guidance and shall be considered by the Department for inclusion in the Tables in this subpart during any subsequent reevaluation of the soil cleanup objectives, as set forth by ECL 27-1415.

(2) Contaminant-specific soil cleanup objectives modified for site specific parameters, as set forth in subdivision 375-6.9(e) above, may be utilized at sites manifesting similar parameters, if approved by the Department.

CP-51 / Soil Cleanup Guidance

New York State Department of Environmental Conservation

DEC Policy

Issuing Authority: Alexander B. Grannis, Commissioner	
Date Issued: October 21, 2010	**Latest Date Revised:**

I. Summary

This policy provides the framework and procedures for the selection of soil cleanup levels appropriate for each of the remedial programs in the New York State Department of Environmental Conservation (DEC) Division of Environmental Remediation (DER). This policy applies to the Inactive Hazardous Waste Disposal Site Remedial Program, known as the State Superfund Program (SSF); Brownfield Cleanup Program (BCP); Voluntary Cleanup Program (VCP); Environmental Restoration Program (ERP); Spill Response Program - Navigation Law (NL) section 176 (SRP); and the Resource Conservation and Recovery Act (RCRA) Corrective Action Program. It replaces *Technical and Administrative Guidance Memorandum (TAGM) 4046: Determination of Soil Cleanup Objectives and Cleanup Levels* (January 24, 1994); the *Petroleum Site Inactivation and Closure Memorandum* (February 23, 1998); and Sections III and IV of *Spill Technology and Remediation Series (STARS) #1* (August 1992).

This document is used in conjunction with the applicable statutes, regulations and guidance. Site-specific soil cleanup levels, determined in accordance with this guidance, are only applied after:

- the site, or area of concern, is fully investigated to determine the nature and extent of contamination;
- all sources of contamination are addressed consistent with the hierarchy provided in 6 NYCRR 375-1.8(c) or consistent with the RCRA Corrective Action Program (as appropriate);
- groundwater, if contaminated, has been evaluated for appropriate remedial actions consistent with 6 NYCRR 375-1.8(d) or consistent with the RCRA Corrective Action Program (as appropriate); and
- impacts on adjacent residential properties, surface water, aquatic ecological resources are evaluated, as well as indoor air, soil vapor, vapor intrusion and other appropriate media.

II. Policy

It is DEC's policy, consistent with applicable statutes and regulations, that all remedies will be protective of public health and the environment. DEC's preference is that remedial programs, including the selection of soil cleanup levels, be designed such that the performance standard results in the implementation of a permanent remedy resulting in no future land use restrictions. However, some of

DEC's remedial programs are predicated on future site use. Further, it is not always feasible to return to a condition where no restrictions are required.

The procedures set forth herein are intended for the use and guidance of both DEC and remedial parties to provide a uniform and consistent process for the determination of soil cleanup levels. This guidance is not intended to create any substantive or procedural rights, enforceable by any party in administrative or judicial litigation with DEC. DEC reserves the right to act at variance with these procedures to address site-specific circumstances and to change the procedures in this guidance at any time.

Please note that this guidance focuses only on soil cleanup levels. All remedies must be fully protective of public health and the environment and must prevent further off-site migration to the extent feasible, with special emphasis on preventing or minimizing migration onto adjacent residential properties. A remedial party is required to evaluate and investigate, if necessary, all environmental media including soil, groundwater, surface water, sediments, soil vapor, ambient air, and biota. [See 6 NYCRR 375-1.8(a)(6) or RCRA Corrective Action Program (as appropriate)]. This investigation will determine if any of the referenced media are, or may be, impacted by site contamination. Applicable guidance should be consulted for media other than soil.

Nothing contained in this guidance, in itself, forms the basis for changes to previously selected remedies. However, a change in the site remedy may be considered consistent with *DER-2: Making Changes to Selected Remedies* (April 1, 2008). [See Section VI, Related References.] To the extent that a change to a selected remedy at a site in one of DER's remedial programs is necessary as provided in DER-2, as applicable, the Soil Cleanup Objectives (SCOs) may be considered in the evaluation of appropriate changes to the selected remedy. For sites in other programs, applicable regulations and guidance must be used.

III. Purpose and Background

DEC has a number of different remedial programs that were developed over time based on separate and distinct authorities. These programs use different procedures to determine the extent of soil cleanup necessary to satisfy the remedial program goals. The purpose of this document is to set forth how soil cleanup levels are selected for the different programs.

Legislation establishing New York State's Brownfield Cleanup Program (Article 27, Title 14 of the Environmental Conservation Law [ECL]) required DEC, in consultation with the New York State Department of Health (NYSDOH), to develop an approach for the remediation of contamination at brownfield sites. The resulting regulation includes seven sets of SCOs. Four sets provide for the protection of public health for different land uses (residential, restricted residential, commercial, and industrial); two sets provide for the protection of other resources (groundwater and ecological resources); and one set includes SCOs for protection of public health and the environment for all uses (unrestricted use).

With the promulgation of the SCOs, it is necessary to discuss how the SCOs, and soil cleanup levels generally, are arrived at for a specific site. Some key definitions in understanding how cleanup levels for soil are arrived at follow.

Feasible, which means suitable to site conditions, capable of being successfully carried out with available technology, implementable and cost effective [see 6 NYCRR 375-1.2(s)].

Presumptive remedy, which means a technology or technique where experience has shown the remedy to be a proven solution for specific types of sites and/or contaminant classes [See *DER-15: Presumptive/Proven Remedial Technologies* February 27, 2007. Refer to Section VI, Related References.]

Soil cleanup level, which means the concentration of a given contaminant for a specific site that must be achieved under a remedial program for soil. Depending on the regulatory program, a soil cleanup level may be based on the regulation [6 NYCRR 375-6.8(a) or (b)], modified from the regulatory value based on site-specific differences, or based on other information, including background levels or feasibility. Soil cleanup levels may include:

- SCOs promulgated at 6 NYCRR 375-6;
- Supplemental Soil Cleanup Objectives (SSCOs);
- a "totals" approach for a family of contaminants known as Polycyclic Aromatic Hydrocarbons (PAHs);
- Presumptive remedy for Polychlorinated Biphenyls (PCBs); and
- Nuisance Condition.

Soil Cleanup Objective (SCO), which means the chemical concentrations for soil cleanup of individual chemicals contained in 6 NYCRR 375-6.8(a) or (b). The SCOs were developed using the process outlined in the Technical Support Document (TSD). The SCOs and the SSCOs defined below are applicable statewide and do not account for many site-specific considerations which could potentially result in higher levels. Soil concentrations that are higher than the SCOs and SSCOs are not necessarily a health or environmental concern. When an SCO (or SSCO) is exceeded, the degree of public health or environmental concern depends on several factors, including the magnitude of the exceedance, the accuracy of the exposure estimates, other sources of exposure to the contaminant, and the strength and quality of the available toxicological information on the contaminant.

Supplemental Soil Cleanup Objective (SSCO), which means a) an existing soil cleanup level for a contaminant which had been included in former TAGM 4046 and was not included in 6 NYCRR 375-6; b) has been developed using the same process used for development of the SCOs; and c) new cleanup levels for soil developed by the remedial party following the approach detailed in Appendix E of the TSD. The TSD provides information relative to the development of cleanup objectives for soil that are not set forth in 6 NYCRR 375-6. Cleanup objectives that have been established at the direction of DEC or the election of remedial parties are included in Table 1.

Technical Support Document (TSD), which refers to the document dated December 2006 detailing the development of the SCOs that were promulgated in 6 NYCRR 375-6. It provides the technical background and provides a detailed discussion of the considerations for development of the SCOs for the different land uses and exposure pathways. The TSD is available on DEC's website [see Section VI, Related References].

The purpose of this guidance is NOT to focus on media other than soil. Accordingly, the remedial program may require remedial activities to address media other than soil (e.g., groundwater, surface water, sediment, and vapor). Applicable guidance should be consulted for media other than soil. This guidance is to be used in conjunction with the applicable statutes, regulations and guidance. Site-specific soil cleanup levels, determined in accordance with this guidance, are only applied after:

- the site, or area of concern, is fully investigated to determine the nature and extent of contamination;
- all sources of contamination are addressed consistent with the hierarchy provided in 6 NYCRR 375-1.8(c) or consistent with the RCRA Corrective Action Program (as appropriate);
- groundwater, if contaminated, has been evaluated for appropriate remedial actions consistent with 6 NYCRR 375-1.8(d) or consistent with the RCRA Corrective Action Program (as appropriate); and
- an evaluation of impacts on adjacent residential properties, surface water, aquatic ecological resources, as well as indoor air, soil vapor, vapor intrusion and other appropriate media.

IV. Responsibility

The responsibility for maintaining and updating this policy lies with DER. DEC staff are responsible for implementing this policy, with input (as applicable) from NYSDOH.

V. Procedures

A. General Approaches to the Selection of Soil Cleanup Levels

The determination of soil cleanup levels for a site is dependent on:

1. The regulatory program pursuant to which the site is being addressed;
2. Whether the groundwater beneath or down gradient of the site is, or may become contaminated with site-related contaminants;
3. Whether ecological resources constitute an important component of the environment at or adjacent to a site, and which are, or may be, impacted by site-related contaminants; and
4. Other impacted environmental media such as surface water, sediment, and soil vapor.

After fully evaluating the nature and extent of soil contamination associated with a site, the soil cleanup levels will be based on one, or a combination of, the following four approaches.

Approach 1: **Utilize the Unrestricted Use Soil Cleanup Objectives** [see 6 NYCRR Table 375-6.8(a)]. Under this approach, the soil cleanup levels will be established consistent with the SCOs set forth in 6 NYCRR Table 375-6.8(a). For contaminants of concern which are not included in the rule, DEC may direct development of a soil cleanup level which is protective of public health and the environment without restrictions following the procedure outlined in Appendix E of the TSD. Under this approach, the unrestricted SCOs are applied throughout the soil matrix to the top of bedrock (including the saturated zone).

Approach 2: **Utilize the Restricted Use Soil Cleanup Objectives** [see 6 NYCRR Table 375-6.8(b)]. Under this approach, soil cleanup levels will be established consistent with the SCOs set forth in 6 NYCRR Table 375-6.8(b) selecting the lowest SCO in the categories described in A through C below. Generally, after source removal, the soil cleanup levels do not need to be achieved to more than 15 feet below ground surface or to the top of bedrock, whichever is shallower.

A. Select the applicable land use category for the protection of public health (residential, restricted residential, commercial or industrial);

B. Determine if the SCOs for the protection of groundwater are applicable (see Section V.D); and

C. Determine if the SCOs for the protection of ecological resources are applicable (see Section V.C).

Approach 3: **Limited Site-Specific Modifications to Soil Cleanup Objectives.** This approach allows for consideration of site-specific information to modify the SCOs promulgated in 6 NYCRR Tables 375-6.8 (a) and (b) following the approach detailed in Appendix E of the TSD. The equations and basic methodology specified for calculating the 6 NYCRR 375-6.8 (a) and (b) values may not be modified under this approach. However, in instances where site-specific parameters were used in the calculation of the SCOs, site data different from the assumptions used to calculate the SCOs may be used to modify the soil cleanup levels for a specific site. These instances are very limited and occur only in certain pathways that are listed below.

- Protection of groundwater pathway
- Particulate inhalation pathway
- Volatile inhalation pathway
- Protection of ecological resources pathway

It should be noted that even if site-specific data modifies these pathways, it may not result in modifying the SCOs because the lowest value from all applicable pathways is used to determine each SCO. The inhalation pathway is very seldom the controlling pathway in the determination of the protection of public health. The specific parameters that can be modified are identified in Appendix E of the TSD (e.g., inhalation dispersion terms, fraction of organic carbon in soil, etc.).

The remedial party should consider the cost of collecting the data necessary to support a request to modify the SCOs with the potential for deriving a higher SCO that provides an appropriate level of protection. The remedial party may be required to submit additional data to support the use of modified SCOs. Once DEC approves one or more modified SCOs, they are applied in the manner described under Approach 2.

Approach 4: **Site-Specific Soil Cleanup Objectives.** Under this approach, the remedial party may propose site-specific cleanup levels or approaches for soil which are protective of public health and the environment based on other information. This approach sets forth a flexible framework to develop soil cleanup levels by allowing the remedial party to conduct a more detailed evaluation of site information in an effort to calculate protective soil cleanup levels or approaches unique to a site. Under this approach, the remedial party may propose a remedy that does not include specific soil cleanup levels (e.g., excavate the top 6 feet in an area extending 75 feet in all directions from boring B12); modify the input parameters used in the SCO calculations; use site data to improve or confirm predictions of exposures to receptors to contaminants of concern; analyze site-specific risks using risk assessments; use toxicological information available from alternate sources; or consider site background and historic fill. Data supporting these site-specific adjustments or use of alternate methodologies must also be provided to DEC for review and approval to ensure that the resulting soil cleanup levels are protective.

The Approach 4 framework leaves DEC with discretion to determine whether a different approach is appropriate for the site and, if a different approach is to be used, the proper method of implementation. The remedial party should consider the cost of collecting the data necessary to develop site-specific soil cleanup levels (or approaches) with the potential for deriving a soil cleanup level which is higher than a particular SCO and which provides an appropriate level of protection. The remedial party may also be required to submit additional data to support the use of methodologies in the calculation of site-specific soil cleanup levels or to support the proposed approach.

B. Application of Soil Cleanup Levels for the Specific Remedial Programs: Soil cleanup levels are determined on a site-specific basis depending on the program under which the site is being remediated. In some cases (e.g., BCP Track 1 or Track 2), the soil cleanup levels are the SCOs taken directly from 6 NYCRR 375-6. In other cases, soil cleanup levels may be derived from the Part 375 SCOs but modified based on other information. In yet other cases, the soil cleanup levels may have no relationship or connection to the SCOs, but rather be developed in accordance with DEC-approved methodologies or approaches.

1. <u>Inactive Hazardous Waste Disposal Site Remedial Program (State Superfund Program)</u>: The goal of the remedial program for a specific site is to restore that site to pre-disposal conditions, to the extent feasible. The unrestricted use SCOs are considered to be representative of pre-disposal conditions unless an impact to ecological resources has been identified (see 6 NYCRR 375-2.8(b)(2)). However, it must be recognized that achievement of this goal may not be feasible in every case. At a minimum, all remedies must be protective of public health and the environment. The following procedure is used to determine the most feasible remedy.

(a) The remedial party shall evaluate, and if feasible, implement a cleanup utilizing Approach 1 (application of unrestricted SCOs).

(b) Where DEC determines that achieving unrestricted SCOs is not feasible as documented in a feasibility study, the remedial party may evaluate alternatives to remediate the site to the greatest extent feasible (see *DER-10: Technical Guidance for Site Investigation and Remediation*, Chapter 4.3). [See Section VI, Related References.] In this event, the remedial party may propose soil cleanup levels in accordance with any of the general approaches. However, when considering restricted use soil cleanup levels, the remedial party should apply the least restrictive use category feasible. For purposes of this discussion, residential use is the least restrictive use and industrial use is the most restrictive category. This process starts with consideration of residential use, followed by restricted residential use, commercial use, and then industrial use. The evaluation proceeds through the different land uses until a feasible remedy is found. This evaluation is not bound to the SCOs in regulation or SSCOs set forth in this guidance but may result in a site-specific soil cleanup level that is between the SCOs or soil cleanup level for two different land uses (e.g., above the restricted residential SCO and below the commercial SCO).

2. <u>Brownfield Cleanup Program</u> The remedy shall be fully protective of public health and the environment, including, but not limited to, groundwater according to its classification pursuant to ECL 17-0301, drinking water, surface water, air (including indoor air), sensitive populations (including children), and ecological resources (including fish and wildlife). Soil cleanup levels corresponding to the cleanup track under which the site is being remediated are required to be met. The four cleanup tracks are:

> **<u>Track 1</u>**: Cleanups pursuant to this track must achieve unrestricted use of the site. This track requires that the remedial party implement a cleanup utilizing Approach 1. Institutional and engineering controls are allowed only for periods of less than five years (defined as short-term controls) except in the limited instance where a volunteer has conducted remedial activities resulting in a bulk reduction in groundwater contamination to asymptotic levels.
>
> **<u>Track 2</u>** : Cleanups pursuant to this track may consider the current, intended, or reasonably anticipated future use in determining the appropriate cleanup levels for soil. This track requires that the remedial party implement a cleanup that achieves the SCOs in the tables in 6 NYCRR 375-6.7(b) for the top 15 feet of soil (or bedrock if less than 15 feet). This track follows approach 2. Institutional and engineering controls are allowed for soil (for the top 15 feet of soil or bedrock if less than 15 feet) for less than five years (defined as short-term controls). Institutional and engineering controls which limit site use and the use of onsite groundwater can be used without regard to duration. Track 2 cleanups at restricted residential, commercial or industrial use sites require site management plans to ensure that material removed from the site (post remedial action) is managed appropriately and to ensure that any buffer zone protecting adjacent residential use sites or ecological resources is maintained.
>
> **<u>Track 3</u>**: Cleanups pursuant to this track may consider the current, intended, or reasonably anticipated use in determining the appropriate cleanup levels for soil. This track requires that the remedial party implement a cleanup utilizing Approach 3 for those SCOs which the remedial party seeks to modify an established SCO. Institutional and engineering controls are allowed for soil (for the top 15 feet of soil or bedrock if less than 15 feet) for less than 5 years (defined as short-term controls). Institutional and engineering controls which limit site use and the use of on-site groundwater can be used without regard to duration. Track 3 cleanups at restricted residential, commercial or industrial use sites require site management plans to ensure that material removed from the site (post remedial action)is managed appropriately and to ensure that any buffer zone protecting adjacent residential use sites or ecological resources is maintained.
>
> **<u>Track 4</u>**: Cleanups pursuant to this track may consider the current, intended, or reasonably anticipated use in determining the appropriate cleanup levels for soil. This track allows for the development of site-specific soil cleanup levels below the cover system in accordance with Approach 4. Track 4 remedies must address all sources as a component of the remedy. Short- and long-term institutional and engineering controls are allowed to achieve protection of public health and the environment. The remedy under Track 4 must provide a cover system over exposed residual soil contamination. Soils which are not otherwise covered by structures such as buildings, sidewalks or pavement (i.e., exposed surface soils) must be covered with soil that complies with the use-based SCOs in 6 NYCRR Table 375-6.8(b) levels for the top one foot (non-residential uses) or top two feet (restricted residential use).

3. <u>Environmental Restoration Program</u>: The goal of the program for a specific site is to select a remedy that is protective of public health and the environment, including, but not limited to, groundwater according to its classification pursuant to ECL 17-0301, drinking water, surface water and air (including indoor air), sensitive populations (including children) and ecological resources (including fish and wildlife). At a minimum, the remedy selected shall eliminate or mitigate all significant threats to public health and to the environment presented by contaminants disposed at the site through the proper application of scientific and engineering principles. Soil cleanup levels may be developed in accordance with Approaches 1 – 4 without restriction.

4. <u>Voluntary Cleanup Program</u>: The goal of the program for a specific site is to select a remedy that is protective of public health and the environment for the contemplated use. The soil cleanup levels may be developed in accordance with Approaches 1 – 4 without restriction.

5. <u>Petroleum Spill Response Program</u>: The goal of the Petroleum Spill Response Program is to achieve pre-spill conditions [6 NYCRR 611.6(a)(4)]. Remedial activities under this program shall be undertaken relative to the petroleum contamination that was released along with any co-mingled contamination from other sources. The remedial party shall achieve, to the extent feasible, the unrestricted SCOs for petroleum-related contaminants listed in 6 NYCRR Table 375-6.8(a). For petroleum contaminants not included in 6 NYCRR Table 375-6.8(a) (discussed in Section E below), the remedial party shall apply, to the extent feasible, the soil cleanup levels provided in Table 1. For ease of implementation, two lists of petroleum contaminants (Gasoline and Fuel Oil, Tables 2 and 3) are attached. The tables combine the applicable petroleum-related SCOs from 6 NYCRR 375-6.8(a) and the applicable petroleum related SSCOs from Table 1. Where DEC determines that it is not feasible to achieve the soil cleanup levels as set forth in this paragraph, the remedial party may propose soil cleanup levels in accordance with any of the general approaches. However, when considering restricted use soil cleanup levels, the remedial party should apply the least restrictive use category feasible.

For purposes of this discussion, residential use is the least restrictive use, and industrial use is the most restrictive category. This process starts with consideration of residential use, followed by restricted residential use, commercial use, and then industrial use. The evaluation proceeds through the different land uses until a feasible remedy is found. If the protection of groundwater or ecological SCOs apply, the lower of the applicable protection of the public health SCO or the applicable protection of groundwater or ecological SCO should be achieved to the extent feasible. This evaluation is not bound to the SCOs in regulation or the SSCOs set forth in this guidance but may result in a site-specific soil cleanup level that is between the SCOs or soil cleanup level for two different land uses (e.g., above the restricted residential SCO and below the commercial SCO).

6. <u>RCRA Corrective Action Program</u>: The RCRA program was promulgated to regulate facilities that actively manage hazardous waste. DER administers the RCRA Corrective Action Program, with a goal of achieving soil cleanup levels at Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) that eliminate risks to public health and the environment (i.e., clean the site to unrestricted use) or control said risks (i.e., clean the site or unit(s) to the lowest possible soil cleanup objective, regardless of site use), to the extent feasible. This goal takes into account that certain units at the facility may be permitted to manage hazardous waste under New York State's Hazardous Waste Management (HWM) regulations (6 NYCRR Part 373). The requirements of active HWM facilities, as well as the site's history, will be considered when soil cleanup levels are determined. Selected remedies must be protective of public health and the environment. Soil cleanup levels will be selected using the following procedure.

(a) The remedial party shall evaluate, and if feasible, implement a cleanup utilizing Approach 1. Under this approach, the unrestricted SCOs apply to the entire soil matrix to the top of bedrock. For contaminants not listed in 6 NYCRR 375-6, a new or existing SSCO may be used.

(b) If DEC determines that achieving unrestricted SCOs is not feasible, the remedial party may evaluate other alternatives to remediate the site. In this event, the remedial party may propose soil cleanup levels in accordance with any of the general approaches. However, when considering restricted use soil cleanup levels, the remedial party shall apply the use category which is both feasible and least restricted. For purposes of this discussion, residential use is the least restricted category and industrial use is the most restricted category. A soil cleanup level between two different land uses (e.g., residential and restricted residential) may be determined to be feasible, and if selected, must be achieved.

Any soil cleanup levels specified in regulation (i.e., 6 NYCRR 373-2.6(b)-(k) for "regulated units" as defined in 6 NYCRR 373-2.6 (a)(1)(ii)) or in a DEC enforceable document (Part 373 permits, Consent Orders, etc.) shall take precedence over the soil cleanup levels which could be established through use of this document.

C. Determination of Whether Ecological Resources SCOs Apply to a Site: SCOs developed to protect ecological resources (ESCOs) are incorporated in the Unrestricted Use SCO in 6 NYCRR Table 375-6.8(a) and are included as a separate category in 6 NYCRR Table 375-6.8(b). For contaminants of concern which do not have a calculated ESCO in regulation, DEC may direct the remedial party to develop a soil cleanup level which is protective of ecological resources where appropriate, based on the process outlined in Appendix E of the TSD.

The presence of ecological resources and any impact to those resources will be assessed during the remedial investigation. For sites where there is the potential for an ecological resource impact to be present, or where it is likely to be present, an assessment of fish and wildlife resource impacts will be performed. For sites in DER's SSF, BCP, VCP and ERP, the assessment will be performed in accordance with DEC's guidance, *Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites*, October, 1994, as described in DER-10, Section 3.10. For sites in the RCRA Corrective Action Program, the assessment will be performed using the above referenced fish and wildlife impact analysis document as guidance, and by consulting with appropriate personnel in DEC's Division of Fish, Wildlife and Marine Resources.

Soil cleanup levels which are protective of ecological resources must be considered and applied, as appropriate, for the upland soils (not sediment) at sites where DEC determines, based on the foregoing analysis, that:

- ecological resources are present, or will be present, under the reasonably anticipated future use of the site, and such resources constitute an important component of the environment at, or adjacent to, the site;

- an impact or threat of impact to the ecological resource has been identified; and

- contaminant concentrations in soil exceed the ESCOs as set forth in 6 NYCRR 375-6.8(b) or the Protection of Ecological Resources SSCOs contained in this document.

Sites or portions thereof that will be covered by buildings, structures or pavement are not subject to the ESCOs. Further, ecological resources do not include pets, livestock, agricultural or horticultural crops, or landscaping in developed areas. (See 6 NYCRR 375-6.6 for more detail.)

D. Determination of Whether Protection of Groundwater SCOs Apply: SCOs developed to protect groundwater are incorporated in the Unrestricted Use SCOs in 6 NYCRR Table 375-6.8(a) and are included as a separate category in 6 NYCRR Table 375-6.8(b). For contaminants of concern which do not have a protection of groundwater SCO, DEC may direct the remedial party to develop a soil cleanup level which is protective of groundwater using the process in Appendix E of the TSD.

1. Except as provided for in (2) below, the protection of groundwater SCOs will be applicable where:

   (i) contamination has been identified in on-site soil by the remedial investigation; and
   (ii) groundwater standards are, or are threatened to be, contravened by the presence of soil contamination at concentrations above the protection of groundwater SCOs.

2. DEC may provide an exception to the applicability of the protection of groundwater SCOs, as set forth in 6 NYCRR 375-6.5(a)(1), when (i), (ii), and (iii) exist and either (iv) or (v) also apply, as described below.

   (i) The groundwater standard contravention is the result of an on-site source which is addressed by the remedial program.
   (ii) An environmental easement or other institutional control will be put in place which provides for a groundwater use restriction.
   (iii) DEC determines that contaminated groundwater at the site:
      (a) is not migrating, nor is likely to migrate, off-site; or
      (b) is migrating, or is likely to migrate, off-site; however, the remedy includes active groundwater management to address off-site migration.
   (iv) DEC determines the groundwater quality will improve over time.
   (v) The groundwater contamination migrating from the site is the result of an off-site source of contamination, and site contaminants are not contributing consequential amounts to the groundwater contamination.

3. In determining whether to provide the exemption set forth in subparagraph 2 above, DEC will consider:

   (i) all of the remedy selection criteria at 6 NYCRR 375-1.8(h) or in the RCRA Corrective Action program;
   (ii) the amount of time that the groundwater will need to be actively managed for the protection of public health and the environment; and
   (iii) the potential impact that groundwater contamination may have on media not specifically addressed by the SCOs (e.g., vapor intrusion, protection of surface water, and protection of aquatic ecological resources).

E. Supplemental Soil Cleanup Objectives: SSCOs are either existing cleanup levels in Table 1 or are new soil cleanup levels developed by the remedial party as part of its remedial program. These SSCOs are in addition to the SCOs that are included in Part 375.

Existing SSCOs: The Table 1 list of SSCOs includes contaminants from former TAGM 4046 that were not included in 6 NYCRR 375-6.8 and soil cleanup levels developed using the process detailed in Appendix E of the TSD but not promulgated. For those contaminants which were part of the former TAGM 4046, soil cleanup levels exist for the protection of public health (based on ingestion) and for the protection of groundwater. In some cases, to be determined on a site-by-site basis, evaluation of other factors is likely needed for the protection of public health, especially when the use of a site includes residential use.

These other factors include other exposure pathways (e.g., homegrown vegetable ingestion, inhalation and dermal contact), potential non-site exposures to the contaminant and current toxicological data on the contaminant. In these instances, DEC (in consultation with NYSDOH) will determine if the additional factors have been adequately addressed. The SSCOs identified in Table 1 (subject to the limitation described above) may be used as if they were included in Part 375. A remedial party is not required to use the SSCOs set forth in Table 1. In lieu of applying an SSCO, the remedial party may elect to develop a soil cleanup level (using the process described in Appendix E of the TSD and discussed below.) Table 1 also includes SSCOs that were developed for some pathways using the same process detailed in the TSD. A remedial party may elect to use those SSCOs directly or confirm that the calculated value for that pathway is correct.

New SSCOs: The remedial party may elect to, or DEC may direct a remedial party to, develop a contaminant-specific SCO for any contaminant not included in 6 NYCRR Tables 375-6.8(a) or (b). Generally, DEC will request that an SCO be developed only where the contaminant is a predominant contaminant of concern (COC) at the site and is not otherwise being addressed to DEC's satisfaction as part of the proposed remedy. This could happen, for example, when a remedial party is seeking a Track 1 cleanup and non-SCO/SSCO contaminants are present and may not be satisfactorily addressed by the remedial activities addressing the SCOs or SSCOs. Guidance on the process for developing new SCOs is provided in Appendix E of the TSD. DEC will include all newly developed soil cleanup levels, developed and approved pursuant to this paragraph in a revised Table 1. The developed SSCO must:

1. be developed utilizing the same methodologies that were used by DEC to develop SCOs that are set forth in Part 375; and

2. apply the maximum acceptable soil concentrations (caps), as set forth in section 9.3 of the TSD.

F. Use of SCOs and SSCOs as a Screening Tool: The SCOs and SSCOs may be used to identify areas of soil contamination and to determine the extent of soil contamination. As noted in Section V.K, consideration of other media is required to determine if remedial action is needed.

1. At sites or areas of concern where contaminant concentrations are equal to or below the unrestricted SCOs in 6 NYCRR Table 375-6.8(a), no action or study is warranted because of soil contamination.

2. The exceedance of one or more applicable SCOs or SSCOs, (which is the lower of protection of public health, protection of groundwater, or protection of ecological resources soil cleanup objectives as described in Section III below), alone does not trigger the need for remedial action, define "unacceptable" levels of contaminants in soil, or indicates that a site qualifies for any DEC remedial program (e.g., BCP, SSF). As noted in the definition of SCO above, SCOs and SSCOs are applicable statewide and do not account for many site-specific considerations which could potentially result in higher levels. Therefore, soil concentrations that are higher than the applicable SCOs or SSCOs are not necessarily health or environmental concerns.

3. When an applicable SCO or SSCO is exceeded, the degree of public health or environmental concern depends on several factors, including:

    - magnitude of the exceedance;
    - accuracy of the exposure estimates;
    - other sources of exposure to the contaminant; and
    - strength and quality of the available toxicological information on the contaminant.

G. Soil Cleanup Levels for Nuisance Conditions: Experience has shown that contaminants in soil that meets the DEC-approved soil cleanup levels can exhibit a distinct odor or other type of nuisance (e.g., staining). This is true even though the contaminants will not leach from the soil (e.g., certain soils with more insoluble substances at higher concentrations). When DEC determines that soil remaining after the remedial action will result in the continuation of a nuisance (e.g., odors, staining, etc), DEC will require that additional remedial measures be evaluated, and may require additional remedial actions be taken to address the nuisance condition.

H. Subsurface Soil Cleanup for Total Polycyclic Aromatic Hydrocarbons: For non-residential use sites (i.e., commercial or industrial use sites) where the ESCOs are not applicable, DEC may approve a remedial program which achieves a soil cleanup level of 500 parts per million (ppm) for total PAHs for all subsurface soil. The 500 ppm soil cleanup level is in lieu of achieving all of the PAH-specific SCOs in 6 NYCRR 375-6. For purposes of this provision, subsurface soil shall mean the soil beneath permanent structures, pavement, or similar cover systems; or at least one foot of soil cover (which must meet the applicable SCOs). Institutional controls (e.g., an environmental easement) along with a site management plan will be required when this soil cleanup level is employed at a site. This cleanup level is determined to be feasible and protective based on DEC's experience in its various remedial programs. This approach has existed in TAGM 4046 since it was first issued in 1992.

I. Soil Cleanup for PCBs: DEC may approve a remedial program which achieves a soil cleanup level for PCBs as set forth herein:

1. **For Non-BCP sites:** An acceptable presumptive remedy for soil where neither the unrestricted SCOs nor the ESCOs are applied in the remedial program may include a soil cleanup level for PCBs of 1 ppm in the surface soils and 10 ppm in subsurface soils.

2. **For BCP sites:** An acceptable presumptive remedy for soil may include a soil cleanup level for PCBs of 1 ppm (the applicable SCO) in the surface soils and 10 ppm in subsurface in limited circumstances as follows:

- cleanup track is Track 4;
- site use will be restricted residential, commercial or industrial; and
- ESCOs do not apply.

3. **At industrial use sites,** a level of 25 ppm for PCBs provided that access is limited and individual occupancy is restricted to less than an average of 6.7 hours per week.

For purposes of this provision, subsurface soil shall mean:

- soil beneath permanent structures, pavement, or similar cover systems;
- soil beneath 1 foot of soil cover for commercial and industrial uses; or
- soil beneath 2 feet of soil cover for residential and restricted residential uses.

Institutional controls (i.e., an environmental easement), along with a site management plan, will be required when this soil cleanup level is employed at a site. As with all presumptive remedies, just because a remedy is presumptive does not mean that it will work at every site. For example, this presumptive remedy for PCBs in soil is not applicable at most landfills. This cleanup level is determined to be feasible and protective based on DEC's experience in its various remedial programs. Further, this approach has existed in TAGM 4046 since it was first issued in 1992.

J. Sampling and Compliance with Soil Cleanup Levels: The number of samples to determine if the SCOs have been achieved should be sufficient to be representative of the area being sampled. See attached Table 4 for suggested sampling frequency and subdivision 5.4(e) of DER-10 for details. This frequency can be used for confirmatory samples or for backfill. It is DEC's goal that all confirmatory samples demonstrate that the remedy has achieved the DEC-approved soil cleanup levels. However, recognizing the heterogeneity of contaminated sites and the uncertainty of sampling and analysis, DEC project manager has limited discretion to determine that remediation is complete where some discrete samples do not meet the soil cleanup levels established for a site. See DER-10 for more information regarding the determination that remediation is complete.

K. Other Considerations: All remedies must be fully protective of public health and the environment and prevent off-site migration to the extent feasible with special emphasis for the prevention or minimization of migration onto adjacent residential properties or into ecological resources. A remedial party is required to investigate all environmental media including soil, groundwater, surface water, sediments, soil vapor, indoor air, and biota. (See 6 NYCRR 375-1.8(a)(6) or RCRA Corrective Action Program). This investigation will determine if any of the referenced media are, or may be, impacted by site contamination. However, the SCOs do not directly address these other media. DEC may require remedial actions to address such media and impacts, including but not limited to the application of lower soil cleanup levels or buffer zones where it determines, based on the investigation, that any of these media are, or may be, impacted by site contamination.

VI. Related References:

- ♦ Environmental Conservation Law, Article 27 Titles 3, 5, 9, 13 and 14.

- ♦ Article 12 of the Navigation Law, Section 178.

- ♦ 6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.
- ♦ 6 NYCRR Subparts 373-1, 373-2 and 373-3, Requirements for Hazardous Waste Management Facilities. September 6, 2006.
- ♦ 6 NYCRR Part 611, Environmental Priorities and Procedures in Petroleum Cleanup and Removal. November 5, 1984 (amended).
- ♦ Development of Soil Cleanup Objectives: Technical Support Document. New York State Department of Environmental Conservation. December 14, 2006.
- ♦ Supplemental Guidance to RAGS: Calculating the Concentration Term. United States Environmental Protection Agency. Publication 9285.7-081. May 1992.
- ♦ New York State Guidelines for Urban Erosion and Sediment Control. 1997.
- ♦ Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites. New York State Department of Environmental Conservation. October 1994.
- ♦ Program Policy DER-2, *Making Changes to Selected Remedies*. New York State Department of Environmental Conservation. April 1, 2008.
- ♦ Program Policy DER-10, *Technical Guidance for Site Investigation and Remediation*. New York State Department of Environmental Conservation. May 3, 2010.
- ♦ Program Policy DER-15, *Presumptive/Proven Remedial Technologies*. New York State Department of Environmental Conservation. February 27, 2007.

TABLES

1 - Supplemental Soil Cleanup Objectives
2 - Soil Cleanup Levels for Gasoline Contaminated Soils
3 - Soil Cleanup Levels for Fuel Oil Contaminated Soils
4 - Recommended Number of Soil Samples for Soil Imported to or Exported From a Site

Table 1

Supplemental Soil Cleanup Objectives
(ppm)

Contaminant	CAS Number	Residential	Restricted Residential	Commercial	Industrial	Protection of Ecological Resources	Protection of Ground-water
METALS							
Aluminum	7429-90-5					10,000 [a,b]	
Antimony	7440–36-0					12 [c]	
Boron	7440-42-8					0.5	
Calcium	7440-70-2					10,000 [a,b]	
Cobalt	7440-48-4	30				20	
Iron	7439-89-6	2,000					
Lithium	7439-93-2					2	
Molybdenum	7439-98-7					2	
Technetium	7440-26-8					0.2	
Thallium	7440-28-0					5 [c]	
Tin	7440-31-5					50	
Uranium	7440-61-1					5	
Vanadium	7440-62-2	100 [a]				39 [b]	
PESTICIDES							
Biphenyl	92-52-4					60	
Chlordecone (Kepone)	143-50-0					0.06	
Dibenzofuran	132-64-9						6.2
2,4-D (2,4-Dichloro-phenoxyacetic acid)	94-75-7	100 [a]					0.5
Furan	110-00-9					600	
Gamma Chlordane	5103-74-2	0.54					14
Heptachlor Epoxide	1024-57-3	0.077					0.02
Methoxychlor	72-43-5	100 [a]				1.2	900

Contaminant	CAS Number	Residential	Restricted Residential	Commercial	Industrial	Protection of Ecological Resources	Protection of Ground-water
Parathion	56-38-2	100 [a]					1.2
2,4,5-T	93-76-5	100 [a]					1.9
2,3,7,8-TCDD	1746-01-6					0.000001	
2,3,7,8-TCDF	51207-31-9					0.000001	
SEMIVOLATILE ORGANIC COMPOUNDS							
Aniline	62-53-3	48	100[a]	500[a]	1000[a]		0.33[b]
Bis(2-ethylhexyl) phthalate	117-81-7	50				239	435
Benzoic Acid	65-85-0	100[a]					2.7
Butylbenzyl-phthalate	85-68-7	100 [a]					122
4-Chloroaniline	106-47-8	100 [a]					0.22
Chloroethane	75-00-3						1.9
2-Chlorophenol	95-57-8	100 [a]				0.8	
3-Chloroaniline	108-42-9					20	
3-Chlorophenol	108-43-0					7	
Di-n-butyl-phthalate	84-74-2	100 [a]				0.014	8.1
2,4-Dichlorophenol	120-83-2	100 [a]				20	0.40
3,4-Dichlorophenol	95-77-2					20	
Diethylphthalate	84-66-2	100 [a]				100	7.1
Di-*n*-hexyl-phthalate	84-75-3					0.91	
2,4-Dinitrophenol	51-28-5	100 [a]				20	0.2
Dimethylphthlate	131-11-3	100 [a]				200	27
Di-n-octylphthlate	117-84-0	100 [a]					120
1,2,3,6,7,8-HCDF	57117-44-9					0.00021	
Hexachloro-benzene	118-74-1	0.41					1.4
2,6-Dinitrotoluene	606-20-2	1.03					1.0
Isophorone	78-59-1	100 [a]					4.4

Contaminant	CAS Number	Residential	Restricted Residential	Commercial	Industrial	Protection of Ecological Resources	Protection of Ground-water
4-methyl-2-pentanone	108-10-1						1.0
2-methyl-naphthalene	91-57-6	0.41					36.4
2-Nitroaniline	88-74-4						0.4
3-Nitroaniline	99-09-2						0.5
Nitrobenzene	98-95-3	3.7	15	69	140	40	0.17[b]
2-Nitrophenol	88-75-5					7	0.3
4-Nitrophenol	100-02-7					7	0.1
Pentachloroaniline	527-20-8					100	
2,3,5,6-Tetrachloroaniline	3481-20-7					20	
2,3,4,5-Tetrachlorophenol	4901-51-3					20	
2,4,5-Trichloroaniline	636-30-6					20	
2,4,5-Trichlorophenol	95-95-4	100 [a]				4	0.1
2,4,6-Trichlorophenol	88-06-2					10	
VOLATILE ORGANIC COMPOUNDS							
2-Butanone	78-93-3	100 [a]					0.3
Carbon Disulfide	75-15-0	100 [a]					2.7
Chloroacetamide	79-07-2					2	
Dibromochloro-methane	124-48-1					10	
2,4-Dichloro aniline	554-00-7					100	
3,4-Dichloroaniline	95-76-1					20	
1,2-Dichloropropane	78-87-5					700	
1,3-Dichloropropane	142-28-9						0.3
2,6-Dinitrotoluene	606-20-2	1.03					0.17[b]
Ethylacetate	141-78-6					48	

Contaminant	CAS Number	Residential	Restricted Residential	Commercial	Industrial	Protection of Ecological Resources	Protection of Ground-water
4-methyl-2-pentanone	108-10-1						1.0
113 Freon (1,1,2- TFE)	76-13-1	100 [a]					6
isopropylbenzene	98-82-8	100 [a]					2.3
p-isopropyltoluene	99-87-6						10
Hexachlorocyclo-pentadiene	77-47-4					10	
Methanol	67-56-1					6.5	
N-nitrosodiphenyl-amine	86-30-6					20	
Pentachloro-benzene	608-93-5					20	
Pentachloronitro-benzene	82-68-8					10	
Styrene	100-42-5					300	
1,2,3,4-Tetrachlorobenzene	634-66-2					10	
1,1,2,2-Tetrachloroethane	79-34-5	35					0.6
1,1,2,2-Tetrachloroethylene	127-18-4					2	
1,2,3-Trichlorobenzene	87-61-6					20	
1,2,4-Trichlorobenzene	120-82-1					20	3.4
1,2,3-Trichloropropane	96-18-4	80					0.34

[a] SCOs for organic contaminants (volatile organic compounds, semivolatile organic compounds, and pesticides) are capped at 100 ppm for residential use, 500 ppm for commercial use, 1000 ppm for industrial use. SCOs for metals are capped at 10,000 ppm.

[b] Based on rural background study

[c] SCO limited by contract required quantitation limit.

Table 2

Soil Cleanup Levels for Gasoline Contaminated Soils

Contaminant	CAS Registry Number	Soil Cleanup Level (ppm)
Benzene	71-43-2	0.06
n-Butylbenzene	104-51-8	12.0
sec-Butylbenzene	135-98-8	11.0
Ethylbenzene	100-41-4	1.0
Isopropylbenzene	98-82-8	2.3
p-Isopropyltoluene	99-87-6	10.0
Methyl-Tert-Butyl-Ether	1634-04-4	0.93
Naphthalene	91-20-3	12.0
n-Propylbenzene	103-65-1	3.9
Tert-Butylbenzene	98-06-6	5.9
Toluene	108-88-3	0.7
1,2,4-Trimethylbenzene	95-63-6	3.6
1,3,5-Trimethylbenzene	108-67-8	8.4
Xylene (Mixed)	1330-20-7	0.26

Table 3

Soil Cleanup Levels for Fuel Oil Contaminated Soil

Contaminant	CAS Registry Number	Soil Cleanup Level (ppm)
Acenaphthene	83-32-9	20
Acenaphthylene	208-96-8	100
Anthracene	120-12-7	100
Benz(a)Anthracene	56-55-3	1.0
Dibenzo(a,h)Anthracene	53-70-3	0.33
Benzene	71-43-2	0.06
n-Butylbenzene	104-51-8	12.0
sec-Butylbenzene	135-98-8	11.0
Tert-Butylbenzene	98-06-6	5.9
Chrysene	218-01-9	1.0
Ethylbenzene	100-41-4	1.0
Fluoranthene	206-44-0	100
Benzo(b)Fluoranthene	205-99-2	1.0
Benzo(k)Fluoranthene	207-08-9	0.8
Fluorene	86-73-7	30
Isopropylbenzene	98-82-8	2.3
p-Isopropyltoluene	99-87-6	10.0
Naphthalene	91-20-3	12.0
n-Propylbenzene	103-65-1	3.9
Benzo(g,h,i)Perylene	191-24-2	100
Phenanthrene	85-01-8	100
Pyrene	129-00-0	100
Benzo(a)Pyrene	50-32-8	1.0
Indeno(1,2,3-cd)Pyrene	193-39-5	0.5
1,2,4-Trimethylbenzene	95-63-6	3.6
1,3,5-Trimethylbenzene	108-67-8	8.4
Toluene	108-88-3	0.7
Xylene (Mixed)	1330-20-7	0.26

Table 4

Recommended Number of Soil Samples for Soil Imported To or Exported From a Site

<table>
<tr><th>Contaminant</th><th>VOCs[a]</th><th colspan="2">SVOCs, Inorganics & PCBs/Pesticides</th></tr>
<tr><th>Soil Quantity (cubic yards)</th><th>Discrete Samples</th><th>Composite</th><th>Discrete Samples/Composite</th></tr>
<tr><td>0-50</td><td>1</td><td>1</td><td rowspan="8">Each composite sample for analysis is created from 3-5 discrete samples from representative locations in the fill.</td></tr>
<tr><td>50-100</td><td>2</td><td>1</td></tr>
<tr><td>100-200</td><td>3</td><td>1</td></tr>
<tr><td>200-300</td><td>4</td><td>1</td></tr>
<tr><td>300-400</td><td>4</td><td>2</td></tr>
<tr><td>400-500</td><td>5</td><td>2</td></tr>
<tr><td>500-800</td><td>6</td><td>2</td></tr>
<tr><td>800-1000</td><td>7</td><td>2</td></tr>
<tr><td>➢ 1000</td><td colspan="3">Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER.[b]</td></tr>
</table>

[a] VOC samples cannot be composited. Discrete samples must be taken to maximize the representativeness of the results.

[b] For example, a 3,000 cubic yard soil pile to be sampled and analyzed for VOCs would require 11 discrete representative samples. The same pile to be sampled for SVOCs would require 4 composite samples with each composite sample consisting of 3-5 discrete samples.

ATTACHMENT D

Resumes

ERICK SALAZAR

GALLAGHER BASSETT | TECHNICAL SERVICES

Current Position:
Assistant Project Manager

Education:
BS, Biology, State University at New Paltz, NY

Registrations/ Certifications:

- OSHA, 40-hr. Hazardous Waste Operations & Emergency Response Health & Safety Certification
- OSHA, 10-hr. General Construction Industry Training and Certification

PROFESSIONAL SUMMARY

Erick Salazar serves as Assistant Project Manager for environmental site assessments and Phase II technical environmental investigations. His responsibilities include: investigating site histories, conducting facility inspections, reviewing regulatory agency records, documenting facility compliance with relevant State and Federal regulations, and preparing reports. He assists with Phase II technical environmental investigations and fieldwork including implementation of community air monitoring plans (CAMP), collecting soil and water samples and tank removal oversight.

Mr. Salazar has experience in the implementation of CAMP monitoring, personal sampling for lead and dust of workers, coordinating pre-demolition C&D waste inventory as part of Sandy relief work on Staten Island, and providing oversight of site remedial activities on rural properties.

Mr. Salazar's experience with Health and Safety services include:

•Complete OSHA training and three years' experience of Sites handling regulated materials as well as hazardous and non-hazardous wastes.

•Preparation of Environmental Health & Safety Plan for (EHASP) for debris removal and soil sampling project in Ulster County, New York.

•Assistance in the preparation of EHASPs for NYSDEC sites in Dutchess and Westchester Counties.

•Implementation of CAMP at sites in Dutchess, Ulster, Bronx and Queens Counties, including preparation of status reports, preparation of incident reports, and communication with involved regulatory agencies.

•Collection/analysis of media samples (air, water and soil) per requirements of the EHASP and/or remedial work plans.

Mr. Salazar graduated from State University of New York at New Paltz where he completed a BS in Biology with specialization in Organism and Environmental Studies. Mr. Salazar is bilingual in Spanish and English.

JAMES BLANEY, CHMM

GALLAGHER BASSETT | TECHNICAL SERVICES

Current Position:

Operations Manager, Environmental

Education:

B.A., Environmental Studies, Ramapo College of New Jersey
M.S. Environmental Policy and Planning, New Jersey Institute of Technology

Registrations/ Certifications:

- Certified Hazardous Materials Manager (CHMM)
- 8-Hour OSHA HAZWOPER Supervisor, 2014
- 8-Hour OSHA HAZWOPER Refresher, 2018
- 10-Hour OSHA Construction Safety Training, 2016
- 40-Hour OSHA HAZWOPER, 1997
- 80-hour Hazardous Materials Technician Level 3, 2000
- Domestic Preparedness Hazardous Materials Technician, 2002
- USDJ CDP Chemical Ordnance Biological Radiological Technician, 2000

PROFESSIONAL SUMMARY

James Blaney is Environmental Services Division Manager and Operations Manager with more than 21 years of specialized technical and regulatory experience in managing large site remediation and redevelopment projects. As construction and remediation risk manager for multiple blighted sites in both the public and private sectors, Mr. Blaney has a deep understanding of New York Metro environmental regulations, employs strong project and site construction management skills, and uses his extensive technical knowledge to guide clients and foster expedient resolutions for many troubled sites. Mr. Blaney, and his team, are eminently qualified to run all phases of an environmental remediation and redevelopment project, either in a phased approach or in complete turnkey fashion.

As an environmental and remediation risk manager with WCD, Mr. Blaney manages projects for commercial, industrial, and institutional properties. He and his team are responsible for all phases of environmental remediation or restoration projects, including investigations, engineering, regulatory interface, plan development, estimating, scheduling, and project execution.

Mr. Blaney earned a Master of Science degree in Environmental Policy Studies from the New Jersey Institute of Technology, and a Bachelor of Arts degree in Environmental Studies from Ramapo College of New Jersey. He is a Certified Hazardous Materials Manager (CHHM) and holds many certifications and licenses, including 40 hour Hazardous Waste Operations & Emergency Response – 29 CFR 1910.12(e)(2); Hazardous Materials Incident Response Awareness and Operations; 80-hour Hazardous Materials Technician Level 3; Domestic Preparedness Hazardous Materials Technician; USDJ CDP Chemical Ordnance Biological Radiological; On-Scene Incident Commander; NJ Enhanced Radiological Response; Air Monitoring for Hazardous Materials.

Mr. Blaney is also a proud veteran of the United States Armed Services where he served as a Damage Control Technician and Machinists Mate in the United States Navy.

PROFESSIONAL EXPERIENCE

New York City Economic Development Corporation New York, NY – Served as Project Manager for the remediation of the former Manufactured Gas Plant site known as Site A Operable Unit 2 (AOU-2) located in the Hunts Point section of Bronx, NY. This heavily contaminated 7.5 acre site with mixed wastes required very detailed coordination between the Project Engineer (GEI), the owner (NYCEDC) and the Construction Manager at Risk (WCD). Working closely with these stakeholders during the Preconstruction Phase of the project, WCD created bidding documents and specifications to govern the remediation work. WCD led the bidding period phase including inviting pre-approved contractors, receiving bids, issuing addenda, performing detailed scope review meetings with bidders and subcontract documents development with the selected bidder. During implementation of the remedial action, it became evident due to substantially changed field conditions that a revision to the original remedy was necessary. WCD put forth a significant value engineering recommendation that was adopted by the stakeholder team, resulting in approximately $1MM of cost avoidance. The project has recently been completed substantially on time and the owner is pursuing design and construction of the new development planned for this site. The overall project value was $13.5MM.

Hudson County Chromium Cleanup Projects – Served as Construction Manager as Agent (CMAA) for the environmental remediation and site restoration of several Hudson County Chromium sites located in Jersey City, NJ. Specific responsibilities include preparation and implementation of construction management plans encompassing the specific processes for reporting, permitting, contractor coordination, health & safety, and communication requirements and procedures; cost and design requirements; site security; health and safety compliance; construction quality assurance/control testing and reporting; and recordkeeping for the project. Other responsibilities include development of a master construction schedules including regular updates; chairing preconstruction, regular construction progress, issue-specific and close-out meetings, including distribution of project record meeting minutes; constructability review of engineering designs, review of contractor-required submittals; review and approval of contractor applications for payment; review and approval of construction change order requests; construction close-out inspections and punch list development and resolution; and post-construction asbuilt documentation.

Statue of Liberty Harbor North – Jersey City, NJ – Served as Construction Manager, general contractor, and comprehensive remediation project manager for the pre-development remediation of this former manufacturing facility prior to its redevelopment as a 5-Star luxury hotel. The 2.7 acre property was formerly operated and occupied by an asbestos shingle manufacturer and is located north and west of Jersey City's Liberty Harbor Marina and the NYC Water Taxi - Liberty Harbor terminal. The property, after being abandoned by the shingle manufacture, became a dumping ground for construction and other wastes. The work involved historic fill/soil excavation with TPH and PCB contaminants, asbestos in soils, the placement of engineered backfill, installation of a TSCA liner followed by the construction of a NJDEP-approved cap and the installation of temporary soil erosion sediment control stabilization measures. WCD provided planning, preconstruction, and turnkey remediation services. All work was performed under a pay-for-performance contract.

Two Trees - 60 Water Street, Brooklyn, NY – Sr. Project Manager responsible for the development and implementation of a Remedial Action Work Plan during the redevelopment of the 46,000-square-foot NYC OER Voluntary Cleanup site. Work involves the oversight of the excavation and off-site disposal of approximately 33,000-cubic yards of historic fill and soil from the site, daily reporting to the NYC OER, collection of postexcavation end-point soil samples, removal of underground storage tanks, inspection during installation of a passive sub-slab depressurization system, and preparation of a Remedial Action Report.

Berry Lane Park, Jersey City, NJ – Served as Project Manager for comprehensive construction management services including field oversight and project management, as well as contractor and consultant coordination during the construction phase of a site remediation and development project on one of the worst brownfields in the country. The 17 acre project site consisted of multiple historic uses including residential, industrial, manufacturing, and rail yard with a portion of the site consisting of a previously backfilled canal. The site, which is located in Jersey City, NJ, was developed by the Jersey City Redevelopment Agency (JCRA) into a municipal park entitled Berry Lane Park. Over the years, the property was used as a dumping ground for a variety of municipal and industrials wastes. In addition, the former Morris Canal (which ran through the site) was backfilled with a hazardous Contaminated Chromium Processed Waste (CCPW) material.

Former Crucible Steel Site, Harrison, NJ - Provided environmental consulting services at this 80-acre Brownfield site along the Passaic River (opposite downtown Newark, NJ). Responsibilities included Phase I, Phase II Environmental Site Assessments as well as Remedial Investigations and Site restoration activities.

Current Position:
Senior Project Manager

Education:
Ph.D., University of St. Andrews, Scotland
BA, Staffordshire University, England

Registrations/ Certifications:

- OSHA-40 Hazwoper
- OSHA-10 Construction
- OSHA Hazardous Waste Site Operations
- OSHA Emergency Response Training
- OER TurboTraining Gold Certified Professional

GALLAGHER BASSETT | TECHNICAL SERVICES

RICHARD HOOKER, PH.D.

PROFESSIONAL SUMMARY

Richard Hooker serves as Senior Project Manager for investigative and remedial projects including NYSDEC and OER Brownfields sites, Phase II investigations, and environmental management of construction projects. He also prepares and evaluates interdisciplinary, comprehensive environmental impact assessment reviews (NEPA, SEQR and CEQR) and has a particular expertise in noise issues. Mr. Hooker develops investigative and remedial work plans, health and safety plans, performs fieldwork, and prepares technical reports. He works with regulatory authorities and subcontractors including construction personnel, waste repositories and haulage contractors, laboratories and drillers. His responsibilities include: designing noise studies, investigating site histories, document reviews, cost benefit analysis of remedial alternatives, overseeing excavations and in situ remediation, sampling, sample data evaluation, report preparation, and obtaining regulatory closure. He has extensive experience of sampling and sample collection protocols for soil, vapor, indoor air, sediment, and groundwater and has worked to remediate a wide range of environmental contaminants including petroleum, heavy metals, PCBs, and solvents.

Mr. Hooker holds a Ph.D. from the University of St. Andrews, St. Andrews, Scotland and a BA from Staffordshire University, Stoke-on-Trent, England. Prior to relocating to the Hudson Valley, he served as an Assistant Professor at the University of Glasgow, Scotland.

PROFESSIONAL EXPERIENCE

3475 Third Avenue, Bronx, NY—Investigated and remediated this former manufacturing facility to NYSDEC Brownfields to Track 1 cleanup standards. This site was the first project in the OER Jumpstart program established to assist cleanup on governmentsupported affordable and supportive housing projects in NYC. Under this program OER sponsored enrollment in the NYS Brownfield Cleanup Program. Work on this trailblazing project required liaising with OER and NYSDEC Region 2 to ensure documentation met the requirements of both agencies. Certificate of Completion secured in 2016.

Former A.C. Dutton Lumber Yard, Dutchess County, NY—Documented hazardous concentrations of arsenic and chromium in soils and concrete surfaces at this NYSDEC Brownfields site contaminated by the historical pressure treatment of lumber. Developed a Workplan for site remediation and directed environmental restoration activities, including: characterization, excavation and removal of hazardous soils, scarification concrete warehouse floors, removal aboveground and underground chemical and petroleum storage tanks.

Lincoln Place, Brooklyn, NY—performed CEQR, SEQR and NEPA reviews including shadow and noise studies for this site prior to development. Prepared Remedial Workplan and oversaw remediation of metals-contaminated soils during construction and implemented remedy for the site including SSDS system installation, vapor barrier, and installation of composite cover system. Prepared FER and obtained NYCHPD and NYCDEP closeout for the site.

Grace Terrace, Mount Vernon, NY—oversaw remediation and obtained NTSDEC Spill file closure after a previously unknown UST and associated petroleum contaminated soil were encountered during construction excavations. Coordinated with the GC to ensure appropriate cleanup was performed without delaying the construction schedule. Remedial actions included characterization and appropriate off-site disposition of petroleum contaminated soil and groundwater, application of chemical oxidation treatment, installation vapor barrier and active SSDS system.

Former Fur Processing Facility, Bronx, NY—Documented the presence of chlorinated hydrocarbon, petroleum, and metals contamination beneath and/or near a former industrial structure. Coordinated the sampling and removal of multiple drums of hazardous and non-hazardous material from the structure and secured NYCDEP approval. Developed a Workplan for site remediation and directed environmental restoration activities, including: excavation and removal of both aboveground and underground storage tanks, removal of contaminated soils, installation of a barrier layer soil cap, and pre-demolition removal of asbestos materials.

Jamaica Hospital Medical Center, Queens, NY—Coordinated and supervised the removal of two, large underground storage tanks and documented site conditions through soil and groundwater sampling. Secured NYSDEC approval of PBS tank closure and registration requirements.

SCOTT SPITZER

GALLAGHER BASSETT | TECHNICAL SERVICES

Current Position:
Director of Environmental Investigations

Education:
BS, Biology, SUNY at Stony Brook, NY
Extensive Studies in Environmental Science

Registrations/ Certifications:

- OSHA, 40-hr. Hazardous Waste Operations & Emergency Response Health & Safety Certification
- OSHA, 10-hr. General Construction Industry Training and Certification

PROFESSIONAL SUMMARY

Scott Spitzer serves as Director of Environmental Investigations, overseeing the technical elements of Phase I and Phase II technical environmental investigations and remedial projects, including Brownfield sites. Mr. Spitzer supervises all WCD field staff and reviews all documents prepared by WCD to ensure consistency and technical accuracy.

His responsibilities associated with the preparation of site assessments include: investigating site histories, conducting facility inspections, reviewing regulatory agency records, documenting facility compliance with relevant State and Federal regulations, and preparing reports. As project manager for complex technical environmental investigations (including sites currently on the NYSDEC Registry of Inactive Hazardous Waste Sites), Mr. Spitzer is involved with: coordinating subcontractors; overseeing fieldwork; designing and implementing material, soil, and water sampling plans, preparing technical reports and interfacing with regulatory agency personnel.

Mr. Spitzer has 11 years' experience in the preparation of Phase I and II investigations and in the management of complex remediation projects. He is knowledgeable in both New York State and Federal environmental regulations and has an understanding of a broad range of remedial technologies. Mr. Spitzer studied environmental science at SUNY Purchase and holds a BS in Biology from SUNY at Stony Brook, Stony Brook, New York.

PROFESSIONAL EXPERIENCE

<u>Former NuHart Plastics Manufacturing Site, Brooklyn, NY</u>: WCD conducted a complex remedial investigation of a NYSDEC Class 2 Inactive Hazardous Waste Disposal ("Superfund") site, where a plume of liquid phthalates and chlorinated solvents had impacted groundwater. Extensive sampling was conducted of both on- and off-site soil, soil vapor and groundwater, and phthalates were removed from recovery wells as an interim remedial measure. A Remedial Investigation Report was completed, allowing the site owner to move create a Remedial Design Document.

<u>Scenic Hudson Land Trust, Inc., Beacon Waterfront Project, Beacon, NY</u>: WCD conducted soil and groundwater investigations on a former MOSF and adjacent scrap yard. Projects involved soil remediation of both petroleum and PCB-contaminated soils and long-term groundwater monitoring. Both projects were classified as Voluntary Clean-Up projects by the NYSDEC and closure status was attained.

<u>Sakmann Restaurant Corporation Site, Fort Montgomery, NY</u>: Conducted Phase I Environmental Site Assessment and Phase II Subsurface Investigations for former filling station and automotive repair garage contaminated by solvent and waste-oil discharges to an on-site drywell. Designed and implemented a sampling plan for soils impacted by chlorinated hydrocarbons, petroleum, and metals. Created Workplan (in coordination with the NYSDEC Voluntary Cleanup Program) for remediation of on-site contamination and longterm sampling of on-site groundwater monitoring wells.

Staten Island Marina Site, Staten Island, NY: Conducted Phase I Environmental Site Assessment and Phase II Subsurface Investigation for an active marine facility engaged in boat painting and engine maintenance activities. Coordinated the delineation of metals contamination over a three-acre area and analyzed potential impacts from onsite fill materials. Submitted remedial and budgetary analysis in support of regulatory agency approval for conversion of boatyard into a public park.

Octagon House Development Site, Roosevelt Island, NY: Conducted Phase I Environmental Site Assessment and Phase II Subsurface Investigations at the former site of a large, urban hospital. Interpreted the results of geotechnical studies, extended test pits, and conducted extensive soil sampling, to document subsurface soil conditions in support of client's application to the U.S. Housing and Urban Development Agency (HUD). Created Workplan (in coordination with the NYCDEP Office of Environmental Planning and Assessment) for site-wide remediation of contaminated soils and secured NYCDEP approval for site remediation as required by HUD.

Camp Glen Gray Boy Scout Facility, Mahwah, NJ: Conducted Phase I Environmental Site Assessment and Phase II Subsurface Investigations at an approximately 800-acre campground containing numerous structures. Documented subsurface soil conditions at the locations of aboveground and underground storage tanks, and delineated lead contamination at a former firing range. Assisted in design and implementation of remediation plans for removal of petroleum and lead contaminated soils, and obtained NJDEP approvals.

APPENDIX C

Previous Environmental Reports

GALLAGHER BASSETT | TECHNICAL SERVICES

COMBINED PHASE I and PHASE II

ENVIRONMENTAL

SITE ASSESSMENT

Saranac Lofts

120 Broadway

Village of Saranac Lake

Franklin County, New York

Tax IDs: Section 446.68, Block 6, Lots 11 & 12

July 27, 2021

GBTS Project: 21003-0066

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22 IBM Road – Suite 101

Poughkeepsie, NY 12601

O: 845-452-1658

www.gallagherbassett.com

COMBINED PHASE I AND PHASE II ENVIRONMENTAL SITE ASSESSMENT

July 27, 2021

GBTS Project: 21003-0066

Prepared By

Gallagher Bassett Technical Services
22 IBM Road – Suite 101
Poughkeepsie, New York 12601

Prepared For

Kearney Realty & Development Group
P.O. Box 925
Baldwin Place, New York 10505

Gallagher Bassett Technical Services conducted a Phase I Environmental Site Assessment in accordance with ASTM Method E 1527-13.

The undersigned have prepared and reviewed this Combined Phase I and Phase II Environmental Site Assessment and certify to Kearney Realty & Development Group that the information provided in this document is to the best of our abilities considered accurate as of the date of issuance by this office.

James Hooker
Gallagher Bassett Technical Services
Environmental Field Scientist

Scott Spitzer
Gallagher Bassett Technical Services
Technical Director – Environmental Consulting

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MAPS IN REPORT

APPENDICES

EXECUTIVE SUMMARY

Gallagher Bassett Technical Services (GBTS) performed a Combined Phase I and Phase II Environmental Site Assessment (ESA) of the property located at 120 Broadway, Village of Saranac Lake, Franklin County, New York. This ESA identifies Recognized Environmental Conditions (RECs) in conformance with the scope and limitations of ASTM Practice E 1527-13, as well as conditions that do not meet the threshold to be considered a REC but represent a significant existing or likely environmental liability (de minimis conditions and items outside the ASTM Phase I ESA scope are noted as appropriate). Findings, conclusions and recommendations are summarized below and in Section 5.0.

Subject Property Description and History

The subject property is an irregularly-shaped 1.1-acre mixed-use (small commercial and vacant) village parcel comprised of two contiguous tax lots. A review of reasonably ascertainable historical records documents that the southern portion of the subject property (Lot 12) was in use for commercial purposes as early as 1924 and was developed for use as a filling station and automotive maintenance facility sometime between 1916 and 1924. This portion of the property contains a small structure that has been used as a tire shop since circa 1969. The northern portion of the property (Lot 11) contained a woodworking factory from at least 1916 through 1965 (remaining portions of these buildings were present on the property as late as 1977). Potential releases associated with the historical presence of a filling station and repair facility represent a REC. No further investigation of historical records is recommended.

Identified Areas of Environmental Concern

Category	Specific Environmental Concerns	Recommendations
RECs (no de minimis conditions identified)	Former on-site filling station and automotive service facility, including two gasoline USTs; former on-site manufacturing operations; potential impacts from off-site properties	Perform Phase II subsurface investigation to document the presence or absence of contamination potentially associated with identified RECs
General Concerns	Potential vault was not accessible	Inspect vault during Phase II investigation
	Potential demolition debris in subsurface	Properly manage any encountered materials
	Presence of aboveground storage tanks (ASTs); piping associated with former tanks	Proper maintenance and periodic inspections of ASTs; remove all inactive piping
	Small quantities containers of petroleum, cleaning/maintenance products, and paints	Properly store containers or dispose off-site
Non-Scope Considerations	Asbestos-containing materials (ACM) and lead-based paint (LBP)	Test suspect materials as needed; handle materials in accordance with applicable regulations

1.0 INTRODUCTION

1.1 Purpose

This Combined Phase I and Phase II Environmental Site Assessment (Report) identifies recognized environmental conditions (RECs) and/or other significant environmental liabilities resulting from or associated with the storage, use, transport or disposal of hazardous or other regulated materials on the property described in Section 2.1.

1.2 Methodology

The Phase I Environmental Site Assessment was prepared in conformance with the attached Scope of Services and with American Society for Testing and Materials (ASTM) Method E1527-13 (no exceptions to or deletions from this practice have occurred). All work was performed under the direct supervision and responsible charge of a qualified environmental professional, following requirements for "all appropriate inquiry" as defined in 40 CFR Part 312.

Gallagher Bassett Technical Services (GBTS) performed the following work:

1. Investigation of the subject property's history and characteristics through the analysis of available physical settings maps, historical documents, local municipal records, and information provided by subject property representatives and/or other knowledgeable individuals.
2. Review of Federal, State, and/or Tribal regulatory-agency databases and printed records for documentation of potential environmental liabilities relevant to the property, consistent with (or exceeding) applicable ASTM requirements.
3. Phase I inspection of the property by James Hooker of GBTS on May 28, 2021. Gregory Mace, the property owner, was present during the site inspection.
4. Phase II investigation by GBTS personnel on June 30, and July 1 and 19, 2021, including a geophysical survey, extension of soil borings, and collection of soil and soil vapor samples.

1.3 Limitations

This Report is a representation and evaluation of the property described in Section 2.1 below as of the dates that services were provided (activities or events after the respective dates of the site inspection or historical and regulatory research may have resulted in environmental liabilities). This Report is not valid for any other property or location. This Report is based in part on information provided in writing or verbally by federal, state, and local officials (including public records) and other referenced parties. The accuracy or completeness of this information was not independently verified. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties, but as probabilities based on professional judgment. Any limitations specific to the site inspection are detailed in Section 3.3.

1.4 Definitions

Definitions of some key terms found in this ESA are provided below.

Recognized Environmental Condition (REC)

The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. A material threat is a physically observable or obvious threat which is reasonably likely to lead to a release that is threatening and might result in impact to public health or the environment. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. De minimis conditions (see below) are not RECs.

Controlled Recognized Environmental Condition (CREC)

A REC resulting from a past release that has been addressed to the satisfaction of applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (legal or physical restrictions or limitations on the use of, or access to, a site or facility to reduce or eliminate potential exposure to remaining contaminants, or to prevent activities that could interfere with the effectiveness of a response action).

Historical Recognized Environmental Condition (HREC)

A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, activity and use limitations, institutional controls, or engineering controls).

De Minimis Conditions

An environmental condition is considered "de minimis" when that condition generally does not present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies. Conditions determined to be de minimis are not recognized environmental conditions.

Sensitive Environmental Receptors

Sensitive Environmental Receptors (SERs) are valued physical (natural or human-made) or biological features that may be adversely impacted by environmental contamination, and where a discharge or release could pose a greater threat than a discharge or release to other less valued areas. SERs include (but are not limited to) potable supply wells, wetlands, and protected wildlife habitat.

2.0 SITE LOCATION AND PHYSICAL SETTING

This ESA was performed for the parcel of land ("subject property") located at 120 Broadway, Village of Saranac Lake, Franklin County, New York (identified as Village of Saranac Lake tax lots: Section 446.68, Block 6, Lots 11 and 12). Site maps are located on Pages 6 and 7 and photographs are provided in Appendix A. Sources of information documenting physical-setting conditions are cited in Section 6.0 and site-specific topographic, wetlands and/or other maps are provided in Appendix B.

2.1 Description of Subject Property

The subject property is an irregularly-shaped 1.1-acre mixed-use (small commercial and vacant) village parcel comprised of two contiguous tax lots located on the northern side of Broadway[1]. A two-story tire shop (a former filling station) is located at the southern portion of Lot 12. The remainder of the property is comprised of a gravel parking lot at the rear of the building, and a maintained yard (entirety of Lot 11). Comprehensive observations from a physical inspection of the property are provided in Section 3.3.

2.2 Description of Adjoining and Surrounding Area Properties

The property is located in a village setting, with most properties developed for residential and commercial purposes. Uses at adjoining properties include railroad tracks to the north, the Saranac Lake Volunteer Rescue Squad to the east, multi-family residential developments to the west of Lot 12 (south of Lot 11), a bookstore to the south, and a propane storage facility (Hyde Fuel) to the west of Lot 11 (see Selected Site Features Map, Page 7).

2.3 Physical Setting

2.3.1 Topography

Local area topography is generally hilly and varied. The subject property lies in a somewhat-level relatively low area, with overall gentle downward slopes to the southeast, towards the Saranac River. The USGS Topographic map providing coverage for the subject property did not indicate the presence of any soil/gravel mining operations or unusual topographic patterns indicative of landfilling activities. A "Map of Boundary and Topographic Survey" (November 2020; see Appendix B) shows site slopes decreasing from approximately 1,560 feet at the northwestern corner of Lot 12 to 1,547 feet immediately north of the on-site building, then rising toward approximately 1,556 feet at the property frontage on Broadway.

1 *For clarity of presentation, Broadway, which has an actual northwest/southeast orientation, is indicated in this Report as having an east/west orientation (all other road and property descriptions have been likewise adjusted); all report maps indicate approximate true north.*

2.3.2 Local Geology and Hydrogeology

Soils in the vicinity of the subject property are likely to be derived from glaciolacustrine deposits, which overlie hard crystalline bedrock.

Soil survey maps indicate Adams loamy fine sand and Monadnock fine sandy loam on the property. Soils recovered during the subsurface investigation (see Fieldwork Map, Page 8) generally consisted of loamy, fine to medium sands. Likely fill material containing coal fragments and/or ash was observed in several borings at 3 to 4 feet below grade surface (bgs). Boring refusal (likely on bedrock) was encountered at depths ranging from 6 to 12 feet bgs. Bedrock outcrops were not observed on the property.

Saturated soils were encountered at the northern portion of the property (Lot 11) at depths generally ranging from 4 to 5 feet bgs. Overall groundwater flow in the vicinity of the property is likely to generally follow surficial topography and be in a southeasterly direction, toward the Saranac River (located approximately 0.2-mile from the property).

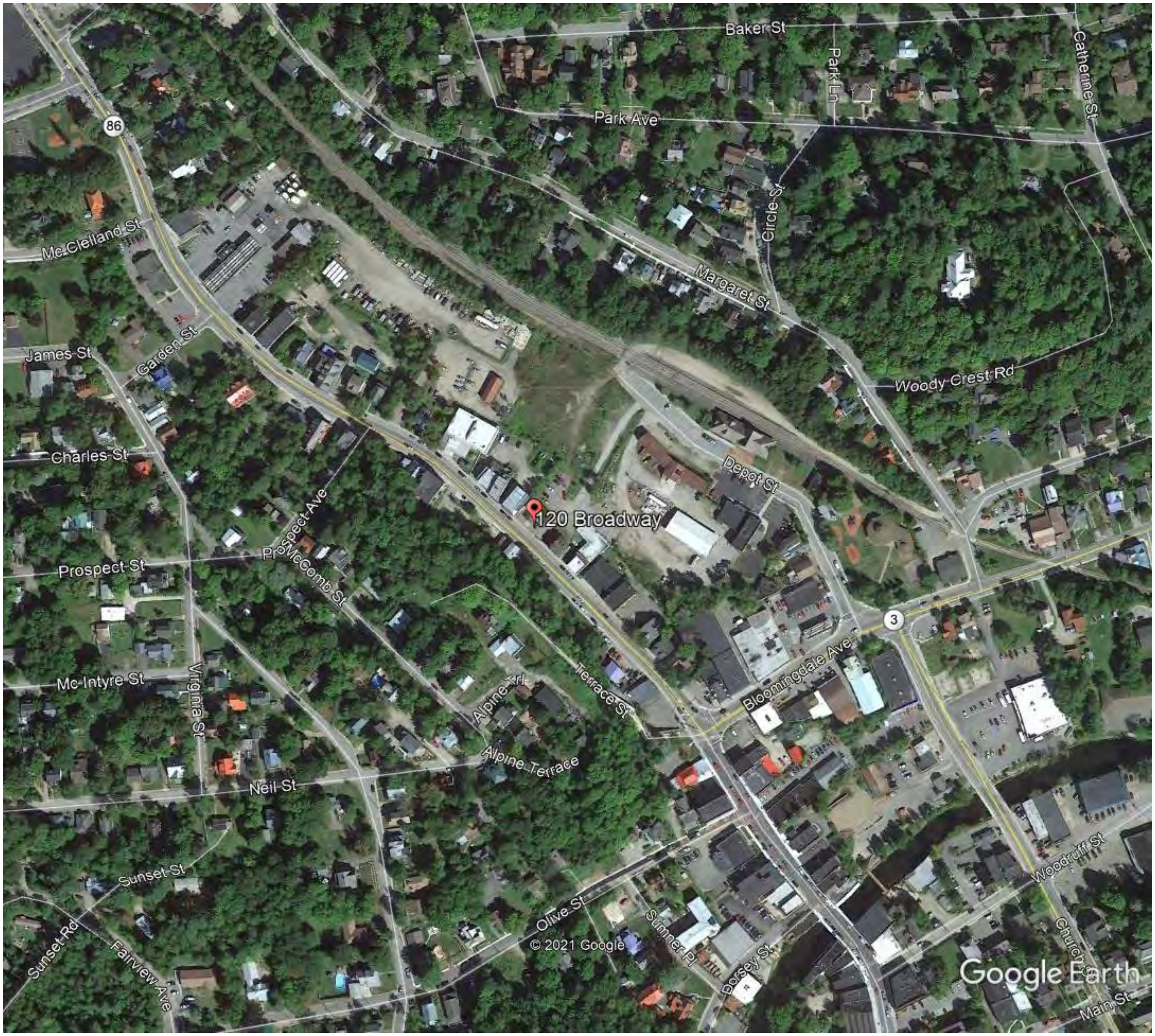
GBTS has not reviewed any historical reports or other information documenting site-specific subsurface conditions.

2.3.3 Surface Hydrology and Wetlands

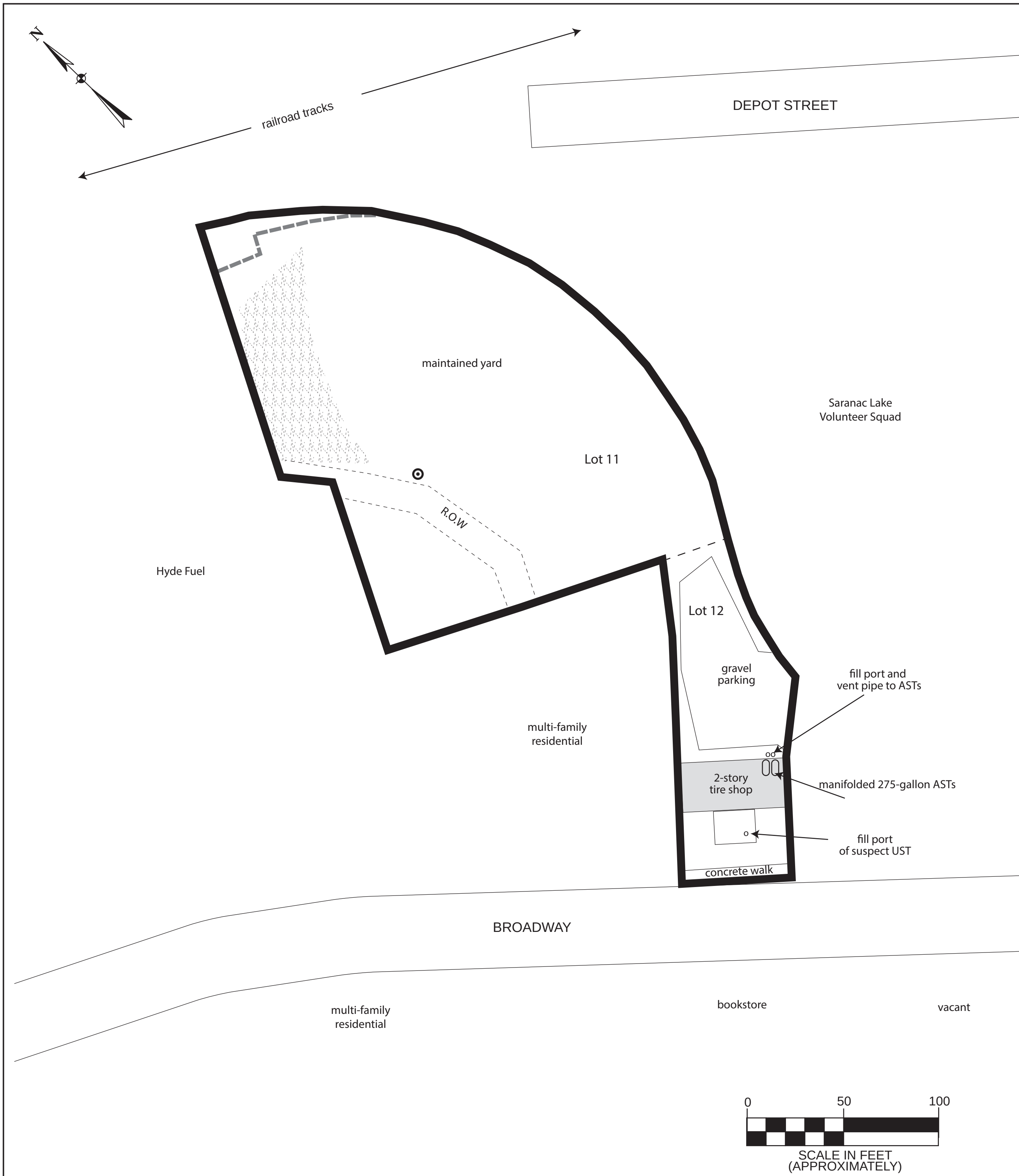
A marshy area was observed during the site inspection at the western portion of Lot 12. Federal and state mapping data do not identify this area, or any classified surface waterbodies, wet areas, or regulated wetlands in the immediate vicinity of the property.

2.3.4 Sensitive Environmental Receptors

The review of maps and observations made during the site inspection indicate that with the exception of the marshy area at the western portion of Lot 12 (not identified in state or federal databases), no SERs are located on or in the immediate vicinity of the subject property. The Saranac River is located approximately 0.2 mile to the southeast.



Site Location Map 120 Broadway Village of Saranac Lake Franklin County, New York	N	File No: 21003-0066 July 2021 Page 6



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Selected Site Features Map

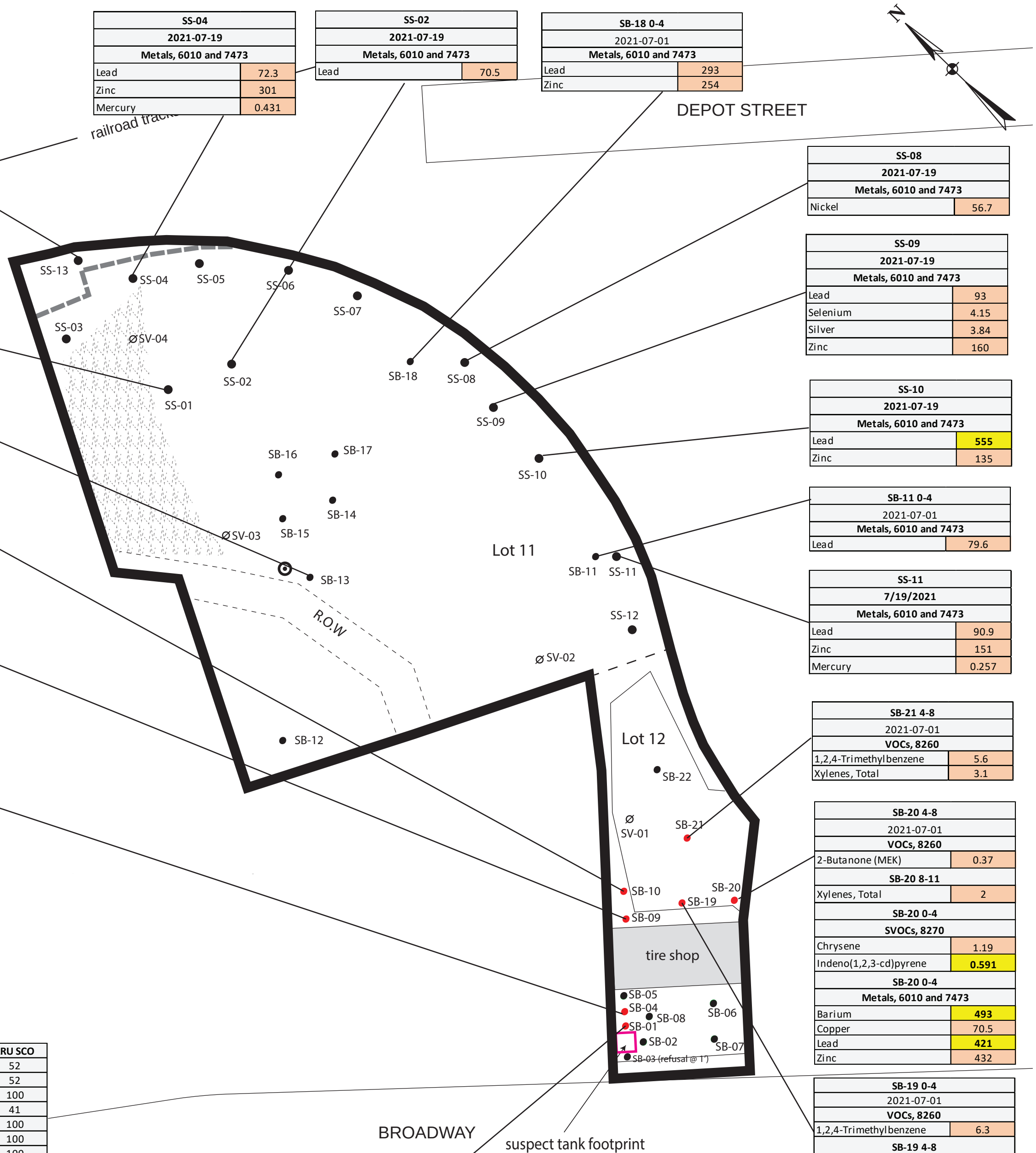
Saranac Lofts
120 Broadway
Village of Saranac Lake
Franklin County, New York

Legend:
- subject property border
- lot line
- retaining wall
- wetlands
- manhole cover

File: 21003-0066

July 2021

Scale as shown



SS-13	
2021-07-19	
SVOCs, 8270	
3- & 4-Methylphenols	1.1
Benzo(a)anthracene	68.5
Benzo(a)pyrene	63.5
Benzo(b)fluoranthene	70.8
Benzo(k)fluoranthene	72
Chrysene	74.1
Dibenzo(a,h)anthracene	16.4
Indeno(1,2,3-cd)pyrene	47
Phenol	0.866
Pyrene	105
Metals, 6010 and 7473	
Copper	57
Lead	66.9

SS-04	
2021-07-19	
Metals, 6010 and 7473	
Lead	72.3
Zinc	301
Mercury	0.431

SS-02	
2021-07-19	
Metals, 6010 and 7473	
Lead	70.5

SB-18 0-4	
2021-07-01	
Metals, 6010 and 7473	
Lead	293
Zinc	254

SS-08	
2021-07-19	
Metals, 6010 and 7473	
Nickel	56.7

SS-09	
2021-07-19	
Metals, 6010 and 7473	
Lead	93
Selenium	4.15
Silver	3.84
Zinc	160

SS-01	
2021-07-19	
Metals, 6010 and 7473	
Selenium	4.28
Zinc	1.63

SB-13 3-4	
2021-07-01	
Metals, 6010 and 7473	
Lead	434
Zinc	171

SS-10	
2021-07-19	
Metals, 6010 and 7473	
Lead	555
Zinc	135

SB-10 5-5.5	
2021-06-30	
Metals, 6010 and 7473	
Cadmium	5.45
Copper	193
Lead	146
Zinc	2,420

SB-11 0-4	
2021-07-01	
Metals, 6010 and 7473	
Lead	79.6

SS-11	
7/19/2021	
Metals, 6010 and 7473	
Lead	90.9
Zinc	151
Mercury	0.257

SB-09 4-7	
2021-06-30	
VOCs, 8260	
1,2,4-Trimethylbenzene	11
Ethyl Benzene	2.4
Xylenes, Total	5.7
Metals, 6010 and 7473	
Lead	430

SB-21 4-8	
2021-07-01	
VOCs, 8260	
1,2,4-Trimethylbenzene	5.6
Xylenes, Total	3.1

SB-04 8-11	
2021-06-30	
VOCs, 8260	
1,2,4-Trimethylbenzene	750
1,3,5-Trimethylbenzene	70
Ethyl Benzene	7.7
Isopropylbenzene	4.1
n-Butylbenzene	31
n-Propylbenzene	17
Xylenes, Total	32

SB-20 4-8	
2021-07-01	
VOCs, 8260	
2-Butanone (MEK)	0.37
SB-20 8-11	
Xylenes, Total	2
SB-20 0-4	
SVOCs, 8270	
Chrysene	1.19
Indeno(1,2,3-cd)pyrene	0.591
SB-20 0-4	
Metals, 6010 and 7473	
Barium	493
Copper	70.5
Lead	421
Zinc	432

VOCs, 8260	UU SCO	RRU SCO
1,2,4-Trimethylbenzene	3.6	52
1,3,5-Trimethylbenzene	8.4	52
2-Butanone (MEK)	0.12	100
Ethyl Benzene	1	41
Isopropylbenzene	2.3	100
n-Butylbenzene	12	100
n-Propylbenzene	3.9	100
Xylenes, Total	0.26	100
SVOCs, 8270	UU SCO	RRU SCO
3- & 4-Methylphenols	0.33	100
Benzo(a)anthracene	1	1
Benzo(a)pyrene	1	1
Benzo(b)fluoranthene	1	1
Benzo(k)fluoranthene	0.8	3.9
Chrysene	1	3.9
Dibenzo(a,h)anthracene	0.33	0.33
Indeno(1,2,3-cd)pyrene	0.5	0.5
Phenol	0.33	100
Pyrene	100	100
Metals, 6010 and 7473	UU SCO	RRU SCO
Barium	350	400
Cadmium	2.5	4.3
Copper	50	270
Lead	63	400
Mercury	0.18	0.81
Selenium	3.9	180
Silver	2	180
Zinc	109	10,000

SB-01 8-11	
2021-06-30	
VOCs, 8260	
1,2,4-Trimethylbenzene	110
1,3,5-Trimethylbenzene	25
Ethyl Benzene	14
Isopropylbenzene	3.5
n-Propylbenzene	14
Xylenes, Total	120

SB-19 0-4	
2021-07-01	
VOCs, 8260	
1,2,4-Trimethylbenzene	6.3
SB-19 4-8	
1,2,4-Trimethylbenzene	59
1,3,5-Trimethylbenzene	21
Ethyl Benzene	12
Isopropylbenzene	3.4
n-Propylbenzene	7.1
Xylenes, Total	61
SB-19 0-4	
Metals, 6010 and 7473	
Lead	315
Mercury	0.801
Zinc	171

All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Fieldwork Map

Saranac Lofts
120 Broadway
Village of Saranac Lake
Franklin County, New York

Legend:

- subject property border
- lot line
- retaining wall
- wetlands
- manhole cover
- soil sample location
- soil boring with evidence of petroleum contamination
- soil vapor location

All data in mg/Kg (ppm)
Analyte Above UU SCO
Analyte Above RRU SCO

File: 21003-0066

July 2021

Scale as shown

3.0 INVESTIGATION

3.1 Site History

The history of the property was researched by interviewing knowledgeable individuals and reviewing standard ASTM historical sources (local agency records, historical maps, aerial photographs or city directories) and additional sources (if reasonably ascertainable and sufficiently useful, accurate, and complete considering the objective of the records review).

3.1.1 User-Reported Information

ASTM Practice E 1527-13, Section 6, requires the User (the party seeking to complete the environmental site assessment [ESA] of the property) to provide specific information to the Environmental Professional to meet the requirements for "all appropriate inquiry". Azita Miller, representing Kearney Realty & Development Group (the User), responded to a questionnaire provided by GBTS requesting information regarding the subject property as specified in Section 6. Ms. Miller stated that she had no specialized knowledge or experience, actual knowledge, or knowledge of commonly known or reasonably ascertainable information regarding: 1) information material to recognized environmental conditions or other environmental liabilities in connection with the property; 2) the results of a review of title and/or judicial records for environmental liens/AULs; or 3) reason(s) for a purchase price that does not reasonably reflect fair market value because of known or suspected contamination.

GBTS assumes that the User requested performance of the Phase I ESA to qualify for one or more Landowner Liability Protections (LLPs) to CERCLA liability and to document potential environmental liabilities on the subject property.

3.1.2 Interviews

Gregory Mace, the owner of the subject property since 1998, was identified as a Key Site Manager (a person having good knowledge of the uses and physical characteristics of the subject property) and was interviewed regarding specific site conditions and recent uses, as well as the topics detailed in the User Questionnaire (see Section 3.1.1, above). Mr. Mace indicated the following:

- His father purchased the property in 1969, which has been in its current use as a tire shop since that time;
- Prior to his family's involvement, two gasoline underground storage tanks (USTs) were located beneath the paved area to the south of the tire shop. Mr. Mace stated that he believes the tanks were 550- and 1,000-gallons in volume, and that he is unsure if the tanks are still present on-site (he believes they may have been removed prior to purchasing the property); and,
- Several slab-on-grade structures were formerly located at the rear of the property (Lot 11), which were demolished "several years ago".

Mr. Mace had no other specialized knowledge or experience, actual knowledge, or knowledge of commonly known or reasonably ascertainable information regarding potential environmental conditions and/or liabilities in connection with the property. Pertinent information from interviews is provided in relevant report sections, where appropriate.

3.1.3 Ownership Records

Property ownership information, based on interviews with Gregory Mace, is summarized below. "Date of Ownership" indicates a time the property was owned by the specified entity.

Owner	Date of Ownership
Gregory Mace (Current Owner)	10/16/1998
Floyd Mace	1969

3.1.4 Standard ASTM Historical Sources

A summary of environmentally significant information obtained from a review of standard historical sources is provided below. [Note: Any property outlines, as drawn by GBTS on maps and/or photographs, are approximations. The property falls on two different Sanborn sheets, distorting the scale and property outlines for maps prior to 1924.]

Sanborn Fire Insurance Maps

GBTS reviewed historical Sanborn Fire Insurance Company Maps dated 1895, 1899, 1903, 1908, 1916, 1924, 1931, 1945 and 1965 (relevant copies of these maps are provided in Appendix C).

1895-1903: The northern portion of the subject property (Lot 11) is not mapped (areas to the west of the property are not mapped in 1895). Municipal water is depicted as being available to the property. No petroleum or chemical bulk storage tanks are noted at the subject property or adjoining properties. A three-story hotel is located on the adjoining property to the northwest of Lot 12. Two one-story outbuildings are shown to the northeast of this structure on the 1895 map; by 1899 these outbuildings are gone and a 1½-story stable is shown to the northeast, along the western border of Lot 12. A large factory facility ("Branch & Callanan Sash & Blind") is located on the adjoining and nearby properties to the east, and adjoining properties along Main Street, and at other nearby areas, contain residential and small commercial uses. A large garage with a gasoline tank is located on Main Street southwest of Lot 11.

1908-1916: Lot 11 and the surrounding area to the north are now mapped. Railroad tracks cross the northern margin of Lot 11 (survey maps suggest that tracks were not located on the property) and comprise the adjoining property to the north. A two-story wood-working factory is depicted at the western portion of Lot 11 (1916), along with several outbuildings. The adjoining property to the west of Lot 11 is now uses as a coal storage facility, with multiple structures. Residential uses are shown in the surrounding area north of the subject property.

1924-1945: A small one-story store is depicted at the southern portion of Lot 12, with two gasoline tanks to the southwest (this use is labeled as a filling station and "Auto Tires & Vulcanizing" by 1931)[2]. A one-story addition, labeled "grease" (indicating an automotive maintenance area) is present at the west side of the building by 1945. The factory at Lot 11 has expanded with several one-story additions and outbuildings, including lumber sheds to the east and west and an automotive repair shop to the southwest. The western adjoining coal facility contains a gasoline tank near the border of Lot 11. The garage to the southwest of Lot 11 has expanded (the gasoline tank is only shown in 1924).

1965: A likely canopy is now present at the southern side of the building on Lot 12, and the gasoline tanks are now longer depicted. The factory on Lot 11 now contains fewer outbuildings. A nearby property approximately 60 feet west of Lot 12, at 121-123 Main Street, is labeled as a dry cleaner, and the garage to the southwest of Lot 11 is now labeled as automotive repair.

City Directories

GBTS reviewed historical city directories dated 1992, 1995, 2000, 2005, 2010, 2014, and 2017 for the subject property and for several adjoining properties (data sources are provided in Appendix D). Adirondack Tire Company, Inc. (the current occupant of the subject property) is listed in city directories at various addresses from 117 to 122 Broadway (Gregory Mace indicated that his family has owned the Adirondack Tire Shop at 120 Broadway since 1969). Most listed occupants of nearby properties along Broadway are residential tenants. The property at 91 Broadway is listed as an automotive repair facility beginning 2005.

Supporting information for the database review presented in Section 3.2 includes a non-ASTM database of potential dry cleaners, based on historical business directories. The subject property, under the former address of 117 Broadway, is reported as a potential historical automotive repair facility from 1969 to 1975 (according to Mr. Mace, Adirondack Tire Company has been in use solely as a tire shop since 1969). A nearby property at 121 Broadway has been identified as a potential historical dry cleaner from 1969 to 1971 (this site is likely to correspond to the facility identified on the 1965 Sanborn Map and to have a current street address of 126 Broadway). A site with an address of 132 Broadway (nominally the adjoining property southwest of Lot 11) is reported as a potential gasoline station from 1987 to 1994 (the listing, however, is for a SUNOCO facility, suggesting a database error). No other significant uses of adjoining or nearby properties were identified.

2 *Beginning in 1924, maps show Lot 12 with a street address of 117 or 119 Broadway. This addressing system, with odd street numbers on the northern side of the road, is opposite of the current naming convention, which now uses odd numbers on the southern side of the road.*

3.1.5 Municipal and Regulatory Agency Records

Assessor's Office Records

Village of Saranac Lake Assessor's Office property card records for the subject property were requested for review on May 7 and May 27, 2021. No response has been received as of the date of this Report. Available property ownership information is summarized in Section 3.1.3.

Building Department Records

Village of Saranac Lake Building Department records for the subject property, reviewed on May 27, 2021, contained a violation from 2012 indicating the on-site presence of metal debris. No permits or other information pertinent to the environmental integrity of the property were present in provided records.

NYSDEC

A request was made on May 7, 2021 to search available New York State Department of Environmental Conservation (NYSDEC) records for information regarding the subject property. No response from this agency has been received as of the date of this Report.

3.1.6 Previous Environmental Reports

GBTS did not review any relevant previous environmental reports (e.g., due diligence site assessments, subsurface investigation, remediation or closure reports, or similar documents) for the subject property.

3.2 Review of Federal and State Agency Records

Federal and state records were reviewed for documentation of environmental conditions and/or liabilities relevant to the property.

3.2.1 Methodology

The following ASTM Standard Environmental Record Sources (as available for the subject property's locality) were reviewed (search distances are consistent with, or exceed, ASTM requirements).

Federal National Priority List (1.0 mile) and delisted National Priority List sites (0.5 mile)
Federal SEMS (formerly CERCLIS) list and SEMS NFRAP site list (0.5 mile)
Federal RCRA CORRACTS facilities list (1.0 mile)
Federal RCRA non-CORRACTS TSD facilities list (0.5 mile)
Federal RCRA generators list (subject/adjoining properties)
Federal ERNS list (subject property)
Federal, State, and Tribal Institutional Control / Engineering Control registries (subject property)
State- and Tribal-equivalent NPL (1.0 mile)
State- and Tribal-equivalent SEMS (0.5 mile)
State and Tribal Brownfield and voluntary cleanup sites (0.5 mile)
State and Tribal leaking storage tank lists (0.5 mile)
State (including locally administered) and Tribal registered storage tank lists (subject/adjoining properties)
State and Tribal landfill and/or solid waste disposal site lists (0.5 mile)

Additional Environmental Record Sources (as available for the subject property's locality) were reviewed to enhance and supplement the review of standard sources, including: spill file records; oil storage facility lists; radon data; wastewater discharge permits; and federal Toxic Release Information System (TRIS) and Facility Index System (FINDS) databases.

A copy of relevant portions of a database search conducted by Environmental Data Resources, Inc. (EDR) for GBTS is provided is provided in Appendix E. Not all sites identified in the attached database search may be referenced below, as some sites may have been excluded based on one or more of the following: ASTM requirements; GBTS's scope of services or professional opinion; and/or information obtained during the review of historical records and the site inspection. Some information may have been deemed to not be practically reviewable as defined in ASTM E1527 (e.g., records lack adequate address information). Sites or additional information not included in the database search may also be referenced based on GBTS's knowledge of the subject property area.

GBTS's opinion is presented for any sites identified within the specified approximate minimum search distances as to any possible impacts that might result in RECs in connection with the subject property, arising from the migration of contaminated soil, soil vapor and/or groundwater. Evaluation of potential impacts to the subject property is based on: distance and direction to the identified site; type of regulated materials and other relevant information found in available records; presence of intervening roadways and/or other physical conduits; local physical setting (topography, soil conditions, geology, hydrology, etc.); and other information known to GBTS.

In accordance with ASTM E1527-13, this Report assesses the potential for hazardous vapors to migrate onto or within the target property. To accomplish this task, GBTS has performed an evaluation of potential Vapor Encroachment Conditions (VECs) arising from identified sites, consistent with a "Tier 1" screening as specified in ASTM E2600-15 (including a review of database records as well as analysis of historical uses, physical setting information and other known information).

3.2.2 Findings of Regulatory Records Review

Federal Hazardous Waste-Contaminated Sites

The subject property is not identified on the United States Environmental Protection Agency's (USEPA): National Priority List (NPL) of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions; Superfund Enterprise Management System (SEMS, formerly CERCLIS) list of sites that are proposed to the NPL or that are in the screening and assessment phase for possible proposal to the NPL; SEMS-Archive list (formerly CERCLIS NFRAP), which are former SEMS sites that were delisted because no significant contamination was found, or because the site has been remediated; or Federal Brownfields list of sites with known or potential contaminants receiving federal cleanup funding. The subject property is not identified on available USEPA Institutional Control/Engineering Control registries. No NPL sites are located within one mile of the property.

The following relevant site has been identified:

Site Name	Site ID	Distance/Direction	Database
Saranac Lake Dept. of Public Works	NYN000201950	0.49 mile, NW	SEMS

Based on a review of reported information, this site is not likely to impact the property.

State Sites

Inactive Hazardous Waste Disposal Sites

NYSDEC maintains a Registry of Inactive Hazardous Waste Disposal Sites (IHWDS), a state equivalent to the federal NPL, which are commonly referred to as "Registry" or "Superfund" sites. Sites are placed on the Registry if there is evidence that hazardous waste was disposed and a determination has been made that a significant threat to public health is present. Once a Registry site has been remediated, it is reclassified or removed (delisted) to indicate that the significant threat(s) has been addressed. Non-Registry sites may (but usually do not) also present significant threats. The property is not identified as a NYSDEC IHWD site, and has not been listed as a site under investigation for inclusion in the IHWDS Registry (a state equivalent to the federal SEMS List). No NYSDEC IHWD sites are located within one mile of the property.

Voluntary Cleanup, Brownfields Cleanup, and Environmental Restoration Programs

Contaminated properties that are not Registry sites may be listed in NYSDEC database records based on enrollment in the Voluntary Cleanup (VCP), Brownfields Cleanup (BCP) or Environmental Restoration (ERP) NYSDEC environmental remediation programs. The property has not been identified as a NYSDEC remedial program site.

The following relevant site has been identified:

Site Name (Program)	Site ID	Distance/Direction	Classification Code
70 River Street, Alaskan Oil (VCP)	V00017	0.48 mile, SE	N – no further action at this time

Based on a review of reported information, this site is not likely to impact the property.

New York Institutional and Engineering Controls

The subject property is not identified in NYSDEC Institutional and Engineering Control databases.

Federal Hazardous Waste Handlers

The SEMS database details facilities that report treatment, storage or disposal of hazardous waste (TSD facilities) or generation or transportation of hazardous waste. Facilities that have been notified by the USEPA to take corrective action regarding their handling of hazardous waste are classified as CORRACTS facilities.

CORRACTS and/or TSD Facilities

The subject property is not registered with the USEPA as a CORRACTS and/or TSD facility for hazardous waste or materials. No CORRACTS and/or TSD facilities are located within one mile of the property.

Generators or Transporters (Non-CORRACTS)

The subject property is not registered with the USEPA as a generator or transporter of hazardous waste. The following relevant site has been identified at an adjoining property:

Site Name	Site ID	Distance/Direction	Classification
P J Hyde & Son Inc.	NY0000261446	0.10 mile, W	NLR

P J Hyde & Son Inc., located at the adjoining property to the west of Lot 11, is listed in database records as a large quantity generator (LQG) in 1994 and a non-generator (NLR) in 1999, 2006 and 2007. Listed materials include ignitable waste. Based on a review of reported information, this site is not likely to impact the property.

Landfills and Solid Waste Disposal Facilities

The state Facility Register does not list the subject property as an active or inactive landfill or solid waste disposal facility.

The following relevant sites have been identified:

Site Name	Site Status	Distance/Direction	Type
Saranac Lake Town Garage	Inactive	0.32 mile, NW	Waste transfer station
Saranac Lake Landfill	Inactive	0.38 mile, SE	Landfill

Based on a review of reported information, these sites are not likely to impact the subject property.

Chemical Bulk Storage (CBS)

The subject property and adjoining properties are not identified in database records as CBS facilities. Observations made during the site inspection did not indicate the presence of chemical bulk storage on the subject property or at adjoining properties.

Petroleum Bulk Storage (PBS)

Subject Property

The subject property is not identified in database records as either a regulated or unregulated PBS facility. Two, manifolded 275-gallon fuel-oil aboveground storage tanks (ASTs), supplying a furnace, were observed in the northeastern portion of the basement. Historical records indicate that the property is a former filling station and Mr. Mace stated that 550- and 1,000-gallon gasoline USTs may be located on the property in the paved area to the south of the on-site structure (a suspect tank was identified during the field investigation, see Section 4). One closed NYSDEC spill is reported for the subject property (see the State Chemical and Petroleum Spill and Leaking Underground Storage Tank Events subsection, below).

Adjoining Properties

The P.J. Hyde & Son property at 196 Broadway (PBS Number: 5-262129), which adjoins Lot 11 to the west, is identified in database records as a regulated facility. Tank information for this property is not publically available; observations made during the site inspection, however, indicated only propane ASTs at this site. Two closed NYSDEC spills are reported for this property (see the State Chemical and Petroleum Spill and Leaking Underground Storage Tank Events subsection, below).

Major Oil Storage Facilities

The subject property is not listed with the NYSDEC as a major oil storage facility (MOSF). No MOSFs are located within a half mile of the property.

Federal Chemical and Petroleum Spills

The USEPA Emergency Response Notification System (ERNS) database documents releases of oil and hazardous substances as reported to federal authorities. There are currently no chemical or petroleum spills on record for the subject property.

State Chemical and Petroleum Spill and Leaking Underground Storage Tank Events

NYSDEC database records were reviewed to determine possible impacts from leaking tanks and other reported releases within a half mile of the subject property. An active spill event (number 2103108) was reported by GBTS for the subject property on July 2, 2021 due to the presence of gross petroleum contamination encountered in soil borings (see Section 4).

The following closed spill events are reported for the subject property and adjoining properties.

Spill File ID	Location	Material Spilled	Spill Date (Closure Date)
8909820	subject property	#2 fuel oil (2 gal.)	January 12, 1990 (January 12, 1990)
9212115	119 Broadway	#2 fuel oil (2 gal.)	January 24, 1993 (January 26, 1993)
9610907	121 Broadway	#2 fuel oil (5 gal.)	November 30, 1996 (December 1, 1996)
0651074	Hyde Fuel	gasoline (15 gal.)	September 26, 2006 (July 27, 2007)
2001106	Hyde Fuel	Gasoline (qty. unknown)	May 19, 2020 (July 29, 2020)

Spill number 8909820 was reported on the subject property due to a release of 2 gallons of fuel oil from a leaking tank-truck delivery line. According to reported information, most of the spilled material was contained in the back of the truck. The spill was closed the same day with state cleanup standards are listed as having been met.

Spill numbers 9610907 and 9212115 were reported for the adjoining properties at 121 and 119 Broadway, respectively, due releases of small quantities of fuel oil. These spills were closed shortly after they were reported, without state cleanup standards listed as having been met.

Spill numbers 0651074 and 2001106 are reported for the adjoining Hyde Fuel facility. Spill number 0651074 was reported due to a release of 15 gallons of gasoline from an AST. Although this spill was reportedly largely contained, approximately 3 tons of contaminated material required removal. Spill number 2001106 was reported due to a release of an unspecified amount of gasoline; corrective actions were taken, and the spill was closed. Both of these spills were closed without state cleanup standards listed as having been met.

Based on a review of reported information, none of the spill events at adjoining properties are likely to have significantly impacted the subject property. No other relevant spill events were identified during the records review.

Air Discharges

No NYSDEC permits for air discharges from the subject property are known to exist. No operations likely to require a NYSDEC air discharge permit were noted on the subject property.

Wastewater Discharges

No USEPA National or NYSDEC State Pollutant Discharge Elimination System (NPDES or SPDES) permit was identified for the subject property. No wastewater discharges are known to exist on the subject property No adjoining properties are registered as NPDES or SPDES facilities.

Radon

The USEPA maintains a Map of Radon Zones to identify areas with the potential for elevated indoor radon levels, and has established a guidance value (the level where mitigation measures may be appropriate) for radon concentrations of 4.0 or greater picoCuries/liter (pCi/l). The subject property is located in Franklin County, which is designated as Zone 3, indicating predicted average indoor radon screening levels less than 2 pCi/L. New York State Department of Health (NYSDOH) data indicate that the average radon level in Franklin County (119 homes tested) is 0.97 pCi/L, and that 0.05 percent of homes exceed USEPA guidance. GBTS has not reviewed any radon test data for the subject property. Based on the available NYSDOH data, radon above actionable levels is unlikely to be a risk at the subject property.

Vapor Encroachment Conditions at Identified Sites

Information obtained during the database review was evaluated consistent with the Tier 1 screening process presented in ASTM E2600-15. Based on this review, releases at Sites identified in database records (other than the NYSDEC spill reported during the subsurface investigation) are not likely to have resulted in vapor encroachment at the subject property (results of on-site soil vapor sampling are discussed in Section 4).

3.3 Site Inspection

The subject property was inspected by GBTS on May 28, and during the subsurface investigation on June 30, and July 1 and 19, 2021. The weather at the time of the inspections ranged from sunny to overcast, with mild temperatures. There were no relevant limitations to the inspection of the subject property.

3.3.1 Protocol

The site inspections were conducted to address any potential concerns raised during the investigation of the site's history (Section 3.1) and the regulatory agency records review (Section 3.2), and to identify any additional indications of contamination from the use, storage, or disposal of hazardous or regulated materials. To the extent possible, site structures, vegetation, topography, surface waters, and other relevant site features were examined for any obvious evidence of existing or previous contamination or unusual patterns (e.g., vegetative stress, soil staining, surface water sheen, or the physical presence of contaminants), which would indicate that the environmental integrity had been or could be impacted.

Section 3.3.2 describes the physical characteristics of the subject property. Section 3.3.3 is divided into topics on specific environmental conditions or concerns, actual or potential, noted on the subject property during the site inspection. Section 3.3.4 describes the physical characteristics of adjoining properties as they concern the potential or actual environmental condition of the subject property.

A Selected Site Features Map illustrating the subject property layout and locations of specific areas of concern (if any) is provided on Page 7, and photographs of the property are provided in Appendix A.

3.3.2 Physical Characteristics of the Subject Property

3.3.2.1 Property

The subject property is an irregularly-shaped, 1.1-acre parcel (comprised of two contiguous tax lots), which has 57 feet of frontage on the northern side of Broadway. A tire shop (a former filling station) is located at the southern portion of Lot 12. The remainder of the property is comprised of a gravel parking lot at the rear of the building, and a maintained yard (entirety of Lot 11). Portions of the eastern and western borders at Lot 12 are defined by the extent of the on-site building and portions of the northern border at Lot 11 are defined by a concrete retaining wall; remaining property lines are undefined.

A manhole indicated on a survey of Lot 11 (dated October 27, 1977, provided by Mr. Mace), was noted during the initial site inspection and the cover was removed during the fieldwork event. The interior was observed to be a square-shaped, approximately 4-foot deep masonry chamber, containing approximately a foot of standing water (the former use of the chamber remains unclear). No odors or surface staining were observed. Approximately 6-inch diameter ceramic piping was observed at the eastern and western walls of the chamber. The survey shows the manhole located in a concrete sidewalk, suggesting that it was associated with site utilities rather than directly with a storage tank or industrial equipment, and this feature is not considered to be a significant environmental concern.

3.3.2.2 Structures

The on-site building is a two-story masonry structure with a walkout basement and an angled roof. Exterior siding is brick and wood, and the roof is covered by asphalt shingles. Sanborn maps suggest a construction date between 1916 and 1924. Interior floors are wood and concrete. First floor walls are generally covered with wood and ceilings are generally covered with plaster; basement walls and ceilings remain unfinished. Gregory Mace indicated that the structure was significantly damaged during a fire in 1979; the building has since been repaired.

Potable Water Supply and Sanitary Waste

According to Gregory Mace, the subject property is serviced by the public water supply and sanitary sewer systems. No water supply wells were noted on the subject property during the site inspection and no on-site uses of groundwater are known to exist for the subject property.

Heating/Cooling

The on-site structure is heated with hot air generated by an oil-fired furnace in the basement and by a wood stove on the first floor. A source of cooling was not identified.

3.3.3 Specific On-Site Environmental Conditions

Debris Areas

Concrete foundation remains of former structures, as well as lumber and metal debris, are present at Lot 11. The potential exists that debris from the demolition of former on-site structures may be present in the subsurface (such debris could contain lead, asbestos, or other regulated materials). No other significant quantities of debris were noted on the subject property.

Petroleum Storage

Two, manifolded 275-gallon fuel oil ASTs are located at the eastern portion of the basement. These tanks appeared to be sound and were noted to be free of signs of corrosion, staining or leakage. The fill port and vent pipe servicing the AST are located on the northeastern exterior wall of the building. No staining was noted on or near the fill port and vent pipe.

The subject property was historically in use as a filling station and reportedly contained two gasoline USTs. According to Gregory Mace, these tanks were 550- and 1,000-gallons in volume and may potentially still be present at the property. A suspect fill port (filled with concrete), likely formerly servicing one of the two gasoline USTs, was observed at the paved area to the southwest of the building. No staining was noted on or near the fill port. According to Mr. Mace, an additional fill port (likely formerly servicing the other of the two historical USTs) is located along the northwestern border of Lot 12; a concrete wall was constructed at this location and the fill port is no longer visible. Disconnected piping, possibly associated with the USTs, was observed at the southwestern wall of the basement. A suspect tank was identified during the field investigation, see Section 4).

Several small containers of petroleum products (lubricants, etc.) are located on the first floor of the tire shop. No staining or other evidence of a release from these containers was observed. No other small quantities of petroleum products, aboveground storage tanks or indications of underground petroleum storage tanks (e.g., fill ports or vent pipes) were observed on the property.

Chemical Storage

Several small containers of paints and common cleaning and maintenance products were observed in the tire shop. No staining or other evidence of a release from these containers was observed during the site inspection. No other small quantities of chemical products, aboveground chemical storage tanks or indications of underground chemical storage tanks (e.g., fill ports or vent pipes) were observed on the property.

Asbestos-Containing Materials

Asbestos-containing materials (ACM) contain over 1% of any type of asbestos. Asbestos has been used in a wide variety of building products based on its thermal and resilient qualities, including insulation, floor and ceiling tiles, wallboard systems, texture-finished ceiling and wall materials, sprayed- or troweled-on structural coverings, and siding and roofing materials. Although ACM are no longer used as extensively as they were prior to the 1970s, asbestos may still be found in common building products used today. The presence or absence of asbestos can only be determined through physical analysis of material samples. GBTS has not reviewed any asbestos surveys for the property.

Suspect building components observed during the site inspection included roofing and plaster. All materials appeared to be in good condition. Construction materials not readily observable during the site inspection (e.g., mastics, caulking, pipe insulation present within walls, etc.) could potentially contain asbestos.

Lead-Based Paint

Lead-based paint (LBP) contains at least 0.5% lead by weight. The presence of LBP presents a risk of both environmental contamination and potential health impacts from inhalation and/or ingestion of paint dust or chips (lead in paint has been regulated since 1978). The presence or absence of lead in painted surfaces can only be determined through the physical analysis of material samples. GBTS has not reviewed any LBP surveys for the property. Based on the likely earliest date of construction and/or subsequent maintenance work, LBP may be present at the subject property. All painted surfaces observed during the site inspection were in good condition.

Wastewater Discharges

The term “wastewater” indicates water that: (1) is or has been used in an industrial or manufacturing process; (2) or is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant; (3) or conveys or has conveyed sewage (water originating on or passing through or adjacent to a site, such as stormwater flows, is not generally considered to be wastewater). No evidence of wastewater discharges into drains, ditches, or streams on or adjacent to the property was observed during the site inspection.

Interior Floor Drains/Sumps/Conduits

No interior floor drains, sumps, or other potential significant conduits to the subsurface were observed during the site inspection.

Stormwater Management and Exterior Drains/Sumps/Conduits

No exterior stormwater catch basins, drains, sumps, or other potential significant conduits to the subsurface, or indications of liquid discharges into drains, ditches, or streams on or adjacent to the property, were observed on the property.

Staining/Corrosion/Leaks/Odors

No evidence of corrosion, leaks, or staining (indicative of an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products onto the property, including on-site structures and paved areas) was observed during the site inspection. No unusual odors indicative of the presence of contamination were noted.

Topographic Irregularities

No overt topographic irregularities (e.g., sinkholes or berms) indicative of the presence of non-natural materials (including debris) in the subsurface were observed on the property.

Vegetative Features

No overt areas of stressed or dying vegetation indicative of the presence of contaminants in surface or subsurface soils were observed on the property.

Pits, Ponds, or Lagoons

No pits, ponds, or lagoons exhibiting evidence of holding liquids or sludge containing hazardous substances or petroleum products were observed on the property.

Surface Waters

No evidence of contamination (e.g., unusual odors, sheens, coloration patterns, or staining) was noted on standing water located at the western portion of Lot 11.

PCBs

No equipment likely to contain polychlorinated biphenyls (PCBs) was noted on the subject property.

3.3.4 Environmental Concerns at Adjoining and Nearby Properties

Adjoining and nearby properties were observed from the subject property and from public thoroughfares to identify any recognized environmental conditions or other potential environmental concerns. No potentially significant environmental conditions were noted on adjoining or nearby properties.

4.0 SUBSURFACE INVESTIGATION

A subsurface investigation was performed to evaluate potential impacts from the following significant environmental conditions identified during the Phase I ESA:

- Former on-site filling station and automotive service facility at Lot 12, including two gasoline USTs;
- Former manufacturing operations at Lot 11; and,
- Former dry cleaner, gasoline tanks, automotive repair facilities and industrial uses at adjoining and nearby properties.

4.1 Summary of Services

GBTS documented the presence or absence of contamination through a geophysical survey, collection of soil samples from mechanized soil borings and surface-soil locations, and collection of soil vapor samples. A map indicating relevant Site information and fieldwork locations is provided on Page 8.

4.2 Fieldwork Activities

4.2.1 Site Preparation Services

GBTS requested a complete utility markout of the Site (as required by New York State Department of Labor regulations) and on-site personnel reviewed the markout and underground utility locations prior to the initiation of fieldwork.

A private markout and geophysical survey was performed for GBTS by East Coast Geophysics, Inc. on June 30, prior to extending soil borings. The survey was conducted at the entirety of Lot 12 and accessible areas at Lot 11 (the survey at this portion of the property was limited due to dense vegetation and the presence of lumber debris throughout the central portion of the lot). The survey indicated the presence of a subsurface anomaly (suspect historical gasoline UST) at the southwestern portion of the paved lot to the south of the tire shop (See Fieldwork Map, Page 8). No other significant subsurface anomalies were encountered at the remainder of Lot 12 or at surveyed areas at Lot 11.

4.2.2 Fieldwork Methodology

General Protocols

All encountered material was screened with a properly calibrated MiniRAE Lite (Model PGM 7300) 3000 (Model PGM 7320) photo-ionization detector (PID) for the presence of any volatile organic vapors where appropriate (reading in parts per million [ppm]. GBTS described all encountered media in field log books, including specific characteristics, the presence of foreign materials, and field and instrument indications of contamination (e.g., staining, odors, PID readings). Relevant information from GBTS logs for each sampling location is provided in Appendix F.

GBTS collected samples in general conformance with NYSDEC and NYSDOH sample collection and decontamination protocols. All field personnel wore dedicated, disposable gloves during fieldwork activities, and any non-dedicated sampling instruments were decontaminated prior to media collection. Soil samples were collected directly from disposable acetate sleeves at boring locations and from exposed areas in the test pits utilizing clean, dedicated sampling tools. Soil collection for analysis of volatile organic compounds (VOCs) was conducted according to USEPA Method 5035 fieldwork protocols, utilizing laboratory sampling kits.

All sample were placed in laboratory-supplied containers and maintained at proper temperatures (using ice-packs and coolers as appropriate) while in GBTS's custody. Samples were transported via courier to York Analytical Laboratories, Inc. (soil) and Alpha Analytical (soil vapor), NYSDOH certified laboratories (ELAP Certification Nos. 10602 and 11148, respectively). Appropriate chain-of-custody procedures were followed.

Extension of Soil Borings

GBTS extended twenty-two (22) mechanized soil borings (SB-01 to SB-22) at the subject property as follows:

- Lot 12, south of building in the vicinity of former gasoline USTs and fuel pumps: SB-01 to SB-08;
- Lot 12, north of building: SB-09, SB-10, and SB-19 to SB-22; and,
- Lot 11, throughout parcel: SB-11 to SB-18.

Four additional borings were extended for the purpose of installing temporary soil vapor collection points: SV-01 at the northern portion of Lot 12; and, SV-02 to SV-04 throughout Lot 11.

All soil borings were extended by personnel from Core Down Drilling using a tracked Geoprobe (7822DT) equipped with a direct-push, macro-core sampler lined with disposable sleeves. Sampling was conducted at each boring location at intervals of 4 feet to a maximum depth of 8 feet bgs or until refusal.

Collection of Surface Soil

Surface soil was collected from immediately beneath the vegetative layer (maximum depth of 6 inches) at thirteen (13) locations throughout Lot 11, utilizing a decontaminated steel trowel.

Fieldwork Observations

Subsurface soils encountered at the Site during the extension of the soil borings generally consisted of variable texture loamy sands, with inclusions of cobbles/gravel, and occasional deeper layers of silt and/or clay. Fragments of coal and glass, as well as ash, were encountered in the surface to 4 feet interval at several locations, indicating likely fill. Peat was encountered in upper soil, or below the presumed fill, throughout Lot 11 and at the northern end of Lot 12. Saturated soil (indicating the general depth of the groundwater table) was observed in all borings extended on Lot 11, beginning at approximately 4 to 6 feet bgs. Boring refusal, likely on bedrock, was encountered from 6 to 12 feet bgs at multiple locations, with refusal at 1 foot at the southwestern corner of Lot 12 near the street.

Field evidence of gross petroleum contamination (moderate to strong odors, staining, and elevated PID readings [up to 3,310 ppm]) was observed below 8 feet in borings SB-01 and SB-04 located north of the suspect UST at the southwestern corner of Lot 12, and starting at approximately 4 feet bgs in five of the six borings (SB-09, SB-10, and SB-19 to SB-21) north of the on-site building. Light nonaqueous-phase liquid

(NAPL), in the form of sheens, was observed in soil below 4 feet bgs at borings SB-20 and SB-21. All field evidence of contamination was observed in moist to very moist soil.

No overt signs of contamination (elevated PID readings) were noted during the collection of soil vapor samples.

Collection of Soil Vapor

GBTS constructed soil vapor probes by extending a boring to approximately 3 feet bgs, inserting a hollow steel rod with an expendable tip, removing the tip, and lowering an air-stone attached to ¼" Teflon tubing into the rod to the invert of the boring. The rod was then removed, and the boring was sealed using a bentonite clay in order to prevent the infiltration of surface air. Each soil-gas boring was purged prior to sampling for at least a period of five minutes, using a GilAir 3 air-sampling pump (rate of approximately 0.2 liters/minute). No significant PID readings were recorded in the purged vapor. Soil vapor samples were collected into 6-liter Summa Canisters equipped with two-hour flow controllers.

4.3 Laboratory Analysis

4.3.1 Standards, Criteria and/or Guidance

Soil

Laboratory results for all compounds in soils are compared to NYSDEC Remedial Program Soil Cleanup Objectives (SCOs) for Unrestricted Use (UU) and Restricted-Residential Use (RRU) as provided in 6 NYCRR Subpart 375, Tables 375-6.8(a) and 375-6.8(b), and Soil Cleanup Levels (for soil impacted by gasoline and fuel oil) presented in NYSDEC CP-51 (Soil Cleanup Guidance, October 2010) Tables 2 through 3.

Vapor

The State of New York does not have any standards, criteria or guidance values (SCG) for volatile chemicals in subsurface vapors; the NYSDOH, however, utilize several decision matrices for evaluating potential soil vapor intrusion for a limited number of compounds under specific circumstances (see NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York [October 2006]). Potentially applicable matrix values and/or relatively high concentrations of VOCs are identified in the report text and in data summary tables, as warranted.

4.3.2 Sample Submission

Submission of samples for laboratory analysis was based on observations made by GBTS personnel during the extension of the soil borings, including the presence or absence of field evidence of contamination. A sufficient number of samples were submitted for analysis to provide a general screening of the property in terms of the identified areas of significant environmental concern.

Samples from all locations with field evidence of petroleum contamination were submitted for laboratory analysis of VOCs (US EPA 8260), and semi-volatile organic compounds (SVOCs, US EPA 8270) or polycyclic aromatic hydrocarbons (PAHs; a subset of SVOCs). Samples from locations throughout the property were analyzed for SVOCs, PAHs, Target Analyte List (TAL) metals (USEPA 6010/7043), PCBs (USEPA 8082), and/or pesticides (USEPA 8081). Soil vapor samples were submitted for analysis of VOCs (USEPA TO-15).

4.3.3 Laboratory Results

Laboratory results are summarized below. Results are reported as milligrams per kilogram (ppm) for soil and micrograms per cubic meter ($\mu g/m^3$) for soil vapor. Data summary tables and the laboratory reports are provided in Appendix G and Appendix H, respectively.

Soil

VOCs above RRU SCOs were reported in petroleum-impacted soil at SB-01, SB-04, SB-09 and SB-19, including 1,2,4-trimethylbenzene (750 ppm, SCO 52 ppm), 1,3,5-trimethylbenzene (70 ppm, SCO 52 ppm), and total xylenes (120 ppm, SCO 100 ppm). One or more other VOCs associated with gasoline (substituted benzenes) were found in all samples collected from grossly impacted soil (except for SB-10). 2-butanone (a solvent) was reported above the UU SCO at SB-20. Surface soil sample SS-13 (far northwestern corner of the Site) contained multiple PAHs above RRU SCOs, including indeno(1,2,3-cd)pyrene (47 ppm, SCO 0.5 ppm; also found above the RRU SCO at SB-20) and seven other compounds.

Metals above RRU SCOs were reported in samples from SB-09, SB-10, SB-20 and SS-10, including barium (493 ppm, SCO 400 ppm), cadmium (5.45 ppm, SCO 4.3 ppm), and lead (555 ppm, SCO 400 ppm). Copper, lead, mercury, nickel, silver, and/or zinc were found above UU SCOs in fourteen of twenty-four samples. No PCBs or pesticides were reported in any samples.

Soil Vapor

Low-grade contamination related to gasoline was reported in all soil vapor samples. Peak values include cyclohexane (136 $\mu g/m^3$), toluene (89 $\mu g/m^3$), and total xylenes (170 $\mu g/m^3$). Reported VOC levels are consistent at all four locations, suggesting that the source of these impacts may be related to groundwater contamination. Multiple other VOCs were reported at low levels typical of urban and/or commercial settings. No solvents associated with dry cleaning activities (e.g., tetrachloroethene or related breakdown products) were found in any samples.

One VOC identified in NYSDOH decision matrices, methylene chloride, was reported at a peak value of 3.75 $\mu g/m^3$, potentially indicating that monitoring or mitigation would be required if high levels of this compound were found inside an overlying structure.

5.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Gallagher Bassett Technical Services (GBTS) performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E 1527-13 to identify recognized environmental conditions (RECs), historical RECs (HRECs) and/or other significant environmental liabilities resulting from or associated with the storage, use, transport, or disposal of hazardous or regulated materials at the property located at 120 Broadway, Village of Saranac Lake, Franklin County, New York. Any exceptions to, or deletions from, this practice are described in Section 1.2 of this report. A Phase II Environmental Site Assessment was subsequently performed to characterize site conditions in identified areas of concern.

Identified RECs are presented in Section 5.1. GBTS's findings, conclusions and recommendations regarding RECs, other potential environmental liabilities associated with the property, and de minimis conditions are presented in Sections 5.2 through 5.5.

5.1 Recognized Environmental Conditions

Significant Data Gaps

The Environmental Professionals preparing this report have not identified any significant data gaps that affect their ability to identify RECs.

Overview of Identified RECs

This assessment has revealed evidence of the following RECs in connection with the property, based on potential releases/impacts associated with:

- Open NYSDEC spill event reported for the subject property based on documented petroleum contamination in soil at Lot 12 (the spill may be associated with local groundwater contamination)
- Documented contamination of on-site soil by metals and semi-volatile organic compounds (SVOCs)

5.2 Site History

Available historical records document that the southern portion of the subject property (Lot 12) was in use for commercial purposes (as a hotel) as early as 1895 and was developed for use as a filling station and automotive maintenance facility sometime between 1916 and 1924. This portion of the property contains a small structure that has been used as a tire shop since circa 1969. The northern portion of the property (Lot 11) contained a woodworking factory from at least 1916 through 1965 (remaining portions of these buildings were present on the property as late as 1977).

Historical uses at adjoining and nearby properties have included a coal yard and automotive garage/repair facility with gasoline tanks, as well as a nearby dry cleaner (within 60 feet of Lot 12) that is likely to have utilized chlorinated solvents.

No further investigation of historical records is recommended.

The property owner has indicated that gasoline underground storage tanks (USTs) may be present on Lot 12 and a geophysical survey confirmed a suspect tank or tank grave located at the southwestern corner. A subsurface investigation revealed gross petroleum contamination in soil borings immediately north of the western suspect UST, and in a broad area to the north of the building on Lot 12, and GBTS reported a spill (#2103108) to the NYSDEC on July 2, 2021. Laboratory analysis of the most impacted materials indicates contamination by volatile organic compounds (VOCs) above NYSDEC Restricted-Residential Use (RRU) criteria at borings both to the south and north of the building, and above NYSDEC cleanup levels for spill sites in six of seven locations with field evidence of contamination. The absence of semivolatile organic compounds (SVOCs) in these areas indicates that the released material is likely to have been gasoline. Given the high level of contamination in soil and the presence of grossly impacted material in deep boring intervals, it is likely that this petroleum release has impacted groundwater (based on the position of the USTs, and the broad impacts to the north of the building, groundwater contamination likely extends to off-site areas to the west and east of Lot 12). Documented petroleum contamination in soil, the potential for groundwater impacts, and the related open spill file constitute a REC.

Soil vapor impacts are limited to low but relatively elevated concentrations of VOCs related to gasoline, and low-grade levels of other VOCs typically encountered in urban environments. VOCs are generally present at uniform levels throughout the property, suggesting that the source of the vapor is groundwater contamination. Soil vapor data are not consistent with any significant impacts from off-site sources, including historical activities at the former, nearby dry cleaner, historical storage tanks, or other significant commercial operations (e.g., current or former automotive repair facilities).

Metal and SVOC contamination above RRU criteria is present at both subject property lots, likely from fill materials or impacts from historical commercial uses (including former manufacturing operations at Lot 11), constituting a REC. This contamination presents a potential exposure hazard to future site residents.

An additional subsurface investigation should be conducted to delineate the extent of petroleum impacts and document the presence or absence of groundwater contamination. All environmental investigative work should be conducted according to a NYSDEC-approved Work Plan in support of spill file closure. Based on documented site-wide impacts above RRU criteria, consideration should be given to conducting site investigation and remediation under the NYSDEC Brownfields Cleanup Program (BCP).

The potential exists that debris from the demolition of former on-site structures may be present in the subsurface (such debris could contain lead, asbestos, or other regulated materials)

Any future development activities at the property should be conducted with an awareness of the potential presence of subsurface debris, as well as soil impacted by elevated levels of metals, and provision should be made for the proper management of any materials that warrant special handling.

5.3 Review of Regulatory Records

An open NYSDEC spill event has been reported for the subject property (see Section 5.2, above). One closed spill event (#8909820) was reported for the property in 1990, based on a minor release, and the file was closed the same day it was reported meeting state cleanup standards. Two closed NYSDEC spill events (#0651074 and #2001106) are reported for the adjoining Hyde Fuel property to the west of Lot 11, which is a registered petroleum bulk storage (PBS) facility; impacts from this site, if any, are likely to be minimal. No other adjoining or nearby properties were identified that are likely to potentially impact the property.

No further investigation of regulatory records is recommended (any impacts from Hyde Fuel facility may be determined concurrently with the subsurface investigation recommended in Section 5.2).

5.4. Relevant Site Observations and General Concerns

Two, manifolded 275-gallon fuel-oil aboveground storage tanks are located at the eastern portion of the basement of the tire shop. These tanks appeared to be in sound condition and no evidence of a release or an impending threat of a release was observed during the site inspection. Future releases from these tanks, however, could impact the subject property.

It is recommended that all PBS tanks be periodically inspected and managed in accordance with applicable state and local regulations.

A suspect closed fill port, likely formerly servicing one of the two historical gasoline USTs, was observed at the paved area southwest of the tire shop, and an additional fill port is reportedly located along the northwestern border of Lot 12. Disconnected piping, possibly associated with the historical USTs, was observed at the southwestern wall of the tire shop basement.

All former USTS and related piping should be removed during future site remediation and development.

Small quantities of petroleum products, common cleaning and maintenance materials, and paints are stored on site; releases from these containers could potentially impact the property.

It is recommended that identified materials be properly stored or be disposed off-site.

5.5 Non-scope Considerations

Limited visual observations by GBTS and the likely dates of building construction suggest that asbestos-containing materials (ACM) and lead-based paint (LBP) may be present. No surveys for ACM or LBP are known to have been conducted.

Any suspect material encountered during maintenance, renovation, or demolition activities should be tested for asbestos or lead, or, in the absence of analytical data, be treated as though it contained asbestos or lead. All maintenance, renovation, or demolition activities should be conducted in accordance with applicable regulations.

6.0 SOURCES OF INFORMATION

6.1 Maps and Documents

Environmental Data Resources, Inc. (EDR), City Directory Abstract, 1992, 1995, 2000, 2005, 2010, 2014, 2017

EDR, Regulatory Database Report, May 7, 2021

Geomatics Land Surveying, PC, "Map of Boundary and Topographic Survey", dated November 12, 2020

New York State Department of Environmental Conservation, Freshwater Wetlands Map of the Saranac Lake, New York Quadrangle, accessed online May 5, 2021 via Environmental Resource Mapper at dec.ny.gov

Sanborn Fire Insurance Company Maps dated 1895, 1899, 1903, 1908, 1916, 1924, 1931, 1945, and 1965

Survey of Lot 11, provided by Gregory Mace, dated October 27, 1977

United States Department of Agriculture, Natural Resources Conservation Service, Soil Survey for Franklin County, New York accessed online May 12, 2021 via websoilsurvey.sc.egov.usda.gov

United States Department of the Interior National Wetlands Inventory Map of the Saranac Lake, New York, Quadrangle, accessed online May 5, 2021 via fws.gov/wetlands/Data/Mapper.html

United States Geological Survey (USGS) Topographic Map of the Saranac Lake, New York Quadrangle, dated 2019, digital image provided by https://ngmdb.usgs.gov/topoview

6.2 Local Agency Records

Village of Saranac Lake Assessor's Office records, requested May 7 and May 27, 2021

Village of Saranac Lake Building Department records, reviewed May 27, 2021

NYSDEC records, requested May 7, 2021

6.3 Communications

Gregory Mace, owner of the subject property, various dates, May - June 2021

7.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

The following statements are required by 40 CFR 312.21(d) of the environmental professional(s) responsible for conducting and preparing the Phase I Environmental Site Assessment report.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312.

and

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 Part 312.

____

Scott Spitzer
Gallagher Bassett Technical Services
Senior Environmental Consultant
Technical Director – Environmental Services

APPENDIX A

Site Photographs

1. Tire shop at Lot 12, looking northeast across Broadway

2. Rear of tire shop

3. Lot 11, looking northeast from southwestern corner

4. Manhole, western portion of Lot 11

5. Adjoining Hyde Fuel facility, looking northwest from Lot 11

6. Suspect fill port (remains of pipe in concrete pad) for historical gasoline underground storage tank (UST), southwest of tire shop

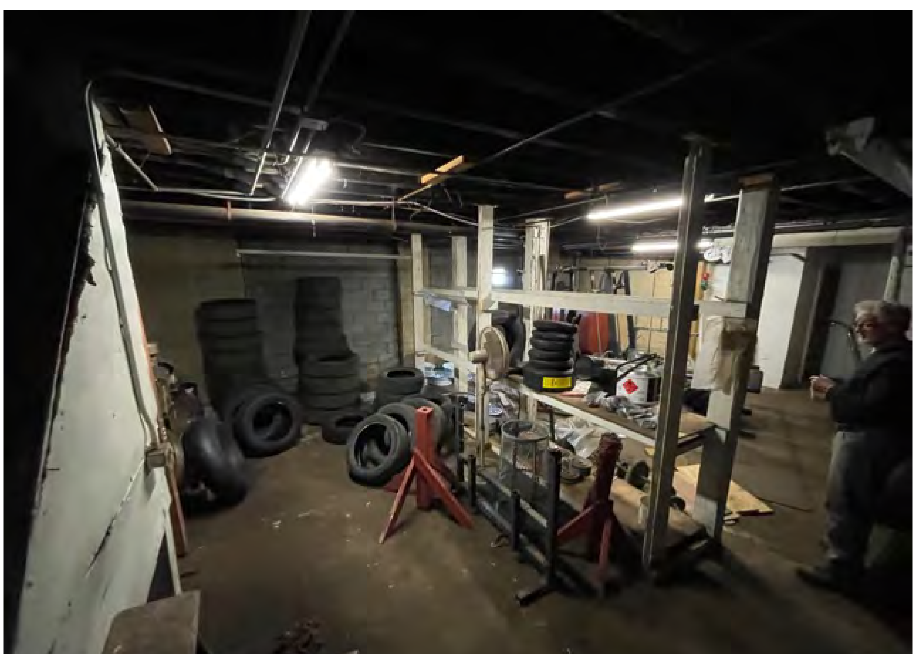
7. Location of additional suspect fill port (beneath masonry), southwest of tire shop

8. Reception area, first floor of tire shop

9. Storage area, first floor

10. Storage of chemical, petroleum, and paint products, first floor

11. Storage room, first floor



12. Basement

13. Storage room, basement

14. Manifolded 275-gallon fuel-oil aboveground storage tanks, basement

15. **Fill port and vent pipe servicing manifolded ASTs, northeastern exterior wall of basement**

16. **Piping, possibly associated with historical gasoline USTs, southwestern wall of basement**

17. Approximate footprint of historical gasoline UST, Lot 12

18. Petroleum stained soil, SB-01

19. Petroleum stained soil, SB-20

20. Elevated photo-ionization detector (PID) reading at SB-09

APPENDIX B

Physical-Setting Maps

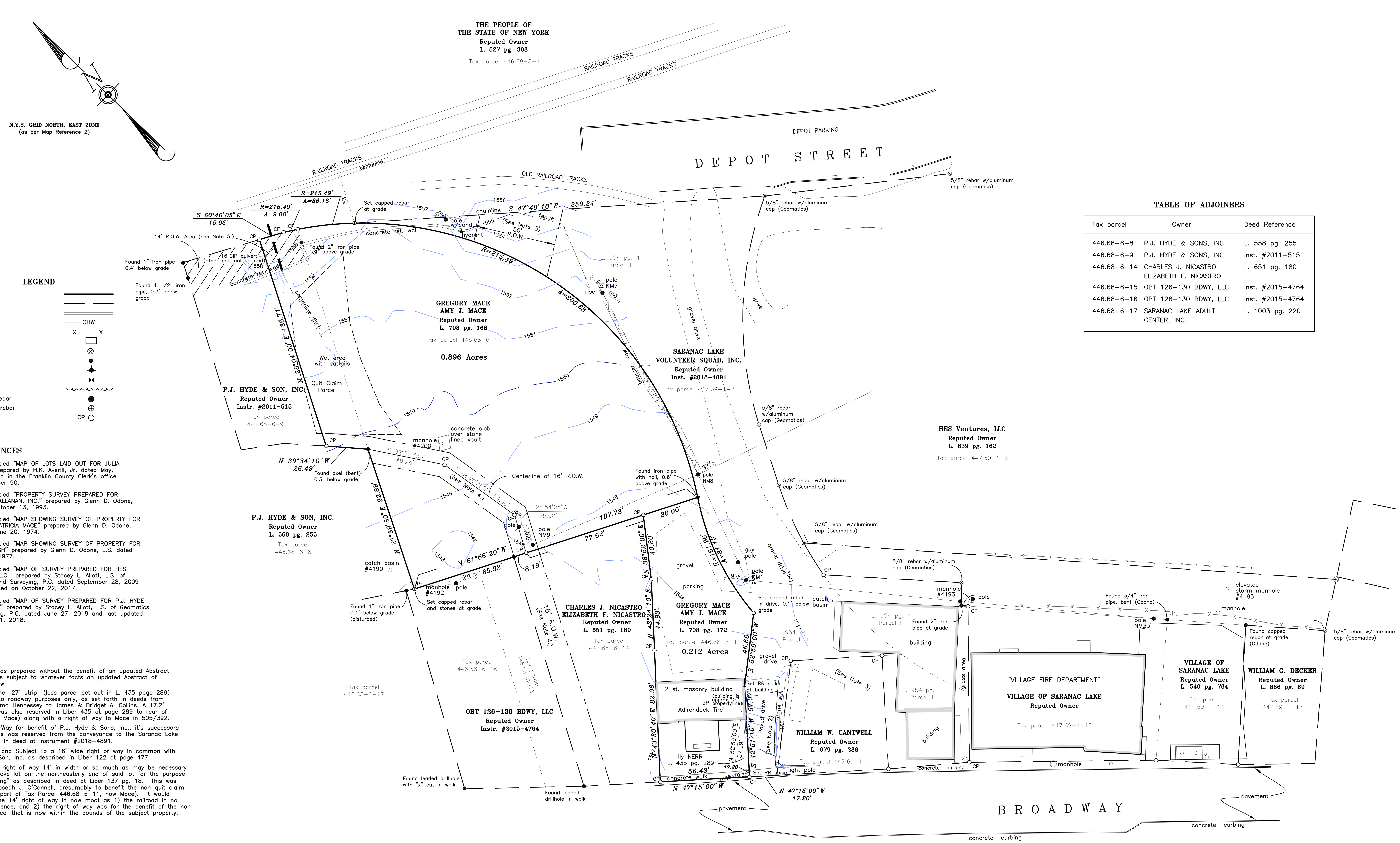


TABLE OF ADJOINERS

Tax parcel	Owner	Deed Reference
446.68-6-8	P.J. HYDE & SONS, INC.	L. 558 pg. 255
446.68-6-9	P.J. HYDE & SONS, INC.	Inst. #2011-515
446.68-6-14	CHARLES J. NICASTRO ELIZABETH F. NICASTRO	L. 651 pg. 180
446.68-6-15	OBT 126-130 BDWY, LLC	Inst. #2015-4764
446.68-6-16	OBT 126-130 BDWY, LLC	Inst. #2015-4764
446.68-6-17	SARANAC LAKE ADULT CENTER, INC.	L. 1003 pg. 220

LEGEND

- Boundary Line
- Adjoiner Line
- Road (paved)
- Overhead wires — OHW
- Fenceline
- Catch basin
- Manhole
- Utility pole
- Hydrant
- Water valve
- Tree line
- Found iron pipe/rebar
- Set 5/8" capped rebar
- Calculated corner — CP

MAP REFERENCES

1. See Map entitled "MAP OF LOTS LAID OUT FOR JULIA A. MILLER" prepared by H.K. Averill, Jr. dated May, 1981 and filed in the Franklin County Clerk's office as Map number 90.
2. See Map entitled "PROPERTY SURVEY PREPARED FOR BRANCH & CALLANAN, INC." prepared by Glenn D. Odone, L.S. dated October 13, 1993.
3. See Map entitled "MAP SHOWING SURVEY OF PROPERTY FOR FLOYD and PATRICIA MACE" prepared by Glenn D. Odone, L.S. dated June 20, 1974.
4. See Map entitled "MAP SHOWING SURVEY OF PROPERTY FOR MICHAEL WALSH" prepared by Glenn D. Odone, L.S. dated October 27, 1977.
5. See Map entitled "MAP OF SURVEY PREPARED FOR HES VENTURES, L.L.C." prepared by Stacey L. Allott, L.S. of Geomatics Land Surveying, P.C. dated September 28, 2009 and last revised on October 22, 2017.
6. See Map entitled "MAP OF SURVEY PREPARED FOR P.J. HYDE & SONS, INC." prepared by Stacey L. Allott, L.S. of Geomatics Land Surveying, P.C. dated June 27, 2018 and last updated on October 01, 2018.

NOTES

1. This survey was prepared without the benefit of an updated Abstract of Title and is subject to whatever facts an updated Abstract of Title may show.
2. The use of the "27' strip" (less parcel set out in L. 435 page 289) is restricted to roadway purposes only, as set forth in deeds from William & Emma Hennessey to James & Bridget A. Collins. A 17.2' wide R.O.W. was also reserved in Liber 435 at page 289 to rear of Kerr lot (now Mace) along with a right of way to Mace in 505/392.
3. 50' Right-of-Way for benefit of P.J. Hyde & Sons, Inc., it's successors and/or assigns was reserved from the conveyance to the Saranac Lake Rescue Squad in deed at Instrument #2018-4891.
4. Together with and Subject To a 16' wide right of way in common with P.J. Hyde & Son, Inc. as described in Liber 122 at page 477.
5. "Subject to a right of way 14' in width or so much as may be necessary across the above lot on the northeasterly end of said lot for the purpose a railroad siding" as described in deed at Liber 137 pg. 18. This was reserved by Joseph J. O'Connell, presumably to benefit the non quit claim parcel (being part of Tax Parcel 446.68-6-11, now Mace). It would appear that the 14' right of way in now moot as 1) the railroad in no longer in existence, and 2) the right of way was for the benefit of the non quit claim parcel that is now within the bounds of the subject property.

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of section 7209, sub-division 2, of the New York State Education Law.

Certifications, if any, indicated hereon signify that this survey was prepared in accordance with the existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors. Said certifications shall run only to the person for whom the survey is prepared, and on his behalf to the title company, governmental agency and lending institution listed hereon, and to the assignees of the lending institution. Certifications are not transferable to any additional institutions or subsequent owners.

30 0 30 60 90

1 Inch = 30 Feet

Contour Interval: 1 Foot

Vertical Datum: NAVD 88

GEOMATICS
land surveying, pc
STACEY L. ALLOTT, L.S.
P.O. BOX 1277 SARANAC LAKE, NY
518-891-6218 Phone
geomaticslspc@gmail.com www.geomatics.pro

MAP OF BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR

NORTH WOODS ENGINEERING, PLLC
ADIRONDACK TIRE PROPERTY

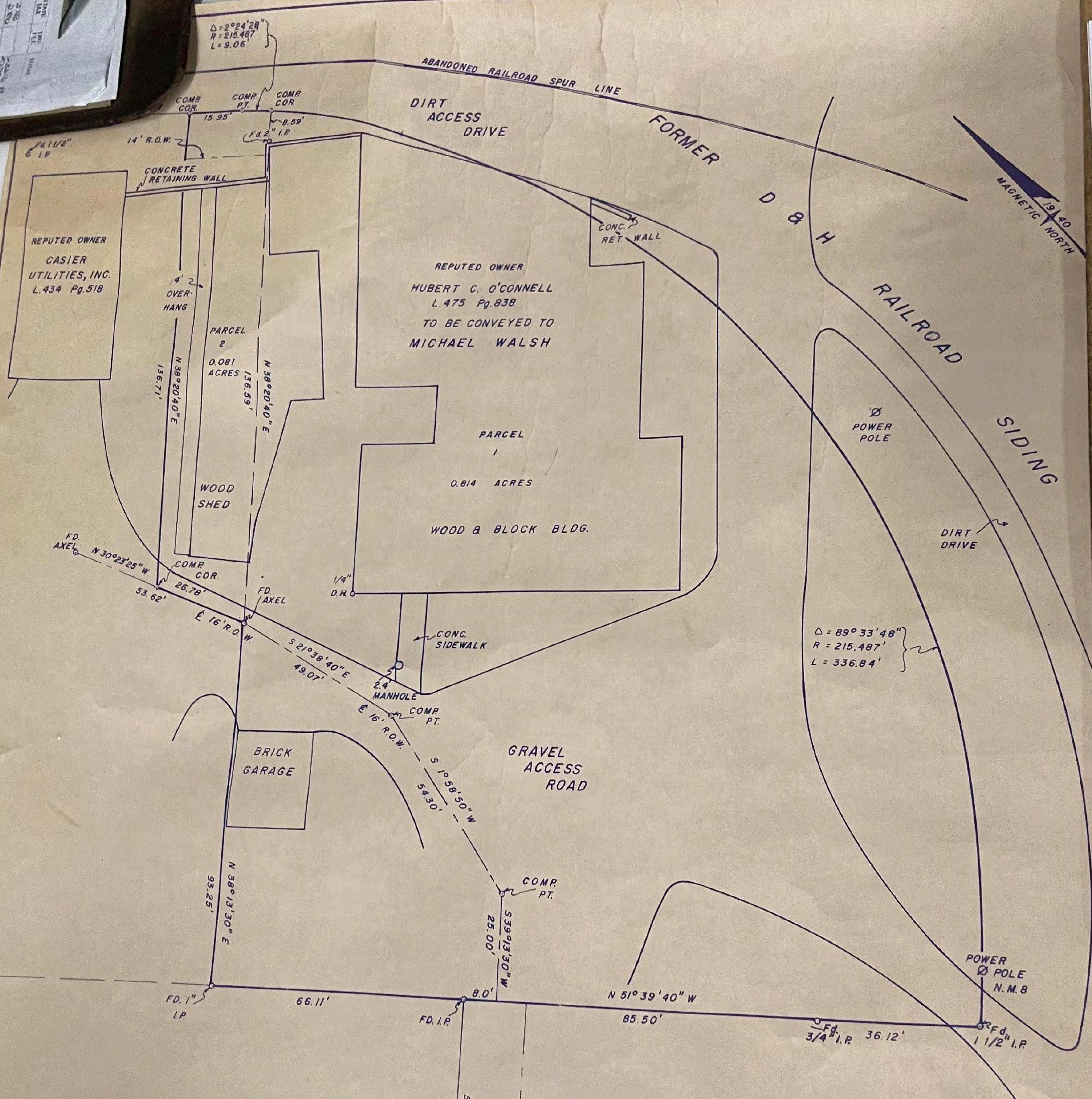
SITUATE IN PLINEY MILLER 300 ACRE TRACT, TOWNSHIP 21, GREAT TRACT ONE, MACOMB'S PURCHASE, VILLAGE OF SARANAC LAKE, TOWN OF HARRIETSTOWN, COUNTY OF FRANKLIN AND STATE OF NEW YORK.

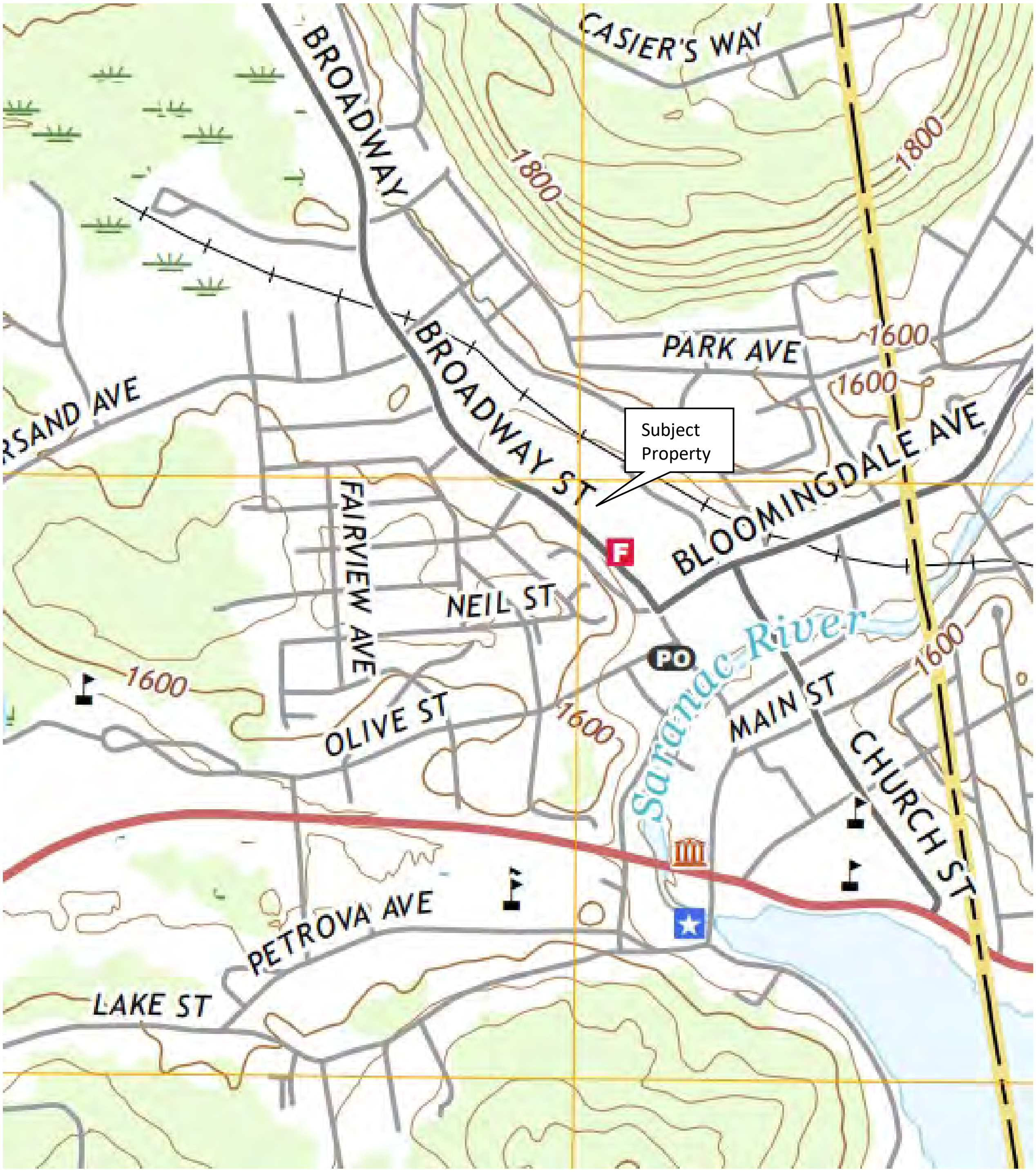
2. Revise notes, add 14' ROW 12-16-20 SLA
1. Revise notes, show R.O.W. width 11-12-20 SLA

REVISIONS / DATE / BY

COPYRIGHT	2020
CHECKED BY	SLA
DRAWN BY	NJH
DATE	SURVEY 10/25/20 MAP 11/09/20
SCALE	IN./FT. 1"=30' RATIO 1:360
TAX MAP NO.	447.68-6-11 447.68-6-12
MAP NO.	20050

CADD File: 20050.dwg


Δ = 2°24'29"
R = 215.487
L = 9.06'
ABANDONED RAILROAD SPUR LINE
COMP. COR.
COMP. PT.
COMP. COR.
15.95'
8.59'
Fd. 2" I.P.
DIRT ACCESS DRIVE
FORMER D & H RAILROAD SIDING
MAGNETIC NORTH 1940
Fd 1 1/2" I.P.
14' R.O.W.
CONCRETE RETAINING WALL
CONC. RET. WALL
REPUTED OWNER
CASIER UTILITIES, INC.
L.434 Pg.518
4' OVERHANG
PARCEL 2
0.081 ACRES
N 38°20'40" E
136.71'
N 38°20'40" E
136.59'
WOOD SHED
REPUTED OWNER
HUBERT C. O'CONNELL
L.475 Pg.838
TO BE CONVEYED TO
MICHAEL WALSH
PARCEL 1
0.814 ACRES
WOOD & BLOCK BLDG.
Ø POWER POLE
DIRT DRIVE
FD. AXEL
N 30°23'25" W
53.62'
COMP. COR.
26.78'
FD. AXEL
℄ 16' R.O.W.
1/4" D.H.
CONC. SIDEWALK
S 21°38'40" E
49.07'
2.4 MANHOLE
COMP. PT.
℄ 16' R.O.W.
Δ = 89°33'48"
R = 215.487'
L = 336.84'
BRICK GARAGE
GRAVEL ACCESS ROAD
S 1°58'50" W
54.30'
N 38°13'30" E
93.25'
COMP. PT.
S 39°13'30" W
25.00'
POWER Ø POLE N.M. 8
FD. 1" I.P.
66.11'
8.0'
FD. I.P.
N 51°39'40" W
85.50'
Fd. 3/4" I.P.
36.12'
Fd. 1 1/2" I.P.



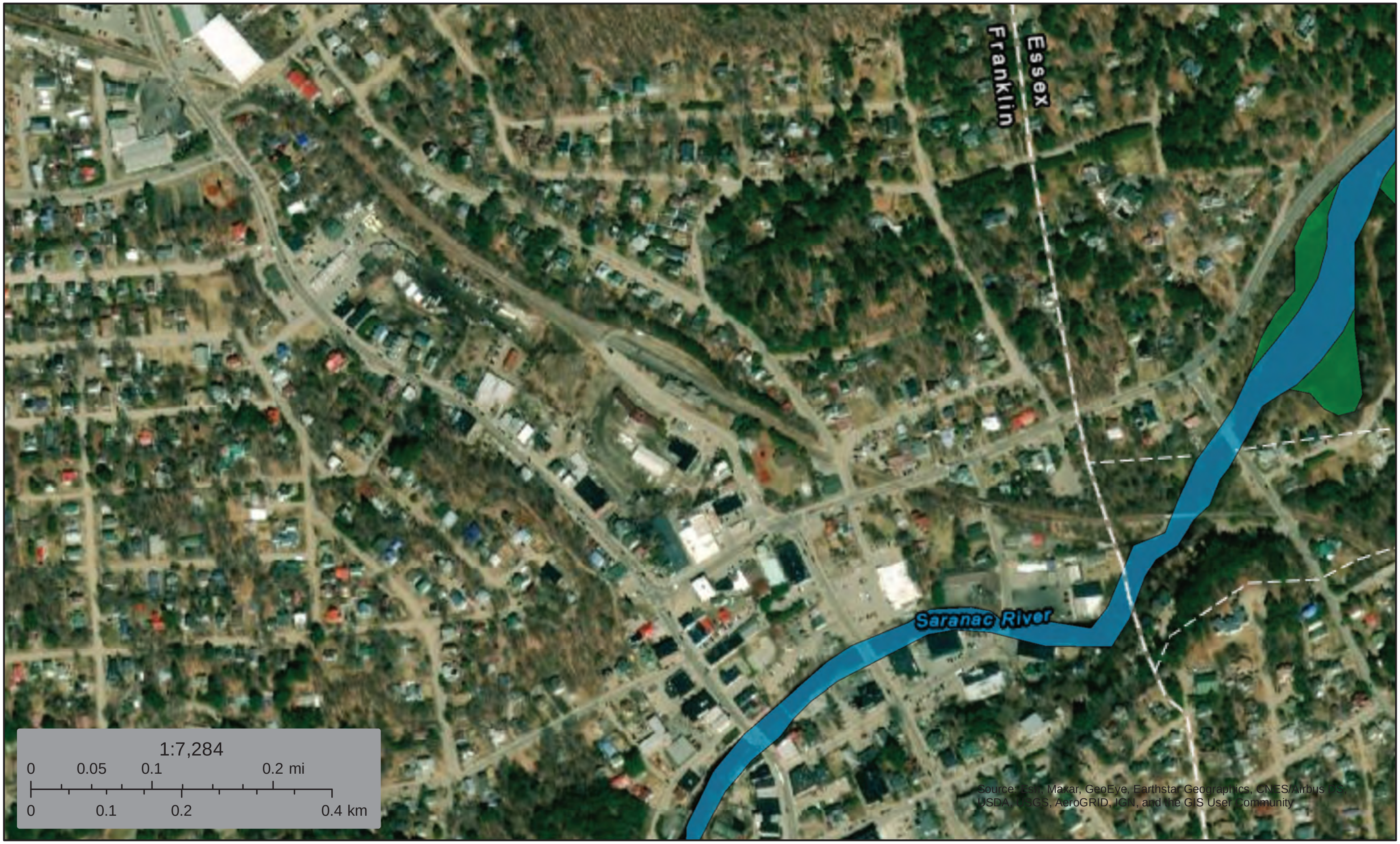
Source: USGS Topographic Map of the Saranac Lake, New York Quadrangle, dated 2019, digital image provided by https://ngmdb.usgs.gov/topoview

U.S.G.S. Topographic Map 120 Broadway Village of Saranac Lake Franklin County, New York	N	File No: 21003-0066 July 2021 Appendix B

U.S. Fish and Wildlife Service

National Wetlands Inventory

21003-0066



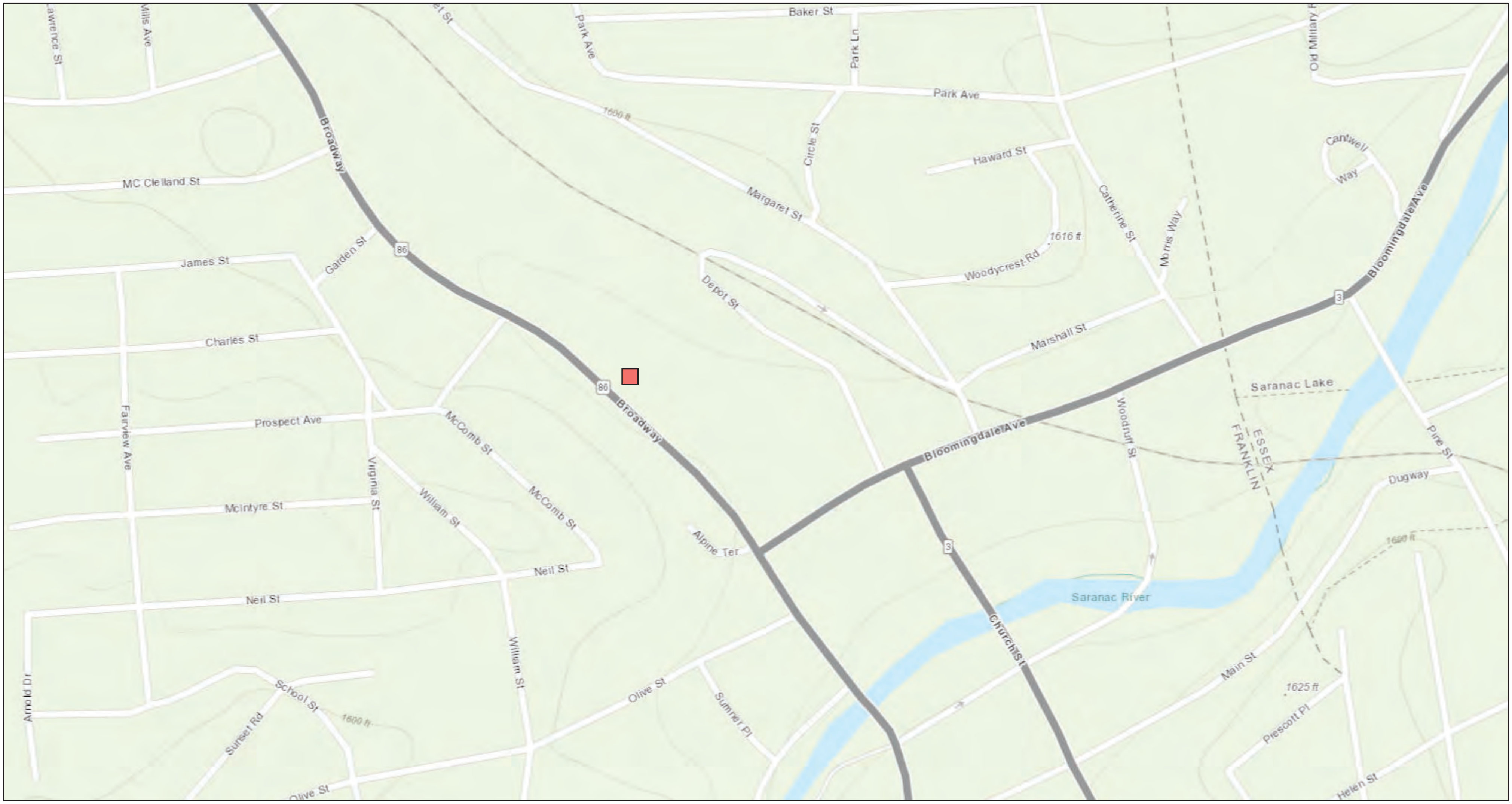
May 5, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

21003-0066 - NYS Wetlands



May 5, 2021

1:4,514

0 0.04 0.08 0.16 mi

0 0.05 0.1 0.2 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

NYS Department of Environmental Conservation
Not a legal document

APPENDIX C

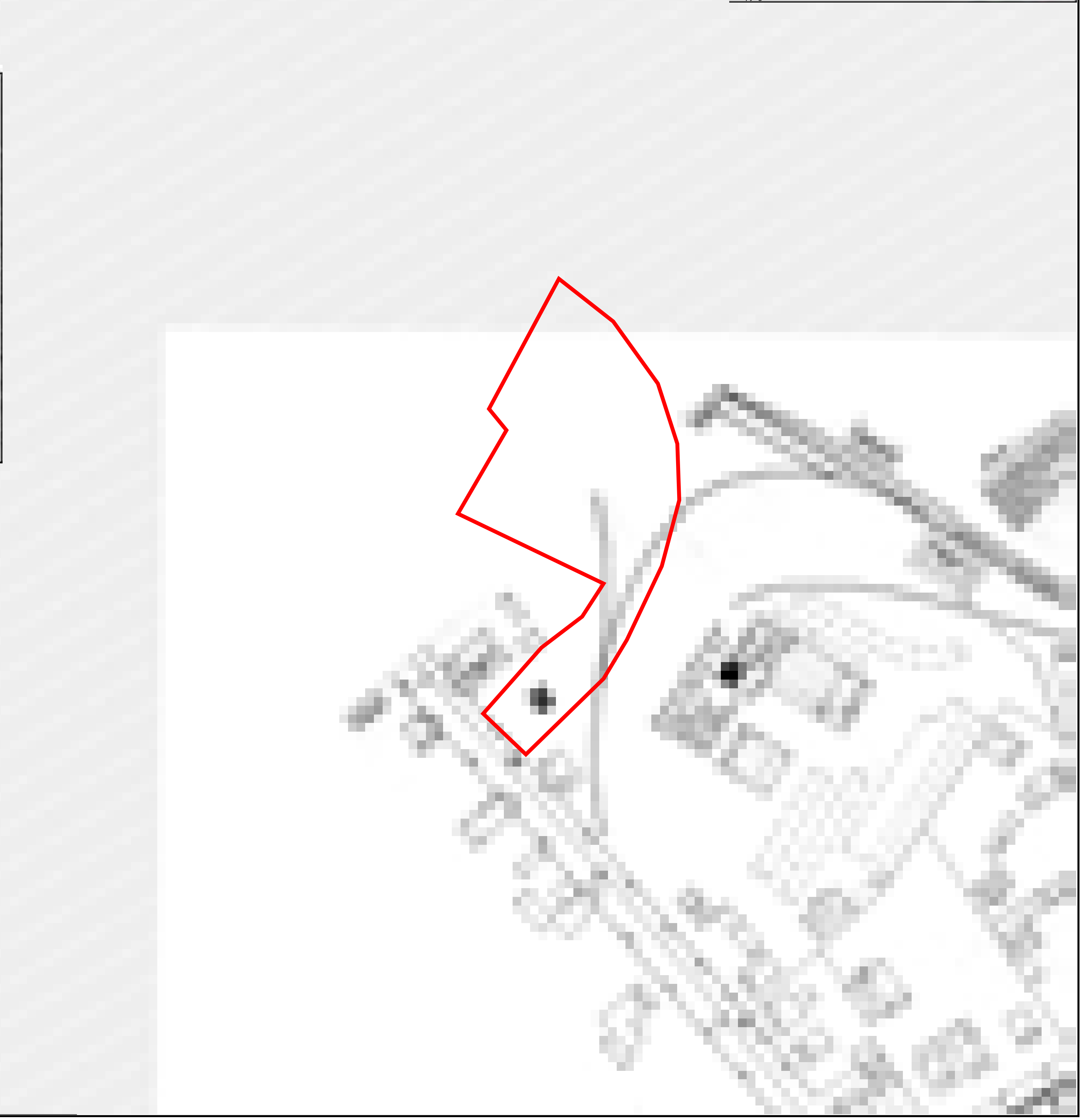
Sanborn Fire Insurance Maps

Certified Sanborn® Map

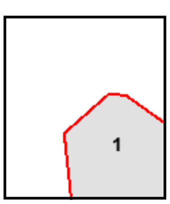
1895

Site Name: 120 Broadway
Address: 120 Broadway
City, ST, ZIP: Saranac Lake, NY 12983
Client: Gallagher Bassett Technical Services
EDR Inquiry: 6484007.3
Order Date: 05/08/2021
Certification #: 6C6C-4A56-B293
Copyright: 1895

Certification # 6C6C-4A56-B293



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



Volume 1, Sheet 1

0 Feet 150 300 600

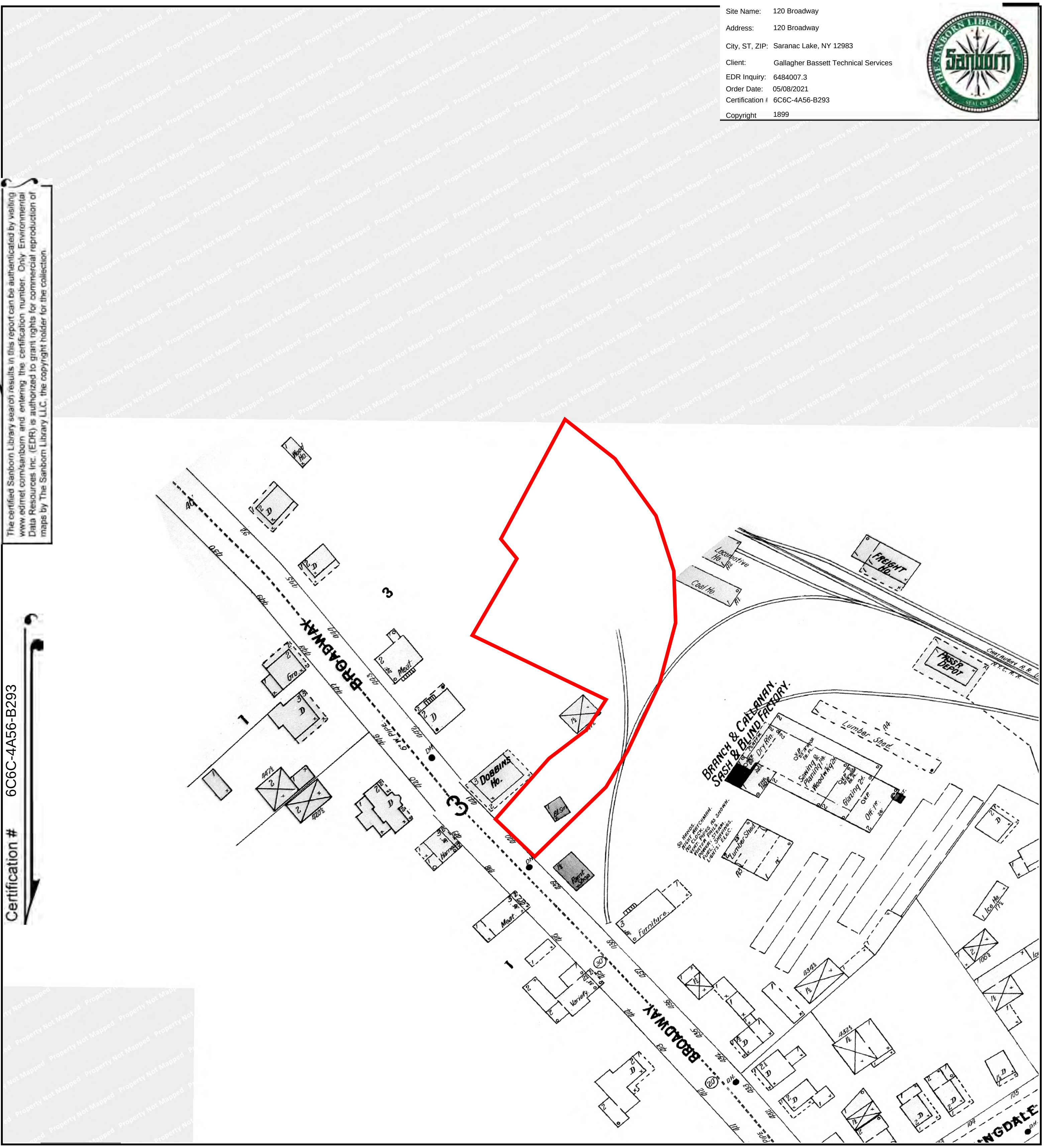
N

Certified Sanborn® Map

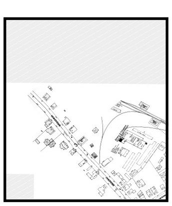
1899

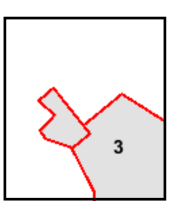
Site Name:	120 Broadway
Address:	120 Broadway
City, ST, ZIP:	Saranac Lake, NY 12983
Client:	Gallagher Bassett Technical Services
EDR Inquiry:	6484007.3
Order Date:	05/08/2021
Certification #	6C6C-4A56-B293
Copyright	1899

Certification # 6C6C-4A56-B293



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.





Volume 1, Sheet 3

0 Feet 150 300 600

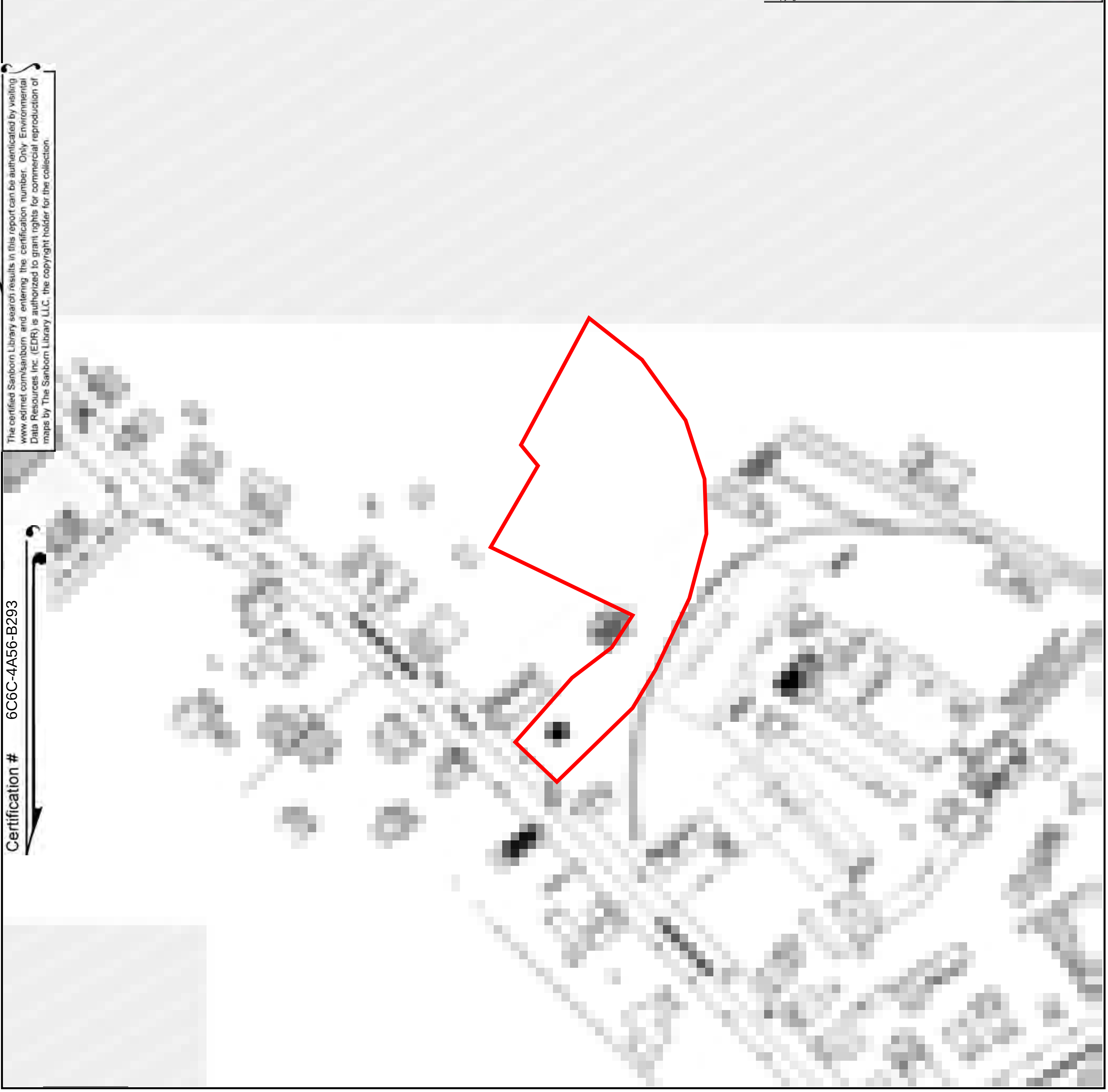
N

Certified Sanborn® Map

1903

Site Name: 120 Broadway
Address: 120 Broadway
City, ST, ZIP: Saranac Lake, NY 12983
Client: Gallagher Bassett Technical Services
EDR Inquiry: 6484007.3
Order Date: 05/08/2021
Certification # 6C6C-4A56-B293
Copyright 1903

Certification # 6C6C-4A56-B293



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Outlined areas indicate map sheets within the collection.

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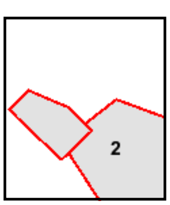


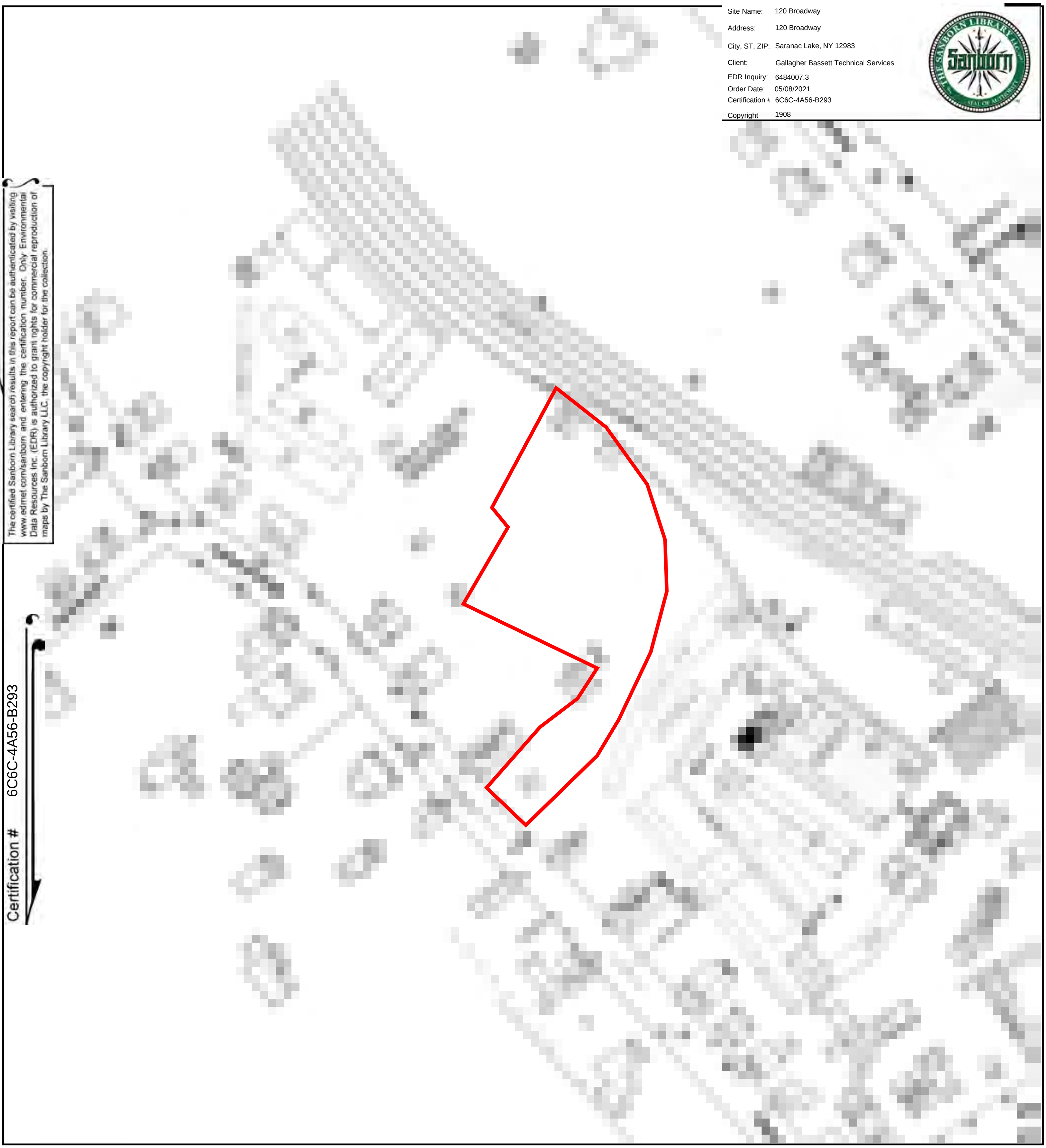
Volume 1, Sheet 2

Certified Sanborn® Map

1908

Site Name: 120 Broadway
Address: 120 Broadway
City, ST, ZIP: Saranac Lake, NY 12983
Client: Gallagher Bassett Technical Services
EDR Inquiry: 6484007.3
Order Date: 05/08/2021
Certification #: 6C6C-4A56-B293
Copyright: 1908

Certification # 6C6C-4A56-B293



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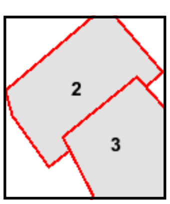


Volume 1, Sheet 3
Volume 1, Sheet 2

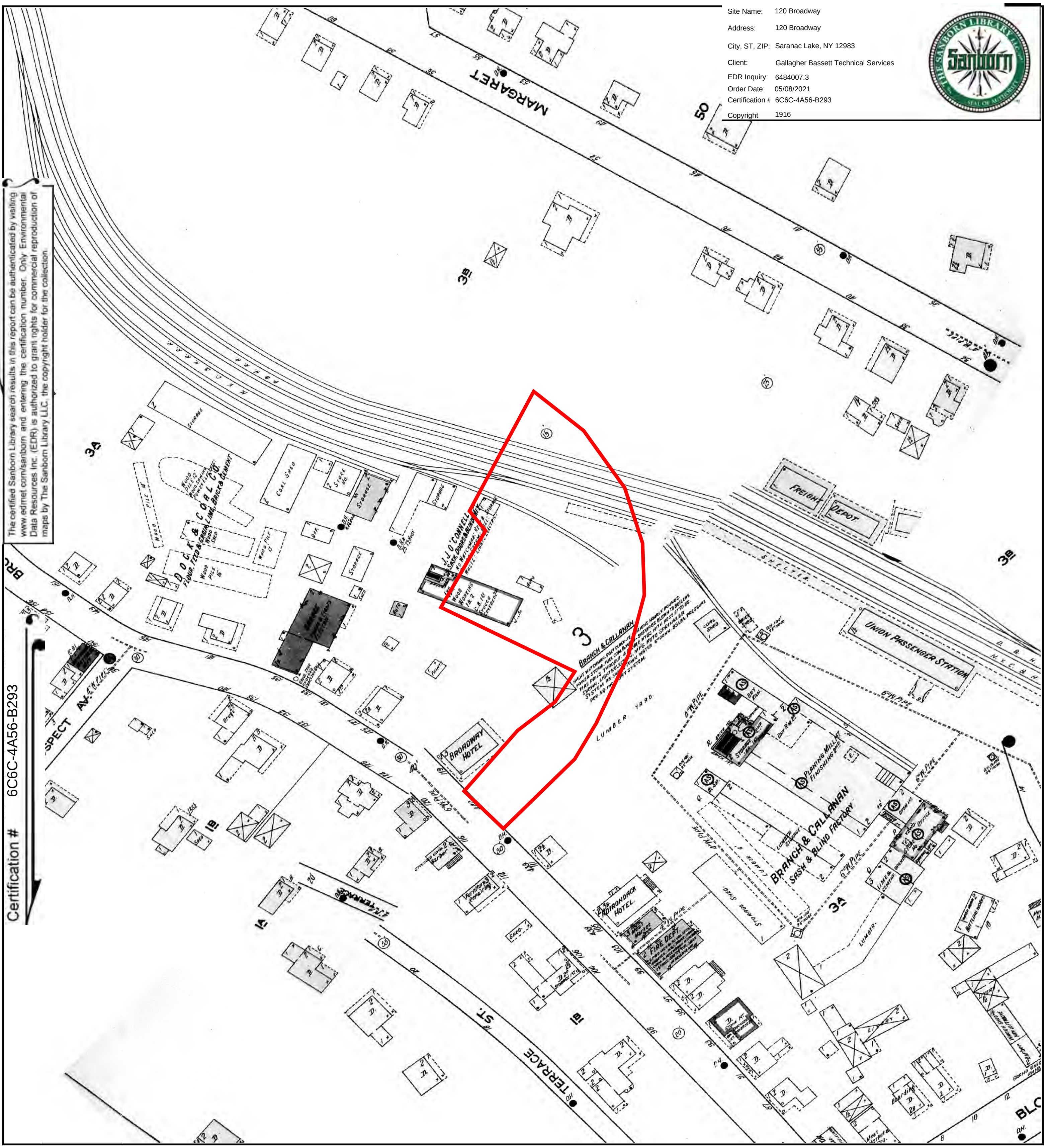
0 Feet 150 300 600

N

Certified Sanborn® Map

1916

Site Name:	120 Broadway
Address:	120 Broadway
City, ST, ZIP:	Saranac Lake, NY 12983
Client:	Gallagher Bassett Technical Services
EDR Inquiry:	6484007.3
Order Date:	05/08/2021
Certification #	6C6C-4A56-B293
Copyright	1916



Certification # 6C6C-4A56-B293

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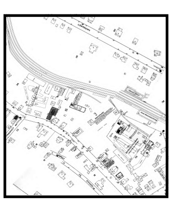

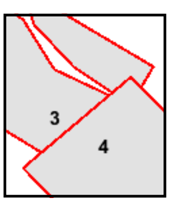

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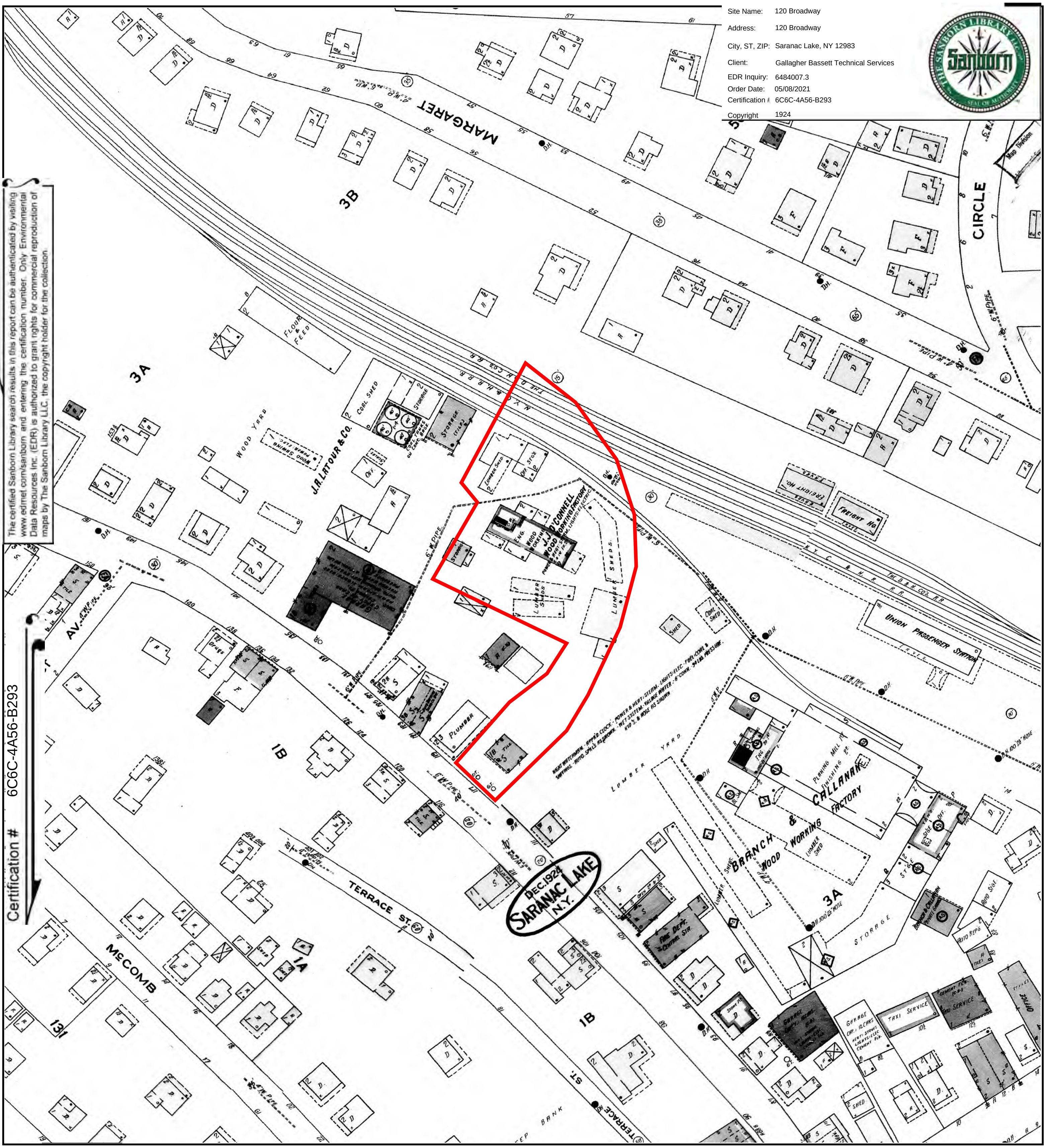
Volume 1, Sheet 3

N

Certified Sanborn® Map

1924

Site Name:	120 Broadway
Address:	120 Broadway
City, ST, ZIP:	Saranac Lake, NY 12983
Client:	Gallagher Bassett Technical Services
EDR Inquiry:	6484007.3
Order Date:	05/08/2021
Certification #	6C6C-4A56-B293
Copyright	1924



Certification # 6C6C-4A56-B293

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Outlined areas indicate map sheets within the collection.

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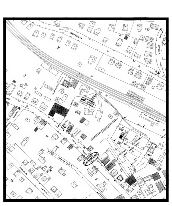

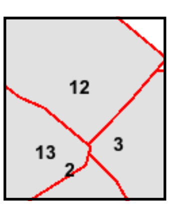

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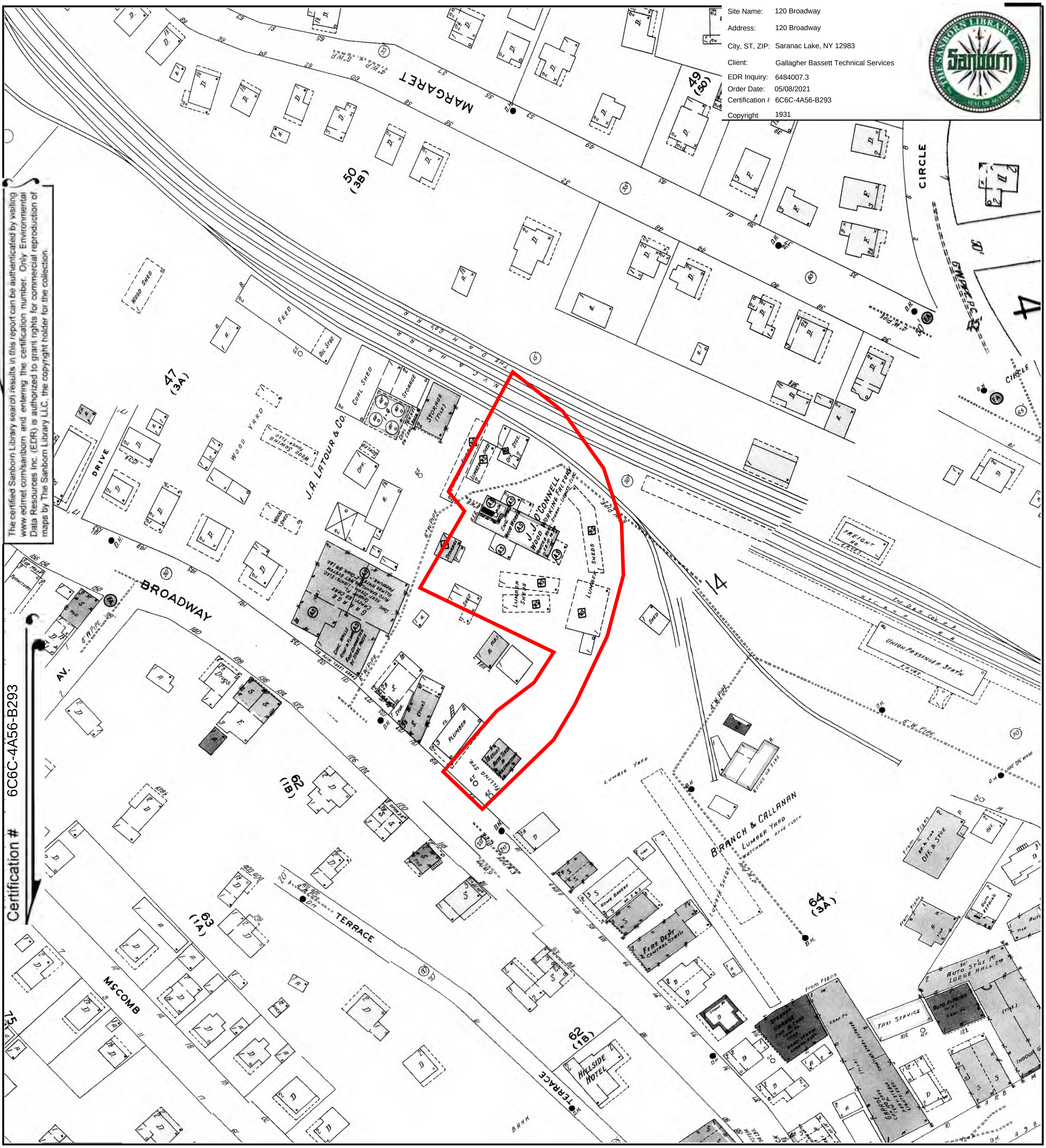
Volume 1, Sheet 12
Volume 1, Sheet 3
Volume 1, Sheet 2

N

Certified Sanborn® Map

1931

Site Name: 120 Broadway
Address: 120 Broadway
City, ST, ZIP: Saranac Lake, NY 12983
Client: Gallagher Bassett Technical Services
EDR Inquiry: 6484007.3
Order Date: 05/08/2021
Certification # 6C6C-4A56-B293
Copyright 1931



Certification # 6C6C-4A56-B293

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Outlined areas indicate map sheets within the collection.

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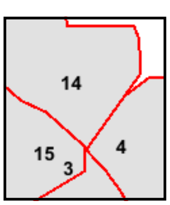

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Volume 1, Sheet 14
Volume 1, Sheet 4
Volume 1, Sheet 3

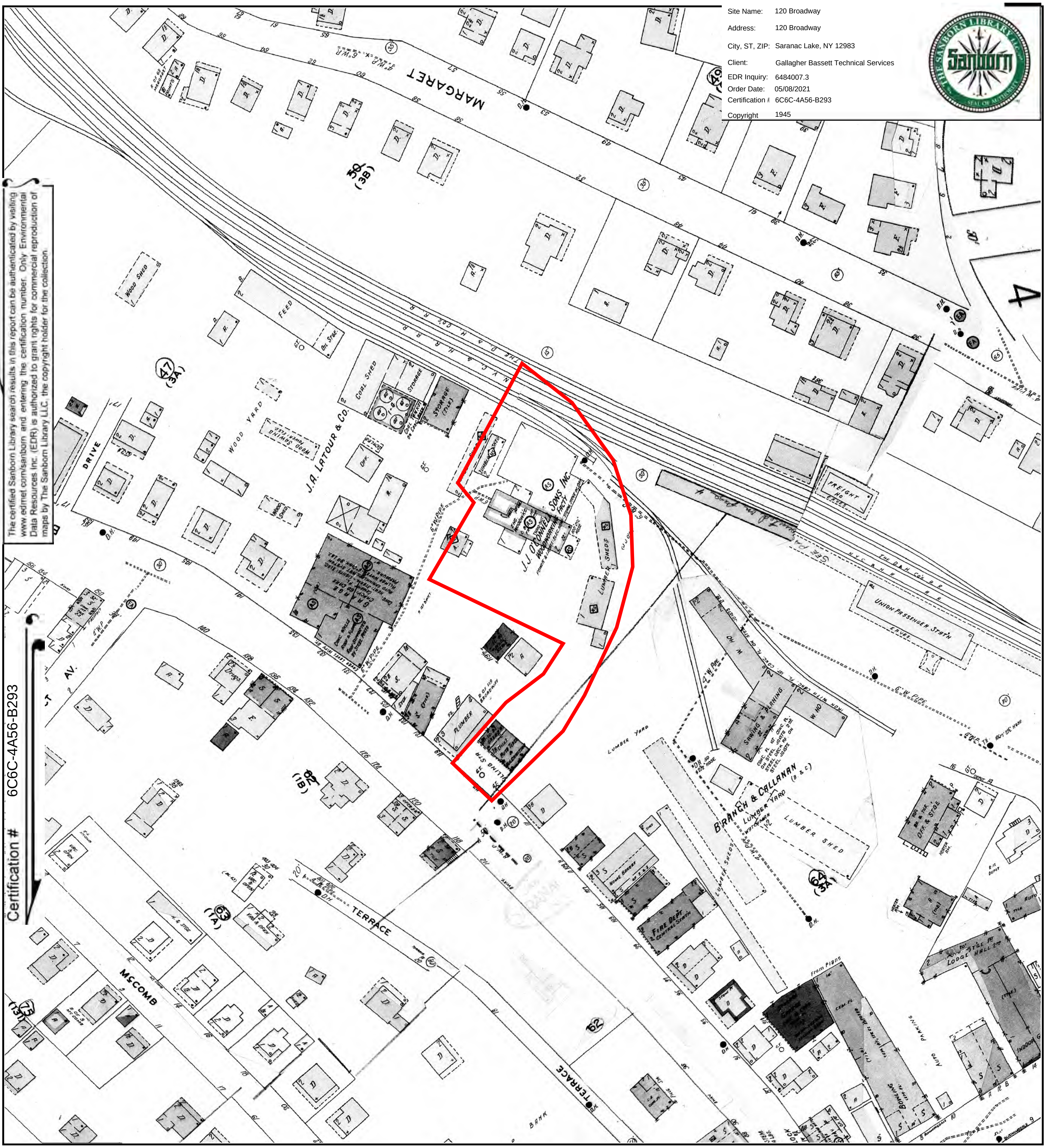
N

Certified Sanborn® Map

1945

Site Name:	120 Broadway
Address:	120 Broadway
City, ST, ZIP:	Saranac Lake, NY 12983
Client:	Gallagher Bassett Technical Services
EDR Inquiry:	6484007.3
Order Date:	05/08/2021
Certification #	6C6C-4A56-B293
Copyright	1945

Certification # 6C6C-4A56-B293



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Outlined areas indicate map sheets within the collection.

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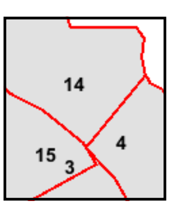

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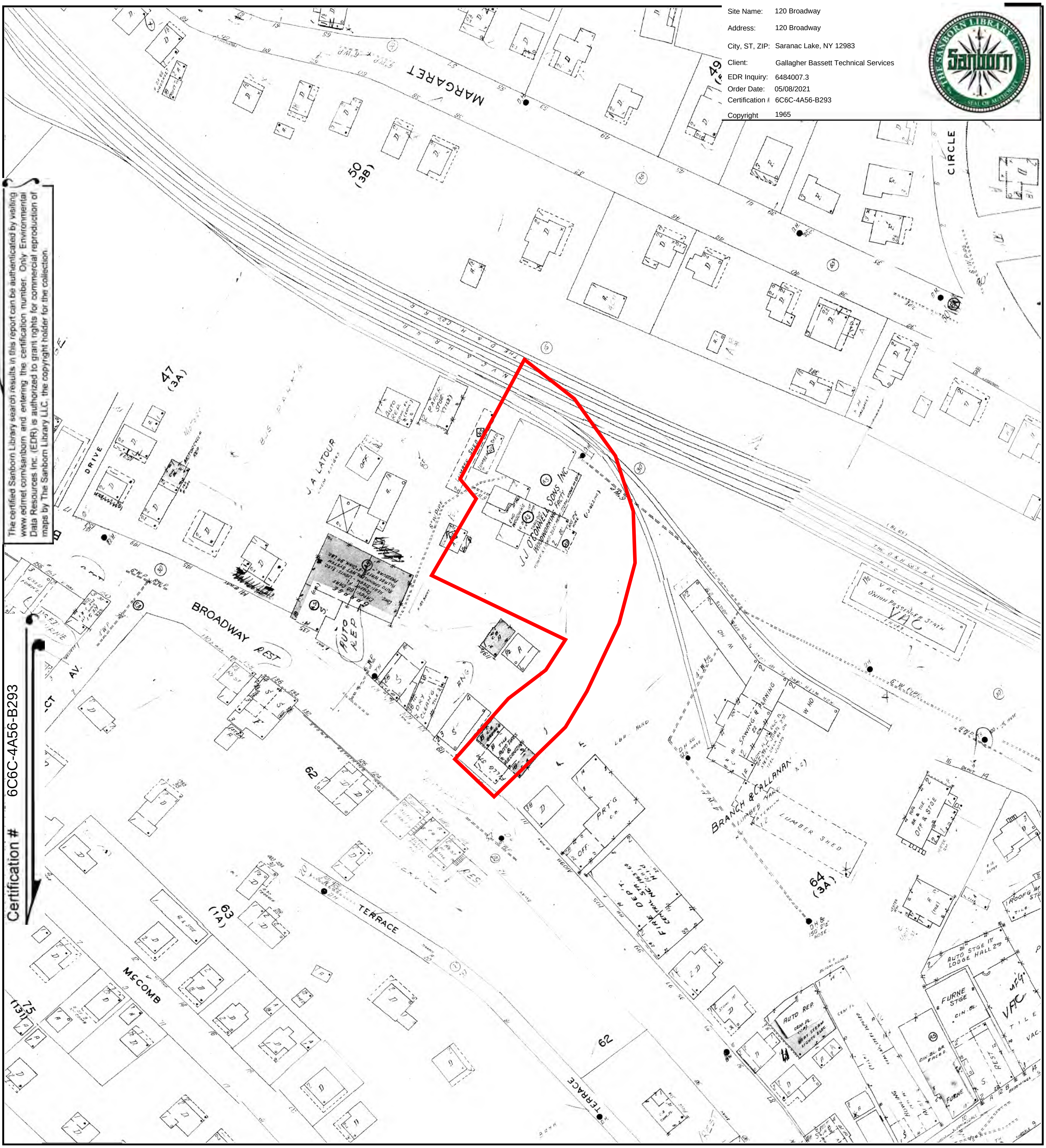
Volume 1, Sheet 14
Volume 1, Sheet 4
Volume 1, Sheet 3

N

Certified Sanborn® Map

1965

Site Name:	120 Broadway
Address:	120 Broadway
City, ST, ZIP:	Saranac Lake, NY 12983
Client:	Gallagher Bassett Technical Services
EDR Inquiry:	6484007.3
Order Date:	05/08/2021
Certification #	6C6C-4A56-B293
Copyright	1965



Certification # 6C6C-4A56-B293

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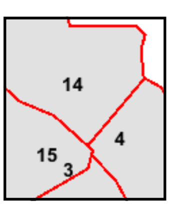

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Volume 1, Sheet 4
Volume 1, Sheet 3

0 Feet 150 300 600

N

APPENDIX D

City Directories

APPENDIX E

Regulatory Review
Database Report

120 Broadway
120 Broadway
Saranac Lake, NY 12983

Inquiry Number: 06484007.2r
May 07, 2021

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

120 BROADWAY
SARANAC LAKE, NY 12983

COORDINATES

Latitude (North):	44.3304280 - 44˚ 19' 49.54''
Longitude (West):	74.1341990 - 74˚ 8' 3.11''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	569030.5
UTM Y (Meters):	4908721.5
Elevation:	1557 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5938913 SARANAC LAKE, NY
Version Date:	2013
East Map:	5938875 MCKENZIE MOUNTAIN, NY
Version Date:	2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150620
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
120 BROADWAY
SARANAC LAKE, NY 12983

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	STANDARD TIRE	120 BROADWAY	NY Spills		TP
A2	SARANAC LAKE LANDFIL	MCKENZIE POND ROAD	NY LTANKS, NY Spills	Higher	1 ft.
A3	SARANAC LAKE VILLAGE	MCKENZIE POND RD	ODI	Higher	1 ft.
A4	DORIS STRONG	121 BROADWAY	NY Spills	Higher	65, 0.012, SW
A5	MURPHY MARK	121 BROADWAY	EDR Hist Cleaner	Higher	65, 0.012, SW
A6	APARTMENT BUILDING	119 BROADWAY STREET	NY Spills	Higher	66, 0.013, SW
A7	KERR A EARL	117 BROADWAY	EDR Hist Auto	Higher	84, 0.016, SSW
A8	NEILS SUNOCO	132 BROADWAY	EDR Hist Auto	Higher	91, 0.017, WNW
A9	RUSTY NAIL	BROADWAY STREET	NY LTANKS, NY Spills	Higher	105, 0.020, WSW
A10	IN FRONT OF RUSTY NA	BROADWAY	NY LTANKS	Higher	125, 0.024, WSW
11	APARTMENT BLDG	135 BROADWAY	NY Spills	Higher	183, 0.035, West
A12	SL FIRE HOUSE	BROADWAY ST.	NY Spills	Higher	189, 0.036, SE
A13	SARANAC LAKE FIRE DE	100 BROADWAY	NY Spills	Higher	190, 0.036, SE
B14	LOUIS BRUNO/JOEL ARS	98 BROADWAY	NY UST	Higher	224, 0.042, SSE
B15	HOMENERGY SERVICES	33 DEPOT ST	NY Spills	Higher	261, 0.049, East
B16	HOMENERGY SERVICES	33 DEPOT STREET	NY TANKS, NY Spills	Higher	261, 0.049, East
B17	HOMENERGY	33 DEPOT ST	NY Spills	Higher	261, 0.049, East
B18	SOIL	33 DEPOT STREET	NY Spills	Higher	261, 0.049, East
19	IFO TRAIN STATION	DEPOT STREET	NY Spills	Higher	303, 0.057, ENE
C20	NEICE RESIDENCE	57 MARAGART ST	NY Spills	Higher	307, 0.058, North
B21	ADIRONDACK TRANSMISS	92 BROADWAY	EDR Hist Auto	Higher	333, 0.063, SE
B22	K&M REPAIR SHOP	92 BROADWAY	NY Spills	Higher	333, 0.063, SE
D23	TOM OBECK PROPERTY	MARGARET/CIRCLE AVE	NY Spills	Higher	354, 0.067, NE
D24	MR. & MRS. PAT CLEMM	15 CIRCLE STREET	NY UST	Higher	422, 0.080, NE
D25	PAT & CLAIRE CLELLAN	15 CIRCLE STREET	NY Spills	Higher	422, 0.080, NE
26	PENNY PRESTON RESIDE	10 1/2 ALPINE TERRAC	NY Spills	Higher	440, 0.083, South
E27	CASIER'S - OLD TANK	BLOOMINGDALE ST	NY LTANKS	Lower	485, 0.092, SE
F28	ISABELLA AMELL RESID	48 MARGARET ST	NY LTANKS	Higher	488, 0.092, NNW
E29	CASIER FURNITURE/RON	BLOOMINGDALE AVE	NY Spills	Lower	489, 0.093, SE
C30	MRS. SCHMIDT'S RESID	115 PARK AVENUE	NY Spills	Higher	497, 0.094, North
G31	ERNA KOCH	209 PROSPECT AVE	NY Spills	Higher	500, 0.095, West
H32	JOHN'S SUNOCO - FORM	172 BROADWAY ST.	NY LTANKS, NY Spills	Higher	508, 0.096, WNW
H33	CATCH BASIN	172 BROADWAY(SUNOCO)	NY Spills	Higher	508, 0.096, WNW
H34	DEPT SARANAC LAKE	172 BROADWAY ST	NY UST	Higher	508, 0.096, WNW
H35	LAVERY CHARLES T	172 BROADWAY	EDR Hist Auto	Higher	508, 0.096, WNW
G36	SHEEN DOWN ROADWAY	167 BROADWAY	NY Spills	Higher	520, 0.098, WNW
H37	P. J. HYDE AND SON,	196 BROADWAY	NY Spills	Higher	523, 0.099, NW
H38	HYDE P J & SON INC	196 BROADWAY	EDR Hist Auto	Higher	523, 0.099, NW
H39	P.J. HYDE AND SON, I	196 BROADWAY	NY TANKS, NY Spills	Higher	523, 0.099, NW

MAPPED SITES SUMMARY

Target Property Address:
120 BROADWAY
SARANAC LAKE, NY 12983

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
F40	JOE BOYLE RESIDENCE	98 PARK AVE	NY Spills	Higher	526, 0.100, NNW
E41	BRANCH & CALLANAN	14-16 DEPOT STREET	NY Spills	Lower	537, 0.102, ESE
E42	DECKER RESIDENCE	12 DEPOT ST.	NY Spills	Lower	537, 0.102, ESE
H43	HYDE P J & SON INC	171 BROADWAY	EDR Hist Auto	Higher	539, 0.102, WNW
H44	PJ HYDE & SON	171 BROADWAY	NY LTANKS, NY Spills	Higher	539, 0.102, WNW
H45	P J HYDE & SON INC	171 BROADWAY	RCRA NonGen / NLR, FINDS, ECHO, NY MANIFEST	Higher	539, 0.102, WNW
F46	51 MARGARET ST	51 MARGARET ST	NY Spills	Higher	540, 0.102, NNW
E47	SARANAC LAKE SANITAR	BROADWAY/BLOOMINGDAL	NY Spills	Lower	562, 0.106, SE
E48	STEWARTS SHOP #	BLOOMINGDALE AVE	NY LTANKS	Lower	571, 0.108, ESE
E49	STEWARTS	BLOOMINGDALE AVENUE	NY Spills	Lower	571, 0.108, ESE
E50	STEWARTS - SARANAC L	BLOOMINGDALE AVE.	NY Spills	Lower	571, 0.108, ESE
E51	STEWART'S	BLOOMINGDALE AVE.	NY Spills	Lower	571, 0.108, ESE
F52	55 MARGARET ST	55 MARGARET ST	NY Spills	Higher	572, 0.108, NNW
E53	ROADWAY	BROADWAY AND BLOOMIN	NY Spills	Lower	573, 0.109, SSE
F54	ALAN NEESE	57 MARGARET ST	NY LTANKS	Higher	596, 0.113, NNW
E55	GAS STATION	27 BLOOMINGDALE AVE	NY Spills	Lower	598, 0.113, ESE
E56	STEWART'S SHOP #242	27 BLOOMINGDALE AVEN	NY UST	Lower	598, 0.113, ESE
E57	STEWARTS	27 BLOOMIGDALE AV	NY Spills	Lower	598, 0.113, ESE
E58	STEWARTS 242	27 BLOOMINGDALE AVE	NY Spills	Lower	598, 0.113, ESE
I59	BROADWAY PROPERTIES	60-62 BROADWAY	NY LTANKS, NY UST, NY Spills	Lower	617, 0.117, SSE
E60	IN SARANAC RIVER	29 BLOOMINGDALE AVE.	NY Spills	Lower	621, 0.118, ESE
E61	STURDY SERVICE CENTE	CHURCH ST EXT	NY UST	Lower	646, 0.122, ESE
E62	BOWLING ALLEY	BLOOMINGDALE AVE	NY Spills	Lower	647, 0.123, ESE
H63	BEHIND AUBUCHON HARD	191 BROADWAY	NY Spills	Higher	653, 0.124, WNW
I64	ADIRONDACK DAILY ENT	61 BROADWAY	RCRA NonGen / NLR	Lower	658, 0.125, SSE
I65	ADIRONDACK DAILY ENT	61 BROADWAY	NY Spills	Lower	658, 0.125, SSE
I66	U S POST OFFICE	60 BROADWAY	NY UST	Lower	680, 0.129, SE
E67	STURDY SUPPLY	9 BLOOMINGDALE AVENU	NY UST	Lower	691, 0.131, SE
E68	STEWARTS	BLOOMINGDALE ROAD &	NY LTANKS	Lower	700, 0.133, ESE
E69	AMERICAN VILLAGE	28 BLOOMINGDALE AVEN	NY DRYCLEANERS	Lower	706, 0.134, ESE
70	29 WILLIAMS STREET	29 WILLIAMS ST	NY LTANKS	Higher	727, 0.138, SSW
71	CHURCO RESIDENCE	89 PARK AVE	NY LTANKS	Higher	751, 0.142, North
J72	MOBILE PRIMARY CRUSH	909 NYS RT 3	ABANDONED MINES	Lower	776, 0.147, ESE
73	FORSYTHE HOME	41 BAKER STREET	NY LTANKS	Higher	791, 0.150, NNE
J74	UPSTONE MATERIALS IN		US MINES	Lower	829, 0.157, ESE
75	DARING RESIDENCE	5 SUMNER PLACE	NY LTANKS	Lower	831, 0.157, SSE
J76	TRUDEAU SAND & GRAVE		US MINES	Lower	840, 0.159, ESE
J77	DBA RITE AID #03594	173 CHURCH ST	RCRA-VSQG, NY MANIFEST	Lower	841, 0.159, ESE
K78	GROSSMANS INC STORE	199 BROADWAY	RCRA NonGen / NLR, FINDS, ECHO	Higher	862, 0.163, WNW

MAPPED SITES SUMMARY

Target Property Address:
120 BROADWAY
SARANAC LAKE, NY 12983

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
K79	GROSSMAN'S	199 BROADWAY	NY UST, NY Spills	Higher	862, 0.163, WNW
J80	UPSTONE MATERIALS IN		US MINES	Lower	891, 0.169, ESE
J81	GRAYMONT MATERIALS (		US MINES	Lower	891, 0.169, ESE
L82	NATOLI RESIDENCE	34 MARGARET ST.	NY LTANKS	Higher	897, 0.170, NNW
M83	KEY BANK OF NEW YORK	55 BROADWAY STREET	NY UST	Lower	952, 0.180, SE
L84	TIM/CHRISTINA BENNER	38 MARGARET ST	NY LTANKS	Higher	954, 0.181, NNW
J85	AMERIGAS PROPANE LP	159 CHURCH ST	RCRA-SQG, NY MANIFEST, NJ MANIFEST	Lower	964, 0.183, SE
J86	AMERIGAS PROPANE LP	159 CHURCH STREET	PA MANIFEST	Lower	964, 0.183, SE
M87	SARANAC RIVER SHEEN	42 BROADWAY	NY LTANKS, NY Spills	Lower	1051, 0.199, SSE
M88	PENNY WHISTLER DEVEL	28 BROADWAY	NY AST	Lower	1150, 0.218, SE
M89	DR. BALKIEWICZ	WOODRUFF STREET	NY LTANKS	Lower	1166, 0.221, SE
N90	OXFORD MARKET BLDG	BROADWAY ST	NY LTANKS, NY Spills	Lower	1214, 0.230, SSE
N91	TRUDEAU INSTITUTE	15 WOODRUFF STREET	NY LTANKS	Lower	1218, 0.231, SE
O92	WAREHOUSE COIN WASH	39 WOODRUFF ST.	NY AST	Lower	1288, 0.244, ESE
O93	PMS OUTFALL INTO SAR	WOODRUFF ST.	NY LTANKS, NY Spills	Lower	1293, 0.245, ESE
N94	CLUB SARANAC	BROADWAY ST	NY LTANKS	Lower	1302, 0.247, SSE
95	SARANAC RIVER	DORSEY STREET	NY LTANKS	Higher	1338, 0.253, South
N96	MAURICE'S BEAUTY SAL	10 BROADWAY	NY LTANKS, NY Spills	Lower	1345, 0.255, SSE
97	BURNS NEWS AGENCY IN	28 WOODRUFF ST	NY LTANKS, NY UST, NY Spills	Lower	1358, 0.257, SE
98	DURFEE RESIDENCE	2 FAIRVIEW AVENUE	NY LTANKS	Higher	1406, 0.266, WSW
P99	IN SARANAC RIVER	BROADWAY	NY LTANKS, NY Spills	Higher	1434, 0.272, NW
P100	JC PENNEY	BROADWAY	NY LTANKS, NY Spills	Higher	1434, 0.272, NW
101	104 MAIN STREET	104 MAIN ST	NY LTANKS, NY Spills	Lower	1574, 0.298, SE
102	HEADING RESIDENCE	17 MC CLELLAND STREE	NY LTANKS	Higher	1585, 0.300, WNW
Q103	ADIRONDACK BANK	60 MAIN STREET	NY LTANKS, NY AST	Lower	1598, 0.303, SSE
Q104	CHINA JADE	58 MAIN STREET	NY LTANKS	Lower	1611, 0.305, SSE
R105	FORMER FURNITURE WEE	BROADWAY & VANBUREN	NY LTANKS	Higher	1679, 0.318, NW
106	SUBURBAN PROPANE	32 SAINT LAWRENCE ST	NY LTANKS, NY TANKS, NY Spills	Higher	1696, 0.321, WNW
R107	SARANAC LAKE TOWN GA	1 VAN BUREN ST	NY SWF/LF, RCRA NonGen / NLR, FINDS, ECHO	Higher	1710, 0.324, NW
S108	HARRIETSTOWN TOWN HA	MAIN ST	NY LTANKS	Lower	1798, 0.341, SSE
S109	TOWN HALL	30 MAIN ST	NY LTANKS, NY UST	Lower	1972, 0.373, SSE
S110	SARANAC LAKE LF (V)	881 MCKENZIE ROAD 89	NY SWF/LF	Lower	1988, 0.377, SSE
T111	ST. BERNARD'S CHURCH	ST. BERNARD ST	NY LTANKS, NY Spills	Lower	1996, 0.378, SSE
T112	ST BERNARDS CHURCH	ST BERNARD ST	NY LTANKS	Lower	1996, 0.378, SSE
113	ST BERNARD'S CHURCH	ST BERNARD ST	NY LTANKS, NY Spills	Lower	2066, 0.391, SSE
T114	ATLANTIC GAS STATION	RIVER ST.	NY LTANKS	Lower	2119, 0.401, SSE
115	PARNELL SHOE SALON	MAIN STREET	NY LTANKS, NY Spills	Lower	2207, 0.418, SSE
116	NY TELEPHONE COMPANY	CHURCH STREET	NY LTANKS	Lower	2227, 0.422, SE
117	TISSOT CONSTRUCTION	RT. 86	NY LTANKS	Higher	2424, 0.459, SE

MAPPED SITES SUMMARY

Target Property Address:
120 BROADWAY
SARANAC LAKE, NY 12983

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
U118	NORTH STAR INDUSTRIE	71 PETROVA AVENUE	NY LTANKS	Higher	2425, 0.459, SSW
U119	NORTH STAR INDUSTRIE	PETROVA AVE	NY LTANKS	Higher	2469, 0.468, SSW
120	RIVER STREET NICE N	111 RIVER STREET	NY UST, NY VCP, NY Spills	Lower	2520, 0.477, SE
V121	NORTH COUNTRY HOME S	37 CHURCH STREET	NY LTANKS	Lower	2524, 0.478, SE
122	SARANAC LAKE DPW EPA	95 VAN BUREN ST SUPE	SEMS, RCRA-VSQG	Higher	2581, 0.489, NW
123	CHAPIN RESIDENCE	22 KIWASSA RD	NY LTANKS	Lower	2621, 0.496, SSE
V124	DECHANTAL APARTMENTS	20 CHURCH STREET	NY LTANKS	Lower	2630, 0.498, SE
V125	DECHANTAL APTS. INC.	20 CHURCH STREET	NY LTANKS	Lower	2630, 0.498, SE

A1 Target Property	**STANDARD TIRE 120 BROADWAY SARANAC LAKE, NY**	**NY Spills**	**S102118707 N/A**

Site 1 of 12 in cluster A

Actual:
1557 ft.

SPILLS:

Name:	STANDARD TIRE
Address:	120 BROADWAY
City,State,Zip:	SARANAC LAKE, NY
Spill Number/Closed Date:	8909820 / 1990-01-12
Facility ID:	8909820
Facility Type:	ER
DER Facility ID:	203865
Site ID:	248447
DEC Region:	5
Spill Cause:	Equipment Failure
Spill Class:	Not reported
SWIS:	1700
Spill Date:	1990-01-12
Investigator:	RLWAGNER
Referred To:	Not reported
Reported to Dept:	1990-01-12
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Tank Truck
Spill Notifier:	Responsible Party
Cleanup Ceased:	1990-01-12
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1990-01-12
Spill Record Last Update:	2004-09-30
Spiller Name:	Not reported
Spiller Company:	HYDE FUEL COMPANY
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was RW "
Remarks:	"TRUCK SPRANG LEAK IN DELIVERY LINE. LOST 2 GALLONS, 1 1/2 CONTAINED IN COMPARTMENT IN BACK OF TRUCK. NO CLEANUP OF SPILT PRODUCT NECESSARY."

All Materials:

Site ID:	248447
Operable Unit ID:	936852
Operable Unit:	01
Material ID:	557496
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	2.00
Units:	G
Recovered:	2.00
Oxygenate:	Not reported

APPENDIX F

Fieldwork Logs

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-01 (SHEET 1 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York	GBTS FILE 21003-0066
	DATE: 2021-06-30	DRILLER (RIG) Core-Down (7822DT Geoprobe, 4' macro-core)
	GBTS STAFF: J. Hooker	WEATHER: Overcast, 70s-80s F

SURFACE MATERIAL: ASPHALT (6")

BORING INTERVAL (RECOVERY)	SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (70%)	Brown SANDY LOAM with coarse gravel	Dry to moist	1.0	yes	ND	ND	
4 – 8' (80%)	Brown, F-M SAND with coarse gravel	Moist	26.2	yes	ND	ND	
8 – 12' (75%)	Brown to light brown, F-M SAND	Very moist	3,310	yes	yes	ND	**(8-11')**
	****** End of Boring (Refusal) at 11' *****						

Notes

Fill Materials

None

Field Evidence of Contamination

Moderate to strong petroleum odors at bottom of 4-8' interval

Gray/green staining, strong petroleum odors, PID 3,310 ppm from ~9-11'

Field Notes

Refusal at ~11'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-02 (SHEET 2 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York	GBTS FILE 21003-0066
	DATE: 2021-06-30 DRILLER (RIG) Core-Down (7822DT Geoprobe, 4' macro-core)	
	GBTS STAFF: J. Hooker WEATHER: Overcast, 70s-80s F	

SURFACE MATERIAL: ASPHALT (6")

BORING INTERVAL (RECOVERY)	SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (70%)	Brown, F-M SAND with coarse gravel, glass and coal fragments (Fill) in bottom 0.5' of soil	Dry to moist	0.0	ND	ND	ND	
4 – 8' (60%)	Brown F-M SAND with coarse gravel; then dark brown SANDY LOAM with coarse gravel	Moist	0.0	ND	ND	ND	
8 – 12' (20%)	Brown SANDY LOAM; then light brown SAND with coarse gravel	Very moist	0.0	ND	ND	ND	**(8-9')**
	****** End of Boring (Refusal) at 9.5' *****						

Notes

Fill Materials

Glass and coal fragments at bottom 0.5' of 0-4' interval

Field Evidence of Contamination

None

Field Notes

Refusal at ~9.5'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-03 (SHEET 3 OF 22)	**Saranac Lofts – Phase II Investigation** **120 Broadway, Saranac Lake, New York** *GBTS FILE 21003-0066*						
	DATE: 2021-06-30 DRILLER (RIG) Core-Down (7822DT Geoprobe, 4' macro-core)						
	GBTS STAFF: J. Hooker WEATHER: Overcast, 70s-80s F						
BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: ASPHALT (6") **SOIL / MATERIAL DESCRIPTION**	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (0%)	Refusal at 1' (likely bedrock)	N/A	N/A	ND	ND	ND	

Notes

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-04 (Sheet 4 of 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York			GBTS File 21003-0066
	Date:	2021-06-30	Driller (Rig)	Core-Down (7822DT Geoprobe, 4' macro-core)
	GBTS Staff:	J. Hooker	Weather:	Overcast, 70s-80s F

Boring Interval (Recovery)	Surface Material: Asphalt (6") **Soil / Material Description**	Moisture	PID (ppm	Odors	Staining	NAPL	Samples Collected
0 – 4' (70%)	Brown to light brown F-M SAND with coarse gravel; glass and coal fragments (Fill) at center of interval	Dry	0.0	ND	ND	ND	
4 – 8' (30%)	Brown F-M SAND with coarse gravel	Dry to moist	0.0	ND	ND	ND	
8 – 12' (70%)	Brown F SAND with coarse gravel	Very moist	3,100	yes	yes	ND	**(8-11')**
	****** End of Boring (Refusal) at 11.5' *****						

Notes

Fill Materials

Glass and coal fragments at center of 0-4' interval'

Field Evidence of Contamination

Gray/green petroleum staining, strong petroleum odor, PID 3,100 ppm from ~10-11.5'

Field Notes

Refusal at 11.5'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-05 (Sheet 5 of 22)	**Saranac Lofts – Phase II Investigation** **120 Broadway, Saranac Lake, New York**			*GBTS File 21003-0066*
	Date:	2021-06-30	Driller (Rig)	Core-Down (7822DT Geoprobe, 4' macro-core)
	GBTS Staff:	J. Hooker	Weather:	Overcast, 70s-80s F

Boring Interval (Recovery)	Surface Material: Asphalt (6") **Soil / Material Description**	Moisture	PID (ppm	Odors	Staining	NAPL	Samples Collected
0 – 4' (10%)	Brown F-M SAND with coarse gravel	Dry	3.6	ND	ND	ND	
4 – 8' (60%)	Brown F-M SAND with coarse gravel; then brownish orange F-M SAND	Dry to moist	2.8	ND	ND	ND	**(4-7')**
	****** End of Boring (Refusal) at 7' *****						

Notes

Fill Materials

None

Field Evidence of Contamination

None

Field Notes

Refusal at 7'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-06 (SHEET 6 OF 22)	**Saranac Lofts – Phase II Investigation** **120 Broadway, Saranac Lake, New York**			*GBTS FILE 21003-0066*
	DATE:	2021-06-30	DRILLER (RIG)	Core-Down (7822DT Geoprobe, 4' macro-core)
	GBTS STAFF:	J. Hooker	WEATHER:	Overcast, 70s-80s F

SURFACE MATERIAL: ASPHALT (6")

BORING INTERVAL (RECOVERY)	SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (80%)	Brown to light brown F-M SAND with coarse gravel	Dry	0.0	ND	ND	ND	
4 – 8' (70%)	Brown to light brown F-M SAND with coarse gravel	Dry to moist	0.0	ND	ND	ND	**(4-7.5')**
	****** End of Boring (Refusal) at 7.5' *****						

Notes

Fill Materials

None

Field Evidence of Contamination

None

Field Notes

Refusal at 7.5'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

SB-07 (SHEET 7 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York					GBTS FILE 21003-0066
	DATE: 2021-06-30	DRILLER (RIG) Core-Down (7822DT Geoprobe, 4’ macro-core)				
	GBTS STAFF: J. Hooker	WEATHER: Overcast, 70s-80s F				

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: ASPHALT (6”) SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4’ (60%)	Light brown F-M SAND with coarse gravel; then light brown SANDY LOAM with coarse gravel	Dry to moist	0.0	ND	ND	ND	
4 – 8’ (30%)	Light brown SANDY LOAM with coarse gravel	Very moist	0.0	ND	ND	ND	**(4-7’)**
	****** End of Boring (Refusal) at 7’ *****						

Notes

Fill Materials

None

Field Evidence of Contamination

None

Field Notes

Refusal at 7’

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-08 (SHEET 8 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York			GBTS FILE 21003-0066
	DATE:	2021-06-30	DRILLER (RIG)	Core-Down (7822DT Geoprobe, 4' macro-core)
	GBTS STAFF:	J. Hooker	WEATHER:	Overcast, 70s-80s F

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: ASPHALT (6") SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (60%)	Brown F-M to M-C SAND, coarse gravel; glass and coal fragments (Fill) at center of interval	Dry	0.4	ND	ND	ND	
4 – 8' (50%)	Brownish reddish SANDY LOAM with coarse gravel	Dry to moist	0.0	ND	ND	ND	**(4-6')**
	****** End of Boring (Refusal) at 6' *****						

Notes

Fill Materials

Glass and coal fragments at center of 0-4' interval

Field Evidence of Contamination

None

Field Notes

Refusal at 6'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-09 (SHEET 9 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York			GBTS FILE 21003-0066
	DATE: 2021-06-30		DRILLER (RIG)	Core-Down (7822DT Geoprobe, 4' macro-core)
	GBTS STAFF: J. Hooker		WEATHER:	Overcast, 70s-80s F

SURFACE MATERIAL: SOIL

BORING INTERVAL (RECOVERY)	SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (70%)	Dark brown SILT, organics, cobble; then gray F SAND	Moist	76.1	yes	yes	ND	
4 – 8' (75%)	Gray SANDY CLAY LOAM	Moist	355	yes	yes	ND	**(4-7')**
	****** End of Boring (Refusal) at 7' *****						

Notes

Fill Materials

None

Field Evidence of Contamination

Gray/black staining from bottom ~1' of 0-4' interval to ~7', strong petroleum odor, PID 355 ppm at ~4-7'

Field Notes

Refusal at 7'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-10 (SHEET 10 OF 22)	**Saranac Lofts – Phase II Investigation** **120 Broadway, Saranac Lake, New York**	GBTS FILE 21003-0066
	DATE: 2021-06-30	DRILLER (RIG) Core-Down (7822DT Geoprobe, 4' macro-core)
	GBTS STAFF: J. Hooker	WEATHER: Overcast, 70s-80s F

SURFACE MATERIAL: CRUSHED STONE DUST (3")

BORING INTERVAL (RECOVERY)	SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (80%)	Brownish grayish F-M SAND, layer of coal fragments and ash (Fill) at center of interval	Moist	0.7	yes	ND	ND	
4 – 8' (90%)	Light brown F SAND with coarse gravel	Very moist	1,072	yes	yes	ND	**(5-5.5')**
	****** End of Boring (Refusal) at 7.5' *****						

Notes

Fill Materials

Coal fragments and ash at center of 0-4' interval

Field Evidence of Contamination

Moderate petroleum odors at bottom of 0-4' interval; gray/black staining, strong petroleum odor, PID 1,072 ppm at ~5-5.5'

Field Notes

Refusal at 7.5'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-11 (SHEET 11 OF 22)	**Saranac Lofts – Phase II Investigation** **120 Broadway, Saranac Lake, New York** *GBTS FILE 21003-0066*
	DATE: 2021-07-01 DRILLER (RIG) Core-Down (7822DT Geoprobe, 4' macro-core) GBTS STAFF: J. Hooker WEATHER: Sunny, 70s-80s F

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: SOIL **SOIL / MATERIAL DESCRIPTION**	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (80%)	Brown F-M SAND with coarse gravel; then coal fragments and ash (Fill); then peat	Moist	0.0	ND	ND	ND	**(0-4')**
4 – 8' (80%)	Peat; then light brown F SAND ****** Saturated at ~6' *****	Moist to wet	0.0	ND	ND	ND	**(4-8')**
	****** End of Boring at 8' *****						

Notes

Fill Materials

Coal fragments and ash at bottom of 0-4' interval

Field Evidence of Contamination

None

Saturated Soils

~6-8'

Field Notes

End of boring at 8'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-12 (SHEET 12 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York	GBTS FILE 21003-0066
	DATE: 2021-01-07 / GBTS STAFF: J. Hooker	DRILLER (RIG): Core-Down (7822DT Geoprobe, 4' macro-core) / WEATHER: Sunny, 70s-80s F

SURFACE MATERIAL: SOIL

BORING INTERVAL (RECOVERY)	SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (80%)	Light brown F SAND with coarse gravel; layer of coal fragments and ash (Fill) at center of interval; then light brown F-M SAND	Dry to moist	0.0	ND	ND	ND	**(0-4')**
4 – 8' (100%)	Brown/ gray F-M SAND; layer of peat at ~4.5-5' ****** Saturated at ~5.5' *****	Moist to wet	0.0	ND	ND	ND	**(4-8')**
	****** End of Boring at 8' *****						

Notes

Fill Materials

Coal fragments and ash at center of 0-4' interval

Field Evidence of Contamination

None

Saturated Soils

~5.5-8'

Field Notes

End of boring at 8'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-13 (SHEET 13 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York			GBTS FILE 21003-0066
	DATE:	2021-07-01	DRILLER (RIG)	Core-Down (7822DT Geoprobe, 4’ macro-core)
	GBTS STAFF:	J. Hooker	WEATHER:	Sunny, 70s-80s F

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: SOIL **SOIL / MATERIAL DESCRIPTION**	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4’ (90%)	Brown, F-M SAND with coarse gravel	Moist	0.0	ND	ND	ND	**(3-4’)**
4 – 8’ (80%)	Gray M-C SAND with coarse gravel; then layer of peat; then brown, F-M SAND ****** Saturated at ~4.5’ *****	Moist to wet	0.0	ND	ND	ND	
	****** End of Boring at 8’ *****						

Notes

Fill Materials
None
Field Evidence of Contamination
None
Saturated Soils
~4.5-8’
Field Notes
Groundwater at ~4.5, end of boring at 8’

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-14 (SHEET 14 OF 22)	**Saranac Lofts – Phase II Investigation** **120 Broadway, Saranac Lake, New York**						*GBTS FILE 21003-0066*
	DATE: 2021-07-01	DRILLER (RIG): Core-Down (7822DT Geoprobe, 4' macro-core)					
	GBTS STAFF: J. Hooker	WEATHER: Sunny, 70s-80s F					

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: SOIL **SOIL / MATERIAL DESCRIPTION**	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (25%)	Peat; then brown, M SAND with coarse gravel	Moist	0.0	ND	ND	ND	
4 – 8' (100%)	Brown/gray, M SAND with silt to ~5'; then gray to light brown F-M to M-C SAND to ~7'; then gray SILTY CLAY ****** Saturated at ~4.5' *****	Moist to wet	0.0	ND	ND	ND	**(4-8')**
	****** End of Boring at 8' *****						

Notes

Fill Materials

None

Field Evidence of Contamination

None

Saturated Soils

~4.5-8'

Field Notes

Groundwater at ~4.5', end of boring at 8'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-15 (Sheet 15 of 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York						GBTS File 21003-0066
	Date: 2021-07-01	Driller (Rig)	Core-Down (7822DT Geoprobe, 4' macro-core)				
	GBTS Staff: J. Hooker	Weather:	Sunny, 70s-80s F				

Boring Interval (Recovery)	Surface Material: Soil Soil / Material Description	Moisture	PID (ppm	Odors	Staining	NAPL	Samples Collected
0 – 4' (60%)	Light brown, F-M SAND with coarse gravel; coal fragments (Fill) in bottom 0.5' of interval	Moist	0.0	ND	ND	ND	**(0-4')**
4 – 8' (100%)	Light brown, F-M SAND with coarse gravel to ~5'; then layer of peat to 5.5'; then gray/brown F SAND ****** Saturated at ~5' *****	Moist to wet	0.0	ND	ND	ND	**(4-8')**
8 – 12' (100%)	Brown, F SAND; then gray/brown F-M to M-C SAND	Wet	0.0	ND	ND	ND	**(8-12')**
	****** End of Boring (Refusal) at 12' *****						

Notes

Fill Materials

Coal fragments in bottom ~0.5' of 0-4' interval

Field Evidence of Contamination

None

Saturated Soils

~5-12'

Field Notes

Groundwater at ~5', refusal at 12'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-16 (SHEET 16 OF 22)	**Saranac Lofts – Phase II Investigation** **120 Broadway, Saranac Lake, New York**						*GBTS FILE 21003-0066*
	DATE: 2021-07-01	DRILLER (RIG) Core-Down (7822DT Geoprobe, 4' macro-core)					
	GBTS STAFF: J. Hooker	WEATHER: Sunny, 70s-80s F					

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: SOIL **SOIL / MATERIAL DESCRIPTION**	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (50%)	Brown F-M SAND with coarse gravel; then layer of peat	Moist	0.0	ND	ND	ND	
4 – 8' (75%)	Light brown, F SAND; then gray F SAND; then gray CLAY ****** Saturated at ~4.5' *****	Moist to wet	0.0	ND	ND	ND	**(4-7')**
	****** End of Boring (Refusal) at 7' *****						

Notes

Fill Materials

None

Field Evidence of Contamination

None

Saturated Soils

~4.5-8'

Field Notes

Groundwater at ~4.5', refusal at 7'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-17 (SHEET 17 OF 22)	**Saranac Lofts – Phase II Investigation** **120 Broadway, Saranac Lake, New York**								*GBTS FILE 21003-0066*
	DATE: 2021-07-01	DRILLER (RIG) Core-Down (7822DT Geoprobe, 4' macro-core)							
	GBTS STAFF: J. Hooker	WEATHER: Sunny, 70s-80s F							
BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: SOIL **SOIL / MATERIAL DESCRIPTION**	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED		
0 – 4' (70%)	Brown, F SAND with coarse gravel; then peat, few brick fragments	Moist	0.0	ND	ND	ND	**(0-4')**		
4 – 8' (100%)	Peat to ~4.5'; then brown, F SAND to ~5'; then gray CLAY ****** Saturated at ~5' *****	Moist to wet	0.0	ND	ND	ND			
	****** End of Boring at 8' *****								

Notes

Fill Materials

Few brick fragments at bottom of 0-4' interval

Field Evidence of Contamination

None

Saturated Soils

~5-8'

Field Notes

Groundwater at ~5', end of boring at 8'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-18 (SHEET 18 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York GBTS FILE 21003-0066						
	DATE: 2021-07-01 DRILLER (RIG) Core-Down (7822DT Geoprobe, 4' macro-core) GBTS STAFF: J. Hooker WEATHER: Sunny, 70s-80s F						
BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: SOIL SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (65%)	Light brown, F-M to M-C SAND; then layer of coal fragments and ash (Fill); then peat with wood/roots	Moist	0.0	ND	ND	ND	**(0-4)'**
4 – 8' (100%)	Light brown, F-M SAND with coarse gravel to ~4.5'; peat to ~5'; then gray SANDY LOAM ****** Saturated at ~5' *****	Moist to wet	0.0	ND	ND	ND	**(4-8')**
	****** End of Boring at 8' *****						

Notes

Fill Materials

Coal fragments and ash at center of 0-4' interval

Field Evidence of Contamination

None

Saturated Soils

~5-8'

Field Notes

Groundwater at ~5', end of boring at 8'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-19 (Sheet 19 of 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York	GBTS File 21003-0066
	Date: 2021-07-01 GBTS Staff: J. Hooker	Driller (Rig): Core-Down (7822DT Geoprobe, 4' macro-core) Weather: Sunny, 70s-80s F

Surface Material: Crushed stone dust (3")

Boring Interval (Recovery)	Soil / Material Description	Moisture	PID (ppm	Odors	Staining	NAPL	Samples Collected
0 – 4' (65%)	Gray to light brown, M-C SAND with coarse gravel; then dark F SAND	Dry to moist	890	yes	yes	ND	**(0-4')**
4 – 8' (100%)	Brown M SAND with coarse gravel	Very moist	1,570	yes	yes	ND	**(4-8')**
	****** End of Boring at 8'*****						

Notes

Fill Materials

None

Field Evidence of Contamination

Gray/green petroleum staining from bottom of 0-4' interval to 8', strong petroleum odors, PID 1,570 ppm from ~4-8'

Field Notes

End of boring at 8'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-20 (SHEET 20 OF 22)	**Saranac Lofts – Phase II Investigation** **120 Broadway, Saranac Lake, New York**						*GBTS FILE 21003-0066*
	DATE: 2021-07-01 GBTS STAFF: J. Hooker	DRILLER (RIG) Core-Down (7822DT Geoprobe, 4' macro-core) WEATHER: Sunny, 70s-80s F					
BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: CRUSHED STONE DUST (3") **SOIL / MATERIAL DESCRIPTION**	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (60%)	Brown/gray, F SAND with coarse gravel	Dry to moist	370	yes	yes	ND	**(0-4')**
4 – 8' (80%)	Brown SANDY CLAY LOAM with coarse gravel	Moist	1,100	yes	yes	ND	**(4-8')**
8 – 12' (75%)	Gray, M-C SAND with coarse gravel	Very moist	1,500	yes	yes	yes	**(8-11')**
	****** End of Boring (Refusal) at 11' *****						

Notes

Fill Materials

None

Field Evidence of Contamination

Gray/green petroleum staining from center of 0-4' interval to 11', strong petroleum odors, PID 1,500 ppm and petroleum sheen from ~8-11'

Field Notes

Refusal at 11'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-21 (SHEET 21 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York	GBTS FILE 21003-0066
	DATE: 2021-07-01	DRILLER (RIG): Core-Down (7822DT Geoprobe, 4' macro-core)
	GBTS STAFF: J. Hooker	WEATHER: Sunny, 70s-80s F

SURFACE MATERIAL: CRUSHED STONE DUST (3")

BORING INTERVAL (RECOVERY)	SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (100%)	Brown, F-M SAND with coarse gravel to ~2'; then brown M SAND, layer of coal fragments and ash (Fill) at ~3.5-4'	Dry to Moist	34.7	yes	yes	ND	**(0-4')**
4 – 8' (100%)	Brown, F SAND to ~4.5; then gray F-M SAND to ~7.5; then light brownish reddish, M SAND	Very moist	1,960	yes	yes	yes	**(4-8')**
	****** End of Boring at 8' *****						

Notes

Fill Materials

Coal fragments and ash at ~3.5-4'

Field Evidence of Contamination

Gray/green petroleum staining from center of 0-4' interval to 7', strong petroleum odors, PID 1,960 ppm and petroleum sheen from ~4-7

Field Notes

Refusal at 7'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

Soil Boring Log

GALLAGHER BASSETT | TECHNICAL SERVICES

SB-22 (SHEET 22 OF 22)	Saranac Lofts – Phase II Investigation 120 Broadway, Saranac Lake, New York			GBTS FILE 21003-0066
	DATE:	2021-30-06	DRILLER (RIG)	Core-Down (7822DT Geoprobe, 4' macro-core)
	GBTS STAFF:	J. Hooker	WEATHER:	Sunny, 70s-80s F

BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: CRUSHED STONE DUST (3") SOIL / MATERIAL DESCRIPTION	MOISTURE	PID (PPM	ODORS	STAINING	NAPL	SAMPLES COLLECTED
0 – 4' (90%)	Brown/gray, M-C SAND to ~2'; then peat to ~2.5'; then brown, M SAND with coal fragments and ash (Fill)	Dry to moist	0.2	ND	ND	ND	**(0-4')**
4 – 8' (100%)	Brownish F SAND to ~4.5'; then coal fragments and ash (Fill) to 5'; then gray SANDY LOAM	Moist	0.0	ND	ND	ND	**(4-8')**
	****** End of Boring at 8' *****						

Notes

Fill Materials

Coal fragments and ash at ~2.5-3' and ~4.5-5'

Field Evidence of Contamination

None

Field Notes

End of boring at 8'

ND (non-detect) **PID** (photoionization detector) **ppm** (parts per million) **NAPL** (non-aqueous phase liquid)
F (fine) **M** (medium) **C** (coarse) **P** (plastic) **LP** (low plastic) **NP** (non-plastic)

APPENDIX G

Data Summary Tables

Table 1: VOCs in Soils
Saranac Lofts

GALLAGHER BASSETT | TECHNICAL SERVICES

		Sample ID	SB-01 8-11		SB-04 8-11		SB-09 4-7		SB-10 5-5.5		SB-19 0-4	
U= Not Detected ≥ value		Sample Date	2021-06-30		2021-06-30		2021-06-30		2021-06-30		2021-07-01	
All data in mg/Kg (ppm)		Dilution Factor	1000		5000		100		100		100	
VOCs, 8260	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1,1,2-Tetrachloroethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,1,1-Trichloroethane	0.68	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,1,2,2-Tetrachloroethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,1,2-Trichloroethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,1-Dichloroethane	0.27	26	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,1-Dichloroethylene (1,1-DCE)	0.33	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,2,3-Trichlorobenzene	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,2,3-Trichloropropane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,2,4-Trichlorobenzene	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,2,4-Trimethylbenzene	3.6	52	**110**	*D*	**750**	*D*	11	*D*	0.68	*U*	6.3	*D*
1,2-Dibromo-3-chloropropane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,2-Dibromoethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,2-Dichlorobenzene	1.1	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,2-Dichloroethane	0.02	3.1	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,2-Dichloropropane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,3,5-Trimethylbenzene	8.4	52	25	*D*	**70**	*D*	4.3	*D*	0.68	*U*	1.8	*D*
1,3-Dichlorobenzene	2.4	49	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,4-Dichlorobenzene	1.8	13	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
1,4-Dioxane	0.1	13	45	*U*	55	*U*	10	*U*	14	*U*	14	*U*
2-Butanone (MEK)	0.12	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
2-Hexanone	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
4-Methyl-2-pentanone	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Acetone	0.05	100	4.5	*U*	5.5	*U*	1	*U*	1.4	*U*	1.4	*U*
Acrolein	NA	NA	4.5	*U*	5.5	*U*	1	*U*	1.4	*U*	1.4	*U*
Acrylonitrile	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Benzene	0.06	4.8	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Bromochloromethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Bromodichloromethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Bromoform	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Bromomethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Carbon disulfide	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Carbon tetrachloride	0.76	2.4	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Chlorobenzene	1.1	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Chloroethane	NA	NA	2.2	*U*	6.6	*D*	0.5	*U*	0.68	*U*	0.7	*U*
Chloroform	0.37	49	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Chloromethane	NA	NA	2.2	*U*	2.7	*U*	0.84	*JBD*	0.68	*U*	0.7	*U*
cis-1,2-Dichloroethylene (cis-DCE)	0.25	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
cis-1,3-Dichloropropylene	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Cyclohexane	NA	NA	2.2	*U*	5.4	*JD*	0.5	*U*	0.68	*U*	0.7	*U*
Dibromochloromethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Dibromomethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Dichlorodifluoromethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Ethyl Benzene	1	41	14	*D*	7.7	*D*	2.4	*D*	0.68	*U*	0.7	*U*
Hexachlorobutadiene	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Isopropylbenzene	2.3	100	3.5	*JD*	4.1	*JD*	0.5	*U*	0.68	*U*	0.7	*U*
Methyl acetate	NA	NA	2.2	*U*	2.7	*U*	2.4	*D*	0.82	*JD*	2.1	*D*
Methyl tert-butyl ether (MTBE)	0.93	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Methylcyclohexane	NA	NA	22	*D*	7.1	*D*	0.92	*JD*	0.68	*U*	4.3	*D*
Methylene chloride	0.05	100	4.5	*U*	5.5	*U*	1	*U*	1.4	*U*	1.4	*U*
n-Butylbenzene	12	100	3.8	*JD*	31	*D*	0.5	*U*	0.68	*U*	0.7	*U*
n-Propylbenzene	3.9	100	14	*D*	17	*D*	1.4	*D*	0.68	*U*	1.1	*JD*
o-Xylene	0.26	100	20	*D*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
p- & m- Xylenes	0.26	100	100	*D*	32	*D*	5.7	*D*	1.4	*U*	1.4	*U*
p-Isopropyltoluene	10	NA	2.2	*U*	5.9	*D*	0.5	*U*	0.68	*U*	0.7	*U*
sec-Butylbenzene	11	100	2.2	*U*	5	*JD*	0.5	*U*	0.68	*U*	0.7	*U*
Styrene	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
tert-Butyl alcohol (TBA)	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
tert-Butylbenzene	5.9	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Tetrachloroethylene (PCE)	1.3	19	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Toluene	0.7	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
trans-1,2-Dichloroethylene (trans-DCE)	0.19	100	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
trans-1,3-Dichloropropylene	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Trichloroethylene (TCE)	0.47	21	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Trichlorofluoromethane	NA	NA	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Vinyl chloride (VC)	0.02	0.9	2.2	*U*	2.7	*U*	0.5	*U*	0.68	*U*	0.7	*U*
Xylenes, Total	0.26	100	**120**	*D*	32	*D*	5.7	*D*	2	*U*	2.1	*U*

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 1: VOCs in Soils
Saranac Lofts

		Sample ID	**SB-19 4-8**		**SB-20 0-4**		**SB-20 4-8**		**SB-20 8-11**		**SB-21 4-8**	
U= Not Detected ≥ value		Sample Date	2021-07-01		2021-07-01		2021-07-01		2021-07-01		2021-07-01	
All data in mg/Kg (ppm)		Dilution Factor	1000		1		100		1		100	
VOCs, 8260	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1,1,2-Tetrachloroethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,1,1-Trichloroethane	0.68	100	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,1,2,2-Tetrachloroethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,1,2-Trichloroethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,1-Dichloroethane	0.27	26	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,1-Dichloroethylene (1,1-DCE)	0.33	100	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,2,3-Trichlorobenzene	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,2,3-Trichloropropane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,2,4-Trichlorobenzene	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,2,4-Trimethylbenzene	3.6	52	**59**	D	0.3		3.1	D	1.9	E	5.6	D
1,2-Dibromo-3-chloropropane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,2-Dibromoethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,2-Dichlorobenzene	1.1	100	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,2-Dichloroethane	0.02	3.1	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,2-Dichloropropane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,3,5-Trimethylbenzene	8.4	52	21	D	0.15		0.58	JD	1.4	E	1.7	D
1,3-Dichlorobenzene	2.4	49	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,4-Dichlorobenzene	1.8	13	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
1,4-Dioxane	0.1	13	36	U	0.1	U	7	U	0.051	U	8.1	U
2-Butanone (MEK)	0.12	100	1.8	U	0.0051	U	0.37	JD	0.0025	U	0.41	U
2-Hexanone	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
4-Methyl-2-pentanone	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Acetone	0.05	100	3.6	U	0.011	J	0.7	U	0.0051	U	0.81	U
Acrolein	NA	NA	3.6	U	0.01	U	0.7	U	0.0051	U	0.81	U
Acrylonitrile	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Benzene	0.06	4.8	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Bromochloromethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Bromodichloromethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Bromoform	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Bromomethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Carbon disulfide	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Carbon tetrachloride	0.76	2.4	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Chlorobenzene	1.1	100	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Chloroethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Chloroform	0.37	49	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Chloromethane	NA	NA	1.8	U	0.0051	U	0.65	JBD	0.0025	U	0.41	U
cis-1,2-Dichloroethylene (cis-DCE)	0.25	100	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
cis-1,3-Dichloropropylene	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Cyclohexane	NA	NA	29	D	0.028		0.35	U	0.06		1.1	D
Dibromochloromethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Dibromomethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Dichlorodifluoromethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Ethyl Benzene	1	41	12	D	0.014		0.35	U	0.53	E	0.66	JD
Hexachlorobutadiene	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Isopropylbenzene	2.3	100	3.4	JD	0.013		0.35	U	0.53	E	0.41	U
Methyl acetate	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Methyl tert-butyl ether (MTBE)	0.93	100	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Methylcyclohexane	NA	NA	63	D	0.1		2.4	D	3.4	E	3.4	D
Methylene chloride	0.05	100	3.6	U	0.01	U	0.7	U	0.0051	U	0.81	U
n-Butylbenzene	12	100	5.8	D	0.03		0.86	D	0.48	E	0.41	U
n-Propylbenzene	3.9	100	7.1	D	0.031		0.66	JD	0.87	E	0.67	JD
o-Xylene	0.26	100	1.8	U	0.0051	U	0.35	U	0.44	E	0.41	U
p- & m- Xylenes	0.26	100	61	D	0.077		0.7	U	1.6	E	3.1	D
p-Isopropyltoluene	10	NA	2.5	JD	0.012		0.35	U	0.21	E	0.41	U
sec-Butylbenzene	11	100	1.8	U	0.0088	J	0.36	JD	0.15		0.41	U
Styrene	NA	NA	1.8	U	0.0051	U	0.35	U	0.015		0.41	U
tert-Butyl alcohol (TBA)	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
tert-Butylbenzene	5.9	100	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Tetrachloroethylene (PCE)	1.3	19	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Toluene	0.7	100	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
trans-1,2-Dichloroethylene (trans-DCE)	0.19	100	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
trans-1,3-Dichloropropylene	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Trichloroethylene (TCE)	0.47	21	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Trichlorofluoromethane	NA	NA	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Vinyl chloride (VC)	0.02	0.9	1.8	U	0.0051	U	0.35	U	0.0025	U	0.41	U
Xylenes, Total	0.26	100	61	D	0.077		1	U	2	E	3.1	D

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 2: SVOCs in Soils
Saranac Lofts

GALLAGHER BASSETT TECHNICAL SERVICES

		Sample ID	SB-01 8-11		SB-04 8-11		SB-09 4-7		SB-10 5-5.5		SB-12 0-4	
U= Not Detected ≥ value		Sample Date	2021-06-30		2021-06-30		2021-06-30		2021-06-30		2021-07-01	
All data in mg/Kg (ppm)		Dilution Factor	2		2		2		2		2	
SVOCs, 8270	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1'-Biphenyl	NA	NA	0.0905	JD	0.0465	U	0.129	D	0.0644	U	0.0482	U
1,2,4,5-Tetrachlorobenzene	NA	NA	0.0928	U	0.0927	U	0.128	U	0.129	U	0.0962	U
1,2,4-Trichlorobenzene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
1,2-Dichlorobenzene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
1,2-Diphenylhydrazine (Azobenzene)	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
1,3-Dichlorobenzene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
1,4-Dichlorobenzene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2,3,4,6-Tetrachlorophenol	NA	NA	0.0928	U	0.0927	U	0.128	U	0.129	U	0.0962	U
2,4,5-Trichlorophenol	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2,4,6-Trichlorophenol	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2,4-Dichlorophenol	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2,4-Dimethylphenol	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2,4-Dinitrophenol	NA	NA	0.0928	U	0.0927	U	0.128	U	0.129	U	0.0962	U
2,4-Dinitrotoluene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2,6-Dinitrotoluene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2-Chloronaphthalene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2-Chlorophenol	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2-Methylnaphthalene	NA	NA	2.78	D	0.773	D	0.312	D	0.0644	U	0.0482	U
2-Methylphenol	0.33	100	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
2-Nitroaniline	NA	NA	0.0928	U	0.0927	U	0.128	U	0.129	U	0.0962	U
2-Nitrophenol	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
3- & 4-Methylphenols	0.33	100	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
3,3'-Dichlorobenzidine	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
3-Nitroaniline	NA	NA	0.0928	U	0.0927	U	0.128	U	0.129	U	0.0962	U
4,6-Dinitro-2-methylphenol	NA	NA	0.0928	U	0.0927	U	0.128	U	0.129	U	0.0962	U
4-Bromophenyl phenyl ether	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
4-Chloro-3-methylphenol	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
4-Chloroaniline	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
4-Chlorophenyl phenyl ether	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
4-Nitroaniline	NA	NA	0.0928	U	0.0927	U	0.128	U	0.129	U	0.0962	U
4-Nitrophenol	NA	NA	0.0928	U	0.0927	U	0.128	U	0.129	U	0.0962	U
Acenaphthene	20	100	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Acenaphthylene	100	100	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Acetophenone	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Aniline	NA	NA	0.186	U	0.186	U	0.256	U	0.257	U	0.193	U
Anthracene	100	100	0.0465	U	0.0465	U	0.0641	U	0.295	D	0.0915	JD
Atrazine	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Benzaldehyde	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Benzidine	NA	NA	0.186	U	0.186	U	0.256	U	0.257	U	0.193	U
Benzo(a)anthracene	1	1	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.248	D
Benzo(a)pyrene	1	1	0.0465	U	0.0465	U	0.0715	JD	0.0644	U	0.217	D
Benzo(b)fluoranthene	1	1	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.194	D
Benzo(g,h,i)perylene	100	100	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.108	D
Benzo(k)fluoranthene	0.8	3.9	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.191	D
Benzoic acid	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Benzyl alcohol	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Benzyl butyl phthalate	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Bis(2-chloroethoxy)methane	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Bis(2-chloroethyl)ether	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Bis(2-chloroisopropyl)ether	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Bis(2-ethylhexyl)phthalate	NA	NA	0.0465	U	0.0465	U	0.326	BD	0.419	D	0.0482	U
Caprolactam	NA	NA	0.0928	U	0.0927	U	0.128	U	0.129	U	0.0962	U
Carbazole	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.124	JD	0.0723	JD
Chrysene	1	3.9	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.239	D
Dibenzo(a,h)anthracene	0.33	0.33	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Dibenzofuran	7	59	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Diethyl phthalate	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Dimethyl phthalate	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Di-n-butyl phthalate	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Di-n-octyl phthalate	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Diphenylamine	NA	NA	NA		NA		NA		NA		NA	
Fluoranthene	100	100	0.0465	U	0.0465	U	0.0641	U	0.0894	JD	0.559	D
Fluorene	30	100	0.0465	U	0.0465	U	0.156	D	0.0644	U	0.0482	U
Hexachlorobenzene	0.33	1.2	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Hexachlorobutadiene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Hexachlorocyclopentadiene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Hexachloroethane	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0969	D
Isophorone	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Naphthalene	12	100	2.92	D	0.577	D	0.267	D	0.0644	U	0.0482	U
Nitrobenzene	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
N-Nitrosodimethylamine	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
N-nitroso-di-n-propylamine	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
N-Nitrosodiphenylamine	NA	NA	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Pentachlorophenol	0.8	6.7	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Phenanthrene	100	100	0.0631	JD	0.0465	U	0.344	D	0.613	D	0.392	D
Phenol	0.33	100	0.0465	U	0.0465	U	0.0641	U	0.0644	U	0.0482	U
Pyrene	100	100	0.0465	U	0.0465	U	0.0644	JD	0.196	D	0.385	D

Analyte Detected

Analyte Above UU SCO

Analyte Above RRU SCO

'SDEC Part 375-6.8 and CP-51   NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 2: SVOCs in Soils
Saranac Lofts

GALLAGHER BASSETT | TECHNICAL SERVICES

		Sample ID	SS-01		SS-13	
U= Not Detected ≥ value		Sample Date	2021-07-19		2021-07-19	
All data in mg/Kg (ppm)		Dilution Factor	2		100	
SVOCs, 8270	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1'-Biphenyl	NA	NA	0.0713	U	0.216	U
1,2,4,5-Tetrachlorobenzene	NA	NA	0.142	U	0.43	U
1,2,4-Trichlorobenzene	NA	NA	0.0713	U	0.216	U
1,2-Dichlorobenzene	NA	NA	0.0713	U	0.216	U
1,2-Diphenylhydrazine (Azobenzene)	NA	NA	0.0713	U	0.216	U
1,3-Dichlorobenzene	NA	NA	0.0713	U	0.216	U
1,4-Dichlorobenzene	NA	NA	0.0713	U	0.216	U
2,3,4,6-Tetrachlorophenol	NA	NA	0.142	U	0.43	U
2,4,5-Trichlorophenol	NA	NA	0.0713	U	0.216	U
2,4,6-Trichlorophenol	NA	NA	0.0713	U	0.216	U
2,4-Dichlorophenol	NA	NA	0.0713	U	0.216	U
2,4-Dimethylphenol	NA	NA	0.0713	U	0.216	U
2,4-Dinitrophenol	NA	NA	0.142	U	0.43	U
2,4-Dinitrotoluene	NA	NA	0.0713	U	0.216	U
2,6-Dinitrotoluene	NA	NA	0.0713	U	0.216	U
2-Chloronaphthalene	NA	NA	0.0713	U	0.216	U
2-Chlorophenol	NA	NA	0.0713	U	0.216	U
2-Methylnaphthalene	NA	NA	0.0713	U	0.392	JD
2-Methylphenol	0.33	100	0.0713	U	0.216	U
2-Nitroaniline	NA	NA	0.142	U	0.43	U
2-Nitrophenol	NA	NA	0.0713	U	0.216	U
3- & 4-Methylphenols	0.33	100	0.0713	U	1.1	D
3,3'-Dichlorobenzidine	NA	NA	0.0713	U	0.216	U
3-Nitroaniline	NA	NA	0.142	U	0.43	U
4,6-Dinitro-2-methylphenol	NA	NA	0.142	U	0.43	U
4-Bromophenyl phenyl ether	NA	NA	0.0713	U	0.216	U
4-Chloro-3-methylphenol	NA	NA	0.0713	U	0.216	U
4-Chloroaniline	NA	NA	0.0713	U	0.216	U
4-Chlorophenyl phenyl ether	NA	NA	0.0713	U	0.216	U
4-Nitroaniline	NA	NA	0.142	U	0.43	U
4-Nitrophenol	NA	NA	0.142	U	0.43	U
Acenaphthene	20	100	0.0713	U	1.95	D
Acenaphthylene	100	100	0.0713	U	55.4	D
Acetophenone	NA	NA	0.0713	U	0.216	U
Aniline	NA	NA	0.285	U	0.938	JD
Anthracene	100	100	0.0713	U	33.8	D
Atrazine	NA	NA	0.0713	U	0.216	U
Benzaldehyde	NA	NA	0.0713	U	0.216	U
Benzidine	NA	NA	0.285	U	0.861	U
Benzo(a)anthracene	1	1	0.0875	JD	**68.5**	D
Benzo(a)pyrene	1	1	0.1	JD	**63.5**	D
Benzo(b)fluoranthene	1	1	0.103	JD	**70.8**	D
Benzo(g,h,i)perylene	100	100	0.0966	JD	35.3	D
Benzo(k)fluoranthene	0.8	3.9	0.0807	JD	**72**	D
Benzoic acid	NA	NA	0.288	D	0.216	U
Benzyl alcohol	NA	NA	0.0713	U	0.216	U
Benzyl butyl phthalate	NA	NA	0.0713	U	0.216	U
Bis(2-chloroethoxy)methane	NA	NA	0.0713	U	0.216	U
Bis(2-chloroethyl)ether	NA	NA	0.0713	U	0.216	U
Bis(2-chloroisopropyl)ether	NA	NA	0.0713	U	0.216	U
Bis(2-ethylhexyl)phthalate	NA	NA	0.214	D	0.216	U
Caprolactam	NA	NA	0.142	U	0.43	U
Carbazole	NA	NA	0.0713	U	1.66	D
Chrysene	1	3.9	0.114	JD	**74.1**	D
Dibenzo(a,h)anthracene	0.33	0.33	0.0713	U	**16.4**	D
Dibenzofuran	7	59	0.0713	U	0.216	U
Diethyl phthalate	NA	NA	0.0713	U	0.216	U
Dimethyl phthalate	NA	NA	0.0713	U	0.216	U
Di-n-butyl phthalate	NA	NA	0.0713	U	0.216	U
Di-n-octyl phthalate	NA	NA	0.0713	U	0.216	U
Diphenylamine	NA	NA	0.142	U	0.43	U
Fluoranthene	100	100	0.178	D	82.4	D
Fluorene	30	100	0.0713	U	3.24	D
Hexachlorobenzene	0.33	1.2	0.0713	U	0.216	U
Hexachlorobutadiene	NA	NA	0.0713	U	0.216	U
Hexachlorocyclopentadiene	NA	NA	0.0713	U	0.216	U
Hexachloroethane	NA	NA	0.0713	U	0.216	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.083	JD	**47**	D
Isophorone	NA	NA	0.0713	U	0.216	U
Naphthalene	12	100	0.0713	U	0.216	U
Nitrobenzene	NA	NA	0.0713	U	0.216	U
N-Nitrosodimethylamine	NA	NA	0.0713	U	0.216	U
N-nitroso-di-n-propylamine	NA	NA	0.0713	U	0.216	U
N-Nitrosodiphenylamine	NA	NA	0.0713	U	0.216	U
Pentachlorophenol	0.8	6.7	0.0713	U	0.216	U
Phenanthrene	100	100	0.118	JD	5.76	D
Phenol	0.33	100	0.0713	U	0.866	D
Pyrene	100	100	0.173	D	**105**	D

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO YSDEC Part 375-6.8 and CP-51   NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3: PAHs in Soils
Saranac Lofts

		Sample ID	SB-11 0-4		SB-15 0-4		SB-17 0-4		SB-18 0-4		SB-19 0-4	
U= Not Detected ≥ value		Sample Date	2021-07-01		2021-07-01		2021-07-01		2021-07-01		2021-07-01	
All data in mg/Kg (ppm)		Dilution Factor	2		2		2		2		2	
SVOCs, 8270	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
2-Methylnaphthalene	NA	NA	0.0501	*U*	0.0523	*U*	0.0501	*U*	0.0586	*U*	1.34	*D*
Acenaphthene	20	100	0.0501	*U*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.0647	*U*
Acenaphthylene	100	100	0.133	*D*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.0647	*U*
Anthracene	100	100	0.284	*D*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.0647	*U*
Benzo(a)anthracene	1	1	0.585	*D*	0.0523	*U*	0.0583	*JD*	0.0586	*U*	0.0938	*JD*
Benzo(a)pyrene	1	1	0.487	*D*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.0753	*JD*
Benzo(b)fluoranthene	1	1	0.387	*D*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.0732	*JD*
Benzo(g,h,i)perylene	100	100	0.185	*D*	0.0523	*U*	0.0551	*JD*	0.0586	*U*	0.128	*JD*
Benzo(k)fluoranthene	0.8	3.9	0.371	*D*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.066	*JD*
Chrysene	1	3.9	0.45	*D*	0.0523	*U*	0.0655	*JD*	0.0586	*U*	0.142	*D*
Dibenzo(a,h)anthracene	0.33	0.33	0.0983	*JD*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.0647	*U*
Fluoranthene	100	100	1.08	*D*	0.0576	*JD*	0.0975	*JD*	0.0586	*U*	0.222	*D*
Fluorene	30	100	0.125	*D*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.0897	*JD*
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.329	*D*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.108	*JD*
Naphthalene	12	100	0.0501	*U*	0.0523	*U*	0.0501	*U*	0.0586	*U*	0.875	*D*
Phenanthrene	100	100	0.656	*D*	0.0523	*U*	0.0687	*JD*	0.0586	*U*	0.227	*D*
Pyrene	100	100	0.754	*D*	0.0523	*U*	0.129	*D*	0.0586	*U*	0.313	*D*

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51   NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 3: PAHs in Soils
Saranac Lofts

GALLAGHER BASSETT | TECHNICAL SERVICES

		Sample ID	SB-19 4-8		SB-20 0-4		SB-20 4-8		SB-20 8-11		SB-21 4-8	
U= Not Detected ≥ value		Sample Date	2021-07-01		2021-07-01		2021-07-01		2021-07-01		2021-07-01	
All data in mg/Kg (ppm)		Dilution Factor	2		2		2		2		2	
SVOCs, 8270	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
2-Methylnaphthalene	NA	NA	1.67	*D*	0.232	*D*	0.617	*D*	0.164	*D*	0.2	*D*
Acenaphthene	20	100	0.0475	*U*	0.0445	*U*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Acenaphthylene	100	100	0.0475	*U*	0.467	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Anthracene	100	100	0.0475	*U*	0.299	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Benzo(a)anthracene	1	1	0.0475	*U*	0.971	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Benzo(a)pyrene	1	1	0.0475	*U*	0.769	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Benzo(b)fluoranthene	1	1	0.0475	*U*	0.62	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Benzo(g,h,i)perylene	100	100	0.0475	*U*	0.81	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Benzo(k)fluoranthene	0.8	3.9	0.0475	*U*	0.678	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Chrysene	1	3.9	0.0475	*U*	1.19	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Dibenzo(a,h)anthracene	0.33	0.33	0.0475	*U*	0.24	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Fluoranthene	100	100	0.0475	*U*	0.931	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Fluorene	30	100	0.0909	*JD*	0.071	*JD*	0.0539	*JD*	0.0487	*U*	0.0505	*U*
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.0475	*U*	**0.591**	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*
Naphthalene	12	100	1.01	*D*	0.176	*D*	0.0476	*U*	0.0487	*U*	0.159	*D*
Phenanthrene	100	100	0.159	*D*	0.39	*D*	0.0683	*JD*	0.0487	*U*	0.0505	*U*
Pyrene	100	100	0.0475	*U*	2.75	*D*	0.0476	*U*	0.0487	*U*	0.0505	*U*

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 4: TAL Metals in Soils
Saranac Lofts

GALLAGHER BASSETT | TECHNICAL SERVICES

		Sample ID	SB-01 8-11		SB-04 8-11		SB-09 4-7		SB-10 5-5.5		SB-11 0-4	
U= Not Detected ≥ value		Sample Date	2021-06-30		2021-06-30		2021-06-30		2021-06-30		2021-07-01	
All data in mg/Kg (ppm)		Dilution Factor	1		1		1		1		1	
Metals, 6010 and 7473	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aluminum	NA	NA	7,530		10,300		4,490		5,430		4,610	
Antimony	NA	NA	2.8	*U*	2.82	*U*	3.88	*U*	3.92	*U*	3.03	*U*
Arsenic	13	16	1.68	*U*	1.69	*U*	2.39		4.63		2.59	
Barium	350	400	23.2		27.1		41.4		117		46.9	
Beryllium	7.2	72	0.056	*U*	0.056	*U*	0.078	*U*	0.078	*U*	0.061	*U*
Cadmium	2.5	4.3	0.336	*U*	0.338	*U*	0.466	*U*	**5.45**		0.745	
Calcium	NA	NA	4,460	*B*	2,850	*B*	4,660	*B*	4,380	*B*	2,190	*B*
Chromium	30	180	5.45		8.97		6.6		5.88		5.84	
Cobalt	NA	NA	5.28		5.33		6.57		4.83		3.54	
Copper	50	270	2.52		3.57		8.96		193		12.8	
Iron	NA	NA	14,900		20,000		8,170		7,270		10,800	
Lead	63	400	8.17		7.52		**430**		146		79.6	
Magnesium	NA	NA	2,040		2,030		1,340		1,160		1,070	
Manganese	1,600	2,000	91		96.1		82.2		64.1		69.3	
Mercury	0.18	0.81	0.0336	*U*	0.0338	*U*	0.0769		0.14		0.0495	
Nickel	30	310	3.74		3.91		5.28		6.11		3.32	
Potassium	NA	NA	386		420		372		275		284	
Selenium	3.9	180	2.8	*U*	2.82	*U*	3.88	*U*	3.92	*U*	3.03	*U*
Silver	2	180	0.56	*U*	0.563	*U*	0.777	*U*	0.784	*U*	0.605	*U*
Sodium	NA	NA	290		225		131		298		78.1	
Thallium	NA	NA	2.8	*U*	2.82	*U*	3.88	*U*	3.92	*U*	3.03	*U*
Vanadium	NA	NA	13.3		16.3		11.1		7.24		10.7	
Zinc	109	10,000	26.1		38.4		91.5		2,420		101	

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51   NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 4: TAL Metals in Soils
Saranac Lofts

GALLAGHER BASSETT | TECHNICAL SERVICES

		Sample ID	SB-12 0-4		SB-13 3-4		SB-15 0-4		SB-17 0-4		SB-18 0-4	
U= Not Detected ≥ value		Sample Date	2021-07-01		2021-07-01		2021-07-01		2021-07-01		2021-07-01	
All data in mg/Kg (ppm)		Dilution Factor	1		1		1		1		1	
Metals, 6010 and 7473	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aluminum	NA	NA	4,720		4,710		6,990		3,630		6,600	
Antimony	NA	NA	2.9	U	3.06	U	3.17	U	3.05	U	3.57	U
Arsenic	13	16	3.72		2.72		1.9	U	1.83	U	4.67	
Barium	350	400	81.5		87.9		46.3		21.2		115	
Beryllium	7.2	72	0.058	U	0.061	U	0.063	U	0.061	U	0.519	
Cadmium	2.5	4.3	0.517		0.436		0.569		0.596		0.89	
Calcium	NA	NA	2,060	B	2,910	B	17,400	B	3,360	B	2,440	B
Chromium	30	180	6.36		6.64		5.9		7.34		10.7	
Cobalt	NA	NA	6		4.31		5.78		3.12		5.57	
Copper	50	270	16.6		17.1		15.3		5.52		22.2	
Iron	NA	NA	9,420		12,700		10,900		12,000		9,380	
Lead	63	400	30.9		**434**		44.6		33.9		293	
Magnesium	NA	NA	1,160		2,100		3,350		1,060		634	
Manganese	1,600	2,000	112		72.7		104		84.2		574	
Mercury	0.18	0.81	0.0422		0.0715		0.0717		0.0366	U	0.0686	
Nickel	30	310	8.88		5.53		7.71		1.97		7.43	
Potassium	NA	NA	482		337		416		328		646	
Selenium	3.9	180	2.9	U	3.06	U	3.17	U	3.05	U	3.57	U
Silver	2	180	0.581	U	0.611	U	0.635	U	0.609	U	0.715	U
Sodium	NA	NA	176		100		139		99.1		106	
Thallium	NA	NA	2.9	U	3.06	U	3.17	U	3.05	U	3.57	U
Vanadium	NA	NA	13		12.9		12.1		10.3		18	
Zinc	109	10,000	43.8		171		48.2		43.1		254	

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 4: TAL Metals in Soils
Saranac Lofts

GALLAGHER BASSETT | TECHNICAL SERVICES

		Sample ID	SB-19 0-4		SB-20 0-4		SS-01		SS-02		SS-03	
U= Not Detected ≥ value		Sample Date	2021-07-01		2021-07-01		2021-07-19		2021-07-19		2021-07-19	
All data in mg/Kg (ppm)		Dilution Factor	1		1		1		1		1	
Metals, 6010 and 7473	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aluminum	NA	NA	8,140		3,920		3,530		3,970		4,000	
Antimony	NA	NA	3.93	*U*	2.71	*U*	4.28	*U*	2.74	*U*	2.61	*U*
Arsenic	13	16	2.36	*U*	4.26		2.57	*U*	1.64	*U*	1.57	*U*
Barium	350	400	181		**493**		110		50.2		16.8	
Beryllium	7.2	72	0.079	*U*	0.054	*U*	0.086	*U*	0.055	*U*	0.052	*U*
Cadmium	2.5	4.3	0.514		1.16		0.54		0.329	*U*	0.313	*U*
Calcium	NA	NA	30,800	*B*	63,900	*B*	10,200	*B*	15,800	*B*	2,990	*B*
Chromium	30	180	9.38		10.9		13.9		12		4.14	
Cobalt	NA	NA	2.44		5.15		9.59		5.74		3.98	
Copper	50	270	19.8		70.5		29.2		16.8		4.51	
Iron	NA	NA	9,760		18,000		22,400		20,100		16,600	
Lead	63	400	315		**421**		23.1		70.5		19.5	
Magnesium	NA	NA	1,440		2,640		4,240		2,430		2,400	
Manganese	1,600	2,000	244		174		225		144		157	
Mercury	0.18	0.81	0.801		0.0572		0.0513	*U*	0.0862		0.0588	
Nickel	30	310	1.67		7.81		16.1		8.43		2.33	
Potassium	NA	NA	336		590		1,150		506		258	
Selenium	3.9	180	3.93	*U*	2.71	*U*	4.28	*U*	2.74	*U*	2.61	*U*
Silver	2	180	0.786	*U*	0.542	*U*	0.856	*U*	0.548	*U*	0.522	*U*
Sodium	NA	NA	242		163		246		75.9		55	
Thallium	NA	NA	3.93	*U*	2.71	*U*	4.28	*U*	2.74	*U*	2.61	*U*
Vanadium	NA	NA	10.3		14		15.7		14.2		9.07	
Zinc	109	10,000	171		432		163		58.9		37	

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51   NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 4: TAL Metals in Soils
Saranac Lofts

GALLAGHER BASSETT | TECHNICAL SERVICES

		Sample ID	SS-04		SS-05		SS-06		SS-07		SS-08	
U= Not Detected ≥ value		Sample Date	2021-07-19		2021-07-19		2021-07-19		2021-07-19		2021-07-19	
All data in mg/Kg (ppm)		Dilution Factor	1		1		1		1		1	
Metals, 6010 and 7473	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aluminum	NA	NA	3,020		2,720		3,290		3,180		3,500	
Antimony	NA	NA	2.79	*U*	2.55	*U*	2.6	*U*	2.53	*U*	3.83	*U*
Arsenic	13	16	1.67	*U*	7.48		1.56	*U*	1.52	*U*	2.3	*U*
Barium	350	400	46.2		23.8		21.3		17.7		59.2	
Beryllium	7.2	72	0.056	*U*	0.051	*U*	0.052	*U*	0.051	*U*	0.077	*U*
Cadmium	2.5	4.3	0.335	*U*	0.306	*U*	0.312	*U*	0.303	*U*	0.459	*U*
Calcium	NA	NA	16,700	*B*	2,190	*B*	3,370	*B*	2,760	*B*	7,640	*B*
Chromium	30	180	9.06		9.52		5.07		3.89		7.53	
Cobalt	NA	NA	4.21		4.53		3.2		3.62		30.3	
Copper	50	270	17.3		37.7		5.24		4.88		10	
Iron	NA	NA	14,000		26,800		12,800		14,800		30,000	
Lead	63	400	72.3		60.4		27.2		18.9		4.79	
Magnesium	NA	NA	1,640		1,110		1,470		1,510		3,720	
Manganese	1,600	2,000	128		161		132		127		128	
Mercury	0.18	0.81	0.431		0.0554		0.0328		0.0303	*U*	0.0459	*U*
Nickel	30	310	4.8		7.4		3.22		3.69		56.7	
Potassium	NA	NA	430		373		332		392		945	
Selenium	3.9	180	2.79	*U*	2.55	*U*	2.6	*U*	2.53	*U*	3.83	*U*
Silver	2	180	0.558	*U*	0.511	*U*	0.52	*U*	0.506	*U*	0.766	*U*
Sodium	NA	NA	82.9		72.4		71		82.2		249	
Thallium	NA	NA	2.79	*U*	2.55	*U*	2.6	*U*	2.53	*U*	3.83	*U*
Vanadium	NA	NA	14.7		10.7		9.36		10.2		14.2	
Zinc	109	10,000	301		25		42.4		45.1		79.1	

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51   NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 4: TAL Metals in Soils

Saranac Lofts

		Sample ID	SS-09		SS-10		SS-11		SS-12		SS-13	
U= Not Detected ≥ value		Sample Date	2021-07-19		2021-07-19		2021-07-19		2021-07-19		2021-07-19	
All data in mg/Kg (ppm)		Dilution Factor	1		1		1		1		1	
Metals, 6010 and 7473	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aluminum	NA	NA	5,230		2,780		5,220		3,410		2,980	
Antimony	NA	NA	4.15	*U*	3.28	*U*	3.56	*U*	3.43	*U*	2.6	*U*
Arsenic	13	16	2.49	*U*	1.97	*U*	2.14	*U*	2.06	*U*	9.22	
Barium	350	400	42.6		60.2		45.8		31.2		23.9	
Beryllium	7.2	72	0.083	*U*	0.066	*U*	0.071	*U*	0.069	*U*	0.052	*U*
Cadmium	2.5	4.3	0.498	*U*	0.394	*U*	0.427	*U*	0.412	*U*	0.311	*U*
Calcium	NA	NA	4,570	*B*	3,510	*B*	6,890	*B*	4,570	*B*	2,510	*B*
Chromium	30	180	9.51		5.74		6.75		5.16		16.8	
Cobalt	NA	NA	4.99		3.18		4.8		5.58		5.81	
Copper	50	270	18		14.8		14.7		10.3		57	
Iron	NA	NA	12,900		14,800		15,600		14,400		44,300	
Lead	63	400	93		**555**		90.9		14.8		66.9	
Magnesium	NA	NA	2,310		1,330		1,660		2,470		1,060	
Manganese	1,600	2,000	145		135		163		163		244	
Mercury	0.18	0.81	0.0541		0.0562		0.257		0.0412	*U*	0.0883	
Nickel	30	310	7.18		3.99		5.29		6.45		10.1	
Potassium	NA	NA	397		325		416		966		374	
Selenium	3.9	180	4.15	*U*	3.28	*U*	3.56	*U*	3.43	*U*	2.6	*U*
Silver	2	180	3.84		0.656	*U*	0.712	*U*	0.686	*U*	0.519	*U*
Sodium	NA	NA	194		72.4		211		208		94.5	
Thallium	NA	NA	4.15	*U*	3.28	*U*	3.56	*U*	3.43	*U*	2.6	*U*
Vanadium	NA	NA	19.7		8.83		11.2		9.57		10.5	
Zinc	109	10,000	160		135		151		67.4		39.9	

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51   NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 5: Pesticides and PCBs in Soils
Saranac Lofts

GALLAGHER BASSETT | TECHNICAL SERVICES

		Sample ID	SB-01 8-11		SB-09 4-7		SB-12 0-4	
U= Not Detected ≥ value		Sample Date	2021-06-30		2021-06-30		2021-07-01	
All data in mg/Kg (ppm)		Dilution Factor	5		5		5	
Pesticides, 8081	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
4,4'-DDD	0.0033	13	0.00182	*U*	0.00252	*U*	0.00191	*U*
4,4'-DDE	0.0033	8.9	0.00182	*U*	0.00252	*U*	0.00191	*U*
4,4'-DDT	0.0033	7.9	0.00182	*U*	0.00252	*U*	0.00191	*U*
Aldrin	0.005	0.097	0.00182	*U*	0.00252	*U*	0.00191	*U*
alpha-BHC	0.02	0.48	0.00182	*U*	0.00252	*U*	0.00191	*U*
alpha-Chlordane	0.094	4.2	0.00182	*U*	0.00252	*U*	0.00191	*U*
beta-BHC	0.036	0.36	0.00182	*U*	0.00252	*U*	0.00191	*U*
Chlordane (total)	NA	NA	0.0364	*U*	0.0504	*U*	0.0382	*U*
delta-BHC	0.04	100	0.00182	*U*	0.00252	*U*	0.00191	*U*
Dieldrin	0.005	0.2	0.00182	*U*	0.00252	*U*	0.00191	*U*
Endosulfan I	2.4	24	0.00182	*U*	0.00252	*U*	0.00191	*U*
Endosulfan II	2.4	24	0.00182	*U*	0.00252	*U*	0.00191	*U*
Endosulfan sulfate	2.4	24	0.00182	*U*	0.00252	*U*	0.00191	*U*
Endrin	0.014	11	0.00182	*U*	0.00252	*U*	0.00191	*U*
Endrin aldehyde	NA	NA	0.00182	*U*	0.00252	*U*	0.00191	*U*
Endrin ketone	NA	NA	0.00182	*U*	0.00252	*U*	0.00191	*U*
gamma-BHC (Lindane)	0.1	1.3	0.00182	*U*	0.00252	*U*	0.00191	*U*
gamma-Chlordane	NA	NA	0.00182	*U*	0.00252	*U*	0.00191	*U*
Heptachlor	0.042	2.1	0.00182	*U*	0.00252	*U*	0.00191	*U*
Heptachlor Epoxide	NA	NA	0.00182	*U*	0.00252	*U*	0.00191	*U*
Methoxychlor	NA	NA	0.00909	*U*	0.0126	*U*	0.00955	*U*
Toxaphene	NA	NA	0.092	*U*	0.128	*U*	0.0967	*U*

		Sample ID	SB-01 8-11		SB-04 8-11		SB-09 4-7		SB-10 5-5.5		SB-12 0-4	
		Sample Date	2021-06-30		2021-06-30		2021-03-03		2021-03-03		2021-07-01	
		Dilution Factor	1		1		1		1		1	
PCBs, 8082	**UU SCO**	**RRU SCO**	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
Aroclor 1016	0.1	1.00	0.0184	*U*	0.0183	*U*	0.0255	*U*	0.026	*U*	0.0193	*U*
Aroclor 1221	0.1	1.00	0.0184	*U*	0.0183	*U*	0.0255	*U*	0.026	*U*	0.0193	*U*
Aroclor 1232	0.1	1.00	0.0184	*U*	0.0183	*U*	0.0255	*U*	0.026	*U*	0.0193	*U*
Aroclor 1242	0.1	1.00	0.0184	*U*	0.0183	*U*	0.0255	*U*	0.026	*U*	0.0193	*U*
Aroclor 1248	0.1	1.00	0.0184	*U*	0.0183	*U*	0.0255	*U*	0.026	*U*	0.0193	*U*
Aroclor 1254	0.1	1.00	0.0184	*U*	0.0183	*U*	0.0255	*U*	0.026	*U*	0.0193	*U*
Aroclor 1260	0.1	1.00	0.0184	*U*	0.0183	*U*	0.0255	*U*	0.026	*U*	0.0193	*U*
Aroclor, Total	0.1	1.00	0.0184	*U*	0.0183	*U*	0.0255	*U*	0.026	*U*	0.0193	*U*

Analyte Detected
Analyte Above UU SCO
Analyte Above RRU SCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51   NA = not available
Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

Table 6: VOCs in Soil Vapor
Saranac Lofts

Sample ID	SV-01		SV-02		SV-03		SV-04	
All data in µg/m³ Sample Date	2021-07-01		2021-07-01		2021-07-01		2021-07-01	
U= Not Detected ≥ value Dilution Factor	1		1		1		1	
VOCs, TO-15	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*	*Result*	*Qualifier*
1,1,1-Trichloroethane	1.09	U	1.09	U	1.09	U	1.09	U
1,1,2,2-Tetrachloroethane	1.37	U	1.37	U	1.37	U	1.37	U
1,1,2-Trichloroethane	1.09	U	1.09	U	1.09	U	1.09	U
1,1-Dichloroethane	0.809	U	0.809	U	0.809	U	0.809	U
1,1-Dichloroethene	0.793	U	0.793	U	0.793	U	0.793	U
1,2,4-Trichlorobenzene	1.48	U	1.48	U	1.48	U	1.48	U
1,2,4-Trimethylbenzene	32.7		30.5		33.2		29.1	
1,2-Dibromoethane	1.54	U	1.54	U	1.54	U	1.54	U
1,2-Dichlorobenzene	8.9		9.56		8.72		8.06	
1,2-Dichloroethane	0.809	U	0.809	U	0.809	U	0.809	U
1,2-Dichloropropane	0.924	U	0.924	U	0.924	U	0.924	U
1,3,5-Trimethylbenzene	7.28		6.64		7.52		6.69	
1,3-Butadiene	2.65		8.83		2.07		25.7	
1,3-Dichlorobenzene	1.2	U	1.2	U	1.2	U	1.2	U
1,4-Dichlorobenzene	8.18		8.78		8.3		7.64	
1,4-Dioxane	0.721	U	0.721	U	0.721	U	0.721	U
2,2,4-Trimethylpentane	6.91		6.35		7.99		10.1	
2-Butanone	13.1		13.2		16.9		41.9	
2-Hexanone	0.82	U	0.82	U	0.82	U	0.82	U
3-Chloropropene	0.626	U	0.626	U	0.626	U	0.626	U
4-Ethyltoluene	10.7		11.7		11.6		10.1	
4-Methyl-2-pentanone	2.05	U	2.05	U	2.05	U	2.05	U
Acetone	24		27.1		39.9		125	
Benzene	12.2		9.68		12.8		19.5	
Benzyl chloride	1.04	U	1.04	U	1.04	U	1.04	U
Bromodichloromethane	1.34	U	1.34	U	1.34	U	1.34	U
Bromoform	2.07	U	2.07	U	2.07	U	2.07	U
Bromomethane	0.777	U	0.777	U	0.777	U	0.777	U
Carbon disulfide	3.04		8.59		0.987		57	
Carbon tetrachloride	1.26	U	1.26	U	1.26	U	1.26	U
Chlorobenzene	15.3		14.9		15.8		24.6	
Chloroethane	0.528	U	0.528	U	0.528	U	0.528	U
Chloroform	9.77		1.52		6.79		5.76	
Chloromethane	0.413	U	0.413	U	0.413	U	0.56	
cis-1,2-Dichloroethene	0.793	U	0.793	U	0.793	U	0.793	U
cis-1,3-Dichloropropene	0.908	U	0.908	U	0.908	U	0.908	U
Cyclohexane	124		115		114		136	
Dibromochloromethane	1.7	U	1.7	U	1.7	U	1.7	U
Dichlorodifluoromethane	2.21		1.99		2.02		1.85	
Ethanol	290		209		239		237	
Ethyl Acetate	1.8	U	1.8	U	1.8	U	1.8	U
Ethylbenzene	36.4		26.1		37.3		49.1	
Freon-113	1.53	U	1.53	U	1.53	U	1.53	U
Freon-114	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	7.13		6.43		5.78		11.3	
Hexachlorobutadiene	2.13	U	2.13	U	2.13	U	2.13	U
Isopropanol	6.02		5.19		7.67		17.8	
Methyl tert butyl ether	0.721	U	0.721	U	0.721	U	0.721	U
Methylene chloride	1.96		1.74	U	3.75		1.74	U
n-Hexane	8.74		7.58		7.65		14.2	
o-Xylene	33.7		25.7		33.9		41.5	
p/m-Xylene	99.5		73.8		103		129	
Styrene	1.82		1.79		2.23		1.94	
Tertiary butyl Alcohol	3.94		9.16		8.43		7.58	
Tetrachloroethene	1.36	U	1.36	U	1.36	U	1.36	U
Tetrahydrofuran	12.4		8.08		13		11	
Toluene	74.2		58		82.2		89.3	
trans-1,2-Dichloroethene	0.793	U	0.793	U	0.793	U	0.793	U
trans-1,3-Dichloropropene	0.908	U	0.908	U	0.908	U	0.908	U
Trichloroethene	1.07	U	1.07	U	1.07	U	1.07	U
Trichlorofluoromethane	1.34		1.12	U	1.14		1.12	U
Vinyl bromide	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	0.511	U	0.511	U	0.511	U	0.511	U

Detected concentrations

Detected VOCs related to gasoline

Notes: NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank

APPENDIX H

Laboratory Reports

Technical Report

prepared for:

Gallagher Bassett - Poughkeepsie, NY
22 IBM Road, Suite 101
Poughkeepsie NY, 12601
Attention: James Hooker

Report Date: 07/14/2021
Client Project ID: 21003-0066
York Project (SDG) No.: 21G0093

Revision No. 1.0

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

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

Report Date: 07/14/2021
Client Project ID: 21003-0066
York Project (SDG) No.: 21G0093

Gallagher Bassett - Poughkeepsie, NY
22 IBM Road, Suite 101
Poughkeepsie NY, 12601
Attention: James Hooker

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on July 02, 2021 and listed below. The project was identified as your project: **21003-0066**.

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

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

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

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
21G0093-01	**SB-11 0-4**	**Soil**	**07/01/2021**	**07/02/2021**
21G0093-02	**SB-12 0-4**	**Soil**	**07/01/2021**	**07/02/2021**
21G0093-03	**SB-15 0-4**	**Soil**	**07/01/2021**	**07/02/2021**
21G0093-04	**SB-17 0-4**	**Soil**	**07/01/2021**	**07/02/2021**
21G0093-05	**SB-18 0-4**	**Soil**	**07/01/2021**	**07/02/2021**

General Notes for York Project (SDG) No.: 21G0093

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: Cassie L Mosher **Date:** 07/14/2021

Cassie L. Mosher
Laboratory Manager

YORK
ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID:	**SB-11 0-4**		**York Sample ID:**	**21G0093-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
83-32-9	Acenaphthene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
208-96-8	**Acenaphthylene**	**133**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
120-12-7	**Anthracene**	**284**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
56-55-3	**Benzo(a)anthracene**	**585**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
50-32-8	**Benzo(a)pyrene**	**487**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
205-99-2	**Benzo(b)fluoranthene**	**387**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
191-24-2	**Benzo(g,h,i)perylene**	**185**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
207-08-9	**Benzo(k)fluoranthene**	**371**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
218-01-9	**Chrysene**	**450**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
53-70-3	**Dibenzo(a,h)anthracene**	**98.3**	J	ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
206-44-0	**Fluoranthene**	**1080**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
86-73-7	**Fluorene**	**125**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
193-39-5	**Indeno(1,2,3-cd)pyrene**	**329**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
91-20-3	Naphthalene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
85-01-8	**Phenanthrene**	**656**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH
129-00-0	**Pyrene**	**754**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 01:56	KH

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*36.2 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*59.8 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*68.2 %*	*24-116*

Metals, Target Analyte

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

Sample Information

Client Sample ID: **SB-11 0-4** | **York Sample ID:** **21G0093-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**4610**		mg/kg dry	6.05	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-36-0	Antimony	ND		mg/kg dry	3.03	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-38-2	**Arsenic**	**2.59**		mg/kg dry	1.82	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-39-3	**Barium**	**46.9**		mg/kg dry	3.03	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.061	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-43-9	**Cadmium**	**0.745**		mg/kg dry	0.363	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-70-2	**Calcium**	**2190**	B	mg/kg dry	6.05	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-47-3	**Chromium**	**5.84**		mg/kg dry	0.605	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-48-4	**Cobalt**	**3.54**		mg/kg dry	0.484	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-50-8	**Copper**	**12.8**		mg/kg dry	2.42	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7439-89-6	**Iron**	**10800**		mg/kg dry	30.3	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7439-92-1	**Lead**	**79.6**		mg/kg dry	0.605	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7439-95-4	**Magnesium**	**1070**		mg/kg dry	6.05	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7439-96-5	**Manganese**	**69.3**		mg/kg dry	0.605	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-02-0	**Nickel**	**3.32**		mg/kg dry	1.21	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-09-7	**Potassium**	**284**		mg/kg dry	6.05	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7782-49-2	Selenium	ND		mg/kg dry	3.03	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-22-4	Silver	ND		mg/kg dry	0.605	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-23-5	**Sodium**	**78.1**		mg/kg dry	60.5	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-28-0	Thallium	ND		mg/kg dry	3.03	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-62-2	**Vanadium**	**10.7**		mg/kg dry	1.21	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM
7440-66-6	**Zinc**	**101**		mg/kg dry	3.03	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:14	EM

Sample Information

Client Sample ID: **SB-11 0-4** **York Sample ID:** **21G0093-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0495**		mg/kg dry	0.0363	1	EPA 7473 Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP	07/09/2021 19:41	07/09/2021 20:48	BR

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**82.6**		%	0.100	1	SM 2540G Certifications: CTDOH	07/12/2021 08:15	07/12/2021 17:02	ALH

Sample Information

Client Sample ID: **SB-12 0-4** **York Sample ID:** **21G0093-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

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	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0962	0.192	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0962	0.192	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH

Sample Information

Client Sample ID: **SB-12 0-4** | **York Sample ID:** **21G0093-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive | **Log-in Notes:** | **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0962	0.192	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0962	0.192	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0962	0.192	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0962	0.192	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0962	0.192	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0962	0.192	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH

Sample Information

Client Sample ID: **SB-12 0-4** | **York Sample ID:** **21G0093-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive | **Log-in Notes:** | **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-86-2	Acetophenone	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
62-53-3	Aniline	ND		mg/kg dry	0.193	0.385	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
120-12-7	**Anthracene**	**0.0915**	J	mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
92-87-5	Benzidine	ND		mg/kg dry	0.193	0.385	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
56-55-3	**Benzo(a)anthracene**	**0.248**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
50-32-8	**Benzo(a)pyrene**	**0.217**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
205-99-2	**Benzo(b)fluoranthene**	**0.194**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
191-24-2	**Benzo(g,h,i)perylene**	**0.108**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
207-08-9	**Benzo(k)fluoranthene**	**0.191**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.0962	0.192	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
86-74-8	**Carbazole**	**0.0723**	J	mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
218-01-9	**Chrysene**	**0.239**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH

Sample Information

Client Sample ID: SB-12 0-4 **York Sample ID:** 21G0093-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
206-44-0	**Fluoranthene**	**0.559**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
86-73-7	Fluorene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.0969**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
78-59-1	Isophorone	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
85-01-8	**Phenanthrene**	**0.392**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
108-95-2	Phenol	ND		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH
129-00-0	**Pyrene**	**0.385**		mg/kg dry	0.0482	0.0962	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 11:57	KH

	Surrogate Recoveries	Result		Acceptance Range
367-12-4	*Surrogate: SURR: 2-Fluorophenol*	*87.7 %*		*20-108*
4165-62-2	*Surrogate: SURR: Phenol-d5*	*83.1 %*		*23-114*
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*123 %*	S-08	*22-108*

YORK ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID: **SB-12 0-4** **York Sample ID:** **21G0093-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*75.8 %*			*21-113*						
118-79-6	*Surrogate: SURR: 2,4,6-Tribromophenol*	*115 %*	S-08		*19-110*						
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*82.8 %*			*24-116*						

Pesticides, 8081 target list

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

Sample Prepared by Method: EPA 3550C

CAS 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		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
72-55-9	4,4'-DDE	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
50-29-3	4,4'-DDT	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
309-00-2	Aldrin	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
319-84-6	alpha-BHC	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
5103-71-9	alpha-Chlordane	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	07/07/2021 13:19	07/08/2021 18:26	CM
319-85-7	beta-BHC	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
57-74-9	Chlordane, total	ND		mg/kg dry	0.0382	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
319-86-8	delta-BHC	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
60-57-1	Dieldrin	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854	07/07/2021 13:19	07/08/2021 18:26	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
72-20-8	Endrin	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	07/07/2021 13:19	07/08/2021 18:26	CM

Sample Information

Client Sample ID: **SB-12 0-4** | **York Sample ID:** **21G0093-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Pesticides, 8081 target list

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

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-44-8	Heptachlor	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00191	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00955	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.0967	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:26	CM

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*64.0 %*	*30-150*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*82.5 %*	*30-150*

Polychlorinated Biphenyls (PCB)

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

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 16:04	BJ
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 16:04	BJ
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 16:04	BJ
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 16:04	BJ
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 16:04	BJ
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 16:04	BJ
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 16:04	BJ
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications:	07/07/2021 13:19	07/08/2021 16:04	BJ

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*90.0 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*43.5 %*	*30-140*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**4720**		mg/kg dry	5.81	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM

Sample Information

Client Sample ID: **SB-12 0-4** **York Sample ID:** **21G0093-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	2.90	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-38-2	**Arsenic**	**3.72**		mg/kg dry	1.74	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-39-3	**Barium**	**81.5**		mg/kg dry	2.90	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.058	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-43-9	**Cadmium**	**0.517**		mg/kg dry	0.348	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-70-2	**Calcium**	**2060**	B	mg/kg dry	5.81	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-47-3	**Chromium**	**6.36**		mg/kg dry	0.581	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-48-4	**Cobalt**	**6.00**		mg/kg dry	0.465	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-50-8	**Copper**	**16.6**		mg/kg dry	2.32	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7439-89-6	**Iron**	**9420**		mg/kg dry	29.0	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7439-92-1	**Lead**	**30.9**		mg/kg dry	0.581	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7439-95-4	**Magnesium**	**1160**		mg/kg dry	5.81	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7439-96-5	**Manganese**	**112**		mg/kg dry	0.581	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-02-0	**Nickel**	**8.88**		mg/kg dry	1.16	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-09-7	**Potassium**	**482**		mg/kg dry	5.81	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7782-49-2	Selenium	ND		mg/kg dry	2.90	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-22-4	Silver	ND		mg/kg dry	0.581	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-23-5	**Sodium**	**176**		mg/kg dry	58.1	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-28-0	Thallium	ND		mg/kg dry	2.90	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-62-2	**Vanadium**	**13.0**		mg/kg dry	1.16	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM
7440-66-6	**Zinc**	**43.8**		mg/kg dry	2.90	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:17	EM

Mercury by 7473 **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: **SB-12 0-4** **York Sample ID:** **21G0093-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0422**		mg/kg dry	0.0348	1	EPA 7473 Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP	07/09/2021 19:41	07/09/2021 20:55	BR

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**86.1**		%	0.100	1	SM 2540G Certifications: CTDOH	07/12/2021 08:15	07/12/2021 17:02	ALH

Sample Information

Client Sample ID: **SB-15 0-4** **York Sample ID:** **21G0093-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, PAH Target List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
83-32-9	Acenaphthene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
120-12-7	Anthracene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
218-01-9	Chrysene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	52.3	104	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:28	KH

Sample Information

Client Sample ID:	SB-15 0-4	York Sample ID:	21G0093-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
206-44-0	**Fluoranthene**	**57.6**	J	ug/kg dry	52.3	104	2	EPA 8270D	07/07/2021 13:21	07/09/2021 12:28	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
86-73-7	Fluorene	ND		ug/kg dry	52.3	104	2	EPA 8270D	07/07/2021 13:21	07/09/2021 12:28	KH
								Certifications: NELAC-NY10854,NJDEP,PADEP			
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	52.3	104	2	EPA 8270D	07/07/2021 13:21	07/09/2021 12:28	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
91-20-3	Naphthalene	ND		ug/kg dry	52.3	104	2	EPA 8270D	07/07/2021 13:21	07/09/2021 12:28	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
85-01-8	Phenanthrene	ND		ug/kg dry	52.3	104	2	EPA 8270D	07/07/2021 13:21	07/09/2021 12:28	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
129-00-0	Pyrene	ND		ug/kg dry	52.3	104	2	EPA 8270D	07/07/2021 13:21	07/09/2021 12:28	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result		Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*114 %*	S-08	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*68.8 %*		*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*74.2 %*		*24-116*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**6990**		mg/kg dry	6.35	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-36-0	Antimony	ND		mg/kg dry	3.17	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	Arsenic	ND		mg/kg dry	1.90	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**46.3**		mg/kg dry	3.17	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/kg dry	0.063	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	**Cadmium**	**0.569**		mg/kg dry	0.381	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	**Calcium**	**17400**	B	mg/kg dry	6.35	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	**Chromium**	**5.90**		mg/kg dry	0.635	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-48-4	**Cobalt**	**5.78**		mg/kg dry	0.508	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-50-8	**Copper**	**15.3**		mg/kg dry	2.54	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-89-6	**Iron**	**10900**		mg/kg dry	31.7	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: **SB-15 0-4** **York Sample ID:** **21G0093-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**44.6**		mg/kg dry	0.635	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**3350**		mg/kg dry	6.35	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-96-5	**Manganese**	**104**		mg/kg dry	0.635	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	**Nickel**	**7.71**		mg/kg dry	1.27	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**416**		mg/kg dry	6.35	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	3.17	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.635	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**139**		mg/kg dry	63.5	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	3.17	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**12.1**		mg/kg dry	1.27	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**48.2**		mg/kg dry	3.17	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:20	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0717**		mg/kg dry	0.0381	1	EPA 7473	07/09/2021 19:41	07/09/2021 21:04	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**78.8**		%	0.100	1	SM 2540G	07/12/2021 08:15	07/12/2021 17:02	ALH
							Certifications: CTDOH			

Sample Information

Client Sample ID: SB-17 0-4 **York Sample ID:** 21G0093-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
83-32-9	Acenaphthene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
120-12-7	Anthracene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
56-55-3	**Benzo(a)anthracene**	**58.3**	J	ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
191-24-2	**Benzo(g,h,i)perylene**	**55.1**	J	ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
218-01-9	**Chrysene**	**65.5**	J	ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
206-44-0	**Fluoranthene**	**97.5**	J	ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
86-73-7	Fluorene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
91-20-3	Naphthalene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
85-01-8	**Phenanthrene**	**68.7**	J	ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH
129-00-0	**Pyrene**	**129**		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/07/2021 17:37	KH

	Surrogate Recoveries	Result		Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*61.3 %*		*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*61.8 %*		*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*142 %*	S-08	*24-116*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: **SB-17 0-4** | **York Sample ID:** **21G0093-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**3630**		mg/kg dry	6.09	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-36-0	Antimony	ND		mg/kg dry	3.05	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	Arsenic	ND		mg/kg dry	1.83	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**21.2**		mg/kg dry	3.05	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/kg dry	0.061	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	**Cadmium**	**0.596**		mg/kg dry	0.366	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	**Calcium**	**3360**	B	mg/kg dry	6.09	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	**Chromium**	**7.34**		mg/kg dry	0.609	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-48-4	**Cobalt**	**3.12**		mg/kg dry	0.487	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-50-8	**Copper**	**5.52**		mg/kg dry	2.44	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-89-6	**Iron**	**12000**		mg/kg dry	30.5	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**33.9**		mg/kg dry	0.609	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**1060**		mg/kg dry	6.09	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-96-5	**Manganese**	**84.2**		mg/kg dry	0.609	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	**Nickel**	**1.97**		mg/kg dry	1.22	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**328**		mg/kg dry	6.09	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	3.05	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.609	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**99.1**		mg/kg dry	60.9	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	3.05	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**10.3**		mg/kg dry	1.22	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**43.1**		mg/kg dry	3.05	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:30	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID:	**SB-17 0-4**		**York Sample ID:**	**21G0093-04**
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0366	1	EPA 7473 Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP	07/09/2021 19:41	07/09/2021 21:13	BR

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**82.1**		%	0.100	1	SM 2540G Certifications: CTDOH	07/12/2021 08:15	07/12/2021 17:02	ALH

Sample Information

Client Sample ID:	**SB-18 0-4**		**York Sample ID:**	**21G0093-05**
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
83-32-9	Acenaphthene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
120-12-7	Anthracene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
218-01-9	Chrysene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH

Sample Information

Client Sample ID:	**SB-18 0-4**			**York Sample ID:**	**21G0093-05**
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received	
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021	

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
206-44-0	Fluoranthene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
86-73-7	Fluorene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
91-20-3	Naphthalene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
85-01-8	Phenanthrene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH
129-00-0	Pyrene	ND		ug/kg dry	58.6	117	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:21	07/09/2021 12:59	KH

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*77.9 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*45.8 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*59.8 %*	*24-116*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**6600**		mg/kg dry	7.15	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM
7440-36-0	Antimony	ND		mg/kg dry	3.57	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM
7440-38-2	**Arsenic**	**4.67**		mg/kg dry	2.14	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM
7440-39-3	**Barium**	**115**		mg/kg dry	3.57	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM
7440-41-7	**Beryllium**	**0.519**		mg/kg dry	0.071	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM
7440-43-9	**Cadmium**	**0.890**		mg/kg dry	0.429	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM
7440-70-2	**Calcium**	**2440**	B	mg/kg dry	7.15	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM
7440-47-3	**Chromium**	**10.7**		mg/kg dry	0.715	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM
7440-48-4	**Cobalt**	**5.57**		mg/kg dry	0.572	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM
7440-50-8	**Copper**	**22.2**		mg/kg dry	2.86	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 17:28	07/12/2021 19:33	EM

YORK ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID: **SB-18 0-4** **York Sample ID:** **21G0093-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0093	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	**Iron**	**9380**		mg/kg dry	35.7	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-92-1	**Lead**	**293**		mg/kg dry	0.715	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-95-4	**Magnesium**	**634**		mg/kg dry	7.15	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-96-5	**Manganese**	**574**		mg/kg dry	0.715	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-02-0	**Nickel**	**7.43**		mg/kg dry	1.43	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-09-7	**Potassium**	**646**		mg/kg dry	7.15	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7782-49-2	Selenium	ND		mg/kg dry	3.57	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-22-4	Silver	ND		mg/kg dry	0.715	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-23-5	**Sodium**	**106**		mg/kg dry	71.5	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-28-0	Thallium	ND		mg/kg dry	3.57	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-62-2	**Vanadium**	**18.0**		mg/kg dry	1.43	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-66-6	**Zinc**	**254**		mg/kg dry	3.57	1	EPA 6010D	07/07/2021 17:28	07/12/2021 19:33	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0686**		mg/kg dry	0.0429	1	EPA 7473	07/09/2021 19:41	07/09/2021 21:21	BR
							Certifications:	CTDOH,NJDEP,NELAC-NY10854,PADEP		

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	** % Solids**	**70.0**		%	0.100	1	SM 2540G	07/12/2021 08:15	07/12/2021 17:02	ALH
							Certifications:	CTDOH		

Analytical Batch Summary

Batch ID: BG10243 **Preparation Method:** EPA 3546 SVOA **Prepared By:** S_K

YORK Sample ID	Client Sample ID	Preparation Date
21G0093-04	SB-17 0-4	07/07/21
BG10243-BLK1	Blank	07/07/21
BG10243-BS1	LCS	07/07/21
BG10243-MS1	Matrix Spike	07/07/21
BG10243-MSD1	Matrix Spike Dup	07/07/21

Batch ID: BG10274 **Preparation Method:** EPA 3550C **Prepared By:** MAM

YORK Sample ID	Client Sample ID	Preparation Date
21G0093-02	SB-12 0-4	07/07/21
21G0093-02	SB-12 0-4	07/07/21
BG10274-BLK1	Blank	07/07/21
BG10274-BLK2	Blank	07/07/21
BG10274-BS1	LCS	07/07/21
BG10274-BS2	LCS	07/07/21
BG10274-MS2	Matrix Spike	07/07/21
BG10274-MSD2	Matrix Spike Dup	07/07/21

Batch ID: BG10275 **Preparation Method:** EPA 3546 SVOA **Prepared By:** EMS

YORK Sample ID	Client Sample ID	Preparation Date
21G0093-01	SB-11 0-4	07/07/21
21G0093-02	SB-12 0-4	07/07/21
21G0093-03	SB-15 0-4	07/07/21
21G0093-05	SB-18 0-4	07/07/21
BG10275-BLK1	Blank	07/07/21
BG10275-BS1	LCS	07/07/21
BG10275-MS1	Matrix Spike	07/07/21
BG10275-MSD1	Matrix Spike Dup	07/07/21

Batch ID: BG10309 **Preparation Method:** EPA 3050B **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date
21G0093-01	SB-11 0-4	07/07/21
21G0093-02	SB-12 0-4	07/07/21
21G0093-03	SB-15 0-4	07/07/21
21G0093-04	SB-17 0-4	07/07/21
21G0093-05	SB-18 0-4	07/07/21
BG10309-BLK1	Blank	07/07/21
BG10309-DUP1	Duplicate	07/07/21
BG10309-MS1	Matrix Spike	07/07/21
BG10309-PS1	Post Spike	07/07/21
BG10309-SRM1	Reference	07/07/21

Batch ID: BG10454 **Preparation Method:** EPA 7473 soil **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date
21G0093-01	SB-11 0-4	07/09/21
21G0093-02	SB-12 0-4	07/09/21
21G0093-03	SB-15 0-4	07/09/21
21G0093-04	SB-17 0-4	07/09/21
21G0093-05	SB-18 0-4	07/09/21
BG10454-BLK1	Blank	07/09/21
BG10454-DUP1	Duplicate	07/09/21
BG10454-MS1	Matrix Spike	07/09/21
BG10454-SRM1	Reference	07/09/21

Batch ID: BG10467 **Preparation Method:** % Solids Prep **Prepared By:** ALH

YORK Sample ID	Client Sample ID	Preparation Date
21G0093-01	SB-11 0-4	07/12/21
21G0093-02	SB-12 0-4	07/12/21
21G0093-03	SB-15 0-4	07/12/21
21G0093-04	SB-17 0-4	07/12/21
21G0093-05	SB-18 0-4	07/12/21
BG10467-DUP1	Duplicate	07/12/21

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10243 - EPA 3546 SVOA											
Blank (BG10243-BLK1)							Prepared & Analyzed: 07/07/2021				
2-Methylnaphthalene	ND	41.6	ug/kg wet								
Acenaphthene	ND	41.6	"								
Acenaphthylene	ND	41.6	"								
Anthracene	ND	41.6	"								
Benzo(a)anthracene	ND	41.6	"								
Benzo(a)pyrene	ND	41.6	"								
Benzo(b)fluoranthene	ND	41.6	"								
Benzo(g,h,i)perylene	ND	41.6	"								
Benzo(k)fluoranthene	ND	41.6	"								
Chrysene	ND	41.6	"								
Dibenzo(a,h)anthracene	ND	41.6	"								
Fluoranthene	ND	41.6	"								
Fluorene	ND	41.6	"								
Indeno(1,2,3-cd)pyrene	ND	41.6	"								
Naphthalene	ND	41.6	"								
Phenanthrene	ND	41.6	"								
Pyrene	ND	41.6	"								
Surrogate: SURR: Nitrobenzene-d5	*546*		*"*	*831*		*65.8*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*544*		*"*	*831*		*65.5*	*21-113*				
Surrogate: SURR: Terphenyl-d14	*791*		*"*	*831*		*95.3*	*24-116*				
LCS (BG10243-BS1)							Prepared & Analyzed: 07/07/2021				
2-Methylnaphthalene	606	41.6	ug/kg wet	831		73.0	16-127				
Acenaphthene	512	41.6	"	831		61.6	17-124				
Acenaphthylene	526	41.6	"	831		63.3	16-124				
Anthracene	575	41.6	"	831		69.2	24-124				
Benzo(a)anthracene	585	41.6	"	831		70.5	25-134				
Benzo(a)pyrene	590	41.6	"	831		71.0	29-144				
Benzo(b)fluoranthene	574	41.6	"	831		69.1	20-151				
Benzo(g,h,i)perylene	456	41.6	"	831		54.9	10-153				
Benzo(k)fluoranthene	562	41.6	"	831		67.7	10-148				
Chrysene	620	41.6	"	831		74.6	24-116				
Dibenzo(a,h)anthracene	517	41.6	"	831		62.2	17-147				
Fluoranthene	570	41.6	"	831		68.6	36-125				
Fluorene	572	41.6	"	831		68.9	16-130				
Indeno(1,2,3-cd)pyrene	526	41.6	"	831		63.4	10-155				
Naphthalene	541	41.6	"	831		65.1	20-121				
Phenanthrene	562	41.6	"	831		67.6	24-123				
Pyrene	586	41.6	"	831		70.6	24-132				
Surrogate: SURR: Nitrobenzene-d5	*536*		*"*	*831*		*64.6*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*537*		*"*	*831*		*64.7*	*21-113*				
Surrogate: SURR: Terphenyl-d14	*794*		*"*	*831*		*95.6*	*24-116*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10243 - EPA 3546 SVOA											
Matrix Spike (BG10243-MS1)	*Source sample: 21G0097-09 (Matrix Spike)						Prepared & Analyzed: 07/07/2021				
2-Methylnaphthalene	868	98.0	ug/kg dry	980	164	71.9	10-143				
Acenaphthene	614	98.0	"	980	ND	62.6	13-133				
Acenaphthylene	607	98.0	"	980	ND	62.0	25-125				
Anthracene	673	98.0	"	980	ND	68.7	27-128				
Benzo(a)anthracene	713	98.0	"	980	ND	72.8	20-147				
Benzo(a)pyrene	602	98.0	"	980	ND	61.4	18-153				
Benzo(b)fluoranthene	637	98.0	"	980	ND	65.0	10-163				
Benzo(g,h,i)perylene	659	98.0	"	980	ND	67.3	10-157				
Benzo(k)fluoranthene	615	98.0	"	980	ND	62.8	10-157				
Chrysene	748	98.0	"	980	ND	76.4	18-133				
Dibenzo(a,h)anthracene	722	98.0	"	980	ND	73.7	10-146				
Fluoranthene	697	98.0	"	980	ND	71.2	10-155				
Fluorene	658	98.0	"	980	ND	67.1	12-150				
Indeno(1,2,3-cd)pyrene	767	98.0	"	980	ND	78.3	10-155				
Naphthalene	684	98.0	"	980	ND	69.8	15-132				
Phenanthrene	676	98.0	"	980	ND	69.0	10-151				
Pyrene	737	98.0	"	980	ND	75.3	13-148				
Surrogate: SURR: Nitrobenzene-d5	*617*		*"*	*980*		*63.0*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*619*		*"*	*980*		*63.2*	*21-113*				
Surrogate: SURR: Terphenyl-d14	*986*		*"*	*980*		*101*	*24-116*				
Matrix Spike Dup (BG10243-MSD1)	*Source sample: 21G0097-09 (Matrix Spike Dup)						Prepared & Analyzed: 07/07/2021				
2-Methylnaphthalene	889	98.0	ug/kg dry	980	164	74.1	10-143		2.41	30	
Acenaphthene	586	98.0	"	980	ND	59.8	13-133		4.57	30	
Acenaphthylene	599	98.0	"	980	ND	61.1	25-125		1.43	30	
Anthracene	646	98.0	"	980	ND	65.9	27-128		4.16	30	
Benzo(a)anthracene	668	98.0	"	980	ND	68.2	20-147		6.47	30	
Benzo(a)pyrene	603	98.0	"	980	ND	61.6	18-153		0.260	30	
Benzo(b)fluoranthene	597	98.0	"	980	ND	61.0	10-163		6.48	30	
Benzo(g,h,i)perylene	644	98.0	"	980	ND	65.8	10-157		2.29	30	
Benzo(k)fluoranthene	602	98.0	"	980	ND	61.4	10-157		2.19	30	
Chrysene	715	98.0	"	980	ND	73.0	18-133		4.50	30	
Dibenzo(a,h)anthracene	677	98.0	"	980	ND	69.1	10-146		6.39	30	
Fluoranthene	701	98.0	"	980	ND	71.5	10-155		0.448	30	
Fluorene	661	98.0	"	980	ND	67.4	12-150		0.476	30	
Indeno(1,2,3-cd)pyrene	690	98.0	"	980	ND	70.4	10-155		10.7	30	
Naphthalene	677	98.0	"	980	ND	69.1	15-132		1.04	30	
Phenanthrene	649	98.0	"	980	ND	66.2	10-151		4.14	30	
Pyrene	679	98.0	"	980	ND	69.3	13-148		8.30	30	
Surrogate: SURR: Nitrobenzene-d5	*610*		*"*	*980*		*62.2*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*598*		*"*	*980*		*61.0*	*21-113*				
Surrogate: SURR: Terphenyl-d14	*905*		*"*	*980*		*92.4*	*24-116*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

Blank (BG10275-BLK1) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units
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	"
2,4-Dinitrotoluene	ND	0.0416	"
2,6-Dinitrotoluene	ND	0.0416	"
2-Chloronaphthalene	ND	0.0416	"
2-Chlorophenol	ND	0.0416	"
2-Methylnaphthalene	ND	41.6	ug/kg wet
2-Methylnaphthalene	ND	0.0416	mg/kg wet
2-Methylphenol	ND	0.0416	"
2-Nitroaniline	ND	0.0830	"
2-Nitrophenol	ND	0.0416	"
3- & 4-Methylphenols	ND	0.0416	"
3,3-Dichlorobenzidine	ND	0.0416	"
3-Nitroaniline	ND	0.0830	"
4,6-Dinitro-2-methylphenol	ND	0.0830	"
4-Bromophenyl phenyl ether	ND	0.0416	"
4-Chloro-3-methylphenol	ND	0.0416	"
4-Chloroaniline	ND	0.0416	"
4-Chlorophenyl phenyl ether	ND	0.0416	"
4-Nitroaniline	ND	0.0830	"
4-Nitrophenol	ND	0.0830	"
Acenaphthene	ND	41.6	ug/kg wet
Acenaphthene	ND	0.0416	mg/kg wet
Acenaphthylene	ND	41.6	ug/kg wet
Acenaphthylene	ND	0.0416	mg/kg wet
Acetophenone	ND	0.0416	"
Aniline	ND	0.166	"
Anthracene	ND	41.6	ug/kg wet
Anthracene	ND	0.0416	mg/kg wet
Atrazine	ND	0.0416	"
Benzaldehyde	ND	0.0416	"
Benzidine	ND	0.166	"
Benzo(a)anthracene	ND	41.6	ug/kg wet
Benzo(a)anthracene	ND	0.0416	mg/kg wet
Benzo(a)pyrene	ND	41.6	ug/kg wet
Benzo(a)pyrene	ND	0.0416	mg/kg wet
Benzo(b)fluoranthene	ND	41.6	ug/kg wet
Benzo(b)fluoranthene	ND	0.0416	mg/kg wet
Benzo(g,h,i)perylene	ND	41.6	ug/kg wet
Benzo(g,h,i)perylene	ND	0.0416	mg/kg wet

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10275 - EPA 3546 SVOA											
Blank (BG10275-BLK1)								Prepared: 07/07/2021 Analyzed: 07/08/2021			
Benzo(k)fluoranthene	ND	41.6	ug/kg wet								
Benzo(k)fluoranthene	ND	0.0416	mg/kg wet								
Benzoic acid	ND	0.0416	"								
Benzyl alcohol	ND	0.0416	"								
Benzyl butyl phthalate	ND	0.0416	"								
Bis(2-chloroethoxy)methane	ND	0.0416	"								
Bis(2-chloroethyl)ether	ND	0.0416	"								
Bis(2-chloroisopropyl)ether	ND	0.0416	"								
Bis(2-ethylhexyl)phthalate	ND	0.0416	"								
Caprolactam	ND	0.0830	"								
Carbazole	ND	0.0416	"								
Chrysene	ND	0.0416	"								
Chrysene	ND	41.6	ug/kg wet								
Dibenzo(a,h)anthracene	ND	0.0416	mg/kg wet								
Dibenzo(a,h)anthracene	ND	41.6	ug/kg wet								
Dibenzofuran	ND	0.0416	mg/kg wet								
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	"								
Fluoranthene	ND	41.6	ug/kg wet								
Fluorene	ND	0.0416	mg/kg wet								
Fluorene	ND	41.6	ug/kg wet								
Hexachlorobenzene	ND	0.0416	mg/kg wet								
Hexachlorobutadiene	ND	0.0416	"								
Hexachlorocyclopentadiene	ND	0.0416	"								
Hexachloroethane	ND	0.0416	"								
Indeno(1,2,3-cd)pyrene	ND	0.0416	"								
Indeno(1,2,3-cd)pyrene	ND	41.6	ug/kg wet								
Isophorone	ND	0.0416	mg/kg wet								
Naphthalene	ND	0.0416	"								
Naphthalene	ND	41.6	ug/kg wet								
Nitrobenzene	ND	0.0416	mg/kg wet								
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	"								
Phenanthrene	ND	41.6	ug/kg wet								
Phenol	ND	0.0416	mg/kg wet								
Pyrene	ND	0.0416	"								
Pyrene	ND	41.6	ug/kg wet								
Surrogate: SURR: 2-Fluorophenol	*1.29*		*mg/kg wet*	*1.66*		*77.8*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.24*		*"*	*1.66*		*74.5*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*772*		*ug/kg wet*	*831*		*93.0*	*22-108*				
Surrogate: SURR: Nitrobenzene-d5	*0.772*		*mg/kg wet*	*0.831*		*93.0*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.638*		*"*	*0.831*		*76.8*	*21-113*				
Surrogate: SURR: 2-Fluorobiphenyl	*638*		*ug/kg wet*	*831*		*76.8*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.64*		*mg/kg wet*	*1.66*		*98.7*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*696*		*ug/kg wet*	*831*		*83.8*	*24-116*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10275 - EPA 3546 SVOA											
Blank (BG10275-BLK1)								Prepared: 07/07/2021 Analyzed: 07/08/2021			
Surrogate: SURR: Terphenyl-d14	*0.696*		*mg/kg wet*	*0.831*		*83.8*	*24-116*				
LCS (BG10275-BS1)								Prepared: 07/07/2021 Analyzed: 07/08/2021			
1,1-Biphenyl	0.645	0.0416	mg/kg wet	0.831		77.6	18-111				
1,2,4,5-Tetrachlorobenzene	0.667	0.0830	"	0.831		80.3	21-131				
1,2,4-Trichlorobenzene	0.670	0.0416	"	0.831		80.6	10-140				
1,2-Dichlorobenzene	0.586	0.0416	"	0.831		70.5	34-108				
1,2-Diphenylhydrazine (as Azobenzene)	0.709	0.0416	"	0.831		85.4	17-137				
1,3-Dichlorobenzene	0.582	0.0416	"	0.831		70.0	33-110				
1,4-Dichlorobenzene	0.590	0.0416	"	0.831		71.0	32-104				
2,3,4,6-Tetrachlorophenol	0.742	0.0830	"	0.831		89.3	30-130				
2,4,5-Trichlorophenol	0.693	0.0416	"	0.831		83.4	27-118				
2,4,6-Trichlorophenol	0.700	0.0416	"	0.831		84.3	31-120				
2,4-Dichlorophenol	0.733	0.0416	"	0.831		88.2	20-127				
2,4-Dimethylphenol	0.758	0.0416	"	0.831		91.3	14-132				
2,4-Dinitrophenol	0.911	0.0830	"	0.831		110	10-171				
2,4-Dinitrotoluene	0.772	0.0416	"	0.831		92.9	34-131				
2,6-Dinitrotoluene	0.782	0.0416	"	0.831		94.2	31-128				
2-Chloronaphthalene	0.619	0.0416	"	0.831		74.5	31-117				
2-Chlorophenol	0.651	0.0416	"	0.831		78.4	33-113				
2-Methylnaphthalene	726	41.6	ug/kg wet	831		87.4	16-127				
2-Methylnaphthalene	0.726	0.0416	mg/kg wet	0.831		87.4	12-138				
2-Methylphenol	0.671	0.0416	"	0.831		80.8	10-136				
2-Nitroaniline	0.755	0.0830	"	0.831		90.9	27-132				
2-Nitrophenol	0.844	0.0416	"	0.831		102	17-129				
3- & 4-Methylphenols	0.609	0.0416	"	0.831		73.3	29-103				
3,3-Dichlorobenzidine	1.31	0.0416	"	0.831		158	22-149	High Bias			
3-Nitroaniline	0.708	0.0830	"	0.831		85.2	20-133				
4,6-Dinitro-2-methylphenol	0.934	0.0830	"	0.831		112	10-143				
4-Bromophenyl phenyl ether	0.716	0.0416	"	0.831		86.2	29-120				
4-Chloro-3-methylphenol	0.768	0.0416	"	0.831		92.5	24-129				
4-Chloroaniline	0.638	0.0416	"	0.831		76.8	10-132				
4-Chlorophenyl phenyl ether	0.642	0.0416	"	0.831		77.3	27-124				
4-Nitroaniline	0.672	0.0830	"	0.831		80.9	16-128				
4-Nitrophenol	0.721	0.0830	"	0.831		86.8	10-141				
Acenaphthene	650	41.6	ug/kg wet	831		78.3	17-124				
Acenaphthene	0.650	0.0416	mg/kg wet	0.831		78.3	30-121				
Acenaphthylene	0.609	0.0416	"	0.831		73.3	30-115				
Acenaphthylene	609	41.6	ug/kg wet	831		73.3	16-124				
Acetophenone	0.670	0.0416	mg/kg wet	0.831		80.7	20-112				
Aniline	0.631	0.166	"	0.831		76.0	10-119				
Anthracene	0.693	0.0416	"	0.831		83.5	34-118				
Anthracene	693	41.6	ug/kg wet	831		83.5	24-124				
Atrazine	0.857	0.0416	mg/kg wet	0.831		103	26-112				
Benzaldehyde	0.649	0.0416	"	0.831		78.2	21-100				
Benzo(a)anthracene	0.672	0.0416	"	0.831		80.9	32-122				
Benzo(a)anthracene	672	41.6	ug/kg wet	831		80.9	25-134				
Benzo(a)pyrene	0.735	0.0416	mg/kg wet	0.831		88.4	29-133				
Benzo(a)pyrene	735	41.6	ug/kg wet	831		88.4	29-144				
Benzo(b)fluoranthene	0.746	0.0416	mg/kg wet	0.831		89.8	25-133				
Benzo(b)fluoranthene	746	41.6	ug/kg wet	831		89.8	20-151				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10275 - EPA 3546 SVOA											
LCS (BG10275-BS1)								Prepared: 07/07/2021 Analyzed: 07/08/2021			
Benzo(g,h,i)perylene	0.651	0.0416	mg/kg wet	0.831		78.4	10-143				
Benzo(g,h,i)perylene	651	41.6	ug/kg wet	831		78.4	10-153				
Benzo(k)fluoranthene	0.621	0.0416	mg/kg wet	0.831		74.7	25-128				
Benzo(k)fluoranthene	621	41.6	ug/kg wet	831		74.7	10-148				
Benzoic acid	0.864	0.0416	mg/kg wet	0.831		104	10-140				
Benzyl alcohol	0.675	0.0416	"	0.831		81.3	30-115				
Benzyl butyl phthalate	0.762	0.0416	"	0.831		91.7	26-126				
Bis(2-chloroethoxy)methane	0.691	0.0416	"	0.831		83.2	19-132				
Bis(2-chloroethyl)ether	0.611	0.0416	"	0.831		73.5	19-125				
Bis(2-chloroisopropyl)ether	0.640	0.0416	"	0.831		77.0	20-135				
Bis(2-ethylhexyl)phthalate	0.863	0.0416	"	0.831		104	10-155				
Caprolactam	0.979	0.0830	"	0.831		118	10-127				
Carbazole	0.660	0.0416	"	0.831		79.4	35-123				
Chrysene	0.631	0.0416	"	0.831		76.0	32-123				
Chrysene	631	41.6	ug/kg wet	831		76.0	24-116				
Dibenzo(a,h)anthracene	0.859	0.0416	mg/kg wet	0.831		103	10-136				
Dibenzo(a,h)anthracene	859	41.6	ug/kg wet	831		103	17-147				
Dibenzofuran	0.627	0.0416	mg/kg wet	0.831		75.5	29-121				
Diethyl phthalate	0.575	0.0416	"	0.831		69.2	34-116				
Dimethyl phthalate	0.626	0.0416	"	0.831		75.3	35-124				
Di-n-butyl phthalate	0.741	0.0416	"	0.831		89.2	31-116				
Di-n-octyl phthalate	0.941	0.0416	"	0.831		113	26-136				
Fluoranthene	0.659	0.0416	"	0.831		79.3	33-122				
Fluoranthene	659	41.6	ug/kg wet	831		79.3	36-125				
Fluorene	0.654	0.0416	mg/kg wet	0.831		78.8	29-123				
Fluorene	654	41.6	ug/kg wet	831		78.8	16-130				
Hexachlorobenzene	0.652	0.0416	mg/kg wet	0.831		78.5	21-124				
Hexachlorobutadiene	0.664	0.0416	"	0.831		80.0	10-149				
Hexachlorocyclopentadiene	0.690	0.0416	"	0.831		83.0	10-129				
Hexachloroethane	0.617	0.0416	"	0.831		74.3	28-108				
Indeno(1,2,3-cd)pyrene	0.782	0.0416	"	0.831		94.2	10-135				
Indeno(1,2,3-cd)pyrene	782	41.6	ug/kg wet	831		94.2	10-155				
Isophorone	0.678	0.0416	mg/kg wet	0.831		81.6	20-132				
Naphthalene	0.675	0.0416	"	0.831		81.2	23-124				
Naphthalene	675	41.6	ug/kg wet	831		81.2	20-121				
Nitrobenzene	0.698	0.0416	mg/kg wet	0.831		84.0	13-132				
N-Nitrosodimethylamine	0.538	0.0416	"	0.831		64.8	11-129				
N-nitroso-di-n-propylamine	0.654	0.0416	"	0.831		78.8	24-119				
N-Nitrosodiphenylamine	0.849	0.0416	"	0.831		102	22-152				
Pentachlorophenol	0.822	0.0416	"	0.831		99.0	10-139				
Phenanthrene	0.638	0.0416	"	0.831		76.8	33-123				
Phenanthrene	638	41.6	ug/kg wet	831		76.8	24-123				
Phenol	0.648	0.0416	mg/kg wet	0.831		78.0	23-115				
Pyrene	0.641	0.0416	"	0.831		77.2	32-130				
Pyrene	641	41.6	ug/kg wet	831		77.2	24-132				
Surrogate: SURR: 2-Fluorophenol	*1.28*		*mg/kg wet*	*1.66*		*76.8*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.21*		*"*	*1.66*		*72.6*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*0.730*		*"*	*0.831*		*87.8*	*22-108*				
Surrogate: SURR: Nitrobenzene-d5	*730*		*ug/kg wet*	*831*		*87.8*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.612*		*mg/kg wet*	*0.831*		*73.7*	*21-113*				
Surrogate: SURR: 2-Fluorobiphenyl	*612*		*ug/kg wet*	*831*		*73.7*	*21-113*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

LCS (BG10275-BS1) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Surrogate: SURR: 2,4,6-Tribromophenol	*1.56*		*mg/kg wet*	*1.66*		*93.9*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.674*		*"*	*0.831*		*81.1*	*24-116*				
Surrogate: SURR: Terphenyl-d14	*674*		*ug/kg wet*	*831*		*81.1*	*24-116*				

Matrix Spike (BG10275-MS1) *Source sample: 21G0094-04 (Matrix Spike) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
1,1-Biphenyl	0.722	0.0899	mg/kg dry	0.898	ND	80.3	10-130				
1,2,4,5-Tetrachlorobenzene	0.762	0.180	"	0.898	ND	84.8	10-133				
1,2,4-Trichlorobenzene	0.748	0.0899	"	0.898	ND	83.3	10-127				
1,2-Dichlorobenzene	0.669	0.0899	"	0.898	ND	74.5	14-111				
1,2-Diphenylhydrazine (as Azobenzene)	0.762	0.0899	"	0.898	ND	84.8	10-144				
1,3-Dichlorobenzene	0.650	0.0899	"	0.898	ND	72.4	11-111				
1,4-Dichlorobenzene	0.660	0.0899	"	0.898	ND	73.5	10-106				
2,3,4,6-Tetrachlorophenol	0.788	0.180	"	0.898	ND	87.8	30-130				
2,4,5-Trichlorophenol	0.758	0.0899	"	0.898	ND	84.4	10-127				
2,4,6-Trichlorophenol	0.760	0.0899	"	0.898	ND	84.6	10-132				
2,4-Dichlorophenol	0.834	0.0899	"	0.898	ND	92.9	10-128				
2,4-Dimethylphenol	0.831	0.0899	"	0.898	ND	92.5	10-137				
2,4-Dinitrophenol	0.420	0.180	"	0.898	ND	46.8	10-171				
2,4-Dinitrotoluene	0.812	0.0899	"	0.898	ND	90.4	16-135				
2,6-Dinitrotoluene	0.877	0.0899	"	0.898	ND	97.6	18-131				
2-Chloronaphthalene	0.687	0.0899	"	0.898	ND	76.5	10-129				
2-Chlorophenol	0.718	0.0899	"	0.898	ND	79.9	15-116				
2-Methylnaphthalene	0.816	0.0899	"	0.898	ND	90.8	10-147				
2-Methylnaphthalene	816	89.9	ug/kg dry	898	ND	90.8	10-143				
2-Methylphenol	0.729	0.0899	mg/kg dry	0.898	ND	81.2	10-136				
2-Nitroaniline	0.830	0.180	"	0.898	ND	92.4	10-137				
2-Nitrophenol	0.979	0.0899	"	0.898	ND	109	10-129				
3- & 4-Methylphenols	0.670	0.0899	"	0.898	ND	74.6	10-123				
3,3-Dichlorobenzidine	1.61	0.0899	"	0.898	ND	180	10-155	High Bias			
3-Nitroaniline	0.804	0.180	"	0.898	ND	89.4	12-133				
4,6-Dinitro-2-methylphenol	0.523	0.180	"	0.898	ND	58.2	10-155				
4-Bromophenyl phenyl ether	0.814	0.0899	"	0.898	ND	90.6	14-128				
4-Chloro-3-methylphenol	0.849	0.0899	"	0.898	ND	94.5	10-134				
4-Chloroaniline	0.717	0.0899	"	0.898	ND	79.8	10-145				
4-Chlorophenyl phenyl ether	0.710	0.0899	"	0.898	ND	79.0	14-130				
4-Nitroaniline	0.762	0.180	"	0.898	ND	84.8	10-147				
4-Nitrophenol	0.758	0.180	"	0.898	ND	84.4	10-137				
Acenaphthene	0.712	0.0899	"	0.898	ND	79.2	10-146				
Acenaphthene	712	89.9	ug/kg dry	898	ND	79.2	13-133				
Acenaphthylene	0.682	0.0899	mg/kg dry	0.898	ND	75.9	10-134				
Acenaphthylene	682	89.9	ug/kg dry	898	ND	75.9	25-125				
Acetophenone	0.752	0.0899	mg/kg dry	0.898	ND	83.7	10-116				
Aniline	0.686	0.360	"	0.898	ND	76.4	10-123				
Anthracene	0.758	0.0899	"	0.898	ND	84.4	10-142				
Anthracene	758	89.9	ug/kg dry	898	ND	84.4	27-128				
Atrazine	0.972	0.0899	mg/kg dry	0.898	ND	108	19-115				
Benzaldehyde	0.724	0.0899	"	0.898	ND	80.6	10-125				
Benzo(a)anthracene	0.767	0.0899	"	0.898	ND	85.4	10-158				
Benzo(a)anthracene	767	89.9	ug/kg dry	898	ND	85.4	20-147				
Benzo(a)pyrene	0.910	0.0899	mg/kg dry	0.898	ND	101	10-180				
Benzo(a)pyrene	910	89.9	ug/kg dry	898	ND	101	18-153				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

Matrix Spike (BG10275-MS1) *Source sample: 21G0094-04 (Matrix Spike) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Benzo(b)fluoranthene	0.887	0.0899	mg/kg dry	0.898	ND	98.7	10-200				
Benzo(b)fluoranthene	887	89.9	ug/kg dry	898	ND	98.7	10-163				
Benzo(g,h,i)perylene	0.752	0.0899	mg/kg dry	0.898	ND	83.8	10-138				
Benzo(g,h,i)perylene	752	89.9	ug/kg dry	898	ND	83.8	10-157				
Benzo(k)fluoranthene	0.724	0.0899	mg/kg dry	0.898	ND	80.6	10-197				
Benzo(k)fluoranthene	724	89.9	ug/kg dry	898	ND	80.6	10-157				
Benzoic acid	0.566	0.0899	mg/kg dry	0.898	ND	63.0	10-166				
Benzyl alcohol	0.742	0.0899	"	0.898	ND	82.6	12-124				
Benzyl butyl phthalate	0.851	0.0899	"	0.898	ND	94.7	10-154				
Bis(2-chloroethoxy)methane	0.765	0.0899	"	0.898	ND	85.1	10-132				
Bis(2-chloroethyl)ether	0.683	0.0899	"	0.898	ND	76.1	10-119				
Bis(2-chloroisopropyl)ether	0.674	0.0899	"	0.898	ND	75.0	10-139				
Bis(2-ethylhexyl)phthalate	0.950	0.0899	"	0.898	ND	106	10-167				
Caprolactam	1.13	0.180	"	0.898	ND	126	10-132				
Carbazole	0.735	0.0899	"	0.898	ND	81.8	10-167				
Chrysene	717	89.9	ug/kg dry	898	ND	79.8	18-133				
Chrysene	0.717	0.0899	mg/kg dry	0.898	ND	79.8	10-156				
Dibenzo(a,h)anthracene	1020	89.9	ug/kg dry	898	ND	113	10-146				
Dibenzo(a,h)anthracene	1.02	0.0899	mg/kg dry	0.898	ND	113	10-137				
Dibenzofuran	0.702	0.0899	"	0.898	ND	78.2	10-147				
Diethyl phthalate	0.633	0.0899	"	0.898	ND	70.5	20-120				
Dimethyl phthalate	0.693	0.0899	"	0.898	ND	77.1	18-131				
Di-n-butyl phthalate	0.852	0.0899	"	0.898	ND	94.9	10-137				
Di-n-octyl phthalate	1.11	0.0899	"	0.898	ND	124	10-180				
Fluoranthene	737	89.9	ug/kg dry	898	ND	82.0	10-155				
Fluoranthene	0.737	0.0899	mg/kg dry	0.898	ND	82.0	10-160				
Fluorene	729	89.9	ug/kg dry	898	ND	81.1	12-150				
Fluorene	0.729	0.0899	mg/kg dry	0.898	ND	81.1	10-157				
Hexachlorobenzene	0.680	0.0899	"	0.898	ND	75.7	10-137				
Hexachlorobutadiene	0.747	0.0899	"	0.898	ND	83.1	10-132				
Hexachlorocyclopentadiene	0.369	0.0899	"	0.898	ND	41.0	10-106				
Hexachloroethane	0.644	0.0899	"	0.898	ND	71.7	10-110				
Indeno(1,2,3-cd)pyrene	919	89.9	ug/kg dry	898	ND	102	10-155				
Indeno(1,2,3-cd)pyrene	0.919	0.0899	mg/kg dry	0.898	ND	102	10-144				
Isophorone	0.750	0.0899	"	0.898	ND	83.4	10-132				
Naphthalene	775	89.9	ug/kg dry	898	ND	86.3	15-132				
Naphthalene	0.775	0.0899	mg/kg dry	0.898	ND	86.3	10-141				
Nitrobenzene	0.753	0.0899	"	0.898	ND	83.8	10-131				
N-Nitrosodimethylamine	0.554	0.0899	"	0.898	ND	61.7	10-126				
N-nitroso-di-n-propylamine	0.697	0.0899	"	0.898	ND	77.6	10-125				
N-Nitrosodiphenylamine	0.929	0.0899	"	0.898	ND	103	10-177				
Pentachlorophenol	0.922	0.0899	"	0.898	ND	103	10-153				
Phenanthrene	0.713	0.0899	"	0.898	ND	79.4	10-148				
Phenanthrene	713	89.9	ug/kg dry	898	ND	79.4	10-151				
Phenol	0.712	0.0899	mg/kg dry	0.898	ND	79.3	10-126				
Pyrene	0.686	0.0899	"	0.898	ND	76.4	10-165				
Pyrene	686	89.9	ug/kg dry	898	ND	76.4	13-148				
Surrogate: SURR: 2-Fluorophenol	*1.37*		*mg/kg dry*	*1.80*		*76.5*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.33*		*"*	*1.80*		*74.0*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*0.778*		*"*	*0.898*		*86.6*	*22-108*				
Surrogate: SURR: Nitrobenzene-d5	*778*		*ug/kg dry*	*898*		*86.6*	*22-108*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

Matrix Spike (BG10275-MS1) *Source sample: 21G0094-04 (Matrix Spike) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Surrogate: SURR: 2-Fluorobiphenyl	*0.675*		*mg/kg dry*	*0.898*		*75.1*	*21-113*				
Surrogate: SURR: 2-Fluorobiphenyl	*675*		*ug/kg dry*	*898*		*75.1*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.82*		*mg/kg dry*	*1.80*		*101*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.712*		*"*	*0.898*		*79.3*	*24-116*				
Surrogate: SURR: Terphenyl-d14	*712*		*ug/kg dry*	*898*		*79.3*	*24-116*				

Matrix Spike Dup (BG10275-MSD1) *Source sample: 21G0094-04 (Matrix Spike Dup) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
1,1-Biphenyl	0.788	0.0899	mg/kg dry	0.898	ND	87.8	10-130		8.85	30	
1,2,4,5-Tetrachlorobenzene	0.824	0.180	"	0.898	ND	91.7	10-133		7.80	30	
1,2,4-Trichlorobenzene	0.804	0.0899	"	0.898	ND	89.4	10-127		7.13	30	
1,2-Dichlorobenzene	0.747	0.0899	"	0.898	ND	83.2	14-111		11.1	30	
1,2-Diphenylhydrazine (as Azobenzene)	0.813	0.0899	"	0.898	ND	90.5	10-144		6.48	30	
1,3-Dichlorobenzene	0.711	0.0899	"	0.898	ND	79.1	11-111		8.87	30	
1,4-Dichlorobenzene	0.735	0.0899	"	0.898	ND	81.8	10-106		10.6	30	
2,3,4,6-Tetrachlorophenol	0.833	0.180	"	0.898	ND	92.7	30-130		5.50	30	
2,4,5-Trichlorophenol	0.803	0.0899	"	0.898	ND	89.4	10-127		5.71	30	
2,4,6-Trichlorophenol	0.842	0.0899	"	0.898	ND	93.8	10-132		10.3	30	
2,4-Dichlorophenol	0.881	0.0899	"	0.898	ND	98.1	10-128		5.45	30	
2,4-Dimethylphenol	0.901	0.0899	"	0.898	ND	100	10-137		8.05	30	
2,4-Dinitrophenol	0.473	0.180	"	0.898	ND	52.6	10-171		11.7	30	
2,4-Dinitrotoluene	0.860	0.0899	"	0.898	ND	95.8	16-135		5.76	30	
2,6-Dinitrotoluene	0.944	0.0899	"	0.898	ND	105	18-131		7.34	30	
2-Chloronaphthalene	0.745	0.0899	"	0.898	ND	82.9	10-129		8.03	30	
2-Chlorophenol	0.804	0.0899	"	0.898	ND	89.5	15-116		11.3	30	
2-Methylnaphthalene	881	89.9	ug/kg dry	898	ND	98.1	10-143		7.71	30	
2-Methylnaphthalene	0.881	0.0899	mg/kg dry	0.898	ND	98.1	10-147		7.71	30	
2-Methylphenol	0.815	0.0899	"	0.898	ND	90.7	10-136		11.1	30	
2-Nitroaniline	0.896	0.180	"	0.898	ND	99.7	10-137		7.58	30	
2-Nitrophenol	1.04	0.0899	"	0.898	ND	116	10-129		5.98	30	
3- & 4-Methylphenols	0.757	0.0899	"	0.898	ND	84.2	10-123		12.2	30	
3,3-Dichlorobenzidine	1.73	0.0899	"	0.898	ND	192	10-155	High Bias	6.84	30	
3-Nitroaniline	0.932	0.180	"	0.898	ND	104	12-133		14.8	30	
4,6-Dinitro-2-methylphenol	0.627	0.180	"	0.898	ND	69.8	10-155		18.1	30	
4-Bromophenyl phenyl ether	0.854	0.0899	"	0.898	ND	95.0	14-128		4.83	30	
4-Chloro-3-methylphenol	0.923	0.0899	"	0.898	ND	103	10-134		8.36	30	
4-Chloroaniline	0.787	0.0899	"	0.898	ND	87.6	10-145		9.37	30	
4-Chlorophenyl phenyl ether	0.760	0.0899	"	0.898	ND	84.6	14-130		6.84	30	
4-Nitroaniline	0.867	0.180	"	0.898	ND	96.6	10-147		13.0	30	
4-Nitrophenol	0.802	0.180	"	0.898	ND	89.3	10-137		5.62	30	
Acenaphthene	780	89.9	ug/kg dry	898	ND	86.8	13-133		9.16	30	
Acenaphthene	0.780	0.0899	mg/kg dry	0.898	ND	86.8	10-146		9.16	30	
Acenaphthylene	747	89.9	ug/kg dry	898	ND	83.2	25-125		9.15	30	
Acenaphthylene	0.747	0.0899	mg/kg dry	0.898	ND	83.2	10-134		9.15	30	
Acetophenone	0.838	0.0899	"	0.898	ND	93.3	10-116		10.8	30	
Aniline	0.783	0.360	"	0.898	ND	87.1	10-123		13.1	30	
Anthracene	835	89.9	ug/kg dry	898	ND	93.0	27-128		9.65	30	
Anthracene	0.835	0.0899	mg/kg dry	0.898	ND	93.0	10-142		9.65	30	
Atrazine	1.05	0.0899	"	0.898	ND	117	19-115	High Bias	7.95	30	
Benzaldehyde	0.831	0.0899	"	0.898	ND	92.5	10-125		13.7	30	
Benzo(a)anthracene	809	89.9	ug/kg dry	898	ND	90.1	20-147		5.38	30	
Benzo(a)anthracene	0.809	0.0899	mg/kg dry	0.898	ND	90.1	10-158		5.38	30	

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Batch BG10275 - EPA 3546 SVOA

Matrix Spike Dup (BG10275-MSD1) *Source sample: 21G0094-04 (Matrix Spike Dup) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Benzo(a)pyrene	954	89.9	ug/kg dry	898	ND	106	18-153		4.78	30	
Benzo(a)pyrene	0.954	0.0899	mg/kg dry	0.898	ND	106	10-180		4.78	30	
Benzo(b)fluoranthene	959	89.9	ug/kg dry	898	ND	107	10-163		7.86	30	
Benzo(b)fluoranthene	0.959	0.0899	mg/kg dry	0.898	ND	107	10-200		7.86	30	
Benzo(g,h,i)perylene	814	89.9	ug/kg dry	898	ND	90.6	10-157		7.89	30	
Benzo(g,h,i)perylene	0.814	0.0899	mg/kg dry	0.898	ND	90.6	10-138		7.89	30	
Benzo(k)fluoranthene	779	89.9	ug/kg dry	898	ND	86.7	10-157		7.36	30	
Benzo(k)fluoranthene	0.779	0.0899	mg/kg dry	0.898	ND	86.7	10-197		7.36	30	
Benzoic acid	0.285	0.0899	"	0.898	ND	31.7	10-166		66.2	30	Non-dir.
Benzyl alcohol	0.847	0.0899	"	0.898	ND	94.3	12-124		13.2	30	
Benzyl butyl phthalate	0.903	0.0899	"	0.898	ND	101	10-154		5.98	30	
Bis(2-chloroethoxy)methane	0.802	0.0899	"	0.898	ND	89.3	10-132		4.77	30	
Bis(2-chloroethyl)ether	0.760	0.0899	"	0.898	ND	84.6	10-119		10.6	30	
Bis(2-chloroisopropyl)ether	0.758	0.0899	"	0.898	ND	84.4	10-139		11.7	30	
Bis(2-ethylhexyl)phthalate	1.01	0.0899	"	0.898	ND	112	10-167		5.94	30	
Caprolactam	1.21	0.180	"	0.898	ND	134	10-132	High Bias	6.14	30	
Carbazole	0.786	0.0899	"	0.898	ND	87.5	10-167		6.71	30	
Chrysene	757	89.9	ug/kg dry	898	ND	84.2	18-133		5.36	30	
Chrysene	0.757	0.0899	mg/kg dry	0.898	ND	84.2	10-156		5.36	30	
Dibenzo(a,h)anthracene	1130	89.9	ug/kg dry	898	ND	126	10-146		10.3	30	
Dibenzo(a,h)anthracene	1.13	0.0899	mg/kg dry	0.898	ND	126	10-137		10.3	30	
Dibenzofuran	0.760	0.0899	"	0.898	ND	84.6	10-147		7.96	30	
Diethyl phthalate	0.698	0.0899	"	0.898	ND	77.7	20-120		9.72	30	
Dimethyl phthalate	0.740	0.0899	"	0.898	ND	82.3	18-131		6.52	30	
Di-n-butyl phthalate	0.895	0.0899	"	0.898	ND	99.6	10-137		4.85	30	
Di-n-octyl phthalate	1.15	0.0899	"	0.898	ND	128	10-180		3.43	30	
Fluoranthene	788	89.9	ug/kg dry	898	ND	87.8	10-155		6.79	30	
Fluoranthene	0.788	0.0899	mg/kg dry	0.898	ND	87.8	10-160		6.79	30	
Fluorene	796	89.9	ug/kg dry	898	ND	88.6	12-150		8.77	30	
Fluorene	0.796	0.0899	mg/kg dry	0.898	ND	88.6	10-157		8.77	30	
Hexachlorobenzene	0.755	0.0899	"	0.898	ND	84.0	10-137		10.4	30	
Hexachlorobutadiene	0.786	0.0899	"	0.898	ND	87.5	10-132		5.16	30	
Hexachlorocyclopentadiene	0.399	0.0899	"	0.898	ND	44.4	10-106		7.87	30	
Hexachloroethane	0.707	0.0899	"	0.898	ND	78.7	10-110		9.36	30	
Indeno(1,2,3-cd)pyrene	1010	89.9	ug/kg dry	898	ND	112	10-155		9.04	30	
Indeno(1,2,3-cd)pyrene	1.01	0.0899	mg/kg dry	0.898	ND	112	10-144		9.04	30	
Isophorone	0.796	0.0899	"	0.898	ND	88.6	10-132		5.95	30	
Naphthalene	0.834	0.0899	"	0.898	ND	92.8	10-141		7.24	30	
Naphthalene	834	89.9	ug/kg dry	898	ND	92.8	15-132		7.24	30	
Nitrobenzene	0.802	0.0899	mg/kg dry	0.898	ND	89.3	10-131		6.28	30	
N-Nitrosodimethylamine	0.648	0.0899	"	0.898	ND	72.2	10-126		15.7	30	
N-nitroso-di-n-propylamine	0.770	0.0899	"	0.898	ND	85.8	10-125		9.99	30	
N-Nitrosodiphenylamine	1.00	0.0899	"	0.898	ND	112	10-177		7.66	30	
Pentachlorophenol	0.979	0.0899	"	0.898	ND	109	10-153		5.97	30	
Phenanthrene	0.772	0.0899	"	0.898	ND	85.9	10-148		7.94	30	
Phenanthrene	772	89.9	ug/kg dry	898	ND	85.9	10-151		7.94	30	
Phenol	0.786	0.0899	mg/kg dry	0.898	ND	87.4	10-126		9.79	30	
Pyrene	0.747	0.0899	"	0.898	ND	83.2	10-165		8.52	30	
Pyrene	747	89.9	ug/kg dry	898	ND	83.2	13-148		8.52	30	
Surrogate: SURR: 2-Fluorophenol	*1.57*		*mg/kg dry*	*1.80*		*87.6*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.49*		*"*	*1.80*		*82.9*	*23-114*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

Matrix Spike Dup (BG10275-MSD1) *Source sample: 21G0094-04 (Matrix Spike Dup) Prepared: 07/07/2021 Analyzed: 07/08/2021

Surrogate: SURR: Nitrobenzene-d5	*0.854*		*mg/kg dry*	*0.898*		*95.0*	*22-108*				
Surrogate: SURR: Nitrobenzene-d5	*854*		*ug/kg dry*	*898*		*95.0*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.737*		*mg/kg dry*	*0.898*		*82.1*	*21-113*				
Surrogate: SURR: 2-Fluorobiphenyl	*737*		*ug/kg dry*	*898*		*82.1*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.94*		*mg/kg dry*	*1.80*		*108*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.781*		*"*	*0.898*		*86.9*	*24-116*				
Surrogate: SURR: Terphenyl-d14	*781*		*ug/kg dry*	*898*		*86.9*	*24-116*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10274 - EPA 3550C

Blank (BG10274-BLK1) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
4,4'-DDD	ND	0.00164	mg/kg wet								
4,4'-DDE	ND	0.00164	"								
4,4'-DDT	ND	0.00164	"								
Aldrin	ND	0.00164	"								
alpha-BHC	ND	0.00164	"								
alpha-Chlordane	ND	0.00164	"								
beta-BHC	ND	0.00164	"								
Chlordane, total	ND	0.0329	"								
delta-BHC	ND	0.00164	"								
Dieldrin	ND	0.00164	"								
Endosulfan I	ND	0.00164	"								
Endosulfan II	ND	0.00164	"								
Endosulfan sulfate	ND	0.00164	"								
Endrin	ND	0.00164	"								
Endrin aldehyde	ND	0.00164	"								
Endrin ketone	ND	0.00164	"								
gamma-BHC (Lindane)	ND	0.00164	"								
gamma-Chlordane	ND	0.00164	"								
Heptachlor	ND	0.00164	"								
Heptachlor epoxide	ND	0.00164	"								
Methoxychlor	ND	0.00822	"								
Toxaphene	ND	0.0832	"								
Surrogate: Decachlorobiphenyl	*0.0609*		*"*	*0.0664*		*91.7*	*30-150*				
Surrogate: Tetrachloro-m-xylene	*0.0661*		*"*	*0.0664*		*99.5*	*30-150*				

LCS (BG10274-BS1) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
4,4'-DDD	0.0321	0.00164	mg/kg wet	0.0332		96.7	40-140				
4,4'-DDE	0.0184	0.00164	"	0.0332		55.3	40-140				
4,4'-DDT	0.0185	0.00164	"	0.0332		55.8	40-140				
Aldrin	0.0333	0.00164	"	0.0332		100	40-140				
alpha-BHC	0.0307	0.00164	"	0.0332		92.4	40-140				
alpha-Chlordane	0.0349	0.00164	"	0.0332		105	40-140				
beta-BHC	0.0331	0.00164	"	0.0332		99.6	40-140				
delta-BHC	0.0302	0.00164	"	0.0332		91.0	40-140				
Dieldrin	0.0357	0.00164	"	0.0332		107	40-140				
Endosulfan I	0.0451	0.00164	"	0.0332		136	40-140				
Endosulfan II	0.0371	0.00164	"	0.0332		112	40-140				
Endosulfan sulfate	0.0313	0.00164	"	0.0332		94.3	40-140				
Endrin	0.0279	0.00164	"	0.0332		84.1	40-140				
Endrin aldehyde	0.0341	0.00164	"	0.0332		103	40-140				
Endrin ketone	0.0347	0.00164	"	0.0332		105	40-140				
gamma-BHC (Lindane)	0.0318	0.00164	"	0.0332		95.8	40-140				
gamma-Chlordane	0.0351	0.00164	"	0.0332		106	40-140				
Heptachlor	0.0375	0.00164	"	0.0332		113	40-140				
Heptachlor epoxide	0.0363	0.00164	"	0.0332		109	40-140				
Methoxychlor	0.0135	0.00822	"	0.0332		40.7	40-140				
Surrogate: Decachlorobiphenyl	*0.0573*		*"*	*0.0664*		*86.2*	*30-150*				
Surrogate: Tetrachloro-m-xylene	*0.0624*		*"*	*0.0664*		*93.8*	*30-150*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch Y1D0212 - BC11630

Performance Mix (Y1D0212-PEM1) Prepared & Analyzed: 04/01/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
4,4'-DDD	10.7		ng/mL	0.00			0-200				
4,4'-DDE	0.811		"	0.00			0-200				
4,4'-DDT	247		"	200		123	0-200				
Endrin	129		"	100		129	0-200				
Endrin aldehyde	0.667		"	0.00			0-200				
Endrin ketone	2.54		"	0.00			0-200				

Batch Y1G0901 - BE10937

Performance Mix (Y1G0901-PEM1) Prepared & Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
4,4'-DDD	14.2		ng/mL	0.00			0-200				
4,4'-DDE	1.78		"	0.00			0-200				
4,4'-DDT	188		"	200		93.8	0-200				
Endrin	120		"	100		120	0-200				
Endrin aldehyde	1.69		"	0.00			0-200				
Endrin ketone	9.98		"	0.00			0-200				

Polychlorinated Biphenyls by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10274 - EPA 3550C

Blank (BG10274-BLK2) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aroclor 1016	ND	0.0166	mg/kg wet								
Aroclor 1221	ND	0.0166	"								
Aroclor 1232	ND	0.0166	"								
Aroclor 1242	ND	0.0166	"								
Aroclor 1248	ND	0.0166	"								
Aroclor 1254	ND	0.0166	"								
Aroclor 1260	ND	0.0166	"								
Total PCBs	ND	0.0166	"								
Surrogate: Tetrachloro-m-xylene	*0.0698*		*"*	*0.0664*		*105*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0435*		*"*	*0.0664*		*65.5*	*30-140*				

LCS (BG10274-BS2) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aroclor 1016	0.415	0.0166	mg/kg wet	0.332		125	40-130				
Aroclor 1260	0.383	0.0166	"	0.332		115	40-130				
Surrogate: Tetrachloro-m-xylene	*0.0741*		*"*	*0.0664*		*112*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0458*		*"*	*0.0664*		*69.0*	*30-140*				

Matrix Spike (BG10274-MS2) *Source sample: 21G0094-03 (Matrix Spike) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aroclor 1016	0.213	0.0181	mg/kg dry	0.363	ND	58.6	40-140				
Aroclor 1260	0.228	0.0181	"	0.363	ND	62.8	40-140				
Surrogate: Tetrachloro-m-xylene	*0.0552*		*"*	*0.0726*		*76.0*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0327*		*"*	*0.0726*		*45.0*	*30-140*				

Matrix Spike Dup (BG10274-MSD2) *Source sample: 21G0094-03 (Matrix Spike Dup) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aroclor 1016	0.188	0.0181	mg/kg dry	0.363	ND	51.9	40-140		12.1	50	
Aroclor 1260	0.211	0.0181	"	0.363	ND	58.2	40-140		7.67	50	
Surrogate: Tetrachloro-m-xylene	*0.0534*		*"*	*0.0726*		*73.5*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0319*		*"*	*0.0726*		*44.0*	*30-140*				

Polychlorinated Biphenyls by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch Y1G0831 - BG10324											
Aroclor Reference (Y1G0831-ARC1)							Prepared & Analyzed: 07/08/2021				
Surrogate: Tetrachloro-m-xylene	*0.219*		*ug/mL*	*0.200*		*110*					
Surrogate: Decachlorobiphenyl	*0.175*		*"*	*0.200*		*87.5*					

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10309 - EPA 3050B

Blank (BG10309-BLK1) Prepared: 07/07/2021 Analyzed: 07/12/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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	5.21	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 (BG10309-DUP1) *Source sample: 21G0094-09 (Duplicate) Prepared: 07/07/2021 Analyzed: 07/12/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	3090	5.16	mg/kg dry		3050				1.26	35	
Antimony	ND	2.58	"		ND					35	
Arsenic	ND	1.55	"		ND					35	
Barium	15.3	2.58	"		12.9				17.2	35	
Beryllium	ND	0.052	"		ND					35	
Cadmium	0.311	0.310	"		ND					35	
Calcium	966	5.16	"		739				26.6	35	
Chromium	6.91	0.516	"		7.19				3.91	35	
Cobalt	2.64	0.413	"		2.65				0.580	35	
Copper	6.72	2.06	"		6.60				1.79	35	
Iron	8460	25.8	"		7400				13.4	35	
Lead	1.48	0.516	"		1.32				11.5	35	
Magnesium	1080	5.16	"		1090				0.762	35	
Manganese	192	0.516	"		151				24.0	35	
Nickel	4.48	1.03	"		4.23				5.91	35	
Potassium	349	5.16	"		334				4.42	35	
Selenium	ND	2.58	"		ND					35	
Silver	ND	0.516	"		ND					35	
Sodium	80.5	51.6	"		65.5				20.5	35	
Thallium	ND	2.58	"		ND					35	
Vanadium	10.5	1.03	"		8.43				22.0	35	
Zinc	9.73	2.58	"		10.2				5.05	35	

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10309 - EPA 3050B

Matrix Spike (BG10309-MS1) *Source sample: 21G0094-09 (Matrix Spike) Prepared: 07/07/2021 Analyzed: 07/12/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	3130	5.16	mg/kg dry	206	3050	38.9	75-125	Low Bias			
Antimony	7.80	2.58	"	25.8	ND	30.2	75-125	Low Bias			
Arsenic	196	1.55	"	206	ND	95.1	75-125				
Barium	220	2.58	"	206	12.9	100	75-125				
Beryllium	4.77	0.052	"	5.16	ND	92.3	75-125				
Cadmium	5.19	0.310	"	5.16	ND	101	75-125				
Calcium	727	5.16	"	103	739	NR	75-125	Low Bias			
Chromium	25.1	0.516	"	20.6	7.19	86.6	75-125				
Cobalt	54.7	0.413	"	51.6	2.65	101	75-125				
Copper	31.5	2.06	"	25.8	6.60	96.5	75-125				
Iron	6080	25.8	"	103	7400	NR	75-125	Low Bias			
Lead	53.0	0.516	"	51.6	1.32	100	75-125				
Magnesium	1110	5.16	"	103	1090	21.4	75-125	Low Bias			
Manganese	214	0.516	"	51.6	151	123	75-125				
Nickel	56.5	1.03	"	51.6	4.23	101	75-125				
Potassium	393	5.16	"	103	334	57.5	75-125	Low Bias			
Selenium	169	2.58	"	206	ND	81.8	75-125				
Silver	11.2	0.516	"	5.16	ND	216	75-125	High Bias			
Sodium	131	51.6	"	103	65.5	63.8	75-125	Low Bias			
Thallium	199	2.58	"	206	ND	96.3	75-125				
Vanadium	56.3	1.03	"	51.6	8.43	92.7	75-125				
Zinc	57.4	2.58	"	51.6	10.2	91.5	75-125				

Post Spike (BG10309-PS1) *Source sample: 21G0094-09 (Post Spike) Prepared: 07/07/2021 Analyzed: 07/12/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	31.5		ug/mL	2.00	29.6	96.4	75-125				
Antimony	0.278		"	0.250	-0.0007	111	75-125				
Arsenic	2.15		"	2.00	0.007	107	75-125				
Barium	2.35		"	2.00	0.125	111	75-125				
Beryllium	0.052		"	0.0500	-0.003	103	75-125				
Cadmium	0.057		"	0.0500	0.003	108	75-125				
Calcium	8.11		"	1.00	7.16	95.3	75-125				
Chromium	0.285		"	0.200	0.070	108	75-125				
Cobalt	0.593		"	0.500	0.026	114	75-125				
Copper	0.343		"	0.250	0.064	111	75-125				
Iron	70.7		"	1.00	71.7	NR	75-125	Low Bias			
Lead	0.577		"	0.500	0.013	113	75-125				
Magnesium	11.4		"	1.00	10.6	79.8	75-125				
Manganese	2.02		"	0.500	1.46	113	75-125				
Nickel	0.609		"	0.500	0.041	114	75-125				
Potassium	4.31		"	1.00	3.24	107	75-125				
Selenium	1.87		"	2.00	-0.059	93.7	75-125				
Silver	0.109		"	0.0500	-0.027	219	75-125	High Bias			
Sodium	1.50		"	1.00	0.635	86.8	75-125				
Thallium	2.17		"	2.00	-0.009	109	75-125				
Vanadium	0.624		"	0.500	0.082	108	75-125				
Zinc	0.633		"	0.500	0.099	107	75-125				

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10309 - EPA 3050B											
Reference (BG10309-SRM1)								Prepared: 07/07/2021 Analyzed: 07/12/2021			
Aluminum	8970	5.00	mg/kg wet	8190		110	50.5-150.1				
Antimony	60.2	2.50	"	110		54.7	19-251.7				
Arsenic	161	1.50	"	162		99.2	70.1-129.8				
Barium	139	2.50	"	138		101	75-125				
Beryllium	152	0.050	"	157		96.6	75-125.2				
Cadmium	131	0.300	"	135		97.2	74.8-125.2				
Calcium	4770	5.00	"	4790		99.5	72.7-127.5				
Chromium	113	0.500	"	117		96.6	70.1-129.9				
Cobalt	101	0.400	"	92.6		110	75-125				
Copper	148	2.00	"	143		104	75.3-125.3				
Iron	13400	25.0	"	15100		88.5	35.8-164.6				
Lead	72.8	0.500	"	77.6		93.8	70-130				
Magnesium	2420	5.00	"	2320		104	61.7-137.8				
Manganese	333	0.500	"	319		104	78.1-122				
Nickel	90.7	1.00	"	79.9		113	70.1-130.1				
Potassium	2190	5.00	"	2050		107	59.1-140.9				
Selenium	143	2.50	"	172		83.1	55.7-144.5				
Silver	69.8	0.500	"	24.7		283	69.2-130.8	High Bias			
Sodium	107	50.0	"	137		78.3	36.1-163.3				
Thallium	85.2	2.50	"	88.0		96.8	65.3-146.8				
Vanadium	94.0	1.00	"	99.9		94.1	67-133.1				
Zinc	304	2.50	"	312		97.4	69.9-130.1				

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 BG10454 - EPA 7473 soil											
Blank (BG10454-BLK1)							Prepared & Analyzed: 07/09/2021				
Mercury	ND	0.0300	mg/kg wet								
Duplicate (BG10454-DUP1)	*Source sample: 21G0124-01 (Duplicate)						Prepared: 07/09/2021 Analyzed: 07/12/2021				
Mercury	0.114	0.0332	mg/kg dry		0.158				32.7	35	
Matrix Spike (BG10454-MS1)	*Source sample: 21G0124-01 (Matrix Spike)						Prepared: 07/09/2021 Analyzed: 07/12/2021				
Mercury	0.593		mg/kg	0.500	0.143	90.0	75-125				
Reference (BG10454-SRM1)							Prepared & Analyzed: 07/09/2021				
Mercury	21.595		mg/kg	27.2		79.4	59.9-140.1				

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 BG10467 - % Solids Prep											
Duplicate (BG10467-DUP1)	*Source sample: 21G0094-06 (Duplicate)						Prepared & Analyzed: 07/12/2021				
% Solids	97.3	0.100	%		97.0				0.300	20	

Sample and Data Qualifiers Relating to This Work Order

S-08	The recovery of this surrogate was outside of QC limits.
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.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data are acceptable.
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.
M-SPKM	The spike recovery is not within acceptance windows due to sample non-homogeneity, or matrix interference.
M-ICV2	The recovery for this element in the ICV was outside the 90-110% recovery criteria.
M-CRL	The RL check for this element recovered outside of control limits.
M-CCV1	The recovery for this element in the Continuing Calibration Verification (CCV) exceeded 110% of the expected value. Positive detections may be biased high.
M-BLK	The target analyte was detected above the RL in the batch method blank. All samples showed >10x the concentration in the blank for this analyte. Data are reported.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-H	The value reported is estimated due to its behavior during continuing calibration verification (>20% difference for average RF or >20% drift for linear or quadratic fit.) This value may be biased high.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

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

High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

Revision Description: This report has been revised to correct the Analyte Reporting List.

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

Field Chain-of-Custody Record

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

YORK Project No. 2160093

Page ____ of ____

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: CBTs	Company: James	Company: Brenda	21003-0066	RUSH - Next Day
Address: 22 IBM Road Poughkeepsie	Address:	Address:	YOUR Project Name	RUSH - Two Day
			21003-0066.20	RUSH - Three Day
Phone:	Phone:	Phone:		RUSH - Four Day
Contact:	Contact:	Contact:		Standard (5-7 Day) X
E-mail:	E-mail:	E-mail:	YOUR PO#:	

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.

JAMES HOOKER

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

James Hooker

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

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
SB-11 0-4	S	7/1/21	PAHs, TAL metals	~~2x40ml~~ 8oz
SB-12 0-4	↓	↓	SVOCs, Pest, PCBs, TAL metals	↓
SB-15 0-4	↓	↓	PAHs, TAL metals	↓
SB-17 0-4	↓	↓	↓	↓
SB-18 0-4	↓	↓	↓	↓

Comments:

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

Special Instruction
Field Filtered ____
Lab to Filter ____

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
J Hooker 7/2/21	7-2-21 11:00	Chris C	7-2-21 11:00	Chris C 14:07	7-2-21
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by / Date/Time	Temp. Received at Lab
				[signature] 7/2/21 / 14:07	2.9

Technical Report

prepared for:

Gallagher Bassett - Poughkeepsie, NY
22 IBM Road, Suite 101
Poughkeepsie NY, 12601
Attention: James Hooker

Report Date: 07/21/2021
Client Project ID: 21003-0066
York Project (SDG) No.: 21G0097

Revision No. 1.0

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

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

Report Date: 07/21/2021
Client Project ID: 21003-0066
York Project (SDG) No.: 21G0097

Gallagher Bassett - Poughkeepsie, NY
22 IBM Road, Suite 101
Poughkeepsie NY, 12601
Attention: James Hooker

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on July 02, 2021 and listed below. The project was identified as your project: **21003-0066**.

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

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

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

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
21G0097-01	**SB-01 8-11**	**Soil**	**06/30/2021**	**07/02/2021**
21G0097-02	**SB-04 8-11**	**Soil**	**06/30/2021**	**07/02/2021**
21G0097-03	**SB-09 4-7**	**Soil**	**06/30/2021**	**07/02/2021**
21G0097-04	**SB-10 5-5.5**	**Soil**	**06/30/2021**	**07/02/2021**
21G0097-05	**SB-19 0-4**	**Soil**	**07/01/2021**	**07/02/2021**
21G0097-06	**SB-19 4-8**	**Soil**	**07/01/2021**	**07/02/2021**
21G0097-07	**SB-20 0-4**	**Soil**	**07/01/2021**	**07/02/2021**
21G0097-08	**SB-20 4-8**	**Soil**	**07/01/2021**	**07/02/2021**
21G0097-09	**SB-20 8-11**	**Soil**	**07/01/2021**	**07/02/2021**
21G0097-10	**SB-21 4-8**	**Soil**	**07/01/2021**	**07/02/2021**

General Notes for York Project (SDG) No.: 21G0097

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: Cassie L. Mosher **Date:** 07/21/2021

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: **SB-01 8-11** | **York Sample ID:** **21G0097-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**110**		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
108-67-8	**1,3,5-Trimethylbenzene**	**25**		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	45	89	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
78-93-3	2-Butanone	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ

Sample Information

Client Sample ID: **SB-01 8-11** **York Sample ID:** **21G0097-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
67-64-1	Acetone	ND		mg/kg dry	4.5	8.9	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
107-02-8	Acrolein	ND		mg/kg dry	4.5	8.9	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
107-13-1	Acrylonitrile	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
71-43-2	Benzene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
74-97-5	Bromochloromethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-25-2	Bromoform	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
74-83-9	Bromomethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-15-0	Carbon disulfide	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
56-23-5	Carbon tetrachloride	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-00-3	Chloroethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
67-66-3	Chloroform	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
74-87-3	Chloromethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
110-82-7	Cyclohexane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
74-95-3	Dibromomethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
100-41-4	**Ethyl Benzene**	**14**		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ

Sample Information

Client Sample ID: SB-01 8-11 **York Sample ID:** 21G0097-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-82-8	**Isopropylbenzene**	**3.5**	J	mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
79-20-9	Methyl acetate	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
108-87-2	**Methylcyclohexane**	**22**		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-09-2	Methylene chloride	ND		mg/kg dry	4.5	8.9	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
104-51-8	**n-Butylbenzene**	**3.8**	J	mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
103-65-1	**n-Propylbenzene**	**14**		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
95-47-6	**o-Xylene**	**20**		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
179601-23-1	**p- & m- Xylenes**	**100**		mg/kg dry	4.5	8.9	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
135-98-8	sec-Butylbenzene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
100-42-5	Styrene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
98-06-6	tert-Butylbenzene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
127-18-4	Tetrachloroethylene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
108-88-3	Toluene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
79-01-6	Trichloroethylene	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
75-01-4	Vinyl Chloride	ND		mg/kg dry	2.2	4.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 16:35	LLJ
1330-20-7	**Xylenes, Total**	**120**		mg/kg dry	6.7	13	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 16:35	LLJ

Surrogate Recoveries	Result	Acceptance Range

Sample Information

Client Sample ID: **SB-01 8-11** | **York Sample ID:** **21G0097-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*68.7 %*	S-03		*77-125*						
2037-26-5	*Surrogate: SURR: Toluene-d8*	*95.6 %*			*85-120*						
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*92.1 %*			*76-130*						

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

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**	**0.0905**	J	mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
91-57-6	**2-Methylnaphthalene**	**2.78**		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH

Sample Information

Client Sample ID: **SB-01 8-11** | **York Sample ID:** **21G0097-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive | **Log-in Notes:** | **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
62-53-3	Aniline	ND		mg/kg dry	0.186	0.372	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
120-12-7	Anthracene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
92-87-5	Benzidine	ND		mg/kg dry	0.186	0.372	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH

Sample Information

Client Sample ID: **SB-01 8-11** | **York Sample ID:** **21G0097-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive | **Log-in Notes:** | **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
86-74-8	Carbazole	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
218-01-9	Chrysene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
122-39-4	* Diphenylamine	ND		mg/kg dry	0.0928	0.185	2	EPA 8270D Certifications:	07/07/2021 07:39	07/07/2021 16:03	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
86-73-7	Fluorene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH

YORK ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID: **SB-01 8-11** | **York Sample ID:** **21G0097-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
78-59-1	Isophorone	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
91-20-3	**Naphthalene**	**2.92**		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
85-01-8	**Phenanthrene**	**0.0631**	J	mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
108-95-2	Phenol	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH
129-00-0	Pyrene	ND		mg/kg dry	0.0465	0.0928	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:03	KH

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: SURR: 2-Fluorophenol*	*50.4 %*	*20-108*
4165-62-2	*Surrogate: SURR: Phenol-d5*	*45.8 %*	*23-114*
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*55.6 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*55.0 %*	*21-113*
118-79-6	*Surrogate: SURR: 2,4,6-Tribromophenol*	*60.6 %*	*19-110*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*83.1 %*	*24-116*

Pesticides, 8081 target list

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

Sample Prepared by Method: EPA 3550C

CAS 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		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
72-55-9	4,4'-DDE	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM

Sample Information

Client Sample ID:	SB-01 8-11			York Sample ID:	21G0097-01
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time		Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm		07/02/2021

Pesticides, 8081 target list **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
50-29-3	4,4'-DDT	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
309-00-2	Aldrin	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
319-84-6	alpha-BHC	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
5103-71-9	alpha-Chlordane	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	07/07/2021 13:19	07/08/2021 18:43	CM
319-85-7	beta-BHC	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
57-74-9	Chlordane, total	ND		mg/kg dry	0.0364	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
319-86-8	delta-BHC	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
60-57-1	Dieldrin	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854	07/07/2021 13:19	07/08/2021 18:43	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
72-20-8	Endrin	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	07/07/2021 13:19	07/08/2021 18:43	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00182	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.00909	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.0920	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:43	CM

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*76.8 %*	*30-150*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*79.8 %*	*30-150*

Polychlorinated Biphenyls (PCB) **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: **SB-01 8-11** | **York Sample ID:** **21G0097-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:20	BJ
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:20	BJ
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:20	BJ
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:20	BJ
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:20	BJ
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:20	BJ
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:20	BJ
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0184	1	EPA 8082A Certifications:	07/07/2021 13:19	07/08/2021 18:20	BJ

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*80.0 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*54.5 %*	*30-140*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**7530**		mg/kg dry	5.60	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM
7440-36-0	Antimony	ND		mg/kg dry	2.80	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM
7440-38-2	Arsenic	ND		mg/kg dry	1.68	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM
7440-39-3	**Barium**	**23.2**		mg/kg dry	2.80	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.056	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.336	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM
7440-70-2	**Calcium**	**4460**	B	mg/kg dry	5.60	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM
7440-47-3	**Chromium**	**5.45**		mg/kg dry	0.560	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM
7440-48-4	**Cobalt**	**5.28**		mg/kg dry	0.448	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM
7440-50-8	**Copper**	**2.52**		mg/kg dry	2.24	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 20:47	EM

YORK ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID: **SB-01 8-11** | **York Sample ID:** **21G0097-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	**Iron**	**14900**		mg/kg dry	28.0	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**8.17**		mg/kg dry	0.560	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**2040**		mg/kg dry	5.60	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-96-5	**Manganese**	**91.0**		mg/kg dry	0.560	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	**Nickel**	**3.74**		mg/kg dry	1.12	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**386**		mg/kg dry	5.60	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	2.80	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.560	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**290**		mg/kg dry	56.0	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	2.80	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**13.3**		mg/kg dry	1.12	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**26.1**		mg/kg dry	2.80	1	EPA 6010D	07/07/2021 18:32	07/09/2021 20:47	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0336	1	EPA 7473	07/09/2021 19:41	07/09/2021 21:30	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**89.3**		%	0.100	1	SM 2540G	07/12/2021 08:19	07/12/2021 17:06	ALH
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SB-04 8-11** | **York Sample ID:** **21G0097-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**750**		mg/kg dry	26	51	5000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:02	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
108-67-8	**1,3,5-Trimethylbenzene**	**70**		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	55	110	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
78-93-3	2-Butanone	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ

Sample Information

Client Sample ID: **SB-04 8-11** | **York Sample ID:** **21G0097-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		mg/kg dry	5.5	11	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
107-02-8	Acrolein	ND		mg/kg dry	5.5	11	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
107-13-1	Acrylonitrile	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
71-43-2	Benzene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
74-97-5	Bromochloromethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-25-2	Bromoform	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
74-83-9	Bromomethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-15-0	Carbon disulfide	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
56-23-5	Carbon tetrachloride	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-00-3	**Chloroethane**	**6.6**		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
67-66-3	Chloroform	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
74-87-3	Chloromethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
110-82-7	**Cyclohexane**	**5.4**	QL-02, J	mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
74-95-3	Dibromomethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
100-41-4	**Ethyl Benzene**	**7.7**		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
98-82-8	**Isopropylbenzene**	**4.1**	J	mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ

Sample Information

Client Sample ID: **SB-04 8-11** | **York Sample ID:** **21G0097-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
108-87-2	**Methylcyclohexane**	**7.1**		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-09-2	Methylene chloride	ND		mg/kg dry	5.5	11	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
104-51-8	**n-Butylbenzene**	**31**		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
103-65-1	**n-Propylbenzene**	**17**		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
95-47-6	o-Xylene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
179601-23-1	**p- & m- Xylenes**	**32**		mg/kg dry	5.5	11	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
99-87-6	**p-Isopropyltoluene**	**5.9**		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
135-98-8	**sec-Butylbenzene**	**5.0**	J	mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
100-42-5	Styrene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
98-06-6	tert-Butylbenzene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
127-18-4	Tetrachloroethylene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
108-88-3	Toluene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
79-01-6	Trichloroethylene	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
75-01-4	Vinyl Chloride	ND		mg/kg dry	2.7	5.5	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 04:02	LLJ
1330-20-7	**Xylenes, Total**	**32**		mg/kg dry	8.2	16	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 04:02	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*94.4 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*96.7 %*	*85-120*

Sample Information

Client Sample ID: **SB-04 8-11** | **York Sample ID:** **21G0097-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*97.5 %*			*76-130*						

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

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	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
91-57-6	**2-Methylnaphthalene**	**0.773**		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH

Sample Information

Client Sample ID: **SB-04 8-11** | **York Sample ID:** **21G0097-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive | **Log-in Notes:** | **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
62-53-3	Aniline	ND		mg/kg dry	0.186	0.371	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
120-12-7	Anthracene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
92-87-5	Benzidine	ND		mg/kg dry	0.186	0.371	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH

Sample Information

Client Sample ID: **SB-04 8-11** **York Sample ID:** **21G0097-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
86-74-8	Carbazole	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
218-01-9	Chrysene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
122-39-4	* Diphenylamine	ND		mg/kg dry	0.0927	0.185	2	EPA 8270D Certifications:	07/07/2021 07:39	07/07/2021 16:35	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
86-73-7	Fluorene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH

Sample Information

Client Sample ID: SB-04 8-11 | **York Sample ID:** 21G0097-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
78-59-1	Isophorone	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
91-20-3	**Naphthalene**	**0.577**		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
108-95-2	Phenol	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH
129-00-0	Pyrene	ND		mg/kg dry	0.0465	0.0927	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 16:35	KH

CAS No.	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: SURR: 2-Fluorophenol*	*51.0 %*	*20-108*
4165-62-2	*Surrogate: SURR: Phenol-d5*	*45.6 %*	*23-114*
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*61.0 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*49.3 %*	*21-113*
118-79-6	*Surrogate: SURR: 2,4,6-Tribromophenol*	*63.2 %*	*19-110*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*92.9 %*	*24-116*

Polychlorinated Biphenyls (PCB)

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

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0183	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:34	BJ
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0183	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:34	BJ
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0183	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:34	BJ

Sample Information

Client Sample ID: **SB-04 8-11** **York Sample ID:** **21G0097-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Polychlorinated Biphenyls (PCB)

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

Sample Prepared by Method: EPA 3550C

CAS 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	0.0183	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:34	BJ
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0183	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:34	BJ
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0183	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:34	BJ
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0183	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:34	BJ
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0183	1	EPA 8082A Certifications:	07/07/2021 13:19	07/08/2021 18:34	BJ

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*75.5 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*46.0 %*	*30-140*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**10300**		mg/kg dry	5.63	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7440-36-0	Antimony	ND		mg/kg dry	2.82	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7440-38-2	Arsenic	ND		mg/kg dry	1.69	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7440-39-3	**Barium**	**27.1**		mg/kg dry	2.82	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.056	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.338	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7440-70-2	**Calcium**	**2850**	B	mg/kg dry	5.63	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7440-47-3	**Chromium**	**8.97**		mg/kg dry	0.563	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7440-48-4	**Cobalt**	**5.33**		mg/kg dry	0.451	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7440-50-8	**Copper**	**3.57**		mg/kg dry	2.25	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7439-89-6	**Iron**	**20000**		mg/kg dry	28.2	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7439-92-1	**Lead**	**7.52**		mg/kg dry	0.563	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM
7439-95-4	**Magnesium**	**2030**		mg/kg dry	5.63	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:03	EM

Sample Information

Client Sample ID: **SB-04 8-11** **York Sample ID:** **21G0097-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	**Manganese**	**96.1**		mg/kg dry	0.563	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:03	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	**Nickel**	**3.91**		mg/kg dry	1.13	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:03	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**420**		mg/kg dry	5.63	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:03	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	2.82	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:03	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.563	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:03	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**225**		mg/kg dry	56.3	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:03	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	2.82	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:03	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**16.3**		mg/kg dry	1.13	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:03	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**38.4**		mg/kg dry	2.82	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:03	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0338	1	EPA 7473	07/09/2021 19:41	07/09/2021 21:39	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**88.8**		%	0.100	1	SM 2540G	07/12/2021 08:19	07/12/2021 17:06	ALH
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SB-09 4-7** **York Sample ID:** **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

YORK ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID: **SB-09 4-7** **York Sample ID:** **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**11**		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
108-67-8	**1,3,5-Trimethylbenzene**	**4.3**		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	10	20	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
78-93-3	2-Butanone	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ

Sample Information

Client Sample ID: SB-09 4-7 | **York Sample ID:** 21G0097-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		mg/kg dry	1.0	2.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
107-02-8	Acrolein	ND		mg/kg dry	1.0	2.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
107-13-1	Acrylonitrile	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
71-43-2	Benzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
74-97-5	Bromochloromethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
75-25-2	Bromoform	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
74-83-9	Bromomethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
75-15-0	Carbon disulfide	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
75-00-3	Chloroethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
67-66-3	Chloroform	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
74-87-3	**Chloromethane**	**0.84**	CCV-E, J, B	mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
110-82-7	Cyclohexane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
74-95-3	Dibromomethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
100-41-4	**Ethyl Benzene**	**2.4**		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/13/2021 16:50	LLJ

Sample Information

Client Sample ID: **SB-09 4-7** **York Sample ID:** **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	**Methyl acetate**	**2.4**		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	**Methylcyclohexane**	**0.92**	J	mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		mg/kg dry	1.0	2.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	**n-Propylbenzene**	**1.4**		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	**p- & m- Xylenes**	**5.7**		mg/kg dry	1.0	2.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.50	1.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	**Xylenes, Total**	**5.7**		mg/kg dry	1.5	3.0	100	EPA 8260C	07/12/2021 05:23	07/13/2021 16:50	LLJ
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*91.9 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*95.0 %*	*85-120*

Sample Information

Client Sample ID: **SB-09 4-7**

York Sample ID: **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*92.6 %*			*76-130*						

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

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**	**0.129**		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
91-57-6	**2-Methylnaphthalene**	**0.312**		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH

Sample Information

Client Sample ID: **SB-09 4-7** | **York Sample ID:** **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
62-53-3	Aniline	ND		mg/kg dry	0.256	0.512	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
120-12-7	Anthracene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
92-87-5	Benzidine	ND		mg/kg dry	0.256	0.512	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
50-32-8	**Benzo(a)pyrene**	**0.0715**	J	mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH

YORK
ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID: **SB-09 4-7** **York Sample ID:** **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
117-81-7	**Bis(2-ethylhexyl)phthalate**	**0.326**	B	mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
86-74-8	Carbazole	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
218-01-9	Chrysene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
122-39-4	* Diphenylamine	ND		mg/kg dry	0.128	0.255	2	EPA 8270D Certifications:	07/07/2021 07:39	07/08/2021 12:44	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
86-73-7	**Fluorene**	**0.156**		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH

YORK ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID: **SB-09 4-7** | **York Sample ID:** **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
78-59-1	Isophorone	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
91-20-3	**Naphthalene**	**0.267**		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
85-01-8	**Phenanthrene**	**0.344**		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
108-95-2	Phenol	ND		mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH
129-00-0	**Pyrene**	**0.0644**	J	mg/kg dry	0.0641	0.128	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 12:44	KH

CAS No.	Surrogate Recoveries	Result	Flag	Acceptance Range
367-12-4	*Surrogate: SURR: 2-Fluorophenol*	*72.6 %*		*20-108*
4165-62-2	*Surrogate: SURR: Phenol-d5*	*68.6 %*		*23-114*
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*110 %*	S-08	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*65.0 %*		*21-113*
118-79-6	*Surrogate: SURR: 2,4,6-Tribromophenol*	*100 %*		*19-110*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*84.1 %*		*24-116*

Pesticides, 8081 target list

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

Sample Prepared by Method: EPA 3550C

CAS 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		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
72-55-9	4,4'-DDE	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM

Sample Information

Client Sample ID: **SB-09 4-7** **York Sample ID:** **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Pesticides, 8081 target list **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
50-29-3	4,4'-DDT	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
309-00-2	Aldrin	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
319-84-6	alpha-BHC	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
5103-71-9	alpha-Chlordane	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	07/07/2021 13:19	07/08/2021 19:00	CM
319-85-7	beta-BHC	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
57-74-9	Chlordane, total	ND		mg/kg dry	0.0504	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
319-86-8	delta-BHC	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
60-57-1	Dieldrin	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
959-98-8	Endosulfan I	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
33213-65-9	Endosulfan II	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854	07/07/2021 13:19	07/08/2021 19:00	CM
1031-07-8	Endosulfan sulfate	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
72-20-8	Endrin	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
7421-93-4	Endrin aldehyde	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
53494-70-5	Endrin ketone	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
58-89-9	gamma-BHC (Lindane)	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
5566-34-7	gamma-Chlordane	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	07/07/2021 13:19	07/08/2021 19:00	CM
76-44-8	Heptachlor	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
1024-57-3	Heptachlor epoxide	ND		mg/kg dry	0.00252	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
72-43-5	Methoxychlor	ND		mg/kg dry	0.0126	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM
8001-35-2	Toxaphene	ND		mg/kg dry	0.128	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 19:00	CM

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*33.3 %*	*30-150*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*39.5 %*	*30-150*

Polychlorinated Biphenyls (PCB) **Log-in Notes:** **Sample Notes:**

Sample Information

Client Sample ID: **SB-09 4-7** | **York Sample ID:** **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:47	BJ
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:47	BJ
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:47	BJ
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:47	BJ
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:47	BJ
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:47	BJ
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/08/2021 18:47	BJ
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0255	1	EPA 8082A Certifications:	07/07/2021 13:19	07/08/2021 18:47	BJ

	Surrogate Recoveries	Result		Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*43.0 %*		*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*27.5 %*	S-GC	*30-140*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**4490**		mg/kg dry	7.77	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM
7440-36-0	Antimony	ND		mg/kg dry	3.88	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM
7440-38-2	**Arsenic**	**2.39**		mg/kg dry	2.33	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM
7440-39-3	**Barium**	**41.4**		mg/kg dry	3.88	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.078	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.466	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM
7440-70-2	**Calcium**	**4660**	B	mg/kg dry	7.77	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM
7440-47-3	**Chromium**	**6.60**		mg/kg dry	0.777	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM
7440-48-4	**Cobalt**	**6.57**		mg/kg dry	0.621	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM
7440-50-8	**Copper**	**8.96**		mg/kg dry	3.11	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:06	EM

Sample Information

Client Sample ID: **SB-09 4-7**　　**York Sample ID:** **21G0097-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	**Iron**	**8170**		mg/kg dry	38.8	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**430**		mg/kg dry	0.777	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**1340**		mg/kg dry	7.77	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-96-5	**Manganese**	**82.2**		mg/kg dry	0.777	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	**Nickel**	**5.28**		mg/kg dry	1.55	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**372**		mg/kg dry	7.77	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	3.88	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.777	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**131**		mg/kg dry	77.7	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	3.88	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**11.1**		mg/kg dry	1.55	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**91.5**		mg/kg dry	3.88	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:06	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

Log-in Notes:　　**Sample Notes:**

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0769**		mg/kg dry	0.0466	1	EPA 7473	07/09/2021 19:41	07/09/2021 21:48	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

Log-in Notes:　　**Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**64.4**		%	0.100	1	SM 2540G	07/12/2021 08:19	07/12/2021 17:06	ALH
							Certifications: CTDOH			

Sample Information

Client Sample ID: SB-10 5-5.5 | **York Sample ID:** 21G0097-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	14	27	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
78-93-3	2-Butanone	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ

Sample Information

Client Sample ID: SB-10 5-5.5 | **York Sample ID:** 21G0097-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		mg/kg dry	1.4	2.7	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
107-02-8	Acrolein	ND		mg/kg dry	1.4	2.7	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
107-13-1	Acrylonitrile	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
71-43-2	Benzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
74-97-5	Bromochloromethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-25-2	Bromoform	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
74-83-9	Bromomethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-15-0	Carbon disulfide	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-00-3	Chloroethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
67-66-3	Chloroform	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
74-87-3	Chloromethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
110-82-7	Cyclohexane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
74-95-3	Dibromomethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ

Sample Information

Client Sample ID:	SB-10 5-5.5		York Sample ID:	21G0097-04
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	**Methyl acetate**	**0.82**	J	mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-09-2	Methylene chloride	ND		mg/kg dry	1.4	2.7	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
95-47-6	o-Xylene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	1.4	2.7	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
100-42-5	Styrene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
108-88-3	Toluene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
79-01-6	Trichloroethylene	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.68	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 17:55	LLJ
1330-20-7	Xylenes, Total	ND		mg/kg dry	2.0	4.1	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 17:55	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*92.2 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.6 %*	*85-120*

Sample Information

Client Sample ID: **SB-10 5-5.5** | **York Sample ID:** **21G0097-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*99.0 %*			*76-130*						

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

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	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH

Sample Information

Client Sample ID: **SB-10 5-5.5** **York Sample ID:** **21G0097-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
62-53-3	Aniline	ND		mg/kg dry	0.257	0.515	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
120-12-7	**Anthracene**	**0.295**		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
92-87-5	Benzidine	ND		mg/kg dry	0.257	0.515	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH

Sample Information

Client Sample ID: **SB-10 5-5.5** | **York Sample ID:** **21G0097-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
117-81-7	**Bis(2-ethylhexyl)phthalate**	**0.419**		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
86-74-8	**Carbazole**	**0.124**	J	mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
218-01-9	Chrysene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
122-39-4	* Diphenylamine	ND		mg/kg dry	0.129	0.257	2	EPA 8270D Certifications:	07/07/2021 14:19	07/09/2021 13:30	KH
206-44-0	**Fluoranthene**	**0.0894**	J	mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
86-73-7	Fluorene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH

Sample Information

Client Sample ID: SB-10 5-5.5 **York Sample ID:** 21G0097-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Semi-Volatiles, 8270 - Comprehensive

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
78-59-1	Isophorone	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
85-01-8	**Phenanthrene**	**0.613**		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
108-95-2	Phenol	ND		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH
129-00-0	**Pyrene**	**0.196**		mg/kg dry	0.0644	0.129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 14:19	07/09/2021 13:30	KH

	Surrogate Recoveries	Result	Flag	Acceptance Range
367-12-4	*Surrogate: SURR: 2-Fluorophenol*	*67.4 %*		*20-108*
4165-62-2	*Surrogate: SURR: Phenol-d5*	*64.6 %*		*23-114*
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*227 %*	S-08	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*69.6 %*		*21-113*
118-79-6	*Surrogate: SURR: 2,4,6-Tribromophenol*	*98.4 %*		*19-110*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*76.6 %*		*24-116*

Polychlorinated Biphenyls (PCB)

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

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0260	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/09/2021 15:20	BJ
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0260	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/09/2021 15:20	BJ
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0260	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/09/2021 15:20	BJ

Sample Information

Client Sample ID: SB-10 5-5.5 | **York Sample ID:** 21G0097-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

Polychlorinated Biphenyls (PCB)

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

Sample Prepared by Method: EPA 3550C

CAS 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	0.0260	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/09/2021 15:20	BJ
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0260	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/09/2021 15:20	BJ
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0260	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/09/2021 15:20	BJ
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0260	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/07/2021 13:19	07/09/2021 15:20	BJ
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0260	1	EPA 8082A Certifications:	07/07/2021 13:19	07/09/2021 15:20	BJ

	Surrogate Recoveries	Result	Flag	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*37.0 %*		*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*27.0 %*	S-GC	*30-140*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**5430**		mg/kg dry	7.84	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7440-36-0	Antimony	ND		mg/kg dry	3.92	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7440-38-2	**Arsenic**	**4.63**		mg/kg dry	2.35	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7440-39-3	**Barium**	**117**		mg/kg dry	3.92	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.078	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7440-43-9	**Cadmium**	**5.45**		mg/kg dry	0.470	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7440-70-2	**Calcium**	**4380**	B	mg/kg dry	7.84	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7440-47-3	**Chromium**	**5.88**		mg/kg dry	0.784	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7440-48-4	**Cobalt**	**4.83**		mg/kg dry	0.627	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7440-50-8	**Copper**	**193**		mg/kg dry	3.13	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7439-89-6	**Iron**	**7270**		mg/kg dry	39.2	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7439-92-1	**Lead**	**146**		mg/kg dry	0.784	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM
7439-95-4	**Magnesium**	**1160**		mg/kg dry	7.84	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:09	EM

Sample Information

Client Sample ID: **SB-10 5-5.5** | **York Sample ID:** **21G0097-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	June 30, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	**Manganese**	**64.1**		mg/kg dry	0.784	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:09	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	**Nickel**	**6.11**		mg/kg dry	1.57	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:09	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**275**		mg/kg dry	7.84	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:09	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	3.92	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:09	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.784	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:09	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**298**		mg/kg dry	78.4	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:09	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	3.92	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:09	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**7.24**		mg/kg dry	1.57	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:09	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**2420**		mg/kg dry	3.92	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:09	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.140**		mg/kg dry	0.0470	1	EPA 7473	07/09/2021 19:41	07/09/2021 21:57	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**63.8**		%	0.100	1	SM 2540G	07/12/2021 08:19	07/12/2021 17:06	ALH
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SB-19 0-4** | **York Sample ID:** **21G0097-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Sample Information

Client Sample ID: **SB-19 0-4** | **York Sample ID:** **21G0097-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**6.3**		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
108-67-8	**1,3,5-Trimethylbenzene**	**1.8**		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	14	28	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
78-93-3	2-Butanone	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ

Sample Information

Client Sample ID: **SB-19 0-4** | **York Sample ID:** **21G0097-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		mg/kg dry	1.4	2.8	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
107-02-8	Acrolein	ND		mg/kg dry	1.4	2.8	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
107-13-1	Acrylonitrile	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
71-43-2	Benzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
74-97-5	Bromochloromethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-25-2	Bromoform	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
74-83-9	Bromomethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-15-0	Carbon disulfide	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-00-3	Chloroethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
67-66-3	Chloroform	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
74-87-3	Chloromethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
110-82-7	Cyclohexane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
74-95-3	Dibromomethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ

Sample Information

Client Sample ID: **SB-19 0-4** | **York Sample ID:** **21G0097-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	**Methyl acetate**	**2.1**		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
108-87-2	**Methylcyclohexane**	**4.3**		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-09-2	Methylene chloride	ND		mg/kg dry	1.4	2.8	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
103-65-1	**n-Propylbenzene**	**1.1**	J	mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
95-47-6	o-Xylene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	1.4	2.8	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
100-42-5	Styrene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
108-88-3	Toluene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
79-01-6	Trichloroethylene	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 18:22	LLJ
1330-20-7	Xylenes, Total	ND		mg/kg dry	2.1	4.2	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 18:22	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*85.2 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*96.6 %*	*85-120*

Sample Information

Client Sample ID: SB-19 0-4 | **York Sample ID:** 21G0097-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*95.9 %*			*76-130*						

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	**2-Methylnaphthalene**	**1340**		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
83-32-9	Acenaphthene	ND		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
120-12-7	Anthracene	ND		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
56-55-3	**Benzo(a)anthracene**	**93.8**	J	ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
50-32-8	**Benzo(a)pyrene**	**75.3**	J	ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
205-99-2	**Benzo(b)fluoranthene**	**73.2**	J	ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
191-24-2	**Benzo(g,h,i)perylene**	**128**	J	ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
207-08-9	**Benzo(k)fluoranthene**	**66.0**	J	ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
218-01-9	**Chrysene**	**142**		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
206-44-0	**Fluoranthene**	**222**		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
86-73-7	**Fluorene**	**89.7**	J	ug/kg dry	64.7	129	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
193-39-5	**Indeno(1,2,3-cd)pyrene**	**108**	J	ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
91-20-3	**Naphthalene**	**875**		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
85-01-8	**Phenanthrene**	**227**		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH
129-00-0	**Pyrene**	**313**		ug/kg dry	64.7	129	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:08	KH

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*49.4 %*	*22-108*

Sample Information

Client Sample ID: **SB-19 0-4** **York Sample ID:** **21G0097-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*47.0 %*			*21-113*						
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*107 %*			*24-116*						

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**8140**		mg/kg dry	7.86	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-36-0	Antimony	ND		mg/kg dry	3.93	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-38-2	Arsenic	ND		mg/kg dry	2.36	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-39-3	**Barium**	**181**		mg/kg dry	3.93	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.079	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-43-9	**Cadmium**	**0.514**		mg/kg dry	0.472	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-70-2	**Calcium**	**30800**	B	mg/kg dry	7.86	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-47-3	**Chromium**	**9.38**		mg/kg dry	0.786	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-48-4	**Cobalt**	**2.44**		mg/kg dry	0.629	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-50-8	**Copper**	**19.8**		mg/kg dry	3.14	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7439-89-6	**Iron**	**9760**		mg/kg dry	39.3	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7439-92-1	**Lead**	**315**		mg/kg dry	0.786	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7439-95-4	**Magnesium**	**1440**		mg/kg dry	7.86	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7439-96-5	**Manganese**	**244**		mg/kg dry	0.786	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-02-0	**Nickel**	**1.67**		mg/kg dry	1.57	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-09-7	**Potassium**	**336**		mg/kg dry	7.86	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7782-49-2	Selenium	ND		mg/kg dry	3.93	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM
7440-22-4	Silver	ND		mg/kg dry	0.786	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 18:32	07/09/2021 21:12	EM

Sample Information

Client Sample ID: **SB-19 0-4** | **York Sample ID:** **21G0097-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**242**		mg/kg dry	78.6	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:12	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	3.93	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:12	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**10.3**		mg/kg dry	1.57	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:12	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**171**		mg/kg dry	3.93	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:12	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.801**		mg/kg dry	0.0472	1	EPA 7473	07/09/2021 19:41	07/09/2021 22:06	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**63.6**		%	0.100	1	SM 2540G	07/12/2021 08:19	07/12/2021 17:06	ALH
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SB-19 4-8** | **York Sample ID:** **21G0097-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C	07/09/2021 12:00	07/10/2021 05:21	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C	07/09/2021 12:00	07/10/2021 05:21	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C	07/09/2021 12:00	07/10/2021 05:21	LLJ
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			

Sample Information

Client Sample ID: **SB-19 4-8** | **York Sample ID:** **21G0097-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**59**		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
108-67-8	**1,3,5-Trimethylbenzene**	**21**		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	36	73	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
78-93-3	2-Butanone	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
67-64-1	Acetone	ND		mg/kg dry	3.6	7.3	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
107-02-8	Acrolein	ND		mg/kg dry	3.6	7.3	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
107-13-1	Acrylonitrile	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ

Sample Information

Client Sample ID:	SB-19 4-8		York Sample ID:	21G0097-06
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
74-97-5	Bromochloromethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-25-2	Bromoform	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
74-83-9	Bromomethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-15-0	Carbon disulfide	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
56-23-5	Carbon tetrachloride	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-00-3	Chloroethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
67-66-3	Chloroform	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
74-87-3	Chloromethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
110-82-7	**Cyclohexane**	**29**	QL-02	mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
74-95-3	Dibromomethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
100-41-4	**Ethyl Benzene**	**12**		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
98-82-8	**Isopropylbenzene**	**3.4**	J	mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
79-20-9	Methyl acetate	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
108-87-2	**Methylcyclohexane**	**63**		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ

Sample Information

Client Sample ID: SB-19 4-8 | **York Sample ID:** 21G0097-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		mg/kg dry	3.6	7.3	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
104-51-8	**n-Butylbenzene**	**5.8**		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
103-65-1	**n-Propylbenzene**	**7.1**		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
95-47-6	o-Xylene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
179601-23-1	**p- & m- Xylenes**	**61**		mg/kg dry	3.6	7.3	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
99-87-6	**p-Isopropyltoluene**	**2.5**	J	mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
135-98-8	sec-Butylbenzene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
100-42-5	Styrene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
98-06-6	tert-Butylbenzene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
127-18-4	Tetrachloroethylene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
108-88-3	Toluene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
79-01-6	Trichloroethylene	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
75-01-4	Vinyl Chloride	ND		mg/kg dry	1.8	3.6	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 05:21	LLJ
1330-20-7	**Xylenes, Total**	**61**		mg/kg dry	5.4	11	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 05:21	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*109 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*98.5 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*94.5 %*	*76-130*

Semi-Volatiles, PAH Target List

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

Sample Information

Client Sample ID: **SB-19 4-8** | **York Sample ID:** **21G0097-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	**2-Methylnaphthalene**	**1670**		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
83-32-9	Acenaphthene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
120-12-7	Anthracene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
218-01-9	Chrysene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
206-44-0	Fluoranthene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
86-73-7	**Fluorene**	**90.9**	J	ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
91-20-3	**Naphthalene**	**1010**		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
85-01-8	**Phenanthrene**	**159**		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH
129-00-0	Pyrene	ND		ug/kg dry	47.5	94.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 18:39	KH

	Surrogate Recoveries	Result		Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*65.2 %*		*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*55.8 %*		*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*118 %*	S-08	*24-116*

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**86.0**		%	0.100	1	SM 2540G Certifications: CTDOH	07/12/2021 08:19	07/12/2021 17:06	ALH

Sample Information

Client Sample ID: **SB-19 4-8** | **York Sample ID:** **21G0097-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Sample Information

Client Sample ID: **SB-20 0-4** | **York Sample ID:** **21G0097-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**0.30**		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
108-67-8	**1,3,5-Trimethylbenzene**	**0.15**		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ

Sample Information

Client Sample ID: **SB-20 0-4** | **York Sample ID:** **21G0097-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.10	0.21	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
78-93-3	2-Butanone	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
67-64-1	**Acetone**	**0.011**	J	mg/kg dry	0.010	0.021	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
107-02-8	Acrolein	ND		mg/kg dry	0.010	0.021	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
71-43-2	Benzene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-25-2	Bromoform	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
74-83-9	Bromomethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-00-3	Chloroethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
67-66-3	Chloroform	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
74-87-3	Chloromethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
110-82-7	**Cyclohexane**	**0.028**		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ

YORK ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID:	SB-20 0-4		York Sample ID:	21G0097-07
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-95-3	Dibromomethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
100-41-4	**Ethyl Benzene**	**0.014**		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
98-82-8	**Isopropylbenzene**	**0.013**		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
79-20-9	Methyl acetate	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
108-87-2	**Methylcyclohexane**	**0.10**		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-09-2	Methylene chloride	ND		mg/kg dry	0.010	0.021	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
104-51-8	**n-Butylbenzene**	**0.030**		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
103-65-1	**n-Propylbenzene**	**0.031**		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
95-47-6	o-Xylene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
179601-23-1	**p- & m- Xylenes**	**0.077**		mg/kg dry	0.010	0.021	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
99-87-6	**p-Isopropyltoluene**	**0.012**		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
135-98-8	**sec-Butylbenzene**	**0.0088**	J	mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
100-42-5	Styrene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
108-88-3	Toluene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ

Sample Information

Client Sample ID: **SB-20 0-4** | **York Sample ID:** **21G0097-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:22	LLJ
1330-20-7	**Xylenes, Total**	**0.077**		mg/kg dry	0.015	0.031	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 01:22	LLJ

	Surrogate Recoveries	Result		Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*66.3 %*	S-03	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.7 %*		*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*107 %*		*76-130*

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	**2-Methylnaphthalene**	**232**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
83-32-9	Acenaphthene	ND		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
208-96-8	**Acenaphthylene**	**467**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
120-12-7	**Anthracene**	**299**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
56-55-3	**Benzo(a)anthracene**	**971**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
50-32-8	**Benzo(a)pyrene**	**769**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
205-99-2	**Benzo(b)fluoranthene**	**620**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
191-24-2	**Benzo(g,h,i)perylene**	**810**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
207-08-9	**Benzo(k)fluoranthene**	**678**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
218-01-9	**Chrysene**	**1190**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
53-70-3	**Dibenzo(a,h)anthracene**	**240**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
206-44-0	**Fluoranthene**	**931**		ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH
86-73-7	**Fluorene**	**71.0**	J	ug/kg dry	44.5	88.9	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 19:10	KH

Sample Information

Client Sample ID: **SB-20 0-4** | **York Sample ID:** **21G0097-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
193-39-5	**Indeno(1,2,3-cd)pyrene**	**591**		ug/kg dry	44.5	88.9	2	EPA 8270D	07/07/2021 07:39	07/07/2021 19:10	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
91-20-3	**Naphthalene**	**176**		ug/kg dry	44.5	88.9	2	EPA 8270D	07/07/2021 07:39	07/07/2021 19:10	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
85-01-8	**Phenanthrene**	**390**		ug/kg dry	44.5	88.9	2	EPA 8270D	07/07/2021 07:39	07/07/2021 19:10	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
129-00-0	**Pyrene**	**2750**		ug/kg dry	44.5	88.9	2	EPA 8270D	07/07/2021 07:39	07/07/2021 19:10	KH
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

	Surrogate Recoveries	Result	Flag	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*57.4 %*		*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*55.0 %*		*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*135 %*	S-08	*24-116*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**3920**		mg/kg dry	5.42	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-36-0	Antimony	ND		mg/kg dry	2.71	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	**Arsenic**	**4.26**		mg/kg dry	1.63	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**493**		mg/kg dry	2.71	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/kg dry	0.054	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	**Cadmium**	**1.16**		mg/kg dry	0.325	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	**Calcium**	**63900**	B	mg/kg dry	5.42	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	**Chromium**	**10.9**		mg/kg dry	0.542	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-48-4	**Cobalt**	**5.15**		mg/kg dry	0.433	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-50-8	**Copper**	**70.5**		mg/kg dry	2.17	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-89-6	**Iron**	**18000**		mg/kg dry	27.1	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**421**		mg/kg dry	0.542	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**2640**		mg/kg dry	5.42	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: **SB-20 0-4** | **York Sample ID:** **21G0097-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-96-5	**Manganese**	**174**		mg/kg dry	0.542	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-02-0	**Nickel**	**7.81**		mg/kg dry	1.08	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-09-7	**Potassium**	**590**		mg/kg dry	5.42	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7782-49-2	Selenium	ND		mg/kg dry	2.71	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-22-4	Silver	ND		mg/kg dry	0.542	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-23-5	**Sodium**	**163**		mg/kg dry	54.2	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-28-0	Thallium	ND		mg/kg dry	2.71	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-62-2	**Vanadium**	**14.0**		mg/kg dry	1.08	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-66-6	**Zinc**	**432**		mg/kg dry	2.71	1	EPA 6010D	07/07/2021 18:32	07/09/2021 21:22	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0572**		mg/kg dry	0.0325	1	EPA 7473	07/09/2021 19:41	07/09/2021 23:52	BR
							Certifications:	CTDOH,NJDEP,NELAC-NY10854,PADEP		

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**92.3**		%	0.100	1	SM 2540G	07/12/2021 08:19	07/12/2021 17:06	ALH
							Certifications:	CTDOH		

Sample Information

Client Sample ID: **SB-20 4-8** | **York Sample ID:** **21G0097-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Sample Information

Client Sample ID: **SB-20 4-8** **York Sample ID:** **21G0097-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**3.1**		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
108-67-8	**1,3,5-Trimethylbenzene**	**0.58**	J	mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	7.0	14	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
78-93-3	**2-Butanone**	**0.37**	J	mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ

Sample Information

Client Sample ID: **SB-20 4-8** | **York Sample ID:** **21G0097-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
107-02-8	Acrolein	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
107-13-1	Acrylonitrile	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
71-43-2	Benzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
74-97-5	Bromochloromethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-25-2	Bromoform	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
74-83-9	Bromomethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-15-0	Carbon disulfide	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-00-3	Chloroethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
67-66-3	Chloroform	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
74-87-3	**Chloromethane**	**0.65**	B, CCV-E, J	mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
110-82-7	Cyclohexane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
74-95-3	Dibromomethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ

Sample Information

Client Sample ID: **SB-20 4-8** **York Sample ID:** **21G0097-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
108-87-2	**Methylcyclohexane**	**2.4**		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-09-2	Methylene chloride	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
104-51-8	**n-Butylbenzene**	**0.86**		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
103-65-1	**n-Propylbenzene**	**0.66**	J	mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
95-47-6	o-Xylene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.70	1.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
135-98-8	**sec-Butylbenzene**	**0.36**	J	mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
100-42-5	Styrene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
108-88-3	Toluene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
79-01-6	Trichloroethylene	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.35	0.70	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/12/2021 05:23	07/12/2021 19:16	LLJ
1330-20-7	Xylenes, Total	ND		mg/kg dry	1.0	2.1	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/12/2021 05:23	07/12/2021 19:16	LLJ

	Surrogate Recoveries	Result		Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*72.1 %*	S-03	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.1 %*		*85-120*

Sample Information

Client Sample ID: **SB-20 4-8** | **York Sample ID:** **21G0097-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*96.2 %*			*76-130*						

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	**2-Methylnaphthalene**	**617**		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
83-32-9	Acenaphthene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
120-12-7	Anthracene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
218-01-9	Chrysene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
206-44-0	Fluoranthene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
86-73-7	**Fluorene**	**53.9**	J	ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
91-20-3	Naphthalene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
85-01-8	**Phenanthrene**	**68.3**	J	ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH
129-00-0	Pyrene	ND		ug/kg dry	47.6	94.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/08/2021 13:14	KH

CAS No.	Surrogate Recoveries	Result	Flag	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*130 %*	S-08	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*78.5 %*		*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*89.9 %*		*24-116*

Sample Information

Client Sample ID: **SB-20 4-8** | **York Sample ID:** **21G0097-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**87.0**		%	0.100	1	SM 2540G Certifications: CTDOH	07/12/2021 08:19	07/12/2021 17:06	ALH

Sample Information

Client Sample ID: **SB-20 8-11** | **York Sample ID:** **21G0097-09**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-34-3	1,1-Dichloroethane	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-35-4	1,1-Dichloroethylene	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**1.9**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ

Sample Information

Client Sample ID: SB-20 8-11 | **York Sample ID: 21G0097-09**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
108-67-8	**1,3,5-Trimethylbenzene**	**1.4**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.051	0.10	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
78-93-3	2-Butanone	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
67-64-1	Acetone	ND	IS-HI	mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
107-02-8	Acrolein	ND	IS-HI	mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
107-13-1	Acrylonitrile	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
71-43-2	Benzene	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
74-97-5	Bromochloromethane	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-25-2	Bromoform	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
74-83-9	Bromomethane	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-15-0	Carbon disulfide	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
56-23-5	Carbon tetrachloride	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-00-3	Chloroethane	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
67-66-3	Chloroform	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
74-87-3	Chloromethane	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ

Sample Information

Client Sample ID: SB-20 8-11 **York Sample ID:** 21G0097-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
110-82-7	**Cyclohexane**	**0.060**	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
74-95-3	Dibromomethane	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-71-8	Dichlorodifluoromethane	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
100-41-4	**Ethyl Benzene**	**0.53**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
98-82-8	**Isopropylbenzene**	**0.53**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
79-20-9	Methyl acetate	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
108-87-2	**Methylcyclohexane**	**3.4**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-09-2	Methylene chloride	ND	IS-HI	mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
91-20-3	**Naphthalene**	**0.28**	VOA-E, E	mg/kg dry	0.0025	0.010	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
104-51-8	**n-Butylbenzene**	**0.48**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
103-65-1	**n-Propylbenzene**	**0.87**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
95-47-6	**o-Xylene**	**0.44**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
179601-23-1	**p- & m- Xylenes**	**1.6**	VOA-E, E	mg/kg dry	0.0051	0.010	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
105-05-5	*** p-Diethylbenzene**	**1.2**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications:	07/09/2021 12:00	07/10/2021 01:49	LLJ
622-96-8	*** p-Ethyltoluene**	**2.7**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications:	07/09/2021 12:00	07/10/2021 01:49	LLJ
99-87-6	**p-Isopropyltoluene**	**0.21**	VOA-E, E	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
135-98-8	**sec-Butylbenzene**	**0.15**		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ

Sample Information

Client Sample ID: **SB-20 8-11** | **York Sample ID:** **21G0097-09**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-42-5	**Styrene**	**0.015**		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
108-88-3	Toluene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-69-4	Trichlorofluoromethane	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
75-01-4	Vinyl Chloride	ND	IS-HI	mg/kg dry	0.0025	0.0051	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 01:49	LLJ
1330-20-7	**Xylenes, Total**	**2.0**	VOA-E, E	mg/kg dry	0.0076	0.015	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 01:49	LLJ

CAS No.	Surrogate Recoveries	Result	Flag	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*0.820 %*	IS-HI, S-03	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*94.2 %*		*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*236 %*	S-03	*76-130*

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	**2-Methylnaphthalene**	**164**		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
83-32-9	Acenaphthene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
120-12-7	Anthracene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH

Sample Information

Client Sample ID: **SB-20 8-11** | **York Sample ID:** **21G0097-09**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
218-01-9	Chrysene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
206-44-0	Fluoranthene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
86-73-7	Fluorene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
91-20-3	Naphthalene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
85-01-8	Phenanthrene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH
129-00-0	Pyrene	ND		ug/kg dry	48.7	97.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 14:29	KH

	Surrogate Recoveries	Result	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*74.9 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*71.8 %*	*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*104 %*	*24-116*

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	**84.8**		%	0.100	1	SM 2540G Certifications: CTDOH	07/12/2021 08:19	07/12/2021 17:06	ALH

Sample Information

Client Sample ID: **SB-21 4-8** | **York Sample ID:** **21G0097-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

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

Sample Information

Client Sample ID: **SB-21 4-8** | **York Sample ID:** **21G0097-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
95-63-6	**1,2,4-Trimethylbenzene**	**5.6**		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
108-67-8	**1,3,5-Trimethylbenzene**	**1.7**		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
123-91-1	1,4-Dioxane	ND		mg/kg dry	8.1	16	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
78-93-3	2-Butanone	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
591-78-6	2-Hexanone	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
67-64-1	Acetone	ND		mg/kg dry	0.81	1.6	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ

Sample Information

Client Sample ID: **SB-21 4-8** | **York Sample ID:** **21G0097-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-02-8	Acrolein	ND		mg/kg dry	0.81	1.6	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
107-13-1	Acrylonitrile	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
71-43-2	Benzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
74-97-5	Bromochloromethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-25-2	Bromoform	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
74-83-9	Bromomethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-15-0	Carbon disulfide	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
108-90-7	Chlorobenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-00-3	Chloroethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
67-66-3	Chloroform	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
74-87-3	Chloromethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
110-82-7	**Cyclohexane**	**1.1**	QL-02	mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
74-95-3	Dibromomethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
100-41-4	**Ethyl Benzene**	**0.66**	J	mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
79-20-9	Methyl acetate	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ

Sample Information

Client Sample ID: **SB-21 4-8** | **York Sample ID:** **21G0097-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
108-87-2	**Methylcyclohexane**	**3.4**		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-09-2	Methylene chloride	ND		mg/kg dry	0.81	1.6	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
103-65-1	**n-Propylbenzene**	**0.67**	J	mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
95-47-6	o-Xylene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
179601-23-1	**p- & m- Xylenes**	**3.1**		mg/kg dry	0.81	1.6	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
100-42-5	Styrene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
108-88-3	Toluene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
79-01-6	Trichloroethylene	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.41	0.81	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	07/09/2021 12:00	07/10/2021 06:14	LLJ
1330-20-7	**Xylenes, Total**	**3.1**		mg/kg dry	1.2	2.4	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	07/09/2021 12:00	07/10/2021 06:14	LLJ

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: SURR: 1,2-Dichloroethane-d4*	*81.5 %*	*77-125*
2037-26-5	*Surrogate: SURR: Toluene-d8*	*97.1 %*	*85-120*
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*96.4 %*	*76-130*

Sample Information

Client Sample ID: **SB-21 4-8** | **York Sample ID:** **21G0097-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Semi-Volatiles, PAH Target List

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

Sample Prepared by Method: EPA 3546 SVOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	**2-Methylnaphthalene**	**200**		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
83-32-9	Acenaphthene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
120-12-7	Anthracene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
218-01-9	Chrysene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
206-44-0	Fluoranthene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
86-73-7	Fluorene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
91-20-3	**Naphthalene**	**159**		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
85-01-8	Phenanthrene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH
129-00-0	Pyrene	ND		ug/kg dry	50.5	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/07/2021 07:39	07/07/2021 20:12	KH

	Surrogate Recoveries	Result	Flag	Acceptance Range
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*49.8 %*		*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*49.2 %*		*21-113*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*120 %*	S-08	*24-116*

Total Solids

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

Sample Prepared by Method: % Solids Prep

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

Sample Information

Client Sample ID: **SB-21 4-8** | **York Sample ID:** **21G0097-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0097	21003-0066	Soil	July 1, 2021 3:00 pm	07/02/2021

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	**82.0**		%	0.100	1	SM 2540G	07/12/2021 08:19	07/12/2021 17:06	ALH
							Certifications: CTDOH			

Analytical Batch Summary

Batch ID: BG10243 **Preparation Method:** EPA 3546 SVOA **Prepared By:** S_K

YORK Sample ID	Client Sample ID	Preparation Date
21G0097-01	SB-01 8-11	07/07/21
21G0097-02	SB-04 8-11	07/07/21
21G0097-03	SB-09 4-7	07/07/21
21G0097-05	SB-19 0-4	07/07/21
21G0097-06	SB-19 4-8	07/07/21
21G0097-07	SB-20 0-4	07/07/21
21G0097-08	SB-20 4-8	07/07/21
21G0097-09	SB-20 8-11	07/07/21
21G0097-10	SB-21 4-8	07/07/21
BG10243-BLK1	Blank	07/07/21
BG10243-BS1	LCS	07/07/21
BG10243-MS1	Matrix Spike	07/07/21
BG10243-MSD1	Matrix Spike Dup	07/07/21

Batch ID: BG10274 **Preparation Method:** EPA 3550C **Prepared By:** MAM

YORK Sample ID	Client Sample ID	Preparation Date
21G0097-01	SB-01 8-11	07/07/21
21G0097-01	SB-01 8-11	07/07/21
21G0097-02	SB-04 8-11	07/07/21
21G0097-03	SB-09 4-7	07/07/21
21G0097-03	SB-09 4-7	07/07/21
21G0097-04	SB-10 5-5.5	07/07/21
BG10274-BLK1	Blank	07/07/21
BG10274-BLK2	Blank	07/07/21
BG10274-BS1	LCS	07/07/21
BG10274-BS2	LCS	07/07/21
BG10274-MS1	Matrix Spike	07/07/21
BG10274-MS2	Matrix Spike	07/07/21
BG10274-MSD1	Matrix Spike Dup	07/07/21
BG10274-MSD2	Matrix Spike Dup	07/07/21

Batch ID: BG10275 **Preparation Method:** EPA 3546 SVOA **Prepared By:** EMS

YORK Sample ID	Client Sample ID	Preparation Date
21G0097-04	SB-10 5-5.5	07/07/21
BG10275-BLK1	Blank	07/07/21
BG10275-BS1	LCS	07/07/21
BG10275-MS1	Matrix Spike	07/07/21
BG10275-MSD1	Matrix Spike Dup	07/07/21

Batch ID: BG10314 **Preparation Method:** EPA 3050B **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date

21G0097-01	SB-01 8-11	07/07/21
21G0097-02	SB-04 8-11	07/07/21
21G0097-03	SB-09 4-7	07/07/21
21G0097-04	SB-10 5-5.5	07/07/21
21G0097-05	SB-19 0-4	07/07/21
21G0097-07	SB-20 0-4	07/07/21
BG10314-BLK1	Blank	07/07/21
BG10314-DUP1	Duplicate	07/07/21
BG10314-MS1	Matrix Spike	07/07/21
BG10314-PS1	Post Spike	07/07/21
BG10314-SRM1	Reference	07/07/21

Batch ID: BG10454 **Preparation Method:** EPA 7473 soil **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date
21G0097-01	SB-01 8-11	07/09/21
21G0097-02	SB-04 8-11	07/09/21
21G0097-03	SB-09 4-7	07/09/21
21G0097-04	SB-10 5-5.5	07/09/21
21G0097-05	SB-19 0-4	07/09/21
21G0097-07	SB-20 0-4	07/09/21
BG10454-BLK1	Blank	07/09/21
BG10454-DUP1	Duplicate	07/09/21
BG10454-MS1	Matrix Spike	07/09/21
BG10454-SRM1	Reference	07/09/21

Batch ID: BG10468 **Preparation Method:** % Solids Prep **Prepared By:** ALH

YORK Sample ID	Client Sample ID	Preparation Date
21G0097-01	SB-01 8-11	07/12/21
21G0097-02	SB-04 8-11	07/12/21
21G0097-03	SB-09 4-7	07/12/21
21G0097-04	SB-10 5-5.5	07/12/21
21G0097-05	SB-19 0-4	07/12/21
21G0097-06	SB-19 4-8	07/12/21
21G0097-07	SB-20 0-4	07/12/21
21G0097-08	SB-20 4-8	07/12/21
21G0097-09	SB-20 8-11	07/12/21
21G0097-10	SB-21 4-8	07/12/21
BG10468-DUP1	Duplicate	07/12/21

Batch ID: BG10562 **Preparation Method:** EPA 5035A **Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
21G0097-01	SB-01 8-11	07/12/21
21G0097-02RE1	SB-04 8-11	07/12/21
21G0097-03	SB-09 4-7	07/12/21
21G0097-04	SB-10 5-5.5	07/12/21
21G0097-05	SB-19 0-4	07/12/21
21G0097-08	SB-20 4-8	07/12/21

BG10562-BLK1	Blank	07/12/21
BG10562-BLK2	Blank	07/12/21
BG10562-BS1	LCS	07/12/21
BG10562-BSD1	LCS Dup	07/12/21

Batch ID: BG10582 **Preparation Method:** EPA 5035A **Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
21G0097-02	SB-04 8-11	07/09/21
21G0097-06	SB-19 4-8	07/09/21
21G0097-07	SB-20 0-4	07/09/21
21G0097-09	SB-20 8-11	07/09/21
21G0097-10	SB-21 4-8	07/09/21
BG10582-BLK1	Blank	07/09/21
BG10582-BLK2	Blank	07/09/21
BG10582-BS1	LCS	07/09/21
BG10582-BSD1	LCS Dup	07/09/21

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10562 - EPA 5035A

Blank (BG10562-BLK1) Prepared & Analyzed: 07/12/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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 113)	ND	0.0050	"								
1,1,2-Trichloroethane	ND	0.0050	"								
1,1-Dichloroethane	ND	0.0050	"								
1,1-Dichloroethylene	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	"								
1,4-Dichlorobenzene	ND	0.0050	"								
1,4-Dioxane	ND	0.10	"								
2-Butanone	ND	0.0050	"								
2-Hexanone	ND	0.0050	"								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrolein	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	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 tetrachloride	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	"								
Ethyl Benzene	ND	0.0050	"								
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	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10562 - EPA 5035A

Blank (BG10562-BLK1) Prepared & Analyzed: 07/12/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Methylene chloride	ND	0.010	mg/kg wet								
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	0.0050	"								
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 Chloride	ND	0.0050	"								
Xylenes, Total	ND	0.015	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*46.8*		*ug/L*	*50.0*		*93.5*	*77-125*				
Surrogate: SURR: Toluene-d8	*47.8*		*"*	*50.0*		*95.7*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*46.1*		*"*	*50.0*		*92.2*	*76-130*				

Blank (BG10562-BLK2) Prepared & Analyzed: 07/12/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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 113)	ND	0.0050	"								
1,1,2-Trichloroethane	ND	0.0050	"								
1,1-Dichloroethane	ND	0.0050	"								
1,1-Dichloroethylene	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	"								
1,4-Dichlorobenzene	ND	0.0050	"								
1,4-Dioxane	ND	0.10	"								
2-Butanone	ND	0.0050	"								
2-Hexanone	ND	0.0050	"								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrolein	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	ND	0.0050	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10562 - EPA 5035A											
Blank (BG10562-BLK2)							Prepared & Analyzed: 07/12/2021				
Bromochloromethane	ND	0.0050	mg/kg wet								
Bromodichloromethane	ND	0.0050	"								
Bromoform	ND	0.0050	"								
Bromomethane	ND	0.0050	"								
Carbon disulfide	ND	0.0050	"								
Carbon tetrachloride	ND	0.0050	"								
Chlorobenzene	ND	0.0050	"								
Chloroethane	ND	0.0050	"								
Chloroform	ND	0.0050	"								
Chloromethane	0.0068	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	"								
Ethyl Benzene	ND	0.0050	"								
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	0.0050	"								
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 Chloride	ND	0.0050	"								
Xylenes, Total	ND	0.015	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*46.6*		*ug/L*	*50.0*		*93.3*	*77-125*				
Surrogate: SURR: Toluene-d8	*47.3*		*"*	*50.0*		*94.6*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*47.2*		*"*	*50.0*		*94.4*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10562 - EPA 5035A

LCS (BG10562-BS1) Prepared & Analyzed: 07/12/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
1,1,1,2-Tetrachloroethane	52		ug/L	50.0		104	75-129				
1,1,1-Trichloroethane	45		"	50.0		90.1	71-137				
1,1,2,2-Tetrachloroethane	60		"	50.0		120	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	54		"	50.0		108	58-146				
1,1,2-Trichloroethane	55		"	50.0		109	83-123				
1,1-Dichloroethane	47		"	50.0		93.5	75-130				
1,1-Dichloroethylene	44		"	50.0		87.3	64-137				
1,2,3-Trichlorobenzene	49		"	50.0		98.1	81-140				
1,2,3-Trichloropropane	51		"	50.0		102	81-126				
1,2,4-Trichlorobenzene	50		"	50.0		99.7	80-141				
1,2,4-Trimethylbenzene	48		"	50.0		95.1	84-125				
1,2-Dibromo-3-chloropropane	45		"	50.0		90.8	74-142				
1,2-Dibromoethane	54		"	50.0		108	86-123				
1,2-Dichlorobenzene	51		"	50.0		102	85-122				
1,2-Dichloroethane	47		"	50.0		94.6	71-133				
1,2-Dichloropropane	51		"	50.0		103	81-122				
1,3,5-Trimethylbenzene	47		"	50.0		93.2	82-126				
1,3-Dichlorobenzene	49		"	50.0		98.6	84-124				
1,4-Dichlorobenzene	50		"	50.0		99.2	84-124				
1,4-Dioxane	67		"	1050		6.35	10-228	Low Bias			
2-Butanone	39		"	50.0		77.5	58-147				
2-Hexanone	49		"	50.0		97.4	70-139				
4-Methyl-2-pentanone	52		"	50.0		104	72-132				
Acetone	33		"	50.0		65.8	36-155				
Acrolein	32		"	50.0		63.3	10-238				
Acrylonitrile	53		"	50.0		107	66-141				
Benzene	52		"	50.0		105	77-127				
Bromochloromethane	50		"	50.0		100	74-129				
Bromodichloromethane	47		"	50.0		94.5	81-124				
Bromoform	54		"	50.0		107	80-136				
Bromomethane	48		"	50.0		95.1	32-177				
Carbon disulfide	51		"	50.0		102	10-136				
Carbon tetrachloride	44		"	50.0		88.8	66-143				
Chlorobenzene	50		"	50.0		100	86-120				
Chloroethane	54		"	50.0		107	51-142				
Chloroform	49		"	50.0		97.1	76-131				
Chloromethane	63		"	50.0		127	49-132				
cis-1,2-Dichloroethylene	48		"	50.0		95.8	74-132				
cis-1,3-Dichloropropylene	52		"	50.0		105	81-129				
Cyclohexane	34		"	50.0		67.1	70-130	Low Bias			
Dibromochloromethane	55		"	50.0		110	10-200				
Dibromomethane	48		"	50.0		96.7	83-124				
Dichlorodifluoromethane	62		"	50.0		123	28-158				
Ethyl Benzene	48		"	50.0		96.7	84-125				
Hexachlorobutadiene	43		"	50.0		86.6	83-133				
Isopropylbenzene	46		"	50.0		91.1	81-127				
Methyl acetate	41		"	50.0		81.5	41-143				
Methyl tert-butyl ether (MTBE)	53		"	50.0		106	74-131				
Methylcyclohexane	40		"	50.0		80.1	70-130				
Methylene chloride	51		"	50.0		103	57-141				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10562 - EPA 5035A											
LCS (BG10562-BS1)							Prepared & Analyzed: 07/12/2021				
n-Butylbenzene	43		ug/L	50.0		85.9	80-130				
n-Propylbenzene	45		"	50.0		89.6	74-136				
o-Xylene	49		"	50.0		98.1	83-123				
p- & m- Xylenes	95		"	100		95.4	82-128				
p-Isopropyltoluene	46		"	50.0		91.6	85-125				
sec-Butylbenzene	47		"	50.0		93.7	83-125				
Styrene	53		"	50.0		106	86-126				
tert-Butyl alcohol (TBA)	190		"	250		77.8	70-130				
tert-Butylbenzene	40		"	50.0		80.6	80-127				
Tetrachloroethylene	41		"	50.0		82.5	80-129				
Toluene	49		"	50.0		97.4	85-121				
trans-1,2-Dichloroethylene	49		"	50.0		97.8	72-132				
trans-1,3-Dichloropropylene	52		"	50.0		103	78-132				
Trichloroethylene	43		"	50.0		85.3	84-123				
Trichlorofluoromethane	45		"	50.0		90.7	62-140				
Vinyl Chloride	58		"	50.0		117	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	*45.2*		*"*	*50.0*		*90.3*	*77-125*				
Surrogate: SURR: Toluene-d8	*48.1*		*"*	*50.0*		*96.2*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*47.3*		*"*	*50.0*		*94.5*	*76-130*				
LCS Dup (BG10562-BSD1)							Prepared & Analyzed: 07/12/2021				
1,1,1,2-Tetrachloroethane	52		ug/L	50.0		105	75-129		0.345	30	
1,1,1-Trichloroethane	45		"	50.0		90.2	71-137		0.178	30	
1,1,2,2-Tetrachloroethane	60		"	50.0		121	79-129		0.498	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	54		"	50.0		108	58-146		0.370	30	
1,1,2-Trichloroethane	56		"	50.0		111	83-123		1.54	30	
1,1-Dichloroethane	48		"	50.0		95.1	75-130		1.61	30	
1,1-Dichloroethylene	45		"	50.0		89.2	64-137		2.11	30	
1,2,3-Trichlorobenzene	50		"	50.0		99.2	81-140		1.11	30	
1,2,3-Trichloropropane	51		"	50.0		102	81-126		0.0196	30	
1,2,4-Trichlorobenzene	50		"	50.0		100	80-141		0.480	30	
1,2,4-Trimethylbenzene	48		"	50.0		95.9	84-125		0.838	30	
1,2-Dibromo-3-chloropropane	45		"	50.0		89.9	74-142		0.997	30	
1,2-Dibromoethane	55		"	50.0		110	86-123		2.41	30	
1,2-Dichlorobenzene	51		"	50.0		102	85-122		0.490	30	
1,2-Dichloroethane	49		"	50.0		97.5	71-133		3.06	30	
1,2-Dichloropropane	50		"	50.0		99.9	81-122		2.63	30	
1,3,5-Trimethylbenzene	46		"	50.0		92.8	82-126		0.430	30	
1,3-Dichlorobenzene	49		"	50.0		98.4	84-124		0.183	30	
1,4-Dichlorobenzene	49		"	50.0		98.6	84-124		0.647	30	
1,4-Dioxane	57		"	1050		5.40	10-228	Low Bias	16.1	30	
2-Butanone	41		"	50.0		82.2	58-147		5.83	30	
2-Hexanone	52		"	50.0		104	70-139		6.29	30	
4-Methyl-2-pentanone	53		"	50.0		107	72-132		3.10	30	
Acetone	34		"	50.0		67.4	36-155		2.31	30	
Acrolein	33		"	50.0		66.8	10-238		5.38	30	
Acrylonitrile	56		"	50.0		111	66-141		4.02	30	
Benzene	54		"	50.0		107	77-127		2.09	30	
Bromochloromethane	51		"	50.0		103	74-129		2.44	30	
Bromodichloromethane	47		"	50.0		94.3	81-124		0.212	30	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10562 - EPA 5035A

LCS Dup (BG10562-BSD1) Prepared & Analyzed: 07/12/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Bromoform	54		ug/L	50.0		108	80-136		0.874	30	
Bromomethane	48		"	50.0		96.6	32-177		1.54	30	
Carbon disulfide	51		"	50.0		103	10-136		0.390	30	
Carbon tetrachloride	45		"	50.0		90.1	66-143		1.43	30	
Chlorobenzene	51		"	50.0		101	86-120		0.992	30	
Chloroethane	54		"	50.0		109	51-142		1.09	30	
Chloroform	49		"	50.0		98.1	76-131		1.11	30	
Chloromethane	64		"	50.0		128	49-132		1.25	30	
cis-1,2-Dichloroethylene	49		"	50.0		97.6	74-132		1.82	30	
cis-1,3-Dichloropropylene	53		"	50.0		105	81-129		0.515	30	
Cyclohexane	34		"	50.0		67.6	70-130	Low Bias	0.802	30	
Dibromochloromethane	55		"	50.0		110	10-200		0.109	30	
Dibromomethane	49		"	50.0		98.8	83-124		2.17	30	
Dichlorodifluoromethane	63		"	50.0		125	28-158		1.40	30	
Ethyl Benzene	48		"	50.0		96.6	84-125		0.145	30	
Hexachlorobutadiene	42		"	50.0		84.2	83-133		2.79	30	
Isopropylbenzene	44		"	50.0		88.8	81-127		2.56	30	
Methyl acetate	42		"	50.0		83.7	41-143		2.59	30	
Methyl tert-butyl ether (MTBE)	53		"	50.0		107	74-131		1.02	30	
Methylcyclohexane	39		"	50.0		77.8	70-130		2.99	30	
Methylene chloride	51		"	50.0		103	57-141		0.0195	30	
n-Butylbenzene	41		"	50.0		81.8	80-130		4.79	30	
n-Propylbenzene	45		"	50.0		89.3	74-136		0.403	30	
o-Xylene	50		"	50.0		99.5	83-123		1.42	30	
p- & m- Xylenes	96		"	100		96.1	82-128		0.731	30	
p-Isopropyltoluene	46		"	50.0		91.8	85-125		0.196	30	
sec-Butylbenzene	47		"	50.0		93.9	83-125		0.213	30	
Styrene	53		"	50.0		106	86-126		0.246	30	
tert-Butyl alcohol (TBA)	200		"	250		81.0	70-130		4.09	30	
tert-Butylbenzene	40		"	50.0		79.3	80-127	Low Bias	1.68	30	
Tetrachloroethylene	42		"	50.0		83.2	80-129		0.869	30	
Toluene	49		"	50.0		97.2	85-121		0.206	30	
trans-1,2-Dichloroethylene	50		"	50.0		99.7	72-132		1.84	30	
trans-1,3-Dichloropropylene	53		"	50.0		105	78-132		2.17	30	
Trichloroethylene	43		"	50.0		85.4	84-123		0.141	30	
Trichlorofluoromethane	45		"	50.0		90.8	62-140		0.176	30	
Vinyl Chloride	59		"	50.0		118	52-130		1.26	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	*45.7*		*"*	*50.0*		*91.4*	*77-125*				
Surrogate: SURR: Toluene-d8	*47.6*		*"*	*50.0*		*95.3*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*46.4*		*"*	*50.0*		*92.9*	*76-130*				

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

Batch BG10582 - EPA 5035A

Blank (BG10582-BLK1) Prepared: 07/09/2021 Analyzed: 07/10/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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 113)	ND	0.0050	"								
1,1,2-Trichloroethane	ND	0.0050	"								
1,1-Dichloroethane	ND	0.0050	"								
1,1-Dichloroethylene	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	"								
1,4-Dichlorobenzene	ND	0.0050	"								
1,4-Dioxane	ND	0.10	"								
2-Butanone	ND	0.0050	"								
2-Hexanone	ND	0.0050	"								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrolein	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	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 tetrachloride	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	"								
Ethyl Benzene	ND	0.0050	"								
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	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10582 - EPA 5035A											
Blank (BG10582-BLK1)											Prepared: 07/09/2021 Analyzed: 07/10/2021
n-Butylbenzene	ND	0.0050	mg/kg wet								
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	0.0050	"								
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 Chloride	ND	0.0050	"								
Xylenes, Total	ND	0.015	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*47.0*		*ug/L*	*50.0*		*93.9*	*77-125*				
Surrogate: SURR: Toluene-d8	*48.3*		*"*	*50.0*		*96.5*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*45.7*		*"*	*50.0*		*91.4*	*76-130*				
Blank (BG10582-BLK2)											Prepared: 07/09/2021 Analyzed: 07/10/2021
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 113)	ND	0.0050	"								
1,1,2-Trichloroethane	ND	0.0050	"								
1,1-Dichloroethane	ND	0.0050	"								
1,1-Dichloroethylene	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	"								
1,4-Dichlorobenzene	ND	0.0050	"								
1,4-Dioxane	ND	0.10	"								
2-Butanone	ND	0.0050	"								
2-Hexanone	ND	0.0050	"								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrolein	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	ND	0.0050	"								
Bromochloromethane	ND	0.0050	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10582 - EPA 5035A											
Blank (BG10582-BLK2)								Prepared: 07/09/2021 Analyzed: 07/10/2021			
Bromodichloromethane	ND	0.0050	mg/kg wet								
Bromoform	ND	0.0050	"								
Bromomethane	ND	0.0050	"								
Carbon disulfide	ND	0.0050	"								
Carbon tetrachloride	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	"								
Ethyl Benzene	ND	0.0050	"								
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	0.0050	"								
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 Chloride	ND	0.0050	"								
Xylenes, Total	ND	0.015	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	*46.6*		*ug/L*	*50.0*		*93.2*	*77-125*				
Surrogate: SURR: Toluene-d8	*46.8*		*"*	*50.0*		*93.6*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*46.6*		*"*	*50.0*		*93.2*	*76-130*				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Batch BG10582 - EPA 5035A

LCS (BG10582-BS1) Prepared & Analyzed: 07/09/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
1,1,1,2-Tetrachloroethane	51		ug/L	50.0		101	75-129				
1,1,1-Trichloroethane	44		"	50.0		87.9	71-137				
1,1,2,2-Tetrachloroethane	59		"	50.0		118	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	53		"	50.0		106	58-146				
1,1,2-Trichloroethane	53		"	50.0		107	83-123				
1,1-Dichloroethane	46		"	50.0		92.8	75-130				
1,1-Dichloroethylene	43		"	50.0		85.4	64-137				
1,2,3-Trichlorobenzene	46		"	50.0		92.4	81-140				
1,2,3-Trichloropropane	50		"	50.0		100	81-126				
1,2,4-Trichlorobenzene	46		"	50.0		91.0	80-141				
1,2,4-Trimethylbenzene	45		"	50.0		89.2	84-125				
1,2-Dibromo-3-chloropropane	45		"	50.0		89.2	74-142				
1,2-Dibromoethane	53		"	50.0		105	86-123				
1,2-Dichlorobenzene	49		"	50.0		97.2	85-122				
1,2-Dichloroethane	47		"	50.0		94.4	71-133				
1,2-Dichloropropane	49		"	50.0		97.3	81-122				
1,3,5-Trimethylbenzene	44		"	50.0		88.0	82-126				
1,3-Dichlorobenzene	47		"	50.0		93.1	84-124				
1,4-Dichlorobenzene	47		"	50.0		93.2	84-124				
1,4-Dioxane	76		"	1050		7.23	10-228	Low Bias			
2-Butanone	38		"	50.0		76.0	58-147				
2-Hexanone	49		"	50.0		97.6	70-139				
4-Methyl-2-pentanone	51		"	50.0		103	72-132				
Acetone	34		"	50.0		67.2	36-155				
Acrolein	32		"	50.0		64.9	10-238				
Acrylonitrile	55		"	50.0		110	66-141				
Benzene	52		"	50.0		104	77-127				
Bromochloromethane	50		"	50.0		101	74-129				
Bromodichloromethane	46		"	50.0		91.7	81-124				
Bromoform	52		"	50.0		103	80-136				
Bromomethane	41		"	50.0		81.4	32-177				
Carbon disulfide	51		"	50.0		101	10-136				
Carbon tetrachloride	42		"	50.0		84.9	66-143				
Chlorobenzene	49		"	50.0		97.9	86-120				
Chloroethane	55		"	50.0		109	51-142				
Chloroform	47		"	50.0		94.9	76-131				
Chloromethane	65		"	50.0		131	49-132				
cis-1,2-Dichloroethylene	47		"	50.0		93.2	74-132				
cis-1,3-Dichloropropylene	49		"	50.0		98.5	81-129				
Cyclohexane	32		"	50.0		65.0	70-130	Low Bias			
Dibromochloromethane	52		"	50.0		104	10-200				
Dibromomethane	48		"	50.0		95.9	83-124				
Dichlorodifluoromethane	63		"	50.0		125	28-158				
Ethyl Benzene	47		"	50.0		93.3	84-125				
Hexachlorobutadiene	40		"	50.0		79.3	83-133	Low Bias			
Isopropylbenzene	43		"	50.0		85.2	81-127				
Methyl acetate	42		"	50.0		84.1	41-143				
Methyl tert-butyl ether (MTBE)	53		"	50.0		106	74-131				
Methylcyclohexane	38		"	50.0		75.3	70-130				
Methylene chloride	51		"	50.0		101	57-141				

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10582 - EPA 5035A											
LCS (BG10582-BS1)							Prepared & Analyzed: 07/09/2021				
n-Butylbenzene	42		ug/L	50.0		84.3	80-130				
n-Propylbenzene	42		"	50.0		84.9	74-136				
o-Xylene	48		"	50.0		95.8	83-123				
p- & m- Xylenes	91		"	100		91.3	82-128				
p-Isopropyltoluene	43		"	50.0		86.3	85-125				
sec-Butylbenzene	45		"	50.0		89.3	83-125				
Styrene	51		"	50.0		102	86-126				
tert-Butyl alcohol (TBA)	200		"	250		78.8	70-130				
tert-Butylbenzene	39		"	50.0		77.4	80-127	Low Bias			
Tetrachloroethylene	39		"	50.0		77.5	80-129	Low Bias			
Toluene	46		"	50.0		92.6	85-121				
trans-1,2-Dichloroethylene	48		"	50.0		96.6	72-132				
trans-1,3-Dichloropropylene	49		"	50.0		97.6	78-132				
Trichloroethylene	41		"	50.0		81.9	84-123	Low Bias			
Trichlorofluoromethane	44		"	50.0		87.8	62-140				
Vinyl Chloride	58		"	50.0		116	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	*45.6*		*"*	*50.0*		*91.2*	*77-125*				
Surrogate: SURR: Toluene-d8	*47.0*		*"*	*50.0*		*94.0*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*46.2*		*"*	*50.0*		*92.4*	*76-130*				
LCS Dup (BG10582-BSD1)							Prepared: 07/09/2021 Analyzed: 07/10/2021				
1,1,1,2-Tetrachloroethane	51		ug/L	50.0		102	75-129		1.06	30	
1,1,1-Trichloroethane	43		"	50.0		86.0	71-137		2.23	30	
1,1,2,2-Tetrachloroethane	58		"	50.0		116	79-129		1.75	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	51		"	50.0		102	58-146		3.68	30	
1,1,2-Trichloroethane	54		"	50.0		108	83-123		1.13	30	
1,1-Dichloroethane	45		"	50.0		90.9	75-130		2.03	30	
1,1-Dichloroethylene	42		"	50.0		83.7	64-137		2.08	30	
1,2,3-Trichlorobenzene	44		"	50.0		87.5	81-140		5.45	30	
1,2,3-Trichloropropane	49		"	50.0		98.0	81-126		2.44	30	
1,2,4-Trichlorobenzene	43		"	50.0		85.9	80-141		5.79	30	
1,2,4-Trimethylbenzene	45		"	50.0		90.7	84-125		1.67	30	
1,2-Dibromo-3-chloropropane	41		"	50.0		82.6	74-142		7.61	30	
1,2-Dibromoethane	53		"	50.0		107	86-123		1.21	30	
1,2-Dichlorobenzene	49		"	50.0		97.2	85-122		0.0617	30	
1,2-Dichloroethane	47		"	50.0		94.1	71-133		0.318	30	
1,2-Dichloropropane	51		"	50.0		102	81-122		4.26	30	
1,3,5-Trimethylbenzene	45		"	50.0		89.6	82-126		1.80	30	
1,3-Dichlorobenzene	46		"	50.0		92.3	84-124		0.798	30	
1,4-Dichlorobenzene	46		"	50.0		91.3	84-124		2.08	30	
1,4-Dioxane	56		"	1050		5.31	10-228	Low Bias	30.7	30	Non-dir.
2-Butanone	37		"	50.0		74.3	58-147		2.24	30	
2-Hexanone	47		"	50.0		94.1	70-139		3.59	30	
4-Methyl-2-pentanone	50		"	50.0		99.6	72-132		3.07	30	
Acetone	30		"	50.0		59.4	36-155		12.4	30	
Acrolein	28		"	50.0		57.0	10-238		13.1	30	
Acrylonitrile	51		"	50.0		102	66-141		7.34	30	
Benzene	52		"	50.0		103	77-127		0.426	30	
Bromochloromethane	50		"	50.0		100	74-129		0.179	30	
Bromodichloromethane	46		"	50.0		92.6	81-124		0.955	30	

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Batch BG10582 - EPA 5035A

LCS Dup (BG10582-BSD1) Prepared: 07/09/2021 Analyzed: 07/10/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Bromoform	51		ug/L	50.0		102	80-136		1.35	30	
Bromomethane	42		"	50.0		83.2	32-177		2.24	30	
Carbon disulfide	49		"	50.0		97.5	10-136		3.72	30	
Carbon tetrachloride	41		"	50.0		82.9	66-143		2.43	30	
Chlorobenzene	49		"	50.0		98.6	86-120		0.753	30	
Chloroethane	49		"	50.0		97.2	51-142		11.7	30	
Chloroform	48		"	50.0		95.2	76-131		0.253	30	
Chloromethane	56		"	50.0		113	49-132		14.7	30	
cis-1,2-Dichloroethylene	47		"	50.0		93.2	74-132		0.00	30	
cis-1,3-Dichloropropylene	50		"	50.0		99.8	81-129		1.29	30	
Cyclohexane	32		"	50.0		64.7	70-130	Low Bias	0.432	30	
Dibromochloromethane	53		"	50.0		106	10-200		1.73	30	
Dibromomethane	48		"	50.0		96.5	83-124		0.665	30	
Dichlorodifluoromethane	63		"	50.0		125	28-158		0.256	30	
Ethyl Benzene	47		"	50.0		94.0	84-125		0.747	30	
Hexachlorobutadiene	39		"	50.0		79.0	83-133	Low Bias	0.404	30	
Isopropylbenzene	43		"	50.0		85.1	81-127		0.0705	30	
Methyl acetate	39		"	50.0		78.3	41-143		7.09	30	
Methyl tert-butyl ether (MTBE)	53		"	50.0		106	74-131		0.0564	30	
Methylcyclohexane	38		"	50.0		77.0	70-130		2.23	30	
Methylene chloride	49		"	50.0		98.2	57-141		2.87	30	
n-Butylbenzene	40		"	50.0		80.2	80-130		4.98	30	
n-Propylbenzene	42		"	50.0		83.8	74-136		1.28	30	
o-Xylene	48		"	50.0		97.0	83-123		1.20	30	
p- & m- Xylenes	92		"	100		92.2	82-128		1.08	30	
p-Isopropyltoluene	43		"	50.0		85.9	85-125		0.418	30	
sec-Butylbenzene	44		"	50.0		88.8	83-125		0.472	30	
Styrene	52		"	50.0		104	86-126		2.35	30	
tert-Butyl alcohol (TBA)	190		"	250		74.7	70-130		5.38	30	
tert-Butylbenzene	39		"	50.0		77.3	80-127	Low Bias	0.0776	30	
Tetrachloroethylene	39		"	50.0		78.9	80-129	Low Bias	1.71	30	
Toluene	48		"	50.0		95.1	85-121		2.64	30	
trans-1,2-Dichloroethylene	47		"	50.0		94.8	72-132		1.84	30	
trans-1,3-Dichloropropylene	50		"	50.0		99.0	78-132		1.40	30	
Trichloroethylene	42		"	50.0		84.5	84-123		3.03	30	
Trichlorofluoromethane	42		"	50.0		83.9	62-140		4.47	30	
Vinyl Chloride	52		"	50.0		103	52-130		11.7	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	*45.1*		*"*	*50.0*		*90.1*	*77-125*				
Surrogate: SURR: Toluene-d8	*48.2*		*"*	*50.0*		*96.4*	*85-120*				
Surrogate: SURR: p-Bromofluorobenzene	*46.9*		*"*	*50.0*		*93.7*	*76-130*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10243 - EPA 3546 SVOA											
Blank (BG10243-BLK1)								Prepared & Analyzed: 07/07/2021			
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	"								
2,4-Dinitrotoluene	ND	0.0416	"								
2,6-Dinitrotoluene	ND	0.0416	"								
2-Chloronaphthalene	ND	0.0416	"								
2-Chlorophenol	ND	0.0416	"								
2-Methylnaphthalene	ND	41.6	ug/kg wet								
2-Methylnaphthalene	ND	0.0416	mg/kg wet								
2-Methylphenol	ND	0.0416	"								
2-Nitroaniline	ND	0.0830	"								
2-Nitrophenol	ND	0.0416	"								
3- & 4-Methylphenols	ND	0.0416	"								
3,3-Dichlorobenzidine	ND	0.0416	"								
3-Nitroaniline	ND	0.0830	"								
4,6-Dinitro-2-methylphenol	ND	0.0830	"								
4-Bromophenyl phenyl ether	ND	0.0416	"								
4-Chloro-3-methylphenol	ND	0.0416	"								
4-Chloroaniline	ND	0.0416	"								
4-Chlorophenyl phenyl ether	ND	0.0416	"								
4-Nitroaniline	ND	0.0830	"								
4-Nitrophenol	ND	0.0830	"								
Acenaphthene	ND	41.6	ug/kg wet								
Acenaphthene	ND	0.0416	mg/kg wet								
Acenaphthylene	ND	0.0416	"								
Acenaphthylene	ND	41.6	ug/kg wet								
Acetophenone	ND	0.0416	mg/kg wet								
Aniline	ND	0.166	"								
Anthracene	ND	0.0416	"								
Anthracene	ND	41.6	ug/kg wet								
Atrazine	ND	0.0416	mg/kg wet								
Benzaldehyde	ND	0.0416	"								
Benzidine	ND	0.166	"								
Benzo(a)anthracene	ND	0.0416	"								
Benzo(a)anthracene	ND	41.6	ug/kg wet								
Benzo(a)pyrene	ND	0.0416	mg/kg wet								
Benzo(a)pyrene	ND	41.6	ug/kg wet								
Benzo(b)fluoranthene	ND	0.0416	mg/kg wet								
Benzo(b)fluoranthene	ND	41.6	ug/kg wet								
Benzo(g,h,i)perylene	ND	41.6	"								
Benzo(g,h,i)perylene	ND	0.0416	mg/kg wet								

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10243 - EPA 3546 SVOA

Blank (BG10243-BLK1) Prepared & Analyzed: 07/07/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Benzo(k)fluoranthene	ND	41.6	ug/kg wet								
Benzo(k)fluoranthene	ND	0.0416	mg/kg wet								
Benzoic acid	ND	0.0416	"								
Benzyl alcohol	ND	0.0416	"								
Benzyl butyl phthalate	ND	0.0416	"								
Bis(2-chloroethoxy)methane	ND	0.0416	"								
Bis(2-chloroethyl)ether	ND	0.0416	"								
Bis(2-chloroisopropyl)ether	ND	0.0416	"								
Bis(2-ethylhexyl)phthalate	0.0588	0.0416	"								
Caprolactam	ND	0.0830	"								
Carbazole	ND	0.0416	"								
Chrysene	ND	0.0416	"								
Chrysene	ND	41.6	ug/kg wet								
Dibenzo(a,h)anthracene	ND	0.0416	mg/kg wet								
Dibenzo(a,h)anthracene	ND	41.6	ug/kg wet								
Dibenzofuran	ND	0.0416	mg/kg wet								
Diethyl phthalate	ND	0.0416	"								
Dimethyl phthalate	ND	0.0416	"								
Di-n-butyl phthalate	ND	0.0416	"								
Di-n-octyl phthalate	ND	0.0416	"								
Diphenylamine	ND	0.0830	"								
Fluoranthene	ND	0.0416	"								
Fluoranthene	ND	41.6	ug/kg wet								
Fluorene	ND	0.0416	mg/kg wet								
Fluorene	ND	41.6	ug/kg wet								
Hexachlorobenzene	ND	0.0416	mg/kg wet								
Hexachlorobutadiene	ND	0.0416	"								
Hexachlorocyclopentadiene	ND	0.0416	"								
Hexachloroethane	ND	0.0416	"								
Indeno(1,2,3-cd)pyrene	ND	0.0416	"								
Indeno(1,2,3-cd)pyrene	ND	41.6	ug/kg wet								
Isophorone	ND	0.0416	mg/kg wet								
Naphthalene	ND	0.0416	"								
Naphthalene	ND	41.6	ug/kg wet								
Nitrobenzene	ND	0.0416	mg/kg wet								
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	"								
Phenanthrene	ND	41.6	ug/kg wet								
Phenol	ND	0.0416	mg/kg wet								
Pyrene	ND	0.0416	"								
Pyrene	ND	41.6	ug/kg wet								
Surrogate: SURR: 2-Fluorophenol	*1.08*		*mg/kg wet*	*1.66*		*65.1*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.02*		*"*	*1.66*		*61.6*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*0.546*		*"*	*0.831*		*65.8*	*22-108*				
Surrogate: SURR: Nitrobenzene-d5	*546*		*ug/kg wet*	*831*		*65.8*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.544*		*mg/kg wet*	*0.831*		*65.5*	*21-113*				
Surrogate: SURR: 2-Fluorobiphenyl	*544*		*ug/kg wet*	*831*		*65.5*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.25*		*mg/kg wet*	*1.66*		*75.3*	*19-110*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10243 - EPA 3546 SVOA											
Blank (BG10243-BLK1)								Prepared & Analyzed: 07/07/2021			
Surrogate: SURR: Terphenyl-d14	*0.791*		*mg/kg wet*	*0.831*		*95.3*	*24-116*				
Surrogate: SURR: Terphenyl-d14	*791*		*ug/kg wet*	*831*		*95.3*	*24-116*				
LCS (BG10243-BS1)								Prepared & Analyzed: 07/07/2021			
1,1-Biphenyl	0.502	0.0416	mg/kg wet	0.831		60.5	18-111				
1,2,4,5-Tetrachlorobenzene	0.532	0.0830	"	0.831		64.0	21-131				
1,2,4-Trichlorobenzene	0.530	0.0416	"	0.831		63.8	10-140				
1,2-Dichlorobenzene	0.493	0.0416	"	0.831		59.4	34-108				
1,2-Diphenylhydrazine (as Azobenzene)	0.506	0.0416	"	0.831		60.9	17-137				
1,3-Dichlorobenzene	0.482	0.0416	"	0.831		58.1	33-110				
1,4-Dichlorobenzene	0.489	0.0416	"	0.831		58.9	32-104				
2,3,4,6-Tetrachlorophenol	0.624	0.0830	"	0.831		75.2	30-130				
2,4,5-Trichlorophenol	0.565	0.0416	"	0.831		68.0	27-118				
2,4,6-Trichlorophenol	0.521	0.0416	"	0.831		62.7	31-120				
2,4-Dichlorophenol	0.563	0.0416	"	0.831		67.8	20-127				
2,4-Dimethylphenol	0.565	0.0416	"	0.831		68.1	14-132				
2,4-Dinitrophenol	0.554	0.0830	"	0.831		66.8	10-171				
2,4-Dinitrotoluene	0.634	0.0416	"	0.831		76.4	34-131				
2,6-Dinitrotoluene	0.628	0.0416	"	0.831		75.6	31-128				
2-Chloronaphthalene	0.516	0.0416	"	0.831		62.1	31-117				
2-Chlorophenol	0.508	0.0416	"	0.831		61.1	33-113				
2-Methylnaphthalene	0.606	0.0416	"	0.831		73.0	12-138				
2-Methylnaphthalene	606	41.6	ug/kg wet	831		73.0	16-127				
2-Methylphenol	0.491	0.0416	mg/kg wet	0.831		59.1	10-136				
2-Nitroaniline	0.588	0.0830	"	0.831		70.8	27-132				
2-Nitrophenol	0.530	0.0416	"	0.831		63.8	17-129				
3- & 4-Methylphenols	0.469	0.0416	"	0.831		56.5	29-103				
3,3-Dichlorobenzidine	0.246	0.0416	"	0.831		29.6	22-149				
3-Nitroaniline	0.545	0.0830	"	0.831		65.6	20-133				
4,6-Dinitro-2-methylphenol	0.557	0.0830	"	0.831		67.1	10-143				
4-Bromophenyl phenyl ether	0.511	0.0416	"	0.831		61.6	29-120				
4-Chloro-3-methylphenol	0.575	0.0416	"	0.831		69.2	24-129				
4-Chloroaniline	0.422	0.0416	"	0.831		50.8	10-132				
4-Chlorophenyl phenyl ether	0.565	0.0416	"	0.831		68.0	27-124				
4-Nitroaniline	0.611	0.0830	"	0.831		73.6	16-128				
4-Nitrophenol	0.534	0.0830	"	0.831		64.3	10-141				
Acenaphthene	0.512	0.0416	"	0.831		61.6	30-121				
Acenaphthene	512	41.6	ug/kg wet	831		61.6	17-124				
Acenaphthylene	0.526	0.0416	mg/kg wet	0.831		63.3	30-115				
Acenaphthylene	526	41.6	ug/kg wet	831		63.3	16-124				
Acetophenone	0.485	0.0416	mg/kg wet	0.831		58.4	20-112				
Aniline	0.503	0.166	"	0.831		60.6	10-119				
Anthracene	0.575	0.0416	"	0.831		69.2	34-118				
Anthracene	575	41.6	ug/kg wet	831		69.2	24-124				
Atrazine	0.590	0.0416	mg/kg wet	0.831		71.0	26-112				
Benzaldehyde	0.477	0.0416	"	0.831		57.4	21-100				
Benzo(a)anthracene	0.585	0.0416	"	0.831		70.5	32-122				
Benzo(a)anthracene	585	41.6	ug/kg wet	831		70.5	25-134				
Benzo(a)pyrene	0.590	0.0416	mg/kg wet	0.831		71.0	29-133				
Benzo(a)pyrene	590	41.6	ug/kg wet	831		71.0	29-144				
Benzo(b)fluoranthene	0.574	0.0416	mg/kg wet	0.831		69.1	25-133				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10243 - EPA 3546 SVOA

LCS (BG10243-BS1) Prepared & Analyzed: 07/07/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Benzo(b)fluoranthene	574	41.6	ug/kg wet	831		69.1	20-151				
Benzo(g,h,i)perylene	0.456	0.0416	mg/kg wet	0.831		54.9	10-143				
Benzo(g,h,i)perylene	456	41.6	ug/kg wet	831		54.9	10-153				
Benzo(k)fluoranthene	0.562	0.0416	mg/kg wet	0.831		67.7	25-128				
Benzo(k)fluoranthene	562	41.6	ug/kg wet	831		67.7	10-148				
Benzoic acid	0.575	0.0416	mg/kg wet	0.831		69.2	10-140				
Benzyl alcohol	0.568	0.0416	"	0.831		68.4	30-115				
Benzyl butyl phthalate	0.580	0.0416	"	0.831		69.8	26-126				
Bis(2-chloroethoxy)methane	0.497	0.0416	"	0.831		59.8	19-132				
Bis(2-chloroethyl)ether	0.507	0.0416	"	0.831		61.0	19-125				
Bis(2-chloroisopropyl)ether	0.447	0.0416	"	0.831		53.8	20-135				
Bis(2-ethylhexyl)phthalate	0.566	0.0416	"	0.831		68.2	10-155				
Caprolactam	0.595	0.0830	"	0.831		71.6	10-127				
Carbazole	0.580	0.0416	"	0.831		69.8	35-123				
Chrysene	0.620	0.0416	"	0.831		74.6	32-123				
Chrysene	620	41.6	ug/kg wet	831		74.6	24-116				
Dibenzo(a,h)anthracene	0.517	0.0416	mg/kg wet	0.831		62.2	10-136				
Dibenzo(a,h)anthracene	517	41.6	ug/kg wet	831		62.2	17-147				
Dibenzofuran	0.565	0.0416	mg/kg wet	0.831		68.0	29-121				
Diethyl phthalate	0.579	0.0416	"	0.831		69.7	34-116				
Dimethyl phthalate	0.549	0.0416	"	0.831		66.1	35-124				
Di-n-butyl phthalate	0.553	0.0416	"	0.831		66.6	31-116				
Di-n-octyl phthalate	0.581	0.0416	"	0.831		70.0	26-136				
Diphenylamine	0.669	0.0830	"	0.831		80.6	40-140				
Fluoranthene	0.570	0.0416	"	0.831		68.6	33-122				
Fluoranthene	570	41.6	ug/kg wet	831		68.6	36-125				
Fluorene	0.572	0.0416	mg/kg wet	0.831		68.9	29-123				
Fluorene	572	41.6	ug/kg wet	831		68.9	16-130				
Hexachlorobenzene	0.551	0.0416	mg/kg wet	0.831		66.3	21-124				
Hexachlorobutadiene	0.556	0.0416	"	0.831		67.0	10-149				
Hexachlorocyclopentadiene	0.455	0.0416	"	0.831		54.8	10-129				
Hexachloroethane	0.508	0.0416	"	0.831		61.2	28-108				
Indeno(1,2,3-cd)pyrene	526	41.6	ug/kg wet	831		63.4	10-155				
Indeno(1,2,3-cd)pyrene	0.526	0.0416	mg/kg wet	0.831		63.4	10-135				
Isophorone	0.506	0.0416	"	0.831		61.0	20-132				
Naphthalene	541	41.6	ug/kg wet	831		65.1	20-121				
Naphthalene	0.541	0.0416	mg/kg wet	0.831		65.1	23-124				
Nitrobenzene	0.509	0.0416	"	0.831		61.2	13-132				
N-Nitrosodimethylamine	0.259	0.0416	"	0.831		31.2	11-129				
N-nitroso-di-n-propylamine	0.466	0.0416	"	0.831		56.1	24-119				
N-Nitrosodiphenylamine	0.679	0.0416	"	0.831		81.8	22-152				
Pentachlorophenol	0.545	0.0416	"	0.831		65.6	10-139				
Phenanthrene	0.562	0.0416	"	0.831		67.6	33-123				
Phenanthrene	562	41.6	ug/kg wet	831		67.6	24-123				
Phenol	0.517	0.0416	mg/kg wet	0.831		62.3	23-115				
Pyrene	0.586	0.0416	"	0.831		70.6	32-130				
Pyrene	586	41.6	ug/kg wet	831		70.6	24-132				
Surrogate: SURR: 2-Fluorophenol	*1.04*		*mg/kg wet*	*1.66*		*62.3*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.02*		*"*	*1.66*		*61.3*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*536*		*ug/kg wet*	*831*		*64.6*	*22-108*				
Surrogate: SURR: Nitrobenzene-d5	*0.536*		*mg/kg wet*	*0.831*		*64.6*	*22-108*				

YORK ANALYTICAL LABORATORIES INC

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10243 - EPA 3546 SVOA											
LCS (BG10243-BS1)							Prepared & Analyzed: 07/07/2021				
Surrogate: SURR: 2-Fluorobiphenyl	*0.537*		*mg/kg wet*	*0.831*		*64.7*	*21-113*				
Surrogate: SURR: 2-Fluorobiphenyl	*537*		*ug/kg wet*	*831*		*64.7*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.25*		*mg/kg wet*	*1.66*		*75.1*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.794*		*"*	*0.831*		*95.6*	*24-116*				
Surrogate: SURR: Terphenyl-d14	*794*		*ug/kg wet*	*831*		*95.6*	*24-116*				
Matrix Spike (BG10243-MS1)	*Source sample: 21G0097-09 (SB-20 8-11)						Prepared & Analyzed: 07/07/2021				
1,1-Biphenyl	0.583	0.0980	mg/kg dry	0.980	ND	59.5	10-130				
1,2,4,5-Tetrachlorobenzene	0.615	0.196	"	0.980	ND	62.8	10-133				
1,2,4-Trichlorobenzene	0.600	0.0980	"	0.980	ND	61.2	10-127				
1,2-Dichlorobenzene	0.560	0.0980	"	0.980	ND	57.2	14-111				
1,2-Diphenylhydrazine (as Azobenzene)	0.607	0.0980	"	0.980	ND	62.0	10-144				
1,3-Dichlorobenzene	0.543	0.0980	"	0.980	ND	55.4	11-111				
1,4-Dichlorobenzene	0.570	0.0980	"	0.980	ND	58.2	10-106				
2,3,4,6-Tetrachlorophenol	0.699	0.196	"	0.980	ND	71.4	30-130				
2,4,5-Trichlorophenol	0.637	0.0980	"	0.980	ND	65.0	10-127				
2,4,6-Trichlorophenol	0.583	0.0980	"	0.980	ND	59.5	10-132				
2,4-Dichlorophenol	0.630	0.0980	"	0.980	ND	64.3	10-128				
2,4-Dimethylphenol	0.639	0.0980	"	0.980	ND	65.3	10-137				
2,4-Dinitrophenol	0.367	0.196	"	0.980	ND	37.4	10-171				
2,4-Dinitrotoluene	0.654	0.0980	"	0.980	ND	66.8	16-135				
2,6-Dinitrotoluene	0.686	0.0980	"	0.980	ND	70.0	18-131				
2-Chloronaphthalene	0.592	0.0980	"	0.980	ND	60.4	10-129				
2-Chlorophenol	0.567	0.0980	"	0.980	ND	57.8	15-116				
2-Methylnaphthalene	0.868	0.0980	"	0.980	0.164	71.9	10-147				
2-Methylnaphthalene	868	98.0	ug/kg dry	980	164	71.9	10-143				
2-Methylphenol	0.538	0.0980	mg/kg dry	0.980	ND	55.0	10-136				
2-Nitroaniline	0.672	0.196	"	0.980	ND	68.6	10-137				
2-Nitrophenol	0.600	0.0980	"	0.980	ND	61.3	10-129				
3- & 4-Methylphenols	0.482	0.0980	"	0.980	ND	49.2	10-123				
3,3-Dichlorobenzidine	0.269	0.0980	"	0.980	ND	27.4	10-155				
3-Nitroaniline	0.640	0.196	"	0.980	ND	65.4	12-133				
4,6-Dinitro-2-methylphenol	0.527	0.196	"	0.980	ND	53.8	10-155				
4-Bromophenyl phenyl ether	0.621	0.0980	"	0.980	ND	63.4	14-128				
4-Chloro-3-methylphenol	0.668	0.0980	"	0.980	ND	68.2	10-134				
4-Chloroaniline	0.512	0.0980	"	0.980	ND	52.2	10-145				
4-Chlorophenyl phenyl ether	0.636	0.0980	"	0.980	ND	65.0	14-130				
4-Nitroaniline	0.713	0.196	"	0.980	ND	72.8	10-147				
4-Nitrophenol	0.567	0.196	"	0.980	ND	57.9	10-137				
Acenaphthene	0.614	0.0980	"	0.980	ND	62.6	10-146				
Acenaphthene	614	98.0	ug/kg dry	980	ND	62.6	13-133				
Acenaphthylene	607	98.0	"	980	ND	62.0	25-125				
Acenaphthylene	0.607	0.0980	mg/kg dry	0.980	ND	62.0	10-134				
Acetophenone	0.605	0.0980	"	0.980	ND	61.8	10-116				
Aniline	0.422	0.393	"	0.980	ND	43.0	10-123				
Anthracene	673	98.0	ug/kg dry	980	ND	68.7	27-128				
Anthracene	0.673	0.0980	mg/kg dry	0.980	ND	68.7	10-142				
Atrazine	0.689	0.0980	"	0.980	ND	70.3	19-115				
Benzaldehyde	1.78	0.0980	"	0.980	ND	182	10-125	High Bias			
Benzo(a)anthracene	713	98.0	ug/kg dry	980	ND	72.8	20-147				
Benzo(a)anthracene	0.713	0.0980	mg/kg dry	0.980	ND	72.8	10-158				

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

Batch BG10243 - EPA 3546 SVOA

Matrix Spike (BG10243-MS1) *Source sample: 21G0097-09 (SB-20 8-11) Prepared & Analyzed: 07/07/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Benzo(a)pyrene	602	98.0	ug/kg dry	980	ND	61.4	18-153				
Benzo(a)pyrene	0.602	0.0980	mg/kg dry	0.980	ND	61.4	10-180				
Benzo(b)fluoranthene	0.637	0.0980	"	0.980	ND	65.0	10-200				
Benzo(b)fluoranthene	637	98.0	ug/kg dry	980	ND	65.0	10-163				
Benzo(g,h,i)perylene	0.659	0.0980	mg/kg dry	0.980	ND	67.3	10-138				
Benzo(g,h,i)perylene	659	98.0	ug/kg dry	980	ND	67.3	10-157				
Benzo(k)fluoranthene	615	98.0	"	980	ND	62.8	10-157				
Benzo(k)fluoranthene	0.615	0.0980	mg/kg dry	0.980	ND	62.8	10-197				
Benzoic acid	0.319	0.0980	"	0.980	ND	32.6	10-166				
Benzyl alcohol	0.662	0.0980	"	0.980	ND	67.6	12-124				
Benzyl butyl phthalate	0.712	0.0980	"	0.980	ND	72.7	10-154				
Bis(2-chloroethoxy)methane	0.545	0.0980	"	0.980	ND	55.7	10-132				
Bis(2-chloroethyl)ether	0.614	0.0980	"	0.980	ND	62.6	10-119				
Bis(2-chloroisopropyl)ether	0.511	0.0980	"	0.980	ND	52.2	10-139				
Bis(2-ethylhexyl)phthalate	0.667	0.0980	"	0.980	0.0590	62.1	10-167				
Caprolactam	0.684	0.196	"	0.980	ND	69.8	10-132				
Carbazole	0.703	0.0980	"	0.980	ND	71.8	10-167				
Chrysene	748	98.0	ug/kg dry	980	ND	76.4	18-133				
Chrysene	0.748	0.0980	mg/kg dry	0.980	ND	76.4	10-156				
Dibenzo(a,h)anthracene	722	98.0	ug/kg dry	980	ND	73.7	10-146				
Dibenzo(a,h)anthracene	0.722	0.0980	mg/kg dry	0.980	ND	73.7	10-137				
Dibenzofuran	0.653	0.0980	"	0.980	ND	66.6	10-147				
Diethyl phthalate	0.659	0.0980	"	0.980	ND	67.3	20-120				
Dimethyl phthalate	0.616	0.0980	"	0.980	ND	62.9	18-131				
Di-n-butyl phthalate	0.672	0.0980	"	0.980	ND	68.6	10-137				
Di-n-octyl phthalate	0.643	0.0980	"	0.980	ND	65.7	10-180				
Diphenylamine	0.793	0.196	"	0.980	ND	81.0	40-140				
Fluoranthene	697	98.0	ug/kg dry	980	ND	71.2	10-155				
Fluoranthene	0.697	0.0980	mg/kg dry	0.980	ND	71.2	10-160				
Fluorene	0.658	0.0980	"	0.980	ND	67.1	10-157				
Fluorene	658	98.0	ug/kg dry	980	ND	67.1	12-150				
Hexachlorobenzene	0.672	0.0980	mg/kg dry	0.980	ND	68.6	10-137				
Hexachlorobutadiene	0.636	0.0980	"	0.980	ND	64.9	10-132				
Hexachlorocyclopentadiene	0.431	0.0980	"	0.980	ND	44.0	10-106				
Hexachloroethane	0.742	0.0980	"	0.980	ND	75.8	10-110				
Indeno(1,2,3-cd)pyrene	0.767	0.0980	"	0.980	ND	78.3	10-144				
Indeno(1,2,3-cd)pyrene	767	98.0	ug/kg dry	980	ND	78.3	10-155				
Isophorone	0.609	0.0980	mg/kg dry	0.980	ND	62.2	10-132				
Naphthalene	0.684	0.0980	"	0.980	ND	69.8	10-141				
Naphthalene	684	98.0	ug/kg dry	980	ND	69.8	15-132				
Nitrobenzene	0.583	0.0980	mg/kg dry	0.980	ND	59.5	10-131				
N-Nitrosodimethylamine	0.290	0.0980	"	0.980	ND	29.6	10-126				
N-nitroso-di-n-propylamine	0.529	0.0980	"	0.980	ND	54.0	10-125				
N-Nitrosodiphenylamine	0.841	0.0980	"	0.980	ND	85.8	10-177				
Pentachlorophenol	0.570	0.0980	"	0.980	ND	58.2	10-153				
Phenanthrene	676	98.0	ug/kg dry	980	ND	69.0	10-151				
Phenanthrene	0.676	0.0980	mg/kg dry	0.980	ND	69.0	10-148				
Phenol	0.565	0.0980	"	0.980	ND	57.7	10-126				
Pyrene	0.737	0.0980	"	0.980	ND	75.3	10-165				
Pyrene	737	98.0	ug/kg dry	980	ND	75.3	13-148				
Surrogate: SURR: 2-Fluorophenol	*1.15*		*mg/kg dry*	*1.96*		*58.9*	*20-108*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10243 - EPA 3546 SVOA

Matrix Spike (BG10243-MS1) *Source sample: 21G0097-09 (SB-20 8-11) Prepared & Analyzed: 07/07/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Surrogate: SURR: Phenol-d5	*1.11*		*mg/kg dry*	*1.96*		*56.8*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*617*		*ug/kg dry*	*980*		*63.0*	*22-108*				
Surrogate: SURR: Nitrobenzene-d5	*0.617*		*mg/kg dry*	*0.980*		*63.0*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*619*		*ug/kg dry*	*980*		*63.2*	*21-113*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.619*		*mg/kg dry*	*0.980*		*63.2*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.37*		*"*	*1.96*		*70.1*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*986*		*ug/kg dry*	*980*		*101*	*24-116*				
Surrogate: SURR: Terphenyl-d14	*0.986*		*mg/kg dry*	*0.980*		*101*	*24-116*				

Matrix Spike Dup (BG10243-MSD1) *Source sample: 21G0097-09 (SB-20 8-11) Prepared & Analyzed: 07/07/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
1,1-Biphenyl	0.595	0.0980	mg/kg dry	0.980	ND	60.7	10-130		2.00	30	
1,2,4,5-Tetrachlorobenzene	0.583	0.196	"	0.980	ND	59.5	10-133		5.36	30	
1,2,4-Trichlorobenzene	0.608	0.0980	"	0.980	ND	62.1	10-127		1.43	30	
1,2-Dichlorobenzene	0.564	0.0980	"	0.980	ND	57.6	14-111		0.697	30	
1,2-Diphenylhydrazine (as Azobenzene)	0.583	0.0980	"	0.980	ND	59.5	10-144		4.08	30	
1,3-Dichlorobenzene	0.563	0.0980	"	0.980	ND	57.5	11-111		3.68	30	
1,4-Dichlorobenzene	0.532	0.0980	"	0.980	ND	54.3	10-106		6.83	30	
2,3,4,6-Tetrachlorophenol	0.730	0.196	"	0.980	ND	74.6	30-130		4.39	30	
2,4,5-Trichlorophenol	0.659	0.0980	"	0.980	ND	67.3	10-127		3.39	30	
2,4,6-Trichlorophenol	0.582	0.0980	"	0.980	ND	59.4	10-132		0.134	30	
2,4-Dichlorophenol	0.637	0.0980	"	0.980	ND	65.0	10-128		1.11	30	
2,4-Dimethylphenol	0.646	0.0980	"	0.980	ND	65.9	10-137		0.976	30	
2,4-Dinitrophenol	0.439	0.196	"	0.980	ND	44.8	10-171		17.9	30	
2,4-Dinitrotoluene	0.676	0.0980	"	0.980	ND	69.0	16-135		3.30	30	
2,6-Dinitrotoluene	0.682	0.0980	"	0.980	ND	69.6	18-131		0.573	30	
2-Chloronaphthalene	0.581	0.0980	"	0.980	ND	59.3	10-129		1.87	30	
2-Chlorophenol	0.554	0.0980	"	0.980	ND	56.6	15-116		2.24	30	
2-Methylnaphthalene	889	98.0	ug/kg dry	980	164	74.1	10-143		2.41	30	
2-Methylnaphthalene	0.889	0.0980	mg/kg dry	0.980	0.164	74.1	10-147		2.41	30	
2-Methylphenol	0.542	0.0980	"	0.980	ND	55.4	10-136		0.725	30	
2-Nitroaniline	0.650	0.196	"	0.980	ND	66.4	10-137		3.20	30	
2-Nitrophenol	0.605	0.0980	"	0.980	ND	61.8	10-129		0.780	30	
3- & 4-Methylphenols	0.523	0.0980	"	0.980	ND	53.4	10-123		8.11	30	
3,3-Dichlorobenzidine	0.279	0.0980	"	0.980	ND	28.5	10-155		3.72	30	
3-Nitroaniline	0.604	0.196	"	0.980	ND	61.7	12-133		5.79	30	
4,6-Dinitro-2-methylphenol	0.545	0.196	"	0.980	ND	55.7	10-155		3.51	30	
4-Bromophenyl phenyl ether	0.575	0.0980	"	0.980	ND	58.7	14-128		7.60	30	
4-Chloro-3-methylphenol	0.654	0.0980	"	0.980	ND	66.7	10-134		2.25	30	
4-Chloroaniline	0.541	0.0980	"	0.980	ND	55.2	10-145		5.51	30	
4-Chlorophenyl phenyl ether	0.625	0.0980	"	0.980	ND	63.8	14-130		1.86	30	
4-Nitroaniline	0.647	0.196	"	0.980	ND	66.0	10-147		9.80	30	
4-Nitrophenol	0.603	0.196	"	0.980	ND	61.6	10-137		6.16	30	
Acenaphthene	0.586	0.0980	"	0.980	ND	59.8	10-146		4.57	30	
Acenaphthene	586	98.0	ug/kg dry	980	ND	59.8	13-133		4.57	30	
Acenaphthylene	599	98.0	"	980	ND	61.1	25-125		1.43	30	
Acenaphthylene	0.599	0.0980	mg/kg dry	0.980	ND	61.1	10-134		1.43	30	
Acetophenone	0.572	0.0980	"	0.980	ND	58.4	10-116		5.59	30	
Aniline	0.429	0.393	"	0.980	ND	43.8	10-123		1.84	30	
Anthracene	0.646	0.0980	"	0.980	ND	65.9	10-142		4.16	30	
Anthracene	646	98.0	ug/kg dry	980	ND	65.9	27-128		4.16	30	
Atrazine	0.668	0.0980	mg/kg dry	0.980	ND	68.2	19-115		3.12	30	

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10243 - EPA 3546 SVOA

Matrix Spike Dup (BG10243-MSD1) *Source sample: 21G0097-09 (SB-20 8-11) Prepared & Analyzed: 07/07/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Benzaldehyde	2.12	0.0980	mg/kg dry	0.980	ND	217	10-125	High Bias	17.6	30	
Benzo(a)anthracene	0.668	0.0980	"	0.980	ND	68.2	10-158		6.47	30	
Benzo(a)anthracene	668	98.0	ug/kg dry	980	ND	68.2	20-147		6.47	30	
Benzo(a)pyrene	0.603	0.0980	mg/kg dry	0.980	ND	61.6	10-180		0.260	30	
Benzo(a)pyrene	603	98.0	ug/kg dry	980	ND	61.6	18-153		0.260	30	
Benzo(b)fluoranthene	597	98.0	"	980	ND	61.0	10-163		6.48	30	
Benzo(b)fluoranthene	0.597	0.0980	mg/kg dry	0.980	ND	61.0	10-200		6.48	30	
Benzo(g,h,i)perylene	644	98.0	ug/kg dry	980	ND	65.8	10-157		2.29	30	
Benzo(g,h,i)perylene	0.644	0.0980	mg/kg dry	0.980	ND	65.8	10-138		2.29	30	
Benzo(k)fluoranthene	602	98.0	ug/kg dry	980	ND	61.4	10-157		2.19	30	
Benzo(k)fluoranthene	0.602	0.0980	mg/kg dry	0.980	ND	61.4	10-197		2.19	30	
Benzoic acid	0.495	0.0980	"	0.980	ND	50.6	10-166		43.3	30	Non-dir.
Benzyl alcohol	0.639	0.0980	"	0.980	ND	65.3	12-124		3.49	30	
Benzyl butyl phthalate	0.681	0.0980	"	0.980	ND	69.5	10-154		4.50	30	
Bis(2-chloroethoxy)methane	0.534	0.0980	"	0.980	ND	54.5	10-132		2.18	30	
Bis(2-chloroethyl)ether	0.617	0.0980	"	0.980	ND	63.0	10-119		0.510	30	
Bis(2-chloroisopropyl)ether	0.487	0.0980	"	0.980	ND	49.8	10-139		4.71	30	
Bis(2-ethylhexyl)phthalate	0.656	0.0980	"	0.980	0.0590	60.9	10-167		1.66	30	
Caprolactam	0.670	0.196	"	0.980	ND	68.4	10-132		2.08	30	
Carbazole	0.656	0.0980	"	0.980	ND	67.0	10-167		6.92	30	
Chrysene	715	98.0	ug/kg dry	980	ND	73.0	18-133		4.50	30	
Chrysene	0.715	0.0980	mg/kg dry	0.980	ND	73.0	10-156		4.50	30	
Dibenzo(a,h)anthracene	0.677	0.0980	"	0.980	ND	69.1	10-137		6.39	30	
Dibenzo(a,h)anthracene	677	98.0	ug/kg dry	980	ND	69.1	10-146		6.39	30	
Dibenzofuran	0.660	0.0980	mg/kg dry	0.980	ND	67.4	10-147		1.07	30	
Diethyl phthalate	0.676	0.0980	"	0.980	ND	69.0	20-120		2.47	30	
Dimethyl phthalate	0.630	0.0980	"	0.980	ND	64.3	18-131		2.26	30	
Di-n-butyl phthalate	0.665	0.0980	"	0.980	ND	67.8	10-137		1.17	30	
Di-n-octyl phthalate	0.629	0.0980	"	0.980	ND	64.2	10-180		2.34	30	
Diphenylamine	0.760	0.196	"	0.980	ND	77.6	40-140		4.24	30	
Fluoranthene	0.701	0.0980	"	0.980	ND	71.5	10-160		0.448	30	
Fluoranthene	701	98.0	ug/kg dry	980	ND	71.5	10-155		0.448	30	
Fluorene	0.661	0.0980	mg/kg dry	0.980	ND	67.4	10-157		0.476	30	
Fluorene	661	98.0	ug/kg dry	980	ND	67.4	12-150		0.476	30	
Hexachlorobenzene	0.646	0.0980	mg/kg dry	0.980	ND	65.9	10-137		3.93	30	
Hexachlorobutadiene	0.645	0.0980	"	0.980	ND	65.8	10-132		1.47	30	
Hexachlorocyclopentadiene	0.422	0.0980	"	0.980	ND	43.0	10-106		2.21	30	
Hexachloroethane	0.742	0.0980	"	0.980	ND	75.8	10-110		0.00	30	
Indeno(1,2,3-cd)pyrene	0.690	0.0980	"	0.980	ND	70.4	10-144		10.7	30	
Indeno(1,2,3-cd)pyrene	690	98.0	ug/kg dry	980	ND	70.4	10-155		10.7	30	
Isophorone	0.597	0.0980	mg/kg dry	0.980	ND	61.0	10-132		1.95	30	
Naphthalene	677	98.0	ug/kg dry	980	ND	69.1	15-132		1.04	30	
Naphthalene	0.677	0.0980	mg/kg dry	0.980	ND	69.1	10-141		1.04	30	
Nitrobenzene	0.586	0.0980	"	0.980	ND	59.8	10-131		0.536	30	
N-Nitrosodimethylamine	0.311	0.0980	"	0.980	ND	31.8	10-126		7.04	30	
N-nitroso-di-n-propylamine	0.522	0.0980	"	0.980	ND	53.3	10-125		1.34	30	
N-Nitrosodiphenylamine	0.725	0.0980	"	0.980	ND	74.0	10-177		14.8	30	
Pentachlorophenol	0.516	0.0980	"	0.980	ND	52.6	10-153		9.96	30	
Phenanthrene	649	98.0	ug/kg dry	980	ND	66.2	10-151		4.14	30	
Phenanthrene	0.649	0.0980	mg/kg dry	0.980	ND	66.2	10-148		4.14	30	
Phenol	0.570	0.0980	"	0.980	ND	58.2	10-126		0.829	30	

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10243 - EPA 3546 SVOA

Matrix Spike Dup (BG10243-MSD1) *Source sample: 21G0097-09 (SB-20 8-11) Prepared & Analyzed: 07/07/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Pyrene	679	98.0	ug/kg dry	980	ND	69.3	13-148		8.30	30	
Pyrene	0.679	0.0980	mg/kg dry	0.980	ND	69.3	10-165		8.30	30	
Surrogate: SURR: 2-Fluorophenol	*1.17*		*"*	*1.96*		*59.7*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.11*		*"*	*1.96*		*56.6*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*610*		*ug/kg dry*	*980*		*62.2*	*22-108*				
Surrogate: SURR: Nitrobenzene-d5	*0.610*		*mg/kg dry*	*0.980*		*62.2*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*598*		*ug/kg dry*	*980*		*61.0*	*21-113*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.598*		*mg/kg dry*	*0.980*		*61.0*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.37*		*"*	*1.96*		*70.0*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.905*		*"*	*0.980*		*92.4*	*24-116*				
Surrogate: SURR: Terphenyl-d14	*905*		*ug/kg dry*	*980*		*92.4*	*24-116*				

Batch BG10275 - EPA 3546 SVOA

Blank (BG10275-BLK1) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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	"								
2,4-Dinitrotoluene	ND	0.0416	"								
2,6-Dinitrotoluene	ND	0.0416	"								
2-Chloronaphthalene	ND	0.0416	"								
2-Chlorophenol	ND	0.0416	"								
2-Methylnaphthalene	ND	0.0416	"								
2-Methylphenol	ND	0.0416	"								
2-Nitroaniline	ND	0.0830	"								
2-Nitrophenol	ND	0.0416	"								
3- & 4-Methylphenols	ND	0.0416	"								
3,3-Dichlorobenzidine	ND	0.0416	"								
3-Nitroaniline	ND	0.0830	"								
4,6-Dinitro-2-methylphenol	ND	0.0830	"								
4-Bromophenyl phenyl ether	ND	0.0416	"								
4-Chloro-3-methylphenol	ND	0.0416	"								
4-Chloroaniline	ND	0.0416	"								
4-Chlorophenyl phenyl ether	ND	0.0416	"								
4-Nitroaniline	ND	0.0830	"								
4-Nitrophenol	ND	0.0830	"								
Acenaphthene	ND	0.0416	"								
Acenaphthylene	ND	0.0416	"								
Acetophenone	ND	0.0416	"								
Aniline	ND	0.166	"								
Anthracene	ND	0.0416	"								

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

Blank (BG10275-BLK1) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Atrazine	ND	0.0416	mg/kg wet								
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	0.0416	"								
Bis(2-chloroethyl)ether	ND	0.0416	"								
Bis(2-chloroisopropyl)ether	ND	0.0416	"								
Bis(2-ethylhexyl)phthalate	ND	0.0416	"								
Caprolactam	ND	0.0830	"								
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	"								
Surrogate: SURR: 2-Fluorophenol	*1.29*		*"*	*1.66*		*77.8*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.24*		*"*	*1.66*		*74.5*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*0.772*		*"*	*0.831*		*93.0*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.638*		*"*	*0.831*		*76.8*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.64*		*"*	*1.66*		*98.7*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.696*		*"*	*0.831*		*83.8*	*24-116*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

LCS (BG10275-BS1) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
1,1-Biphenyl	0.645	0.0416	mg/kg wet	0.831		77.6	18-111				
1,2,4,5-Tetrachlorobenzene	0.667	0.0830	"	0.831		80.3	21-131				
1,2,4-Trichlorobenzene	0.670	0.0416	"	0.831		80.6	10-140				
1,2-Dichlorobenzene	0.586	0.0416	"	0.831		70.5	34-108				
1,2-Diphenylhydrazine (as Azobenzene)	0.709	0.0416	"	0.831		85.4	17-137				
1,3-Dichlorobenzene	0.582	0.0416	"	0.831		70.0	33-110				
1,4-Dichlorobenzene	0.590	0.0416	"	0.831		71.0	32-104				
2,3,4,6-Tetrachlorophenol	0.742	0.0830	"	0.831		89.3	30-130				
2,4,5-Trichlorophenol	0.693	0.0416	"	0.831		83.4	27-118				
2,4,6-Trichlorophenol	0.700	0.0416	"	0.831		84.3	31-120				
2,4-Dichlorophenol	0.733	0.0416	"	0.831		88.2	20-127				
2,4-Dimethylphenol	0.758	0.0416	"	0.831		91.3	14-132				
2,4-Dinitrophenol	0.911	0.0830	"	0.831		110	10-171				
2,4-Dinitrotoluene	0.772	0.0416	"	0.831		92.9	34-131				
2,6-Dinitrotoluene	0.782	0.0416	"	0.831		94.2	31-128				
2-Chloronaphthalene	0.619	0.0416	"	0.831		74.5	31-117				
2-Chlorophenol	0.651	0.0416	"	0.831		78.4	33-113				
2-Methylnaphthalene	0.726	0.0416	"	0.831		87.4	12-138				
2-Methylphenol	0.671	0.0416	"	0.831		80.8	10-136				
2-Nitroaniline	0.755	0.0830	"	0.831		90.9	27-132				
2-Nitrophenol	0.844	0.0416	"	0.831		102	17-129				
3- & 4-Methylphenols	0.609	0.0416	"	0.831		73.3	29-103				
3,3-Dichlorobenzidine	1.31	0.0416	"	0.831		158	22-149	High Bias			
3-Nitroaniline	0.708	0.0830	"	0.831		85.2	20-133				
4,6-Dinitro-2-methylphenol	0.934	0.0830	"	0.831		112	10-143				
4-Bromophenyl phenyl ether	0.716	0.0416	"	0.831		86.2	29-120				
4-Chloro-3-methylphenol	0.768	0.0416	"	0.831		92.5	24-129				
4-Chloroaniline	0.638	0.0416	"	0.831		76.8	10-132				
4-Chlorophenyl phenyl ether	0.642	0.0416	"	0.831		77.3	27-124				
4-Nitroaniline	0.672	0.0830	"	0.831		80.9	16-128				
4-Nitrophenol	0.721	0.0830	"	0.831		86.8	10-141				
Acenaphthene	0.650	0.0416	"	0.831		78.3	30-121				
Acenaphthylene	0.609	0.0416	"	0.831		73.3	30-115				
Acetophenone	0.670	0.0416	"	0.831		80.7	20-112				
Aniline	0.631	0.166	"	0.831		76.0	10-119				
Anthracene	0.693	0.0416	"	0.831		83.5	34-118				
Atrazine	0.857	0.0416	"	0.831		103	26-112				
Benzaldehyde	0.649	0.0416	"	0.831		78.2	21-100				
Benzo(a)anthracene	0.672	0.0416	"	0.831		80.9	32-122				
Benzo(a)pyrene	0.735	0.0416	"	0.831		88.4	29-133				
Benzo(b)fluoranthene	0.746	0.0416	"	0.831		89.8	25-133				
Benzo(g,h,i)perylene	0.651	0.0416	"	0.831		78.4	10-143				
Benzo(k)fluoranthene	0.621	0.0416	"	0.831		74.7	25-128				
Benzoic acid	0.864	0.0416	"	0.831		104	10-140				
Benzyl alcohol	0.675	0.0416	"	0.831		81.3	30-115				
Benzyl butyl phthalate	0.762	0.0416	"	0.831		91.7	26-126				
Bis(2-chloroethoxy)methane	0.691	0.0416	"	0.831		83.2	19-132				
Bis(2-chloroethyl)ether	0.611	0.0416	"	0.831		73.5	19-125				
Bis(2-chloroisopropyl)ether	0.640	0.0416	"	0.831		77.0	20-135				
Bis(2-ethylhexyl)phthalate	0.863	0.0416	"	0.831		104	10-155				
Caprolactam	0.979	0.0830	"	0.831		118	10-127				

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10275 - EPA 3546 SVOA											
LCS (BG10275-BS1)							Prepared: 07/07/2021 Analyzed: 07/08/2021				
Carbazole	0.660	0.0416	mg/kg wet	0.831		79.4	35-123				
Chrysene	0.631	0.0416	"	0.831		76.0	32-123				
Dibenzo(a,h)anthracene	0.859	0.0416	"	0.831		103	10-136				
Dibenzofuran	0.627	0.0416	"	0.831		75.5	29-121				
Diethyl phthalate	0.575	0.0416	"	0.831		69.2	34-116				
Dimethyl phthalate	0.626	0.0416	"	0.831		75.3	35-124				
Di-n-butyl phthalate	0.741	0.0416	"	0.831		89.2	31-116				
Di-n-octyl phthalate	0.941	0.0416	"	0.831		113	26-136				
Fluoranthene	0.659	0.0416	"	0.831		79.3	33-122				
Fluorene	0.654	0.0416	"	0.831		78.8	29-123				
Hexachlorobenzene	0.652	0.0416	"	0.831		78.5	21-124				
Hexachlorobutadiene	0.664	0.0416	"	0.831		80.0	10-149				
Hexachlorocyclopentadiene	0.690	0.0416	"	0.831		83.0	10-129				
Hexachloroethane	0.617	0.0416	"	0.831		74.3	28-108				
Indeno(1,2,3-cd)pyrene	0.782	0.0416	"	0.831		94.2	10-135				
Isophorone	0.678	0.0416	"	0.831		81.6	20-132				
Naphthalene	0.675	0.0416	"	0.831		81.2	23-124				
Nitrobenzene	0.698	0.0416	"	0.831		84.0	13-132				
N-Nitrosodimethylamine	0.538	0.0416	"	0.831		64.8	11-129				
N-nitroso-di-n-propylamine	0.654	0.0416	"	0.831		78.8	24-119				
N-Nitrosodiphenylamine	0.849	0.0416	"	0.831		102	22-152				
Pentachlorophenol	0.822	0.0416	"	0.831		99.0	10-139				
Phenanthrene	0.638	0.0416	"	0.831		76.8	33-123				
Phenol	0.648	0.0416	"	0.831		78.0	23-115				
Pyrene	0.641	0.0416	"	0.831		77.2	32-130				
Surrogate: SURR: 2-Fluorophenol	*1.28*		"	*1.66*		*76.8*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.21*		"	*1.66*		*72.6*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*0.730*		"	*0.831*		*87.8*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.612*		"	*0.831*		*73.7*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.56*		"	*1.66*		*93.9*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.674*		"	*0.831*		*81.1*	*24-116*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

Matrix Spike (BG10275-MS1) *Source sample: 21G0094-04 (Matrix Spike) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
1,1-Biphenyl	0.722	0.0899	mg/kg dry	0.898	ND	80.3	10-130				
1,2,4,5-Tetrachlorobenzene	0.762	0.180	"	0.898	ND	84.8	10-133				
1,2,4-Trichlorobenzene	0.748	0.0899	"	0.898	ND	83.3	10-127				
1,2-Dichlorobenzene	0.669	0.0899	"	0.898	ND	74.5	14-111				
1,2-Diphenylhydrazine (as Azobenzene)	0.762	0.0899	"	0.898	ND	84.8	10-144				
1,3-Dichlorobenzene	0.650	0.0899	"	0.898	ND	72.4	11-111				
1,4-Dichlorobenzene	0.660	0.0899	"	0.898	ND	73.5	10-106				
2,3,4,6-Tetrachlorophenol	0.788	0.180	"	0.898	ND	87.8	30-130				
2,4,5-Trichlorophenol	0.758	0.0899	"	0.898	ND	84.4	10-127				
2,4,6-Trichlorophenol	0.760	0.0899	"	0.898	ND	84.6	10-132				
2,4-Dichlorophenol	0.834	0.0899	"	0.898	ND	92.9	10-128				
2,4-Dimethylphenol	0.831	0.0899	"	0.898	ND	92.5	10-137				
2,4-Dinitrophenol	0.420	0.180	"	0.898	ND	46.8	10-171				
2,4-Dinitrotoluene	0.812	0.0899	"	0.898	ND	90.4	16-135				
2,6-Dinitrotoluene	0.877	0.0899	"	0.898	ND	97.6	18-131				
2-Chloronaphthalene	0.687	0.0899	"	0.898	ND	76.5	10-129				
2-Chlorophenol	0.718	0.0899	"	0.898	ND	79.9	15-116				
2-Methylnaphthalene	0.816	0.0899	"	0.898	ND	90.8	10-147				
2-Methylphenol	0.729	0.0899	"	0.898	ND	81.2	10-136				
2-Nitroaniline	0.830	0.180	"	0.898	ND	92.4	10-137				
2-Nitrophenol	0.979	0.0899	"	0.898	ND	109	10-129				
3- & 4-Methylphenols	0.670	0.0899	"	0.898	ND	74.6	10-123				
3,3-Dichlorobenzidine	1.61	0.0899	"	0.898	ND	180	10-155	High Bias			
3-Nitroaniline	0.804	0.180	"	0.898	ND	89.4	12-133				
4,6-Dinitro-2-methylphenol	0.523	0.180	"	0.898	ND	58.2	10-155				
4-Bromophenyl phenyl ether	0.814	0.0899	"	0.898	ND	90.6	14-128				
4-Chloro-3-methylphenol	0.849	0.0899	"	0.898	ND	94.5	10-134				
4-Chloroaniline	0.717	0.0899	"	0.898	ND	79.8	10-145				
4-Chlorophenyl phenyl ether	0.710	0.0899	"	0.898	ND	79.0	14-130				
4-Nitroaniline	0.762	0.180	"	0.898	ND	84.8	10-147				
4-Nitrophenol	0.758	0.180	"	0.898	ND	84.4	10-137				
Acenaphthene	0.712	0.0899	"	0.898	ND	79.2	10-146				
Acenaphthylene	0.682	0.0899	"	0.898	ND	75.9	10-134				
Acetophenone	0.752	0.0899	"	0.898	ND	83.7	10-116				
Aniline	0.686	0.360	"	0.898	ND	76.4	10-123				
Anthracene	0.758	0.0899	"	0.898	ND	84.4	10-142				
Atrazine	0.972	0.0899	"	0.898	ND	108	19-115				
Benzaldehyde	0.724	0.0899	"	0.898	ND	80.6	10-125				
Benzo(a)anthracene	0.767	0.0899	"	0.898	ND	85.4	10-158				
Benzo(a)pyrene	0.910	0.0899	"	0.898	ND	101	10-180				
Benzo(b)fluoranthene	0.887	0.0899	"	0.898	ND	98.7	10-200				
Benzo(g,h,i)perylene	0.752	0.0899	"	0.898	ND	83.8	10-138				
Benzo(k)fluoranthene	0.724	0.0899	"	0.898	ND	80.6	10-197				
Benzoic acid	0.566	0.0899	"	0.898	ND	63.0	10-166				
Benzyl alcohol	0.742	0.0899	"	0.898	ND	82.6	12-124				
Benzyl butyl phthalate	0.851	0.0899	"	0.898	ND	94.7	10-154				
Bis(2-chloroethoxy)methane	0.765	0.0899	"	0.898	ND	85.1	10-132				
Bis(2-chloroethyl)ether	0.683	0.0899	"	0.898	ND	76.1	10-119				
Bis(2-chloroisopropyl)ether	0.674	0.0899	"	0.898	ND	75.0	10-139				
Bis(2-ethylhexyl)phthalate	0.950	0.0899	"	0.898	ND	106	10-167				
Caprolactam	1.13	0.180	"	0.898	ND	126	10-132				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

Matrix Spike (BG10275-MS1) *Source sample: 21G0094-04 (Matrix Spike) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Carbazole	0.735	0.0899	mg/kg dry	0.898	ND	81.8	10-167				
Chrysene	0.717	0.0899	"	0.898	ND	79.8	10-156				
Dibenzo(a,h)anthracene	1.02	0.0899	"	0.898	ND	113	10-137				
Dibenzofuran	0.702	0.0899	"	0.898	ND	78.2	10-147				
Diethyl phthalate	0.633	0.0899	"	0.898	ND	70.5	20-120				
Dimethyl phthalate	0.693	0.0899	"	0.898	ND	77.1	18-131				
Di-n-butyl phthalate	0.852	0.0899	"	0.898	ND	94.9	10-137				
Di-n-octyl phthalate	1.11	0.0899	"	0.898	ND	124	10-180				
Fluoranthene	0.737	0.0899	"	0.898	ND	82.0	10-160				
Fluorene	0.729	0.0899	"	0.898	ND	81.1	10-157				
Hexachlorobenzene	0.680	0.0899	"	0.898	ND	75.7	10-137				
Hexachlorobutadiene	0.747	0.0899	"	0.898	ND	83.1	10-132				
Hexachlorocyclopentadiene	0.369	0.0899	"	0.898	ND	41.0	10-106				
Hexachloroethane	0.644	0.0899	"	0.898	ND	71.7	10-110				
Indeno(1,2,3-cd)pyrene	0.919	0.0899	"	0.898	ND	102	10-144				
Isophorone	0.750	0.0899	"	0.898	ND	83.4	10-132				
Naphthalene	0.775	0.0899	"	0.898	ND	86.3	10-141				
Nitrobenzene	0.753	0.0899	"	0.898	ND	83.8	10-131				
N-Nitrosodimethylamine	0.554	0.0899	"	0.898	ND	61.7	10-126				
N-nitroso-di-n-propylamine	0.697	0.0899	"	0.898	ND	77.6	10-125				
N-Nitrosodiphenylamine	0.929	0.0899	"	0.898	ND	103	10-177				
Pentachlorophenol	0.922	0.0899	"	0.898	ND	103	10-153				
Phenanthrene	0.713	0.0899	"	0.898	ND	79.4	10-148				
Phenol	0.712	0.0899	"	0.898	ND	79.3	10-126				
Pyrene	0.686	0.0899	"	0.898	ND	76.4	10-165				
Surrogate: SURR: 2-Fluorophenol	*1.37*		*"*	*1.80*		*76.5*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.33*		*"*	*1.80*		*74.0*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*0.778*		*"*	*0.898*		*86.6*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.675*		*"*	*0.898*		*75.1*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.82*		*"*	*1.80*		*101*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.712*		*"*	*0.898*		*79.3*	*24-116*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

Matrix Spike Dup (BG10275-MSD1) *Source sample: 21G0094-04 (Matrix Spike Dup) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
1,1-Biphenyl	0.788	0.0899	mg/kg dry	0.898	ND	87.8	10-130		8.85	30	
1,2,4,5-Tetrachlorobenzene	0.824	0.180	"	0.898	ND	91.7	10-133		7.80	30	
1,2,4-Trichlorobenzene	0.804	0.0899	"	0.898	ND	89.4	10-127		7.13	30	
1,2-Dichlorobenzene	0.747	0.0899	"	0.898	ND	83.2	14-111		11.1	30	
1,2-Diphenylhydrazine (as Azobenzene)	0.813	0.0899	"	0.898	ND	90.5	10-144		6.48	30	
1,3-Dichlorobenzene	0.711	0.0899	"	0.898	ND	79.1	11-111		8.87	30	
1,4-Dichlorobenzene	0.735	0.0899	"	0.898	ND	81.8	10-106		10.6	30	
2,3,4,6-Tetrachlorophenol	0.833	0.180	"	0.898	ND	92.7	30-130		5.50	30	
2,4,5-Trichlorophenol	0.803	0.0899	"	0.898	ND	89.4	10-127		5.71	30	
2,4,6-Trichlorophenol	0.842	0.0899	"	0.898	ND	93.8	10-132		10.3	30	
2,4-Dichlorophenol	0.881	0.0899	"	0.898	ND	98.1	10-128		5.45	30	
2,4-Dimethylphenol	0.901	0.0899	"	0.898	ND	100	10-137		8.05	30	
2,4-Dinitrophenol	0.473	0.180	"	0.898	ND	52.6	10-171		11.7	30	
2,4-Dinitrotoluene	0.860	0.0899	"	0.898	ND	95.8	16-135		5.76	30	
2,6-Dinitrotoluene	0.944	0.0899	"	0.898	ND	105	18-131		7.34	30	
2-Chloronaphthalene	0.745	0.0899	"	0.898	ND	82.9	10-129		8.03	30	
2-Chlorophenol	0.804	0.0899	"	0.898	ND	89.5	15-116		11.3	30	
2-Methylnaphthalene	0.881	0.0899	"	0.898	ND	98.1	10-147		7.71	30	
2-Methylphenol	0.815	0.0899	"	0.898	ND	90.7	10-136		11.1	30	
2-Nitroaniline	0.896	0.180	"	0.898	ND	99.7	10-137		7.58	30	
2-Nitrophenol	1.04	0.0899	"	0.898	ND	116	10-129		5.98	30	
3- & 4-Methylphenols	0.757	0.0899	"	0.898	ND	84.2	10-123		12.2	30	
3,3-Dichlorobenzidine	1.73	0.0899	"	0.898	ND	192	10-155	High Bias	6.84	30	
3-Nitroaniline	0.932	0.180	"	0.898	ND	104	12-133		14.8	30	
4,6-Dinitro-2-methylphenol	0.627	0.180	"	0.898	ND	69.8	10-155		18.1	30	
4-Bromophenyl phenyl ether	0.854	0.0899	"	0.898	ND	95.0	14-128		4.83	30	
4-Chloro-3-methylphenol	0.923	0.0899	"	0.898	ND	103	10-134		8.36	30	
4-Chloroaniline	0.787	0.0899	"	0.898	ND	87.6	10-145		9.37	30	
4-Chlorophenyl phenyl ether	0.760	0.0899	"	0.898	ND	84.6	14-130		6.84	30	
4-Nitroaniline	0.867	0.180	"	0.898	ND	96.6	10-147		13.0	30	
4-Nitrophenol	0.802	0.180	"	0.898	ND	89.3	10-137		5.62	30	
Acenaphthene	0.780	0.0899	"	0.898	ND	86.8	10-146		9.16	30	
Acenaphthylene	0.747	0.0899	"	0.898	ND	83.2	10-134		9.15	30	
Acetophenone	0.838	0.0899	"	0.898	ND	93.3	10-116		10.8	30	
Aniline	0.783	0.360	"	0.898	ND	87.1	10-123		13.1	30	
Anthracene	0.835	0.0899	"	0.898	ND	93.0	10-142		9.65	30	
Atrazine	1.05	0.0899	"	0.898	ND	117	19-115	High Bias	7.95	30	
Benzaldehyde	0.831	0.0899	"	0.898	ND	92.5	10-125		13.7	30	
Benzo(a)anthracene	0.809	0.0899	"	0.898	ND	90.1	10-158		5.38	30	
Benzo(a)pyrene	0.954	0.0899	"	0.898	ND	106	10-180		4.78	30	
Benzo(b)fluoranthene	0.959	0.0899	"	0.898	ND	107	10-200		7.86	30	
Benzo(g,h,i)perylene	0.814	0.0899	"	0.898	ND	90.6	10-138		7.89	30	
Benzo(k)fluoranthene	0.779	0.0899	"	0.898	ND	86.7	10-197		7.36	30	
Benzoic acid	0.285	0.0899	"	0.898	ND	31.7	10-166		66.2	30	Non-dir.
Benzyl alcohol	0.847	0.0899	"	0.898	ND	94.3	12-124		13.2	30	
Benzyl butyl phthalate	0.903	0.0899	"	0.898	ND	101	10-154		5.98	30	
Bis(2-chloroethoxy)methane	0.802	0.0899	"	0.898	ND	89.3	10-132		4.77	30	
Bis(2-chloroethyl)ether	0.760	0.0899	"	0.898	ND	84.6	10-119		10.6	30	
Bis(2-chloroisopropyl)ether	0.758	0.0899	"	0.898	ND	84.4	10-139		11.7	30	
Bis(2-ethylhexyl)phthalate	1.01	0.0899	"	0.898	ND	112	10-167		5.94	30	
Caprolactam	1.21	0.180	"	0.898	ND	134	10-132	High Bias	6.14	30	

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10275 - EPA 3546 SVOA

Matrix Spike Dup (BG10275-MSD1) *Source sample: 21G0094-04 (Matrix Spike Dup) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Carbazole	0.786	0.0899	mg/kg dry	0.898	ND	87.5	10-167		6.71	30	
Chrysene	0.757	0.0899	"	0.898	ND	84.2	10-156		5.36	30	
Dibenzo(a,h)anthracene	1.13	0.0899	"	0.898	ND	126	10-137		10.3	30	
Dibenzofuran	0.760	0.0899	"	0.898	ND	84.6	10-147		7.96	30	
Diethyl phthalate	0.698	0.0899	"	0.898	ND	77.7	20-120		9.72	30	
Dimethyl phthalate	0.740	0.0899	"	0.898	ND	82.3	18-131		6.52	30	
Di-n-butyl phthalate	0.895	0.0899	"	0.898	ND	99.6	10-137		4.85	30	
Di-n-octyl phthalate	1.15	0.0899	"	0.898	ND	128	10-180		3.43	30	
Fluoranthene	0.788	0.0899	"	0.898	ND	87.8	10-160		6.79	30	
Fluorene	0.796	0.0899	"	0.898	ND	88.6	10-157		8.77	30	
Hexachlorobenzene	0.755	0.0899	"	0.898	ND	84.0	10-137		10.4	30	
Hexachlorobutadiene	0.786	0.0899	"	0.898	ND	87.5	10-132		5.16	30	
Hexachlorocyclopentadiene	0.399	0.0899	"	0.898	ND	44.4	10-106		7.87	30	
Hexachloroethane	0.707	0.0899	"	0.898	ND	78.7	10-110		9.36	30	
Indeno(1,2,3-cd)pyrene	1.01	0.0899	"	0.898	ND	112	10-144		9.04	30	
Isophorone	0.796	0.0899	"	0.898	ND	88.6	10-132		5.95	30	
Naphthalene	0.834	0.0899	"	0.898	ND	92.8	10-141		7.24	30	
Nitrobenzene	0.802	0.0899	"	0.898	ND	89.3	10-131		6.28	30	
N-Nitrosodimethylamine	0.648	0.0899	"	0.898	ND	72.2	10-126		15.7	30	
N-nitroso-di-n-propylamine	0.770	0.0899	"	0.898	ND	85.8	10-125		9.99	30	
N-Nitrosodiphenylamine	1.00	0.0899	"	0.898	ND	112	10-177		7.66	30	
Pentachlorophenol	0.979	0.0899	"	0.898	ND	109	10-153		5.97	30	
Phenanthrene	0.772	0.0899	"	0.898	ND	85.9	10-148		7.94	30	
Phenol	0.786	0.0899	"	0.898	ND	87.4	10-126		9.79	30	
Pyrene	0.747	0.0899	"	0.898	ND	83.2	10-165		8.52	30	
Surrogate: SURR: 2-Fluorophenol	*1.57*		*"*	*1.80*		*87.6*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.49*		*"*	*1.80*		*82.9*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*0.854*		*"*	*0.898*		*95.0*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.737*		*"*	*0.898*		*82.1*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.94*		*"*	*1.80*		*108*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.781*		*"*	*0.898*		*86.9*	*24-116*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10274 - EPA 3550C

Blank (BG10274-BLK1) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
4,4'-DDD	ND	0.00164	mg/kg wet								
4,4'-DDE	ND	0.00164	"								
4,4'-DDT	ND	0.00164	"								
Aldrin	ND	0.00164	"								
alpha-BHC	ND	0.00164	"								
alpha-Chlordane	ND	0.00164	"								
beta-BHC	ND	0.00164	"								
Chlordane, total	ND	0.0329	"								
delta-BHC	ND	0.00164	"								
Dieldrin	ND	0.00164	"								
Endosulfan I	ND	0.00164	"								
Endosulfan II	ND	0.00164	"								
Endosulfan sulfate	ND	0.00164	"								
Endrin	ND	0.00164	"								
Endrin aldehyde	ND	0.00164	"								
Endrin ketone	ND	0.00164	"								
gamma-BHC (Lindane)	ND	0.00164	"								
gamma-Chlordane	ND	0.00164	"								
Heptachlor	ND	0.00164	"								
Heptachlor epoxide	ND	0.00164	"								
Methoxychlor	ND	0.00822	"								
Toxaphene	ND	0.0832	"								
Surrogate: Decachlorobiphenyl	*0.0609*		*"*	*0.0664*		*91.7*	*30-150*				
Surrogate: Tetrachloro-m-xylene	*0.0661*		*"*	*0.0664*		*99.5*	*30-150*				

LCS (BG10274-BS1) Prepared: 07/07/2021 Analyzed: 07/08/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
4,4'-DDD	0.0321	0.00164	mg/kg wet	0.0332		96.7	40-140				
4,4'-DDE	0.0184	0.00164	"	0.0332		55.3	40-140				
4,4'-DDT	0.0185	0.00164	"	0.0332		55.8	40-140				
Aldrin	0.0333	0.00164	"	0.0332		100	40-140				
alpha-BHC	0.0307	0.00164	"	0.0332		92.4	40-140				
alpha-Chlordane	0.0349	0.00164	"	0.0332		105	40-140				
beta-BHC	0.0331	0.00164	"	0.0332		99.6	40-140				
delta-BHC	0.0302	0.00164	"	0.0332		91.0	40-140				
Dieldrin	0.0357	0.00164	"	0.0332		107	40-140				
Endosulfan I	0.0451	0.00164	"	0.0332		136	40-140				
Endosulfan II	0.0371	0.00164	"	0.0332		112	40-140				
Endosulfan sulfate	0.0313	0.00164	"	0.0332		94.3	40-140				
Endrin	0.0279	0.00164	"	0.0332		84.1	40-140				
Endrin aldehyde	0.0341	0.00164	"	0.0332		103	40-140				
Endrin ketone	0.0347	0.00164	"	0.0332		105	40-140				
gamma-BHC (Lindane)	0.0318	0.00164	"	0.0332		95.8	40-140				
gamma-Chlordane	0.0351	0.00164	"	0.0332		106	40-140				
Heptachlor	0.0375	0.00164	"	0.0332		113	40-140				
Heptachlor epoxide	0.0363	0.00164	"	0.0332		109	40-140				
Methoxychlor	0.0135	0.00822	"	0.0332		40.7	40-140				
Surrogate: Decachlorobiphenyl	*0.0573*		*"*	*0.0664*		*86.2*	*30-150*				
Surrogate: Tetrachloro-m-xylene	*0.0624*		*"*	*0.0664*		*93.8*	*30-150*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10274 - EPA 3550C

Matrix Spike (BG10274-MS1) *Source sample: 21G0094-03 (Matrix Spike) Prepared: 07/07/2021 Analyzed: 07/14/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
4,4'-DDD	0.0299	0.00180	mg/kg dry	0.0363	0.00465	69.7	30-150				
4,4'-DDE	0.0375	0.00180	"	0.0363	0.0188	51.5	30-150				
4,4'-DDT	0.0346	0.00180	"	0.0363	0.0220	34.7	30-150				
Aldrin	0.0219	0.00180	"	0.0363	ND	60.4	30-150				
alpha-BHC	0.0258	0.00180	"	0.0363	ND	70.9	30-150				
alpha-Chlordane	0.0430	0.00180	"	0.0363	0.0220	57.8	30-150				
beta-BHC	0.0333	0.00180	"	0.0363	ND	91.6	30-150				
delta-BHC	0.0230	0.00180	"	0.0363	ND	63.3	30-150				
Dieldrin	0.0382	0.00180	"	0.0363	0.0161	61.0	30-150				
Endosulfan I	0.0255	0.00180	"	0.0363	ND	70.2	30-150				
Endosulfan II	0.0272	0.00180	"	0.0363	ND	75.1	30-150				
Endosulfan sulfate	0.0232	0.00180	"	0.0363	ND	64.0	30-150				
Endrin	0.0255	0.00180	"	0.0363	ND	70.2	30-150				
Endrin aldehyde	0.0187	0.00180	"	0.0363	ND	51.5	30-150				
Endrin ketone	0.0256	0.00180	"	0.0363	ND	70.5	30-150				
gamma-BHC (Lindane)	0.0243	0.00180	"	0.0363	ND	66.8	30-150				
gamma-Chlordane	0.0366	0.00180	"	0.0363	0.0176	52.4	30-150				
Heptachlor	0.0281	0.00180	"	0.0363	ND	77.4	30-150				
Heptachlor epoxide	0.0242	0.00180	"	0.0363	ND	66.8	30-150				
Methoxychlor	0.0224	0.00898	"	0.0363	ND	61.7	30-150				
Surrogate: Decachlorobiphenyl	*0.0364*		*"*	*0.0726*		*50.2*	*30-150*				
Surrogate: Tetrachloro-m-xylene	*0.0340*		*"*	*0.0726*		*46.8*	*30-150*				

Matrix Spike Dup (BG10274-MSD1) *Source sample: 21G0094-03 (Matrix Spike Dup) Prepared: 07/07/2021 Analyzed: 07/14/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
4,4'-DDD	0.0258	0.00180	mg/kg dry	0.0363	0.00465	58.2	30-150		15.0	30	
4,4'-DDE	0.0334	0.00180	"	0.0363	0.0188	40.0	30-150		11.8	30	
4,4'-DDT	0.0269	0.00180	"	0.0363	0.0220	13.7	30-150	Low Bias	24.9	30	
Aldrin	0.0194	0.00180	"	0.0363	ND	53.4	30-150		12.3	30	
alpha-BHC	0.0229	0.00180	"	0.0363	ND	63.2	30-150		11.5	30	
alpha-Chlordane	0.0366	0.00180	"	0.0363	0.0220	40.4	30-150		15.9	30	
beta-BHC	0.0280	0.00180	"	0.0363	ND	77.0	30-150		17.3	30	
delta-BHC	0.0222	0.00180	"	0.0363	ND	61.2	30-150		3.43	30	
Dieldrin	0.0332	0.00180	"	0.0363	0.0161	47.1	30-150		14.1	30	
Endosulfan I	0.0220	0.00180	"	0.0363	ND	60.7	30-150		14.6	30	
Endosulfan II	0.0236	0.00180	"	0.0363	ND	64.9	30-150		14.6	30	
Endosulfan sulfate	0.0196	0.00180	"	0.0363	ND	54.1	30-150		16.8	30	
Endrin	0.0214	0.00180	"	0.0363	ND	59.1	30-150		17.2	30	
Endrin aldehyde	0.0151	0.00180	"	0.0363	ND	41.5	30-150		21.6	30	
Endrin ketone	0.0210	0.00180	"	0.0363	ND	57.7	30-150		20.0	30	
gamma-BHC (Lindane)	0.0214	0.00180	"	0.0363	ND	59.0	30-150		12.4	30	
gamma-Chlordane	0.0315	0.00180	"	0.0363	0.0176	38.3	30-150		15.0	30	
Heptachlor	0.0238	0.00180	"	0.0363	ND	65.7	30-150		16.4	30	
Heptachlor epoxide	0.0234	0.00180	"	0.0363	ND	64.4	30-150		3.64	30	
Methoxychlor	0.0187	0.00898	"	0.0363	ND	51.5	30-150		18.0	30	
Surrogate: Decachlorobiphenyl	*0.0339*		*"*	*0.0726*		*46.7*	*30-150*				
Surrogate: Tetrachloro-m-xylene	*0.0300*		*"*	*0.0726*		*41.4*	*30-150*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch Y1D0212 - BC11630											
Performance Mix (Y1D0212-PEM1)							Prepared & Analyzed: 04/01/2021				
4,4'-DDD	10.7		ng/mL	0.00			0-200				
4,4'-DDE	0.811		"	0.00			0-200				
4,4'-DDT	247		"	200		123	0-200				
Endrin	129		"	100		129	0-200				
Endrin aldehyde	0.667		"	0.00			0-200				
Endrin ketone	2.54		"	0.00			0-200				
Batch Y1G0901 - BE10937											
Performance Mix (Y1G0901-PEM1)							Prepared & Analyzed: 07/08/2021				
4,4'-DDD	14.2		ng/mL	0.00			0-200				
4,4'-DDE	1.78		"	0.00			0-200				
4,4'-DDT	188		"	200		93.8	0-200				
Endrin	120		"	100		120	0-200				
Endrin aldehyde	1.69		"	0.00			0-200				
Endrin ketone	9.98		"	0.00			0-200				
Batch Y1G1207 - BE10937											
Performance Mix (Y1G1207-PEM1)							Prepared & Analyzed: 07/09/2021				
4,4'-DDD	9.58		ng/mL	0.00			0-200				
4,4'-DDE	1.13		"	0.00			0-200				
4,4'-DDT	143		"	200		71.4	0-200				
Endrin	88.9		"	100		88.9	0-200				
Endrin aldehyde	1.40		"	0.00			0-200				
Endrin ketone	4.35		"	0.00			0-200				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch Y1G1506 - BG10350

Performance Mix (Y1G1506-PEM1) Prepared & Analyzed: 07/14/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
4,4'-DDD	17.6		ng/mL	0.00			0-200				
4,4'-DDE	2.38		"	0.00			0-200				
4,4'-DDT	268		"	200		134	0-200				
Endrin	117		"	100		117	0-200				
Endrin aldehyde	3.35		"	0.00			0-200				
Endrin ketone	10.4		"	0.00			0-200				

Polychlorinated Biphenyls by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10274 - EPA 3550C											
Blank (BG10274-BLK2)								Prepared: 07/07/2021 Analyzed: 07/08/2021			
Aroclor 1016	ND	0.0166	mg/kg wet								
Aroclor 1221	ND	0.0166	"								
Aroclor 1232	ND	0.0166	"								
Aroclor 1242	ND	0.0166	"								
Aroclor 1248	ND	0.0166	"								
Aroclor 1254	ND	0.0166	"								
Aroclor 1260	ND	0.0166	"								
Total PCBs	ND	0.0166	"								
Surrogate: Tetrachloro-m-xylene	*0.0698*		*"*	*0.0664*		*105*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0435*		*"*	*0.0664*		*65.5*	*30-140*				
LCS (BG10274-BS2)								Prepared: 07/07/2021 Analyzed: 07/08/2021			
Aroclor 1016	0.415	0.0166	mg/kg wet	0.332		125	40-130				
Aroclor 1260	0.383	0.0166	"	0.332		115	40-130				
Surrogate: Tetrachloro-m-xylene	*0.0741*		*"*	*0.0664*		*112*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0458*		*"*	*0.0664*		*69.0*	*30-140*				
Matrix Spike (BG10274-MS2)	*Source sample: 21G0094-03 (Matrix Spike)							Prepared: 07/07/2021 Analyzed: 07/08/2021			
Aroclor 1016	0.213	0.0181	mg/kg dry	0.363	ND	58.6	40-140				
Aroclor 1260	0.228	0.0181	"	0.363	ND	62.8	40-140				
Surrogate: Tetrachloro-m-xylene	*0.0552*		*"*	*0.0726*		*76.0*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0327*		*"*	*0.0726*		*45.0*	*30-140*				
Matrix Spike Dup (BG10274-MSD2)	*Source sample: 21G0094-03 (Matrix Spike Dup)							Prepared: 07/07/2021 Analyzed: 07/08/2021			
Aroclor 1016	0.188	0.0181	mg/kg dry	0.363	ND	51.9	40-140		12.1	50	
Aroclor 1260	0.211	0.0181	"	0.363	ND	58.2	40-140		7.67	50	
Surrogate: Tetrachloro-m-xylene	*0.0534*		*"*	*0.0726*		*73.5*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0319*		*"*	*0.0726*		*44.0*	*30-140*				

Polychlorinated Biphenyls by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch Y1G0831 - BG10324											
Aroclor Reference (Y1G0831-ARC1)							Prepared & Analyzed: 07/08/2021				
Surrogate: Tetrachloro-m-xylene	*0.219*		*ug/mL*	*0.200*		*110*					
Surrogate: Decachlorobiphenyl	*0.175*		*"*	*0.200*		*87.5*					
Batch Y1G0928 - BG10388											
Aroclor Reference (Y1G0928-ARC1)							Prepared & Analyzed: 07/09/2021				
Surrogate: Tetrachloro-m-xylene	*0.217*		*ug/mL*	*0.200*		*108*					
Surrogate: Decachlorobiphenyl	*0.191*		*"*	*0.200*		*95.5*					

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG10314 - EPA 3050B											
Blank (BG10314-BLK1)											Prepared: 07/07/2021 Analyzed: 07/09/2021
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	12.2	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 (BG10314-DUP1)	*Source sample: 21G0097-01 (SB-01 8-11)										Prepared: 07/07/2021 Analyzed: 07/09/2021
Aluminum	7320	5.60	mg/kg dry		7530				2.88	35	
Antimony	ND	2.80	"		ND					35	
Arsenic	ND	1.68	"		ND					35	
Barium	18.8	2.80	"		23.2				21.4	35	
Beryllium	ND	0.056	"		ND					35	
Cadmium	ND	0.336	"		ND					35	
Calcium	4040	5.60	"		4460				9.91	35	
Chromium	4.45	0.560	"		5.45				20.2	35	
Cobalt	4.92	0.448	"		5.28				7.05	35	
Copper	ND	2.24	"		2.52					35	
Iron	13500	28.0	"		14900				9.76	35	
Lead	12.5	0.560	"		8.17				41.7	35	Non-dir.
Magnesium	1960	5.60	"		2040				4.14	35	
Manganese	65.6	0.560	"		91.0				32.4	35	
Nickel	3.27	1.12	"		3.74				13.6	35	
Potassium	337	5.60	"		386				13.4	35	
Selenium	ND	2.80	"		ND					35	
Silver	ND	0.560	"		ND					35	
Sodium	297	56.0	"		290				2.23	35	
Thallium	ND	2.80	"		ND					35	
Vanadium	11.2	1.12	"		13.3				17.8	35	
Zinc	22.3	2.80	"		26.1				15.4	35	

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10314 - EPA 3050B

Matrix Spike (BG10314-MS1) *Source sample: 21G0097-01 (SB-01 8-11) Prepared: 07/07/2021 Analyzed: 07/09/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	7150	5.60	mg/kg dry	224	7530	NR	75-125	Low Bias			
Antimony	10.9	2.80	"	28.0	ND	39.0	75-125	Low Bias			
Arsenic	225	1.68	"	224	ND	100	75-125				
Barium	250	2.80	"	224	23.2	101	75-125				
Beryllium	4.96	0.056	"	5.60	ND	88.6	75-125				
Cadmium	5.81	0.336	"	5.60	ND	104	75-125				
Calcium	4980	5.60	"	112	4460	463	75-125	High Bias			
Chromium	26.6	0.560	"	22.4	5.45	94.6	75-125				
Cobalt	65.5	0.448	"	56.0	5.28	108	75-125				
Copper	31.5	2.24	"	28.0	2.52	104	75-125				
Iron	15500	28.0	"	112	14900	528	75-125	High Bias			
Lead	68.7	0.560	"	56.0	8.17	108	75-125				
Magnesium	2120	5.60	"	112	2040	66.8	75-125	Low Bias			
Manganese	129	0.560	"	56.0	91.0	68.6	75-125	Low Bias			
Nickel	62.8	1.12	"	56.0	3.74	105	75-125				
Potassium	424	5.60	"	112	386	33.6	75-125	Low Bias			
Selenium	189	2.80	"	224	ND	84.3	75-125				
Silver	7.77	0.560	"	5.60	ND	139	75-125	High Bias			
Sodium	424	56.0	"	112	290	120	75-125				
Thallium	228	2.80	"	224	ND	102	75-125				
Vanadium	70.6	1.12	"	56.0	13.3	102	75-125				
Zinc	90.2	2.80	"	56.0	26.1	115	75-125				

Post Spike (BG10314-PS1) *Source sample: 21G0097-01 (SB-01 8-11) Prepared: 07/07/2021 Analyzed: 07/09/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	69.1		ug/mL	2.00	67.2	94.9	75-125				
Antimony	0.294		"	0.250	-0.001	118	75-125				
Arsenic	2.20		"	2.00	0.004	110	75-125				
Barium	2.47		"	2.00	0.208	113	75-125				
Beryllium	0.048		"	0.0500	-0.007	95.7	75-125				
Cadmium	0.057		"	0.0500	0.0004	113	75-125				
Calcium	40.9		"	1.00	39.8	106	75-125				
Chromium	0.267		"	0.200	0.049	109	75-125				
Cobalt	0.632		"	0.500	0.047	117	75-125				
Copper	0.306		"	0.250	0.022	114	75-125				
Iron	134		"	1.00	133	93.9	75-125				
Lead	0.657		"	0.500	0.073	117	75-125				
Magnesium	19.5		"	1.00	18.2	123	75-125				
Manganese	1.36		"	0.500	0.812	109	75-125				
Nickel	0.618		"	0.500	0.033	117	75-125				
Potassium	4.71		"	1.00	3.44	126	75-125	High Bias			
Selenium	1.86		"	2.00	-0.129	93.1	75-125				
Silver	0.059		"	0.0500	-0.061	118	75-125				
Sodium	3.31		"	1.00	2.59	72.1	75-125	Low Bias			
Thallium	2.23		"	2.00	-0.024	112	75-125				
Vanadium	0.667		"	0.500	0.119	110	75-125				
Zinc	0.787		"	0.500	0.233	111	75-125				

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10314 - EPA 3050B

Reference (BG10314-SRM1) Prepared: 07/07/2021 Analyzed: 07/09/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	8460	5.00	mg/kg wet	8190		103	50.5-150.1				
Antimony	60.0	2.50	"	110		54.5	19-251.7				
Arsenic	159	1.50	"	162		97.9	70.1-129.8				
Barium	141	2.50	"	138		102	75-125				
Beryllium	157	0.050	"	157		99.9	75-125.2				
Cadmium	143	0.300	"	135		106	74.8-125.2				
Calcium	4680	5.00	"	4790		97.8	72.7-127.5				
Chromium	112	0.500	"	117		95.9	70.1-129.9				
Cobalt	102	0.400	"	92.6		110	75-125				
Copper	142	2.00	"	143		99.4	75.3-125.3				
Iron	13300	25.0	"	15100		88.2	35.8-164.6				
Lead	71.3	0.500	"	77.6		91.9	70-130				
Magnesium	2390	5.00	"	2320		103	61.7-137.8				
Manganese	329	0.500	"	319		103	78.1-122				
Nickel	92.2	1.00	"	79.9		115	70.1-130.1				
Potassium	2130	5.00	"	2050		104	59.1-140.9				
Selenium	142	2.50	"	172		82.8	55.7-144.5				
Silver	59.5	0.500	"	24.7		241	69.2-130.8	High Bias			
Sodium	112	50.0	"	137		81.8	36.1-163.3				
Thallium	87.5	2.50	"	88.0		99.5	65.3-146.8				
Vanadium	91.4	1.00	"	99.9		91.5	67-133.1				
Zinc	306	2.50	"	312		98.1	69.9-130.1				

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 BG10454 - EPA 7473 soil											
Blank (BG10454-BLK1)							Prepared & Analyzed: 07/09/2021				
Mercury	ND	0.0300	mg/kg wet								
Duplicate (BG10454-DUP1)	*Source sample: 21G0124-01 (Duplicate)						Prepared: 07/09/2021 Analyzed: 07/12/2021				
Mercury	0.114	0.0332	mg/kg dry		0.158				32.7	35	
Matrix Spike (BG10454-MS1)	*Source sample: 21G0124-01 (Matrix Spike)						Prepared: 07/09/2021 Analyzed: 07/12/2021				
Mercury	0.593		mg/kg	0.500	0.143	90.0	75-125				
Reference (BG10454-SRM1)							Prepared & Analyzed: 07/09/2021				
Mercury	21.595		mg/kg	27.2		79.4	59.9-140.1				

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 BG10468 - % Solids Prep											
Duplicate (BG10468-DUP1)	*Source sample: 21G0119-01 (Duplicate)						Prepared & Analyzed: 07/12/2021				
% Solids	95.6	0.100	%		95.6				0.0571	20	

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
21G0097-01	SB-01 8-11	40mL Vial with Stir Bar-Cool 4° C
21G0097-02	SB-04 8-11	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
21G0097-03	SB-09 4-7	40mL Vial with Stir Bar-Cool 4° C
21G0097-04	SB-10 5-5.5	40mL Vial with Stir Bar-Cool 4° C
21G0097-05	SB-19 0-4	40mL Vial with Stir Bar-Cool 4° C
21G0097-06	SB-19 4-8	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
21G0097-07	SB-20 0-4	40mL Vial with Stir Bar-Cool 4° C
21G0097-08	SB-20 4-8	40mL Vial with Stir Bar-Cool 4° C
21G0097-09	SB-20 8-11	40mL Vial with Stir Bar-Cool 4° C
21G0097-10	SB-21 4-8	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C

Sample and Data Qualifiers Relating to This Work Order

M-SPKM	The spike recovery is not within acceptance windows due to sample non-homogeneity, or matrix interference.
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).
CCV-H	The value reported is estimated due to its behavior during continuing calibration verification (>20% difference for average RF or >20% drift for linear or quadratic fit.) This value may be biased high.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
IS-HI	The internal std associated with this target compound did not meet acceptance criteria (area >200% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects.
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-BLK	The target analyte was detected above the RL in the batch method blank. All samples showed >10x the concentration in the blank for this analyte. Data are reported.
M-CCV1	The recovery for this element in the Continuing Calibration Verification (CCV) exceeded 110% of the expected value. Positive detections may be biased high.
M-CRL	The RL check for this element recovered outside of control limits.
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.
M-ICV2	The recovery for this element in the ICV was outside the 90-110% recovery criteria.
VOA-E	The concentration reported for this analyte is an estimated value above the linear range of the instrument for EPA SW846-5035/8260 (>200ppb). Re-analysis using 5035/8260 medium level prep. resulted in a detection below the reporting limit (<500ppb).
M-SRD1	The serial dilution for this element was outside control limits.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data are acceptable.
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-03	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. This effect was confirmed by reanalysis.
S-08	The recovery of this surrogate was outside of QC limits.
S-GC	Two surrogates are used for this analysis. One surrogate recovered within control limits therefore the analysis is acceptable.
M-DUPS	The RPD between the native sample and the duplicate is outside of limits due to sample non-homogeneity

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

Revision Description: This report has been revised to correct the Analyte Reporting List.

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

Field Chain-of-Custody Record

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

YORK Project No. 21G0097

Page ____ of ____

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: CBTS	Company: James	Company: Brenda	21003-0066	RUSH - Next Day
Address: 22 IBM Road Poughkeepsie NY	Address:	Address:		RUSH - Two Day
			YOUR Project Name	RUSH - Three Day
Phone:	Phone:	Phone:	21003-0066.21	RUSH - Four Day
Contact:	Contact:	Contact:		Standard (5-7 Day) X
E-mail:	E-mail:	E-mail:	YOUR PO#:	

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.

JAMES HOOKER

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

James Hooker

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

Sample Identification		Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
SB-01	8-11	S	06/30/21	VOCs, SVOCs, Pest, PCBs, TAL metals	8oz 2x40ml
SB-04	8-11			VOCs, SVOCs, PCBs TAL metals	
SB-09	4-7			VOCs SVOCs, Pest, PCBs, TAL metals	
SB-10	5-5.5			VOCs SVOCs, PCBs, TAL metals	
SB-19	0-4		07/01/21	VOCs, PAHs, TAL metals	
SB-19	4-8			VOCs, PAHs	
SB-20	0-4			VOCs, PAHs TAL metals	
SB-20	4-8			VOCs PAHs	
SB-20	8-11			VOCs PAHs	
SB-21	4-8			VOCs PAHs	

Comments: VOCs frozen

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

Special Instruction: Field Filtered ____ Lab to Filter ____

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
JHooker 7/2/21	7-2-21 11:00	Chris C	7-2-21 11:00	Chris C 14:07	7-2-21
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by / Date/Time	Temp. Received at Lab
				7/2/21 / 14:07	2.9 Degrees C

Technical Report

prepared for:

Gallagher Bassett - Poughkeepsie, NY
22 IBM Road, Suite 101
Poughkeepsie NY, 12601
Attention: Richard Hooker

Report Date: 07/21/2021
Client Project ID: 21003-0066
York Project (SDG) No.: 21G0169

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

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

Report Date: 07/21/2021
Client Project ID: 21003-0066
York Project (SDG) No.: 21G0169

Gallagher Bassett - Poughkeepsie, NY
22 IBM Road, Suite 101
Poughkeepsie NY, 12601
Attention: Richard Hooker

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on July 06, 2021 and listed below. The project was identified as your project: **21003-0066**.

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

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

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

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
21G0169-08	SB-13 3-4	Soil	07/01/2021	07/06/2021

General Notes for York Project (SDG) No.: 21G0169

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: Cassie L. Mosher **Date:** 07/21/2021

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: **SB-13 3-4** **York Sample ID:** **21G0169-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0169	21003-0066	Soil	July 1, 2021 3:00 pm	07/06/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**4710**		mg/kg dry	6.11	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-36-0	Antimony	ND		mg/kg dry	3.06	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-38-2	**Arsenic**	**2.72**		mg/kg dry	1.83	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-39-3	**Barium**	**87.9**		mg/kg dry	3.06	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.061	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-43-9	**Cadmium**	**0.436**		mg/kg dry	0.367	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-70-2	**Calcium**	**2910**	B	mg/kg dry	6.11	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-47-3	**Chromium**	**6.64**		mg/kg dry	0.611	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-48-4	**Cobalt**	**4.31**		mg/kg dry	0.489	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-50-8	**Copper**	**17.1**		mg/kg dry	2.45	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7439-89-6	**Iron**	**12700**		mg/kg dry	30.6	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7439-92-1	**Lead**	**434**		mg/kg dry	0.611	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7439-95-4	**Magnesium**	**2100**		mg/kg dry	6.11	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7439-96-5	**Manganese**	**72.7**		mg/kg dry	0.611	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-02-0	**Nickel**	**5.53**		mg/kg dry	1.22	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-09-7	**Potassium**	**337**		mg/kg dry	6.11	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7782-49-2	Selenium	ND		mg/kg dry	3.06	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-22-4	Silver	ND		mg/kg dry	0.611	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-23-5	**Sodium**	**100**		mg/kg dry	61.1	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-28-0	Thallium	ND		mg/kg dry	3.06	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM
7440-62-2	**Vanadium**	**12.9**		mg/kg dry	1.22	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 11:05	07/21/2021 10:36	EM

Sample Information

Client Sample ID: **SB-13 3-4** | **York Sample ID:** **21G0169-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0169	21003-0066	Soil	July 1, 2021 3:00 pm	07/06/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	**Zinc**	**171**		mg/kg dry	3.06	1	EPA 6010D	07/20/2021 11:05	07/21/2021 10:36	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0715**		mg/kg dry	0.0367	1	EPA 7473	07/19/2021 19:55	07/19/2021 20:45	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**81.8**		%	0.100	1	SM 2540G	07/20/2021 14:31	07/20/2021 17:37	VR
							Certifications: CTDOH			

Analytical Batch Summary

Batch ID: BG10959 **Preparation Method:** EPA 7473 soil **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date
21G0169-08	SB-13 3-4	07/19/21
BG10959-DUP1	Duplicate	07/19/21
BG10959-MS1	Matrix Spike	07/19/21

Batch ID: BG10990 **Preparation Method:** EPA 3050B **Prepared By:** OT

YORK Sample ID	Client Sample ID	Preparation Date
21G0169-08	SB-13 3-4	07/20/21
BG10990-BLK1	Blank	07/20/21
BG10990-DUP1	Duplicate	07/20/21
BG10990-MS1	Matrix Spike	07/20/21
BG10990-PS1	Post Spike	07/20/21
BG10990-SRM1	Reference	07/20/21

Batch ID: BG11012 **Preparation Method:** % Solids Prep **Prepared By:** VR

YORK Sample ID	Client Sample ID	Preparation Date
21G0169-08	SB-13 3-4	07/20/21
BG11012-DUP1	Duplicate	07/20/21

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10990 - EPA 3050B

Blank (BG10990-BLK1) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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	9.24	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 (BG10990-DUP1) *Source sample: 21G0644-05 (Duplicate) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	7610	5.73	mg/kg dry		8190				7.35	35	
Antimony	ND	2.86	"		ND					35	
Arsenic	3.27	1.72	"		3.98				19.5	35	
Barium	71.7	2.86	"		74.3				3.50	35	
Beryllium	ND	0.057	"		ND					35	
Cadmium	ND	0.344	"		ND					35	
Calcium	46500	5.73	"		62000				28.5	35	
Chromium	17.3	0.573	"		18.7				7.86	35	
Cobalt	5.39	0.458	"		5.92				9.37	35	
Copper	36.4	2.29	"		37.6				3.09	35	
Iron	12000	28.6	"		13900				14.7	35	
Lead	121	0.573	"		113				6.54	35	
Magnesium	4170	5.73	"		12000				96.7	35	Non-dir.
Manganese	221	0.573	"		278				22.8	35	
Nickel	13.1	1.15	"		14.9				12.8	35	
Potassium	1310	5.73	"		1520				14.3	35	
Selenium	ND	2.86	"		ND					35	
Silver	ND	0.573	"		ND					35	
Sodium	301	57.3	"		303				0.513	35	
Thallium	ND	2.86	"		ND					35	
Vanadium	21.1	1.15	"		22.5				6.47	35	
Zinc	125	2.86	"		124				1.05	35	

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Batch BG10990 - EPA 3050B

Matrix Spike (BG10990-MS1) *Source sample: 21G0644-05 (Matrix Spike) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	9160	5.73	mg/kg dry	229	8190	423	75-125	High Bias			
Antimony	5.87	2.86	"	28.6	ND	20.5	75-125	Low Bias			
Arsenic	227	1.72	"	229	3.98	97.2	75-125				
Barium	309	2.86	"	229	74.3	102	75-125				
Beryllium	4.11	0.057	"	5.73	ND	71.7	75-125	Low Bias			
Cadmium	5.72	0.344	"	5.73	ND	99.9	75-125				
Calcium	57400	5.73	"	115	62000	NR	75-125	Low Bias			
Chromium	45.0	0.573	"	22.9	18.7	115	75-125				
Cobalt	62.0	0.458	"	57.3	5.92	97.9	75-125				
Copper	75.0	2.29	"	28.6	37.6	131	75-125	High Bias			
Iron	14800	28.6	"	115	13900	788	75-125	High Bias			
Lead	205	0.573	"	57.3	113	161	75-125	High Bias			
Magnesium	5760	5.73	"	115	12000	NR	75-125	Low Bias			
Manganese	282	0.573	"	57.3	278	8.23	75-125	Low Bias			
Nickel	74.4	1.15	"	57.3	14.9	104	75-125				
Potassium	1480	5.73	"	115	1520	NR	75-125	Low Bias			
Selenium	189	2.86	"	229	ND	82.3	75-125				
Silver	12.8	0.573	"	5.73	ND	223	75-125	High Bias			
Sodium	452	57.3	"	115	303	131	75-125	High Bias			
Thallium	221	2.86	"	229	ND	96.3	75-125				
Vanadium	80.2	1.15	"	57.3	22.5	101	75-125				
Zinc	204	2.86	"	57.3	124	140	75-125	High Bias			

Post Spike (BG10990-PS1) *Source sample: 21G0644-05 (Post Spike) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	75.3		ug/mL	2.00	71.5	189	75-125	High Bias			
Antimony	0.296		"	0.250	-0.018	118	75-125				
Arsenic	2.33		"	2.00	0.035	115	75-125				
Barium	2.94		"	2.00	0.648	114	75-125				
Beryllium	0.045		"	0.0500	-0.010	90.6	75-125				
Cadmium	0.058		"	0.0500	0.002	111	75-125				
Calcium	551		"	1.00	541	986	75-125	High Bias			
Chromium	0.388		"	0.200	0.163	112	75-125				
Cobalt	0.628		"	0.500	0.052	115	75-125				
Copper	0.644		"	0.250	0.328	126	75-125	High Bias			
Iron	125		"	1.00	121	365	75-125	High Bias			
Lead	1.63		"	0.500	0.990	128	75-125	High Bias			
Magnesium	108		"	1.00	105	364	75-125	High Bias			
Manganese	3.14		"	0.500	2.42	143	75-125	High Bias			
Nickel	0.744		"	0.500	0.130	123	75-125				
Potassium	14.8		"	1.00	13.2	155	75-125	High Bias			
Selenium	2.02		"	2.00	-0.006	101	75-125				
Silver	0.056		"	0.0500	-0.061	111	75-125				
Sodium	3.76		"	1.00	2.64	112	75-125				
Thallium	2.25		"	2.00	-0.035	113	75-125				
Vanadium	0.768		"	0.500	0.197	114	75-125				
Zinc	1.65		"	0.500	1.08	115	75-125				

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG10990 - EPA 3050B

Reference (BG10990-SRM1) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	8250	5.00	mg/kg wet	8190		101	50.5-150.1				
Antimony	60.4	2.50	"	110		54.9	19-251.7				
Arsenic	152	1.50	"	162		94.1	70.1-129.8				
Barium	136	2.50	"	138		98.8	75-125				
Beryllium	150	0.050	"	157		95.6	75-125.2				
Cadmium	135	0.300	"	135		100	74.8-125.2				
Calcium	4680	5.00	"	4790		97.8	72.7-127.5				
Chromium	108	0.500	"	117		92.5	70.1-129.9				
Cobalt	99.6	0.400	"	92.6		108	75-125				
Copper	139	2.00	"	143		97.3	75.3-125.3				
Iron	12600	25.0	"	15100		83.6	35.8-164.6				
Lead	70.1	0.500	"	77.6		90.3	70-130				
Magnesium	2250	5.00	"	2320		96.9	61.7-137.8				
Manganese	328	0.500	"	319		103	78.1-122				
Nickel	89.2	1.00	"	79.9		112	70.1-130.1				
Potassium	2000	5.00	"	2050		97.8	59.1-140.9				
Selenium	137	2.50	"	172		79.7	55.7-144.5				
Silver	71.3	0.500	"	24.7		289	69.2-130.8	High Bias			
Sodium	117	50.0	"	137		85.7	36.1-163.3				
Thallium	84.3	2.50	"	88.0		95.8	65.3-146.8				
Vanadium	90.0	1.00	"	99.9		90.1	67-133.1				
Zinc	292	2.50	"	312		93.5	69.9-130.1				

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 BG10959 - EPA 7473 soil											
Duplicate (BG10959-DUP1)	*Source sample: 21G0169-08 (SB-13 3-4)						Prepared & Analyzed: 07/19/2021				
Mercury	0.165	0.0367	mg/kg dry		0.0715				78.9	35	Non-dir.
Matrix Spike (BG10959-MS1)	*Source sample: 21G0169-08 (SB-13 3-4)						Prepared & Analyzed: 07/19/2021				
Mercury	0.491		mg/kg	0.500	0.0585	86.5	75-125				

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 BG11012 - % Solids Prep											
Duplicate (BG11012-DUP1)	*Source sample: 21G0871-01 (Duplicate)						Prepared & Analyzed: 07/20/2021				
% Solids	85.2	0.100	%		85.0				0.205	20	

Sample and Data Qualifiers Relating to This Work Order

M-SPKM	The spike recovery is not within acceptance windows due to sample non-homogeneity, or matrix interference.
M-ICV2	The recovery for this element in the ICV was outside the 90-110% recovery criteria.
M-DUPS	The RPD between the native sample and the duplicate is outside of limits due to sample non-homogeneity
M-CRL	The RL check for this element recovered outside of control limits.
M-CCV1	The recovery for this element in the Continuing Calibration Verification (CCV) exceeded 110% of the expected value. Positive detections may be biased high.
M-BLK	The target analyte was detected above the RL in the batch method blank. All samples showed >10x the concentration in the blank for this analyte. Data are reported.
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

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

Field Chain-of-Custody Record

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

YORK Project No. 2160169

Page 1 of 2

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: GBTS	Company: Richard	Company: Brenda	21003-0066	RUSH - Next Day
Address:	Address:	Address:		RUSH - Two Day
Phone.:	Phone.:	Phone.:	YOUR Project Name	RUSH - Three Day
Contact:	Contact:	Contact:	21003-0066	RUSH - Four Day
E-mail:	E-mail:	E-mail:	YOUR PO#:	Standard (5-7 Day)

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

J Hooker

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

[signature]

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

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
SB-05 4-7	S	7/1/20	Hold	8oz.; 4x40mL
SB-06 4-7.5				
SB-07 4-7				
SB-07 8-9				
SB-08 4-6				
SB-15 4-8				8oz
SB-15 8-12				
SB-13 3-4				
SB-11 4-8				
SB-18 4-8				

Comments:

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

Special Instruction
Field Filtered ___
Lab to Filter ___

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
James Hooker	7/6/21 12:10	Chris C	7-6-21 12:10	Chris C 15:05	7-6-21
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by / Date/Time	Temp. Received at Lab
				[signature] 7/6/21 15:05	1.7 Degrees C

York Analytical Laboratories, Inc.

120 Research Drive, Stratford, CT 06615 | 132-02 89th Ave, Queens, NY 11418

clientservices@yorklab.com

www.yorklab.com

Field Chain-of-Custody Record

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

YORK Project No. 2160169

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: GBTS	Company: Richard	Company: Brenda	21003-0066	RUSH - Next Day
Address:	Address:	Address:		RUSH - Two Day
Phone.:	Phone.:	Phone.:	YOUR Project Name: 21003-0066	RUSH - Three Day
Contact:	Contact:	Contact:		RUSH - Four Day
E-mail:	E-mail:	E-mail:	YOUR PO#:	Standard (5-7 Day)

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

J Hooker

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

[signature]

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

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
SB-22 4-8	S	7/1/30	Hold	8oz.
SB-22 0-4				
SB-16 4-7				
SB-12 4-8				
SB-13 4-8				
SB-14 4-8				
SB-21 0-4				

Comments:

Preservation: (check all that apply)

HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___ ZnAc ___

Ascorbic Acid ___ Other: ___

Special Instruction

Field Filtered ___

Lab to Filter ___

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
James Hooker	7/6/21 12:10	[signature]	7-6-21 12:10	[signature] 15:05	7-6-21
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by / Date/Time	Temp. Received at Lab
				[signature] 7/6/21 15:07	1.7

Technical Report

prepared for:

Gallagher Bassett - Poughkeepsie, NY
22 IBM Road, Suite 101
Poughkeepsie NY, 12601
Attention: Richard Hooker

Report Date: 07/23/2021
Client Project ID: 21003-0066
York Project (SDG) No.: 21G0903

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

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

Report Date: 07/23/2021
Client Project ID: 21003-0066
York Project (SDG) No.: 21G0903

Gallagher Bassett - Poughkeepsie, NY
22 IBM Road, Suite 101
Poughkeepsie NY, 12601
Attention: Richard Hooker

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on July 20, 2021 and listed below. The project was identified as your project: **21003-0066**.

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

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

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

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
21G0903-01	**SS-01**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-02	**SS-02**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-03	**SS-03**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-04	**SS-04**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-05	**SS-05**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-06	**SS-06**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-07	**SS-07**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-08	**SS-08**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-09	**SS-09**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-10	**SS-10**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-11	**SS-011**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-12	**SS-012**	**Soil**	**07/19/2021**	**07/20/2021**
21G0903-13	**SS-013**	**Soil**	**07/19/2021**	**07/20/2021**

General Notes for York Project (SDG) No.: 21G0903

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: Cassie L Mosher **Date:** 07/23/2021

Cassie L. Mosher
Laboratory Manager

Sample Information

Client Sample ID: **SS-01** | **York Sample ID:** **21G0903-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
65794-96-9	3- & 4-Methylphenols	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH

Sample Information

Client Sample ID: **SS-01** **York Sample ID:** **21G0903-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
62-53-3	Aniline	ND		mg/kg dry	0.285	0.570	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
120-12-7	Anthracene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
92-87-5	Benzidine	ND		mg/kg dry	0.285	0.570	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
56-55-3	**Benzo(a)anthracene**	**0.0875**	J	mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
50-32-8	**Benzo(a)pyrene**	**0.100**	J	mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
205-99-2	**Benzo(b)fluoranthene**	**0.103**	J	mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
191-24-2	**Benzo(g,h,i)perylene**	**0.0966**	J	mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
207-08-9	**Benzo(k)fluoranthene**	**0.0807**	J	mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
65-85-0	**Benzoic acid**	**0.288**		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH

Sample Information

Client Sample ID: **SS-01** | **York Sample ID:** **21G0903-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Semi-Volatiles, 8270 - Comprehensive | **Log-in Notes:** | **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
117-81-7	**Bis(2-ethylhexyl)phthalate**	**0.214**		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
86-74-8	Carbazole	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
218-01-9	**Chrysene**	**0.114**	J	mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
122-39-4	* Diphenylamine	ND		mg/kg dry	0.142	0.284	2	EPA 8270D Certifications:	07/22/2021 06:31	07/23/2021 13:23	KH
206-44-0	**Fluoranthene**	**0.178**		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
86-73-7	Fluorene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.0830**	J	mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH

Sample Information

Client Sample ID: **SS-01** **York Sample ID:** **21G0903-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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
78-59-1	Isophorone	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
85-01-8	**Phenanthrene**	**0.118**	J	mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
108-95-2	Phenol	ND		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH
129-00-0	**Pyrene**	**0.173**		mg/kg dry	0.0713	0.142	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:23	KH

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: SURR: 2-Fluorophenol*	*56.1 %*	*20-108*
4165-62-2	*Surrogate: SURR: Phenol-d5*	*57.7 %*	*23-114*
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*57.9 %*	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*44.6 %*	*21-113*
118-79-6	*Surrogate: SURR: 2,4,6-Tribromophenol*	*93.0 %*	*19-110*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*46.7 %*	*24-116*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**3530**		mg/kg dry	8.56	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 15:59	EM
7440-36-0	Antimony	ND		mg/kg dry	4.28	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 15:59	EM
7440-38-2	Arsenic	ND		mg/kg dry	2.57	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 15:59	EM
7440-39-3	**Barium**	**110**		mg/kg dry	4.28	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 15:59	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.086	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 15:59	EM

Sample Information

Client Sample ID: **SS-01** | **York Sample ID:** **21G0903-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	**Cadmium**	**0.540**		mg/kg dry	0.513	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	**Calcium**	**10200**	B	mg/kg dry	8.56	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	**Chromium**	**13.9**		mg/kg dry	0.856	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-48-4	**Cobalt**	**9.59**		mg/kg dry	0.684	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-50-8	**Copper**	**29.2**		mg/kg dry	3.42	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-89-6	**Iron**	**22400**		mg/kg dry	42.8	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**23.1**		mg/kg dry	0.856	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**4240**		mg/kg dry	8.56	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-96-5	**Manganese**	**225**		mg/kg dry	0.856	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	**Nickel**	**16.1**		mg/kg dry	1.71	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**1150**		mg/kg dry	8.56	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	4.28	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.856	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**246**		mg/kg dry	85.6	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	4.28	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**15.7**		mg/kg dry	1.71	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**163**		mg/kg dry	4.28	1	EPA 6010D	07/20/2021 18:08	07/21/2021 15:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0513	1	EPA 7473	07/21/2021 12:48	07/21/2021 17:08	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Information

Client Sample ID:	SS-01			York Sample ID:	21G0903-01
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time		Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm		07/20/2021

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**58.4**		%	0.100	1	SM 2540G Certifications: CTDOH	07/21/2021 11:40	07/21/2021 13:55	VR

Sample Information

Client Sample ID:	SS-02			York Sample ID:	21G0903-02
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time		Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm		07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**3970**		mg/kg dry	5.48	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7440-36-0	Antimony	ND		mg/kg dry	2.74	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7440-38-2	Arsenic	ND		mg/kg dry	1.64	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7440-39-3	**Barium**	**50.2**		mg/kg dry	2.74	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.055	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.329	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7440-70-2	**Calcium**	**15800**	B	mg/kg dry	5.48	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7440-47-3	**Chromium**	**12.0**		mg/kg dry	0.548	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7440-48-4	**Cobalt**	**5.74**		mg/kg dry	0.438	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7440-50-8	**Copper**	**16.8**		mg/kg dry	2.19	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7439-89-6	**Iron**	**20100**		mg/kg dry	27.4	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7439-92-1	**Lead**	**70.5**		mg/kg dry	0.548	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7439-95-4	**Magnesium**	**2430**		mg/kg dry	5.48	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM
7439-96-5	**Manganese**	**144**		mg/kg dry	0.548	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:02	EM

Sample Information

Client Sample ID: **SS-02** | **York Sample ID:** **21G0903-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-02-0	**Nickel**	**8.43**		mg/kg dry	1.10	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:02	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**506**		mg/kg dry	5.48	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:02	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	2.74	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:02	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.548	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:02	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**75.9**		mg/kg dry	54.8	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:02	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	2.74	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:02	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**14.2**		mg/kg dry	1.10	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:02	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**58.9**		mg/kg dry	2.74	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:02	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0862**		mg/kg dry	0.0329	1	EPA 7473	07/21/2021 12:48	07/21/2021 17:17	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**91.3**		%	0.100	1	SM 2540G	07/21/2021 11:40	07/21/2021 13:55	VR
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SS-03** | **York Sample ID:** **21G0903-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Metals, Target Analyte

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

Sample Information

Client Sample ID: **SS-03** | **York Sample ID:** **21G0903-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**4000**		mg/kg dry	5.22	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-36-0	Antimony	ND		mg/kg dry	2.61	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-38-2	Arsenic	ND		mg/kg dry	1.57	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-39-3	**Barium**	**16.8**		mg/kg dry	2.61	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.052	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.313	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-70-2	**Calcium**	**2990**	B	mg/kg dry	5.22	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-47-3	**Chromium**	**4.14**		mg/kg dry	0.522	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-48-4	**Cobalt**	**3.98**		mg/kg dry	0.418	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-50-8	**Copper**	**4.51**		mg/kg dry	2.09	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7439-89-6	**Iron**	**16600**		mg/kg dry	26.1	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7439-92-1	**Lead**	**19.5**		mg/kg dry	0.522	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7439-95-4	**Magnesium**	**2400**		mg/kg dry	5.22	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7439-96-5	**Manganese**	**157**		mg/kg dry	0.522	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-02-0	**Nickel**	**2.33**		mg/kg dry	1.04	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-09-7	**Potassium**	**258**		mg/kg dry	5.22	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7782-49-2	Selenium	ND		mg/kg dry	2.61	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-22-4	Silver	ND		mg/kg dry	0.522	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-23-5	**Sodium**	**55.0**		mg/kg dry	52.2	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-28-0	Thallium	ND		mg/kg dry	2.61	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-62-2	**Vanadium**	**9.07**		mg/kg dry	1.04	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM
7440-66-6	**Zinc**	**37.0**		mg/kg dry	2.61	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:05	EM

Sample Information

Client Sample ID: **SS-03** | **York Sample ID:** **21G0903-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0588**		mg/kg dry	0.0313	1	EPA 7473	07/21/2021 12:48	07/21/2021 17:26	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**95.7**		%	0.100	1	SM 2540G	07/21/2021 11:40	07/21/2021 13:55	VR
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SS-04** | **York Sample ID:** **21G0903-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**3020**		mg/kg dry	5.58	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-36-0	Antimony	ND		mg/kg dry	2.79	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	Arsenic	ND		mg/kg dry	1.67	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**46.2**		mg/kg dry	2.79	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/kg dry	0.056	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/kg dry	0.335	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	**Calcium**	**16700**	B	mg/kg dry	5.58	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	**Chromium**	**9.06**		mg/kg dry	0.558	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-48-4	**Cobalt**	**4.21**		mg/kg dry	0.446	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-50-8	**Copper**	**17.3**		mg/kg dry	2.23	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: **SS-04** | **York Sample ID:** **21G0903-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	**Iron**	**14000**		mg/kg dry	27.9	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**72.3**		mg/kg dry	0.558	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**1640**		mg/kg dry	5.58	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-96-5	**Manganese**	**128**		mg/kg dry	0.558	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	**Nickel**	**4.80**		mg/kg dry	1.12	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**430**		mg/kg dry	5.58	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	2.79	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.558	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**82.9**		mg/kg dry	55.8	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	2.79	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**14.7**		mg/kg dry	1.12	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**301**		mg/kg dry	2.79	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:08	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.431**		mg/kg dry	0.0335	1	EPA 7473	07/21/2021 12:48	07/21/2021 17:35	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**89.6**		%	0.100	1	SM 2540G	07/21/2021 11:40	07/21/2021 13:55	VR
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SS-05** | **York Sample ID:** **21G0903-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**2720**		mg/kg dry	5.11	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-36-0	Antimony	ND		mg/kg dry	2.55	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-38-2	**Arsenic**	**7.48**		mg/kg dry	1.53	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-39-3	**Barium**	**23.8**		mg/kg dry	2.55	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.051	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.306	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-70-2	**Calcium**	**2190**	B	mg/kg dry	5.11	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-47-3	**Chromium**	**9.52**		mg/kg dry	0.511	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-48-4	**Cobalt**	**4.53**		mg/kg dry	0.409	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-50-8	**Copper**	**37.7**		mg/kg dry	2.04	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7439-89-6	**Iron**	**26800**		mg/kg dry	25.5	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7439-92-1	**Lead**	**60.4**		mg/kg dry	0.511	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7439-95-4	**Magnesium**	**1110**		mg/kg dry	5.11	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7439-96-5	**Manganese**	**161**		mg/kg dry	0.511	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-02-0	**Nickel**	**7.40**		mg/kg dry	1.02	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-09-7	**Potassium**	**373**		mg/kg dry	5.11	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7782-49-2	Selenium	ND		mg/kg dry	2.55	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-22-4	Silver	ND		mg/kg dry	0.511	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-23-5	**Sodium**	**72.4**		mg/kg dry	51.1	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-28-0	Thallium	ND		mg/kg dry	2.55	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-62-2	**Vanadium**	**10.7**		mg/kg dry	1.02	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM
7440-66-6	**Zinc**	**25.0**		mg/kg dry	2.55	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:11	EM

Sample Information

Client Sample ID: **SS-05** | **York Sample ID:** **21G0903-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0554**		mg/kg dry	0.0306	1	EPA 7473 Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP	07/21/2021 12:48	07/21/2021 17:52	BR

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**97.9**		%	0.100	1	SM 2540G Certifications: CTDOH	07/21/2021 11:40	07/21/2021 13:55	VR

Sample Information

Client Sample ID: **SS-06** | **York Sample ID:** **21G0903-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**3290**		mg/kg dry	5.20	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:14	EM
7440-36-0	Antimony	ND		mg/kg dry	2.60	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:14	EM
7440-38-2	Arsenic	ND		mg/kg dry	1.56	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:14	EM
7440-39-3	**Barium**	**21.3**		mg/kg dry	2.60	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:14	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.052	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:14	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.312	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:14	EM
7440-70-2	**Calcium**	**3370**	B	mg/kg dry	5.20	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:14	EM
7440-47-3	**Chromium**	**5.07**		mg/kg dry	0.520	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:14	EM
7440-48-4	**Cobalt**	**3.20**		mg/kg dry	0.416	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:14	EM

Sample Information

Client Sample ID: SS-06 | **York Sample ID:** 21G0903-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-50-8	**Copper**	**5.24**		mg/kg dry	2.08	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-89-6	**Iron**	**12800**		mg/kg dry	26.0	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-92-1	**Lead**	**27.2**		mg/kg dry	0.520	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-95-4	**Magnesium**	**1470**		mg/kg dry	5.20	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-96-5	**Manganese**	**132**		mg/kg dry	0.520	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-02-0	**Nickel**	**3.22**		mg/kg dry	1.04	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-09-7	**Potassium**	**332**		mg/kg dry	5.20	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7782-49-2	Selenium	ND		mg/kg dry	2.60	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-22-4	Silver	ND		mg/kg dry	0.520	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-23-5	**Sodium**	**71.0**		mg/kg dry	52.0	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-28-0	Thallium	ND		mg/kg dry	2.60	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-62-2	**Vanadium**	**9.36**		mg/kg dry	1.04	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-66-6	**Zinc**	**42.4**		mg/kg dry	2.60	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:14	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0328**		mg/kg dry	0.0312	1	EPA 7473	07/21/2021 12:49	07/21/2021 15:02	BR
							Certifications:	CTDOH,NJDEP,NELAC-NY10854,PADEP		

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**96.1**		%	0.100	1	SM 2540G	07/21/2021 11:40	07/21/2021 13:55	VR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: **SS-07** **York Sample ID:** **21G0903-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**3180**		mg/kg dry	5.06	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-36-0	Antimony	ND		mg/kg dry	2.53	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-38-2	Arsenic	ND		mg/kg dry	1.52	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-39-3	**Barium**	**17.7**		mg/kg dry	2.53	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.051	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.303	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-70-2	**Calcium**	**2760**	B	mg/kg dry	5.06	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-47-3	**Chromium**	**3.89**		mg/kg dry	0.506	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-48-4	**Cobalt**	**3.62**		mg/kg dry	0.404	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-50-8	**Copper**	**4.88**		mg/kg dry	2.02	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7439-89-6	**Iron**	**14800**		mg/kg dry	25.3	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7439-92-1	**Lead**	**18.9**		mg/kg dry	0.506	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7439-95-4	**Magnesium**	**1510**		mg/kg dry	5.06	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7439-96-5	**Manganese**	**127**		mg/kg dry	0.506	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-02-0	**Nickel**	**3.69**		mg/kg dry	1.01	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-09-7	**Potassium**	**392**		mg/kg dry	5.06	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7782-49-2	Selenium	ND		mg/kg dry	2.53	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-22-4	Silver	ND		mg/kg dry	0.506	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-23-5	**Sodium**	**82.2**		mg/kg dry	50.6	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-28-0	Thallium	ND		mg/kg dry	2.53	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-62-2	**Vanadium**	**10.2**		mg/kg dry	1.01	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM
7440-66-6	**Zinc**	**45.1**		mg/kg dry	2.53	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:17	EM

Sample Information

Client Sample ID: **SS-07** | **York Sample ID:** **21G0903-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0303	1	EPA 7473 Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP	07/21/2021 12:49	07/21/2021 15:11	BR

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**98.9**		%	0.100	1	SM 2540G Certifications: CTDOH	07/21/2021 11:40	07/21/2021 13:55	VR

Sample Information

Client Sample ID: **SS-08** | **York Sample ID:** **21G0903-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**3500**		mg/kg dry	7.66	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:20	EM
7440-36-0	Antimony	ND		mg/kg dry	3.83	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:20	EM
7440-38-2	Arsenic	ND		mg/kg dry	2.30	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:20	EM
7440-39-3	**Barium**	**59.2**		mg/kg dry	3.83	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:20	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.077	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:20	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.459	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:20	EM
7440-70-2	**Calcium**	**7640**	B	mg/kg dry	7.66	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:20	EM
7440-47-3	**Chromium**	**7.53**		mg/kg dry	0.766	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:20	EM
7440-48-4	**Cobalt**	**30.3**		mg/kg dry	0.612	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:20	EM

Sample Information

Client Sample ID: **SS-08** | **York Sample ID:** **21G0903-08**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-50-8	**Copper**	**10.0**		mg/kg dry	3.06	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-89-6	**Iron**	**30000**		mg/kg dry	38.3	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-92-1	**Lead**	**4.79**		mg/kg dry	0.766	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-95-4	**Magnesium**	**3720**		mg/kg dry	7.66	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-96-5	**Manganese**	**128**		mg/kg dry	0.766	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-02-0	**Nickel**	**56.7**		mg/kg dry	1.53	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-09-7	**Potassium**	**945**		mg/kg dry	7.66	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7782-49-2	Selenium	ND		mg/kg dry	3.83	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-22-4	Silver	ND		mg/kg dry	0.766	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-23-5	**Sodium**	**249**		mg/kg dry	76.6	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-28-0	Thallium	ND		mg/kg dry	3.83	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-62-2	**Vanadium**	**14.2**		mg/kg dry	1.53	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-66-6	**Zinc**	**79.1**		mg/kg dry	3.83	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:20	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0459	1	EPA 7473	07/21/2021 12:49	07/21/2021 15:20	BR
							Certifications:	CTDOH,NJDEP,NELAC-NY10854,PADEP		

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**65.3**		%	0.100	1	SM 2540G	07/21/2021 11:40	07/21/2021 13:55	VR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: SS-09 **York Sample ID:** 21G0903-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**5230**		mg/kg dry	8.30	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-36-0	Antimony	ND		mg/kg dry	4.15	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-38-2	Arsenic	ND		mg/kg dry	2.49	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-39-3	**Barium**	**42.6**		mg/kg dry	4.15	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.083	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.498	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-70-2	**Calcium**	**4570**	B	mg/kg dry	8.30	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-47-3	**Chromium**	**9.51**		mg/kg dry	0.830	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-48-4	**Cobalt**	**4.99**		mg/kg dry	0.664	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-50-8	**Copper**	**18.0**		mg/kg dry	3.32	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7439-89-6	**Iron**	**12900**		mg/kg dry	41.5	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7439-92-1	**Lead**	**93.0**		mg/kg dry	0.830	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7439-95-4	**Magnesium**	**2310**		mg/kg dry	8.30	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7439-96-5	**Manganese**	**145**		mg/kg dry	0.830	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-02-0	**Nickel**	**7.18**		mg/kg dry	1.66	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-09-7	**Potassium**	**397**		mg/kg dry	8.30	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7782-49-2	Selenium	ND		mg/kg dry	4.15	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-22-4	**Silver**	**3.84**		mg/kg dry	0.830	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-23-5	**Sodium**	**194**		mg/kg dry	83.0	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-28-0	Thallium	ND		mg/kg dry	4.15	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-62-2	**Vanadium**	**19.7**		mg/kg dry	1.66	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM
7440-66-6	**Zinc**	**160**		mg/kg dry	4.15	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 18:08	07/21/2021 16:30	EM

YORK ANALYTICAL LABORATORIES INC

Sample Information

Client Sample ID: **SS-09** | **York Sample ID:** **21G0903-09**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0541**		mg/kg dry	0.0498	1	EPA 7473	07/21/2021 12:49	07/21/2021 15:30	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**60.3**		%	0.100	1	SM 2540G	07/21/2021 11:42	07/21/2021 14:54	VR
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SS-10** | **York Sample ID:** **21G0903-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**2780**		mg/kg dry	6.56	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-36-0	Antimony	ND		mg/kg dry	3.28	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	Arsenic	ND		mg/kg dry	1.97	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**60.2**		mg/kg dry	3.28	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/kg dry	0.066	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/kg dry	0.394	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	**Calcium**	**3510**	B	mg/kg dry	6.56	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	**Chromium**	**5.74**		mg/kg dry	0.656	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-48-4	**Cobalt**	**3.18**		mg/kg dry	0.525	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: **SS-10** — **York Sample ID:** **21G0903-10**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-50-8	**Copper**	**14.8**		mg/kg dry	2.63	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-89-6	**Iron**	**14800**		mg/kg dry	32.8	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**555**		mg/kg dry	0.656	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**1330**		mg/kg dry	6.56	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-96-5	**Manganese**	**135**		mg/kg dry	0.656	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	**Nickel**	**3.99**		mg/kg dry	1.31	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**325**		mg/kg dry	6.56	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	ND		mg/kg dry	3.28	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.656	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**72.4**		mg/kg dry	65.6	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/kg dry	3.28	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-62-2	**Vanadium**	**8.83**		mg/kg dry	1.31	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	**Zinc**	**135**		mg/kg dry	3.28	1	EPA 6010D	07/20/2021 18:08	07/21/2021 16:34	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0562**		mg/kg dry	0.0394	1	EPA 7473	07/21/2021 12:49	07/21/2021 15:39	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**76.2**		%	0.100	1	SM 2540G	07/21/2021 11:42	07/21/2021 14:54	VR
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SS-011** | **York Sample ID:** **21G0903-11**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**5220**		mg/kg dry	7.12	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-36-0	Antimony	ND		mg/kg dry	3.56	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-38-2	Arsenic	ND		mg/kg dry	2.14	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-39-3	**Barium**	**45.8**		mg/kg dry	3.56	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.071	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.427	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-70-2	**Calcium**	**6890**	B	mg/kg dry	7.12	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-47-3	**Chromium**	**6.75**		mg/kg dry	0.712	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-48-4	**Cobalt**	**4.80**		mg/kg dry	0.569	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-50-8	**Copper**	**14.7**		mg/kg dry	2.85	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7439-89-6	**Iron**	**15600**		mg/kg dry	35.6	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7439-92-1	**Lead**	**90.9**		mg/kg dry	0.712	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7439-95-4	**Magnesium**	**1660**		mg/kg dry	7.12	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7439-96-5	**Manganese**	**163**		mg/kg dry	0.712	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-02-0	**Nickel**	**5.29**		mg/kg dry	1.42	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-09-7	**Potassium**	**416**		mg/kg dry	7.12	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7782-49-2	Selenium	ND		mg/kg dry	3.56	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-22-4	Silver	ND		mg/kg dry	0.712	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-23-5	**Sodium**	**211**		mg/kg dry	71.2	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-28-0	Thallium	ND		mg/kg dry	3.56	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-62-2	**Vanadium**	**11.2**		mg/kg dry	1.42	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM
7440-66-6	**Zinc**	**151**		mg/kg dry	3.56	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 16:56	EM

Sample Information

Client Sample ID: **SS-011** | **York Sample ID:** **21G0903-11**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.257**		mg/kg dry	0.0427	1	EPA 7473	07/21/2021 12:49	07/21/2021 15:48	BR
							Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**70.2**		%	0.100	1	SM 2540G	07/21/2021 11:42	07/21/2021 14:54	VR
							Certifications: CTDOH			

Sample Information

Client Sample ID: **SS-012** | **York Sample ID:** **21G0903-12**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**3410**		mg/kg dry	6.86	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-36-0	Antimony	ND		mg/kg dry	3.43	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	Arsenic	ND		mg/kg dry	2.06	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**31.2**		mg/kg dry	3.43	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/kg dry	0.069	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/kg dry	0.412	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	**Calcium**	**4570**	B	mg/kg dry	6.86	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	**Chromium**	**5.16**		mg/kg dry	0.686	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-48-4	**Cobalt**	**5.58**		mg/kg dry	0.549	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: **SS-012** | **York Sample ID:** **21G0903-12**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-50-8	**Copper**	**10.3**		mg/kg dry	2.75	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-89-6	**Iron**	**14400**		mg/kg dry	34.3	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-92-1	**Lead**	**14.8**		mg/kg dry	0.686	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-95-4	**Magnesium**	**2470**		mg/kg dry	6.86	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-96-5	**Manganese**	**163**		mg/kg dry	0.686	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-02-0	**Nickel**	**6.45**		mg/kg dry	1.37	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-09-7	**Potassium**	**966**		mg/kg dry	6.86	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7782-49-2	Selenium	ND		mg/kg dry	3.43	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-22-4	Silver	ND		mg/kg dry	0.686	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-23-5	**Sodium**	**208**		mg/kg dry	68.6	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-28-0	Thallium	ND		mg/kg dry	3.43	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-62-2	**Vanadium**	**9.57**		mg/kg dry	1.37	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-66-6	**Zinc**	**67.4**		mg/kg dry	3.43	1	EPA 6010D	07/20/2021 21:17	07/21/2021 16:59	EM
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0412	1	EPA 7473	07/21/2021 12:49	07/21/2021 15:57	BR
							Certifications:	CTDOH,NJDEP,NELAC-NY10854,PADEP		

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**72.9**		%	0.100	1	SM 2540G	07/21/2021 11:42	07/21/2021 14:54	VR
							Certifications:	CTDOH		

Sample Information

Client Sample ID: **SS-013** | **York Sample ID:** **21G0903-13**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
95-95-4	2,4,5-Trichlorophenol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
88-06-2	2,4,6-Trichlorophenol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
120-83-2	2,4-Dichlorophenol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
105-67-9	2,4-Dimethylphenol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
51-28-5	2,4-Dinitrophenol	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
121-14-2	2,4-Dinitrotoluene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
606-20-2	2,6-Dinitrotoluene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
91-58-7	2-Chloronaphthalene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
95-57-8	2-Chlorophenol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
91-57-6	**2-Methylnaphthalene**	**0.392**	J	mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
95-48-7	2-Methylphenol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
88-74-4	2-Nitroaniline	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
88-75-5	2-Nitrophenol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
65794-96-9	**3- & 4-Methylphenols**	**1.10**		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
91-94-1	3,3-Dichlorobenzidine	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH

Sample Information

Client Sample ID: **SS-013** **York Sample ID:** **21G0903-13**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Semi-Volatiles, 8270 - Comprehensive **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
101-55-3	4-Bromophenyl phenyl ether	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
59-50-7	4-Chloro-3-methylphenol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
106-47-8	4-Chloroaniline	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
100-01-6	4-Nitroaniline	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
100-02-7	4-Nitrophenol	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
83-32-9	**Acenaphthene**	**1.95**		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
208-96-8	**Acenaphthylene**	**55.4**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
98-86-2	Acetophenone	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
62-53-3	**Aniline**	**0.938**	J	mg/kg dry	0.861	1.72	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
120-12-7	**Anthracene**	**33.8**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
1912-24-9	Atrazine	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
100-52-7	Benzaldehyde	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
92-87-5	Benzidine	ND		mg/kg dry	0.861	1.72	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
56-55-3	**Benzo(a)anthracene**	**68.5**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
50-32-8	**Benzo(a)pyrene**	**63.5**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
205-99-2	**Benzo(b)fluoranthene**	**70.8**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
191-24-2	**Benzo(g,h,i)perylene**	**35.3**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
207-08-9	**Benzo(k)fluoranthene**	**72.0**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
65-85-0	Benzoic acid	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
100-51-6	Benzyl alcohol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH

Sample Information

Client Sample ID: **SS-013** | **York Sample ID:** **21G0903-13**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Semi-Volatiles, 8270 - Comprehensive | **Log-in Notes:** | **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
111-44-4	Bis(2-chloroethyl)ether	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
105-60-2	Caprolactam	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
86-74-8	**Carbazole**	**1.66**		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
218-01-9	**Chrysene**	**74.1**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
53-70-3	**Dibenzo(a,h)anthracene**	**16.4**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
132-64-9	Dibenzofuran	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
84-66-2	Diethyl phthalate	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
131-11-3	Dimethyl phthalate	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
84-74-2	Di-n-butyl phthalate	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
117-84-0	Di-n-octyl phthalate	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
122-39-4	* Diphenylamine	ND		mg/kg dry	0.430	0.859	10	EPA 8270D Certifications:	07/22/2021 06:31	07/23/2021 13:52	KH
206-44-0	**Fluoranthene**	**82.4**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
86-73-7	**Fluorene**	**3.24**		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
118-74-1	Hexachlorobenzene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
77-47-4	Hexachlorocyclopentadiene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
67-72-1	Hexachloroethane	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
193-39-5	**Indeno(1,2,3-cd)pyrene**	**47.0**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH
78-59-1	Isophorone	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH

Sample Information

Client Sample ID: SS-013 | **York Sample ID:** 21G0903-13

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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
91-20-3	Naphthalene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
98-95-3	Nitrobenzene	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
62-75-9	N-Nitrosodimethylamine	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
621-64-7	N-nitroso-di-n-propylamine	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
86-30-6	N-Nitrosodiphenylamine	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
87-86-5	Pentachlorophenol	ND		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
85-01-8	**Phenanthrene**	**5.76**		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
108-95-2	**Phenol**	**0.866**		mg/kg dry	0.216	0.430	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 13:52	KH
129-00-0	**Pyrene**	**105**		mg/kg dry	2.16	4.30	100	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/22/2021 06:31	07/23/2021 14:22	KH

	Surrogate Recoveries	Result		Acceptance Range
367-12-4	*Surrogate: SURR: 2-Fluorophenol*	*46.4 %*		*20-108*
4165-62-2	*Surrogate: SURR: Phenol-d5*	*44.6 %*		*23-114*
4165-60-0	*Surrogate: SURR: Nitrobenzene-d5*	*127 %*	S-08	*22-108*
321-60-8	*Surrogate: SURR: 2-Fluorobiphenyl*	*56.4 %*		*21-113*
118-79-6	*Surrogate: SURR: 2,4,6-Tribromophenol*	*72.4 %*		*19-110*
1718-51-0	*Surrogate: SURR: Terphenyl-d14*	*78.0 %*		*24-116*

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**2980**		mg/kg dry	5.19	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-36-0	Antimony	ND		mg/kg dry	2.60	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-38-2	**Arsenic**	**9.22**		mg/kg dry	1.56	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-39-3	**Barium**	**23.9**		mg/kg dry	2.60	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-41-7	Beryllium	ND		mg/kg dry	0.052	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-43-9	Cadmium	ND		mg/kg dry	0.311	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM

Sample Information

Client Sample ID: **SS-013** **York Sample ID:** **21G0903-13**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

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 Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-70-2	**Calcium**	**2510**	B	mg/kg dry	5.19	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-47-3	**Chromium**	**16.8**		mg/kg dry	0.519	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-48-4	**Cobalt**	**5.81**		mg/kg dry	0.415	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-50-8	**Copper**	**57.0**		mg/kg dry	2.08	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7439-89-6	**Iron**	**44300**		mg/kg dry	26.0	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7439-92-1	**Lead**	**66.9**		mg/kg dry	0.519	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7439-95-4	**Magnesium**	**1060**		mg/kg dry	5.19	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7439-96-5	**Manganese**	**244**		mg/kg dry	0.519	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-02-0	**Nickel**	**10.1**		mg/kg dry	1.04	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-09-7	**Potassium**	**374**		mg/kg dry	5.19	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7782-49-2	Selenium	ND		mg/kg dry	2.60	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-22-4	Silver	ND		mg/kg dry	0.519	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-23-5	**Sodium**	**94.5**		mg/kg dry	51.9	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-28-0	Thallium	ND		mg/kg dry	2.60	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-62-2	**Vanadium**	**10.5**		mg/kg dry	1.04	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM
7440-66-6	**Zinc**	**39.9**		mg/kg dry	2.60	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	07/20/2021 21:17	07/21/2021 17:09	EM

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.0883**		mg/kg dry	0.0311	1	EPA 7473 Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP	07/21/2021 12:49	07/21/2021 16:07	BR

Total Solids

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

Sample Information

Client Sample ID: **SS-013** | **York Sample ID:** **21G0903-13**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21G0903	21003-0066	Soil	July 19, 2021 3:00 pm	07/20/2021

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	**96.3**		%	0.100	1	SM 2540G Certifications: CTDOH	07/21/2021 11:42	07/21/2021 14:54	VR

Analytical Batch Summary

Batch ID: BG11044 **Preparation Method:** EPA 3050B **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date
21G0903-01	SS-01	07/20/21
21G0903-02	SS-02	07/20/21
21G0903-03	SS-03	07/20/21
21G0903-04	SS-04	07/20/21
21G0903-05	SS-05	07/20/21
21G0903-06	SS-06	07/20/21
21G0903-07	SS-07	07/20/21
21G0903-08	SS-08	07/20/21
21G0903-09	SS-09	07/20/21
21G0903-10	SS-10	07/20/21
BG11044-BLK1	Blank	07/20/21
BG11044-DUP1	Duplicate	07/20/21
BG11044-MS1	Matrix Spike	07/20/21
BG11044-PS1	Post Spike	07/20/21
BG11044-SRM1	Reference	07/20/21

Batch ID: BG11049 **Preparation Method:** EPA 3050B **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date
21G0903-11	SS-011	07/20/21
21G0903-12	SS-012	07/20/21
21G0903-13	SS-013	07/20/21
BG11049-BLK1	Blank	07/20/21
BG11049-DUP1	Duplicate	07/20/21
BG11049-MS1	Matrix Spike	07/20/21
BG11049-PS1	Post Spike	07/20/21
BG11049-SRM1	Reference	07/20/21

Batch ID: BG11090 **Preparation Method:** % Solids Prep **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
21G0903-01	SS-01	07/21/21
21G0903-02	SS-02	07/21/21
21G0903-03	SS-03	07/21/21
21G0903-04	SS-04	07/21/21
21G0903-05	SS-05	07/21/21
21G0903-06	SS-06	07/21/21
21G0903-07	SS-07	07/21/21
21G0903-08	SS-08	07/21/21
BG11090-DUP1	Duplicate	07/21/21

Batch ID: BG11091 **Preparation Method:** % Solids Prep **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date

21G0903-09	SS-09	07/21/21
21G0903-10	SS-10	07/21/21
21G0903-11	SS-011	07/21/21
21G0903-12	SS-012	07/21/21
21G0903-13	SS-013	07/21/21
BG11091-DUP1	Duplicate	07/21/21

Batch ID: BG11098 **Preparation Method:** EPA 7473 soil **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date
21G0903-01	SS-01	07/21/21
21G0903-02	SS-02	07/21/21
21G0903-03	SS-03	07/21/21
21G0903-04	SS-04	07/21/21
21G0903-05	SS-05	07/21/21
BG11098-BLK1	Blank	07/21/21
BG11098-DUP1	Duplicate	07/21/21
BG11098-MS1	Matrix Spike	07/21/21
BG11098-SRM1	Reference	07/21/21

Batch ID: BG11099 **Preparation Method:** EPA 7473 soil **Prepared By:** BR

YORK Sample ID	Client Sample ID	Preparation Date
21G0903-06	SS-06	07/21/21
21G0903-07	SS-07	07/21/21
21G0903-08	SS-08	07/21/21
21G0903-09	SS-09	07/21/21
21G0903-10	SS-10	07/21/21
21G0903-11	SS-011	07/21/21
21G0903-12	SS-012	07/21/21
21G0903-13	SS-013	07/21/21
BG11099-BLK1	Blank	07/21/21
BG11099-DUP1	Duplicate	07/21/21
BG11099-MS1	Matrix Spike	07/21/21
BG11099-SRM1	Reference	07/21/21

Batch ID: BG11159 **Preparation Method:** EPA 3550C **Prepared By:** RTH

YORK Sample ID	Client Sample ID	Preparation Date
21G0903-01	SS-01	07/22/21
21G0903-13	SS-013	07/22/21
21G0903-13RE1	SS-013	07/22/21
BG11159-BLK1	Blank	07/22/21
BG11159-BS1	LCS	07/22/21

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG11159 - EPA 3550C

Blank (BG11159-BLK1) Prepared: 07/22/2021 Analyzed: 07/23/2021

Analyte	Result	Reporting Limit	Units
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	"
2,4-Dinitrotoluene	ND	0.0416	"
2,6-Dinitrotoluene	ND	0.0416	"
2-Chloronaphthalene	ND	0.0416	"
2-Chlorophenol	ND	0.0416	"
2-Methylnaphthalene	ND	0.0416	"
2-Methylphenol	ND	0.0416	"
2-Nitroaniline	ND	0.0830	"
2-Nitrophenol	ND	0.0416	"
3- & 4-Methylphenols	ND	0.0416	"
3,3-Dichlorobenzidine	ND	0.0416	"
3-Nitroaniline	ND	0.0830	"
4,6-Dinitro-2-methylphenol	ND	0.0830	"
4-Bromophenyl phenyl ether	ND	0.0416	"
4-Chloro-3-methylphenol	ND	0.0416	"
4-Chloroaniline	ND	0.0416	"
4-Chlorophenyl phenyl ether	ND	0.0416	"
4-Nitroaniline	ND	0.0830	"
4-Nitrophenol	ND	0.0830	"
Acenaphthene	ND	0.0416	"
Acenaphthylene	ND	0.0416	"
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	0.0416	"
Bis(2-chloroethyl)ether	ND	0.0416	"
Bis(2-chloroisopropyl)ether	ND	0.0416	"

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG11159 - EPA 3550C

Blank (BG11159-BLK1) Prepared: 07/22/2021 Analyzed: 07/23/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Bis(2-ethylhexyl)phthalate	0.0352	0.0416	mg/kg wet								
Caprolactam	ND	0.0830	"								
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	"								
Diphenylamine	ND	0.0830	"								
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	"								
Surrogate: SURR: 2-Fluorophenol	*1.33*		*"*	*1.66*		*80.1*	*20-108*				
Surrogate: SURR: Phenol-d5	*1.21*		*"*	*1.66*		*72.8*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*0.732*		*"*	*0.831*		*88.1*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.811*		*"*	*0.831*		*97.6*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*1.99*		*"*	*1.66*		*120*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.837*		*"*	*0.831*		*101*	*24-116*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG11159 - EPA 3550C

LCS (BG11159-BS1) Prepared: 07/22/2021 Analyzed: 07/23/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
1,1-Biphenyl	0.450	0.0416	mg/kg wet	0.831		54.2	18-111				
1,2,4,5-Tetrachlorobenzene	0.511	0.0830	"	0.831		61.6	21-131				
1,2,4-Trichlorobenzene	0.465	0.0416	"	0.831		56.0	10-140				
1,2-Dichlorobenzene	0.429	0.0416	"	0.831		51.6	34-108				
1,2-Diphenylhydrazine (as Azobenzene)	0.381	0.0416	"	0.831		45.9	17-137				
1,3-Dichlorobenzene	0.447	0.0416	"	0.831		53.8	33-110				
1,4-Dichlorobenzene	0.435	0.0416	"	0.831		52.3	32-104				
2,3,4,6-Tetrachlorophenol	0.470	0.0830	"	0.831		56.6	30-130				
2,4,5-Trichlorophenol	0.510	0.0416	"	0.831		61.4	27-118				
2,4,6-Trichlorophenol	0.514	0.0416	"	0.831		61.9	31-120				
2,4-Dichlorophenol	0.533	0.0416	"	0.831		64.1	20-127				
2,4-Dimethylphenol	0.442	0.0416	"	0.831		53.2	14-132				
2,4-Dinitrophenol	0.117	0.0830	"	0.831		14.1	10-171				
2,4-Dinitrotoluene	0.621	0.0416	"	0.831		74.8	34-131				
2,6-Dinitrotoluene	0.696	0.0416	"	0.831		83.8	31-128				
2-Chloronaphthalene	0.457	0.0416	"	0.831		55.0	31-117				
2-Chlorophenol	0.443	0.0416	"	0.831		53.4	33-113				
2-Methylnaphthalene	0.486	0.0416	"	0.831		58.5	12-138				
2-Methylphenol	0.418	0.0416	"	0.831		50.3	10-136				
2-Nitroaniline	0.586	0.0830	"	0.831		70.6	27-132				
2-Nitrophenol	0.573	0.0416	"	0.831		69.0	17-129				
3- & 4-Methylphenols	0.376	0.0416	"	0.831		45.2	29-103				
3,3-Dichlorobenzidine	0.464	0.0416	"	0.831		55.9	22-149				
3-Nitroaniline	0.523	0.0830	"	0.831		63.0	20-133				
4,6-Dinitro-2-methylphenol	0.195	0.0830	"	0.831		23.5	10-143				
4-Bromophenyl phenyl ether	0.518	0.0416	"	0.831		62.4	29-120				
4-Chloro-3-methylphenol	0.464	0.0416	"	0.831		55.9	24-129				
4-Chloroaniline	0.356	0.0416	"	0.831		42.9	10-132				
4-Chlorophenyl phenyl ether	0.469	0.0416	"	0.831		56.5	27-124				
4-Nitroaniline	0.543	0.0830	"	0.831		65.4	16-128				
4-Nitrophenol	0.475	0.0830	"	0.831		57.2	10-141				
Acenaphthene	0.429	0.0416	"	0.831		51.7	30-121				
Acenaphthylene	0.448	0.0416	"	0.831		53.9	30-115				
Acetophenone	0.408	0.0416	"	0.831		49.1	20-112				
Aniline	0.367	0.166	"	0.831		44.2	10-119				
Anthracene	0.486	0.0416	"	0.831		58.5	34-118				
Atrazine	0.553	0.0416	"	0.831		66.6	26-112				
Benzaldehyde	0.378	0.0416	"	0.831		45.5	21-100				
Benzo(a)anthracene	0.503	0.0416	"	0.831		60.6	32-122				
Benzo(a)pyrene	0.501	0.0416	"	0.831		60.3	29-133				
Benzo(b)fluoranthene	0.463	0.0416	"	0.831		55.7	25-133				
Benzo(g,h,i)perylene	0.466	0.0416	"	0.831		56.1	10-143				
Benzo(k)fluoranthene	0.451	0.0416	"	0.831		54.3	25-128				
Benzoic acid	0.241	0.0416	"	0.831		29.0	10-140				
Benzyl alcohol	0.430	0.0416	"	0.831		51.7	30-115				
Benzyl butyl phthalate	0.542	0.0416	"	0.831		65.2	26-126				
Bis(2-chloroethoxy)methane	0.364	0.0416	"	0.831		43.9	19-132				
Bis(2-chloroethyl)ether	0.361	0.0416	"	0.831		43.5	19-125				
Bis(2-chloroisopropyl)ether	0.309	0.0416	"	0.831		37.2	20-135				
Bis(2-ethylhexyl)phthalate	0.497	0.0416	"	0.831		59.8	10-155				
Caprolactam	0.504	0.0830	"	0.831		60.6	10-127				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG11159 - EPA 3550C

LCS (BG11159-BS1) Prepared: 07/22/2021 Analyzed: 07/23/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Carbazole	0.456	0.0416	mg/kg wet	0.831		54.9	35-123				
Chrysene	0.458	0.0416	"	0.831		55.1	32-123				
Dibenzo(a,h)anthracene	0.501	0.0416	"	0.831		60.3	10-136				
Dibenzofuran	0.454	0.0416	"	0.831		54.7	29-121				
Diethyl phthalate	0.464	0.0416	"	0.831		55.8	34-116				
Dimethyl phthalate	0.470	0.0416	"	0.831		56.6	35-124				
Di-n-butyl phthalate	0.486	0.0416	"	0.831		58.6	31-116				
Di-n-octyl phthalate	0.508	0.0416	"	0.831		61.2	26-136				
Diphenylamine	0.581	0.0830	"	0.831		70.0	40-140				
Fluoranthene	0.475	0.0416	"	0.831		57.2	33-122				
Fluorene	0.456	0.0416	"	0.831		54.9	29-123				
Hexachlorobenzene	0.468	0.0416	"	0.831		56.4	21-124				
Hexachlorobutadiene	0.498	0.0416	"	0.831		59.9	10-149				
Hexachlorocyclopentadiene	0.354	0.0416	"	0.831		42.6	10-129				
Hexachloroethane	0.424	0.0416	"	0.831		51.0	28-108				
Indeno(1,2,3-cd)pyrene	0.501	0.0416	"	0.831		60.4	10-135				
Isophorone	0.369	0.0416	"	0.831		44.4	20-132				
Naphthalene	0.450	0.0416	"	0.831		54.2	23-124				
Nitrobenzene	0.445	0.0416	"	0.831		53.5	13-132				
N-Nitrosodimethylamine	0.286	0.0416	"	0.831		34.5	11-129				
N-nitroso-di-n-propylamine	0.358	0.0416	"	0.831		43.1	24-119				
N-Nitrosodiphenylamine	0.565	0.0416	"	0.831		68.0	22-152				
Pentachlorophenol	0.293	0.0416	"	0.831		35.3	10-139				
Phenanthrene	0.456	0.0416	"	0.831		54.9	33-123				
Phenol	0.428	0.0416	"	0.831		51.6	23-115				
Pyrene	0.544	0.0416	"	0.831		65.4	32-130				
Surrogate: SURR: 2-Fluorophenol	*0.628*		*"*	*1.66*		*37.8*	*20-108*				
Surrogate: SURR: Phenol-d5	*0.592*		*"*	*1.66*		*35.7*	*23-114*				
Surrogate: SURR: Nitrobenzene-d5	*0.350*		*"*	*0.831*		*42.2*	*22-108*				
Surrogate: SURR: 2-Fluorobiphenyl	*0.354*		*"*	*0.831*		*42.7*	*21-113*				
Surrogate: SURR: 2,4,6-Tribromophenol	*0.971*		*"*	*1.66*		*58.5*	*19-110*				
Surrogate: SURR: Terphenyl-d14	*0.423*		*"*	*0.831*		*50.9*	*24-116*				

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG11044 - EPA 3050B

Blank (BG11044-BLK1) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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	20.9	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 (BG11044-DUP1) *Source sample: 21G0903-10 (SS-10) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	3030	6.56	mg/kg dry		2780				8.54	35	
Antimony	ND	3.28	"		ND					35	
Arsenic	ND	1.97	"		ND					35	
Barium	70.7	3.28	"		60.2				16.0	35	
Beryllium	ND	0.066	"		ND					35	
Cadmium	0.417	0.394	"		ND					35	
Calcium	4290	6.56	"		3510				20.0	35	
Chromium	5.56	0.656	"		5.74				3.27	35	
Cobalt	2.97	0.525	"		3.18				7.04	35	
Copper	15.1	2.63	"		14.8				2.51	35	
Iron	10600	32.8	"		14800				33.5	35	
Lead	489	0.656	"		555				12.7	35	
Magnesium	1250	6.56	"		1330				5.94	35	
Manganese	135	0.656	"		135				0.283	35	
Nickel	3.19	1.31	"		3.99				22.2	35	
Potassium	360	6.56	"		325				10.5	35	
Selenium	ND	3.28	"		ND					35	
Silver	ND	0.656	"		ND					35	
Sodium	67.5	65.6	"		72.4				7.08	35	
Thallium	ND	3.28	"		ND					35	
Vanadium	9.30	1.31	"		8.83				5.22	35	
Zinc	155	3.28	"		135				14.1	35	

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Batch BG11044 - EPA 3050B

Matrix Spike (BG11044-MS1) *Source sample: 21G0903-10 (SS-10) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	3000	6.56	mg/kg dry	263	2780	85.3	75-125				
Antimony	16.1	3.28	"	32.8	ND	49.1	75-125	Low Bias			
Arsenic	237	1.97	"	263	ND	90.4	75-125				
Barium	303	3.28	"	263	60.2	92.4	75-125				
Beryllium	5.26	0.066	"	6.56	ND	80.1	75-125				
Cadmium	6.44	0.394	"	6.56	ND	98.0	75-125				
Calcium	3910	6.56	"	131	3510	304	75-125	High Bias			
Chromium	28.8	0.656	"	26.3	5.74	87.6	75-125				
Cobalt	66.5	0.525	"	65.6	3.18	96.4	75-125				
Copper	49.1	2.63	"	32.8	14.8	105	75-125				
Iron	17800	32.8	"	131	14800	NR	75-125	High Bias			
Lead	530	0.656	"	65.6	555	NR	75-125	Low Bias			
Magnesium	1290	6.56	"	131	1330	NR	75-125	Low Bias			
Manganese	208	0.656	"	65.6	135	112	75-125				
Nickel	67.7	1.31	"	65.6	3.99	97.0	75-125				
Potassium	431	6.56	"	131	325	81.1	75-125				
Selenium	189	3.28	"	263	ND	72.0	75-125	Low Bias			
Silver	16.0	0.656	"	6.56	ND	243	75-125	High Bias			
Sodium	175	65.6	"	131	72.4	78.0	75-125				
Thallium	238	3.28	"	263	ND	90.7	75-125				
Vanadium	66.3	1.31	"	65.6	8.83	87.5	75-125				
Zinc	206	3.28	"	65.6	135	109	75-125				

Post Spike (BG11044-PS1) *Source sample: 21G0903-10 (SS-10) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	27.3		ug/mL	2.00	21.2	308	75-125	High Bias			
Antimony	0.296		"	0.250	-0.010	118	75-125				
Arsenic	2.26		"	2.00	0.009	113	75-125				
Barium	2.85		"	2.00	0.459	120	75-125				
Beryllium	0.050		"	0.0500	-0.005	99.6	75-125				
Cadmium	0.060		"	0.0500	0.002	117	75-125				
Calcium	32.6		"	1.00	26.8	586	75-125	High Bias			
Chromium	0.276		"	0.200	0.044	116	75-125				
Cobalt	0.638		"	0.500	0.024	123	75-125				
Copper	0.434		"	0.250	0.112	129	75-125	High Bias			
Iron	133		"	1.00	113	NR	75-125	High Bias			
Lead	5.51		"	0.500	4.23	257	75-125	High Bias			
Magnesium	13.0		"	1.00	10.1	291	75-125	High Bias			
Manganese	1.79		"	0.500	1.03	153	75-125	High Bias			
Nickel	0.645		"	0.500	0.030	123	75-125				
Potassium	4.11		"	1.00	2.47	164	75-125	High Bias			
Selenium	1.85		"	2.00	-0.113	92.3	75-125				
Silver	0.064		"	0.0500	-0.047	129	75-125	High Bias			
Sodium	1.72		"	1.00	0.552	117	75-125				
Thallium	2.29		"	2.00	-0.013	114	75-125				
Vanadium	0.644		"	0.500	0.067	115	75-125				
Zinc	1.75		"	0.500	1.03	145	75-125	High Bias			

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BG11044 - EPA 3050B

Reference (BG11044-SRM1) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	8940	5.00	mg/kg wet	8190		109	50.5-150.1				
Antimony	65.5	2.50	"	110		59.5	19-251.7				
Arsenic	154	1.50	"	162		94.9	70.1-129.8				
Barium	152	2.50	"	138		110	75-125				
Beryllium	157	0.050	"	157		99.9	75-125.2				
Cadmium	137	0.300	"	135		102	74.8-125.2				
Calcium	4800	5.00	"	4790		100	72.7-127.5				
Chromium	114	0.500	"	117		97.2	70.1-129.9				
Cobalt	102	0.400	"	92.6		110	75-125				
Copper	145	2.00	"	143		101	75.3-125.3				
Iron	13000	25.0	"	15100		86.1	35.8-164.6				
Lead	69.6	0.500	"	77.6		89.7	70-130				
Magnesium	2330	5.00	"	2320		100	61.7-137.8				
Manganese	325	0.500	"	319		102	78.1-122				
Nickel	91.1	1.00	"	79.9		114	70.1-130.1				
Potassium	2170	5.00	"	2050		106	59.1-140.9				
Selenium	135	2.50	"	172		78.7	55.7-144.5				
Silver	71.3	0.500	"	24.7		289	69.2-130.8	High Bias			
Sodium	125	50.0	"	137		91.2	36.1-163.3				
Thallium	86.1	2.50	"	88.0		97.8	65.3-146.8				
Vanadium	93.6	1.00	"	99.9		93.6	67-133.1				
Zinc	297	2.50	"	312		95.3	69.9-130.1				

Batch BG11049 - EPA 3050B

Blank (BG11049-BLK1) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units
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	7.76	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	"

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Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG11049 - EPA 3050B											
Duplicate (BG11049-DUP1)	*Source sample: 21G0966-11 (Duplicate)							Prepared: 07/20/2021 Analyzed: 07/21/2021			
Aluminum	8840	6.18	mg/kg dry		8850				0.196	35	
Antimony	ND	3.09	"		ND					35	
Arsenic	ND	1.86	"		ND					35	
Barium	25.9	3.09	"		27.0				3.87	35	
Beryllium	ND	0.062	"		ND					35	
Cadmium	ND	0.371	"		ND					35	
Calcium	1300	6.18	"		1280				1.51	35	
Chromium	11.3	0.618	"		11.1				1.81	35	
Cobalt	8.50	0.495	"		8.31				2.25	35	
Copper	12.8	2.47	"		13.0				1.64	35	
Iron	14400	30.9	"		14000				2.29	35	
Lead	5.50	0.618	"		4.76				14.6	35	
Magnesium	3630	6.18	"		3560				2.04	35	
Manganese	117	0.618	"		113				3.29	35	
Nickel	16.6	1.24	"		16.8				0.962	35	
Potassium	1250	6.18	"		1270				1.04	35	
Selenium	ND	3.09	"		ND					35	
Silver	ND	0.618	"		ND					35	
Sodium	ND	61.8	"		ND					35	
Thallium	ND	3.09	"		ND					35	
Vanadium	15.1	1.24	"		15.1				0.0298	35	
Zinc	38.0	3.09	"		37.7				0.841	35	
Matrix Spike (BG11049-MS1)	*Source sample: 21G0966-11 (Matrix Spike)							Prepared: 07/20/2021 Analyzed: 07/21/2021			
Aluminum	8430	6.18	mg/kg dry	247	8850	NR	75-125	Low Bias			
Antimony	10.9	3.09	"	30.9	ND	35.4	75-125	Low Bias			
Arsenic	247	1.86	"	247	ND	100	75-125				
Barium	279	3.09	"	247	27.0	102	75-125				
Beryllium	6.04	0.062	"	6.18	ND	97.7	75-125				
Cadmium	6.21	0.371	"	6.18	ND	100	75-125				
Calcium	1410	6.18	"	124	1280	108	75-125				
Chromium	35.0	0.618	"	24.7	11.1	96.7	75-125				
Cobalt	72.6	0.495	"	61.8	8.31	104	75-125				
Copper	44.3	2.47	"	30.9	13.0	101	75-125				
Iron	13800	30.9	"	124	14000	NR	75-125	Low Bias			
Lead	77.8	0.618	"	61.8	4.76	118	75-125				
Magnesium	3610	6.18	"	124	3560	43.0	75-125	Low Bias			
Manganese	173	0.618	"	61.8	113	97.2	75-125				
Nickel	80.4	1.24	"	61.8	16.8	103	75-125				
Potassium	1190	6.18	"	124	1270	NR	75-125	Low Bias			
Selenium	210	3.09	"	247	ND	84.8	75-125				
Silver	19.2	0.618	"	6.18	ND	311	75-125	High Bias			
Sodium	163	61.8	"	124	ND	132	75-125	High Bias			
Thallium	250	3.09	"	247	ND	101	75-125				
Vanadium	74.2	1.24	"	61.8	15.1	95.6	75-125				
Zinc	98.7	3.09	"	61.8	37.7	98.6	75-125				

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Batch BG11049 - EPA 3050B

Post Spike (BG11049-PS1) *Source sample: 21G0966-11 (Post Spike) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	73.5		ug/mL	2.00	71.6	93.2	75-125				
Antimony	0.295		"	0.250	-0.009	118	75-125				
Arsenic	2.29		"	2.00	0.005	114	75-125				
Barium	2.54		"	2.00	0.218	116	75-125				
Beryllium	0.055		"	0.0500	-0.0009	111	75-125				
Cadmium	0.057		"	0.0500	-0.0007	114	75-125				
Calcium	11.4		"	1.00	10.3	101	75-125				
Chromium	0.313		"	0.200	0.090	112	75-125				
Cobalt	0.664		"	0.500	0.067	119	75-125				
Copper	0.391		"	0.250	0.105	114	75-125				
Iron	113		"	1.00	113	NR	75-125	Low Bias			
Lead	0.633		"	0.500	0.038	119	75-125				
Magnesium	29.6		"	1.00	28.8	82.9	75-125				
Manganese	1.48		"	0.500	0.914	114	75-125				
Nickel	0.732		"	0.500	0.136	119	75-125				
Potassium	11.5		"	1.00	10.3	123	75-125				
Selenium	1.97		"	2.00	-0.082	98.3	75-125				
Silver	0.099		"	0.0500	-0.035	197	75-125	High Bias			
Sodium	1.49		"	1.00	0.433	105	75-125				
Thallium	2.30		"	2.00	-0.009	115	75-125				
Vanadium	0.684		"	0.500	0.122	112	75-125				
Zinc	0.879		"	0.500	0.305	115	75-125				

Reference (BG11049-SRM1) Prepared: 07/20/2021 Analyzed: 07/21/2021

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Aluminum	8270	5.00	mg/kg wet	8190		101	50.5-150.1				
Antimony	65.2	2.50	"	110		59.2	19-251.7				
Arsenic	155	1.50	"	162		95.6	70.1-129.8				
Barium	137	2.50	"	138		99.1	75-125				
Beryllium	149	0.050	"	157		94.9	75-125.2				
Cadmium	136	0.300	"	135		101	74.8-125.2				
Calcium	4580	5.00	"	4790		95.6	72.7-127.5				
Chromium	109	0.500	"	117		92.8	70.1-129.9				
Cobalt	99.9	0.400	"	92.6		108	75-125				
Copper	140	2.00	"	143		98.0	75.3-125.3				
Iron	13300	25.0	"	15100		88.2	35.8-164.6				
Lead	71.4	0.500	"	77.6		92.0	70-130				
Magnesium	2290	5.00	"	2320		98.6	61.7-137.8				
Manganese	320	0.500	"	319		100	78.1-122				
Nickel	89.2	1.00	"	79.9		112	70.1-130.1				
Potassium	2040	5.00	"	2050		99.3	59.1-140.9				
Selenium	139	2.50	"	172		80.7	55.7-144.5				
Silver	70.3	0.500	"	24.7		285	69.2-130.8	High Bias			
Sodium	122	50.0	"	137		88.8	36.1-163.3				
Thallium	83.3	2.50	"	88.0		94.7	65.3-146.8				
Vanadium	90.8	1.00	"	99.9		90.9	67-133.1				
Zinc	294	2.50	"	312		94.4	69.9-130.1				

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 BG11098 - EPA 7473 soil											
Blank (BG11098-BLK1)							Prepared & Analyzed: 07/21/2021				
Mercury	ND	0.0300	mg/kg wet								
Duplicate (BG11098-DUP1)	*Source sample: 21G0758-06 (Duplicate)						Prepared & Analyzed: 07/21/2021				
Mercury	ND	0.0322	mg/kg dry		ND					35	
Matrix Spike (BG11098-MS1)	*Source sample: 21G0758-06 (Matrix Spike)						Prepared & Analyzed: 07/21/2021				
Mercury	0.462		mg/kg	0.500	0.0103	90.3	75-125				
Reference (BG11098-SRM1)							Prepared & Analyzed: 07/21/2021				
Mercury	27.567		mg/kg	27.2		101	59.9-140.1				
Batch BG11099 - EPA 7473 soil											
Blank (BG11099-BLK1)							Prepared & Analyzed: 07/21/2021				
Mercury	ND	0.0300	mg/kg wet								
Duplicate (BG11099-DUP1)	*Source sample: 21G0508-27 (Duplicate)						Prepared & Analyzed: 07/21/2021				
Mercury	0.196	0.0355	mg/kg dry		0.185				5.60	35	
Matrix Spike (BG11099-MS1)	*Source sample: 21G0508-27 (Matrix Spike)						Prepared & Analyzed: 07/21/2021				
Mercury	0.624		mg/kg	0.500	0.156	93.6	75-125				
Reference (BG11099-SRM1)							Prepared & Analyzed: 07/21/2021				
Mercury	21.992		mg/kg	27.2		80.9	59.9-140.1				

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 BG11090 - % Solids Prep											
Duplicate (BG11090-DUP1)	*Source sample: 21G0903-03 (SS-03)							Prepared & Analyzed: 07/21/2021			
% Solids	96.1	0.100	%		95.7				0.430	20	
Batch BG11091 - % Solids Prep											
Duplicate (BG11091-DUP1)	*Source sample: 21G0903-13 (SS-013)							Prepared & Analyzed: 07/21/2021			
% Solids	96.0	0.100	%		96.3				0.375	20	

Sample and Data Qualifiers Relating to This Work Order

S-08	The recovery of this surrogate was outside of QC limits.
M-SRD1	The serial dilution for this element was outside control limits.
M-SPKM	The spike recovery is not within acceptance windows due to sample non-homogeneity, or matrix interference.
M-MBLk	Analyte was detected in the batch method blank above the Reporting Limit.
M-ICV2	The recovery for this element in the ICV was outside the 90-110% recovery criteria.
M-CRL	The RL check for this element recovered outside of control limits.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615
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www.yorklab.com

Field Chain-of-Custody Record

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

YORK Project No. 21G0903

Page ____ of ____

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: GBTS	Company: Richard	Company: Brenda	21003-0066	RUSH - Next Day X
Address: 22 IBM Road Poughkeepsie	Address:	Address:		RUSH - Two Day
			YOUR Project Name	RUSH - Three Day
Phone.:	Phone.:	Phone.:	21003-0066.20	RUSH - Four Day
Contact:	Contact:	Contact:		Standard (5-7 Day)
E-mail:	E-mail:	E-mail:	YOUR PO#:	

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.

R. HOOKER

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

[signature]

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

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
SS-01	S	7/19/21	TAL metals	4oz jar
SS-02	↓	↓	↓	↓
SS-03				
SS-04				
SS-05				
SS-06				
SS-07				
SS-08				
SS-09				
SS-10				

Comments:

Preservation: (check all that apply)
HCl ___ MeOH ___ HNO_3 ___ H_2SO_4 ___ NaOH ___ ZnAc ___
Ascorbic Acid ___ Other: ________

Special Instruction
Field Filtered ____
Lab to Filter ____

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
[signature]	11:10 7-20-21	[signature]	7-20-21 11:10	[signature]	7-20-21 1520
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by [signature] Date/Time 07/20/21 1520	Temp. Received at Lab 3.5 Degrees C

YORK ANALYTICAL LABORATORIES INC

York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615 | 132-02 89th Ave, Queens, NY 11418
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Field Chain-of-Custody Record

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

YORK Project No. 2160903

Page ____ of ____

YOUR Information	Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: CIBSS	Company: Richard	Company: Brenda	21003-0066	RUSH - Next Day X
Address: 22 IBM Road Poughkeepsie	Address:	Address:		RUSH - Two Day
			YOUR Project Name	RUSH - Three Day
Phone.:	Phone.:	Phone.:	21003-0066.20	RUSH - Four Day
Contact:	Contact:	Contact:		Standard (5-7 Day)
E-mail:	E-mail:	E-mail:	YOUR PO#:	

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.

R Hooker

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

R Hooker

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

Sample Identification	Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
SS-011	S	7/19/21	TAL metals	4oz jar
SS-012	↓	↓	↓ ↓	↓ ↓
SS-013	↓	↓	↓ ↓	↓ ↓

Comments:

Preservation: (check all that apply)
HCl ___ MeOH ___ HNO_3 ___ H_2SO_4 ___ NaOH ___ ZnAc ___
Ascorbic Acid ___ Other: ________

Special Instruction
Field Filtered ____
Lab to Filter ____

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
R Hooker	7-20-21 11:10	Chris	7-20-21 11:10	Chris	7-20-21 1520
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by / Date/Time	Temp. Received at Lab
				[signature] 07/20/21 1520	3.5 Degrees C

ANALYTICAL REPORT

Lab Number:	L2135944
Client:	Gallagher Bassett Technical Services 22 IBM Road Suite 101 Poughkeepsie, NY 12603
ATTN:	Richard Hooker
Phone:	(845) 867-4714
Project Name:	SARANAC LOFTS
Project Number:	21003-0066
Report Date:	07/08/21

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: SARANAC LOFTS
Project Number: 21003-0066

Lab Number: L2135944
Report Date: 07/08/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2135944-01	SV-01	SOIL_VAPOR	120 BROADWAY, SARANAC LAKE	07/01/21 09:58	07/02/21
L2135944-02	SV-02	SOIL_VAPOR	120 BROADWAY, SARANAC LAKE	07/01/21 10:15	07/02/21
L2135944-03	SV-03	SOIL_VAPOR	120 BROADWAY, SARANAC LAKE	07/01/21 10:16	07/02/21
L2135944-04	SV-04	SOIL_VAPOR	120 BROADWAY, SARANAC LAKE	07/01/21 10:21	07/02/21

Project Name:	SARANAC LOFTS	**Lab Number:**	L2135944
Project Number:	21003-0066	**Report Date:**	07/08/21

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.

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on June 29, 2021. The canister certification results are provided as an addendum.

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: Christopher J. Anderson

Title: Technical Director/Representative Date: 07/08/21

AIR

Project Name:	SARANAC LOFTS	***Lab Number:***	L2135944
Project Number:	21003-0066	***Report Date:***	07/08/21

SAMPLE RESULTS

Lab ID:	L2135944-01	Date Collected:	07/01/21 09:58
Client ID:	SV-01	Date Received:	07/02/21
Sample Location:	120 BROADWAY, SARANAC LAKE	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 07/07/21 17:16
Analyst: AR

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.446	0.200	--	2.21	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	1.20	0.200	--	2.65	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	154	5.00	--	290	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.1	1.00	--	24.0	2.38	--		1
Trichlorofluoromethane	0.239	0.200	--	1.34	1.12	--		1
Isopropanol	2.45	0.500	--	6.02	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.30	0.500	--	3.94	1.52	--		1
Methylene chloride	0.563	0.500	--	1.96	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.976	0.200	--	3.04	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	4.44	0.500	--	13.1	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name:	SARANAC LOFTS	***Lab Number:***	L2135944
Project Number:	21003-0066	***Report Date:***	07/08/21

SAMPLE RESULTS

Lab ID:	L2135944-01	Date Collected:	07/01/21 09:58
Client ID:	SV-01	Date Received:	07/02/21
Sample Location:	120 BROADWAY, SARANAC LAKE	Field Prep:	Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	2.00	0.200	--	9.77	0.977	--		1
Tetrahydrofuran	4.19	0.500	--	12.4	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	2.48	0.200	--	8.74	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	3.83	0.200	--	12.2	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	36.0	0.200	--	124	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	1.48	0.200	--	6.91	0.934	--		1
Heptane	1.74	0.200	--	7.13	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	19.7	0.200	--	74.2	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	3.32	0.200	--	15.3	0.921	--		1
Ethylbenzene	8.38	0.200	--	36.4	0.869	--		1

Project Name: SARANAC LOFTS **Lab Number:** L2135944
Project Number: 21003-0066 **Report Date:** 07/08/21

SAMPLE RESULTS

Lab ID: L2135944-01
Client ID: SV-01
Sample Location: 120 BROADWAY, SARANAC LAKE

Date Collected: 07/01/21 09:58
Date Received: 07/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	22.9	0.400	--	99.5	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.428	0.200	--	1.82	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	7.77	0.200	--	33.7	0.869	--		1
4-Ethyltoluene	2.18	0.200	--	10.7	0.983	--		1
1,3,5-Trimethylbenzene	1.48	0.200	--	7.28	0.983	--		1
1,2,4-Trimethylbenzene	6.66	0.200	--	32.7	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	1.36	0.200	--	8.18	1.20	--		1
1,2-Dichlorobenzene	1.48	0.200	--	8.90	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	100		60-140

Project Name:	SARANAC LOFTS	***Lab Number:***	L2135944
Project Number:	21003-0066	***Report Date:***	07/08/21

SAMPLE RESULTS

Lab ID:	L2135944-02	Date Collected:	07/01/21 10:15
Client ID:	SV-02	Date Received:	07/02/21
Sample Location:	120 BROADWAY, SARANAC LAKE	Field Prep:	Not Specified

Sample Depth:	
Matrix:	Soil_Vapor
Anaytical Method:	48,TO-15
Analytical Date:	07/07/21 17:55
Analyst:	AR

	ppbV			ug/m3				Dilution
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.403	0.200	--	1.99	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	3.99	0.200	--	8.83	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	111	5.00	--	209	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	11.4	1.00	--	27.1	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	2.11	0.500	--	5.19	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	3.02	0.500	--	9.16	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	2.76	0.200	--	8.59	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	4.49	0.500	--	13.2	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name:	SARANAC LOFTS	***Lab Number:***	L2135944
Project Number:	21003-0066	***Report Date:***	07/08/21

SAMPLE RESULTS

Lab ID:	L2135944-02	Date Collected:	07/01/21 10:15
Client ID:	SV-02	Date Received:	07/02/21
Sample Location:	120 BROADWAY, SARANAC LAKE	Field Prep:	Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.312	0.200	--	1.52	0.977	--		1
Tetrahydrofuran	2.74	0.500	--	8.08	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	2.15	0.200	--	7.58	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	3.03	0.200	--	9.68	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	33.5	0.200	--	115	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	1.36	0.200	--	6.35	0.934	--		1
Heptane	1.57	0.200	--	6.43	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	15.4	0.200	--	58.0	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	3.24	0.200	--	14.9	0.921	--		1
Ethylbenzene	6.01	0.200	--	26.1	0.869	--		1

Project Name: SARANAC LOFTS | **Lab Number:** L2135944
Project Number: 21003-0066 | **Report Date:** 07/08/21

SAMPLE RESULTS

Lab ID: L2135944-02
Client ID: SV-02
Sample Location: 120 BROADWAY, SARANAC LAKE

Date Collected: 07/01/21 10:15
Date Received: 07/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	17.0	0.400	--	73.8	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.420	0.200	--	1.79	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	5.92	0.200	--	25.7	0.869	--		1
4-Ethyltoluene	2.37	0.200	--	11.7	0.983	--		1
1,3,5-Trimethylbenzene	1.35	0.200	--	6.64	0.983	--		1
1,2,4-Trimethylbenzene	6.20	0.200	--	30.5	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	1.46	0.200	--	8.78	1.20	--		1
1,2-Dichlorobenzene	1.59	0.200	--	9.56	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	98		60-140

Project Name: SARANAC LOFTS
Project Number: 21003-0066

Lab Number: L2135944
Report Date: 07/08/21

SAMPLE RESULTS

Lab ID: L2135944-03
Client ID: SV-03
Sample Location: 120 BROADWAY, SARANAC LAKE

Date Collected: 07/01/21 10:16
Date Received: 07/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 07/07/21 18:34
Analyst: AR

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.408	0.200	--	2.02	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.935	0.200	--	2.07	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	127	5.00	--	239	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	16.8	1.00	--	39.9	2.38	--		1
Trichlorofluoromethane	0.203	0.200	--	1.14	1.12	--		1
Isopropanol	3.12	0.500	--	7.67	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.78	0.500	--	8.43	1.52	--		1
Methylene chloride	1.08	0.500	--	3.75	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.317	0.200	--	0.987	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	5.73	0.500	--	16.9	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: SARANAC LOFTS **Lab Number:** L2135944
Project Number: 21003-0066 **Report Date:** 07/08/21

SAMPLE RESULTS

Lab ID: L2135944-03
Client ID: SV-03
Sample Location: 120 BROADWAY, SARANAC LAKE

Date Collected: 07/01/21 10:16
Date Received: 07/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.39	0.200	--	6.79	0.977	--		1
Tetrahydrofuran	4.40	0.500	--	13.0	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	2.17	0.200	--	7.65	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	4.00	0.200	--	12.8	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	33.2	0.200	--	114	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	1.71	0.200	--	7.99	0.934	--		1
Heptane	1.41	0.200	--	5.78	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	21.8	0.200	--	82.2	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	3.42	0.200	--	15.8	0.921	--		1
Ethylbenzene	8.59	0.200	--	37.3	0.869	--		1

Project Name:	SARANAC LOFTS	***Lab Number:***	L2135944
Project Number:	21003-0066	***Report Date:***	07/08/21

SAMPLE RESULTS

Lab ID:	L2135944-03	Date Collected:	07/01/21 10:16
Client ID:	SV-03	Date Received:	07/02/21
Sample Location:	120 BROADWAY, SARANAC LAKE	Field Prep:	Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	23.6	0.400	--	103	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.524	0.200	--	2.23	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	7.80	0.200	--	33.9	0.869	--		1
4-Ethyltoluene	2.35	0.200	--	11.6	0.983	--		1
1,3,5-Trimethylbenzene	1.53	0.200	--	7.52	0.983	--		1
1,2,4-Trimethylbenzene	6.75	0.200	--	33.2	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	1.38	0.200	--	8.30	1.20	--		1
1,2-Dichlorobenzene	1.45	0.200	--	8.72	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	95		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	97		60-140

Project Name:	SARANAC LOFTS	***Lab Number:***	L2135944
Project Number:	21003-0066	***Report Date:***	07/08/21

SAMPLE RESULTS

Lab ID:	L2135944-04	Date Collected:	07/01/21 10:21
Client ID:	SV-04	Date Received:	07/02/21
Sample Location:	120 BROADWAY, SARANAC LAKE	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 07/07/21 19:13
Analyst: AR

	ppbV			ug/m3				Dilution
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.375	0.200	--	1.85	0.989	--		1
Chloromethane	0.271	0.200	--	0.560	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	11.6	0.200	--	25.7	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	126	5.00	--	237	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	52.6	1.00	--	125	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	7.25	0.500	--	17.8	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.50	0.500	--	7.58	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	18.3	0.200	--	57.0	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	14.2	0.500	--	41.9	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: SARANAC LOFTS
Project Number: 21003-0066
Lab Number: L2135944
Report Date: 07/08/21

SAMPLE RESULTS

Lab ID: L2135944-04
Client ID: SV-04
Sample Location: 120 BROADWAY, SARANAC LAKE
Date Collected: 07/01/21 10:21
Date Received: 07/02/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.18	0.200	--	5.76	0.977	--		1
Tetrahydrofuran	3.73	0.500	--	11.0	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	4.02	0.200	--	14.2	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	6.09	0.200	--	19.5	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	39.5	0.200	--	136	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	2.17	0.200	--	10.1	0.934	--		1
Heptane	2.75	0.200	--	11.3	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	23.7	0.200	--	89.3	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	5.35	0.200	--	24.6	0.921	--		1
Ethylbenzene	11.3	0.200	--	49.1	0.869	--		1

Project Name:	SARANAC LOFTS	***Lab Number:***	L2135944
Project Number:	21003-0066	***Report Date:***	07/08/21

SAMPLE RESULTS

Lab ID:	L2135944-04	Date Collected:	07/01/21 10:21
Client ID:	SV-04	Date Received:	07/02/21
Sample Location:	120 BROADWAY, SARANAC LAKE	Field Prep:	Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	29.8	0.400	--	129	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.456	0.200	--	1.94	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	9.56	0.200	--	41.5	0.869	--		1
4-Ethyltoluene	2.06	0.200	--	10.1	0.983	--		1
1,3,5-Trimethylbenzene	1.36	0.200	--	6.69	0.983	--		1
1,2,4-Trimethylbenzene	5.91	0.200	--	29.1	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	1.27	0.200	--	7.64	1.20	--		1
1,2-Dichlorobenzene	1.34	0.200	--	8.06	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	103		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	112		60-140

Project Name:	SARANAC LOFTS	**Lab Number:**	L2135944
Project Number:	21003-0066	**Report Date:**	07/08/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 07/07/21 14:49

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1521395-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: SARANAC LOFTS **Lab Number:** L2135944
Project Number: 21003-0066 **Report Date:** 07/08/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 07/07/21 14:49

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1521395-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: SARANAC LOFTS **Lab Number:** L2135944
Project Number: 21003-0066 **Report Date:** 07/08/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 07/07/21 14:49

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1521395-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: SARANAC LOFTS
Project Number: 21003-0066

Lab Number: L2135944
Report Date: 07/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1521395-3								
Dichlorodifluoromethane	88		-		70-130	-		
Chloromethane	94		-		70-130	-		
Freon-114	94		-		70-130	-		
Vinyl chloride	90		-		70-130	-		
1,3-Butadiene	95		-		70-130	-		
Bromomethane	94		-		70-130	-		
Chloroethane	94		-		70-130	-		
Ethanol	90		-		40-160	-		
Vinyl bromide	97		-		70-130	-		
Acetone	68		-		40-160	-		
Trichlorofluoromethane	95		-		70-130	-		
Isopropanol	74		-		40-160	-		
1,1-Dichloroethene	96		-		70-130	-		
Tertiary butyl Alcohol	87		-		70-130	-		
Methylene chloride	95		-		70-130	-		
3-Chloropropene	102		-		70-130	-		
Carbon disulfide	93		-		70-130	-		
Freon-113	97		-		70-130	-		
trans-1,2-Dichloroethene	92		-		70-130	-		
1,1-Dichloroethane	94		-		70-130	-		
Methyl tert butyl ether	92		-		70-130	-		
2-Butanone	93		-		70-130	-		
cis-1,2-Dichloroethene	96		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SARANAC LOFTS
Project Number: 21003-0066

Lab Number: L2135944
Report Date: 07/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1521395-3								
Ethyl Acetate	94		-		70-130	-		
Chloroform	96		-		70-130	-		
Tetrahydrofuran	90		-		70-130	-		
1,2-Dichloroethane	79		-		70-130	-		
n-Hexane	90		-		70-130	-		
1,1,1-Trichloroethane	95		-		70-130	-		
Benzene	90		-		70-130	-		
Carbon tetrachloride	104		-		70-130	-		
Cyclohexane	93		-		70-130	-		
1,2-Dichloropropane	93		-		70-130	-		
Bromodichloromethane	101		-		70-130	-		
1,4-Dioxane	97		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	98		-		70-130	-		
Heptane	94		-		70-130	-		
cis-1,3-Dichloropropene	102		-		70-130	-		
4-Methyl-2-pentanone	96		-		70-130	-		
trans-1,3-Dichloropropene	88		-		70-130	-		
1,1,2-Trichloroethane	96		-		70-130	-		
Toluene	94		-		70-130	-		
2-Hexanone	95		-		70-130	-		
Dibromochloromethane	113		-		70-130	-		
1,2-Dibromoethane	98		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SARANAC LOFTS | **Lab Number:** L2135944

Project Number: 21003-0066 | **Report Date:** 07/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1521395-3								
Tetrachloroethene	96		-		70-130	-		
Chlorobenzene	96		-		70-130	-		
Ethylbenzene	97		-		70-130	-		
p/m-Xylene	98		-		70-130	-		
Bromoform	120		-		70-130	-		
Styrene	99		-		70-130	-		
1,1,2,2-Tetrachloroethane	100		-		70-130	-		
o-Xylene	100		-		70-130	-		
4-Ethyltoluene	97		-		70-130	-		
1,3,5-Trimethylbenzene	92		-		70-130	-		
1,2,4-Trimethylbenzene	102		-		70-130	-		
Benzyl chloride	112		-		70-130	-		
1,3-Dichlorobenzene	100		-		70-130	-		
1,4-Dichlorobenzene	102		-		70-130	-		
1,2-Dichlorobenzene	103		-		70-130	-		
1,2,4-Trichlorobenzene	121		-		70-130	-		
Hexachlorobutadiene	114		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: SARANAC LOFTS
Project Number: 21003-0066

Lab Number: L2135944
Report Date: 07/08/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1521395-5 QC Sample: L2135944-04 Client ID: SV-04						
Dichlorodifluoromethane	0.375	0.386	ppbV	3		25
Chloromethane	0.271	0.294	ppbV	8		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	11.6	12.3	ppbV	6		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	126	129	ppbV	2		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	52.6	50.5	ppbV	4		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	7.25	7.42	ppbV	2		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	2.50	2.44	ppbV	2		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	18.3	18.8	ppbV	3		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SARANAC LOFTS
Project Number: 21003-0066

Lab Number: L2135944
Report Date: 07/08/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1521395-5 QC Sample: L2135944-04 Client ID: SV-04						
2-Butanone	14.2	15.0	ppbV	5		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	1.18	1.24	ppbV	5		25
Tetrahydrofuran	3.73	3.92	ppbV	5		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	4.02	4.16	ppbV	3		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	6.09	6.44	ppbV	6		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	39.5	42.0	ppbV	6		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	2.17	2.30	ppbV	6		25
Heptane	2.75	2.92	ppbV	6		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SARANAC LOFTS
Project Number: 21003-0066
Lab Number: L2135944
Report Date: 07/08/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1521395-5 QC Sample: L2135944-04 Client ID: SV-04						
Toluene	23.7	26.1	ppbV	10		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	ND	ND	ppbV	NC		25
Chlorobenzene	5.35	ND	ppbV	NC		25
Ethylbenzene	11.3	12.4	ppbV	9		25
p/m-Xylene	29.8	32.0	ppbV	7		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	0.456	0.503	ppbV	10		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	9.56	10.3	ppbV	7		25
4-Ethyltoluene	2.06	2.10	ppbV	2		25
1,3,5-Trimethylbenzene	1.36	1.50	ppbV	10		25
1,2,4-Trimethylbenzene	5.91	6.42	ppbV	8		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	1.27	1.37	ppbV	8		25
1,2-Dichlorobenzene	1.34	1.45	ppbV	8		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: SARANAC LOFTS **Lab Number:** L2135944

Project Number: 21003-0066 **Report Date:** 07/08/21

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2135944-01	SV-01	01941	Flow 3	06/29/21	356773		-	-	-	Pass	18.0	18.3	2
L2135944-01	SV-01	2595	2.7L Can	06/29/21	356773	L2133447-01	Pass	-29.0	-7.0	-	-	-	-
L2135944-02	SV-02	01510	Flow 3	06/29/21	356773		-	-	-	Pass	18.0	16.7	7
L2135944-02	SV-02	2992	2.7L Can	06/29/21	356773	L2133447-01	Pass	-29.8	-8.5	-	-	-	-
L2135944-03	SV-03	01080	Flow 2	06/29/21	356773		-	-	-	Pass	18.0	16.8	7
L2135944-03	SV-03	545	2.7L Can	06/29/21	356773	L2133447-01	Pass	-28.3	-7.4	-	-	-	-
L2135944-04	SV-04	01034	Flow 4	06/29/21	356773		-	-	-	Pass	18.0	17.1	5
L2135944-04	SV-04	3106	2.7L Can	06/29/21	356773	L2133447-01	Pass	-29.8	-7.1	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2133447
Project Number: CANISTER QC BAT **Report Date:** 07/08/21

Air Canister Certification Results

Lab ID: L2133447-01
Client ID: CAN 2033 SHELF 13
Sample Location:

Date Collected: 06/18/21 16:00
Date Received: 06/21/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 06/21/21 19:09
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name:	BATCH CANISTER CERTIFICATION	**Lab Number:**	L2133447
Project Number:	CANISTER QC BAT	**Report Date:**	07/08/21

Air Canister Certification Results

Lab ID:	L2133447-01	Date Collected:	06/18/21 16:00
Client ID:	CAN 2033 SHELF 13	Date Received:	06/21/21
Sample Location:		Field Prep:	Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2133447
Project Number: CANISTER QC BAT **Report Date:** 07/08/21

Air Canister Certification Results

Lab ID: L2133447-01
Client ID: CAN 2033 SHELF 13
Sample Location:

Date Collected: 06/18/21 16:00
Date Received: 06/21/21
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				Dilution
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Factor**
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Lab Number: L2133447
Project Number: CANISTER QC BAT
Report Date: 07/08/21

Air Canister Certification Results

Lab ID: L2133447-01
Client ID: CAN 2033 SHELF 13
Sample Location:
Date Collected: 06/18/21 16:00
Date Received: 06/21/21
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name:	BATCH CANISTER CERTIFICATION	**Lab Number:**	L2133447
Project Number:	CANISTER QC BAT	**Report Date:**	07/08/21

Air Canister Certification Results

Lab ID:	L2133447-01	Date Collected:	06/18/21 16:00
Client ID:	CAN 2033 SHELF 13	Date Received:	06/21/21
Sample Location:		Field Prep:	Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2133447
Project Number: CANISTER QC BAT **Report Date:** 07/08/21

Air Canister Certification Results

Lab ID: L2133447-01
Client ID: CAN 2033 SHELF 13
Sample Location:

Date Collected: 06/18/21 16:00
Date Received: 06/21/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 06/21/21 19:09
Analyst: TS

	ppbV			ug/m3				Dilution Factor
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2133447
Project Number: CANISTER QC BAT **Report Date:** 07/08/21

Air Canister Certification Results

Lab ID: L2133447-01
Client ID: CAN 2033 SHELF 13
Sample Location:

Date Collected: 06/18/21 16:00
Date Received: 06/21/21
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Lab Number: L2133447
Project Number: CANISTER QC BAT
Report Date: 07/08/21

Air Canister Certification Results

Lab ID: L2133447-01
Client ID: CAN 2033 SHELF 13
Sample Location:
Date Collected: 06/18/21 16:00
Date Received: 06/21/21
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	96		60-140

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2135944-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2135944-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2135944-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2135944-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)

*Values in parentheses indicate holding time in days

GLOSSARY

Acronyms

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.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

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.)

LOQ - 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.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. 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.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

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.

Report Format: Data Usability Report

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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 Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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.

J - Estimated value. 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 reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Data Qualifiers

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.

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

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.

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, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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, SM4500Cl-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 Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

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, EPA 537.1.

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.

Serial_No:07082117:03

AIR ANALYSIS

ALPHA ANALYTICAL

CHAIN OF CUSTODY

PAGE ____ OF ____

Date Rec'd in Lab: 7/3/21

ALPHA Job #: L2135944

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: GBTS

Address: 22 IBM Road, Ste. 101, Poughkeepsie, NY 12603

Phone: 845-867-4712

Fax:

Email: richard_hooker@gbtpa.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Saranac Lofts

Project Location: 120 Broadway, Saranac Lake

Project #: 21003-0066

Project Manager: Richard Hooker

ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
35944-01	SV-01	7/1/21	8:18	9:58	-27.40	-5.09	SV	JH	2.7L	2595	01941	X					
02	SV-02	7/1/21	8:20	10:15	-28.45	-6.34	SV	JH	2.7L	2992	01570	X					
03	SV-03	7/1/21	8:23	10:16	-26.19	-5.30	SV	JH	2.7L	545	01080	X					
04	SV-04	7/1/21	8:37	10:21	-28.26	-4.98	SV	JH	2.7L	3106	01034	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
J. Hooker	7/2/21 1227	[signature]	7/2/21 1227
[signature]	7/2/21 1425	[signature] AAL	7/2/21 2300
[signature] AAL	7/3/21 0505	[signature]	7/3/21 0505

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

 (25-Sep-15)