19 Patchen Avenue

KINGS, NEW YORK

Final Engineering Report

NYSDEC Site Number: C224232

Prepared for:

Hudson BEC II LLC
19 Patchen GP LLC
c/o The Hudson Companies
826 Broadway
New York, NY 10003

Prepared by:

Matthew M. Carroll, P.E. & Tenen Environmental, LLC
121 West 27th Street, Suite 702
New York, NY 10001
(646) 606-2332

DECEMBER 2019

CERTIFICATIONS

I, Matthew M. Carroll, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Action Work Plan was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by the Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Matthew M. Carroll, of 1085 Sackett Avenue, Bronx, NY 10461, am certifying as Owner's Designated Site Representative for the site.

091629	12/31/2019	
NYS Professional Engineer #	Date	Signature

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LIST OF ACRONYMS

Acronym	Definition
AGV	NYSDOH Air Guidance Value
AOC	area of concern
AS	air sparging
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
ECL	Environmental Conservation Law
BTEX	benzene, toluene, ethylbenzene and xylenes
CAMP	Community Air Monitoring Program
C&D	construction and demolition
CDS	construction dewatering system
Class GA Standards	NYSDEC TOGS 1.1.1 Class GA Ambient Water Quality Standards and Guidance Values
CEQR	City Environmental Quality Review
CFR	Code of Federal Regulations
CPP	Citizen Participation Plan
COC	Certificate of Completion
cVOC	Chlorinated volatile organic compound
DCE	dichloroethene
DER-10	NYSDEC Division of Environmental Remediation (DER), DER-10 / Technical Guidance for Site Investigation and Remediation
DRO	diesel range organics
DOC	dissolved organic carbon
DUSR	Data Usability Summary Report
EC	engineering control
ESA	Environmental Site Assessment
EZ	exclusion zone
FB	field blanks
FER	Final Engineering Report
ft-bs	feet below building slab
ft-bg	feet below sidewalk grade
ft-msl	feet above mean sea level
GPM	Gallons per minute
HASP	Health and Safety Plan
HSA	Hollow Stem Auger
HSO	Health and Safety Officer
IC	institutional control
ISCO	in-situ chemical oxidation
IRM	Interim Remedial Measure

MW	monitoring well
NAVD	North American Vertical Datum of 1988
NGVD	National Geodetic Vertical Datum of 1929
NIOSH	National Institute for Occupational Safety and Health
NYCDEP	New York City Department of Environmental Protection
NYCDEP Limits	NYCDEP Limitations for Effluent to Sanitary or Combined Sewers
NYCDOB	New York City Department of Buildings
NYCDOT	New York City Department of Transportation
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOH-ELAP	NYSDOH Environmental Laboratory Approval Program
O&M Plan	Operations and Maintenance Plan
OSHA	Occupational Safety and Health Association
PCB	polychlorinated biphenyl
PCE	perchloroethene, aka tetrachloroethene
PID	photoionization detector
PGWSCOs	6 NYCRR 375-6.8(b) and CP-51 Protection of Groundwater Soil Cleanup Objectives
PP Metals	Priority Pollutant Metals
PPE	personal protective equipment
QA/QC	quality assurance / quality control
QAPP	Quality Assurance Project Plan
RAWP	Remedial Action Plan
RCNY	Rules of the City of New York
RAO	Remedial Action Objective
RE	Remedial Engineer
RI	remedial investigation
RSCOs	Recommended Soil Cleanup Objectives
RRUSCOs	6 NYCRR 375-6.8(b) and CP-51 Track 4 – Restricted-Residential Use Soil Cleanup Objectives
RUSCOs	6 NYCRR 375-6.8(b) and CP-51 Track 2 – Residential Use Soil Cleanup Objectives
SB	soil boring
SCGs	Standards, Criteria and Guidance
SV	soil vapor
SMP	Site Management Plan
SMMP	Soil/Material Management Plan
SSDS	sub-slab depressurization system
SVE	soil vapor extraction
SVOC	semi-volatile organic compound

TAL	Target Analyte List
TAGM 4046	NYSDEC Technical and Administrative Guidance Memorandum #4046
TB	trip blanks
TCE	trichloroethene
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TCLP Limits	USEPA Maximum Concentrations of Contaminants for the Toxicity Characteristic
TOC	total organic carbon
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	underground storage tank
UUSCOs	6 NYCRR 375-6.8(a) Track 1 Unrestricted Use Soil Cleanup Objectives
VOC	volatile organic compound

FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

19 Patchen LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in September 2016, to investigate and remediate a 0.042-acre property located in Brooklyn, New York. In October 2017, 19 Patchen GP LLC and Hudson BEC II LLC were added to the BCA and 19 Patchen LLC was removed from the BCA. The property was remediated to restricted residential use and will be used for residential and commercial use.

The site is located in the County of Kings, New York and is identified as Block 1618 and Lot 8 on the New York City Tax Map # 17A. The site is situated on an approximately 0.042-acre area bounded by Van Buren Street to the north, a four-story residential building to the south, a residential garage to the east, and Patchen Avenue to the west (see Figure 1). The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

An electronic copy of this Final Engineering Report (FER) with all supporting documentation is included as Appendix B.

2.0 SUMMARY OF SITE REMEDY

2.1 Remedial Action Objectives

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site.

2.1.1 Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.

2.1.2 Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater contamination.

2.1.3 Soil Vapor RAOs

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

2.2 Description of Selected Remedy

The site was remediated in accordance with the remedy selected by the NYSDEC in the RAWP dated December 27, 2019 and Interim Remedial Measures Work Plan (IRM Work Plan) dated March 2017.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. Construction and maintenance of a soil cover system consisting of concrete slabs to prevent human exposure to remaining contaminated soil/fill remaining at the site;

2. Installation and maintenance of a vapor barrier;

3. Installation and maintenance of active sub-slab depressurization systems (SSDSs) at the Site and the southern adjoining building;

4. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site;

5. Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose;

6. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting; and,

7. Periodic certification of the institutional and engineering controls listed above.

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

3.1 Interim Remedial Measures

The IRM Work Plan included the installation of an SSDS at the Site and also documented a proposed modification to the exhaust of the now-removed dry cleaner in order to meet local and state regulations. The IRM Work Plan was conditionally approved on March 8, 2017 and a final certified plan was submitted to NYSDEC on March 27, 2017.

The SSDS was installed and the dry cleaner exhaust was rerouted in the summer of 2017. The vapor barrier was installed in November 2017, following the completion of the SSDS. Sub-slab soil vapor and indoor air samples were collected approximately 30 days later, in December 2017, while the SSDS was active but the dry cleaner was not operating. Concentrations of PCE in the sub-slab soil vapor were much lower than prior results. In December 2017, confirmatory indoor air samples were collected and showed continued lower indoor air concentrations. Subsequent post-remedial indoor air sampling in February and March 2019 indicated that elevated levels remain in the indoor air following the re-starting of the dry cleaning operations (which were shut down prior to rerouting of the exhaust). Soil vapor and indoor air concentrations are included in Table 4 and Figures 6 through 9. As of August 2019, the dry cleaner is no longer in operation.

Based on the project schedule, an Interim Remedial Measure Construction Completion Report (IRM CCR) was not completed. The implementation of the IRM and the RAWP are included in this FER.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved RAWP and IRM Work Plan for the 19 Patchen Avenue site (December 27, 2019 and March 2017, respectively). All deviations from the RAWP and IRM Work Plan are noted below.

4.1 Governing Documents

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

4.1.2 Quality Assurance Project Plan (QAPP)

The QAPP was included as Appendix G of the RAWP approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives.

4.1.3 Soil/Materials Management Plan (S/MMP)

The SMMP was included as Appendix D of the RAWP and Appendix B of the IRM Work Plan, both approved by the NYSDEC. Soil and materials management on-Site was conducted in accordance with the SMMP. The main goal of the SMMP was to handle all potentially contaminated soil and manage activities associated with soil in a manner that prevents contamination from reaching the community, workers, future occupants and workers, and the environment. Contaminated soil was managed in a manner that ensures removal, transport, and disposal such that it fulfills applicable regulatory requirements.

4.1.4 Storm-Water Pollution Prevention Plan (SWPPP)

The development is less than one acre in area and a SWPPP was not required.

4.1.5 Community Air Monitoring Plan (CAMP)

On-site air monitoring was conducted consistent with the requirements of the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP) and the project HASP included as Appendix A of the RAWP and of the IRM Work Plan. The purpose of the CAMP was to protect downwind receptors from potential airborne contaminants released as a direct result of the Remedial Action and the IRM being performed at the Site. In accordance with the HASP and CAMP, continuous community air monitoring was implemented during all ground-intrusive sampling and remedial activities. The approved HASP includes action levels for two monitoring stations at the upwind and downwind perimeters of the exclusion zone.

Air monitoring stations were established at the upwind perimeter and downwind perimeter of the Site, with the locations determined on a daily basis. The downwind and upwind CAMP stations were equipped with a photoionization meter (PID) to measure volatile organics (VOCs), and a Mini-Rae dust monitor to measure for particulate emissions. Equipment was calibrated on a daily basis and was capable of calculating 15-minute running average concentrations, which were compared to specified action levels. Due to the project schedule and excavation extent, the locations of the air monitoring equipment changed with the scope of excavation. In addition, fugitive dust migration was visually assessed during all work activities.

The following action levels for VOC monitoring were used:

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

If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persisted at levels in excess of 5 ppm over background but less than 25 ppm, work activities were halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities resumed 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, was below 5 ppm over background for the 15-minute average.

If the organic vapor level was above 25 ppm at the perimeter of the work area,

activities were shut down.

All 15-minute readings were recorded and made available for State (NYSDEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes were also recorded.

The following action levels for particulate level monitoring were used:

If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques were employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels did not exceed 150 mcg/m3 above the upwind level and provided that no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m3 above the upwind level, work was stopped and a re-evaluation of activities was initiated. Work resumed provided that dust suppression measures and other controls were successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 of the upwind level and in preventing visible dust migration.

All readings were recorded and made available for State (NYSDEC and NYSDOH) personnel to review.

4.1.6 Contractors Site Operations Plans (SOPs)

The Remediation Engineer reviewed all plans and submittals for this remedial project (i.e. those listed above plus contractor and subcontractor submittals) and confirmed that they were in compliance with the IRM Work Plan and the RAWP. All remedial documents were submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.1.7 Community Participation Plan

The Community Participation Plan (CPP) was included as Appendix H of the RAWP and Appendix C of the IRM Work Plan. The CPP enables citizens to participate more fully in decisions that affect their health, environment, and social well being.

A certification of mailing was sent by the Volunteer to the NYSDEC project manager following the distribution of all Fact Sheets and includes: (1) certification that the Fact Sheets were mailed, (2) the date they were mailed; (3) a copy of the Fact Sheet,

and, (4) a list of recipients (contact list).

No changes were made to the approved Fact Sheets authorized for release by NYSDEC without written consent of the NYSDEC. No other information, such as brochures and flyers, was included with the Fact Sheet mailing.

Document repositories have been established at the following locations and contain all applicable project documents:

Brooklyn Public Library
Dekalb Branch
790 Bushwick Avenue
Brooklyn, NY 11221

Brooklyn Community Board #3
1360 Fulton Street
Brooklyn, NY 11216

Once the NYSDEC approves the Final Engineering Report, a final Fact Sheet will be prepared and distributed to announce that (1) remediation has been completed; and (2) the Certificate of Completion (COC) has been issued.

4.2 Remedial Program Elements

4.2.1 Contractors and Consultants

The Remedial Engineer (RE) for this project was Matthew M. Carroll, P.E., a registered professional engineer (PE) licensed by the State of New York. The RE has certified in this FER that the remedial actions were observed by representatives under his supervision and the requirements set forth in the RAWP and any other relevant provisions of ECL 27-1419 have been achieved in conformance with that RAWP.

Matthew M. Carroll, P.E. served as the Engineer of Record and provided oversight for all remedial activities. NYSDEC was the lead agency, providing regulatory approval for all components of the remedy. The following parties completed various tasks as noted:

Environmental Consultant

Tenen Environmental, LLC

121 West 27th Street, Suite 702, New York, NY 10001

(646) 606-2332

Mary Manto, Technical Director: responsible for overall coordination and management of the project.

Mohamed Ahmed, Senior Geologist: responsible for quality assurance of sampling procedures and laboratory data.

Claire Zaccheo, Project Engineer: responsible for the day-to-day field monitoring activities, including SSDS installation, dust monitoring and PID monitoring. Post-remedial sampling activities and report preparation was performed by a Project Engineer from Tenen.

Analytical Laboratory

Alpha Analytical, Inc.

8 Walkup Drive, Westborough, MA

(800) 624-9220

Alpha Analytical performed sampling analysis related to the RI, pre-design investigations, soil vapor and indoor air samples and post-remedial groundwater monitoring. The laboratory is certified under the NYSDOH Environmental Laboratory Approval Program (ELAP) IDs 11148 and 11627 for solid and hazardous waste and air and emissions, respectively. NYSDEC Analytical Services Protocol (ASP) Category B deliverables were prepared by the laboratory.

Subcontractor Drilling and Disposal

Aquifer Drilling & Testing Inc. Company (ADT)

75 E 2nd Street

Mineola, NY 11501

ADT performed drilling related to implementation of the RI and pre-design investigations.

Cascade Technical Services

30 North Prospect Avenue

Lynbrook, NY 11563

Cascade performed drilling related to implementation of the RI and pre-design investigations. Cascade also provided disposal services for investigation-derived waste and soil generated during installation of SSDS pits at the Site.

Subcontractor Disposal

Clean Earth of Carteret, LLC

334 South Warminster Road

Hatboro, PA 19040

Clean Earth provided disposal services for investigation-derived waste and soil generated during installation of SSDS pits at an off-site location.

Data Validation

L.A.B Validation Corp.

14 West Point Drive

East Northport, NY 11731

Data validation was completed for all post-remedial indoor air and post-remedial groundwater samples.

Remedial Contractor

Broadway Builders

826 Broadway, 11th Floor

New York, NY 10003

Broadway Builders was the remedial contractor responsible for installation of the SSDS systems and vapor barriers.

Drum Disposal Facility

Spring Grove Resource Recovery, Inc.

4879 Spring Grove Avenue

Cincinnati, OH 45232

All drummed material was transported Spring Grove Resource Recovery. Contained-in Determinations were issued by NYSDEC in order for waste to be disposed as non-hazardous. Documentation is provided in Appendix D.

4.2.2 Site Preparation

Prior to initiating construction, the presence of utilities and easements on the Site was investigated by the Remedial Engineer. It was determined that no risk or impediment to the planned work under the RAWP was posed by utilities or easements on the Site.

A pre-construction meeting with NYSDEC was not required.

4.2.3 General Site Controls

Photographs were taken of all remedial activities and submitted to NYSDEC in digital (JPEG) format. Photos illustrated all remedial program elements and were of acceptable quality. Photos were included in the daily reports as needed and a Project Photo Log (Appendix H) is included in this FER.

Job-site record keeping for all remedial work was appropriately documented. These records were maintained on-Site at all times during the project and were available for inspection by NYSDEC staff.

Provisions for sediment and erosion control were not required as all soil disturbances were completed within an existing building that was protected from stormwater.

4.2.4 Nuisance controls

Odor Control

All necessary means were employed to prevent on- and off-Site odor nuisances. At a minimum, procedures included limiting the area of open excavations.

Dust Control

Dust management during invasive on-Site work included, as necessary:

- Use of a dedicated water spray method at suitable supply and pressure for limited excavation; and,
- Identification of air intakes on adjoining residential properties.

This dust control plan was capable of controlling emissions of dust. If nuisance dust emissions were identified, work was halted and the source of dusts were identified and corrected. Work did not resume until all nuisance dust emissions were abated. No dust complaints were received during the remedial action. Implementation of all dust controls, including halt of work, was the responsibility of the RE.

Other Nuisances

Noise control was exercised during the remedial program. All remedial work conformed, at a minimum, to NYC noise control standards.

4.2.5 CAMP results

Data generated by CAMP equipment was tabulated and compared to action limits established for the Site.

Copies of all field data sheets relating to the CAMP are provided in electronic format in Appendix E.

4.2.6 Reporting

On-Site personnel maintained a daily field log, updated throughout the workday. The daily log recorded weather conditions and identified issues related to the CAMP and any health and safety concerns.

Daily reports were submitted to the NYSDEC Project Manager on a weekly basis and included the following:

- An update of progress made during the reporting week;
- Locations of work and quantities of material imported and exported from the Site;
- References to alpha-numeric map for Site activities;
- Photographs of remedial work activities;
- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of CAMP findings, including excursions; and,
- An explanation of notable Site conditions.
- Daily reporting was conducted during periods of active soil disturbances.
- Monthly reporting was conducted and submitted by the 10th day of the following month. Monthly reports included the following:
- Activities relative to the Site during the previous reporting period and those anticipated for the next reporting period, including a quantitative presentation of work performed (i.e., tons of material exported and imported, etc.);
- Photographs of the work completed during the reporting period;
- Description of approved activity modifications, including changes to work scope and/or schedule;
- Sampling results received following internal data review and validation, as applicable; and,

- An update of the remedial schedule including the percentage of project completion, unresolved delays encountered or anticipated that may affect the future schedule, and efforts made to mitigate such delays.

All daily and monthly reports are included in electronic format in Appendix G.

The digital photo log required by the RAWP is included in electronic format in Appendix H.

4.3 Contaminated Materials Removal

A minimal amount of material was removed from the Site and southern-adjoining property to facilitate installation of the SSDS pits.

4.3.1 Excavation and Disposal of Soil/Fill and Investigation Derived Waste

All soil/fill from installation of the sub-grade SSDS components and all investigation-derived waste was placed in 55-gallon drums, characterized and disposed off-site.

4.3.1.1 Disposal Details

On January 29, 2018, NYSDEC issued a contained-in determination for the non-hazardous disposal of eight drums, five with soil and three with groundwater. On April 26, 2019, NYSDEC issued a second contained-in determination for the hazardous disposal of one drum filled with soil. Characterization was based on RI data and drum-specific testing.

All drums were disposed at the Clean Harbors facility located at 4979 Spring Grove Avenue in Cincinnati, Ohio. Both sets of drums were transported by SJ Transportation (EPA ID: NJD071629976).

The soil from the test pits at the off-site building was bulked with other soil generated at this location and disposed at Clean Earth of Carteret, located at 24 Middlesex Avenue in Carteret, NJ. The material was transported by Rizzo Environmental (Hauler Permit: IA-997).

Table 2 shows the total quantities of each category of material removed from the site and the disposal locations. A summary of the samples collected to characterize the waste, and associated analytical results are summarized on Table 7.

Waste profiles prepared for the disposal facilities and acceptance letters from disposal facility owners are attached in Appendix E.

Manifests and bills of lading are included in electronic format in Appendix D.

4.4 Contamination Remaining at the Site

All soil samples collected below the cellar slab met the Part 375 Unrestricted Use soil cleanup objectives (SCOs). One shallow soil sample in the rear yard contained polyaromatic hydrocarbons (PAHs) and metals, including barium, lead, mercury and zinc, above the Unrestricted Use SCOs in samples collected from the rear yard of the Site. The PAHs, barium and lead also exceeded the Part 375 Restricted-Residential SCOs. A Track 4 remediation was achieved. This material remains below a concrete slab, which is part of the composite cover Engineering Control (see Section 4.5). These concentrations are delineated to below the Unrestricted Use SCOs at two feet below the slab.

Table 3 and Figure 4 summarize the results of all soil samples remaining at the site after completion of Remedial Action that exceed the Track 1 (unrestricted) SCOs. Figure 4 summarizes the results of all soil samples remaining at the site after completion of the remedial action that meet the SCOs for unrestricted use of the site.

As shown on Table 5 and Figure 5, groundwater samples during the RI indicated that PCE and 2-butanone were detected above the TOGS 1.1.1 Class GA Ambient Water Quality Standards and Guidance Values (Class GA Standards). Sampling completed in September 2018 indicated that the PCE remained in groundwater above the Class GA Standards. Sampling for emerging contaminants was also completed in September 2018. As shown on Table 6 and detailed in Appendix J, all perfluoroalkyl acid substances (PFAS) compounds were below the EPA Drinking Water Health Advisory level of 70 nanograms per liter (ng/L) and 1,4-dioxane was below the EPA Cancer Reference Concentration of 35 ng/L.

Table 4 and Figures 6 through 9 summarize the post-remedial soil vapor and indoor air concentrations. Following start-up of the SSDS, the soil vapor concentrations are generally low. Indoor air concentrations have decreased but require additional treatment in two locations (Unit 2A and the former dry cleaner space).

Since contaminated soil, groundwater and soil vapor remain beneath the site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/ICs) are described in the following sections. Long-term management of

these EC/ICs and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC.

4.5 Soil Cover System

Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover in the rear yard and cellar the site. This cover system is comprised of a minimum of three inches of concrete-covered sidewalks and concrete building slabs. Figures 10 and 12, in Appendix I, show the material and location of each cover type built at the Site, and Figure 11, also in Appendix I, shows the vertical extent of the cover system. An Excavation Work Plan, which outlines the procedures required in the event the cover system and/or underlying residual contamination are disturbed, is provided in Appendix A of the SMP.

4.6 Other Engineering Controls

Since remaining contaminated soil, groundwater and soil vapor exists beneath the site, Engineering Controls (EC) are required to protect human health and the environment. The site has the following primary Engineering Controls, as described in the following subsections.

4.6.1 Sub-Slab Depressurization Systems

To minimize the potential for vapor intrusion, active SSDSs were installed at the Site and the off-site building. The SSDSs will depressurize below the existing building slabs as compared to the building environment.

The SSDSs consist of suction pits installed beneath the building slabs that are connected to fans on the roof via cast iron (interior) and PVC (exterior) piping. To create the suction pits, the existing slabs were saw cut and the underlying soil was removed to a depth of at least 18 inches. The void spaces were lined with geotextile fabric and a layer of ¾" clean stone aggregate.

The overall goal of the systems was to create a pressure differential of -0.02 inches per water column (in-wc) between the at-grade building and sub-slab environments; however, differential pressure readings above -0.004 in-wc are acceptable. An alarm system was installed that will notify the building management if a drop in pressure occurs, which indicates that the system is not operating as designed. The system has been designed in general accordance with the New York State Department of Health

(NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 (NYSDOH Soil Vapor Guidance), including Section 4.2.2, *System-specific recommendations*. The exhaust locations are located on the highest point of the buildings' roofs and meets the requirements of the NYSDOH Soil Vapor Guidance, specifically Section 4.2.2 c (6), which reads:

To avoid entry of extracted subsurface vapors into the building, the vent pipe's exhaust is located 13 feet above the access roof level and at least 25 feet away from adjoining buildings and HVAC intakes.

A pre-design pilot test was completed at the Site and at the off-site building on February 7, 2017, to confirm the radius of influence (ROI) of the pressure field; all measurements were above 0.02 in-wc.

A blower test was performed at the Site on June 1, 2017, and at the off-site building on September 22, 2017 to size the blowers. Based on the sizing tests, blowers were selected to meet the design goals.

The SSDS design for the Site was approved in Tenen's IRM Work Plan dated March 2017. The SSDS design for the off-site location building was initially included in a Remedial Action Plan dated September 2015 and approved by the New York City Department of Environmental Protection (NYCDEP); the design was also included in Tenen's RAWP dated December 27, 2019.

The suction pits and piping were installed in the summer of 2017 and the final SSDS blowers were installed on October 2017. The systems were started up on November 1, 2017 and a monitoring point communication test was completed to ensure design goals were being met. Results of the communication test indicate that all soil vapor monitoring points pass the performance criteria. The SSDS layout design is shown in Figure 3. Photographs of the installation are included in Appendix H. As-built drawings are included in Appendix I.

Procedures for monitoring, operating and maintaining the SSDSs are provided in the Operation and Maintenance Plan in Section 4 of the Site Management Plan (SMP). The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site ECs.

4.6.2 Vapor Barriers

To minimize the potential for vapor intrusion, vapor barriers were installed at the Site and the off-site building. The vapor barriers will mitigate the potential for soil vapor to impact the indoor air environment.

The vapor barrier minimizes the potential for vapor intrusion by decreasing the permeability of the overall composite cover. A Land Science Technologies Retro Coat™ (20-mil thick) vapor sealant was applied over a primer which covered the entire concrete slab of the building basements. The sealant has a vapor transmission rate (measured by ASTM Method E-96) of 0.03 perms. The sealant and primer were applied according to the manufacturer's specifications.

4.6.3 Carbon Filtration of Indoor Air

While not a required Engineering Control, a carbon filtration unit was installed in Unit 2A at the Site to address potential indoor air impacts. An additional carbon filtration unit will be installed in the dry cleaner space. Unit 2A and the dry cleaner space were selected based on historic indoor air concentrations. The filtration units, Airpura C600-DLX, are sized for the selected spaces and contain 26 pounds of granulated activate carbon (GAC) each.

Post remedial indoor air sampling was completed on October 1, 2019. Indoor air samples were collected in apartment Units 2A, 3A and the former dry cleaner space. Additionally, an outdoor sample was collected. Sample results showed an overall decrease in PCE in indoor air within the apartment units. The concentration of PCE ranged from 11.3 micrograms per cubic meter (ug/m3) in Unit 2A to 17 ug/m3 in Unit 3A. The concentration of PCE within the former dry cleaner unit was 1,590 ug/m3. These concentrations are detailed on Table 4 and shown on Figure 9.

Continued annual indoor air testing of all apartment units within the building, including the former dry cleaner space, will be completed during the heating season. All samples will be collected at breathing height in a six-liter Summa canister using 24-hour regulators and analyzed for VOCs using EPA Method TO-15. All samples will be collected in accordance with the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

The locations of the vapor barriers are shown on Figure 11, located in Appendix I. Photographs of the installation are included in Appendix H. Manufacturer's specifications are included in Appendix I.

4.7 Institutional Controls

The site remedy requires that an environmental easement be placed on the property to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; (3) limit the use and development of the site to Restricted-Residential and Commercial uses only; and, (4) prohibition on potable use of groundwater, consistent with New York City code.

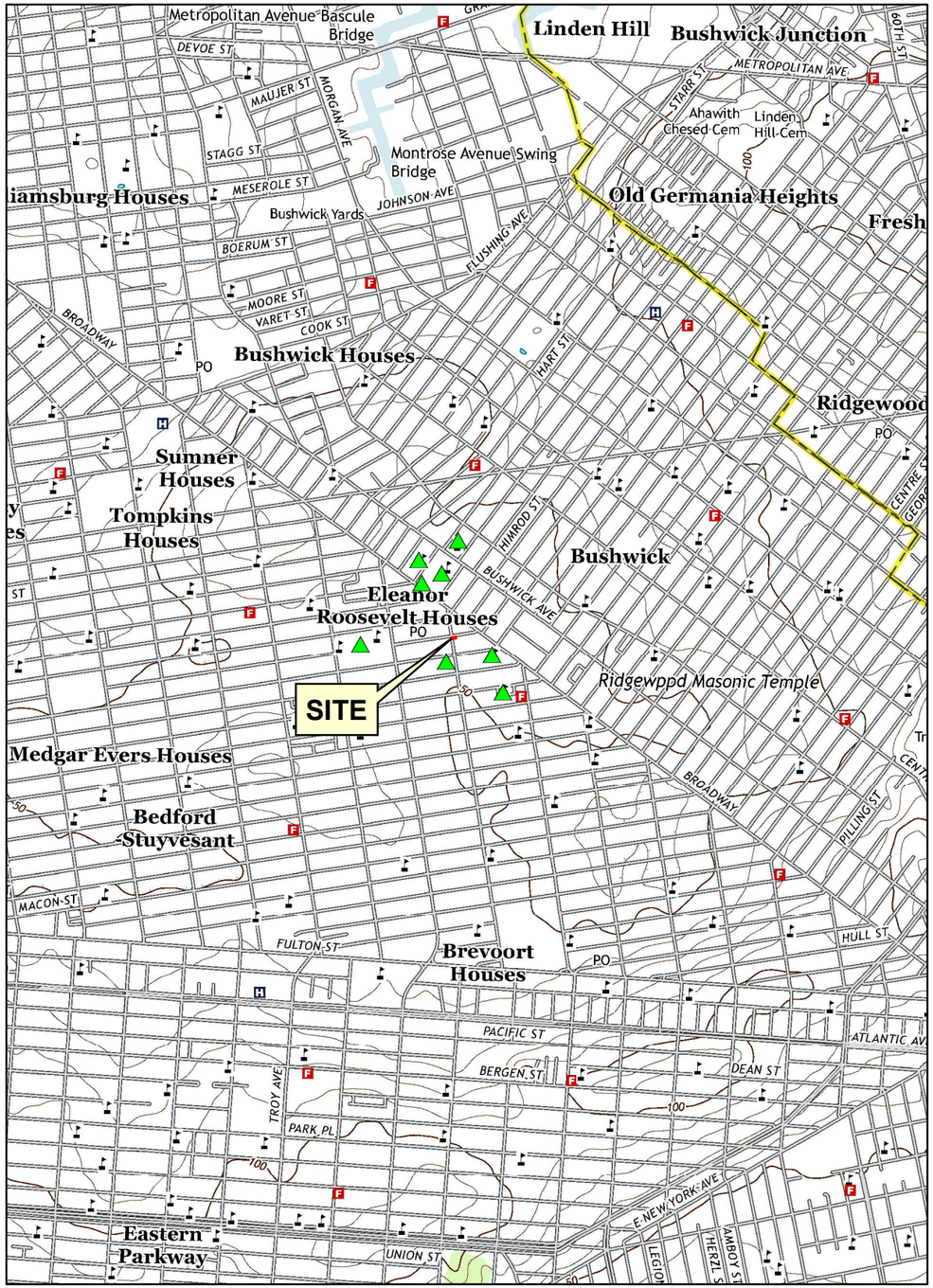
The environmental easement for the site was executed by the Department on August 14, 2018, and filed with the Kings County Clerk on August 14, 2018. The County Recording Identifier number for this filing is 2018000408040. A copy of the easement and proof of filing is provided in Appendix C.

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

FIGURES



Basemap: USGS Brooklyn - NY Quandrangle, 2013
http://www.usgs.gov

Site Location

▲ Sensitive Receptor

0 1,000 2,000 4,000 Feet

http://gis.nyc.gov/taxmap/map.htm

Department of Finance Digital Tax Map

0 50 100 200 Feet

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
NYC Department of City Planning, Information Technology Division

Department of City Planning MapPLUTO - 2015

0 50 100 200 Feet

19 Patchen Avenue
Brooklyn, New York
Block 1618, Lot 8

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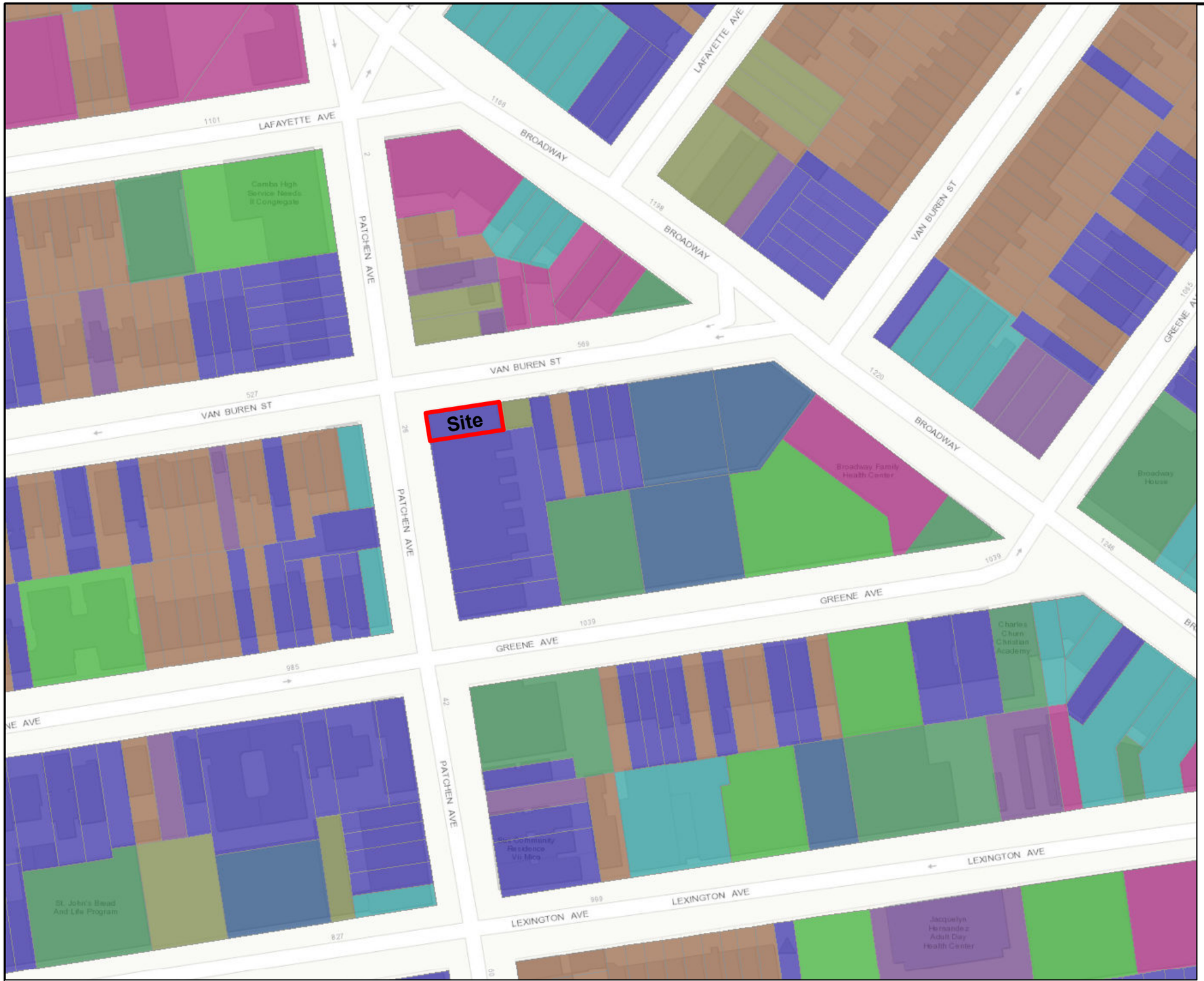
Drawn By	Checked By	Date	Scale
LM	MC	July 2016	As Noted

Drawing Title: **Site Location Map**

Drawing No: **Figure 1**



Legend

Land Use

- One &Two Family Buildings
- Multi-Family Walk-Up Buildings
- Multi-Family Elevator Buildings
- Mixed Residential & Commercial Buildings
- Commercial & Office Buildings
- Industrial & Manufacturing
- Transportation & Utility
- Public Facilities & Institutions
- Open Space & Outdoor Recreation
- Parking Facilities
- Vacant Land

Service Layer Credits: 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), swisstopo, © OpenStreetMap contributors, and the GIS User Community
NYC Department of City Planning, Information Technology Division

Department of City Planning MapPLUTO - 2018v1

0 50 100 200 Feet

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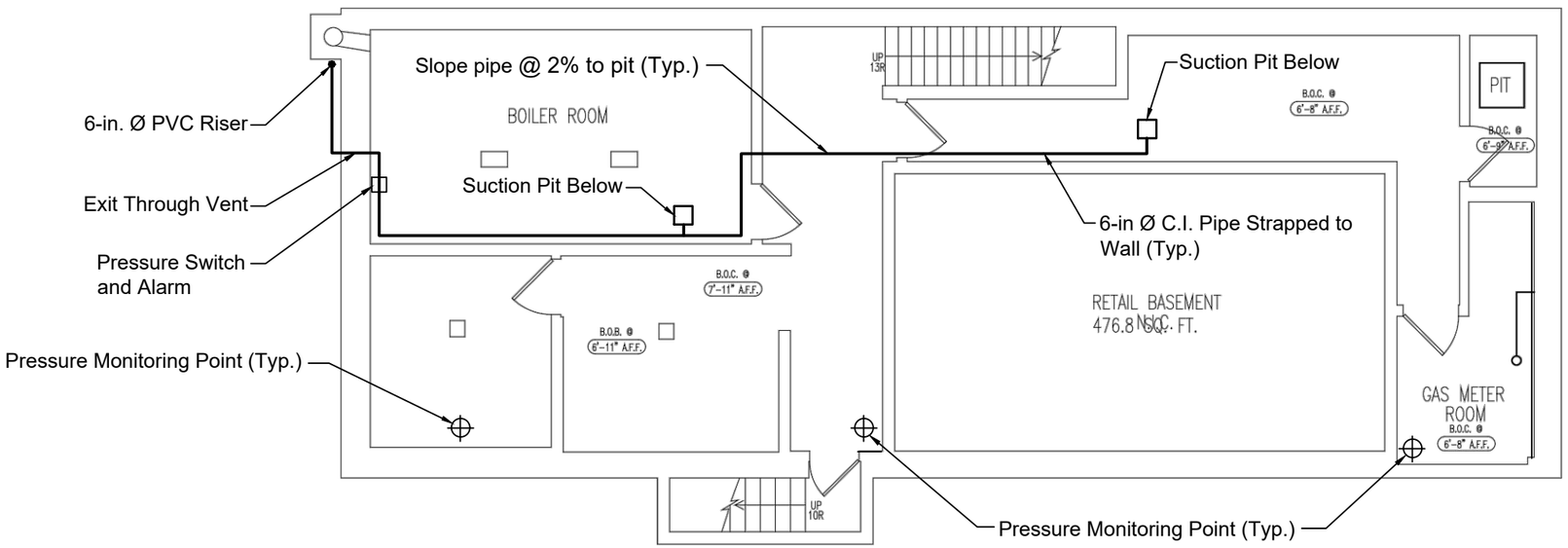
Drawn By	Checked By	Date	Scale
LM	CZ	November 2018	As Noted

Drawing Title: **Site Layout**

Drawing No: **Figure 2**



LEGEND

- Suction Pit Location
- Pressure Monitoring Point Location

0 4' 8' 16'

Drawing Scale

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Proj #1518, Dwg. #A-100.00, 6/28/15

CLIENT

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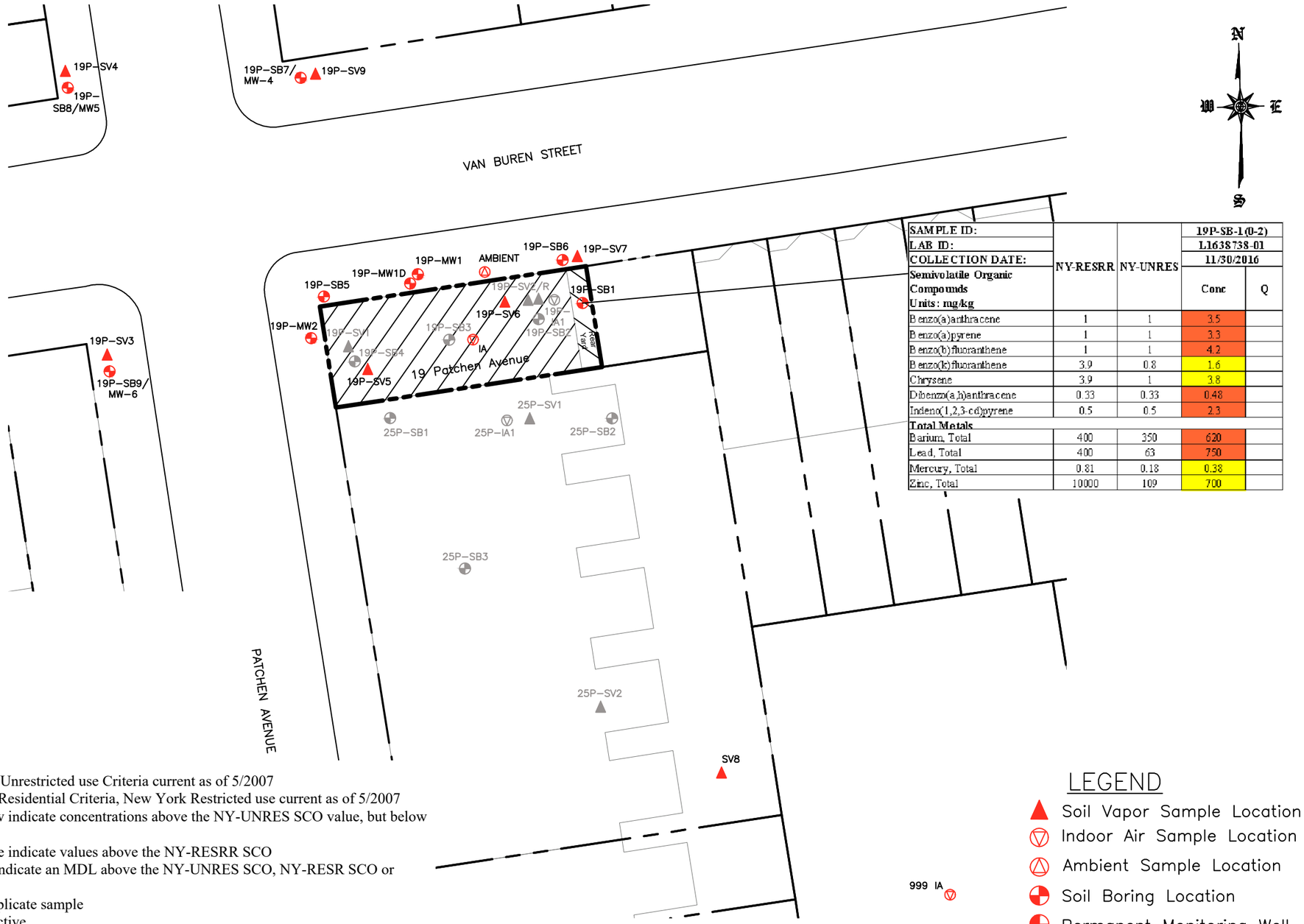
LM	MC	FEBRUARY 2017	AS NOTED

DRAWING TITLE: Figure 3

DRAWING NO.: SSDS CELLAR LAYOUT



SAMPLE ID:	NY-RESRR	NY-UNRES	19P-SB-1(0-2)	
LAB ID:			L1638738-01	
COLLECTION DATE:			11/30/2016	
Semivolatile Organic Compounds Units: mg/kg			Conc	Q
Benzo(a)anthracene	1	1	3.5	
Benzo(a)pyrene	1	1	3.3	
Benzo(b)fluoranthene	1	1	4.2	
Benzo(k)fluoranthene	3.9	0.8	1.6	
Chrysene	3.9	1	3.8	
Dibenzo(a,h)anthracene	0.33	0.33	0.48	
Indeno(1,2,3-cd)pyrene	0.5	0.5	2.3	
Total Metals				
Barium, Total	400	350	620	
Lead, Total	400	63	750	
Mercury, Total	0.81	0.18	0.38	
Zinc, Total	10000	109	700	

Notes:
NY-UNRES = New York Unrestricted use Criteria current as of 5/2007
NY-RESRR = Restricted-Residential Criteria, New York Restricted use current as of 5/2007
Cells highlighted in yellow indicate concentrations above the NY-UNRES SCO value, but below the NY-RESRR SCO
Cells highlighted in orange indicate values above the NY-RESRR SCO
Cells highlighted in grey indicate an MDL above the NY-UNRES SCO, NY-RESR SCO or NY-RESRR SCO
DUP = designation for duplicate sample
SCO = Soil Cleanup Objective
MDL = Maximum Detection Limit
RL = Reporting Limit
Qual = Laboratory Data Qualifier
For U qualified entries, the MDL is shown
U = not detected at or above the MDL
For J qualified entries, the estimated concentration is shown
J = estimated value, indicating the detected value is below the RL, but above the MDL
Results and MDL values are in milligrams per kilogram (mg/kg)
Soil sample depths shown in feet (ft) within sample location
-- = No standard

LEGEND

- Soil Vapor Sample Location
- Indoor Air Sample Location
- Ambient Sample Location
- Soil Boring Location
- Permanent Monitoring Well
- Previous Sample Locations

0 15' 30' 60'
Drawing Scale

Basemap Features Source: New York City Dept. of Finance & NYC Open Data.

CLIENT: 19 Patchen Avenue, Brooklyn, New york

CONSULTANT: TENEN ENVIRONMENTAL

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LM	CZ	November 2018	As Noted

DRAWING TITLE: Soil Sample Location Map with Exceedances of Unrestricted Use SCOs

DRAWING NO.: Figure 4

SAMPLE ID:	NY-AWQS	MW-4		MW-4		MW-4 DUP	
LAB ID:		L1639548-03		L1837978-04		L1837978-05	
COLLECTION DATE:		12/6/2016		9/21/2018		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q	Conc	Q
Chloroform	7	6.4		8.6		7.4	
Tetrachloroethene	5	26		23		19	

SAMPLE ID:	NY-AWQS	MW-1		MW-1	
LAB ID:		L1639693-03		L1837978-02	
COLLECTION DATE:		12/7/2016		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	18		12	

SAMPLE ID:	NY-AWQS	MW-5		MW-5	
LAB ID:		L1639548-02		L1837978-06	
COLLECTION DATE:		12/6/16		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	24		10	

SAMPLE ID:	NY-AWQS	MW-1D		MW-1D-DUP		MW-1-D	
LAB ID:		L1639693-04		L1639693-05		L1837978-01	
COLLECTION DATE:		12/7/2016		12/7/2016		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q	Conc	Q
Tetrachloroethene	5	0.4	J	0.3	J	0.18	U
2-Butanone	50	51		49		1.9	U

SAMPLE ID:	NY-AWQS	MW-2		MW-2	
LAB ID:		L1639693-02		L1837978-03	
COLLECTION DATE:		12/7/2016		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	19		12	

SAMPLE ID:	NY-AWQS	MW-6		MW-6	
LAB ID:		L1639548-01		L1837978-07	
COLLECTION DATE:		12/6/2016		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	12		12	

SAMPLE ID:	NY-AWQS	19P-MW-3		MW-3	
LAB ID:		L1714748-01		L1837978-08	
COLLECTION DATE:		5/8/2017		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	0.7	U	72	
2-Butanone	50	13		1.9	U

22 1/2 Patchen Avenue

24 Patchen Avenue

19P-SB8/MW5

19P-SB7/MW-4

PARKING LOT

VAN BUREN STREET

PARKING GARAGE

19P-MW1

19P-MW1D

19P-MW2

19 Patchen Avenue

Near 19P

542 Van Buren Street

19P-SB9/MW-6

520 Van Buren

25 Patchen Avenue

EN AVENUE

19P-MW3

N

W E

S

LEGEND

Permanent Monitoring Well

Notes:

*NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

Cells highlighted in yellow indicate concentrations above the NY-AWQS

DUP = designation for duplicate sample

MDL = Maximum Detection Limit

Q = Laboratory Data Qualifier

For U qualified entries, the MDL is shown

U = not detected at or above the MDL

Results and MDL values are in micrograms per liter (µg/L)

Basemap Features Source: New York City Dept. of Finance & NYC Open Data.

0 15' 30' 60'

Drawing Scale

CLIENT

19 Patchen Avenue
Brooklyn, New York

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DRAWN BY: LM

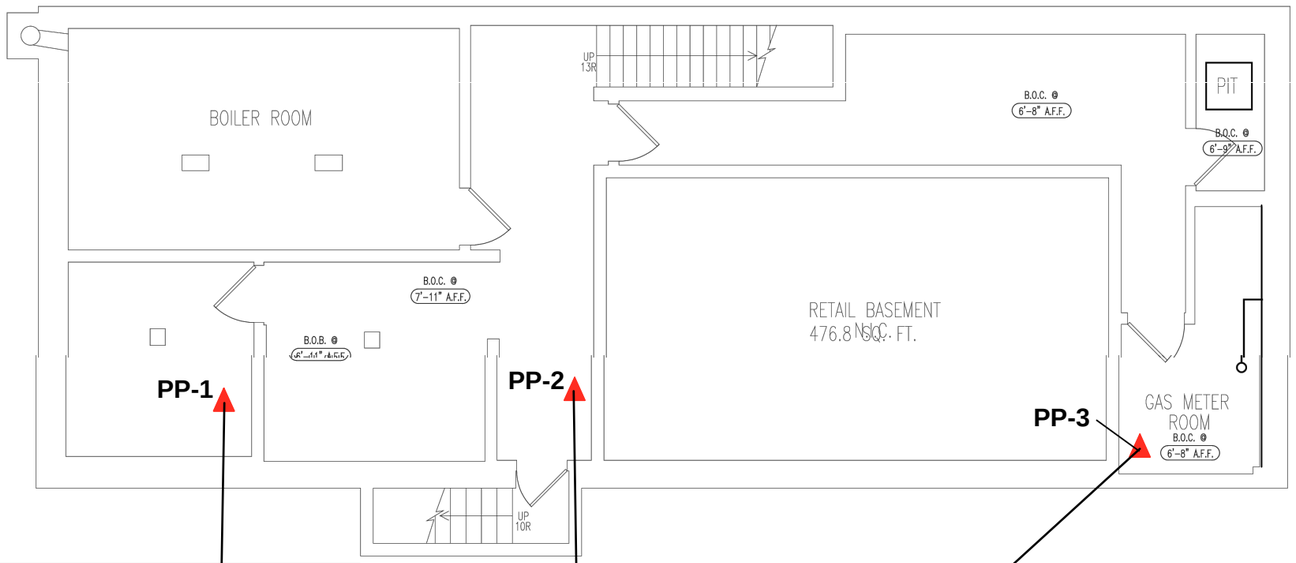
CHECKED BY: CZ

DATE: August 2019

SCALE: As Noted

DRAWING TITLE: Remaining Groundwater Sample Exceedances

DRAWING NO.: Figure 5



SAMPLE ID:	PP-1	
LAB ID:	L1747261-01	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Trichloroethene	ND	
Tetrachloroethene	6.71	

SAMPLE ID:	PP-2	
LAB ID:	L1747261-02	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Trichloroethene	ND	
Tetrachloroethene	7.59	

SAMPLE ID:	PP-3	
LAB ID:	L1747261-03	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Trichloroethene	4.69	
Tetrachloroethene	22	

Notes:
RL = Reporting Limit
Q = Laboratory Data Qualifier
ND = not detected at or above the RL
Results are in micrograms per cubic meter (ug/m³)

LEGEND

▲ Soil Vapor Sample Location

0 4' 8' 16'
Drawing Scale

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Pro□□1518, Dwg. □A-100.00, 6□28□15

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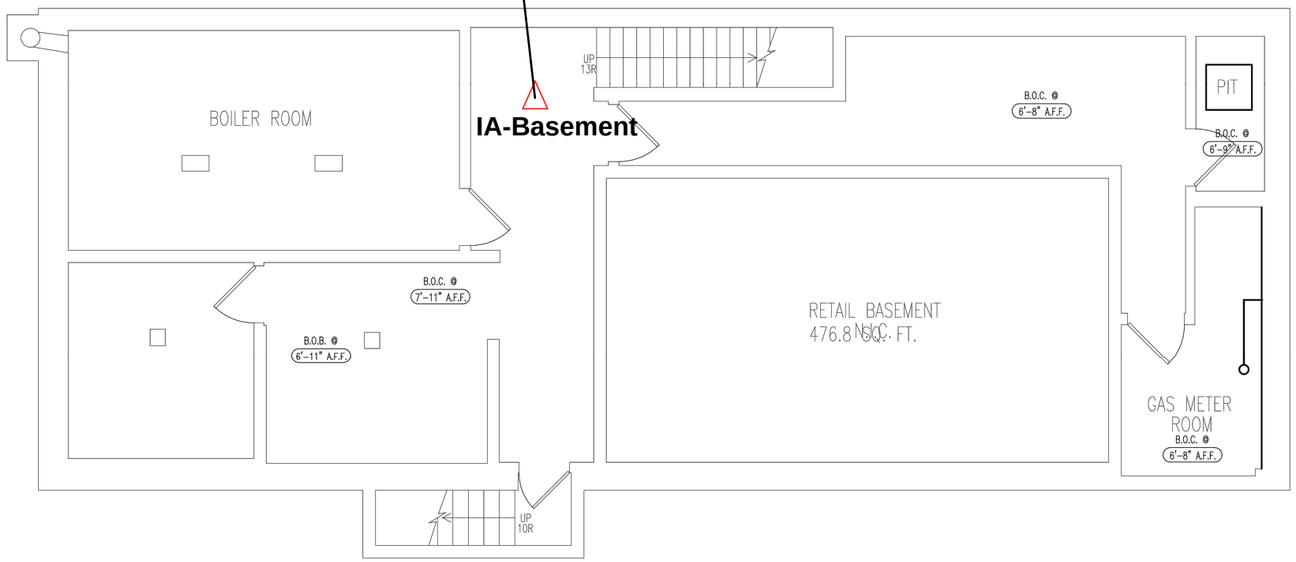
DRAWN BY: LM
CHECKED BY: CZ
DATE: December 2019
SCALE: As Noted

DRAWING TITLE: Sub-slab Soil Vapor Samples (December 2017)
DRAWING NO.: Figure 6

SAMPLE ID:	BASEMENT IA	
LAB ID:	L1747350-06	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Tetrachloroethene	14.4	
Trichloroethene	ND	



NYSDOH AGVs	
Tetrachloroethene	30
Trichloroethene	2

Notes:
NYSDOH AGV = New York State Department of Health Air Guidance Values
NYSDOH AGV values from NYSDOH Soil Vapor Guidance, October 2006, except for the revised NYSDOH AGV for PCE from Fact Sheet: Tetrachloroethene (PERC) in Indoor & Outdoor Air, September 2013
Cells highlighted in yellow indicate concentrations above the NYSDOH AGV
RL = Reporting Limit
ND = not detected at or above the RL
Results and RL values are in micrograms per cubic meter (ug/m³)

LEGEND

△ Indoor Air Sample Location

0 4' 8' 16'
Drawing Scale

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Pro□□1518, Dwg. □A-100.00, 6□28□15

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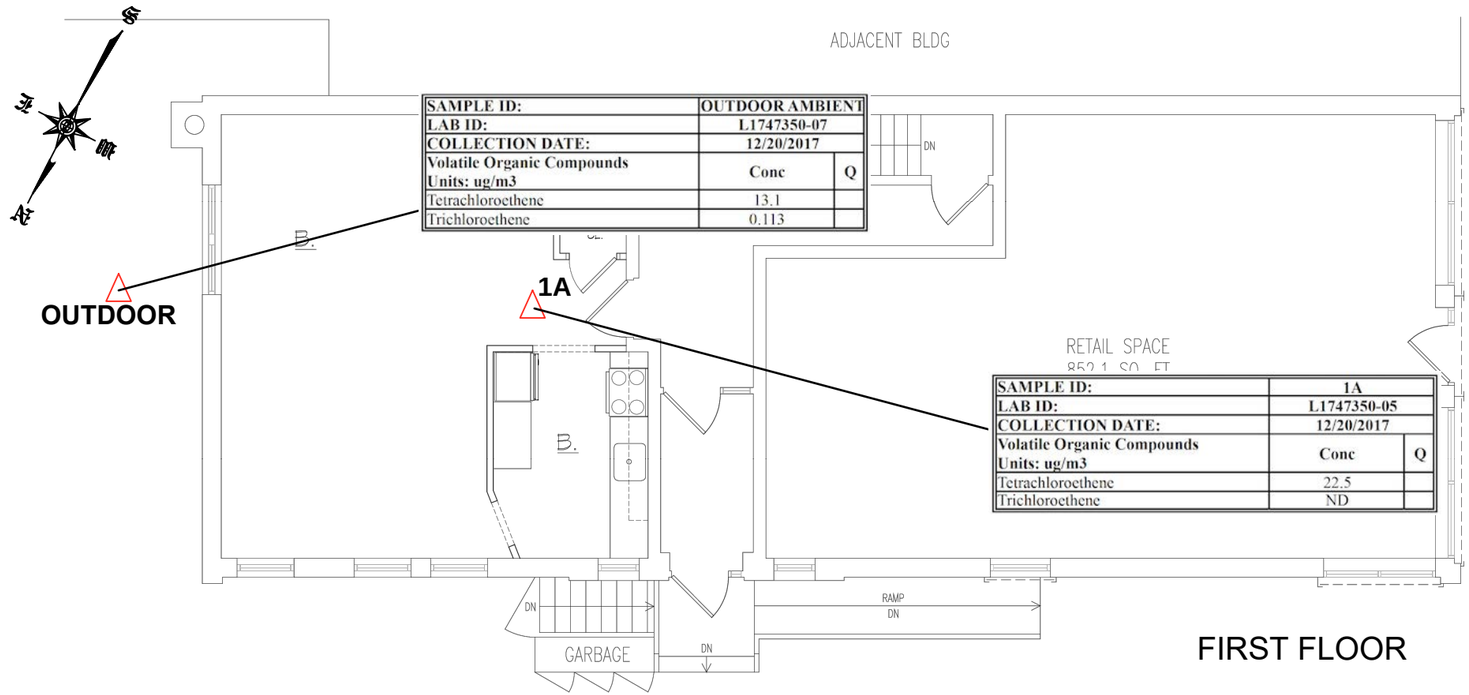
DRAWN BY: LM
CHECKED BY: CZ
DATE: December 2019
SCALE: As Noted

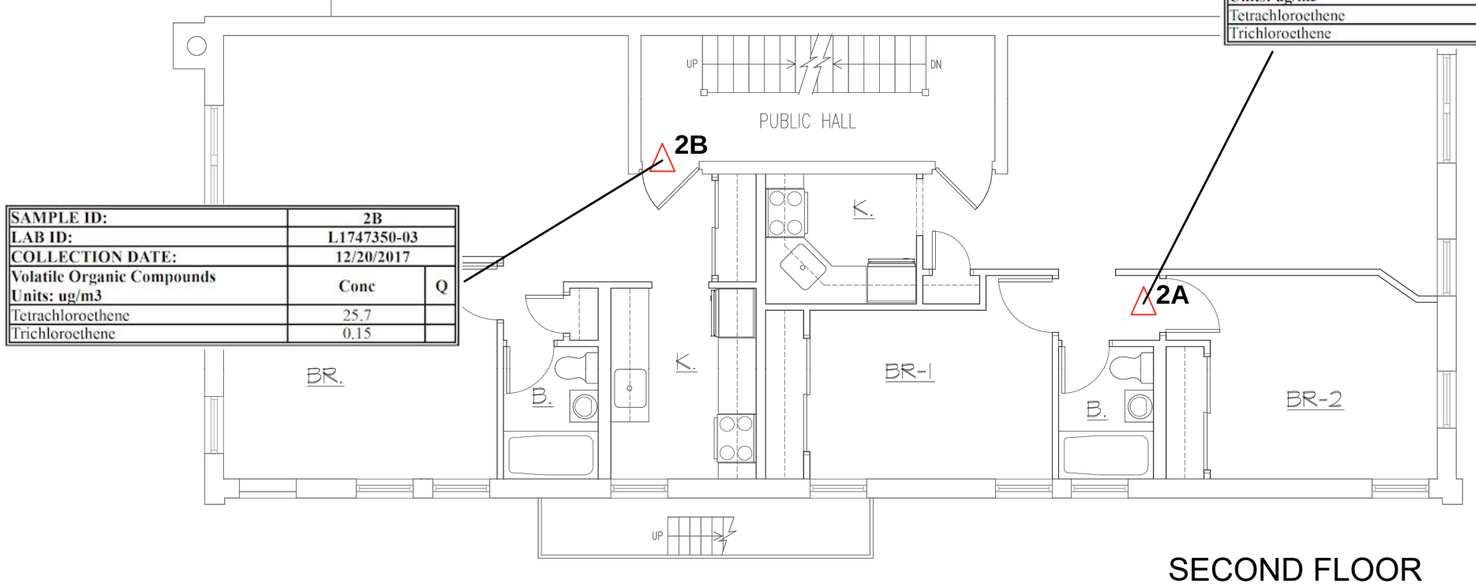
DRAWING TITLE: Indoor Air Samples, Cellar (December 2017)
DRAWING NO.: Figure 7A



SAMPLE ID:	OUTDOOR AMBIENT	
LAB ID:	L1747350-07	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Tetrachloroethene	13.1	
Trichloroethene	0.113	

SAMPLE ID:	1A	
LAB ID:	L1747350-05	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Tetrachloroethene	22.5	
Trichloroethene	ND	

FIRST FLOOR



SAMPLE ID:	2B	
LAB ID:	L1747350-03	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Tetrachloroethene	25.7	
Trichloroethene	0.15	

SAMPLE ID:	2A	
LAB ID:	L1747350-04	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Tetrachloroethene	9.02	
Trichloroethene	ND	

SECOND FLOOR

LEGEND

△ Indoor Air and Outdoor Air Sample Location

0 4' 8' 16'

Drawing Scale

NYSDOH AGVs	
Tetrachloroethene	30
Trichloroethene	2

Notes:

- NYSDOH AGV = New York State Department of Health Air Guidance Values
- NYSDOH AGV values from NYSDOH Soil Vapor Guidance, October 2006, except for the revised NYSDOH AGV for PCE from Fact Sheet: Tetrachloroethene (PERC) in Indoor & Outdoor Air, September 2013
- Cells highlighted in yellow indicate concentrations above the NYSDOH AGV
- RL = Reporting Limit
- ND = not detected at or above the RL
- Results and RL values are in micrograms per cubic meter (ug/m³)

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Pro□□1518, Dwg. □A-102.00, 6□28□15

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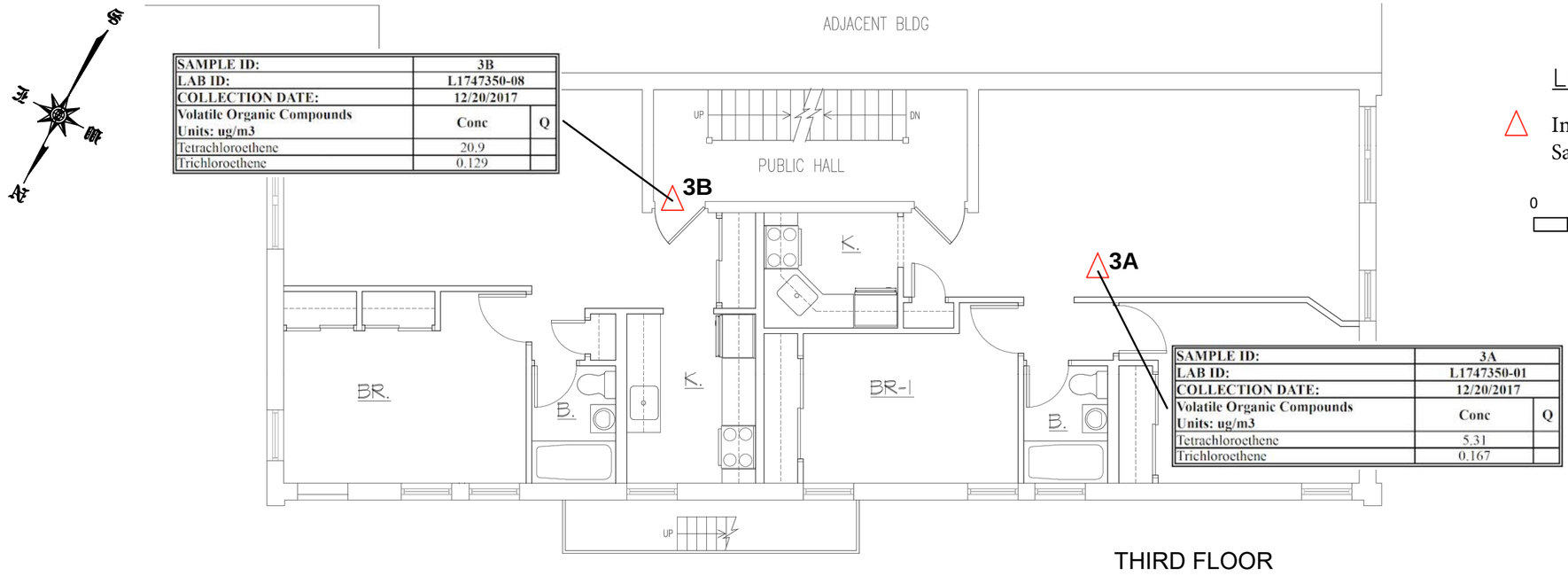
DRAWN BY	CHECKED BY	DATE	SCALE:
LM	CZ	December 2019	As Noted

DRAWING TITLE:
Indoor Air Samples, 1st and 2nd Floors (December 2017)

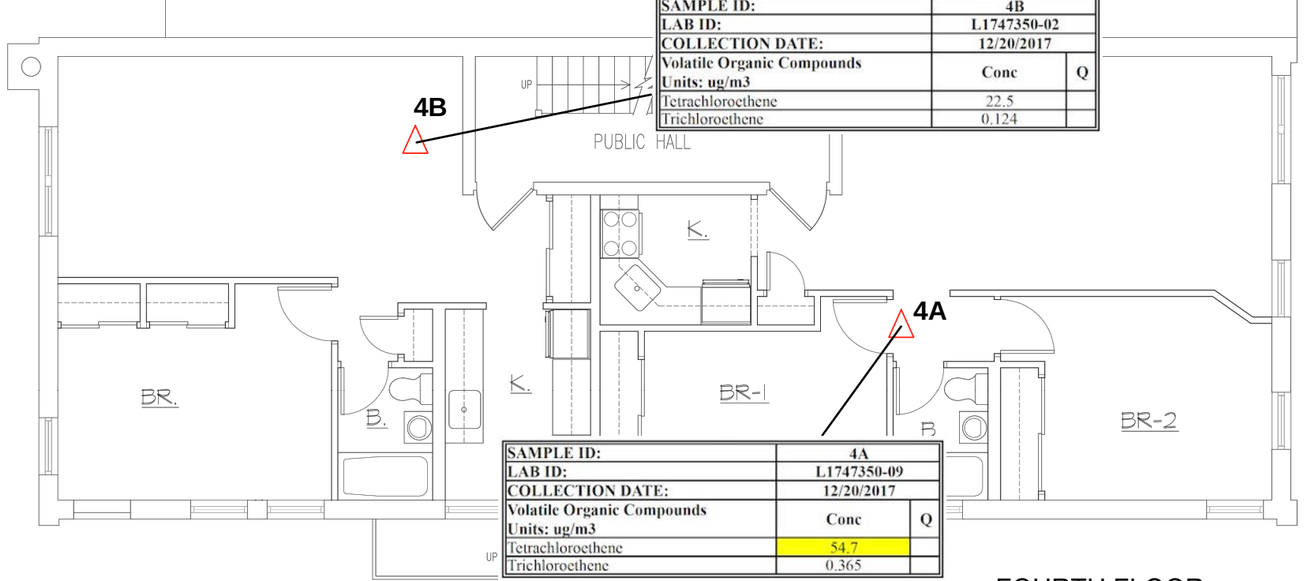
DRAWING NO.
Figure 7B



SAMPLE ID:	3B	
LAB ID:	L1747350-08	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Tetrachloroethene	20.9	
Trichloroethene	0.129	

SAMPLE ID:	3A	
LAB ID:	L1747350-01	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Tetrachloroethene	5.31	
Trichloroethene	0.167	

THIRD FLOOR



SAMPLE ID:	4B	
LAB ID:	L1747350-02	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Tetrachloroethene	22.5	
Trichloroethene	0.124	

SAMPLE ID:	4A	
LAB ID:	L1747350-09	
COLLECTION DATE:	12/20/2017	
Volatile Organic Compounds Units: ug/m3	Conc	Q
Tetrachloroethene	54.7	
Trichloroethene	0.365	

FOURTH FLOOR

LEGEND

Indoor Air and Outdoor Air Sample Location

0 4' 8' 16'

Drawing Scale

NYSDOH AGVs	
Tetrachloroethene	30
Trichloroethene	2

Notes:
NYSDOH AGV = New York State Department of Health Air Guidance Values
NYSDOH AGV values from NYSDOH Soil Vapor Guidance, October 2006, except for the revised NYSDOH AGV for PCE from Fact Sheet: Tetrachloroethene (PERC) in Indoor & Outdoor Air, September 2013
Cells highlighted in yellow indicate concentrations above the NYSDOH AGV
RL = Reporting Limit
ND = not detected at or above the RL
Results and RL values are in micrograms per cubic meter (ug/m³)

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Pro□□1518, Dwg. □A-102.00, 6□28□15

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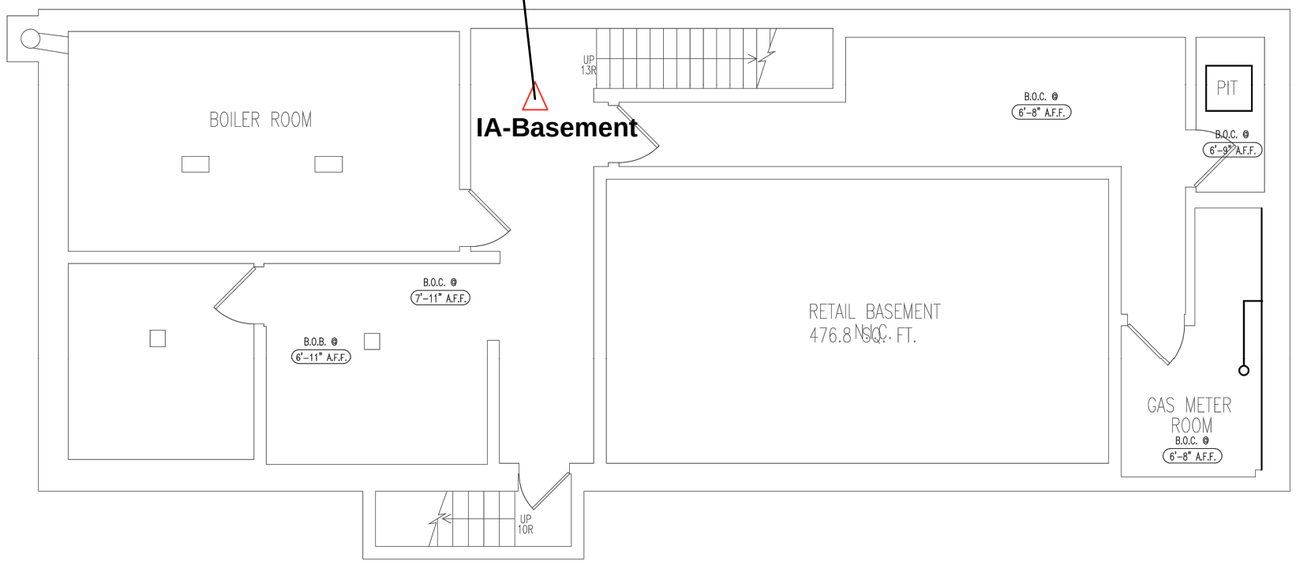
DRAWN BY: LM
CHECKED BY: CZ
DATE: December 2019
SCALE: As Noted

DRAWING TITLE: Indoor Air Samples, 3rd and 4th Floors (December 2017)
DRAWING NO.: Figure 7C

SAMPLE ID:	19P-BASEMENT	
LAB ID:	L1905848-02	
COLLECTION DATE:	2/13/2019	
Volatile Organic Compounds in Air Units: ug/m3	Conc	Q
Tetrachloroethene	82.7	
Trichloroethene	1.52	



NYSDOH AGVs	
Tetrachloroethene	30
Trichloroethene	2

Notes:
NYSDOH AGV = New York State Department of Health Air Guidance Values
NYSDOH AGV values from NYSDOH Soil Vapor Guidance, October 2006, except for the revised NYSDOH AGV for PCE from Fact Sheet: Tetrachloroethene (PERC) in Indoor & Outdoor Air, September 2013
Cells highlighted in yellow indicate concentrations above the NYSDOH AGV
RL = Reporting Limit
ND = not detected at or above the RL
Results and RL values are in micrograms per cubic meter (ug/m³)

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Pro□□1518, Dwg. □A-100.00, 6□28□15

LEGEND

△ Indoor Air Sample Location

0 4' 8' 16'
Drawing Scale

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Brooklyn, New York

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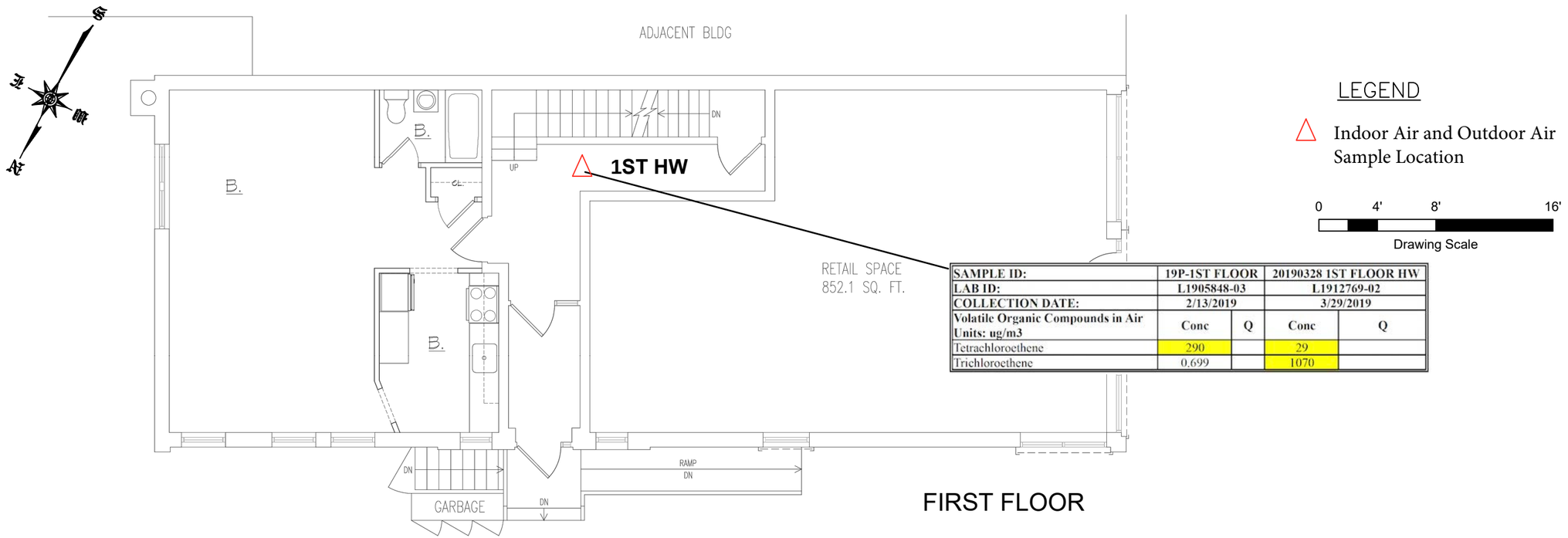
DRAWN BY	CHECKED BY	DATE	SCALE:
LM	CZ	December 2019	As Noted

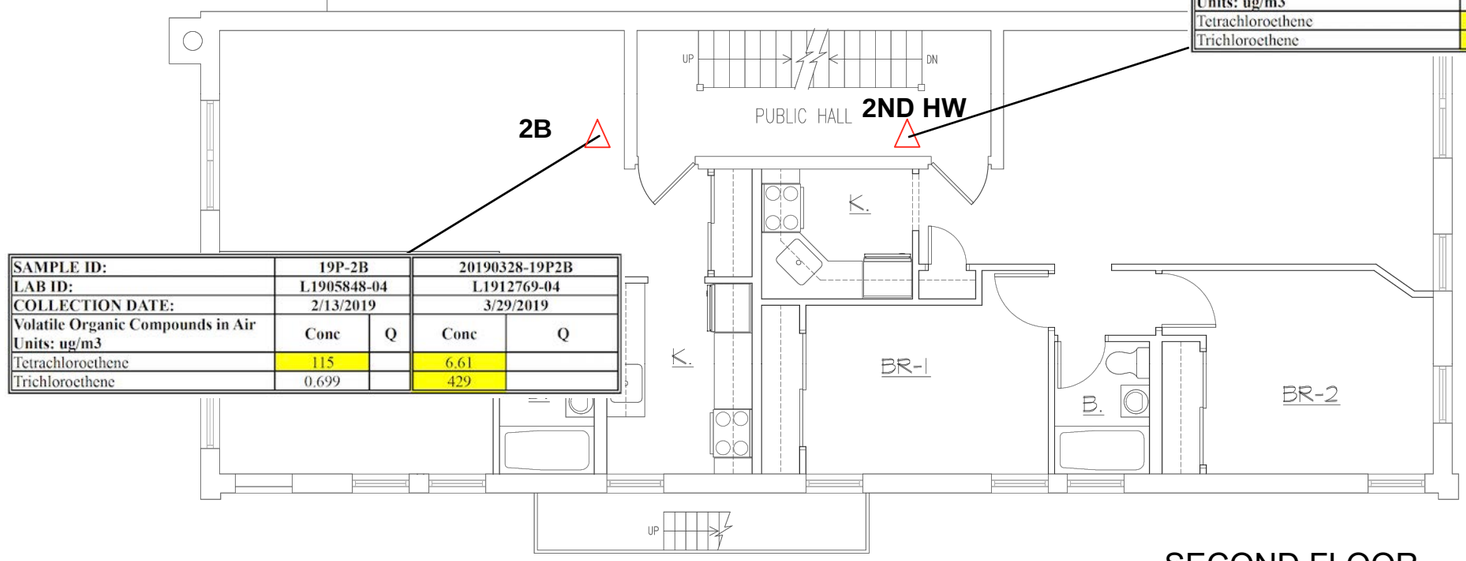
DRAWING TITLE:
Indoor Air Samples, Cellar
(February and March 2019)

DRAWING NO.
Figure 8A



FIRST FLOOR

SAMPLE ID:	19P-1ST FLOOR		20190328 1ST FLOOR HW	
LAB ID:	L1905848-03		L1912769-02	
COLLECTION DATE:	2/13/2019		3/29/2019	
Volatile Organic Compounds in Air Units: ug/m3	Conc	Q	Conc	Q
Tetrachloroethene	290		29	
Trichloroethene	0.699		1070	



SECOND FLOOR

SAMPLE ID:	20190328 2ND	
LAB ID:	L1912769-03	
COLLECTION DATE:	3/29/2019	
Volatile Organic Compounds in Air Units: ug/m3	Conc	Q
Tetrachloroethene	47.5	
Trichloroethene	1480	

SAMPLE ID:	19P-2B		20190328-19P2B	
LAB ID:	L1905848-04		L1912769-04	
COLLECTION DATE:	2/13/2019		3/29/2019	
Volatile Organic Compounds in Air Units: ug/m3	Conc	Q	Conc	Q
Tetrachloroethene	115		6.61	
Trichloroethene	0.699		429	

LEGEND

△ Indoor Air and Outdoor Air Sample Location

0 4' 8' 16'

Drawing Scale

NYSDOH AGVs	
Tetrachloroethene	30
Trichloroethene	2

Notes:

NYSDOH AGV = New York State Department of Health Air Guidance Values

NYSDOH AGV values from NYSDOH Soil Vapor Guidance, October 2006, except for the revised NYSDOH AGV for PCE from Fact Sheet: Tetrachloroethene (PERC) in Indoor & Outdoor Air, September 2013

Cells highlighted in yellow indicate concentrations above the NYSDOH AGV

RL = Reporting Limit

ND = not detected at or above the RL

Results and RL values are in micrograms per cubic meter (ug/m³)

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Pro□□1518, Dwg. □A-102.00, 6□28□15

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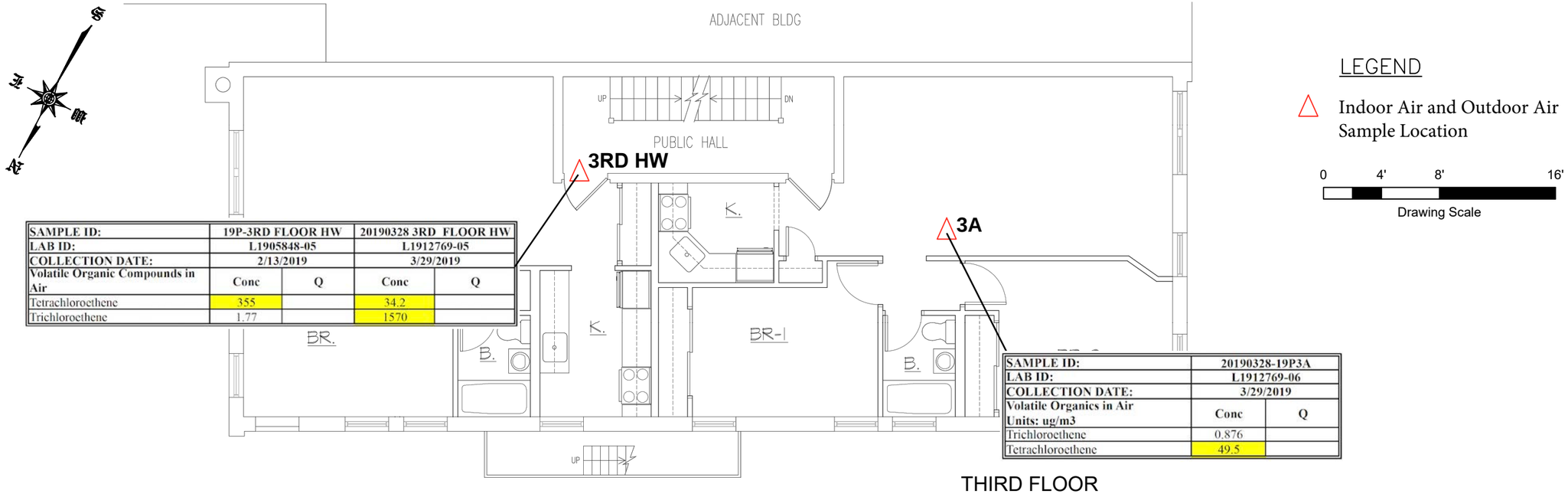
CHECKED BY: CZ
DATE: December 2019
SCALE: As Noted

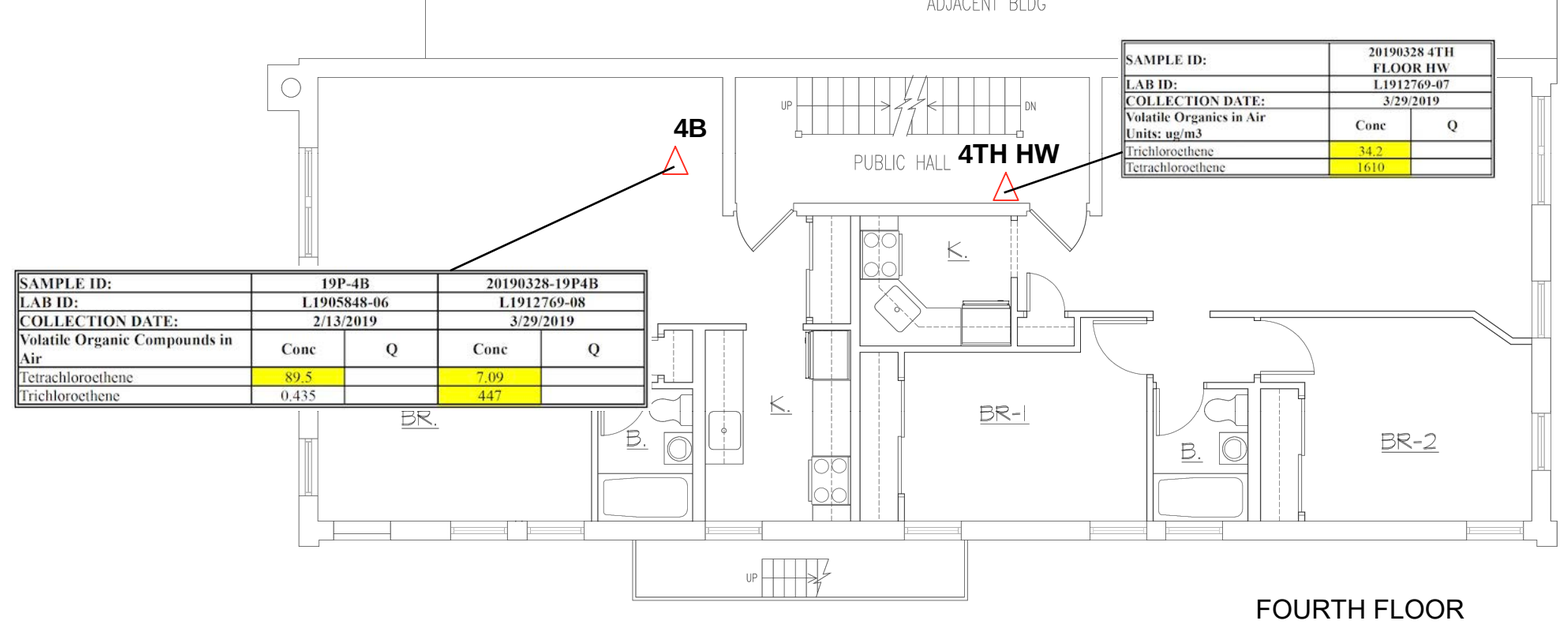
DRAWING TITLE: Indoor Air Samples, 1st and 2nd Floors (February and March 2019)
DRAWING NO.: Figure 8B



SAMPLE ID:	19P-3RD FLOOR HW		20190328 3RD_FLOOR HW	
LAB ID:	L1905848-05		L1912769-05	
COLLECTION DATE:	2/13/2019		3/29/2019	
Volatile Organic Compounds in Air	Conc	Q	Conc	Q
Tetrachloroethene	355		34.2	
Trichloroethene	1.77		1570	

SAMPLE ID:	20190328-19P3A	
LAB ID:	L1912769-06	
COLLECTION DATE:	3/29/2019	
Volatile Organics in Air Units: ug/m3	Conc	Q
Trichloroethene	0.876	
Tetrachloroethene	49.5	

THIRD FLOOR



SAMPLE ID:	20190328 4TH FLOOR HW	
LAB ID:	L1912769-07	
COLLECTION DATE:	3/29/2019	
Volatile Organics in Air Units: ug/m3	Conc	Q
Trichloroethene	34.2	
Tetrachloroethene	1610	

SAMPLE ID:	19P-4B		20190328-19P4B	
LAB ID:	L1905848-06		L1912769-08	
COLLECTION DATE:	2/13/2019		3/29/2019	
Volatile Organic Compounds in Air	Conc	Q	Conc	Q
Tetrachloroethene	89.5		7.09	
Trichloroethene	0.435		447	

FOURTH FLOOR

LEGEND

△ Indoor Air and Outdoor Air Sample Location

0 4' 8' 16'

Drawing Scale

NYSDOH AGVs	
Tetrachloroethene	30
Trichloroethene	2

Notes:

NYSDOH AGV = New York State Department of Health Air Guidance Values

NYSDOH AGV values from NYSDOH Soil Vapor Guidance, October 2006, except for the revised NYSDOH AGV for PCE from Fact Sheet: Tetrachloroethene (PERC) in Indoor & Outdoor Air, September 2013

Cells highlighted in yellow indicate concentrations above the NYSDOH AGV

RL = Reporting Limit

ND = not detected at or above the RL

Results and RL values are in micrograms per cubic meter (ug/m³)

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Pro□□1518, Dwg. □A-102.00, 6□28□15

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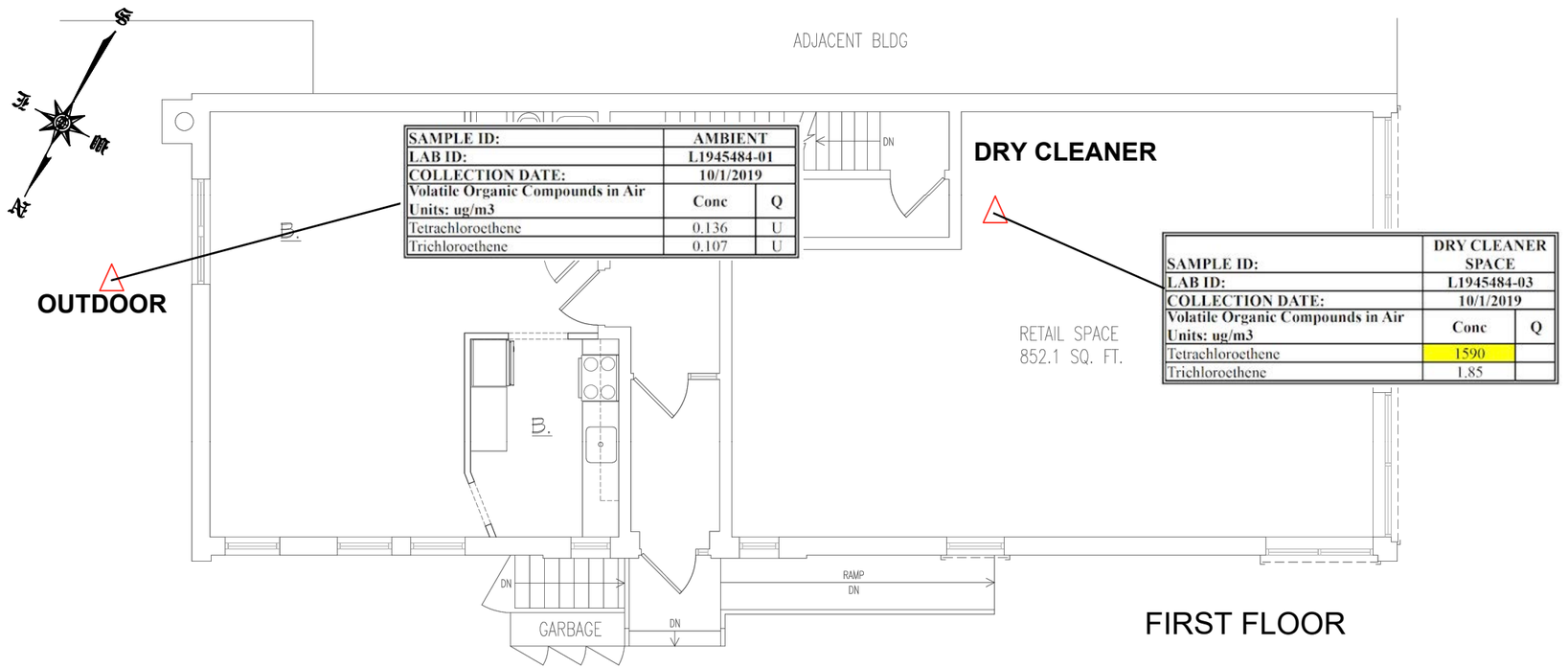
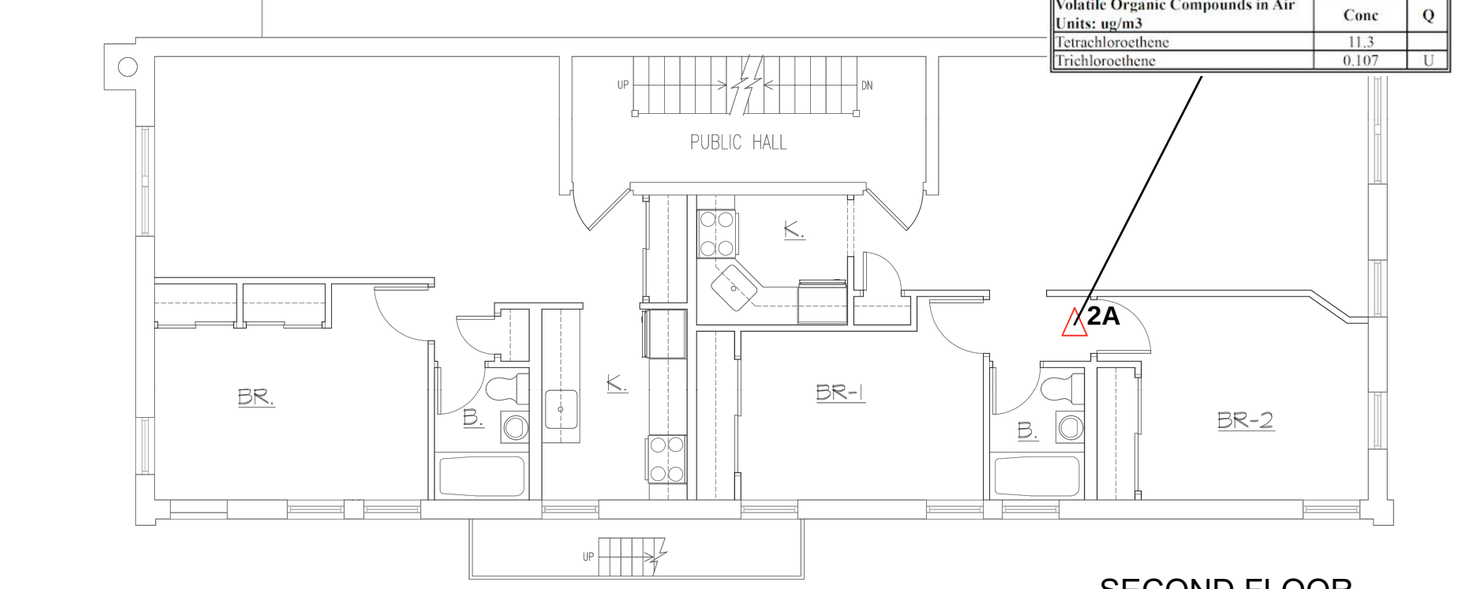
DRAWN BY	CHECKED BY	DATE	SCALE:
LM	CZ	December 2019	As Noted

DRAWING TITLE: Indoor Air Samples, 3rd and 4th Floors February and March 2019)

DRAWING NO.: Figure 8C



FIRST FLOOR



SECOND FLOOR

LEGEND

△ Indoor Air and Outdoor Air Sample Location

0 4' 8' 16'

Drawing Scale

NYSDOH AGVs	
Tetrachloroethene	30
Trichloroethene	2

Notes:

NYSDOH AGV = New York State Department of Health Air Guidance Values

NYSDOH AGV values from NYSDOH Soil Vapor Guidance, October 2006, except for the revised NYSDOH AGV for PCE from Fact Sheet: Tetrachloroethene (PERC) in Indoor & Outdoor Air,, September 2013

Cells highlighted in yellow indicate concentrations above the NYSDOH AGV

RL = Reporting Limit

ND = not detected at or above the RL

Results and RL values are in micrograms per cubic meter (ug/m³)

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
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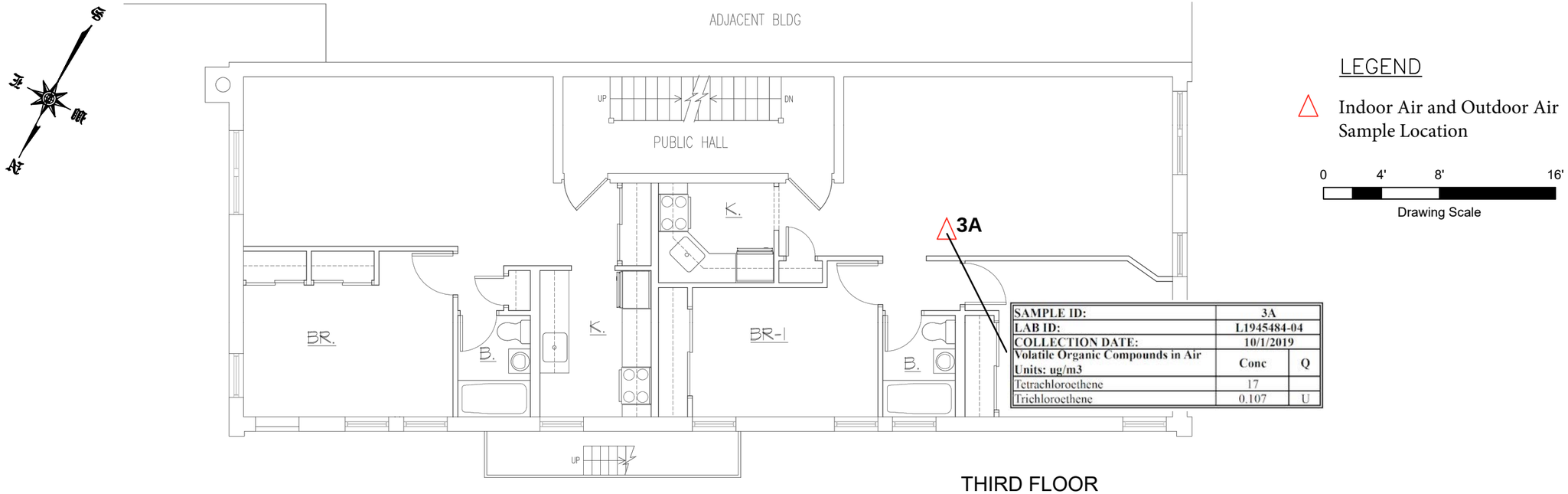
CHECKED BY: CZ
DATE: December 2019
SCALE: As Noted

DRAWING TITLE: Indoor Air Samples, 1st and 2nd Floors (October 2019)
DRAWING NO.: Figure 9A



THIRD FLOOR

SAMPLE ID:	3A	
LAB ID:	L1945484-04	
COLLECTION DATE:	10/1/2019	
Volatile Organic Compounds in Air Units: ug/m3	Conc	Q
Tetrachloroethene	17	
Trichloroethene	0.107	U

LEGEND

△ Indoor Air and Outdoor Air Sample Location

0 4' 8' 16'

Drawing Scale

NYSDOH AGVs	
Tetrachloroethene	30
Trichloroethene	2

Notes:
NYSDOH AGV = New York State Department of Health Air Guidance Values
NYSDOH AGV values from NYSDOH Soil Vapor Guidance, October 2006, except for the revised NYSDOH AGV for PCE from Fact Sheet: Tetrachloroethene (PERC) in Indoor & Outdoor Air, September 2013
Cells highlighted in yellow indicate concentrations above the NYSDOH AGV
RL = Reporting Limit
ND = not detected at or above the RL
Results and RL values are in micrograms per cubic meter (ug/m³)

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
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DRAWN BY: LM
CHECKED BY: CZ
DATE: December 2019
SCALE: As Noted

DRAWING TITLE: Indoor Air Samples, 3rd Floor (October 2019)
DRAWING NO.: Figure 9B

TABLES

Table 1 - Soil Cleanup Objectives
19 Patchen Avenue - Brooklyn, NY

From Table 375-6.8(b) or CP51 Table 1: Restricted-Residential Use and Protection of Groundwater Soil Cleanup Objectives with highlighted site-specific SCOs.

Contaminant	CAS Number	Restricted Residential
Metals		
Arsenic	7440-38-2	16[f]
Barium	7440-39-3	620
Beryllium	7440-41-7	72
Cadmium	7440-43-9	4.3
Chromium, hexavalent[h]	18540-29-9	110
Chromium, trivalent[h]	16065-83-1	180
Copper	7440-50-8	270
Total Cyanide[h]		27
Lead	7439-92-1	750
Manganese	7439-96-5	2,000[f]
Total Mercury		0.81[j]
Nickel	7440-02-0	310
Selenium	7782-49-2	180
Silver	7440-22-4	180
Zinc	7440-66-6	10,000[d]
PCBs/Pesticides		
2,4,5-TP Acid (Silvex)	93-72-1	100[a]
4,4'-DDE	72-55-9	8.9
4,4'-DDT	50-29-3	7.9
4,4'-DDD	72-54-8	13
Aldrin	309-00-2	0.097
alpha-BHC	319-84-6	0.48
beta-BHC	319-85-7	0.36
Chlordane (alpha)	5103-71-9	4.2
delta-BHC	319-86-8	100[a]
Dibenzofuran	132-64-9	59
Dieldrin	60-57-1	0.2
Endosulfan I	959-98-8	24[i]
Endosulfan II	33213-65-9	24[i]
Endosulfan sulfate	1031-07-8	24[i]
Endrin	72-20-8	11
Heptachlor	76-44-8	2.1
Lindane	58-89-9	1.3
Polychlorinated biphenyls	1336-36-3	1

Contaminant	CAS Number	Restricted Residential
Semivolatiles		
Acenaphthene	83-32-9	100[a]
Acenapthylene	208-96-8	100[a]
Anthracene	120-12-7	100[a]
Benz(a)anthracene	56-55-3	3.5
Benzo(a)pyrene	50-32-8	3.5
Benzo(b)fluoranthene	205-99-2	4.2
Benzo(g,h,i)perylene	191-24-2	100[a]
Benzo(k)fluoranthene	207-08-9	3.9
Chrysene	218-01-9	3.9
Dibenz(a,h)anthracene	53-70-3	0.48
Fluoranthene	206-44-0	100[a]
Fluorene	86-73-7	100[a]
Indeno(1,2,3-cd)pyrene	193-39-5	2.3
m-Cresol	108-39-4	100[a]
Naphthalene	91-20-3	100[a]
o-Cresol	95-48-7	100[a]
p-Cresol	106-44-5	100[a]
Pentachlorophenol	87-86-5	6.7
Phenanthrene	85-01-8	100[a]
Phenol	108-95-2	100[a]
Pyrene	129-00-0	100[a]

Contaminant	CAS Number	Restricted Residential	Protection of GW
Volatiles			
1,1,1-Trichloroethane	71-55-6	100[a]	0.68
1,1-Dichloroethane	75-34-3	26	0.27
1,1-Dichloroethene	75-35-4	100[a]	0.33
1,2-Dichlorobenzene	95-50-1	100[a]	1.1
1,2-Dichloroethane	107-06-2	3.1	0.02[f]
cis-1,2-Dichloroethene	156-59-2	100[a]	0.25
trans-1,2-Dichloroethene	156-60-5	100[a]	0.19
1,3-Dichlorobenzene	541-73-1	49	2.4
1,4-Dichlorobenzene	106-46-7	13	1.8
1,4-Dioxane	123-91-1	13	0.1[e]
Acetone	67-64-1	100[b]	0.05
Benzene	71-43-2	4.8	0.06
n-Butylbenzene	104-51-8	100[a]	12
Carbon tetrachloride	56-23-5	2.4	0.76
Chlorobenzene	108-90-7	100[a]	1.1
Chloroform	67-66-3	49	0.37
Ethylbenzene	100-41-4	41	1
Hexachlorobenzene	118-74-1	1.2	3
Methyl ethyl ketone	78-93-3	100[a]	0.12
Methyl tert-butyl ether	1634-04-4	100[a]	0.93
Methylene chloride	75-09-2	100[a]	0.05
n-Propylbenzene	103-65-1	100[a]	3.9
sec-Butylbenzene	135-98-8	100[a]	11
tert-Butylbenzene	98-06-6	100[a]	5.9
Tetrachloroethene	127-18-4	19	1.3
Toluene	108-88-3	100[a]	0.7
Trichloroethene	79-01-6	21	
1,2,4-Trimethylbenzene	95-63-6	52	3.6
1,3,5- Trimethylbenzene	108-67-8	52	8.4
Vinyl chloride	75-01-4	0.9	0.02
Xylene (mixed)	1330-20-7	100[a]	1.6

Notes:
All soil cleanup objectives (SCOs) are in parts per million (ppm). NS=Not specified.
Site-specific Track 4 SCOs are highlighted in yellow.
Protection of Groundwater SCOs are applicable to volatile organic compounds (VOCs) only.
Footnotes (designations are from Table in Part 375). See Technical Support Document (TSD).
a The SCOs for restricted-residential use were capped at a maximum value of 250 ppm.
b the SCOs for restricted-commercial use were capped at a maximum value of 500 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.
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.

Table 2 - Waste Disposal Quantities and Facility
19 Patchen Avenue - Brooklyn, NY

Date	Material	Drums (55-gal)	Total Weight (lbs)	Facility
2/19/18	Soil + Groundwater	4	2,400	Spring Grove Resource Recovery Inc. 4879 Spring Grove Avenue Cincinnati, Ohio 45232
5/10/19	Soil	1	400	

Table 3 - Soils Exceeding Restricted-Residential and Unrestricted Use SCOs After the Remedial Action
19 Patchen Avenue - Brooklyn, NY

SAMPLE ID:	NY-RESRR	NY-UNRES	19P-SB-1(0-2)	
LAB ID:			L1638738-01	
COLLECTION DATE:			11/30/2016	
Semivolatile Organic Compounds Units: mg/kg			Conc	Q
Benzo(a)anthracene	1	1	3.5	
Benzo(a)pyrene	1	1	3.3	
Benzo(b)fluoranthene	1	1	4.2	
Benzo(k)fluoranthene	3.9	0.8	1.6	
Chrysene	3.9	1	3.8	
Dibenzo(a,h)anthracene	0.33	0.33	0.48	
Indeno(1,2,3-cd)pyrene	0.5	0.5	2.3	
Total Metals				
Barium, Total	400	350	620	
Lead, Total	400	63	750	
Mercury, Total	0.81	0.18	0.38	
Zinc, Total	10000	109	700	

Notes:
NY-UNRES = New York Unrestricted use Criteria current as of 5/2007
NY-RESRR = Restricted-Residential Criteria, New York Restricted use current as of 5/2007
Cells highlighted in yellow indicate concentrations above the NY-UNRES SCO value, but below the NY-RESRR SCO
Cells highlighted in orange indicate values above the NY-RESRR SCO
SCO = Soil Cleanup Objective
Q = Laboratory Data Qualifier
For U qualified entries, the MDL is shown
U = not detected at or above the MDL
Results values are in milligrams per kilogram (mg/kg)
Soil sample depths shown in feet (ft) within sample location

Table 4 – Post-Remedial Soil Vapor and Indoor Air Concentrations
19 Patchen Avenue - Brooklyn, NY

	December 2017																				February 2019					
LOCATION	**PP-1**		**PP-2**		**PP-3**		**BASEMENT IA**		**1A**		**2A**		**2B**		**3A**		**3B**		**4A**		**4B**		**OUTDOOR AMBIENT**		**19P-BASEMENT**		**19P-1ST FLOOR**		**19P-2B**	
SAMPLING DATE	**12/20/2017**		**12/20/2017**		**12/20/2017**		**12/20/2017**		**12/20/2017**		**12/20/2017**		**12/20/2017**		**12/20/2017**		**12/20/2017**		**12/20/2017**		**12/20/2017**		**12/20/2017**		**2/13/2019**		**2/13/2019**		**2/13/2019**	
LAB SAMPLE ID	**L1747261-01**		**L1747261-02**		**L1747261-03**		**L1747350-06**		**L1747350-05**		**L1747350-04**		**L1747350-03**		**L1747350-01**		**L1747350-08**		**L1747350-09**		**L1747350-02**		**L1747350-07**		**L1905848-02**		**L1905848-03**		**L1905848-04**	
SAMPLE TYPE	**SOIL VAPOR**		**SOIL VAPOR**		**SOIL VAPOR**		**AIR**		**AIR**		**AIR**		**AIR**		**AIR**		**AIR**		**AIR**		**AIR**		**AIR**		**AIR**		**AIR**		**AIR**	
	Results	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**	**Results**	**Qual**
1,1-Dichloroethane	1.29	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
1,1-Dichloroethene	1.26	U	0.793	U	0.793	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U
1,1,1-Trichloroethane	1.74	U	1.09	U	1.09	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U
1,1,2-Trichloroethane	1.74	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U
1,1,2,2-Tetrachloroethane	2.18	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U
1,2-Dibromoethane	2.44	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U
1,2-Dichlorobenzene	1.91	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,2-Dichloroethane	1.29	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	2.61		0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
1,2-Dichloropropane	1.47	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U
1,2,4-Trichlorobenzene	2.36	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U
1,2,4-Trimethylbenzene	1.56		0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,3-Butadiene	0.704	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.772		0.442	U	0.442	U	0.442	U	0.442	U
1,3-Dichlorobenzene	1.91	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,3,5-Trimethylbenzene	1.56	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,4-Dichlorobenzene	1.91	U	1.2	U	1.2	U	1.2	U	1.56		1170		2.8		11.1		64.3		112		56.1		1.2	U	1.2	U	1.2	U	2.04	
1,4-Dioxane	1.15	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
2-Butanone	73.1		66.7		5.6		1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	3.21		1.47	U	1.47	U	1.47	U	1.47	U	1.47	U
2-Hexanone	1.3	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U
2,2,4-Trimethylpentane	4.86		0.934	U	1.03		0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U
3-Chloropropene	0.995	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U
4-Ethyltoluene	1.56	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
4-Methyl-2-pentanone	3.26	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	71.3		2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U
Acetone	28.7		11.4		28		4.25		3.47		349		29.7		494		34.4		107		53.9		4.61		2.38	U	3.37		17	
Benzene	26.9		6.04		27.6		0.639	U	0.639	U	0.68		0.728		0.639	U	0.639	U	1.5		1.15		0.639	U	0.92		0.99		1.02	
Benzyl chloride	1.65	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U
Bromodichloromethane	2.13	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U
Bromoform	3.29	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U
Bromomethane	1.23	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U
Carbon disulfide	0.99	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U
Carbon tetrachloride	2	U	1.26	U	1.26	U	0.409		0.409		0.503		0.434		0.428		0.434		0.415		0.396		0.44		0.384		0.352		0.434	
Chlorobenzene	1.46	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U
Chloroethane	0.839	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U
Chloroform	1.55	U	0.977	U	1.6		0.977	U	0.977	U	2.51		1.07		0.977	U	0.977	U	3.12		0.977	U	0.977	U	0.977	U	0.977	U	2.01	
Chloromethane	0.657	U	0.413	U	0.413	U	0.942		0.929		0.989		1.01		0.933		0.983		1.35		1.32		0.946		0.95		0.948		1.1	
cis-1,2-Dichloroethene	1.26	U	0.793	U	4.88		0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U
cis-1,3-Dichloropropene	1.44	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
Cyclohexane	1.09	U	0.688	U	0.885		0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U
Dibromochloromethane	2.71	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
Dichlorodifluoromethane	2.47		2.4		2.24		2.31		2.27		2.36		2.33		2.18		2.4		2.35		2.37		2.39		1.93		1.93		1.97	
Ethanol	137		55.2		90.6		9.42	U	10.2		1160		196		835		164		37300		1480		9.42	U	9.42	U	11.6		239	
Ethyl Acetate	2.86	U	1.8	U	1.8	U	1.8	U	1.8	U	2.4		1.8	U	1.8	U	1.8	U	7.93		1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Ethylbenzene	1.38	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U
Freon-113	2.44	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U
Freon-114	2.22	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	3.41		0.943		20.1		0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U
Hexachlorobutadiene	3.39	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U
Isopropanol	11.1		4.4		203		1.27		1.23	U	9.09		693		17.7		25.6		29		43.5		1.31		1.66		1.95		58	
Methyl tert butyl ether	1.15	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
Methylene chloride	2.76	U	1.74	U	2.12		1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U
n-Hexane	7.72		0.73		0.821		0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.821		0.705	U
o-Xylene	1.38	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U
p/m-Xylene	17		6.34		1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U
Styrene	1.35	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U
Tertiary butyl Alcohol	2.41	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	77.6		2.1		1.52	U	1.52	U	1.52	U	1.52	U
Tetrachloroethene	6.71		7.59		22		14.4		22.5		9.02		25.7		5.31		20.9		54.7		22.5		13.1		82.7		290		115	
Tetrahydrofuran	2.34	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U
Toluene	1.85		1.19		2.22		0.92		0.897		1.31		2.41		1.35		1.19		3.34		1.56		0.95		1.34		1.62		2.42	
trans-1,2-Dichloroethene	1.26	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U
trans-1,3-Dichloropropene	1.44	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
Trichloroethene	1.71	U	1.07	U	4.69		0.107	U	0.107	U	0.107	U	0.15		0.167		0.129		0.365		0.124		0.113		0.457		1.52		0.699	
Trichlorofluoromethane	1.79	U	1.34		1.35		1.2		1.19		1.71		1.31		1.28		1.31		2.65		1.35		1.27		1.12	U	1.12	U	1.12	U
Vinyl bromide	1.39	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	0.813	U	0.511	U	0.511	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U

Notes:
RL = Reporting Limit
Q = Laboratory Data Qualifier
For U qualified entries, the RL is shown
U = not detected at or above the RL
Results and RL values are in micrograms per cubic meter (ug/m3)

Table 4 – Post-Remedial Soil Vapor and Indoor Air Concentrations
19 Patchen Avenue - Brooklyn, NY

	February 2019, continued						March 2019														October 2019							
LOCATION	19P-3RD FLOOR HW		19P-4B		AMBIENT 20190212		20190328 1ST FLOOR HW		20190328 2ND FLOOR HW		20190328 2ND FLOOR HW		20190328 3RD FLOOR HW		20190328 3RD FLOOR HW		20190328 4TH FLOOR HW		20190328 4TH FLOOR HW		20190328 AMBIENT		2A		3A		DRY CLEANER SPACE		AMBIENT
SAMPLING DATE	2/13/2019		2/13/2019		2/13/2019		3/29/2019		3/29/2019		3/29/2019		3/29/2019		3/29/2019		3/29/2019		3/29/2019		3/29/2019		10/1/2019		10/1/2019		10/1/2019		10/1/2019
LAB SAMPLE ID	L1905848-05		L1905848-06		L1905848-01		L1912769-02		L1912769-03		L1912769-04		L1912769-05		L1912769-06		L1912769-07		L1912769-08		L1912769-01		L1945484-02		L1945484-04		L1945484-03		L1945484-01
SAMPLE TYPE	AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR		AIR
	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
1,1-Dichloroethane	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
1,1-Dichloroethene	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U
1,1,1-Trichloroethane	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U	0.109	U
1,1,2-Trichloroethane	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U	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	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U
1,2-Dibromoethane	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U
1,2-Dichlorobenzene	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,2-Dichloroethane	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U	1.51		0.809	U	0.809	U	0.809	U	0.809	U	2.47		0.809	U	0.809	U
1,2-Dichloropropane	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U
1,2,4-Trichlorobenzene	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U
1,2,4-Trimethylbenzene	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,3-Butadiene	0.442	U	2.26		0.442	U	0.442	U	0.442	U	0.442	U	0.442	U	0.604		0.442	U	1.29		0.442	U	0.442	U	0.442	U	0.442	U	0.442	U
1,3-Dichlorobenzene	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,3,5-Trimethylbenzene	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,4-Dichlorobenzene	84.2		10.9		1.2	U	2.7		25.7		21.6		90.8		7.27		70.9		24.4		1.2	U	66.7		2.2		3.01		1.2	U
1,4-Dioxane	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
2-Butanone	1.47	U	2.7		1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.93		1.47	U	1.68		1.47	U	1.47	U	1.47	U	1.47	U	1.47	U
2-Hexanone	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U
2,2,4-Trimethylpentane	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U
3-Chloropropene	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U
4-Ethyltoluene	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
4-Methyl-2-pentanone	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U
Acetone	52.7		37.3		2.38	U	7.06		21.5		25.2		43.7		24.7		40.9		30.2		3.4		13		24.9		6.53		3.87	
Benzene	1.09		2.91		0.853		0.719		0.744		0.744		0.741		1.1		0.818		1.65		0.639	U	0.639	U	1.07		0.639	U	0.639	U
Benzyl chloride	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U	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	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U	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	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U	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	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U
Carbon disulfide	0.623	U	0.623	U	0.623	U	0.623	U	0.626		0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U
Carbon tetrachloride	0.396		0.346		0.34		0.528		0.572		0.51		0.522		0.554		0.585		0.51		0.541		0.447		0.44		0.484		0.44	
Chlorobenzene	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U
Chloroethane	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U
Chloroform	0.977	U	1.11		0.977	U	0.977	U	0.977	U	1.89		0.977	U	0.977	U	0.977	U	0.977	U	0.977	U	1.11		0.977	U	0.977	U	0.977	U
Chloromethane	1.14		2.62		0.95		1.19		1.21		1.36		1.32		1.8		1.32		2.23		1.11		1.17		1.9		1.06		1	
cis-1,2-Dichloroethene	0.079	U	0.079	U	0.079	U	0.079	U	0.099		0.079	U	0.079	U	0.079	U	0.083		0.079	U	0.079	U	0.079	U	0.079	U	0.079	U	0.079	U
cis-1,3-Dichloropropene	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
Cyclohexane	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U
Dibromochloromethane	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
Dichlorodifluoromethane	2		1.95		1.94		2.36		3.31		2.45		3.06		2.23		3.42		2.65		2.22		1.95		1.9		1.97		1.92	
Ethanol	168		837		9.42	U	65		162		122		341		594		330		803		10.4		648		155		83.1		10.2	
Ethyl Acetate	1.8	U	4.4		1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	3.82		1.8	U	27.2		1.8	U	1.8	U	1.8	U
Ethylbenzene	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U
Freon-113	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U	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	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U
Hexachlorobutadiene	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U
Isopropanol	6.39		256		1.23	U	2.97		5.7		54.6		10.5		23.3		14.2		12.4		1.5		4.84		16.8		4.03		1.35	
Methyl tert butyl ether	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
Methylene chloride	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	3.72		25.2		3.34		1.74	U	1.74	U	1.74	U	4.55		1.74	U	1.74	U
n-Hexane	2.83		0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.906		0.705	U
o-Xylene	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U
p/m-Xylene	1.74	U	2.22		1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U	1.9		1.74	U	1.74	U	1.74	U	1.74	U	1.74	U
Styrene	0.852	U	0.852		0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U	0.852	U
Tertiary butyl Alcohol	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U
Tetrachloroethene	-	-	89.5		0.427		1070		1480		-	-	1570		49.5		1610		-	-	0.231		11.3		17		1590		0.136	U
Tetrahydrofuran	1.54		1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U	1.47	U
Toluene	1.99		5.01		0.916		7.84		6.48		3		5.2		3.31		5.65		4.11		0.754	U	1.24		2.77		1.82		0.754	U
trans-1,2-Dichloroethene	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U	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	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
Trichloroethene	1.77		0.435		0.107	U	29		47.5		6.61		34.2		0.876		34.2		7.09		0.107	U	0.107	U	0.107	U	1.85		0.107	U
Trichlorofluoromethane	1.12	U	1.12	U	1.12	U	1.26		1.2		1.12	U	1.2		1.13		1.15		1.17		1.12	U	1.12	U	1.12	U	1.12	U	1.12	U
Vinyl bromide	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U	0.051	U

Notes:
RL = Reporting Limit
Q = Laboratory Data Qualifier
For U qualified entries, the RL is shown
U = not detected at or above the RL
Results and RL values are in micrograms per cubic meter (ug/m3)

Table 5 – Groundwater Exceeding Class GA AWQS
19 Patchen Avenue - Brooklyn, NY

SAMPLE ID:	NY-AWQS	MW-1		MW-1	
LAB ID:		L1639693-03		L1837978-02	
COLLECTION DATE:		12/7/2016		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	18		12	

SAMPLE ID:	NY-AWQS	MW-1D		MW-1D-DUP		MW-1-D	
LAB ID:		L1639693-04		L1639693-05		L1837978-01	
COLLECTION DATE:		12/7/2016		12/7/2016		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q	Conc	Q
Tetrachloroethene	5	0.4	J	0.3	J	0.18	U
2-Butanone	50	51		49		1.9	U

SAMPLE ID:	NY-AWQS	MW-2		MW-2	
LAB ID:		L1639693-02		L1837978-03	
COLLECTION DATE:		12/7/2016		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	19		12	

SAMPLE ID:	NY-AWQS	19P-MW-3		MW-3	
LAB ID:		L1714748-01		L1837978-08	
COLLECTION DATE:		5/8/2017		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	0.7	U	72	
2-Butanone	50	13		1.9	U

SAMPLE ID:	NY-AWQS	MW-4		MW-4		MW-4 DUP	
LAB ID:		L1639548-03		L1837978-04		L1837978-05	
COLLECTION DATE:		12/6/2016		9/21/2018		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q	Conc	Q
Chloroform	7	6.4		8.6		7.4	
Tetrachloroethene	5	26		23		19	

SAMPLE ID:	NY-AWQS	MW-5		MW-5	
LAB ID:		L1639548-02		L1837978-06	
COLLECTION DATE:		12/6/16		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	24		10	

SAMPLE ID:	NY-AWQS	MW-6		MW-6	
LAB ID:		L1639548-01		L1837978-07	
COLLECTION DATE:		12/6/2016		9/21/2018	
Volatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q
Tetrachloroethene	5	12		12	

*NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.
Cells highlighted in yellow indicate concentrations above the NY-AWQS
DUP = designation for duplicate sample
RL = Reporting limit
Q = Laboratory Data Qualifier
For U qualified entries, the MDL is shown
U = not detected at or above the MDL
For J qualified entries, the estimated concentration is shown
J = estimated value, indicating the detected value is below the RL, but above the MDL
Results are in micrograms per liter (µg/L)

Table 6 - Emerging Contaminant Sampling Results
19 Patchen Avenue - Brooklyn, NY

SAMPLE ID:	EPA-DWHS	EPA-10-6 Cancer Reference Concentration	MW-1-D		MW-1		MW-2		MW-4		MW-4 DUP		MW-5		MW-6		MW-3		FIELD BLANK	
LAB ID:			L1837978-01		L1837978-02		L1837978-03		L1837978-04		L1837978-05		L1837978-06		L1837978-07		L1837978-08		L1837978-09	
COLLECTION DATE:			9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018	
1,4 DIOXANE BY 8270D-SIM Units: ug/l			Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,4-Dioxane	--	0.35	0.0735	U	0.0708	U	0.0735	U	0.0765	U	0.0735	U	0.0735	U	0.075	U	0.0694	U	-	-
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION																				
Perfluorobutanoic Acid (PFBA)	0.07	--	0.00567		0.00613		0.00776		0.00524		0.00464		0.00602		0.00863		0.00383		0.000127	U
Perfluoropentanoic Acid (PFPeA)	0.07	--	0.0102		0.0127		0.0242		0.00759		0.00696		0.00623		0.015		0.00652		0.000083	U
Perfluorobutanesulfonic Acid (PFBS)	0.07	--	0.00342		0.00333		0.00344		0.00261		0.00229		0.0035		0.00304		0.00142	J	0.000106	U
Perfluorohexanoic Acid (PFHxA)	0.07	--	0.0104		0.00957		0.016		0.00672		0.00655		0.00577		0.0125		0.00465		0.000122	U
Perfluoroheptanoic Acid (PFHpA)	0.07	--	0.0106		0.00763		0.0153		0.00548		0.00456		0.00653		0.012		0.00222		0.000089	U
Perfluorohexanesulfonic Acid (PFHxS)	0.07	--	0.00671		0.00433		0.00596		0.00225		0.00252		0.00312		0.00451		0.00097	J	0.000104	U
Perfluorooctanoic Acid (PFOA)	0.07	--	0.0457		0.0396		0.0804		0.041		0.039		0.061		0.0575		0.00762		0.000049	U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.07	--	0.0191		0.00018	U	0.000176	U	0.0103		0.012		0.00515		0.0066		0.00018	U	0.000187	U
Perfluoroheptanesulfonic Acid (PFHpS)	0.07	--	0.000144	U	0.000144	U	0.000141	U	0.000145	U	0.000476	J	0.000145	U	0.00014	U	0.000144	U	0.00015	U
Perfluorononanoic Acid (PFNA)	0.07	--	0.000093	U	0.00162	J	0.00144	J	0.000739	J	0.000816	J	0.000094	U	0.000848	J	0.00222		0.000097	U
Perfluorooctanesulfonic Acid (PFOS)	0.07	--	0.00455		0.0225		0.0418		0.0154		0.0151		0.011		0.0302		0.0171		0.00134	J
Perfluorodecanoic Acid (PFDA)	0.07	--	0.000176	U	0.000176	U	0.000173	U	0.000178	U	0.000178	U	0.000178	U	0.000172	U	0.000177	U	0.000184	U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	0.07	--	0.000269	U	0.000269	U	0.000264	U	0.000271	U	0.000272	U	0.000272	U	0.000263	U	0.00027	U	0.000281	U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.07	--	0.000232	U	0.000232	U	0.000228	U	0.00138	J	0.000234	U	0.000234	U	0.000227	U	0.000233	U	0.000242	U
Perfluoroundecanoic Acid (PFUnA)	0.07	--	0.000177	U	0.000177	U	0.000174	U	0.000178	U	0.000179	U	0.000179	U	0.000173	U	0.000178	U	0.000184	U
Perfluorodecanesulfonic Acid (PFDS)	0.07	--	0.000206	U	0.000206	U	0.000202	U	0.000207	U	0.000208	U	0.000208	U	0.000201	U	0.000207	U	0.000215	U
Perfluorooctanesulfonamide (FOSA)	0.07	--	0.00021	U	0.00021	U	0.000206	U	0.000212	U	0.000212	U	0.000212	U	0.000205	U	0.000211	U	0.000219	U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.07	--	0.000345	U	0.000345	U	0.000339	U	0.000348	U	0.000349	U	0.000349	U	0.000338	U	0.000346	U	0.00036	U
Perfluorododecanoic Acid (PFDoA)	0.07	--	0.000085	U	0.000085	U	0.000083	U	0.000085	U	0.000086	U	0.000086	U	0.000083	U	0.000085	U	0.000088	U
Perfluorotridecanoic Acid (PFTrDA)	0.07	--	0.000084	U	0.000084	U	0.000082	U	0.000084	U	0.000085	U	0.000085	U	0.000082	U	0.000084	U	0.000087	U
Perfluorotetradecanoic Acid (PFTA)	0.07	--	0.000067	U	0.000067	U	0.000065	U	0.000067	U	0.000067	U	0.000067	U	0.000065	U	0.000067	U	0.00007	U

Notes:
EPA-DWHS - EPA Drinking Water Health Advisory
Q - Laboratory Qualifier
J - Estimated Value
U - the MDL is shown
MDL - Method of Detection Limit
ug/l - Micrograms per liter

Table 7 – Investigation Derived Waste (IDW) Characterization Data for Disposal
19 Patchen Avenue - Brooklyn, NY

LOCATION		19PWC-1		DRUM	
SAMPLING DATE		12/7/2017		4/16/2019	
LAB SAMPLE ID		L1745037-01		L1915442-01	
SAMPLE TYPE		SOIL		SOIL	
	Units	Results	Qual	Results	Qual
General Chemistry					
Solids, Total	%	83.3		88.5	
pH (H)	SU	7.3		-	-
Cyanide, Reactive	mg/kg	10	U	-	-
Sulfide, Reactive	mg/kg	10	U	-	-
Ignitability of Solids					
Ignitability		NI	U	-	-
Extractable Petroleum Hydrocarbons					
Total EPH	mg/kg	290		-	-
Semivolatile Organics					
Acenaphthene	mg/kg	-	-	0.092	J
1,2,4-Trichlorobenzene	mg/kg	-	-	0.18	U
Hexachlorobenzene	mg/kg	-	-	0.11	U
Bis(2-chloroethyl)ether	mg/kg	-	-	0.17	U
2-Chloronaphthalene	mg/kg	-	-	0.18	U
1,2-Dichlorobenzene	mg/kg	-	-	0.18	U
1,3-Dichlorobenzene	mg/kg	-	-	0.18	U
1,4-Dichlorobenzene	mg/kg	-	-	0.18	U
3,3'-Dichlorobenzidine	mg/kg	-	-	0.18	U
2,4-Dinitrotoluene	mg/kg	-	-	0.18	U
2,6-Dinitrotoluene	mg/kg	-	-	0.18	U
Fluoranthene	mg/kg	-	-	2.5	
4-Chlorophenyl phenyl ether	mg/kg	-	-	0.18	U
4-Bromophenyl phenyl ether	mg/kg	-	-	0.18	U
Bis(2-chloroisopropyl)ether	mg/kg	-	-	0.22	U
Bis(2-chloroethoxy)methane	mg/kg	-	-	0.2	U
Hexachlorobutadiene	mg/kg	-	-	0.18	U
Hexachlorocyclopentadiene	mg/kg	-	-	0.53	U
Hexachloroethane	mg/kg	-	-	0.15	U
Isophorone	mg/kg	-	-	0.17	U
Naphthalene	mg/kg	-	-	0.047	J
Nitrobenzene	mg/kg	-	-	0.17	U
NDPA/DPA	mg/kg	-	-	0.15	U
n-Nitrosodi-n-propylamine	mg/kg	-	-	0.18	U
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	0.18	U
Butyl benzyl phthalate	mg/kg	-	-	0.18	U
Di-n-butylphthalate	mg/kg	-	-	0.18	U
Di-n-octylphthalate	mg/kg	-	-	0.18	U
Diethyl phthalate	mg/kg	-	-	0.18	U
Dimethyl phthalate	mg/kg	-	-	0.18	U
Benzo(a)anthracene	mg/kg	-	-	1.4	
Benzo(a)pyrene	mg/kg	-	-	1.2	
Benzo(b)fluoranthene	mg/kg	-	-	1.7	
Benzo(k)fluoranthene	mg/kg	-	-	0.5	
Chrysene	mg/kg	-	-	1.5	
Acenaphthylene	mg/kg	-	-	0.14	J
Anthracene	mg/kg	-	-	0.25	
Benzo(ghi)perylene	mg/kg	-	-	0.69	
Fluorene	mg/kg	-	-	0.099	J
Phenanthrene	mg/kg	-	-	1.6	
Dibenzo(a,h)anthracene	mg/kg	-	-	0.16	
Indeno(1,2,3-cd)pyrene	mg/kg	-	-	0.73	
Pyrene	mg/kg	-	-	2.3	
Biphenyl	mg/kg	-	-	0.42	U
4-Chloroaniline	mg/kg	-	-	0.18	U
2-Nitroaniline	mg/kg	-	-	0.18	U
3-Nitroaniline	mg/kg	-	-	0.18	U
4-Nitroaniline	mg/kg	-	-	0.18	U
Dibenzofuran	mg/kg	-	-	0.059	J
2-Methylnaphthalene	mg/kg	-	-	0.024	J
1,2,4,5-Tetrachlorobenzene	mg/kg	-	-	0.18	U
Acetophenone	mg/kg	-	-	0.18	U
2,4,6-Trichlorophenol	mg/kg	-	-	0.11	U
p-Chloro-m-cresol	mg/kg	-	-	0.18	U
2-Chlorophenol	mg/kg	-	-	0.18	U
2,4-Dichlorophenol	mg/kg	-	-	0.17	U
2,4-Dimethylphenol	mg/kg	-	-	0.18	U
2-Nitrophenol	mg/kg	-	-	0.4	U
4-Nitrophenol	mg/kg	-	-	0.26	U
2,4-Dinitrophenol	mg/kg	-	-	0.89	U
4,6-Dinitro-o-cresol	mg/kg	-	-	0.48	U
Pentachlorophenol	mg/kg	-	-	0.15	U
Phenol	mg/kg	-	-	0.18	U
2-Methylphenol	mg/kg	-	-	0.18	U
3-Methylphenol/4-Methylphenol	mg/kg	-	-	0.27	U
2,4,5-Trichlorophenol	mg/kg	-	-	0.18	U
Benzoic Acid	mg/kg	-	-	0.6	U
Benzyl Alcohol	mg/kg	-	-	0.18	U
Carbazole	mg/kg	-	-	0.17	J
TCLP Metals					
Arsenic, TCLP	mg/l	1	U	-	-
Barium, TCLP	mg/l	1.04		-	-
Cadmium, TCLP	mg/l	0.1	U	-	-
Chromium, TCLP	mg/l	0.2	U	-	-
Lead, TCLP	mg/l	0.104	J	-	-
Mercury, TCLP	mg/l	0.001	U	-	-
Selenium, TCLP	mg/l	0.5	U	-	-
Silver, TCLP	mg/l	0.1	U	-	-
Total Metals					
Arsenic, Total	mg/kg	-	-	4.42	
Barium, Total	mg/kg	-	-	156	
Cadmium, Total	mg/kg	-	-	0.264	J
Chromium, Total	mg/kg	-	-	10.4	

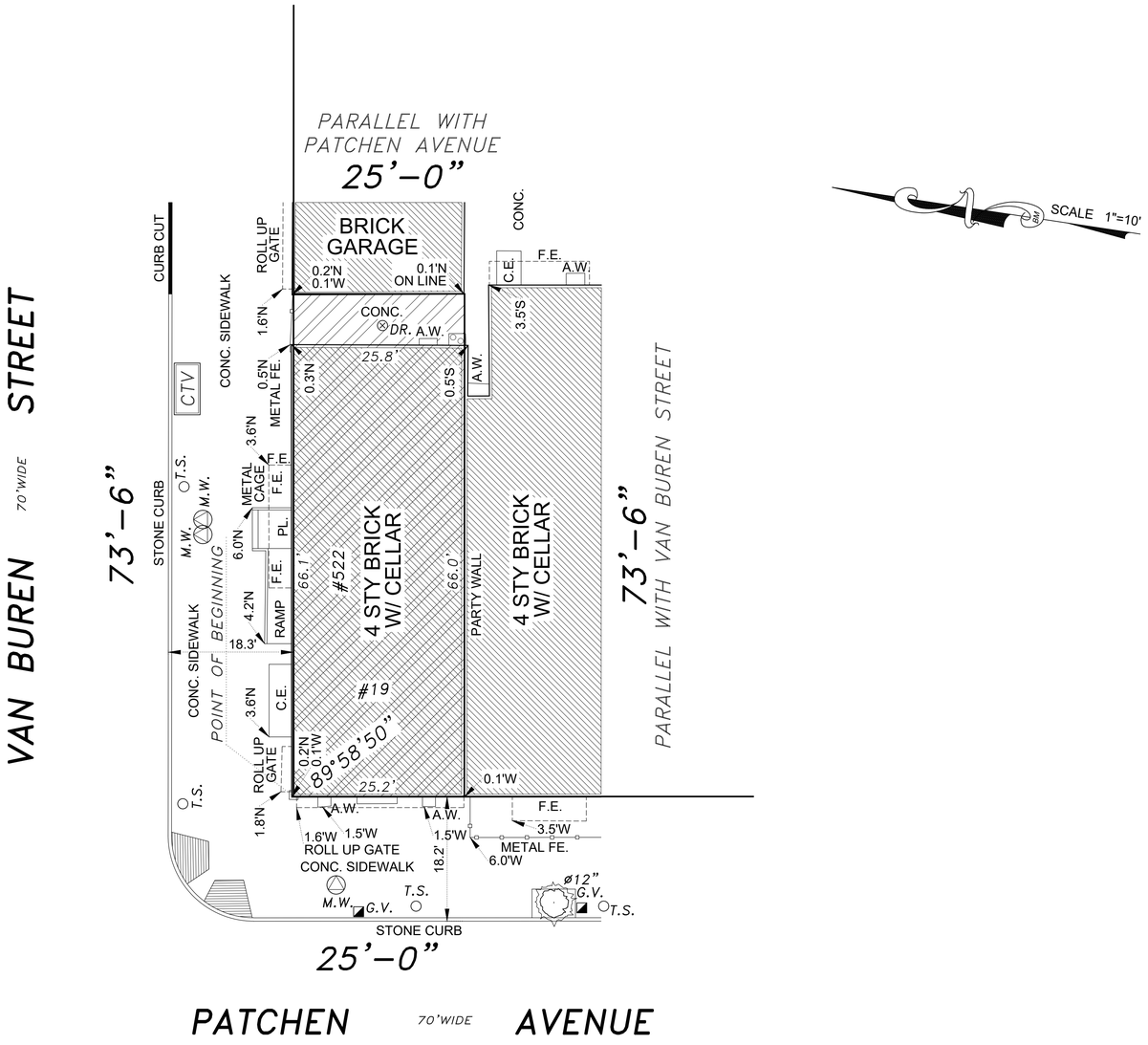
Table 7 – Investigation Derived Waste (IDW) Characterization Data for Disposal
19 Patchen Avenue - Brooklyn, NY

Lead, Total	mg/kg	-	-	275	
Mercury, Total	mg/kg	-	-	0.243	
Selenium, Total	mg/kg	-	-	0.556	J
Silver, Total	mg/kg	-	-	0.448	U
Volatile Organics					
Methylene chloride	mg/kg	-	-	0.0061	U
1,1-Dichloroethane	mg/kg	-	-	0.0012	U
Chloroform	mg/kg	-	-	0.0018	U
Carbon tetrachloride	mg/kg	-	-	0.0012	U
1,2-Dichloropropane	mg/kg	-	-	0.0012	U
Dibromochloromethane	mg/kg	-	-	0.0012	U
1,1,2-Trichloroethane	mg/kg	-	-	0.0012	U
Tetrachloroethene	mg/kg	-	-	0.00093	
Chlorobenzene	mg/kg	-	-	0.00061	U
Trichlorofluoromethane	mg/kg	-	-	0.0049	U
1,2-Dichloroethane	mg/kg	-	-	0.0012	U
1,1,1-Trichloroethane	mg/kg	-	-	0.00061	U
Bromodichloromethane	mg/kg	-	-	0.00061	U
trans-1,3-Dichloropropene	mg/kg	-	-	0.0012	U
cis-1,3-Dichloropropene	mg/kg	-	-	0.00061	U
1,3-Dichloropropene, Total	mg/kg	-	-	0.00061	U
1,1-Dichloropropene	mg/kg	-	-	0.00061	U
Bromoform	mg/kg	-	-	0.0049	U
1,1,2,2-Tetrachloroethane	mg/kg	-	-	0.00061	U
Benzene	mg/kg	-	-	0.00061	U
Toluene	mg/kg	-	-	0.0012	U
Ethylbenzene	mg/kg	-	-	0.0012	U
Chloromethane	mg/kg	-	-	0.0049	U
Bromomethane	mg/kg	-	-	0.0024	U
Vinyl chloride	mg/kg	-	-	0.0012	U
Chloroethane	mg/kg	-	-	0.0024	U
1,1-Dichloroethene	mg/kg	-	-	0.0012	U
trans-1,2-Dichloroethene	mg/kg	-	-	0.0018	U
Trichloroethene	mg/kg	-	-	0.00061	U
1,2-Dichlorobenzene	mg/kg	-	-	0.0024	U
1,3-Dichlorobenzene	mg/kg	-	-	0.0024	U
1,4-Dichlorobenzene	mg/kg	-	-	0.0024	U
Methyl tert butyl ether	mg/kg	-	-	0.0024	U
p/m-Xylene	mg/kg	-	-	0.0024	U
o-Xylene	mg/kg	-	-	0.0012	U
Xylenes, Total	mg/kg	-	-	0.0012	U
cis-1,2-Dichloroethene	mg/kg	-	-	0.0012	U
1,2-Dichloroethene, Total	mg/kg	-	-	0.0012	U
Dibromomethane	mg/kg	-	-	0.0024	U
Styrene	mg/kg	-	-	0.0012	U
Dichlorodifluoromethane	mg/kg	-	-	0.012	U
Acetone	mg/kg	-	-	0.0058	J
Carbon disulfide	mg/kg	-	-	0.012	U
2-Butanone	mg/kg	-	-	0.012	U
Vinyl acetate	mg/kg	-	-	0.012	U
4-Methyl-2-pentanone	mg/kg	-	-	0.012	U
1,2,3-Trichloropropane	mg/kg	-	-	0.0024	U
2-Hexanone	mg/kg	-	-	0.012	U
Bromochloromethane	mg/kg	-	-	0.0024	U
2,2-Dichloropropane	mg/kg	-	-	0.0024	U
1,2-Dibromoethane	mg/kg	-	-	0.0012	U
1,3-Dichloropropane	mg/kg	-	-	0.0024	U
1,1,1,2-Tetrachloroethane	mg/kg	-	-	0.00061	U
Bromobenzene	mg/kg	-	-	0.0024	U
n-Butylbenzene	mg/kg	-	-	0.0012	U
sec-Butylbenzene	mg/kg	-	-	0.0012	U
tert-Butylbenzene	mg/kg	-	-	0.0024	U
o-Chlorotoluene	mg/kg	-	-	0.0024	U
p-Chlorotoluene	mg/kg	-	-	0.0024	U
1,2-Dibromo-3-chloropropane	mg/kg	-	-	0.0036	U
Hexachlorobutadiene	mg/kg	-	-	0.0049	U
Isopropylbenzene	mg/kg	-	-	0.0012	U
p-Isopropyltoluene	mg/kg	-	-	0.0012	U
Naphthalene	mg/kg	-	-	0.0049	U
Acrylonitrile	mg/kg	-	-	0.0049	U
n-Propylbenzene	mg/kg	-	-	0.0012	U
1,2,3-Trichlorobenzene	mg/kg	-	-	0.0024	U
1,2,4-Trichlorobenzene	mg/kg	-	-	0.0024	U
1,3,5-Trimethylbenzene	mg/kg	-	-	0.0024	U
1,2,4-Trimethylbenzene	mg/kg	-	-	0.0024	U
1,4-Dioxane	mg/kg	-	-	0.097	U
p-Diethylbenzene	mg/kg	-	-	0.0024	U
p-Ethyltoluene	mg/kg	-	-	0.0024	U
1,2,4,5-Tetramethylbenzene	mg/kg	-	-	0.0024	U
Ethyl ether	mg/kg	-	-	0.0024	U
trans-1,4-Dichloro-2-butene	mg/kg	-	-	0.0061	U

Notes:
TCLP = Toxicity Characteristic Leachate Procedure
MDL = Maximum Detection Limit
Qual = Laboratory Data Qualifier
For U qualified entries, the MDL is shown
U = not detected at or above the MDL
For J qualified entries, the estimated concentration is shown
J = estimated value, indicating the detected value is below the RL, but above the MDL
Results and MDL values are in milligrams per liter (mg/l)
-- = No standard
SU = Standard Units
mg/kg = milligrams per kilogram
NI = Not Igntable

APPENDIX A – Survey Map, Metes and Bounds

JOB NO. B 1618-8-EN
SURVEYED ON: MAY 18, 2018



SCALE 1"=10'

SYMBOLS AND ABBREVIATIONS

FENCE	CH.-LK. FE. / WOOD FE.
UTILITY POLE	U.P.
PARKING METER	P.M.
OIL FILL	O.F.
MONITORING WELL	M.W.
TRAFFIC LIGHT	T.L.
LIGHT	
STREET LIGHT	L.P. / L.P.
FIRE HYDRANT	HYD.
SIAMESE CONNECTION	SPR.
SHUT OFF VALVE	G.V. / G.V. / W.V. / W.V.
HANDICAPPED PARKING	
EXISTING TREE	ø12"
DRAINS	DR. / DR.
ROOF OVER	R.O.
EXISTING ELEVATIONS	×43.15 TOP OF CURB ×42.93 BOTTOM OF CURB / ×43.78
CITY ESTABLISHED GRADES	L.G.7.52
CURB AND CURB CUT	CURB CUT
OVERHEAD SERVICE	OH.S.W.
CABLE TV MANHOLE	CTV
MANHOLES	M / E / T / W / S — RIM EL. INV.EL.
CATCH BASIN	C.B. / C.B.
FIRE ESCAPE	F.E.
PLATFORM	PL. or PLTF.
BASEMENT ENTRANCE	B.E.
CELLAR ENTRANCE	C.E.
AIR WAY	A.W.
BAY WINDOW	B.W.
CONCRETE	CONC.
OVERHANG	O.H.
AIR CONDITION	AC
METAL	MET.
NORTH OF PROPERTY LINE	N
SOUTH OF PROPERTY LINE	S
EAST OF PROPERTY LINE	E
WEST OF PROPERTY LINE	W

GENERAL NOTES

SUBSURFACE UTILITIES ARE NOT GUARANTEED BY SURVEYOR. HIGH CAUTION RECOMMENDED AND VERIFICATION WITH PROPER CITY AGENCIES, IS MANDATORY BEFORE COMMENCING ALL NEW WORK.

ALL SUBSURFACE AND OVERHEAD UTILITIES (AS TO SIZE , TYPE AND DEPTH) SHOWN ON THIS SURVEY ARE TAKEN FROM RECORDS OF GOVERNMENTAL AGENCIES AND UTILITY COMPANIES, UNLESS OTHERWISE NOTED AND SHOWN.

COVER OR DEPTH OF UTILITIES WHICH DERIVED FROM FIELD MEASUREMENTS SHOWN ON THIS SURVEY SHOULD BE VERIFIED WITH PROPER AGENCY PRIOR TO CONSTRUCTION OF PROJECT. INVERT ELEVATIONS ARE DERIVED FROM CITY AGENCY RECORDS WHEN NOT AVAILABLE BY FIELD SURVEY AND NOTED AS "PER RECORD" ON THE SURVEY.

ALL SUBSURFACE UTILITY AS TO LOCATION AND DEPTH, SHOULD BE RECHECKED AND LEGAL GRADES SHOULD BE VERIFIED WITH THE TOPOGRAPHICAL BUREAU, PREFERABLY IN WRITING BEFORE COMMENCING CONSTRUCTION.

THIS IS TO CERTIFY THAT THERE ARE NO STREAMS OR NATURAL WATER COURSES ON THE SURVEYED PROPERTY EXCEPT AS SHOWN AND/OR DESCRIBED ON THIS SURVEY.

ALL OPERATIONS OF UNDERGROUND FACILITIES AND ALL EXCAVATORS ARE OBLIGATED TO COMPLY WITH ARTICLE 36 OF THE GENERAL BUSINESS LAW AND WITH PROVISIONS OF INDUSTRIAL CODE PART (RULE NO.35) BEFORE ANY EXCAVATION OR DEMOLITION IS COMMENCED. EVERY EXCAVATOR IS REQUIRED BY THESE LAWS TO GIVE ADVANCE NOTICE TO EVERY OPERATOR OF UNDERGROUND FACILITIES OF HIS INTENT TO PERFORM EXCAVATION OR DEMOLITION WORK IN THE SPECIFIED AREA

ALL ELEVATIONS SHOWN REFER TO THE NAVD 1988 DATUM. TO OBTAIN:
- NGVD 1929 DATUM - ADD 1.098 FEET
- BROOKLYN BOROUGH DATUM - SUBTRACT 1.447 FEET

UNDERGROUND UTILITIES NOTES

UNDERGROUND, OVERHEAD AND GROUND LEVEL UTILITIES ARE NOT GUARANTEED AS TO ACCURACY, EXACT LOCATION, TYPE OR USE, ACTIVE OR INACTIVE. VERIFICATION IS MANDATORY WITH MUNICIPAL AGENCIES, PUBLIC AND PRIVATE UTILITY COMPANIES PRIOR TO TAKING TITLE AND OR DESIGN WORK. BOUNDARIES ARE NOT GUARANTEED UNLESS SO NOTED.

PROFESSIONAL LAND SURVEYOR
RICHARD TOM
N.Y.S. L.L.S. 049844
7914 ROCKAWAY BEACH BLVD
ROCKAWAY BEACH, NY 11693
TEL. 718-474-7700

GUARANTEED TO:
New York State Department of Environmental Conservation

COUNTY: KINGS CITY: BROOKLYN

SECTION: 3 BLOCK: 1618 LOT(S): 8

PROPERTY ADDRESS: 19 PATCHEN AVENUE a/k/a 522 VAN BUREN STREET

ENVIRONMENTAL EASEMENT SURVEY

PREPARED BY
PERFECT POINT
LAND SURVEYING RT
brooklyn - queens - manhattan - bronx
staten island - nassau
phone: (718) 474-7700
fax: (718) 872-9699
info@ppsurveying.com
www.ppsurveying.com

STATE OF NEW YORK RICHARD TOM LICENSED LAND SURVEYOR

N.Y.S. L.L.S. 049844

– BUILDING FOOTPRINT

– ENVIRONMENTAL EASEMENT

GRAPHIC SCALE
ALL WRITTEN MEASUREMENTS AND OFFSETS NOTED ON THIS SURVEY SUPERSEDE MEASUREMENTS SCALED OF THIS PLOT.
SCALE 1:20
1.525 m 3.05 m 4.57 m 6.10 m 7.62 m 15.24 meters
0 2.5 f 5 f 7.5 f 10 f 12.5 f 15 f 17.5 f 20 f 22.5 f 25 f 50 feet

NOTE:
This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the New York Environmental Conservation Law. The engineering and institutional controls for this Easement are set forth in the Site Management Plan (SMP). A copy of the SMP must be obtained by any party with an interest in the property. The SMP can be obtained from NYS Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@dec.ny.gov

ENVIRONMENTAL EASEMENT DESCRIPTION

Section 3, Block 1618, Lot 8

All that certain plot, piece or parcel of land with the buildings and improvements thereon erected, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the easterly side of Patchen Avenue (70 feet wide) with the southerly side of Van Buren Street (70 feet wide);

RUNNING THENCE easterly along the southerly side of Van Buren Street, 73 feet 6 inches to a point;

THENCE southerly parallel with Patchen Avenue, 25 feet to a point;

THENCE westerly parallel with Van Buren Street and part of distance through a party wall, 73 feet 6 inches to a point on the easterly side of Patchen Avenue;

THENCE northerly along the easterly side of Patchen Avenue, 25 feet to the southerly side of Van Buren Street at the point or place of BEGINNING.

LOT AREA = 1837.50 sq.ft. = 0.0422 acre

APPENDIX B – Digital Copy of the FER
(included on CD)

APPENDIX C – Environmental Easement

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument.The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.

2018121100560001002E8CEA

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 12**

Document ID: 2018121100560001 Document Date: 09-10-2018 Preparation Date: 12-11-2018
Document Type: EASEMENT
Document Page Count: 10

PRESENTER:
ROYAL REGISTERED PROPERTY
REPORTS(182450)MB
125 PARK AVENUE, SUITE 1610
NEW YORK, NY 10017
212-376-0900
MBASALATAN@ROYALABSTRACT.COM

RETURN TO:
ROYAL REGISTERED PROPERTY
REPORTS(182450)MB
125 PARK AVENUE, SUITE 1610
NEW YORK, NY 10017
212-376-0900
MBASALATAN@ROYALABSTRACT.COM

PROPERTY DATA

Borough	Block	Lot	Unit	Address
BROOKLYN	1618	8	Entire Lot	19 PATCHEN AVENUE

Property Type: COMMERCIAL REAL ESTATE Easement

CROSS REFERENCE DATA

CRFN_____ *or* DocumentID_____ *or* _____ Year_____ Reel____ Page_____ *or* File Number_____

PARTIES

GRANTOR/SELLER:
BEC CONTINUUM HOUSING DEVELOPMENT FUND COMPANY INC
67 HANSON PLACE
BROOKLYN, NY 11217

☒ Additional Parties Listed on Continuation Page

GRANTEE/BUYER:
THE PEOPLE OF THE STATE OF NEW YORK
625 BROADWAY
ALBANY, NY 12233

FEES AND TAXES

Mortgage :

Mortgage Amount:	$	0.00
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	0.00
City (Additional):	$	0.00
Spec (Additional):	$	0.00
TASF:	$	0.00
MTA:	$	0.00
NYCTA:	$	0.00
Additional MRT:	$	0.00
TOTAL:	$	0.00
Recording Fee:	$	EXEMPT
Affidavit Fee:	$	0.00

Filing Fee: $ 0.00

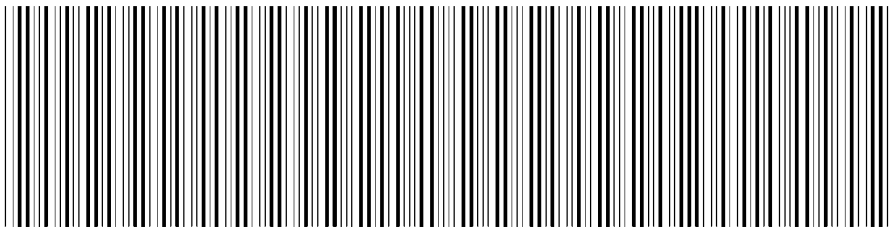
NYC Real Property Transfer Tax: $ 0.00

NYS Real Estate Transfer Tax: $ 0.00

RECORDED OR FILED IN THE OFFICE OF THE CITY REGISTER OF THE CITY OF NEW YORK
Recorded/Filed 12-11-2018 15:21
City Register File No.(CRFN): **2018000408040**

City Register Official Signature

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER



2018121100560001002C8E6A

RECORDING AND ENDORSEMENT COVER PAGE (CONTINUATION) **PAGE 2 OF 12**

Document ID: 2018121100560001 Document Date: 09-10-2018 Preparation Date: 12-11-2018
Document Type: EASEMENT

PARTIES

GRANTOR/SELLER:
19 PATCHEN GP LCC
67 HANSON PLACE
BROOKLYN, NY 11217

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made as of this 10th day of September, 2018 between Owner(s) BEC Continuum Housing Development Fund Company, Inc., (the "Grantor Fee Owner") having an office at 67 Hanson Place, Brooklyn, New York 11217, County of Kings, State of New York, and 19 Patchen GP LCC, (the "Grantor Beneficial Owner), having an office at c/o BEC New Communities HDFC, Inc., 67 Hansen Place, Brooklyn, New York 11217, County of Kings, State of New York (collectively, the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 19 Patchen Avenue in the City of New York, County of Kings and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 1618 Lot 8, being the same as that property conveyed to Grantor by deed dated June 30, 2017 and recorded in the City Register of the City of New York as CRFN # 2017000276596. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.0422 +/- acres, and is hereinafter more fully described in the Land Title Survey dated May 18, 2018 prepared by Richard Tom, L.L.S. of Perfect Point Land Surveying RT, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, Grantor Beneficial Owner, is the owner of the beneficial interest in the Controlled Property being the same as a portion of that beneficial interest conveyed to Grantor Beneficial Owner by means of a Declaration of Interest and Nominee Agreement dated June 30, 2017 and recorded in the recorded in the City Register of the City of New York as CRFN # 2017000276601; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C224232-05-16 as amended October 30, 2017, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without

necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to: Site Number: C224232
Office of General Counsel

NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

11. Consistency with the SMP. To the extent there is any conflict or inconsistency between the terms of this Environmental Easement and the SMP, regarding matters specifically addressed by the SMP, the terms of the SMP will control.

Remainder of Page Intentionally Left Blank

IN WITNESS WHEREOF, Grantor Fee Owner has caused this instrument to be signed in its name.

BEC Continuum Housing Development Fund Company, Inc.:

By: Al Libard

Print Name: Al Libard

Title: Board President Date: 8/14/18

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF Kings)

On the 14 day of August, in the year 2018, before me, the undersigned, personally appeared Al Libard, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York

ELIZABETH SHOY
Notary Public, State of New York
No. 01SH6137760
Qualified in Kings County
Commission Expires December 5, 2021

IN WITNESS WHEREOF, Grantor Beneficial Owner has caused this instrument to be signed in its name.

19 Patchen GP LLC:

By: _____

Print Name: Aaron Kaffman

Title: member Date: 8/22/18

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF Kings)

On the 22nd day of August, in the year 2018, before me, the undersigned, personally appeared Aaron Kaffman, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

MARLEE BUSCHING
Notary Public, State of New York
No. 01BU6344816
Qualified in Kings County
Commission Expires July 11, 2020

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Michael J. Ryan, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 10th day of September, in the year 2018, before me, the undersigned, personally appeared Michael J. Ryan, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 20 19

SCHEDULE "A" PROPERTY DESCRIPTION

ALL that certain plot, piece or parcel of land with the buildings and improvements thereon erected, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the easterly side of Patchen Avenue (70 feet wide) with the southerly side of Van Buren Street (70 feet wide);

RUNNING THENCE easterly along the southerly side of Van Buren Street, 73 feet 6 inches to a point;

THENCE southerly parallel with Patchen Avenue, 25 feet to a point;

THENCE westerly parallel with Van Buren Street and part of a distance through a party wall, 73 feet 6 inches to a point on the easterly side of Patchen Avenue;

THENCE northerly along the easterly side of Patchen Avenue, 25 feet to the southerly side of Van Buren Street at the point or place of BEGINNING.

LOT AREA = 1837.50 sq. ft. = 0.0422 acre

B. 1618
L. 8
County of Kings

182450
Royal Registered Property Reports, Inc.
125 Park Avenue, Suite 1610
New York, N.Y 10017
(212) 376-0900

Record and Return TO:
Sive Paget & Riesel P.C.
560 Lexington Ave., 15th Floor
New York, NY 10022
Attn: Allison Sloto

APPENDIX D – Soil/Waste Characterization Documentation

WASTE MATERIAL PROFILE SHEET

Clean Harbors Profile No. CH1591381

A. GENERAL INFORMATION

GENERATOR EPA ID #/REGISTRATION # *NONEREQUIRED* GENERATOR NAME: *Tenen Environmental*

GENERATOR CODE (Assigned by Clean Harbors) *TE32542* CITY *Brooklyn* STATE/PROVINCE *NY* ZIP/POSTAL CODE *11221*

ADDRESS *19 Patchen Avenue* PHONE: *(253) 334-9256*

CUSTOMER CODE (Assigned by Clean Harbors) *CA59174* CUSTOMER NAME: *Cascade Drilling*

ADDRESS *22722 29th Drive SE, Suite 228* CITY *Bothell* STATE/PROVINCE *WA* ZIP/POSTAL CODE *98021*

B. WASTE DESCRIPTION

WASTE DESCRIPTION: *Non-Hazardous Waste Liquid*

PROCESS GENERATING WASTE: **Investigation Derived Waste from environmental drilling operations. Former Dry Cleaning Site.**

IS THIS WASTE CONTAINED IN SMALL PACKAGING CONTAINED WITHIN A LARGER SHIPPING CONTAINER ? **No**

C. PHYSICAL PROPERTIES (at 25C or 77F)

PHYSICAL STATE

- [ ] SOLID WITHOUT FREE LIQUID
- [ ] POWDER
- [ ] MONOLITHIC SOLID
- [x] LIQUID WITH NO SOLIDS
- [ ] LIQUID/SOLID MIXTURE

% FREE LIQUID *90.00 - 100.00*
% SETTLED SOLID *0.00 - 10.00*
% TOTAL SUSPENDED SOLID
- [ ] SLUDGE
- [ ] GAS/AEROSOL

NUMBER OF PHASES/LAYERS

1 [x] 2 3

% BY VOLUME (Approx.) TOP *90.00* MIDDLE *0.00* BOTTOM *10.00*

VISCOSITY (If liquid present)

- [x] 1 - 100 (e.g. Water)
- [ ] 101 - 500 (e.g. Motor Oil)
- [ ] 501 - 10,000 (e.g. Molasses)
- [ ] > 10,000

COLOR *Brown*

ODOR

- [x] NONE
- [ ] MILD
- [ ] STRONG

Describe:

BOILING POINT °F (°C)

- [ ] <= 95 (<=35)
- [ ] 95 - 100 (35-38)
- [ ] 101 - 129 (38-54)
- [x] >= 130 (>54)

MELTING POINT °F (°C)

- [ ] < 140 (<60)
- [ ] 140-200 (60-93)
- [x] > 200 (>93)

TOTAL ORGANIC CARBON

- [x] <= 1%
- [ ] 1-9%
- [ ] >= 10%

FLASH POINT °F (°C)

- [ ] < 73 (<23)
- [ ] 73 - 100 (23-38)
- [ ] 101 -140 (38-60)
- [ ] 141 -200 (60-93)
- [x] > 200 (>93)

pH

- [ ] <= 2
- [ ] 2.1 - 6.9
- [x] 7 (Neutral)
- [ ] 7.1 - 12.4
- [ ] >= 12.5

SPECIFIC GRAVITY

- [ ] < 0.8 (e.g. Gasoline)
- [ ] 0.8-1.0 (e.g. Ethanol)
- [x] 1.0 (e.g. Water)
- [ ] 1.0-1.2 (e.g. Antifreeze)
- [ ] > 1.2 (e.g. Methylene Chloride)

ASH

- [x] < 0.1
- [ ] 0.1 - 1.0
- [ ] 1.1 - 5.0
- [ ] 5.1 - 20.0
- [ ] > 20
- [ ] Unknown

BTU/LB (MJ/kg)

- [x] < 2,000 (<4.6)
- [ ] 2,000-5,000 (4.6-11.6)
- [ ] 5,000-10,000 (11.6-23.2)
- [ ] > 10,000 (>23.2)

Actual:

D. COMPOSITION (List the complete composition of the waste, include any inert components and/or debris. Ranges for individual components are acceptable. If a trade name is used, please supply an MSDS. Please do not use abbreviations.)

CHEMICAL	MIN	--	MAX	UOM
SOIL	0.0000000	--	10.0000000	%
WATER	90.0000000	--	100.0000000	%

DOES THIS WASTE CONTAIN ANY HEAVY GAUGE METAL DEBRIS OR OTHER LARGE OBJECTS (EX., METAL PLATE OR PIPING >1/4" THICK OR >12" LONG, METAL REINFORCED HOSE >12" LONG, METAL WIRE >12" LONG, METAL VALVES, PIPE FITTINGS, CONCRETE REINFORCING BAR OR PIECES OF CONCRETE >3")? YES [x] NO

If yes, describe, including dimensions:

DOES THIS WASTE CONTAIN ANY METALS IN POWDERED OR OTHER FINELY DIVIDED FORM? YES [x] NO

DOES THIS WASTE CONTAIN OR HAS IT CONTACTED ANY OF THE FOLLOWING; ANIMAL WASTES, HUMAN BLOOD, BLOOD PRODUCTS, BODY FLUIDS, MICROBIOLOGICAL WASTE, PATHOLOGICAL WASTE, HUMAN OR ANIMAL DERIVED SERUMS OR PROTEINS OR ANY OTHER POTENTIALLY INFECTIOUS MATERIAL? YES [x] NO

I acknowledge that this waste material is neither infectious nor does it contain any organism known to be a threat to human health. This certification is based on my knowledge of the material. Select the answer below that applies:

The waste was never exposed to potentially infectious material. YES NO

Chemical disinfection or some other form of sterilization has been applied to the waste. YES NO

I ACKNOWLEDGE THAT THIS PROFILE MEETS THE CLEAN HARBORS BATTERY PACKAGING REQUIREMENTS. YES NO

I ACKNOWLEDGE THAT MY FRIABLE ASBESTOS WASTE IS DOUBLE BAGGED AND WETTED. YES NO

SPECIFY THE SOURCE CODE ASSOCIATED WITH THE WASTE. *G45* SPECIFY THE FORM CODE ASSOCIATED WITH THE WASTE. *W113*

E. CONSTITUENTS

Are these values based on testing or knowledge? Knowledge ☑ Testing

If constituent concentrations are based on analytical testing, analysis must be provided. Please attach document(s) using the link on the Submit tab.

Please indicate which constituents below apply. Concentrations must be entered when applicable to assist in accurate review and expedited approval of your waste profile. Please note that the total regulated metals and other constituents sections require answers.

RCRA	REGULATED METALS	REGULATORY LEVEL (mg/l)	TCLP mg/l	TOTAL	UOM	NOT APPLICABLE
D004	ARSENIC	5.0				☑
D005	BARIUM	100.0				☑
D006	CADMIUM	1.0				☑
D007	CHROMIUM	5.0				☑
D008	LEAD	5.0				☑
D009	MERCURY	0.2				☑
D010	SELENIUM	1.0				☑
D011	SILVER	5.0				☑
	VOLATILE COMPOUNDS					
D018	BENZENE	0.5				
D019	CARBON TETRACHLORIDE	0.5				
D021	CHLOROBENZENE	100.0				
D022	CHLOROFORM	6.0				
D028	1,2-DICHLOROETHANE	0.5				
D029	1,1-DICHLOROETHYLENE	0.7				
D035	METHYL ETHYL KETONE	200.0				
D039	TETRACHLOROETHYLENE	0.7				
D040	TRICHLOROETHYLENE	0.5				
D043	VINYL CHLORIDE	0.2				
	SEMI-VOLATILE COMPOUNDS					
D023	o-CRESOL	200.0				
D024	m-CRESOL	200.0				
D025	p-CRESOL	200.0				
D026	CRESOL (TOTAL)	200.0				
D027	1,4-DICHLOROBENZENE	7.5				
D030	2,4-DINITROTOLUENE	0.13				
D032	HEXACHLOROBENZENE	0.13				
D033	HEXACHLOROBUTADIENE	0.5				
D034	HEXACHLOROETHANE	3.0				
D036	NITROBENZENE	2.0				
D037	PENTACHLOROPHENOL	100.0				
D038	PYRIDINE	5.0				
D041	2,4,5-TRICHLOROPHENOL	400.0				
D042	2,4,6-TRICHLOROPHENOL	2.0				
	PESTICIDES AND HERBICIDES					
D012	ENDRIN	0.02				
D013	LINDANE	0.4				
D014	METHOXYCHLOR	10.0				
D015	TOXAPHENE	0.5				
D016	2,4-D	10.0				
D017	2,4,5-TP (SILVEX)	1.0				
D020	CHLORDANE	0.03				
D031	HEPTACHLOR (AND ITS EPOXIDE)	0.008				

OTHER CONSTITUENTS	MAX	UOM	NOT APPLICABLE
BROMINE			☑
CHLORINE			☑
FLUORINE			☑
IODINE			☑
SULFUR			☑
POTASSIUM			☑
SODIUM			☑
AMMONIA			☑
CYANIDE AMENABLE			☑
CYANIDE REACTIVE			☑
CYANIDE TOTAL			☑
SULFIDE REACTIVE			☑

HOCs

☑ NONE
< 1000 PPM
>= 1000 PPM

PCBs

☑ NONE
< 50 PPM
>=50 PPM

IF PCBS ARE PRESENT, IS THE WASTE REGULATED BY TSCA 40 CFR 761?

YES ☑ NO

ADDITIONAL HAZARDS

DOES THIS WASTE HAVE ANY UNDISCLOSED HAZARDS OR PRIOR INCIDENTS ASSOCIATED WITH IT, WHICH COULD AFFECT THE WAY IT SHOULD BE HANDLED?

YES ☑ NO (If yes, explain)

CHOOSE ALL THAT APPLY

DEA REGULATED SUBSTANCES	EXPLOSIVE	FUMING	OSHA REGULATED CARCINOGENS
POLYMERIZABLE	RADIOACTIVE	REACTIVE MATERIAL	☑ NONE OF THE ABOVE

F. REGULATORY STATUS

YES ☑ NO USEPA HAZARDOUS WASTE?

YES ☑ NO DO ANY STATE WASTE CODES APPLY?

Texas Waste Code

YES ☑ NO DO ANY CANADIAN PROVINCIAL WASTE CODES APPLY?

YES ☑ NO IS THIS WASTE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT PER 40 CFR PART 268?

LDR CATEGORY: ***Not subject to LDR***
VARIANCE INFO:

YES ☑ NO IS THIS A UNIVERSAL WASTE?

YES ☑ NO IS THE GENERATOR OF THE WASTE CLASSIFIED AS VERY SMALL QUANTITY GENERATOR (VSQG) OR A STATE EQUIVALENT DESIGNATION?

YES NO IS THIS MATERIAL GOING TO BE MANAGED AS A RCRA EXEMPT COMMERCIAL PRODUCT, WHICH IS FUEL (40 CFR 261.2 (C)(2)(II))?

YES ☑ NO DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE?

YES NO IS THIS WASTE STREAM SUBJECT TO THE INORGANIC METAL BEARING WASTE PROHIBITION FOUND AT 40 CFR 268.3(C)?

YES ☑ NO DOES THIS WASTE CONTAIN VOC'S IN CONCENTRATIONS >=500 PPM?

YES NO DOES THE WASTE CONTAIN GREATER THAN 20% OF ORGANIC CONSTITUENTS WITH A VAPOR PRESSURE >= .3KPA (.044 PSIA)?

YES ☑ NO DOES THIS WASTE CONTAIN AN ORGANIC CONSTITUENT WHICH IN ITS PURE FORM HAS A VAPOR PRESSURE > 77 KPA (11.2 PSIA)?

YES ☑ NO IS THIS CERCLA REGULATED (SUPERFUND) WASTE ?

YES ☑ NO IS THE WASTE SUBJECT TO ONE OF THE FOLLOWING NESHAP RULES?

Hazardous Organic NESHAP (HON) rule (subpart G) Pharmaceuticals production (subpart GGG)

YES NO IF THIS IS A US EPA HAZARDOUS WASTE, DOES THIS WASTE STREAM CONTAIN BENZENE?

YES NO Does the waste stream come from a facility with one of the SIC codes listed under benzene NESHAP or is this waste regulated under the benzene NESHAP rules because the original source of the waste is from a chemical manufacturing, coke by-product recovery, or petroleum refinery process?

YES NO Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) >10 Mg/year?

What is the TAB quantity for your facility? Megagram/year (1 Mg = 2,200 lbs)

The basis for this determination is: Knowledge of the Waste Or Test Data Knowledge Testing

Describe the knowledge :

G. DOT/TDG INFORMATION

DOT/TDG PROPER SHIPPING NAME:

NON DOT REGULATED MATERIAL, (WATER, SOIL)

H. TRANSPORTATION REQUIREMENTS

ESTIMATED SHIPMENT FREQUENCY ☑ ONE TIME WEEKLY MONTHLY QUARTERLY YEARLY OTHER

☑ CONTAINERIZED	BULK LIQUID	BULK SOLID
1-1 CONTAINERS/SHIPMENT STORAGE CAPACITY: ***10*** CONTAINER TYPE: PORTABLE TOTE TANK BOX/CARTON/CASE CUBIC YARD BOX ☑ DRUM OTHER: DRUM SIZE: ***55***	GALLONS/SHIPMENT: ***0 Min -0 Max*** GAL.	SHIPMENT UOM: TON YARD TONS/YARDS/SHIPMENT: ***0 Min - 0 Max***

I. SPECIAL REQUEST

COMMENTS OR REQUESTS:
CNOS. No Incineration.

GENERATOR'S CERTIFICATION

I certify that I am authorized to execute this document as an authorized agent. I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge.I also certify that any samples submitted are representative of the actual waste.If Clean Harbors discovers a discrepancy during the approval process, Generator grants Clean Harbors the authority to amend the profile, as Clean Harbors deems necessary, to reflect the discrepancy.

AUTHORIZED SIGNATURE	NAME (PRINT)	TITLE	DATE
[signature]	Claire Zacchea	as an agent of owner (Clapatchon LLC)	1/26/2018

WASTE MATERIAL PROFILE SHEET

Clean Harbors Profile No. CH1591255

A. GENERAL INFORMATION

GENERATOR EPA ID #/REGISTRATION # *NONEREQUIRED* GENERATOR NAME: *Tenen Environmental*

GENERATOR CODE (Assigned by Clean Harbors) *TE32542* CITY *Brooklyn* STATE/PROVINCE *NY* ZIP/POSTAL CODE *11221*

ADDRESS *19 Patchen Avenue* PHONE: *(253) 334-9256*

CUSTOMER CODE (Assigned by Clean Harbors) *CA59174* CUSTOMER NAME: *Cascade Drilling*

ADDRESS *22722 29th Drive SE, Suite 228* CITY *Bothell* STATE/PROVINCE *WA* ZIP/POSTAL CODE *98021*

B. WASTE DESCRIPTION

WASTE DESCRIPTION: *Non-Hazardous Waste Solid*

PROCESS GENERATING WASTE: **Investigation Derived Waste from environmental drilling operations. Former Dry Cleaner.**

IS THIS WASTE CONTAINED IN SMALL PACKAGING CONTAINED WITHIN A LARGER SHIPPING CONTAINER ? **No**

C. PHYSICAL PROPERTIES (at 25C or 77F)

PHYSICAL STATE
- [x] SOLID WITHOUT FREE LIQUID
- [ ] POWDER
- [ ] MONOLITHIC SOLID
- [ ] LIQUID WITH NO SOLIDS
- [ ] LIQUID/SOLID MIXTURE
- [ ] % FREE LIQUID
- [ ] % SETTLED SOLID
- [ ] % TOTAL SUSPENDED SOLID
- [ ] SLUDGE
- [ ] GAS/AEROSOL

NUMBER OF PHASES/LAYERS

1 2 3

% BY VOLUME (Approx.)

TOP *0.00*
MIDDLE *0.00*
BOTTOM *0.00*

VISCOSITY (If liquid present)
- [ ] 1 - 100 (e.g. Water)
- [ ] 101 - 500 (e.g. Motor Oil)
- [ ] 501 - 10,000 (e.g. Molasses)
- [ ] > 10,000

COLOR

Brown

ODOR
- [x] NONE
- [ ] MILD
- [ ] STRONG

Describe:

BOILING POINT °F (°C)
- [ ] <= 95 (<=35)
- [ ] 95 - 100 (35-38)
- [ ] 101 - 129 (38-54)
- [ ] >= 130 (>54)

MELTING POINT °F (°C)
- [ ] < 140 (<60)
- [ ] 140-200 (60-93)
- [x] > 200 (>93)

TOTAL ORGANIC CARBON
- [x] <= 1%
- [ ] 1-9%
- [ ] >= 10%

FLASH POINT °F (°C)
- [ ] < 73 (<23)
- [ ] 73 - 100 (23-38)
- [ ] 101 -140 (38-60)
- [ ] 141 -200 (60-93)
- [ ] > 200 (>93)

pH
- [ ] <= 2
- [ ] 2.1 - 6.9
- [x] 7 (Neutral)
- [ ] 7.1 - 12.4
- [ ] >= 12.5

SPECIFIC GRAVITY
- [ ] < 0.8 (e.g. Gasoline)
- [ ] 0.8-1.0 (e.g. Ethanol)
- [ ] 1.0 (e.g. Water)
- [ ] 1.0-1.2 (e.g. Antifreeze)
- [x] > 1.2 (e.g. Methylene Chloride)

ASH
- [x] < 0.1
- [ ] 0.1 - 1.0
- [ ] 1.1 - 5.0
- [ ] 5.1 - 20.0
- [ ] > 20
- [ ] Unknown

BTU/LB (MJ/kg)
- [x] < 2,000 (<4.6)
- [ ] 2,000-5,000 (4.6-11.6)
- [ ] 5,000-10,000 (11.6-23.2)
- [ ] > 10,000 (>23.2)

Actual:

D. COMPOSITION (List the complete composition of the waste, include any inert components and/or debris. Ranges for individual components are acceptable. If a trade name is used, please supply an MSDS. Please do not use abbreviations.)

CHEMICAL	MIN	--	MAX	UOM
GRAVEL, DEBRIS	0.0000000	--	5.0000000	%
SOIL	95.0000000	--	100.0000000	%

DOES THIS WASTE CONTAIN ANY HEAVY GAUGE METAL DEBRIS OR OTHER LARGE OBJECTS (EX., METAL PLATE OR PIPING >1/4" THICK OR >12" LONG, METAL REINFORCED HOSE >12" LONG, METAL WIRE >12" LONG, METAL VALVES, PIPE FITTINGS, CONCRETE REINFORCING BAR OR PIECES OF CONCRETE >3")? YES [ ] NO [x]

If yes, describe, including dimensions:

DOES THIS WASTE CONTAIN ANY METALS IN POWDERED OR OTHER FINELY DIVIDED FORM? YES [ ] NO [x]

DOES THIS WASTE CONTAIN OR HAS IT CONTACTED ANY OF THE FOLLOWING; ANIMAL WASTES, HUMAN BLOOD, BLOOD PRODUCTS, BODY FLUIDS, MICROBIOLOGICAL WASTE, PATHOLOGICAL WASTE, HUMAN OR ANIMAL DERIVED SERUMS OR PROTEINS OR ANY OTHER POTENTIALLY INFECTIOUS MATERIAL? YES [ ] NO [x]

I acknowledge that this waste material is neither infectious nor does it contain any organism known to be a threat to human health. This certification is based on my knowledge of the material. Select the answer below that applies:

The waste was never exposed to potentially infectious material. YES NO

Chemical disinfection or some other form of sterilization has been applied to the waste. YES NO

I ACKNOWLEDGE THAT THIS PROFILE MEETS THE CLEAN HARBORS BATTERY PACKAGING REQUIREMENTS. YES NO

I ACKNOWLEDGE THAT MY FRIABLE ASBESTOS WASTE IS DOUBLE BAGGED AND WETTED. YES NO

SPECIFY THE SOURCE CODE ASSOCIATED WITH THE WASTE. *G45* SPECIFY THE FORM CODE ASSOCIATED WITH THE WASTE. *W301*

E. CONSTITUENTS

Are these values based on testing or knowledge? Knowledge ☑ Testing

If constituent concentrations are based on analytical testing, analysis must be provided. Please attach document(s) using the link on the Submit tab.

Please indicate which constituents below apply. Concentrations must be entered when applicable to assist in accurate review and expedited approval of your waste profile. Please note that the total regulated metals and other constituents sections require answers.

RCRA	REGULATED METALS	REGULATORY LEVEL (mg/l)	TCLP mg/l	TOTAL	UOM	NOT APPLICABLE
D004	ARSENIC	5.0				☑
D005	BARIUM	100.0				☑
D006	CADMIUM	1.0				☑
D007	CHROMIUM	5.0				☑
D008	LEAD	5.0				☑
D009	MERCURY	0.2				☑
D010	SELENIUM	1.0				☑
D011	SILVER	5.0				☑
	VOLATILE COMPOUNDS					
D018	BENZENE	0.5				
D019	CARBON TETRACHLORIDE	0.5				
D021	CHLOROBENZENE	100.0				
D022	CHLOROFORM	6.0				
D028	1,2-DICHLOROETHANE	0.5				
D029	1,1-DICHLOROETHYLENE	0.7				
D035	METHYL ETHYL KETONE	200.0				
D039	TETRACHLOROETHYLENE	0.7				
D040	TRICHLOROETHYLENE	0.5				
D043	VINYL CHLORIDE	0.2				
	SEMI-VOLATILE COMPOUNDS					
D023	o-CRESOL	200.0				
D024	m-CRESOL	200.0				
D025	p-CRESOL	200.0				
D026	CRESOL (TOTAL)	200.0				
D027	1,4-DICHLOROBENZENE	7.5				
D030	2,4-DINITROTOLUENE	0.13				
D032	HEXACHLOROBENZENE	0.13				
D033	HEXACHLOROBUTADIENE	0.5				
D034	HEXACHLOROETHANE	3.0				
D036	NITROBENZENE	2.0				
D037	PENTACHLOROPHENOL	100.0				
D038	PYRIDINE	5.0				
D041	2,4,5-TRICHLOROPHENOL	400.0				
D042	2,4,6-TRICHLOROPHENOL	2.0				
	PESTICIDES AND HERBICIDES					
D012	ENDRIN	0.02				
D013	LINDANE	0.4				
D014	METHOXYCHLOR	10.0				
D015	TOXAPHENE	0.5				
D016	2,4-D	10.0				
D017	2,4,5-TP (SILVEX)	1.0				
D020	CHLORDANE	0.03				
D031	HEPTACHLOR (AND ITS EPOXIDE)	0.008				

OTHER CONSTITUENTS	MAX	UOM	NOT APPLICABLE
BROMINE			☑
CHLORINE			☑
FLUORINE			☑
IODINE			☑
SULFUR			☑
POTASSIUM			☑
SODIUM			☑
AMMONIA			☑
CYANIDE AMENABLE			☑
CYANIDE REACTIVE			☑
CYANIDE TOTAL			☑
SULFIDE REACTIVE			☑

HOCs

☑ NONE
< 1000 PPM
>= 1000 PPM

PCBs

☑ NONE
< 50 PPM
>=50 PPM

IF PCBS ARE PRESENT, IS THE WASTE REGULATED BY TSCA 40 CFR 761?

YES ☑ NO

ADDITIONAL HAZARDS

DOES THIS WASTE HAVE ANY UNDISCLOSED HAZARDS OR PRIOR INCIDENTS ASSOCIATED WITH IT, WHICH COULD AFFECT THE WAY IT SHOULD BE HANDLED?

YES ☑ NO (If yes, explain)

CHOOSE ALL THAT APPLY

DEA REGULATED SUBSTANCES | EXPLOSIVE | FUMING | OSHA REGULATED CARCINOGENS

POLYMERIZABLE | RADIOACTIVE | REACTIVE MATERIAL | ☑ NONE OF THE ABOVE

F. REGULATORY STATUS

YES ☑ NO USEPA HAZARDOUS WASTE?

YES ☑ NO DO ANY STATE WASTE CODES APPLY?

Texas Waste Code

YES ☑ NO DO ANY CANADIAN PROVINCIAL WASTE CODES APPLY?

YES ☑ NO IS THIS WASTE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT PER 40 CFR PART 268?

LDR CATEGORY: ***Not subject to LDR***
VARIANCE INFO:

YES ☑ NO IS THIS A UNIVERSAL WASTE?

YES ☑ NO IS THE GENERATOR OF THE WASTE CLASSIFIED AS VERY SMALL QUANTITY GENERATOR (VSQG) OR A STATE EQUIVALENT DESIGNATION?

YES NO IS THIS MATERIAL GOING TO BE MANAGED AS A RCRA EXEMPT COMMERCIAL PRODUCT, WHICH IS FUEL (40 CFR 261.2 (C)(2)(II))?

YES ☑ NO DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE?

YES NO IS THIS WASTE STREAM SUBJECT TO THE INORGANIC METAL BEARING WASTE PROHIBITION FOUND AT 40 CFR 268.3(C)?

YES ☑ NO DOES THIS WASTE CONTAIN VOC'S IN CONCENTRATIONS >=500 PPM?

YES NO DOES THE WASTE CONTAIN GREATER THAN 20% OF ORGANIC CONSTITUENTS WITH A VAPOR PRESSURE >= .3KPA (.044 PSIA)?

YES ☑ NO DOES THIS WASTE CONTAIN AN ORGANIC CONSTITUENT WHICH IN ITS PURE FORM HAS A VAPOR PRESSURE > 77 KPA (11.2 PSIA)?

YES ☑ NO IS THIS CERCLA REGULATED (SUPERFUND) WASTE ?

YES ☑ NO IS THE WASTE SUBJECT TO ONE OF THE FOLLOWING NESHAP RULES?

Hazardous Organic NESHAP (HON) rule (subpart G) Pharmaceuticals production (subpart GGG)

YES NO IF THIS IS A US EPA HAZARDOUS WASTE, DOES THIS WASTE STREAM CONTAIN BENZENE?

YES NO Does the waste stream come from a facility with one of the SIC codes listed under benzene NESHAP or is this waste regulated under the benzene NESHAP rules because the original source of the waste is from a chemical manufacturing, coke by-product recovery, or petroleum refinery process?

YES NO Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) >10 Mg/year?

What is the TAB quantity for your facility? Megagram/year (1 Mg = 2,200 lbs)

The basis for this determination is: Knowledge of the Waste Or Test Data Knowledge Testing

Describe the knowledge :

G. DOT/TDG INFORMATION

DOT/TDG PROPER SHIPPING NAME:

NOT REGULATED BY DOT

H. TRANSPORTATION REQUIREMENTS

ESTIMATED SHIPMENT FREQUENCY ☑ ONE TIME WEEKLY MONTHLY QUARTERLY YEARLY OTHER

☑ **CONTAINERIZED**

5-5 CONTAINERS/SHIPMENT

STORAGE CAPACITY: ***10***

CONTAINER TYPE:

PORTABLE TOTE TANK BOX/CARTON/CASE

CUBIC YARD BOX ☑ DRUM

OTHER:

DRUM SIZE: ***55***

BULK LIQUID

GALLONS/SHIPMENT: ***0 Min -0 Max*** GAL.

BULK SOLID

SHIPMENT UOM: TON YARD

TONS/YARDS/SHIPMENT: ***0 Min - 0 Max***

I. SPECIAL REQUEST

COMMENTS OR REQUESTS:

CNO. No incineration.

GENERATOR'S CERTIFICATION

I certify that I am authorized to execute this document as an authorized agent. I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge.I also certify that any samples submitted are representative of the actual waste.If Clean Harbors discovers a discrepancy during the approval process, Generator grants Clean Harbors the authority to amend the profile, as Clean Harbors deems necessary, to reflect the discrepancy.

AUTHORIZED SIGNATURE Claire Zaccheo NAME (PRINT) Claire Zaccheo TITLE Asagent of owner (Tapatchen LLC) DATE 1/26/2018

Site Address : 19 Patchen Avenue
Brooklyn,NY 11221

SC PPW 3/12/2019

WORK ORDER NO D31902381967

DOCUMENT NO. 0055128 **STRAIGHT BILL OF LADING**

TRANSPORTER 1 Clean Harbors Environmental Services, Inc. VEHICLE ID # 5297

EPA ID # MAD039322250 TRANS. 1 PHONE (781) 792-5000

TRANSPORTER 2 SJ Transportation VEHICLE ID #

EPA ID # NJD071629976 TRANS. 2 PHONE

DESIGNATED FACILITY			SHIPPER		
Spring Grove Resource Recovery Inc			Tenen Environmental		
FACILITY EPA ID # OHD000816629			SHIPPER EPA ID # NONEREQUIRED		
ADDRESS 4879 Spring Grove Avenue			ADDRESS 121 W 27th St		
CITY Cincinnati	STATE OH	ZIP 45232	CITY New York	STATE NY	ZIP 10001

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1X55	DM		A. NOT REGULATED BY DOT. (SOIL)	400	P
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS EMERGENCY PHONE #: (800) 483-3718 GENERATOR: Tenen Environmental
A.CH1832706
DEP07259, Decal 409280

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	Hongpong Lau	[signature]	5/10/19
TRANSPORTER 1	Jeffrey M. Clark	Jeffrey M Clark	5/10/19
TRANSPORTER 2	ED Jimenez	[signature]	5-15-19
RECEIVED BY	Brandy Prewitt	[signature]	05/16/19

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CHI 107

Site Address : 19 Patchen Avenue
Brooklyn,NY 11221

SC PPW 3/12/2019

WORK ORDER NO D31902381967

DOCUMENT NO. 0055128 **STRAIGHT BILL OF LADING**

TRANSPORTER 1	Clean Harbors Environmental Services, Inc.	VEHICLE ID #	5297
EPA ID #	MAD039322250	TRANS. 1 PHONE	(781) 792-5000
TRANSPORTER 2	SJ Transportation	VEHICLE ID #	
EPA ID #	NJD071629976	TRANS. 2 PHONE	

DESIGNATED FACILITY			SHIPPER		
Spring Grove Resource Recovery Inc.			Tenen Environmental		
FACILITY EPA ID #			SHIPPER EPA ID #		
OHD000816629			NONEREQUIRED		
ADDRESS			ADDRESS		
4879 Spring Grove Avenue			121 W 27th St		
CITY	STATE	ZIP	CITY	STATE	ZIP
Cincinnati	OH	45232	New York	NY	10001

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1X55	DM		A. NOT REGULATED BY DOT. (SOIL)	400	P
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS
A.CH1832706

EMERGENCY PHONE #: (800) 483-3718 GENERATOR: Tenen Environmental

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TRANSPORTER 1	Jeffrey M. Clark	Jeffrey M Clark	5/10/19
TRANSPORTER 2	ED Jimenez	[signature]	5-15-19
RECEIVED BY	Brandy Pruett	[signature]	05/16/19

1

CHI 107

TENEN ENVIRONMENTAL

121 West 27th Street, 702
New York, NY 10001
(646) 606-2332

April 25, 2019

Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, New York 12233-7015

Attn: Henry Wilkie

Re: Contained-In Waste Determination
19 Patchen Avenue – Brooklyn, New York
Site No. C224232

Dear Mr. Wilkie:

On behalf of the Participant, 19 Patchen, LLC, Tenen Environmental, LLC (Tenen) is requesting a determination that the soil removed during some minor trenching and excavation in the rear yard at the 19 Patchen Avenue project in Brooklyn, New York does not require management as hazardous waste under the "contained-in" criteria as outlined in Technical and Administrative Guidance Memorandum (TAGM) 3028. The Site is enrolled in the Brownfield Cleanup Program (BCP) as Site #C224232.

The Site is a rectangular-shaped parcel of 1,838 square-feet (0.0422 acres) with 25 feet of frontage along Patchen Avenue. The Site is occupied by a four-story mixed-use commercial and residential building with a basement. An active dry-cleaner occupies the ground floor commercial space. The current operator is Rodriguez Dry Cleaners (NYSDEC Dry Cleaning Facility #2-6104-01058). The Site is located in Brooklyn Community Board 3 and is generally identified on the New York City tax map as Kings County Block 1618, Lot 8.

One drum containing soil was filled during the trenching and excavation activities. One five-point composite sample was collected from the drummed soil. The following volatile organic compounds (VOCs) were detected in the drummed soil: PCE at a concentration of 0.00093 milligrams per kilogram (mg/kg). The following semivolatile organic compounds (SVOCs) were detected in the drummed soil: fluoranthene (max: 2.5 mg/kg), benzo(a)anthracene (max: 1.4 mg/kg), benzo(a)pyrene (max: 1.2 mg/kg), benzo(b)fluoranthene (max: 1.7 mg/kg), benzo(k)fluoranthene (max: 0.5 mg/kg), anthracene (max: 0.25 mg/kg), acenaphthylene (max: 0.14 mg/kg), benzo(ghi)perylene (max: 0.69 mg/kg), fluorine (max: 0.099 mg/kg), phenanthrene (max: 1.6 mg/kg), dibenzo(a,h)anthracene (max: 0.16 mg/kg), indeno(1,2,3-cd)pyrene (max: 0.73 mg/kg) and pyrene (max: 2.3 mg/kg). The following total metals were detected in the drummed soil: arsenic (max: 4.42 mg/kg), barium (max: 156 mg/kg), cadmium (max: 0.264 mg/kg), chromium (max: 10.4 mg/kg), lead (max: 275 mg/kg), mercury (max: 0.243 mg/kg) and selenium (max: 0.556 mg/kg). A table with all soil sampling results can be found in Attachment 1.

The drum contents are proposed for disposal at the Clean Harbors facility located at 4979 Spring Grove Avenue in Cincinnati, Ohio. The proposed waste material profile sheet can be found in Attachment 2.

 April 25, 2019

Based on the above and attached, we request that you provide a contained-in determination that the currently-characterized material proposed for disposal at the Clean Harbors facility, as noted in the facility waste material profile, can be managed as non-hazardous waste. Please let us know if you need any additional information.

Sincerely,
Tenen Environmental LLC

Claire Zaccheo

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of Program Management
625 Broadway, 12th Floor, Albany, NY 12233-7012
P: (518) 402-9764 I F: (518) 402-9722
www.dec.ny.gov

January 29, 2018

Mr. Matthew Carroll, PE
Project Manager
Tenen Environmental, LLC
121 West 27th Street, Suite 702
New York City, NY 10001

Re: "Contained-In" Determination Request
19 Patchen Avenue Site
NYSDEC Site No. C224232

Dear. Mr. Carroll:

We have completed our review of the soil and water sampling data (Lab ID: L1638173, L1638269, L1638645, L1638738, L1639548 and L1639693) submitted with your January 29, 2018 request for a "contained-in" determination for the referenced project.

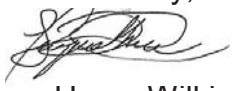
Concentrations detected for individual VOCs, SVOCs, pesticides, PCBs and metals were all significantly less than their current NYSDEC "contained in" soil action levels and Land Disposal Restriction concentrations. Most of the individual VOCs were not detected above the detection limit.

Concentrations for tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2-Dichloroethene were detected was significantly less than its current "contained-in" soil action levels and Land Disposal Restriction concentrations. Therefore, five (5) 55-gallon drums containing soil cuttings; collected as part of a remedial investigation of the Site; do not have to be managed as hazardous waste and can be transported off-site to Clean Harbors facility, for final disposal as non-hazardous waste.

Water (well development water, purge water, well sampling and decon water) collecting during the well development and groundwater sampling activities met "contained-in" groundwater action levels and Land Disposal Restriction concentrations. Three (3) 55-gallon drums of water were generated during well development and groundwater sampling activities at the referenced project site do not have to be managed as hazardous waste and can be transported off-site to Clean Harbors facility, for final disposal as non-hazardous waste.

Should you have any questions regarding the content of this letter, please do not hesitate to contact me at (518) 402-9611 or email me at henry.wilkie@dec.ny.gov.

Sincerely,



Henry Wilkie
Assistance Engineer
Resource Management Section

ecc: C. Whitfield, DER

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Bureau of Hazardous Waste and Radiation Management
625 Broadway, 9th Floor, Albany, New York 12233-7256
P: (518) 402-8651 | F: (518) 402-9024
www.dec.ny.gov

April 26, 2019

Ms. Claire Zaccheo
Project Engineer
Tenen Environmental

Re: Contained-In Waste Determination
19 Patchen Avenue – Brooklyn, New York
Site No. C224232

Dear Ms. Zaccheo:

We have completed our review of the soil sampling data (Lab sample ID: L1915442-01) submitted with your April 25, 2019 request for a “contained-in” determination for the referenced project.

Concentrations detected for individual VOCs, SVOCs, and metals were all significantly less than their current NYSDEC "contained in" soil action levels and Land Disposal Restriction concentrations. Most of the individual VOCs were not detected above the detection limit.

Concentration for tetrachloroethene (PCE) was detected was significantly less than its current "contained-in" soil action levels and Land Disposal Restriction concentrations. Therefore, one (1) 55-gallon drums, containing soil was from the trenching and excavation activities as part of a remedial investigation of the Site; do not have to be managed as hazardous waste and can be transported off-site to Clean Harbors facility in Cincinnati, Ohio, for final disposal as non-hazardous waste.

Should you have any questions regarding the content of this letter, please do not hesitate to contact me at (518) 402-9611 or email me at henry.wilkie@dec.ny.gov.

Sincerely,

Henry Wilkie
Assistant Environmental Engineer
RCRA Permitting Section

ec: M. Mashhadi, DER

This Invoice is submitted on behalf of Clean Earth, Inc. located at 334 S. Warminster Road, Hatboro, PA 19040.

Clean Earth of Carteret, LLC
Remit To:
P.O. Box 95000-3755
Philadelphia, PA 19195-0001
Phone: 215-734-1400
Fax: 215-734-1423

CLEANEARTH

Faster, smarter, greener solutions...

Invoice

Invoice Number:
PSI0103037
Invoice Date:
12/20/17
Order Number

Page:
1

Sold To:
BROADWAY BUILDERS
826 BROADWAY
NEW YORK, NY 10003

Site Address:
25 Patchen Avenue
25 Patchen Avenue
Brooklyn, NY 11221

Customer No.	Customer PO	Payment Terms
BWB127		Credit Card
Sales Rep ID	**Approval Number**	**Payment Due**
JEN SCHROF	173071685	12/30/17

Job No.	Description	Scale Date:	Ticket No.	Manifest No.	Quantity	Unit	Unit Price	Total Price
147507	Soil Treatment Type II	12/15/17	700000778000	1287658	4.11	Tons	35.00	143.85
147507	Transportation Fee	12/15/17			1	Load	1,250.00	1,250.00
147507	Env, Energy, and Ins Fee					N/C		

Amount Subject to Sales Tax	Amount Exempt from Sales Tax	Total Quantity:		
1,393.85	0.00	4.11	Subtotal:	1,393.85
			Invoice Discount:	0.00
			Total Sales Tax:	123.70
			Total:	**1,517.55**

CLEANEARTH

Manifest # 1287658

GLOBAL JOB NUMBER: 147507 **FACILITY APPROVAL NUMBER:** 173071685

Please Check One:

☑ Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909

☐ Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220

☐ Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633

☐ Clean Earth of Greater Washington
6250 Dower House Road
Upper Marlboro, MD 20772
Ph: 301-599-0939

☐ Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520

☐ Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004

☐ Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700

☐ Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS:	GROSS WEIGHT: ☐Tons ☐Yards	
25 Patchen Avenue 25 Patchen Avenue Brooklyn N.Y 11221	TARE WEIGHT: ☐Tons ☐Yards	
GENERATOR'S PHONE:	NET WEIGHT: ☐Tons ☐Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Non Haz Soil

GENERATOR'S CERTIFICATION – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: ZHERIN MAYKA Title: Contractor

Signature: _____ Date and Time: 12/15/17 12 PM

TRANSPORTER 8 AM START - 12 PM Finish

Company: Rizco Environmental Phone Number: 516-791-5000

Address: PO Box 383 Hewlett NY Truck # and License Plate: 75 - 56236 PC NY

Driver: John DellaRatta SW Haulers Permit #: 1A-597

(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: _____ Date and Time: 12/15/17 12 PM

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: 12/15/17 12:50 PM

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: 12/15/17

FACILITY #219

Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 7325418909 Fax: 7325418105

Ticket: 700000778000

	Date	Time	Scale
In:	12/15/2017	13:16:50	CECSCALE1
Out:	12/15/2017	13:16:59	

Manifest: 1287658

Vehicle ID: 07RIZZO75

Vehicle Permit:

	Lbs.	Tns
Gross:	45960.00	22.98
Tare:	37740.00	18.87
Net:	8220.00	4.11

Customer: BROADWAY BUILDERS

Carrier: .

Facility Approval#: 173071685

Generator: 25 Patchen Avenue

Gen Address: 826 Broadway
New York, 07008
NY

Job Name: 25 Patchen Avenue

Job Address: 25 Patchen Avenue
Brooklyn, NY 11221

Contaminate Type	Quantity	Unit
Soil Treatment Type II	4.1100	TONS

Comment:

Driver:

Facility: _____
Gibson, Barry

ANALYTICAL REPORT

Lab Number:	L1608891
Client:	Tenen Environmental, LLC 121 West 27th Street Suite 303 New York City, NY 10001
ATTN:	Matt Carroll
Phone:	(646) 606-2332
Project Name:	25 PATCHEN
Project Number:	25 PATCHEN
Report Date:	04/04/16

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1608891-01	SS-1	SOIL	BROOKLYN, NY	03/28/16 14:35	03/28/16

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	25 PATCHEN	**Lab Number:**	L1608891
Project Number:	25 PATCHEN	**Report Date:**	04/04/16

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Metals

L1608891-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 04/04/16

ORGANICS

VOLATILES

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN
Lab Number: L1608891
Report Date: 04/04/16

SAMPLE RESULTS

Lab ID: L1608891-01
Client ID: SS-1
Sample Location: BROOKLYN, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 03/31/16 18:30
Analyst: BN
Percent Solids: 86%

Date Collected: 03/28/16 14:35
Date Received: 03/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.1	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.36	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.41	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.45	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.14	1
1,1-Dichloropropene	ND		ug/kg	5.8	0.16	1
Bromoform	ND		ug/kg	4.7	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.8	0.34	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.14	1
Chloroethane	ND		ug/kg	2.3	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.25	1
Trichloroethene	ND		ug/kg	1.2	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.18	1

Project Name: 25 PATCHEN **Lab Number:** L1608891

Project Number: 25 PATCHEN **Report Date:** 04/04/16

SAMPLE RESULTS

Lab ID: L1608891-01 Date Collected: 03/28/16 14:35

Client ID: SS-1 Date Received: 03/28/16

Sample Location: BROOKLYN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	ND		ug/kg	2.3	0.23	1
o-Xylene	ND		ug/kg	2.3	0.20	1
Xylenes, Total	ND		ug/kg	2.3	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	12	0.19	1
Styrene	ND		ug/kg	2.3	0.47	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	ND		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.32	1
Vinyl acetate	ND		ug/kg	12	0.15	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.19	1
2-Hexanone	ND		ug/kg	12	0.78	1
Bromochloromethane	ND		ug/kg	5.8	0.32	1
2,2-Dichloropropane	ND		ug/kg	5.8	0.26	1
1,2-Dibromoethane	ND		ug/kg	4.7	0.20	1
1,3-Dichloropropane	ND		ug/kg	5.8	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.37	1
Bromobenzene	ND		ug/kg	5.8	0.24	1
n-Butylbenzene	ND		ug/kg	1.2	0.13	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
tert-Butylbenzene	ND		ug/kg	5.8	0.16	1
o-Chlorotoluene	ND		ug/kg	5.8	0.19	1
p-Chlorotoluene	ND		ug/kg	5.8	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.46	1
Hexachlorobutadiene	ND		ug/kg	5.8	0.27	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.15	1
Naphthalene	ND		ug/kg	5.8	0.16	1
Acrylonitrile	ND		ug/kg	12	0.60	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.8	0.17	1

Project Name: 25 PATCHEN **Lab Number:** L1608891

Project Number: 25 PATCHEN **Report Date:** 04/04/16

SAMPLE RESULTS

Lab ID: L1608891-01 Date Collected: 03/28/16 14:35

Client ID: SS-1 Date Received: 03/28/16

Sample Location: BROOKLYN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/kg	5.8	0.16	1
1,4-Dioxane	ND		ug/kg	120	17.	1
p-Diethylbenzene	ND		ug/kg	4.7	0.19	1
p-Ethyltoluene	ND		ug/kg	4.7	0.14	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.7	0.15	1
Ethyl ether	ND		ug/kg	5.8	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	0.46	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	97		70-130

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/31/16 09:00
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG879482-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
1,1-Dichloropropene	ND		ug/kg	5.0	0.14
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	0.48	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/31/16 09:00
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG879482-3					
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
Xylenes, Total	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	1.3	J	ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
Vinyl acetate	ND		ug/kg	10	0.13
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.16
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
2,2-Dichloropropane	ND		ug/kg	5.0	0.23
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
1,3-Dichloropropane	ND		ug/kg	5.0	0.14
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14
o-Chlorotoluene	ND		ug/kg	5.0	0.16

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN
Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/31/16 09:00
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG879482-3					
p-Chlorotoluene	ND		ug/kg	5.0	0.13
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Hexachlorobutadiene	ND		ug/kg	5.0	0.23
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
Acrylonitrile	ND		ug/kg	10	0.51
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,4-Dioxane	ND		ug/kg	100	14.
p-Diethylbenzene	ND		ug/kg	4.0	0.16
p-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.39

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879482-1 WG879482-2								
Methylene chloride	98		98		70-130	0		30
1,1-Dichloroethane	96		94		70-130	2		30
Chloroform	96		95		70-130	1		30
Carbon tetrachloride	91		90		70-130	1		30
1,2-Dichloropropane	96		96		70-130	0		30
Dibromochloromethane	87		92		70-130	6		30
2-Chloroethylvinyl ether	91		96		70-130	5		30
1,1,2-Trichloroethane	97		97		70-130	0		30
Tetrachloroethene	97		94		70-130	3		30
Chlorobenzene	96		96		70-130	0		30
Trichlorofluoromethane	117		108		70-139	8		30
1,2-Dichloroethane	96		96		70-130	0		30
1,1,1-Trichloroethane	93		92		70-130	1		30
Bromodichloromethane	89		92		70-130	3		30
trans-1,3-Dichloropropene	92		93		70-130	1		30
cis-1,3-Dichloropropene	93		95		70-130	2		30
1,1-Dichloropropene	98		94		70-130	4		30
Bromoform	82		88		70-130	7		30
1,1,2,2-Tetrachloroethane	92		94		70-130	2		30
Benzene	96		94		70-130	2		30
Toluene	94		93		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879482-1 WG879482-2								
Ethylbenzene	95		93		70-130	2		30
Chloromethane	103		97		52-130	6		30
Bromomethane	106		94		57-147	12		30
Vinyl chloride	100		94		67-130	6		30
Chloroethane	129		118		50-151	9		30
1,1-Dichloroethene	97		93		65-135	4		30
trans-1,2-Dichloroethene	95		93		70-130	2		30
Trichloroethene	96		95		70-130	1		30
1,2-Dichlorobenzene	95		97		70-130	2		30
1,3-Dichlorobenzene	96		96		70-130	0		30
1,4-Dichlorobenzene	97		97		70-130	0		30
Methyl tert butyl ether	94		95		66-130	1		30
p/m-Xylene	96		94		70-130	2		30
o-Xylene	96		96		70-130	0		30
cis-1,2-Dichloroethene	94		97		70-130	3		30
Dibromomethane	95		98		70-130	3		30
Styrene	97		98		70-130	1		30
Dichlorodifluoromethane	104		98		30-146	6		30
Acetone	98		96		54-140	2		30
Carbon disulfide	92		91		59-130	1		30
2-Butanone	90		93		70-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879482-1 WG879482-2								
Vinyl acetate	95		99		70-130	4		30
4-Methyl-2-pentanone	88		92		70-130	4		30
1,2,3-Trichloropropane	93		95		68-130	2		30
2-Hexanone	94		96		70-130	2		30
Bromochloromethane	100		101		70-130	1		30
2,2-Dichloropropane	92		93		70-130	1		30
1,2-Dibromoethane	94		96		70-130	2		30
1,3-Dichloropropane	96		98		69-130	2		30
1,1,1,2-Tetrachloroethane	91		92		70-130	1		30
Bromobenzene	96		97		70-130	1		30
n-Butylbenzene	98		96		70-130	2		30
sec-Butylbenzene	97		95		70-130	2		30
tert-Butylbenzene	96		94		70-130	2		30
o-Chlorotoluene	96		94		70-130	2		30
p-Chlorotoluene	96		94		70-130	2		30
1,2-Dibromo-3-chloropropane	80		87		68-130	8		30
Hexachlorobutadiene	93		93		67-130	0		30
Isopropylbenzene	96		94		70-130	2		30
p-Isopropyltoluene	98		96		70-130	2		30
Naphthalene	94		99		70-130	5		30
Acrylonitrile	95		97		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879482-1 WG879482-2								
Isopropyl Ether	98		98		66-130	0		30
tert-Butyl Alcohol	86		90		70-130	5		30
n-Propylbenzene	97		94		70-130	3		30
1,2,3-Trichlorobenzene	99		102		70-130	3		30
1,2,4-Trichlorobenzene	96		100		70-130	4		30
1,3,5-Trimethylbenzene	97		96		70-130	1		30
1,2,4-Trimethylbenzene	97		96		70-130	1		30
Methyl Acetate	94		96		51-146	2		30
Ethyl Acetate	95		92		70-130	3		30
Acrolein	94		97		70-130	3		30
Cyclohexane	105		99		59-142	6		30
1,4-Dioxane	99		105		65-136	6		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	107		101		50-139	6		30
p-Diethylbenzene	98		96		70-130	2		30
p-Ethyltoluene	97		95		70-130	2		30
1,2,4,5-Tetramethylbenzene	97		98		70-130	1		30
Tetrahydrofuran	98		98		66-130	0		30
Ethyl ether	80		78		67-130	3		30
trans-1,4-Dichloro-2-butene	92		94		70-130	2		30
Methyl cyclohexane	102		97		70-130	5		30
Ethyl-Tert-Butyl-Ether	95		96		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879482-1 WG879482-2								
Tertiary-Amyl Methyl Ether	93		95		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		97		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	97		96		70-130
Dibromofluoromethane	98		99		70-130

SEMIVOLATILES

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN
Lab Number: L1608891
Report Date: 04/04/16

SAMPLE RESULTS

Lab ID: L1608891-01
Client ID: SS-1
Sample Location: BROOKLYN, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/04/16 17:09
Analyst: RC
Percent Solids: 86%

Date Collected: 03/28/16 14:35
Date Received: 03/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 03/31/16 17:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	340		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	6200		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	230		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-Ethylhexyl)phthalate	340		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1

Project Name: 25 PATCHEN **Lab Number:** L1608891

Project Number: 25 PATCHEN **Report Date:** 04/04/16

SAMPLE RESULTS

Lab ID: L1608891-01 Date Collected: 03/28/16 14:35

Client ID: SS-1 Date Received: 03/28/16

Sample Location: BROOKLYN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)anthracene	3500		ug/kg	120	22.	1
Benzo(a)pyrene	3100		ug/kg	150	47.	1
Benzo(b)fluoranthene	4000		ug/kg	120	32.	1
Benzo(k)fluoranthene	1700		ug/kg	120	31.	1
Chrysene	3400		ug/kg	120	20.	1
Acenaphthylene	310		ug/kg	150	30.	1
Anthracene	1100		ug/kg	120	38.	1
Benzo(ghi)perylene	1900		ug/kg	150	23.	1
Fluorene	420		ug/kg	190	19.	1
Phenanthrene	4200		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	560		ug/kg	120	22.	1
Indeno(1,2,3-cd)Pyrene	2200		ug/kg	150	27.	1
Pyrene	5400		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	200		ug/kg	190	18.	1
2-Methylnaphthalene	130	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
P-Chloro-M-Cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	200	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	470		ug/kg	190	19.	1

Project Name: 25 PATCHEN
Lab Number: L1608891
Project Number: 25 PATCHEN
Report Date: 04/04/16

SAMPLE RESULTS

Lab ID: L1608891-01
Client ID: SS-1
Sample Location: BROOKLYN, NY
Date Collected: 03/28/16 14:35
Date Received: 03/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	86		10-120
Nitrobenzene-d5	96		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	97		10-136
4-Terphenyl-d14	72		18-120

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/01/16 20:14
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 03/31/16 17:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG879252-1					
Acenaphthene	ND		ug/kg	130	17.
Benzidine	ND		ug/kg	540	180
n-Nitrosodimethylamine	ND		ug/kg	320	31.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Azobenzene	ND		ug/kg	160	16.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/01/16 20:14
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 03/31/16 17:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG879252-1					
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	38.
Aniline	ND		ug/kg	190	77.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
P-Chloro-M-Cresol	ND		ug/kg	160	24.

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/01/16 20:14
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 03/31/16 17:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG879252-1					
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
Benzaldehyde	ND		ug/kg	210	44.
Caprolactam	ND		ug/kg	160	49.
Atrazine	ND		ug/kg	130	57.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
Pyridine	ND		ug/kg	650	62.
Parathion, ethyl	ND		ug/kg	160	100
1-Methylnaphthalene	ND		ug/kg	160	19.

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/01/16 20:14
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 03/31/16 17:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG879252-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	66		10-136
4-Terphenyl-d14	82		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879252-2 WG879252-3								
Acenaphthene	67		66		31-137	2		50
Benzidine	**78**	Q	**68**	Q	10-66	14		50
n-Nitrosodimethylamine	53		56		22-100	6		50
1,2,4-Trichlorobenzene	68		70		38-107	3		50
Hexachlorobenzene	84		82		40-140	2		50
Bis(2-chloroethyl)ether	65		65		40-140	0		50
2-Chloronaphthalene	79		77		40-140	3		50
1,2-Dichlorobenzene	65		69		40-140	6		50
1,3-Dichlorobenzene	61		65		40-140	6		50
1,4-Dichlorobenzene	62		66		28-104	6		50
3,3'-Dichlorobenzidine	72		67		40-140	7		50
2,4-Dinitrotoluene	89		85		28-89	5		50
2,6-Dinitrotoluene	93		87		40-140	7		50
Fluoranthene	81		78		40-140	4		50
4-Chlorophenyl phenyl ether	74		72		40-140	3		50
4-Bromophenyl phenyl ether	82		78		40-140	5		50
Azobenzene	73		71		40-140	3		50
Bis(2-chloroisopropyl)ether	57		57		40-140	0		50
Bis(2-chloroethoxy)methane	75		73		40-117	3		50
Hexachlorobutadiene	72		75		40-140	4		50
Hexachlorocyclopentadiene	88		90		40-140	2		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879252-2 WG879252-3								
Hexachloroethane	67		71		40-140	6		50
Isophorone	88		86		40-140	2		50
Naphthalene	66		66		40-140	0		50
Nitrobenzene	71		73		40-140	3		50
NitrosoDiPhenylAmine(NDPA)/DPA	80		76		36-157	5		50
n-Nitrosodi-n-propylamine	82		81		32-121	1		50
Bis(2-Ethylhexyl)phthalate	70		68		40-140	3		50
Butyl benzyl phthalate	85		81		40-140	5		50
Di-n-butylphthalate	84		80		40-140	5		50
Di-n-octylphthalate	76		74		40-140	3		50
Diethyl phthalate	83		79		40-140	5		50
Dimethyl phthalate	77		74		40-140	4		50
Benzo(a)anthracene	74		72		40-140	3		50
Benzo(a)pyrene	75		74		40-140	1		50
Benzo(b)fluoranthene	74		74		40-140	0		50
Benzo(k)fluoranthene	76		72		40-140	5		50
Chrysene	66		65		40-140	2		50
Acenaphthylene	88		86		40-140	2		50
Anthracene	74		72		40-140	3		50
Benzo(ghi)perylene	74		73		40-140	1		50
Fluorene	75		73		40-140	3		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879252-2 WG879252-3								
Phenanthrene	67		65		40-140	3		50
Dibenzo(a,h)anthracene	80		79		40-140	1		50
Indeno(1,2,3-cd)Pyrene	82		82		40-140	0		50
Pyrene	78		76		35-142	3		50
Biphenyl	65		64		54-104	2		50
Aniline	60		57		40-140	5		50
4-Chloroaniline	78		76		40-140	3		50
2-Nitroaniline	90		89		47-134	1		50
3-Nitroaniline	62		56		26-129	10		50
4-Nitroaniline	77		71		41-125	8		50
Dibenzofuran	69		68		40-140	1		50
2-Methylnaphthalene	73		72		40-140	1		50
1,2,4,5-Tetrachlorobenzene	66		66		40-117	0		50
Acetophenone	76		78		14-144	3		50
2,4,6-Trichlorophenol	81		78		30-130	4		50
P-Chloro-M-Cresol	90		87		26-103	3		50
2-Chlorophenol	78		80		25-102	3		50
2,4-Dichlorophenol	82		82		30-130	0		50
2,4-Dimethylphenol	91		89		30-130	2		50
2-Nitrophenol	88		90		30-130	2		50
4-Nitrophenol	73		74		11-114	1		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879252-2 WG879252-3								
2,4-Dinitrophenol	79		73		4-130	8		50
4,6-Dinitro-o-cresol	93		88		10-130	6		50
Pentachlorophenol	72		70		17-109	3		50
Phenol	68		69		26-90	1		50
2-Methylphenol	80		80		30-130.	0		50
3-Methylphenol/4-Methylphenol	76		74		30-130	3		50
2,4,5-Trichlorophenol	93		87		30-130	7		50
Benzoic Acid	55		50		10-66	10		50
Benzyl Alcohol	77		75		40-140	3		50
Carbazole	79		76		54-128	4		50
Benzaldehyde	56		58		40-140	4		50
Caprolactam	81		77		15-130	5		50
Atrazine	90		86		40-140	5		50
2,3,4,6-Tetrachlorophenol	82		80		40-140	2		50
Pyridine	40		47		10-93	16		50
Parathion, ethyl	129		123		40-140	5		50
1-Methylnaphthalene	74		75		26-130	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG879252-2 WG879252-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	73		76		25-120
Phenol-d6	83		83		10-120
Nitrobenzene-d5	85		84		23-120
2-Fluorobiphenyl	80		78		30-120
2,4,6-Tribromophenol	85		82		10-136
4-Terphenyl-d14	88		83		18-120

PCBS

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN
Lab Number: L1608891
Report Date: 04/04/16

SAMPLE RESULTS

Lab ID:	L1608891-01	Date Collected:	03/28/16 14:35
Client ID:	SS-1	Date Received:	03/28/16
Sample Location:	BROOKLYN, NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	03/31/16 02:29
Analytical Date:	04/01/16 18:16	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	04/01/16
Percent Solids:	86%	Cleanup Method:	EPA 3660B
		Cleanup Date:	04/01/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.4	3.04	1	A
Aroclor 1221	ND		ug/kg	38.4	3.54	1	A
Aroclor 1232	ND		ug/kg	38.4	4.50	1	A
Aroclor 1242	ND		ug/kg	38.4	4.70	1	A
Aroclor 1248	ND		ug/kg	38.4	3.24	1	A
Aroclor 1254	ND		ug/kg	38.4	3.16	1	A
Aroclor 1260	ND		ug/kg	38.4	2.93	1	A
Aroclor 1262	ND		ug/kg	38.4	1.91	1	A
Aroclor 1268	ND		ug/kg	38.4	5.57	1	A
PCBs, Total	ND		ug/kg	38.4	1.91	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	44		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 03/31/16 10:16
Analyst: BO

Extraction Method: EPA 3546
Extraction Date: 03/31/16 02:29
Cleanup Method: EPA 3665A
Cleanup Date: 03/31/16
Cleanup Method: EPA 3660B
Cleanup Date: 03/31/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG878973-1						
Aroclor 1016	ND		ug/kg	31.8	2.52	A
Aroclor 1221	ND		ug/kg	31.8	2.94	A
Aroclor 1232	ND		ug/kg	31.8	3.73	A
Aroclor 1242	ND		ug/kg	31.8	3.90	A
Aroclor 1248	ND		ug/kg	31.8	2.69	A
Aroclor 1254	ND		ug/kg	31.8	2.62	A
Aroclor 1260	ND		ug/kg	31.8	2.43	A
Aroclor 1262	ND		ug/kg	31.8	1.58	A
Aroclor 1268	ND		ug/kg	31.8	4.62	A
PCBs, Total	ND		ug/kg	31.8	1.58	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	84		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG878973-2 WG878973-3									
Aroclor 1016	93		93		40-140	0		50	A
Aroclor 1260	79		80		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		88		30-150	A
Decachlorobiphenyl	90		83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		87		30-150	B
Decachlorobiphenyl	82		76		30-150	B

PESTICIDES

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN
Lab Number: L1608891
Report Date: 04/04/16

SAMPLE RESULTS

Lab ID: L1608891-01
Client ID: SS-1
Sample Location: BROOKLYN, NY
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/02/16 13:33
Analyst: EC
Percent Solids: 86%

Date Collected: 03/28/16 14:35
Date Received: 03/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 04/01/16 08:44
Cleanup Method: EPA 3620B
Cleanup Date: 04/02/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.81	0.355	1	A
Lindane	ND		ug/kg	0.755	0.338	1	A
Alpha-BHC	ND		ug/kg	0.755	0.214	1	A
Beta-BHC	ND		ug/kg	1.81	0.687	1	A
Heptachlor	ND		ug/kg	0.906	0.406	1	A
Aldrin	ND		ug/kg	1.81	0.638	1	A
Heptachlor epoxide	1.12	J	ug/kg	3.40	1.02	1	A
Endrin	ND		ug/kg	0.755	0.310	1	A
Endrin aldehyde	ND		ug/kg	2.26	0.793	1	A
Endrin ketone	ND		ug/kg	1.81	0.467	1	A
Dieldrin	ND		ug/kg	1.13	0.566	1	A
4,4'-DDE	12.3		ug/kg	1.81	0.419	1	A
4,4'-DDD	ND		ug/kg	1.81	0.646	1	A
4,4'-DDT	45.5		ug/kg	3.40	1.46	1	A
Endosulfan I	ND		ug/kg	1.81	0.428	1	A
Endosulfan II	ND		ug/kg	1.81	0.606	1	A
Endosulfan sulfate	ND		ug/kg	0.755	0.359	1	A
Methoxychlor	ND		ug/kg	3.40	1.06	1	A
Toxaphene	ND		ug/kg	34.0	9.51	1	A
cis-Chlordane	4.53		ug/kg	2.26	0.631	1	B
trans-Chlordane	2.81	PI	ug/kg	2.26	0.598	1	A
Chlordane	31.6	PI	ug/kg	14.7	6.00	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	85		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	103		30-150	A

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/02/16 10:05
Analyst: EC

Extraction Method: EPA 3546
Extraction Date: 04/01/16 08:44
Cleanup Method: EPA 3620B
Cleanup Date: 04/02/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG879421-1						
Delta-BHC	ND		ug/kg	1.50	0.295	A
Lindane	ND		ug/kg	0.627	0.280	A
Alpha-BHC	ND		ug/kg	0.627	0.178	A
Beta-BHC	ND		ug/kg	1.50	0.571	A
Heptachlor	ND		ug/kg	0.753	0.338	A
Aldrin	ND		ug/kg	1.50	0.530	A
Heptachlor epoxide	ND		ug/kg	2.82	0.847	A
Endrin	ND		ug/kg	0.627	0.257	A
Endrin aldehyde	ND		ug/kg	1.88	0.659	A
Endrin ketone	ND		ug/kg	1.50	0.388	A
Dieldrin	ND		ug/kg	0.941	0.470	A
4,4'-DDE	ND		ug/kg	1.50	0.348	A
4,4'-DDD	ND		ug/kg	1.50	0.537	A
4,4'-DDT	ND		ug/kg	2.82	1.21	A
Endosulfan I	ND		ug/kg	1.50	0.356	A
Endosulfan II	ND		ug/kg	1.50	0.503	A
Endosulfan sulfate	ND		ug/kg	0.627	0.299	A
Methoxychlor	ND		ug/kg	2.82	0.878	A
Toxaphene	ND		ug/kg	28.2	7.90	A
cis-Chlordane	ND		ug/kg	1.88	0.524	A
trans-Chlordane	ND		ug/kg	1.88	0.497	A
Chlordane	ND		ug/kg	12.2	4.99	A

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/02/16 10:05
Analyst: EC

Extraction Method: EPA 3546
Extraction Date: 04/01/16 08:44
Cleanup Method: EPA 3620B
Cleanup Date: 04/02/16

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG879421-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	108		30-150	B
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	78		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG879421-2 WG879421-3									
Delta-BHC	86		85		30-150	1		30	A
Lindane	84		82		30-150	2		30	A
Alpha-BHC	92		86		30-150	7		30	A
Beta-BHC	97		86		30-150	12		30	A
Heptachlor	83		80		30-150	4		30	A
Aldrin	86		84		30-150	2		30	A
Heptachlor epoxide	89		83		30-150	7		30	A
Endrin	95		89		30-150	7		30	A
Endrin aldehyde	84		72		30-150	15		30	A
Endrin ketone	84		78		30-150	7		30	A
Dieldrin	89		86		30-150	3		30	A
4,4'-DDE	88		83		30-150	6		30	A
4,4'-DDD	91		85		30-150	7		30	A
4,4'-DDT	92		90		30-150	2		30	A
Endosulfan I	91		87		30-150	4		30	A
Endosulfan II	96		92		30-150	4		30	A
Endosulfan sulfate	78		72		30-150	8		30	A
Methoxychlor	102		92		30-150	10		30	A
cis-Chlordane	87		83		30-150	5		30	A
trans-Chlordane	93		90		30-150	3		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG879421-2 WG879421-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		66		30-150	B
Decachlorobiphenyl	99		95		30-150	B
2,4,5,6-Tetrachloro-m-xylene	75		72		30-150	A
Decachlorobiphenyl	98		85		30-150	A

METALS

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN
Lab Number: L1608891
Report Date: 04/04/16

SAMPLE RESULTS

Lab ID: L1608891-01
Client ID: SS-1
Sample Location: BROOKLYN, NY
Matrix: Soil
Percent Solids: 86%

Date Collected: 03/28/16 14:35
Date Received: 03/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Aluminum, Total	6700		mg/kg	9.2	1.8	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Antimony, Total	5.7		mg/kg	4.6	0.74	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Arsenic, Total	11		mg/kg	0.92	0.18	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Barium, Total	250		mg/kg	0.92	0.28	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Beryllium, Total	0.33	J	mg/kg	0.46	0.09	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Cadmium, Total	2.1		mg/kg	0.92	0.07	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Calcium, Total	2900		mg/kg	9.2	2.8	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Chromium, Total	21		mg/kg	0.92	0.18	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Cobalt, Total	4.6		mg/kg	1.8	0.46	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Copper, Total	180		mg/kg	0.92	0.18	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Iron, Total	25000		mg/kg	4.6	1.8	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Lead, Total	540		mg/kg	4.6	0.18	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Magnesium, Total	1200		mg/kg	9.2	0.92	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Manganese, Total	370		mg/kg	0.92	0.18	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Mercury, Total	1.6		mg/kg	0.07	0.02	1	03/29/16 07:55	03/29/16 23:18	EPA 7471B	1,7471B	EA
Nickel, Total	14		mg/kg	2.3	0.37	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Potassium, Total	480		mg/kg	230	37.	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Selenium, Total	1.0	J	mg/kg	1.8	0.28	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Silver, Total	0.50	J	mg/kg	0.92	0.18	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Sodium, Total	61	J	mg/kg	180	28.	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.8	0.37	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Vanadium, Total	30		mg/kg	0.92	0.09	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB
Zinc, Total	430		mg/kg	4.6	0.65	2	03/29/16 10:20	03/29/16 22:09	EPA 3050B	1,6010C	AB

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN
Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG878222-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	03/29/16 07:55	03/29/16 18:17	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG878295-1										
Aluminum, Total	ND		mg/kg	4.0	0.80	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Antimony, Total	ND		mg/kg	2.0	0.32	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Arsenic, Total	ND		mg/kg	0.40	0.08	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Barium, Total	ND		mg/kg	0.40	0.12	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Beryllium, Total	ND		mg/kg	0.20	0.04	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.40	0.03	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Calcium, Total	ND		mg/kg	4.0	1.2	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Chromium, Total	ND		mg/kg	0.40	0.08	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Cobalt, Total	ND		mg/kg	0.80	0.20	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Copper, Total	0.10	J	mg/kg	0.40	0.08	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Iron, Total	ND		mg/kg	2.0	0.80	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Lead, Total	ND		mg/kg	2.0	0.08	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Magnesium, Total	ND		mg/kg	4.0	0.40	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Manganese, Total	ND		mg/kg	0.40	0.08	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Nickel, Total	ND		mg/kg	1.0	0.16	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Potassium, Total	ND		mg/kg	100	16.	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Selenium, Total	ND		mg/kg	0.80	0.12	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Silver, Total	ND		mg/kg	0.40	0.08	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Sodium, Total	ND		mg/kg	80	12.	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Thallium, Total	ND		mg/kg	0.80	0.16	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Vanadium, Total	ND		mg/kg	0.40	0.04	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB
Zinc, Total	ND		mg/kg	2.0	0.28	1	03/29/16 10:20	03/29/16 12:52	1,6010C	AB

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG878222-2 SRM Lot Number: D088-540								
Mercury, Total	97		-		72-128	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 PATCHEN

Project Number: 25 PATCHEN

Lab Number: L1608891

Report Date: 04/04/16

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG878295-2 SRM Lot Number: D088-540					
Aluminum, Total	88	-	48-151	-	
Antimony, Total	206	-	1-208	-	
Arsenic, Total	105	-	79-121	-	
Barium, Total	99	-	83-117	-	
Beryllium, Total	103	-	83-117	-	
Cadmium, Total	103	-	83-117	-	
Calcium, Total	101	-	81-119	-	
Chromium, Total	101	-	80-120	-	
Cobalt, Total	111	-	84-115	-	
Copper, Total	98	-	81-118	-	
Iron, Total	116	-	45-155	-	
Lead, Total	98	-	81-117	-	
Magnesium, Total	91	-	76-124	-	
Manganese, Total	98	-	81-118	-	
Nickel, Total	105	-	83-117	-	
Potassium, Total	93	-	71-129	-	
Selenium, Total	97	-	78-122	-	
Silver, Total	103	-	75-124	-	
Sodium, Total	106	-	72-127	-	
Thallium, Total	105	-	80-120	-	
Vanadium, Total	107	-	78-122	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 25 PATCHEN

Project Number: 25 PATCHEN

Lab Number: L1608891

Report Date: 04/04/16

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG878295-2 SRM Lot Number: D088-540					
Zinc, Total	101	-	82-118	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG878222-4 QC Sample: L1608886-14 Client ID: MS Sample												
Mercury, Total	0.82	0.141	1.4	**410**	Q	-	-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG878295-4 QC Sample: L1608886-14 Client ID: MS Sample										
Aluminum, Total	6500	170	5200	**0**	Q	-	-	75-125	-	20
Antimony, Total	3.0J	42.5	46	108		-	-	75-125	-	20
Arsenic, Total	7.0	10.2	18	108		-	-	75-125	-	20
Barium, Total	160	170	360	118		-	-	75-125	-	20
Beryllium, Total	0.26J	4.25	4.6	108		-	-	75-125	-	20
Cadmium, Total	0.64J	4.33	4.7	108		-	-	75-125	-	20
Calcium, Total	26000	850	52000	**3060**	Q	-	-	75-125	-	20
Chromium, Total	20.	17	33	76		-	-	75-125	-	20
Cobalt, Total	5.4	42.5	42	86		-	-	75-125	-	20
Copper, Total	120	21.2	140	94		-	-	75-125	-	20
Iron, Total	14000	85	12000	**0**	Q	-	-	75-125	-	20
Lead, Total	260	43.3	330	**161**	Q	-	-	75-125	-	20
Magnesium, Total	8800	850	8000	**0**	Q	-	-	75-125	-	20
Manganese, Total	220	42.5	240	**47**	Q	-	-	75-125	-	20
Nickel, Total	16.	42.5	52	85		-	-	75-125	-	20
Potassium, Total	850	850	1700	100		-	-	75-125	-	20
Selenium, Total	0.38J	10.2	10	98		-	-	75-125	-	20
Silver, Total	0.39J	25.5	27	106		-	-	75-125	-	20
Sodium, Total	230	850	1200	114		-	-	75-125	-	20
Thallium, Total	ND	10.2	8.6	84		-	-	75-125	-	20
Vanadium, Total	20.	42.5	60	94		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG878295-4 QC Sample: L1608886-14 Client ID: MS Sample									
Zinc, Total	260	42.5	300	94	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG878222-3 QC Sample: L1608886-14 Client ID: DUP Sample						
Mercury, Total	0.82	0.79	mg/kg	4		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG878295-3 QC Sample: L1608886-14 Client ID: DUP Sample						
Aluminum, Total	6500	7200	mg/kg	10		20
Antimony, Total	3.0J	4.2J	mg/kg	NC		20
Arsenic, Total	7.0	7.4	mg/kg	6		20
Barium, Total	160	190	mg/kg	17		20
Beryllium, Total	0.26J	0.69	mg/kg	NC		20
Cadmium, Total	0.64J	0.66J	mg/kg	NC		20
Calcium, Total	26000	25000	mg/kg	4		20
Chromium, Total	20.	23	mg/kg	14		20
Cobalt, Total	5.4	6.2	mg/kg	14		20
Copper, Total	120	140	mg/kg	15		20
Iron, Total	14000	17000	mg/kg	19		20
Lead, Total	260	300	mg/kg	14		20
Magnesium, Total	8800	8100	mg/kg	8		20
Manganese, Total	220	220	mg/kg	0		20
Nickel, Total	16.	16	mg/kg	0		20
Potassium, Total	850	970	mg/kg	13		20
Selenium, Total	0.38J	0.61J	mg/kg	NC		20
Silver, Total	0.39J	0.36J	mg/kg	NC		20
Sodium, Total	230	540	mg/kg	**81**	Q	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG878295-3 QC Sample: L1608886-14 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	20.	21	mg/kg	5	20
Zinc, Total	260	260	mg/kg	0	20

INORGANICS
&
MISCELLANEOUS

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

SAMPLE RESULTS

Lab ID: L1608891-01
Client ID: SS-1
Sample Location: BROOKLYN, NY
Matrix: Soil

Date Collected: 03/28/16 14:35
Date Received: 03/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.6		%	0.100	NA	1	-	03/29/16 11:38	121,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG878348-1 QC Sample: L1608893-01 Client ID: DUP Sample						
Solids, Total	85.0	84.6	%	0		20

Project Name: 25 PATCHEN
Project Number: 25 PATCHEN

Lab Number: L1608891
Report Date: 04/04/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1608891-01A	Vial Large Septa unpreserved (4o	A	N/A	4.4	Y	Absent	NYTCL-8260(14)
L1608891-01A9	Vial MeOH preserved split	A	N/A	4.4	Y	Absent	NYTCL-8260(14)
L1608891-01B	Glass 250ml/8oz unpreserved	A	N/A	4.4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1608891-01C	Glass 60mL/2oz unpreserved	A	N/A	4.4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Project Name:	25 PATCHEN	**Lab Number:**	L1608891
Project Number:	25 PATCHEN	**Report Date:**	04/04/16

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

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.

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.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: DU Report with 'J' Qualifiers

Project Name:	25 PATCHEN	**Lab Number:**	L1608891
Project Number:	25 PATCHEN	**Report Date:**	04/04/16

Data Qualifiers

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	25 PATCHEN	**Lab Number:**	L1608891
Project Number:	25 PATCHEN	**Report Date:**	04/04/16

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: Biphenyl, Caprolactam
EPA 8270D-SIM Isotope Dilution: SCM: 1,4-Dioxane
SM 2540D: TSS
SM2540G: SCM: Percent Solids
EPA 1631E: SCM: Mercury
EPA 7474: SCM: Mercury
EPA 8081B: NPW and SCM: Mirex, Hexachlorobenzene.
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA 8270-SIM: NPW and SCM: Alkylated PAHs.
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, n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene.
Biological Tissue Matrix: ***8270D-SIM; 3050B; 3051A; 7471B; 8081B; 8082A; 6020A:*** Lead***; 8270D:*** bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate, Fluoranthene, Pentachlorophenol.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: 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**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: 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: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial_No:04041618:27

CHAIN OF CUSTODY

ALPHA ANALYTICAL

PAGE ____ OF ____

Date Rec'd in Lab: 3/28/16

ALPHA Job #: L1608891

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: Tenen Environmental

Address:

Phone:

Fax:

Email: mcarroll@tenen-env.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 25 Patchen

Project Location: Brooklyn, NY

Project #: 25 Patchen

Project Manager: Matt Carroll

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS: NYTCL-8081, 8082, 8270; TAL Metals; NYTCL-8260

SAMPLE HANDLING

Filtration ________
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8081, 8082, 8270	TAL Metals	NYTCL-8260	Sample Specific Comments	TOTAL # BOTTLES
08891-01	SS-1	3/28/16	1435	S	AK	X	X	X		3

Container Type	A	A	A
Preservative	A	A	A

Relinquished By:	Date/Time	Received By:	Date/Time
Rob [signature]	3/28/16 16:30	Rob [signature] AAL	3/28/16 16:30
Tom [signature]	3/28/16 18:30	Tom [signature]	3-28-16 1830
[signature]	3/28/16 22:45	[signature]	3/28/16 22:45

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.

FORM NO: 01-01 (rev. 14-OCT-07)

Site Address: 19 Patchen Avenue
Brooklyn, NY 11221

SC PPW 10/10/2017

WORK ORDER NO: 031800670495

DOCUMENT NO. 913827

STRAIGHT BILL OF LADING

TRANSPORTER 1 Clean Harbors Environmental Services, Inc. VEHICLE ID # T#5244

EPA ID # MAD039322250 TRANS. 1 PHONE (781) 792-5000

TRANSPORTER 2 SJ Transportation VEHICLE ID # 1240 - VIDB

EPA ID # NJD071629576 TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Spring Grove Resource Recovery Inc.	Tenen Environmental
FACILITY EPA ID # OHD000816629	SHIPPER EPA ID # NONEREQUIRED
ADDRESS 4879 Spring Grove Avenue	ADDRESS 121 W 27th St
CITY Cincinnati STATE OH ZIP 45232	CITY New York STATE NY ZIP 10001

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
			A. ~~NOT REGULATED BY DOT, (SOIL)~~ (16)		
4X55	DM		B. NON DOT REGULATED MATERIAL, (WATER, SOIL)	2400	P
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS EMERGENCY PHONE #: (800) 483-3718 GENERATOR: Tenen Environmental

~~A.CH1691255 B.CH1691301~~
(16) 4X55 Dep #01259 Des #401679

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

SHIPPER	PRINT CLAIRE ZACCHEO	SIGN	DATE 2/9/18
TRANSPORTER 1	PRINT MANUEL GARCIA	SIGN	DATE 2/9/18
TRANSPORTER 2	PRINT M. Andreas	SIGN	DATE 2/13/18
RECEIVED BY	PRINT Charity Bongafel	SIGN	DATE 2/14/18

ANALYTICAL REPORT

Lab Number:	L1915442
Client:	Tenen Environmental, LLC 121 West 27th Street Suite 702 New York City, NY 10001
ATTN:	Matthew Carroll
Phone:	(646) 606-2332
Project Name:	19 PATCHEN AVE.
Project Number:	19 PATCHEN AVE
Report Date:	04/23/19

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1915442-01	DRUM	SOIL	19 PATCHEN AVE., BROOKLYN, NY	04/16/19 10:05	04/16/19

Project Name:	19 PATCHEN AVE.	**Lab Number:**	L1915442
Project Number:	19 PATCHEN AVE	**Report Date:**	04/23/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	19 PATCHEN AVE.	**Lab Number:**	L1915442
Project Number:	19 PATCHEN AVE	**Report Date:**	04/23/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Amita Naik

Title: Technical Director/Representative Date: 04/23/19

ORGANICS

VOLATILES

Project Name: 19 PATCHEN AVE. **Lab Number:** L1915442

Project Number: 19 PATCHEN AVE **Report Date:** 04/23/19

SAMPLE RESULTS

Lab ID: L1915442-01 Date Collected: 04/16/19 10:05

Client ID: DRUM Date Received: 04/16/19

Sample Location: 19 PATCHEN AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 04/21/19 11:31

Analyst: JC

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.1	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	0.93		ug/kg	0.61	0.24	1
Chlorobenzene	ND		ug/kg	0.61	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.85	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	0.20	1
Bromodichloromethane	ND		ug/kg	0.61	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.61	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.61	0.19	1
Bromoform	ND		ug/kg	4.9	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	0.20	1
Benzene	ND		ug/kg	0.61	0.20	1
Toluene	ND		ug/kg	1.2	0.66	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.9	1.1	1
Bromomethane	ND		ug/kg	2.4	0.71	1
Vinyl chloride	ND		ug/kg	1.2	0.41	1
Chloroethane	ND		ug/kg	2.4	0.55	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1915442

Project Number: 19 PATCHEN AVE **Report Date:** 04/23/19

SAMPLE RESULTS

Lab ID: L1915442-01 Date Collected: 04/16/19 10:05

Client ID: DRUM Date Received: 04/16/19

Sample Location: 19 PATCHEN AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.61	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.68	1
o-Xylene	ND		ug/kg	1.2	0.35	1
Xylenes, Total	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	5.8	J	ug/kg	12	5.8	1
Carbon disulfide	ND		ug/kg	12	5.5	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.61	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.9	0.79	1
Acrylonitrile	ND		ug/kg	4.9	1.4	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1915442

Project Number: 19 PATCHEN AVE **Report Date:** 04/23/19

SAMPLE RESULTS

Lab ID: L1915442-01 Date Collected: 04/16/19 10:05

Client ID: DRUM Date Received: 04/16/19

Sample Location: 19 PATCHEN AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.41	1
1,4-Dioxane	ND		ug/kg	97	43.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.22	1
p-Ethyltoluene	ND		ug/kg	2.4	0.47	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.42	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.1	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	98		70-130

Project Name: 19 PATCHEN AVE. **Lab Number:** L1915442

Project Number: 19 PATCHEN AVE **Report Date:** 04/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/21/19 11:05
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1228784-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/21/19 11:05
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1228784-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: 19 PATCHEN AVE. **Lab Number:** L1915442

Project Number: 19 PATCHEN AVE **Report Date:** 04/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/21/19 11:05
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1228784-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1228784-3 WG1228784-4								
Methylene chloride	96		98		70-130	2		30
1,1-Dichloroethane	102		107		70-130	5		30
Chloroform	94		98		70-130	4		30
Carbon tetrachloride	86		92		70-130	7		30
1,2-Dichloropropane	101		105		70-130	4		30
Dibromochloromethane	91		91		70-130	0		30
1,1,2-Trichloroethane	98		99		70-130	1		30
Tetrachloroethene	91		94		70-130	3		30
Chlorobenzene	90		94		70-130	4		30
Trichlorofluoromethane	78		83		70-139	6		30
1,2-Dichloroethane	106		109		70-130	3		30
1,1,1-Trichloroethane	91		96		70-130	5		30
Bromodichloromethane	95		98		70-130	3		30
trans-1,3-Dichloropropene	102		103		70-130	1		30
cis-1,3-Dichloropropene	97		99		70-130	2		30
1,1-Dichloropropene	96		101		70-130	5		30
Bromoform	84		87		70-130	4		30
1,1,2,2-Tetrachloroethane	96		96		70-130	0		30
Benzene	95		99		70-130	4		30
Toluene	93		95		70-130	2		30
Ethylbenzene	93		96		70-130	3		30
Chloromethane	123		**134**	Q	52-130	9		30
Bromomethane	73		82		57-147	12		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1228784-3 WG1228784-4								
Vinyl chloride	103		110		67-130	7		30
Chloroethane	88		91		50-151	3		30
1,1-Dichloroethene	91		98		65-135	7		30
trans-1,2-Dichloroethene	91		95		70-130	4		30
Trichloroethene	93		94		70-130	1		30
1,2-Dichlorobenzene	93		94		70-130	1		30
1,3-Dichlorobenzene	93		94		70-130	1		30
1,4-Dichlorobenzene	94		95		70-130	1		30
Methyl tert butyl ether	96		100		66-130	4		30
p/m-Xylene	92		95		70-130	3		30
o-Xylene	92		94		70-130	2		30
cis-1,2-Dichloroethene	91		95		70-130	4		30
Dibromomethane	96		96		70-130	0		30
Styrene	91		93		70-130	2		30
Dichlorodifluoromethane	108		115		30-146	6		30
Acetone	118		113		54-140	4		30
Carbon disulfide	92		98		59-130	6		30
2-Butanone	105		101		70-130	4		30
Vinyl acetate	117		120		70-130	3		30
4-Methyl-2-pentanone	102		106		70-130	4		30
1,2,3-Trichloropropane	98		98		68-130	0		30
2-Hexanone	103		100		70-130	3		30
Bromochloromethane	95		98		70-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1228784-3 WG1228784-4								
2,2-Dichloropropane	94		99		70-130	5		30
1,2-Dibromoethane	96		96		70-130	0		30
1,3-Dichloropropane	99		101		69-130	2		30
1,1,1,2-Tetrachloroethane	89		92		70-130	3		30
Bromobenzene	90		91		70-130	1		30
n-Butylbenzene	97		100		70-130	3		30
sec-Butylbenzene	92		96		70-130	4		30
tert-Butylbenzene	89		94		70-130	5		30
o-Chlorotoluene	95		98		70-130	3		30
p-Chlorotoluene	95		99		70-130	4		30
1,2-Dibromo-3-chloropropane	85		83		68-130	2		30
Hexachlorobutadiene	87		93		67-130	7		30
Isopropylbenzene	92		96		70-130	4		30
p-Isopropyltoluene	92		96		70-130	4		30
Naphthalene	86		86		70-130	0		30
Acrylonitrile	110		103		70-130	7		30
n-Propylbenzene	94		98		70-130	4		30
1,2,3-Trichlorobenzene	89		91		70-130	2		30
1,2,4-Trichlorobenzene	91		92		70-130	1		30
1,3,5-Trimethylbenzene	93		96		70-130	3		30
1,2,4-Trimethylbenzene	94		96		70-130	2		30
1,4-Dioxane	97		95		65-136	2		30
p-Diethylbenzene	92		95		70-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1228784-3 WG1228784-4								
p-Ethyltoluene	95		97		70-130	2		30
1,2,4,5-Tetramethylbenzene	89		91		70-130	2		30
Ethyl ether	100		101		67-130	1		30
trans-1,4-Dichloro-2-butene	109		108		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	112		111		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	103		103		70-130
Dibromofluoromethane	99		99		70-130

SEMIVOLATILES

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE
Lab Number: L1915442
Report Date: 04/23/19

SAMPLE RESULTS

Lab ID: L1915442-01
Client ID: DRUM
Sample Location: 19 PATCHEN AVE., BROOKLYN, NY

Date Collected: 04/16/19 10:05
Date Received: 04/16/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/22/19 10:25
Analyst: JG
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 04/21/19 08:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	92	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	2500		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	47	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1915442

Project Number: 19 PATCHEN AVE **Report Date:** 04/23/19

SAMPLE RESULTS

Lab ID: L1915442-01 Date Collected: 04/16/19 10:05

Client ID: DRUM Date Received: 04/16/19

Sample Location: 19 PATCHEN AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	1400		ug/kg	110	21.	1
Benzo(a)pyrene	1200		ug/kg	150	45.	1
Benzo(b)fluoranthene	1700		ug/kg	110	31.	1
Benzo(k)fluoranthene	500		ug/kg	110	30.	1
Chrysene	1500		ug/kg	110	19.	1
Acenaphthylene	140	J	ug/kg	150	28.	1
Anthracene	250		ug/kg	110	36.	1
Benzo(ghi)perylene	690		ug/kg	150	22.	1
Fluorene	99	J	ug/kg	180	18.	1
Phenanthrene	1600		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	160		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	730		ug/kg	150	26.	1
Pyrene	2300		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	59	J	ug/kg	180	18.	1
2-Methylnaphthalene	24	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1915442

Project Number: 19 PATCHEN AVE **Report Date:** 04/23/19

SAMPLE RESULTS

Lab ID: L1915442-01 Date Collected: 04/16/19 10:05

Client ID: DRUM Date Received: 04/16/19

Sample Location: 19 PATCHEN AVE., BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	170	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	91		25-120
Phenol-d6	94		10-120
Nitrobenzene-d5	104		23-120
2-Fluorobiphenyl	92		30-120
2,4,6-Tribromophenol	109		10-136
4-Terphenyl-d14	63		18-120

Project Name: 19 PATCHEN AVE. **Lab Number:** L1915442

Project Number: 19 PATCHEN AVE **Report Date:** 04/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/22/19 03:55
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 04/21/19 08:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1228671-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/22/19 03:55
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 04/21/19 08:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1228671-1					
Dimethyl phthalate	47	J	ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	27.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: 19 PATCHEN AVE. **Lab Number:** L1915442

Project Number: 19 PATCHEN AVE **Report Date:** 04/23/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/22/19 03:55
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 04/21/19 08:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1228671-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	97		25-120
Phenol-d6	102		10-120
Nitrobenzene-d5	109		23-120
2-Fluorobiphenyl	103		30-120
2,4,6-Tribromophenol	123		10-136
4-Terphenyl-d14	102		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1228671-2 WG1228671-3								
Acenaphthene	96		102		31-137	6		50
1,2,4-Trichlorobenzene	85		93		38-107	9		50
Hexachlorobenzene	108		112		40-140	4		50
Bis(2-chloroethyl)ether	76		85		40-140	11		50
2-Chloronaphthalene	98		103		40-140	5		50
1,2-Dichlorobenzene	74		79		40-140	7		50
1,3-Dichlorobenzene	73		77		40-140	5		50
1,4-Dichlorobenzene	74		78		28-104	5		50
3,3'-Dichlorobenzidine	80		83		40-140	4		50
2,4-Dinitrotoluene	106		113		40-132	6		50
2,6-Dinitrotoluene	116		123		40-140	6		50
Fluoranthene	94		100		40-140	6		50
4-Chlorophenyl phenyl ether	105		111		40-140	6		50
4-Bromophenyl phenyl ether	109		113		40-140	4		50
Bis(2-chloroisopropyl)ether	90		102		40-140	13		50
Bis(2-chloroethoxy)methane	94		102		40-117	8		50
Hexachlorobutadiene	86		94		40-140	9		50
Hexachlorocyclopentadiene	71		82		40-140	14		50
Hexachloroethane	79		83		40-140	5		50
Isophorone	95		102		40-140	7		50
Naphthalene	83		91		40-140	9		50
Nitrobenzene	98		109		40-140	11		50
NDPA/DPA	100		107		36-157	7		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1228671-2 WG1228671-3								
n-Nitrosodi-n-propylamine	96		106		32-121	10		50
Bis(2-ethylhexyl)phthalate	110		114		40-140	4		50
Butyl benzyl phthalate	97		102		40-140	5		50
Di-n-butylphthalate	93		98		40-140	5		50
Di-n-octylphthalate	111		115		40-140	4		50
Diethyl phthalate	103		108		40-140	5		50
Dimethyl phthalate	108		118		40-140	9		50
Benzo(a)anthracene	106		109		40-140	3		50
Benzo(a)pyrene	109		115		40-140	5		50
Benzo(b)fluoranthene	112		116		40-140	4		50
Benzo(k)fluoranthene	102		108		40-140	6		50
Chrysene	102		108		40-140	6		50
Acenaphthylene	103		110		40-140	7		50
Anthracene	88		92		40-140	4		50
Benzo(ghi)perylene	90		94		40-140	4		50
Fluorene	100		105		40-140	5		50
Phenanthrene	88		92		40-140	4		50
Dibenzo(a,h)anthracene	89		93		40-140	4		50
Indeno(1,2,3-cd)pyrene	90		95		40-140	5		50
Pyrene	95		100		35-142	5		50
Biphenyl	101		**108**	Q	54-104	7		50
4-Chloroaniline	90		93		40-140	3		50
2-Nitroaniline	124		132		47-134	6		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1228671-2 WG1228671-3								
3-Nitroaniline	102		107		26-129	5		50
4-Nitroaniline	118		124		41-125	5		50
Dibenzofuran	100		106		40-140	6		50
2-Methylnaphthalene	90		95		40-140	5		50
1,2,4,5-Tetrachlorobenzene	110		**119**	Q	40-117	8		50
Acetophenone	84		92		14-144	9		50
2,4,6-Trichlorophenol	116		123		30-130	6		50
p-Chloro-m-cresol	**112**	Q	**119**	Q	26-103	6		50
2-Chlorophenol	86		97		25-102	12		50
2,4-Dichlorophenol	109		116		30-130	6		50
2,4-Dimethylphenol	107		114		30-130	6		50
2-Nitrophenol	120		**136**	Q	30-130	13		50
4-Nitrophenol	**146**	Q	**155**	Q	11-114	6		50
2,4-Dinitrophenol	**133**	Q	**136**	Q	4-130	2		50
4,6-Dinitro-o-cresol	**152**	Q	**164**	Q	10-130	8		50
Pentachlorophenol	105		**111**	Q	17-109	6		50
Phenol	84		**94**	Q	26-90	11		50
2-Methylphenol	93		103		30-130.	10		50
3-Methylphenol/4-Methylphenol	105		113		30-130	7		50
2,4,5-Trichlorophenol	123		130		30-130	6		50
Benzoic Acid	88		90		10-110	2		50
Benzyl Alcohol	100		109		40-140	9		50
Carbazole	91		96		54-128	5		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1228671-2 WG1228671-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	87		96		25-120
Phenol-d6	98		107		10-120
Nitrobenzene-d5	99		107		23-120
2-Fluorobiphenyl	102		108		30-120
2,4,6-Tribromophenol	116		121		10-136
4-Terphenyl-d14	94		97		18-120

METALS

Project Name: 19 PATCHEN AVE.
Lab Number: L1915442
Project Number: 19 PATCHEN AVE
Report Date: 04/23/19

SAMPLE RESULTS

Lab ID: L1915442-01
Client ID: DRUM
Sample Location: 19 PATCHEN AVE., BROOKLYN, NY
Date Collected: 04/16/19 10:05
Date Received: 04/16/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	4.42		mg/kg	0.448	0.093	1	04/17/19 21:04	04/20/19 03:36	EPA 3050B	1,6010D	AB
Barium, Total	156		mg/kg	0.448	0.078	1	04/17/19 21:04	04/20/19 03:36	EPA 3050B	1,6010D	AB
Cadmium, Total	0.264	J	mg/kg	0.448	0.044	1	04/17/19 21:04	04/20/19 03:36	EPA 3050B	1,6010D	AB
Chromium, Total	10.4		mg/kg	0.448	0.043	1	04/17/19 21:04	04/20/19 03:36	EPA 3050B	1,6010D	AB
Lead, Total	275		mg/kg	2.24	0.120	1	04/17/19 21:04	04/20/19 03:36	EPA 3050B	1,6010D	AB
Mercury, Total	0.243		mg/kg	0.072	0.015	1	04/18/19 06:30	04/18/19 11:00	EPA 7471B	1,7471B	GD
Selenium, Total	0.556	J	mg/kg	0.897	0.116	1	04/17/19 21:04	04/20/19 03:36	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.448	0.127	1	04/17/19 21:04	04/20/19 03:36	EPA 3050B	1,6010D	AB

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1227471-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	04/17/19 21:04	04/19/19 23:24	1,6010D	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	04/17/19 21:04	04/19/19 23:24	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	04/17/19 21:04	04/19/19 23:24	1,6010D	AB
Chromium, Total	0.040	J	mg/kg	0.400	0.038	1	04/17/19 21:04	04/19/19 23:24	1,6010D	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	04/17/19 21:04	04/19/19 23:24	1,6010D	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	04/17/19 21:04	04/19/19 23:24	1,6010D	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	04/17/19 21:04	04/19/19 23:24	1,6010D	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1227631-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	04/18/19 06:30	04/18/19 10:23	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1915442

Report Date: 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1227471-2 SRM Lot Number: D101-540								
Arsenic, Total	86		-		83-117	-		
Barium, Total	84		-		83-118	-		
Cadmium, Total	89		-		83-117	-		
Chromium, Total	86		-		81-118	-		
Lead, Total	83		-		83-117	-		
Selenium, Total	88		-		79-121	-		
Silver, Total	87		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1227631-2 SRM Lot Number: D101-540								
Mercury, Total	104		-		65-135	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1227471-3 QC Sample: L1915225-01 Client ID: MS Sample												
Arsenic, Total	6.89	11.3	16.6	86		-	-		75-125	-		20
Barium, Total	52.1	189	208	82		-	-		75-125	-		20
Cadmium, Total	ND	4.82	3.83	80		-	-		75-125	-		20
Chromium, Total	156	18.9	156	**0**	Q	-	-		75-125	-		20
Lead, Total	21.1	48.2	56.6	**74**	Q	-	-		75-125	-		20
Selenium, Total	1.07	11.3	10.3	81		-	-		75-125	-		20
Silver, Total	ND	28.3	26.1	92		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1227631-3 QC Sample: L1915738-01 Client ID: MS Sample												
Mercury, Total	0.032J	0.151	0.191	**126**	Q	-	-		80-120	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1915442

Report Date: 04/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1227471-4 QC Sample: L1915225-01 Client ID: DUP Sample						
Chromium, Total	156	160	mg/kg	3		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1227631-4 QC Sample: L1915738-01 Client ID: DUP Sample						
Mercury, Total	0.032J	0.039J	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

SAMPLE RESULTS

Lab ID: L1915442-01
Client ID: DRUM
Sample Location: 19 PATCHEN AVE., BROOKLYN, NY

Date Collected: 04/16/19 10:05
Date Received: 04/16/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.5		%	0.100	NA	1	-	04/17/19 14:14	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1915442

Report Date: 04/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1227319-1 QC Sample: L1915532-07 Client ID: DUP Sample						
Solids, Total	73.6	75.8	%	3		20

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1915442
Report Date: 04/23/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1915442-01A	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L1915442-01B	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L1915442-01C	5 gram Encore Sampler	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L1915442-01D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L1915442-01E	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14)
L1915442-01F	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.8	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L1915442-01X	Vial MeOH preserved split	A	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L1915442-01Y	Vial Water preserved split	A	NA		2.8	Y	Absent	17-APR-19 07:15	NYTCL-8260HLW(14)
L1915442-01Z	Vial Water preserved split	A	NA		2.8	Y	Absent	17-APR-19 07:15	NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name:	19 PATCHEN AVE.	**Lab Number:**	L1915442
Project Number:	19 PATCHEN AVE	**Report Date:**	04/23/19

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.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	19 PATCHEN AVE.	**Lab Number:**	L1915442
Project Number:	19 PATCHEN AVE	**Report Date:**	04/23/19

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	19 PATCHEN AVE.	**Lab Number:**	L1915442
Project Number:	19 PATCHEN AVE	**Report Date:**	04/23/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 4/16/19

ALPHA Job #: L1915442

Client Information
Client: Tenen Environmental, LLC
Address: 121 West 27th St suite 702, 10001, NY, NY
Phone:
Fax:
Email: M.Carroll@tenen-env.com

Project Information
Project Name: 19 Patchen Ave
Project Location: 19 Patchen Ave, Brooklyn, NY
Project #
(Use Project name as Project #)
Project Manager: M. Carroll
ALPHAQuote #:

Turn-Around Time
Standard [X] Due Date:
Rush (only if pre approved) [ ] # of Days:

These samples have been previously analyzed by Alpha [ ]

Other project specific requirements/comments:

Please specify Metals or TAL

Deliverables
[ ] ASP-A [ ] ASP-B
[ ] EQuIS (1 File) [ ] EQuIS (4 File)
[ ] Other

Regulatory Requirement
[ ] NY TOGS [ ] NY Part 375
[ ] AWQ Standards [ ] NY CP-51
[ ] NY Restricted Use [ ] Other
[ ] NY Unrestricted Use
[ ] NYC Sewer Discharge

Billing Information
[ ] Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
[ ] NJ [ ] NY
[ ] Other:

ANALYSIS

Sample Filtration
[ ] Done
[ ] Lab to do
Preservation
[ ] Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs 8260	SVOCs 8270	RCRA Metals 6010/7471	Total Bottle	Sample Specific Comments
L1915442-01	Drum	4/16/2019	10:05am	S	HP	X	X	X		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	E	A	A	
Preservative	A	A	A	

Relinquished By:	Date/Time	Received By:	Date/Time
	4/16/2019 13:12pm		4/16/19 13:12
	4/16/19 14:35		4/16/19 1645
	4/16/19 21:20		4/16/19 21:20

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Attachment 1 –
Soil Analytical Data

Table 1 - Soil Sampling Results
19 Patchen Avenue - Brooklyn, NY

SAMPLE ID:	DRUM	
LAB ID:	L1915442-01	
COLLECTION DATE:	4/16/2019	
Volatile Organic Compounds Units: mg/kg	Conc	Q
Methylene chloride	0.0028	U
1,1-Dichloroethane	0.00018	U
Chloroform	0.00017	U
Carbon tetrachloride	0.00028	U
1,2-Dichloropropane	0.00015	U
Dibromochloromethane	0.00017	U
1,1,2-Trichloroethane	0.00032	U
Tetrachloroethene	0.00093	
Chlorobenzene	0.00015	U
Trichlorofluoromethane	0.00085	U
1,2-Dichloroethane	0.00031	U
1,1,1-Trichloroethane	0.0002	U
Bromodichloromethane	0.00013	U
trans-1,3-Dichloropropene	0.00033	U
cis-1,3-Dichloropropene	0.00019	U
1,3-Dichloropropene, Total	0.00019	U
1,1-Dichloropropene	0.00019	U
Bromoform	0.0003	U
1,1,2,2-Tetrachloroethane	0.0002	U
Benzene	0.0002	U
Toluene	0.00066	U
Ethylbenzene	0.00017	U
Chloromethane	0.0011	U
Bromomethane	0.00071	U
Vinyl chloride	0.00041	U
Chloroethane	0.00055	U
1,1-Dichloroethene	0.00029	U
trans-1,2-Dichloroethene	0.00017	U
Trichloroethene	0.00017	U
1,2-Dichlorobenzene	0.00018	U
1,3-Dichlorobenzene	0.00018	U
1,4-Dichlorobenzene	0.00021	U
Methyl tert butyl ether	0.00024	U
p/m-Xylene	0.00068	U
o-Xylene	0.00035	U
Xylenes, Total	0.00035	U
cis-1,2-Dichloroethene	0.00021	U
1,2-Dichloroethene, Total	0.00017	U
Dibromomethane	0.00029	U
Styrene	0.00024	U
Dichlorodifluoromethane	0.0011	U
Acetone	0.0058	J
Carbon disulfide	0.0055	U
2-Butanone	0.0027	U
Vinyl acetate	0.0026	U
4-Methyl-2-pentanone	0.0016	U
1,2,3-Trichloropropane	0.00015	U
2-Hexanone	0.0014	U
Bromochloromethane	0.00025	U
2,2-Dichloropropane	0.00024	U
1,2-Dibromoethane	0.00034	U
1,3-Dichloropropane	0.0002	U
1,1,1,2-Tetrachloroethane	0.00016	U
Bromobenzene	0.00018	U
n-Butylbenzene	0.0002	U
sec-Butylbenzene	0.00018	U
tert-Butylbenzene	0.00014	U
o-Chlorotoluene	0.00023	U
p-Chlorotoluene	0.00013	U
1,2-Dibromo-3-chloropropane	0.0012	U
Hexachlorobutadiene	0.0002	U
Isopropylbenzene	0.00013	U
p-Isopropyltoluene	0.00013	U
Naphthalene	0.00079	U
Acrylonitrile	0.0014	U
n-Propylbenzene	0.00021	U
1,2,3-Trichlorobenzene	0.00039	U
1,2,4-Trichlorobenzene	0.00033	U
1,3,5-Trimethylbenzene	0.00023	U
1,2,4-Trimethylbenzene	0.00041	U
1,4-Dioxane	0.043	U
p-Diethylbenzene	0.00022	U
p-Ethyltoluene	0.00047	U
1,2,4,5-Tetramethylbenzene	0.00023	U
Ethyl ether	0.00042	U
trans-1,4-Dichloro-2-butene	0.0017	U
Total VOCs	0.00673	-

Notes:
MDL = Maximum Detection Limit
Conc = Concentration
Q = Laboratory Data Qualifier
For U qualified entries, the MDL is shown
U = not detected at or above the MDL
For J qualified entries, the estimated concentration is shown
J = estimated value, indicating the detected value is below the RL, but above the MDL
-- = No standard

Table 1 - Soil Sampling Results
19 Patchen Avenue - Brooklyn, NY

SAMPLE ID:	DRUM	
LAB ID:	L1915442-01	
COLLECTION DATE:	4/16/2019	
Semivolatile Organic Compounds Units: mg/kg	**Conc**	**Q**
Acenaphthene	0.092	J
1,2,4-Trichlorobenzene	0.021	U
Hexachlorobenzene	0.021	U
Bis(2-chloroethyl)ether	0.025	U
2-Chloronaphthalene	0.018	U
1,2-Dichlorobenzene	0.033	U
1,3-Dichlorobenzene	0.032	U
1,4-Dichlorobenzene	0.032	U
3,3'-Dichlorobenzidine	0.049	U
2,4-Dinitrotoluene	0.037	U
2,6-Dinitrotoluene	0.032	U
Fluoranthene	2.5	
4-Chlorophenyl phenyl ether	0.02	U
4-Bromophenyl phenyl ether	0.028	U
Bis(2-chloroisopropyl)ether	0.032	U
Bis(2-chloroethoxy)methane	0.018	U
Hexachlorobutadiene	0.027	U
Hexachlorocyclopentadiene	0.17	U
Hexachloroethane	0.03	U
Isophorone	0.024	U
Naphthalene	0.047	J
Nitrobenzene	0.027	U
NDPA/DPA	0.021	U
n-Nitrosodi-n-propylamine	0.028	U
Bis(2-ethylhexyl)phthalate	0.064	U
Butyl benzyl phthalate	0.047	U
Di-n-butylphthalate	0.035	U
Di-n-octylphthalate	0.063	U
Diethyl phthalate	0.017	U
Dimethyl phthalate	0.039	U
Benzo(a)anthracene	1.4	
Benzo(a)pyrene	1.2	
Benzo(b)fluoranthene	1.7	
Benzo(k)fluoranthene	0.5	
Chrysene	1.5	
Acenaphthylene	0.14	J
Anthracene	0.25	
Benzo(ghi)perylene	0.69	
Fluorene	0.099	J
Phenanthrene	1.6	
Dibenzo(a,h)anthracene	0.16	
Indeno(1,2,3-cd)pyrene	0.73	
Pyrene	2.3	
Biphenyl	0.043	U
4-Chloroaniline	0.034	U
2-Nitroaniline	0.036	U
3-Nitroaniline	0.035	U
4-Nitroaniline	0.077	U
Dibenzofuran	0.059	J
2-Methylnaphthalene	0.024	J
1,2,4,5-Tetrachlorobenzene	0.019	U
Acetophenone	0.023	U
2,4,6-Trichlorophenol	0.035	U
p-Chloro-m-cresol	0.028	U
2-Chlorophenol	0.022	U
2,4-Dichlorophenol	0.03	U
2,4-Dimethylphenol	0.061	U
2-Nitrophenol	0.07	U
4-Nitrophenol	0.076	U
2,4-Dinitrophenol	0.086	U
4,6-Dinitro-o-cresol	0.089	U
Pentachlorophenol	0.041	U
Phenol	0.028	U
2-Methylphenol	0.029	U
3-Methylphenol/4-Methylphenol	0.029	U
2,4,5-Trichlorophenol	0.035	U
Benzoic Acid	0.19	U
Benzyl Alcohol	0.057	U
Carbazole	0.17	J
Total SVOCs	15.161	-
Total Metals		
Arsenic, Total	4.42	
Barium, Total	156	
Cadmium, Total	0.264	J
Chromium, Total	10.4	
Lead, Total	275	
Mercury, Total	0.243	
Selenium, Total	0.556	J
Silver, Total	0.127	U

Notes:
MDL = Maximum Detection Limit
Conc = Concentration
Q = Laboratory Data Qualifier
For U qualified entries, the MDL is shown
U = not detected at or above the MDL
For J qualified entries, the estimated concentration is shown
J = estimated value, indicating the detected value is below the RL, but above the MDL
-- = No standard

Attachment 2 –
Proposed Waste Profile from Clean Harbors Disposal Facility

WASTE MATERIAL PROFILE SHEET

Clean Harbors Profile No. CH1832706

A. GENERAL INFORMATION

GENERATOR EPA ID #/REGISTRATION # *NONEREQUIRED* GENERATOR NAME: *Tenen Environmental*

GENERATOR CODE (Assigned by Clean Harbors) *TE32542* CITY *Brooklyn* STATE/PROVINCE *NY* ZIP/POSTAL CODE *11221*

ADDRESS *19 Patchen Avenue* PHONE: (253) 334-9256

CUSTOMER CODE (Assigned by Clean Harbors) *CA59174* CUSTOMER NAME: *Cascade Drilling*

ADDRESS *22722 29th Drive SE, Suite 228* CITY *Bothell* STATE/PROVINCE *WA* ZIP/POSTAL CODE *98021*

B. WASTE DESCRIPTION

WASTE DESCRIPTION: *Non-Hazardous Waste Solid*

PROCESS GENERATING WASTE: **Investigation Derived Waste from environmental drilling operations. Former Dry Cleaner.**

IS THIS WASTE CONTAINED IN SMALL PACKAGING CONTAINED WITHIN A LARGER SHIPPING CONTAINER ? **No**

C. PHYSICAL PROPERTIES (at 25C or 77F)

PHYSICAL STATE
- [x] SOLID WITHOUT FREE LIQUID
- [ ] POWDER
- [ ] MONOLITHIC SOLID
- [ ] LIQUID WITH NO SOLIDS
- [ ] LIQUID/SOLID MIXTURE
- [ ] % FREE LIQUID
- [ ] % SETTLED SOLID
- [ ] % TOTAL SUSPENDED SOLID
- [ ] SLUDGE
- [ ] GAS/AEROSOL

NUMBER OF PHASES/LAYERS

1 2 3

% BY VOLUME (Approx.)

TOP *0.00*
MIDDLE *0.00*
BOTTOM *0.00*

VISCOSITY (If liquid present)
- [ ] 1 - 100 (e.g. Water)
- [ ] 101 - 500 (e.g. Motor Oil)
- [ ] 501 - 10,000 (e.g. Molasses)
- [ ] > 10,000

COLOR

Brown

ODOR
- [x] NONE
- [ ] MILD
- [ ] STRONG

Describe:

BOILING POINT °F (°C)
- [ ] <= 95 (<=35)
- [ ] 95 - 100 (35-38)
- [ ] 101 - 129 (38-54)
- [ ] >= 130 (>54)

MELTING POINT °F (°C)
- [ ] < 140 (<60)
- [ ] 140-200 (60-93)
- [x] > 200 (>93)

TOTAL ORGANIC CARBON
- [x] <= 1%
- [ ] 1-9%
- [ ] >= 10%

FLASH POINT °F (°C)
- [ ] < 73 (<23)
- [ ] 73 - 100 (23-38)
- [ ] 101 -140 (38-60)
- [ ] 141 -200 (60-93)
- [ ] > 200 (>93)

pH
- [ ] <= 2
- [ ] 2.1 - 6.9
- [x] 7 (Neutral)
- [ ] 7.1 - 12.4
- [ ] >= 12.5

SPECIFIC GRAVITY
- [ ] < 0.8 (e.g. Gasoline)
- [ ] 0.8-1.0 (e.g. Ethanol)
- [ ] 1.0 (e.g. Water)
- [ ] 1.0-1.2 (e.g. Antifreeze)
- [x] > 1.2 (e.g. Methylene Chloride)

ASH
- [x] < 0.1
- [ ] 0.1 - 1.0
- [ ] 1.1 - 5.0
- [ ] 5.1 - 20.0
- [ ] > 20
- [ ] Unknown

BTU/LB (MJ/kg)
- [x] < 2,000 (<4.6)
- [ ] 2,000-5,000 (4.6-11.6)
- [ ] 5,000-10,000 (11.6-23.2)
- [ ] > 10,000 (>23.2)

Actual:

D. COMPOSITION (List the complete composition of the waste, include any inert components and/or debris. Ranges for individual components are acceptable. If a trade name is used, please supply an MSDS. Please do not use abbreviations.)

CHEMICAL	MIN	--	MAX	UOM
ACETONE	0.0000000	--	6.0000000	PPB
GRAVEL, DEBRIS	0.0000000	--	5.0000000	%
SOIL	95.0000000	--	100.0000000	%
TETRACHLOROETHYLENE	0.0000000	--	1.0000000	PPB

DOES THIS WASTE CONTAIN ANY HEAVY GAUGE METAL DEBRIS OR OTHER LARGE OBJECTS (EX., METAL PLATE OR PIPING >1/4" THICK OR >12" LONG, METAL REINFORCED HOSE >12" LONG, METAL WIRE >12" LONG, METAL VALVES, PIPE FITTINGS, CONCRETE REINFORCING BAR OR PIECES OF CONCRETE >3")? YES [ ] NO [x]

If yes, describe, including dimensions:

DOES THIS WASTE CONTAIN ANY METALS IN POWDERED OR OTHER FINELY DIVIDED FORM? YES [ ] NO [x]

DOES THIS WASTE CONTAIN OR HAS IT CONTACTED ANY OF THE FOLLOWING; ANIMAL WASTES, HUMAN BLOOD, BLOOD PRODUCTS, BODY FLUIDS, MICROBIOLOGICAL WASTE, PATHOLOGICAL WASTE, HUMAN OR ANIMAL DERIVED SERUMS OR PROTEINS OR ANY OTHER POTENTIALLY INFECTIOUS MATERIAL? YES [ ] NO [x]

I acknowledge that this waste material is neither infectious nor does it contain any organism known to be a threat to human health. This certification is based on my knowledge of the material. Select the answer below that applies:

The waste was never exposed to potentially infectious material. YES NO

Chemical disinfection or some other form of sterilization has been applied to the waste. YES NO

I ACKNOWLEDGE THAT THIS PROFILE MEETS THE CLEAN HARBORS BATTERY PACKAGING REQUIREMENTS. YES NO

I ACKNOWLEDGE THAT MY FRIABLE ASBESTOS WASTE IS DOUBLE BAGGED AND WETTED. YES NO

SPECIFY THE SOURCE CODE ASSOCIATED WITH THE WASTE. *G49* SPECIFY THE FORM CODE ASSOCIATED WITH THE WASTE. *W301*

E. CONSTITUENTS

Are these values based on testing or knowledge? Knowledge ☑ Testing

If constituent concentrations are based on analytical testing, analysis must be provided. Please attach document(s) using the link on the Submit tab.

Please indicate which constituents below apply. Concentrations must be entered when applicable to assist in accurate review and expedited approval of your waste profile. Please note that the total regulated metals and other constituents sections require answers.

RCRA	REGULATED METALS	REGULATORY LEVEL (mg/l)	TCLP mg/l	TOTAL	UOM	NOT APPLICABLE
D004	ARSENIC	5.0				☑
D005	BARIUM	100.0				☑
D006	CADMIUM	1.0				☑
D007	CHROMIUM	5.0				☑
D008	LEAD	5.0				☑
D009	MERCURY	0.2				☑
D010	SELENIUM	1.0				☑
D011	SILVER	5.0				☑
	VOLATILE COMPOUNDS					
D018	BENZENE	0.5				
D019	CARBON TETRACHLORIDE	0.5				
D021	CHLOROBENZENE	100.0				
D022	CHLOROFORM	6.0				
D028	1,2-DICHLOROETHANE	0.5				
D029	1,1-DICHLOROETHYLENE	0.7				
D035	METHYL ETHYL KETONE	200.0				
D039	TETRACHLOROETHYLENE	0.7				
D040	TRICHLOROETHYLENE	0.5				
D043	VINYL CHLORIDE	0.2				
	SEMI-VOLATILE COMPOUNDS					
D023	o-CRESOL	200.0				
D024	m-CRESOL	200.0				
D025	p-CRESOL	200.0				
D026	CRESOL (TOTAL)	200.0				
D027	1,4-DICHLOROBENZENE	7.5				
D030	2,4-DINITROTOLUENE	0.13				
D032	HEXACHLOROBENZENE	0.13				
D033	HEXACHLOROBUTADIENE	0.5				
D034	HEXACHLOROETHANE	3.0				
D036	NITROBENZENE	2.0				
D037	PENTACHLOROPHENOL	100.0				
D038	PYRIDINE	5.0				
D041	2,4,5-TRICHLOROPHENOL	400.0				
D042	2,4,6-TRICHLOROPHENOL	2.0				
	PESTICIDES AND HERBICIDES					
D012	ENDRIN	0.02				
D013	LINDANE	0.4				
D014	METHOXYCHLOR	10.0				
D015	TOXAPHENE	0.5				
D016	2,4-D	10.0				
D017	2,4,5-TP (SILVEX)	1.0				
D020	CHLORDANE	0.03				
D031	HEPTACHLOR (AND ITS EPOXIDE)	0.008				

OTHER CONSTITUENTS	MAX	UOM	NOT APPLICABLE
BROMINE			☑
CHLORINE			☑
FLUORINE			☑
IODINE			☑
SULFUR			☑
POTASSIUM			☑
SODIUM			☑
AMMONIA			☑
CYANIDE AMENABLE			☑
CYANIDE REACTIVE			☑
CYANIDE TOTAL			☑
SULFIDE REACTIVE			☑

HOCs

NONE

☑ < 1000 PPM

>= 1000 PPM

PCBs

☑ NONE

< 50 PPM

>=50 PPM

IF PCBS ARE PRESENT, IS THE WASTE REGULATED BY TSCA 40 CFR 761?

YES ☑ NO

ADDITIONAL HAZARDS

DOES THIS WASTE HAVE ANY UNDISCLOSED HAZARDS OR PRIOR INCIDENTS ASSOCIATED WITH IT, WHICH COULD AFFECT THE WAY IT SHOULD BE HANDLED?

YES ☑ NO (If yes, explain)

CHOOSE ALL THAT APPLY

DEA REGULATED SUBSTANCES	EXPLOSIVE	FUMING	☑ OSHA REGULATED CARCINOGENS
POLYMERIZABLE	RADIOACTIVE	REACTIVE MATERIAL	NONE OF THE ABOVE

F. REGULATORY STATUS

YES ☑ NO USEPA HAZARDOUS WASTE?

YES ☑ NO DO ANY STATE WASTE CODES APPLY?

Texas Waste Code

YES ☑ NO DO ANY CANADIAN PROVINCIAL WASTE CODES APPLY?

YES ☑ NO IS THIS WASTE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT PER 40 CFR PART 268?

LDR CATEGORY: ***Not subject to LDR***
VARIANCE INFO:

YES ☑ NO IS THIS A UNIVERSAL WASTE?

YES ☑ NO IS THE GENERATOR OF THE WASTE CLASSIFIED AS VERY SMALL QUANTITY GENERATOR (VSQG) OR A STATE EQUIVALENT DESIGNATION?

YES NO IS THIS MATERIAL GOING TO BE MANAGED AS A RCRA EXEMPT COMMERCIAL PRODUCT, WHICH IS FUEL (40 CFR 261.2 (C)(2)(II))?

YES ☑ NO DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE?

YES NO IS THIS WASTE STREAM SUBJECT TO THE INORGANIC METAL BEARING WASTE PROHIBITION FOUND AT 40 CFR 268.3(C)?

YES ☑ NO DOES THIS WASTE CONTAIN VOC'S IN CONCENTRATIONS >=500 PPM?

YES NO DOES THE WASTE CONTAIN GREATER THAN 20% OF ORGANIC CONSTITUENTS WITH A VAPOR PRESSURE >= .3KPA (.044 PSIA)?

YES ☑ NO DOES THIS WASTE CONTAIN AN ORGANIC CONSTITUENT WHICH IN ITS PURE FORM HAS A VAPOR PRESSURE > 77 KPA (11.2 PSIA)?

YES ☑ NO IS THIS CERCLA REGULATED (SUPERFUND) WASTE ?

YES ☑ NO IS THE WASTE SUBJECT TO ONE OF THE FOLLOWING NESHAP RULES?

Hazardous Organic NESHAP (HON) rule (subpart G) Pharmaceuticals production (subpart GGG)

YES NO IF THIS IS A US EPA HAZARDOUS WASTE, DOES THIS WASTE STREAM CONTAIN BENZENE?

YES NO Does the waste stream come from a facility with one of the SIC codes listed under benzene NESHAP or is this waste regulated under the benzene NESHAP rules because the original source of the waste is from a chemical manufacturing, coke by-product recovery, or petroleum refinery process?

YES NO Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) >10 Mg/year?

What is the TAB quantity for your facility? Megagram/year (1 Mg = 2,200 lbs)

The basis for this determination is: Knowledge of the Waste Or Test Data Knowledge Testing

Describe the knowledge :

G. DOT/TDG INFORMATION

DOT/TDG PROPER SHIPPING NAME:

NOT REGULATED BY DOT, (SOIL)

H. TRANSPORTATION REQUIREMENTS

ESTIMATED SHIPMENT FREQUENCY ☑ ONE TIME WEEKLY MONTHLY QUARTERLY YEARLY OTHER

☑ **CONTAINERIZED**

1-1 CONTAINERS/SHIPMENT

STORAGE CAPACITY: *10*

CONTAINER TYPE:

PORTABLE TOTE TANK BOX/CARTON/CASE

CUBIC YARD BOX ☑ DRUM

OTHER:

DRUM SIZE: *55*

BULK LIQUID

GALLONS/SHIPMENT: ***0 Min -0 Max*** GAL.

BULK SOLID

SHIPMENT UOM: TON YARD

TONS/YARDS/SHIPMENT: ***0 Min - 0 Max***

I. SPECIAL REQUEST

COMMENTS OR REQUESTS:

CNO. No Incineration. Contained in Determination Provided.

GENERATOR'S CERTIFICATION

I certify that I am authorized to execute this document as an authorized agent. I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge.I also certify that any samples submitted are representative of the actual waste.If Clean Harbors discovers a discrepancy during the approval process, Generator grants Clean Harbors the authority to amend the profile, as Clean Harbors deems necessary, to reflect the discrepancy.

AUTHORIZED SIGNATURE	NAME (PRINT)	TITLE	DATE
Claire Zacchco	Claire Zacchco	Envi. Engineer / Agent of Owner	4/25/19

Site Address: 19 Patchen Avenue
Brooklyn, NY 11221

SC PPW 10/10/2017

WORK ORDER NO: 031800670495

DOCUMENT NO. 913827

STRAIGHT BILL OF LADING

TRANSPORTER 1 Clean Harbors Environmental Services, Inc. VEHICLE ID # T#5244

EPA ID # MAD039322250 TRANS. 1 PHONE (781) 792-5000

TRANSPORTER 2 SJ Transportation VEHICLE ID # 1240 - VIDB

EPA ID # NJD071629576 TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Spring Grove Resource Recovery Inc.	Tenen Environmental
FACILITY EPA ID # OHD000816629	SHIPPER EPA ID # NONEREQUIRED
ADDRESS 4879 Spring Grove Avenue	ADDRESS 121 W 27th St
CITY Cincinnati STATE OH ZIP 45232	CITY New York STATE NY ZIP 10001

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
			A. ~~NOT REGULATED BY DOT, (SOIL)~~ (16)		
4X55	DM		B. NON DOT REGULATED MATERIAL, (WATER, SOIL)	2400	P
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS EMERGENCY PHONE #: (800) 483-3718 GENERATOR: Tenen Environmental

~~A.CH1691255 B.CH1691301~~
(16) 4X55 Dep #01259 Des #401679

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

SHIPPER	PRINT CLAIRE ZACCHEO	SIGN	DATE 2/9/18
TRANSPORTER 1	PRINT MANUEL GARCIA	SIGN	DATE 2/9/18
TRANSPORTER 2	PRINT M. Andreas	SIGN	DATE 2/13/18
RECEIVED BY	PRINT Charity Bongafel	SIGN	DATE 2/14/18

APPENDIX E – CAMP Field Data Sheets and Air Monitoring Data (included on CD)

APPENDIX F – Raw Analytical Data
(included on CD)

APPENDIX G – Daily and Monthly Reports (included on CD)

APPENDIX H – Project Photo Log
(included on CD)

APPENDIX I – EC As-Built Drawings, Documentation and Specifications

SECTION 025000
SITE REMEDIATION

PART 1 INTRODUCTION

1.1 SECTION INCLUDES
A. All labor, materials, equipment and incidentals that are required to furnish and install a sub-slab depressurization system (SSDS) as shown, specified, and required to complete the Work.

1.2 TABLE OF CONTENTS
A. This specification is arranged as follows:

1.3 DISCLOSED DOCUMENTS
One relevant document has been prepared for the Site that relate to this Section:

A. Interim Remedial Measures (IRM) Work Plan, dated March 2017 by Matthew M. Carroll, PE and Tenen Environmental, submitted to the New York State Department of Environmental Conservation (NYSDEC). Appendix D includes the layout for the sub-slab depressurization system (SSDS), as updated from time to time.

1.4 RELATED SECTIONS
Several other Sections are related to implementing the Disclosed Documents including, but not limited to the following:

A.

1.5 BACKGROUND
The Site is in the NYSDEC Brownfield Cleanup Program (BCP) as Site #C224232. The IRM Work Plan includes a SSDS, which is described in this Section. Other Agency requirements are detailed in the Disclosed Documents.

PART 2 SYSTEM REQUIREMENTS

2.1 GENERAL REQUIREMENTS

1. See drawings X-100 and X-101 for SSDS layouts below and above the slab, respectively.
2. See drawing X-102 for the SSDS layout on the roof.
3. See drawing X-103 for SSDS details.
4. See drawing X-104 for the results of a pressure field extension test.
5. As shown on the drawings, there is one systems with two suction pits.
6. The term "Engineer" shall mean a representative of the Remedial Engineer for the project.
7. The term "provide" means furnish and install complete and ready for intended use, as applicable in each instance. All materials and equipment shown, specified and/or required for the intended use shall be furnished and installed.
8. Any proposed changes to the SSDS must be approved in writing by the Engineer.
9. In strict accordance with all applicable codes, regulations and ordinances having jurisdiction, Contractor shall give all notices and comply with all codes, laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance and execution of the work. Electrical systems shall be installed in accordance with all applicable municipal and state jurisdictional codes, the National Electric Code and utility company specifications. All work shall be performed in strict adherence with the latest editions of the BOCA National Building Codes, the State of New York Uniform Construction Code and the Occupations Safety & Health Administration (OSHA) regulations. All materials, workmanship and construction shall conform to all current prevailing state, county, municipal and/or utility company specifications, standards and requirements.
10. The Contractor shall identify, apply for and obtain and pay all fees for licenses, permits, approvals and insurance required from federal, state and local governmental and public agencies and authorities as necessary to perform the work. The Contractor shall provide indemnification to public and private agencies and authorities as necessary to perform the work.
11. If any law, regulation or the plans have contradicting requirements, then the most stringent requirement shall apply, as determined by the Engineer.
12. Contractor's responsibilities include arranging for inspections and obtaining the Engineer's approval prior to finalization of work.
13. The Contractor shall supervise and direct the work using the best construction skills and attention. The Contractor shall be solely responsible and have control over construction means, methods, techniques, sequences and procedures. The Contractor shall be solely responsible for coordination all portions of the work.
14. The Contractor shall furnish all labor, equipment, materials, supplies, facilities, water, power and incidentals as necessary to construct and fully complete the work as shown, as specified and as directed by the Engineer. The Contractor shall be responsible for performing all the work described and shown including items not specifically identified as required to complete the work as to provide a complete SSDS, ready for use.
15. The SSDS shall be installed in accordance with the specifications controlling the mechanical, electrical and plumbing contracts.
16. Label all accessible components of the SSDS (including but not limited to the above-grade piping where exposed or concealed above the ceiling) with permanent letter as follows: "COMPONENT OF THE SUB-SLAB DEPRESSURIZATION SYSTEM – DO NOT ALTER OR DISCONNECT".

2.2 QUALITY CONTROL

1. Contractor's responsibilities include arranging inspections and obtaining the Engineer's approval prior to concealment of work. At a minimum, inspection of the Owner or it's approved representative of all components of the SSDS shall be required and the Contractor shall be required to obtain approval of all components of the SSDS by the Owner or it's approved representative upon completion of installation. Additional inspections, examination and quality control measure may be required as per manufacturers' recommendation and are the responsibility of the Contractor. The Owner reserves the right to perform additional inspection or quality control tests as deemed necessary by the Owner at any point during the installation process at no additional cost to the Owner.
2. Pre-installation Meeting; The Contractor shall arrange for and convene a pre-installation meeting prior to the start of work of this Section to review installation procedures, protection, and coordination with other work. The meeting shall be held on a date that is a minimum of ten business days prior to start of the work of this Section.
3. Whenever construction work is in progress or preparation, the Contractor shall permit access and inspection and shall provide proper and necessary facilities to representatives of the Owner, Engineer and regulatory agencies. Contractor shall fully cooperate with all testing performed the Owner or Engineer during construction and shall not make any claims for additional time or payment for cooperating fully.

2.3 PRODUCT REQUIREMENTS

1. All materials and equipment furnished shall be new, in first-class condition, supplied directly from original equipment manufacturers or approved distributers and installed in accordance with manufacturer's recommendations.

2.4 PRODUCT DELIVERY, STORAGE AND HANDLING REQUIREMENTS

Deliver products to the site in manufacturers' original packaging, with labels clearly identifying product and manufacturer.

1. Store materials in a clean and dry area in accordance with manufacturers' instructions.
2. Protect materials during handling and installation to prevent damage.
3. Examine all equipment and materials before installation. Do no install any equipment or material that is found to be defective.

PART 3 INSTALLATION

1. Equipment and materials shall be installed in accordance with the requirements herein, as shown on the drawings, in accordance with manufacturers' specifications and recommendations and with applicable building code requirements.
2. Contractor shall permanently support all SSDS components in accordance with building code requirements.
3. Contractor shall perform all required wiring and electrical work for fully functioning SSDS.

3.1 PROTECTING INSTALLED CONSTRUCTION

1. It is the sole responsibility of the Contractor to ensure that no damage occurs to components of the SSDS prior to, during or following installation of the SSDS. Any damages to the SSDS during performance of the work shall be repaired and tested at no additional cost to the Owner.

3.2 FIELD ENGINEERING

1. Contractor shall be solely responsible for all locations, dimensions and elevations. No

data other than written order of the Engineer shall justify departure from the dimensions and elevations required by the drawings.

2. Contractor shall employ or retain at the location of the work, a field Engineer or superintendence capable of performing engineering tasks required of the Contractor.

3.3 EXISTING CONDITIONS

1. Contractor shall become fully acquainted with the conditions as they exist in order that the restrictions attending the work are understood. All areas and dimensions of the drawings shall be verified by the Contractor at the site. Failure of the Contractor to examine the site shall not relieve the Contractor from any obligation.
2. All conditions and dimensions shall be verified by the Contractor prior to the start of construction. It is the Contractor's responsibility to report to the Owner, in writing, significant variations or discrepancies from the conditions noted or implied, immediately upon discovery of such conditions and prior to scheduling the work.

3.4 SUB-SLAB SYSTEM

1. Install two suction pits as shown on drawing X-100 and X-104.
2. Slope all solid horizontal pipes a minimum 2% uniformly toward suction pits, so as to not allow for water pooling in the portions of solid pipe.
3. Connect sub-slab piping to a vertical riser extending through the roof.
4. Obtain Engineer's approval prior to re-installating the concrete slab at the suction pits and installing the pressure monitoring points.
5. Geotextile fabric to be placed on properly compacted and prepared subgrade within the suction pits shall be a non-woven polypropylene type, Mirafi N-series product type 140NL or approved equal having the following properties.

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	120 (534)	120 (534)
Grab Tensile Elongation	ASTM D4632	%	50	50
Trapezoid Tear Strength	ASTM D4533	lbs (N)	50 (223)	50 (223)
CBR Puncture Strength	ASTM D6241	lbs (N)	310 (1380)	
Apparent Opening Size (AOS)[1]	ASTM D4751	U.S. Sieve (mm)	70 (0.212)	
Permittivity	ASTM D4491	sec^{-1}	1.7	
Flow Rate	ASTM D4491	$gal/min/ft^2$ ($l/min/m^2$)	135 (5500)	
UV Resistance (at 500 hours)[2]	ASTM D4355	% strength retained	70	

[1] ASTM D4751: AOS is a Maximum Opening Diameter Value
[2] Modified

6. Washed gravel layer shall be ¾-inch washed stone with 100% passing the 2-inch sieve and 0% passing the ¾-inch sieve, by weight. Gravel layer to be placed on the geotextile fabric.
7. Consult with Engineer for blower test prior to construction of vertical riser outside of building.
8. Locations of monitoring points may be changed upon approval from Engineer.
9. Monitoring points shall be installed through the floor slab as shown on Drawing X-103.
10. Monitoring points shall consist of the sub-slab vapor probe kit manufactured by AMS product #52954 or approved equal. The monitoring points shall be installed through the cellar slab. Penetrations through floor slab for monitoring points shall be air-tight and completed monitoring points shall be air-tight, preventing the potential for migration of gas from the sub-slab into the building.
11. The screen and/or opening of the sub-slab monitoring points shall be installed within

two inches of the bottom of the slab.

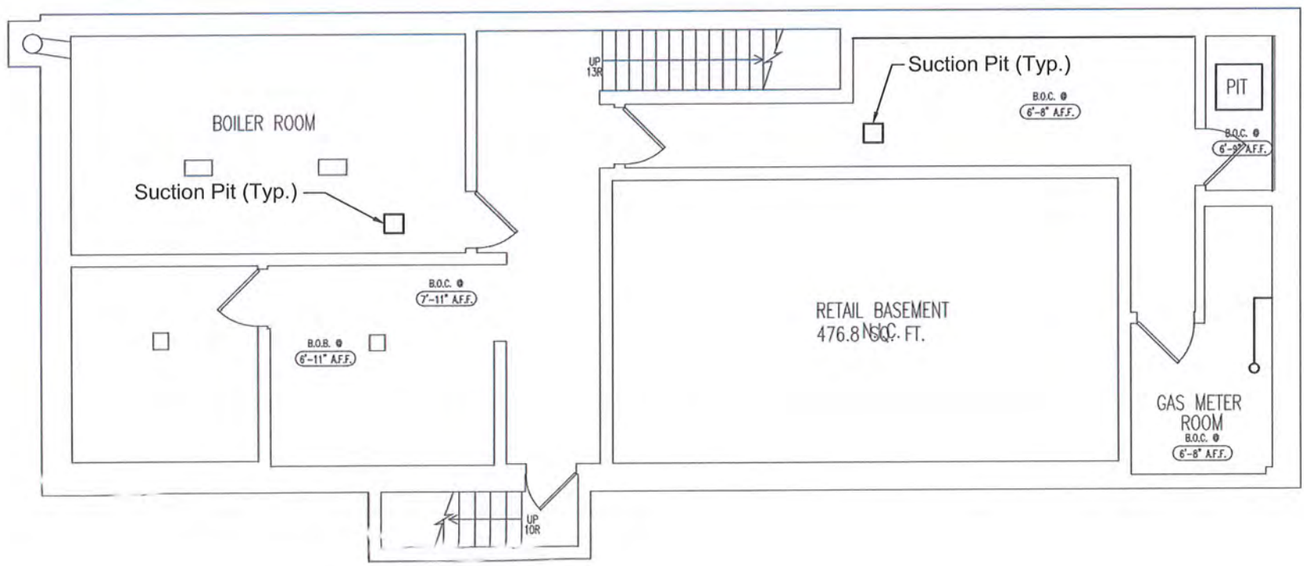
3.5 ABOVE-GROUND SYSTEM

1. Slope all horizontal above-ground pipes a minimum 1% uniformly to vertical riser.
2. Connect vertical riser to exterior suction fan on roof.
3. Continuous tape labeling on riser pipe beginning at the floor slab elevation, within each floor level and continuing to the installation of the suction fan above roof penetration shall be permanently installed on riser, shall indicate flow direction and shall read "CAUTION: DO NOT TAP OR PUNCTURE. SUBSURFACE VAPOR VENT PIPE. NOT FOR DOMESTIC USE."
4. Furnish, install test and place pressure gauge and switch, valves and suction fan in service in accordance with manufacturers' recommendations and accessories as required for a complete and fully functional installation.
5. The pressure monitor and switch and suction fan shall be as directed by Engineer subsequent to blower test. Items specified below are typical and should not be furnished without written approval by Engineer.
6. The pressure monitor shall be a Wika pressure indicator, model 612.20 Part 9747724 or approved equivalent.
7. The pressure switch shall be an Ashcroft pressure switch, watertight enclosure, product model B4-24-B-000-NEG50"H20 or approved equal.
8. The pressure switch shall activate a local alarm at low pressure. The Engineer shall establish set point in the field.
9. The suction fan shall be a Plastec direct-drive suction fan product model PLA 20 X52P or approved equivalent with Weather Hood Enclosed Pedestal (PLA WH3). The discharge position shall be CCW90.
10. Valves shall be 6-inch diameter cast iron butterfly valves with hand levers as manufactured by Saunders, Xomox, Crane or approved equivalent.
11. Provide local power disconnect switch near suction fan as required by code.
12. Power requirements for motor are: 115/208-230 volt.
13. A flexible connector shall be installed on the suction fan inlet. A transition type flexible outlet connector shall be furnished and installed on the suction fan outlet.
14. Exhaust discharge shall by a minimum 2-feet above the roof.
15. Exhaust discharge point shall be at least 25-feet from any building operable openings, air intakes, supply registers or adjoining or adjacent buildings. Exhaust pipe shall terminate in a vertical position above the roof.
16. Remote alarm shall be the building security system. The alarm panel shall include warning lights, audible alarm and an appropriate enclosure. The remote alarm shall be configured such that if the pressure falls below the set point, the remote alarm will be activated.
17. Remote visual alarm shall be labeled as follows: "Sub-slab gas venting system alarm. Fan malfunction if lit. Service immediately."

3.7 CLOSE-OUT PROCEDURES

1. Contractor shall thoroughly clean all materials, equipment and structures; all marred surfaces shall be touched up to match adjacent surfaces; remove labels, tags, packing materials and other foreign items or substances from interior and exterior surfaces, equipment, signs and lettering.
2. At the time of substantial completion, an inspection shall be held with the Owner and Engineer. At this time, the Contractor shall also provide any manufacturers' Owner's manuals and warranties.
3. Legally transport and dispose of off-site all generated waste.

END OF SECTION



LEGEND

☐ Suction Pit Location

0 4' 8' 16'

Drawing Scale

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Proj #1518, Dwg. #A-100.00, 6/28/15

CLIENT

19 PATCHEN AVENUE
BROOKLYN, NEW YORK

CONSULTANT

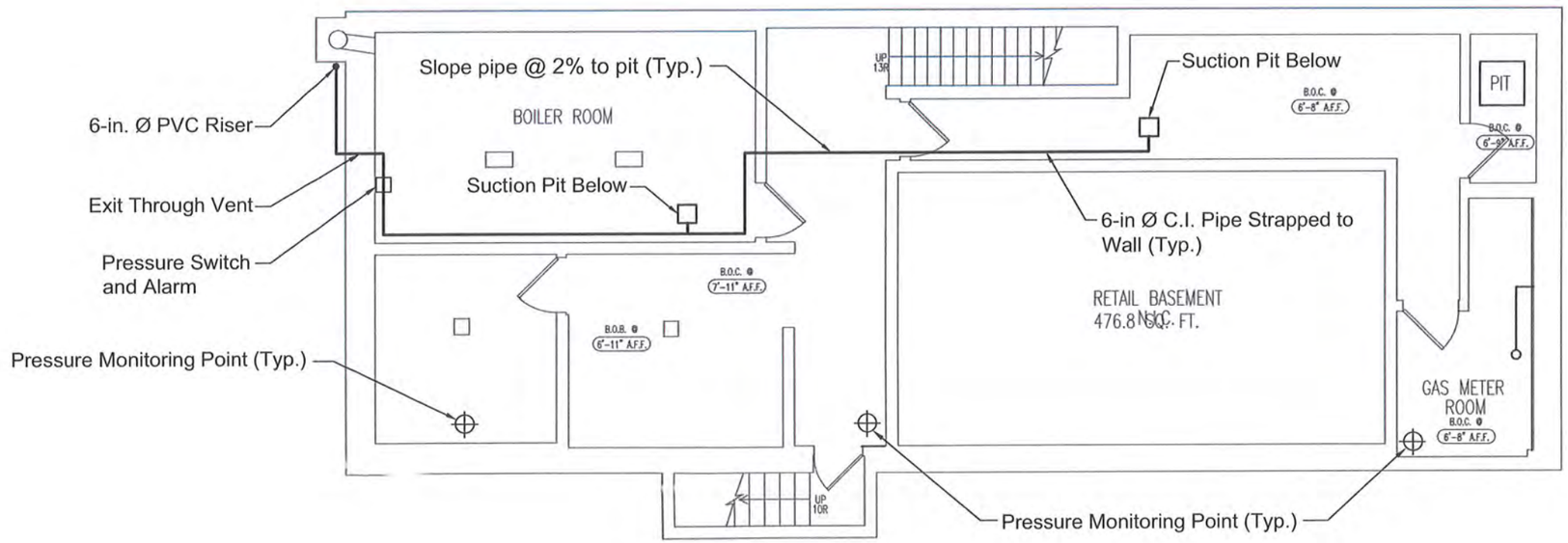
TENEN ENVIRONMENTAL, LLC
121 West 27th Street
Suite 702
New York, NY 10001
O: 646-606-2332
F: 646-606-2379

DRAWN BY	CHECKED BY	DATE	SCALE:
LM	MC	FEBRUARY 2017	AS NOTED

DRAWING TITLE: X-100.00

DRAWING NO.

SSDS SUBGRADE LAYOUT



LEGEND

- Suction Pit Location
- Pressure Monitoring Point Location

0 4' 8' 16'

Drawing Scale

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Proj #1518, Dwg. #A-100.00, 6/28/15

CLIENT

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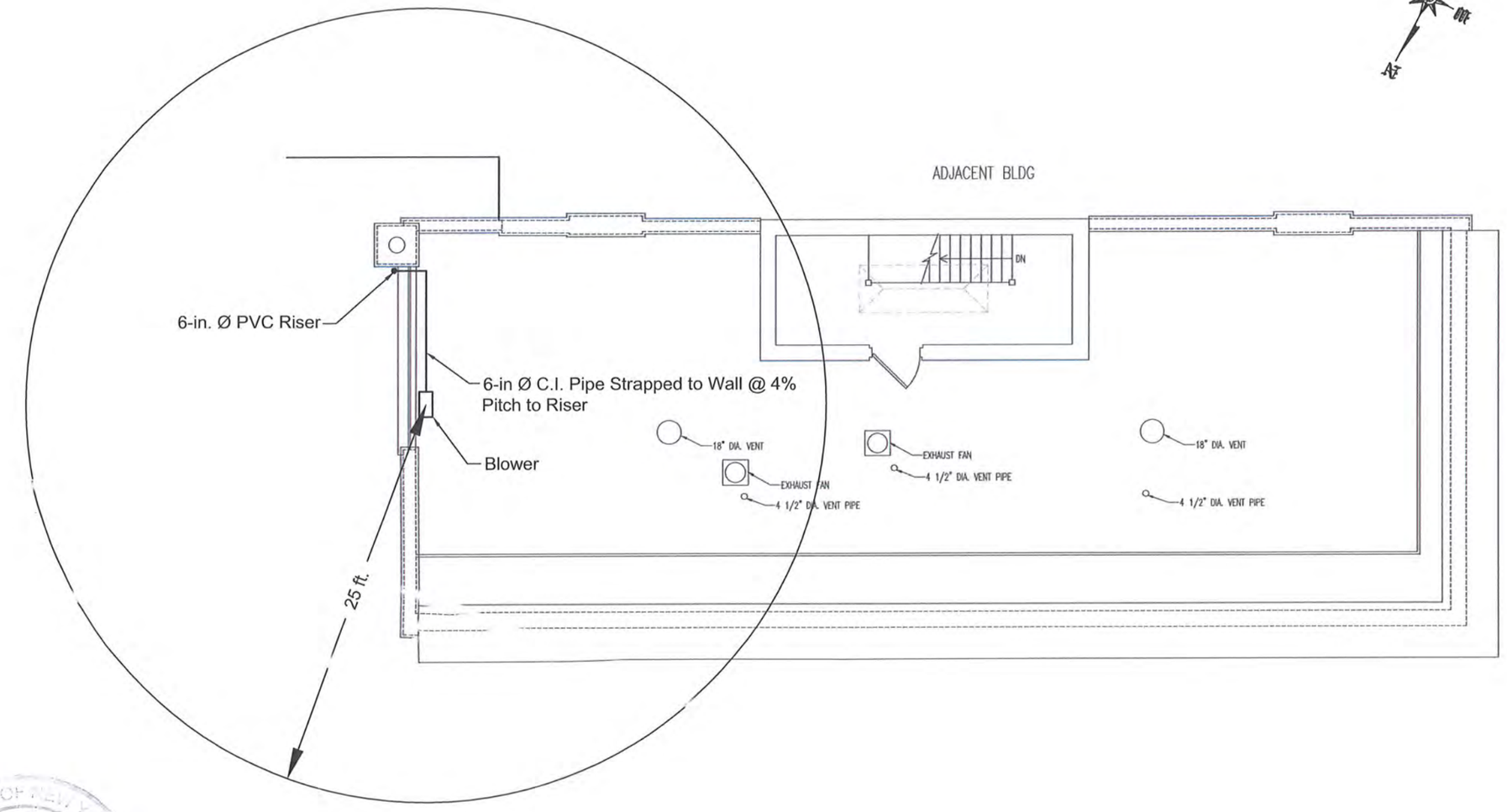
LM	MC	FEBRUARY 2017	AS NOTED

DRAWING TITLE: X-101.00

DRAWING NO.

SSDS CELLAR LAYOUT



Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Proj #1518, Dwg. #A-103.00, 6/28/15

0 4' 8' 16'
Drawing Scale

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BROOKLYN, NEW YORK

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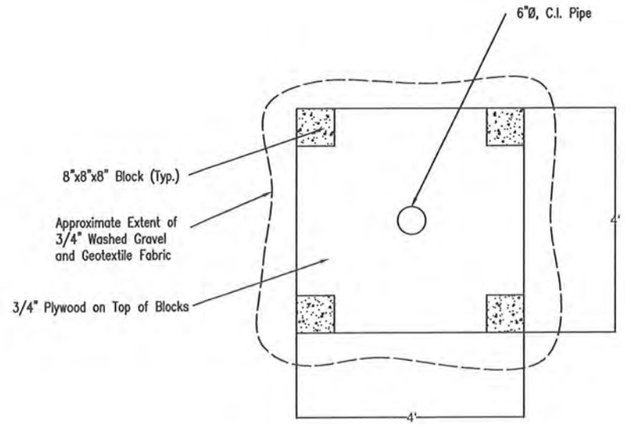
LM	MC	FEBRUARY 2017	AS NOTED

DRAWING TITLE: X-102.00

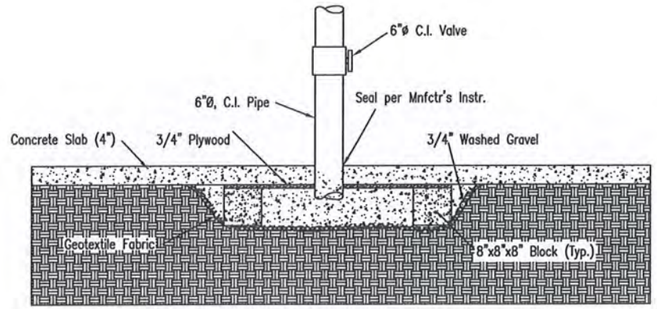
DRAWING NO.: SSDS ROOF LAYOUT

1



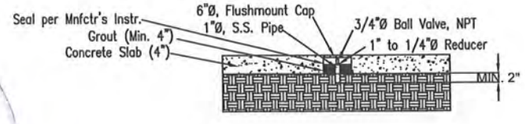
Suction Pit – Plan View

2



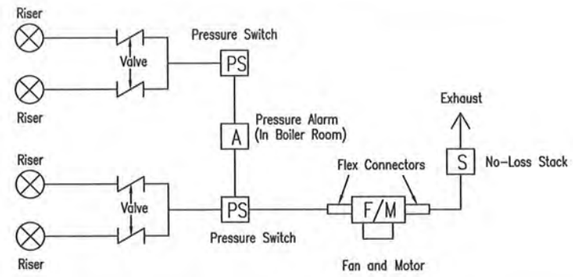
Suction Pit – Section View

3



Sub-Slab Depressurization Monitoring Point – Side View

4



Sub-Slab Depressurization System – Schematic from Riser to Exhaust Location

CLIENT

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BROOKLYN, NEW YORK

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121 West 27th Street
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New York, NY 10001
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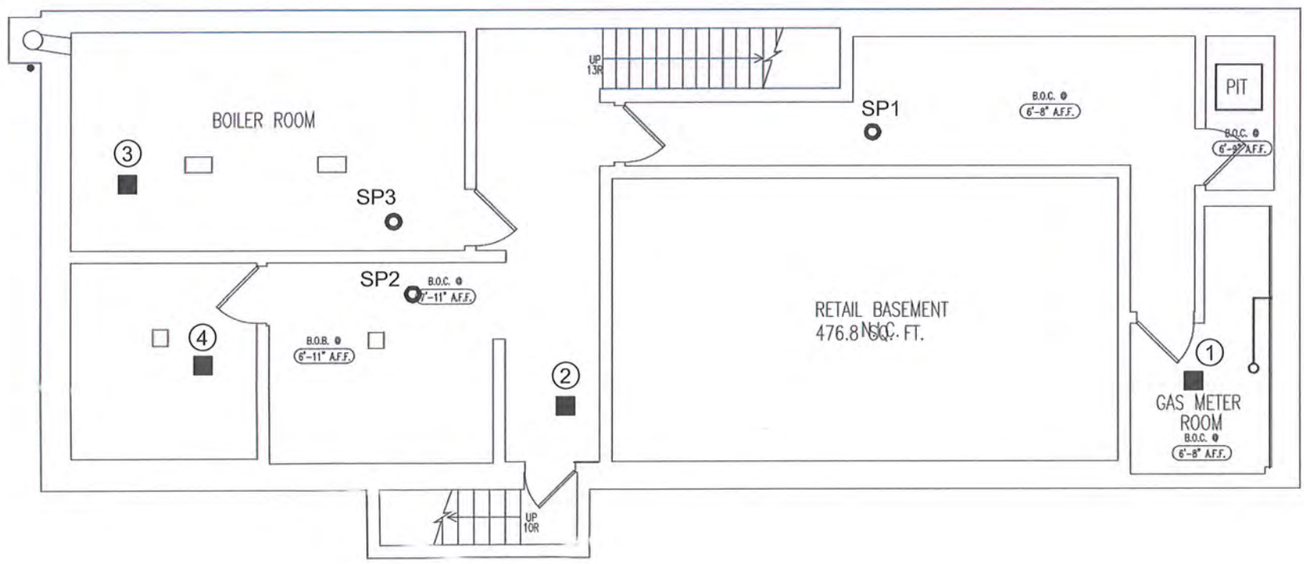
DRAWN BY	LM
CHECKED BY	MC
DATE	FEBRUARY 2017
SCALE:	AS NOTED
DRAWING TITLE:	X-103.00
DRAWING NO.	SSDS DETAILS



Pressure Test Results	
Suction Location	Pressure Measured In:
SP1	#1, #2
SP2	#2, #4
SP3	#2, #3, #4

LEGEND

- ■ Pressure Response Monitoring Location
- ○ Suction Location

0 4' 8' 16'

Drawing Scale

Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Proj #1518, Dwg. #A-100.00, 6/28/15

CLIENT

19 PATCHEN AVENUE
BROOKLYN, NEW YORK

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New York, NY 10001
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DRAWN BY	CHECKED BY	DATE	SCALE:
LM	MC	FEBRUARY 2017	AS NOTED

DRAWING TITLE: X-104.00

DRAWING NO.: PRESSURE TEST RESULTS

Van Buren Street

Patchen Avenue

Extent of Existing
Concrete Basement Slab

Extent of Existing
Concrete Paving

Basemap Features Source: New York City Dept. of Finance & NYC Open Data.

0 5' 10' 20'

Drawing Scale

CLIENT

19 PATCHEN AVENUE
BROOKLYN, NEW YORK

CONSULTANT

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121 West 27th Street
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New York, NY 10001
O: 646-606-2332
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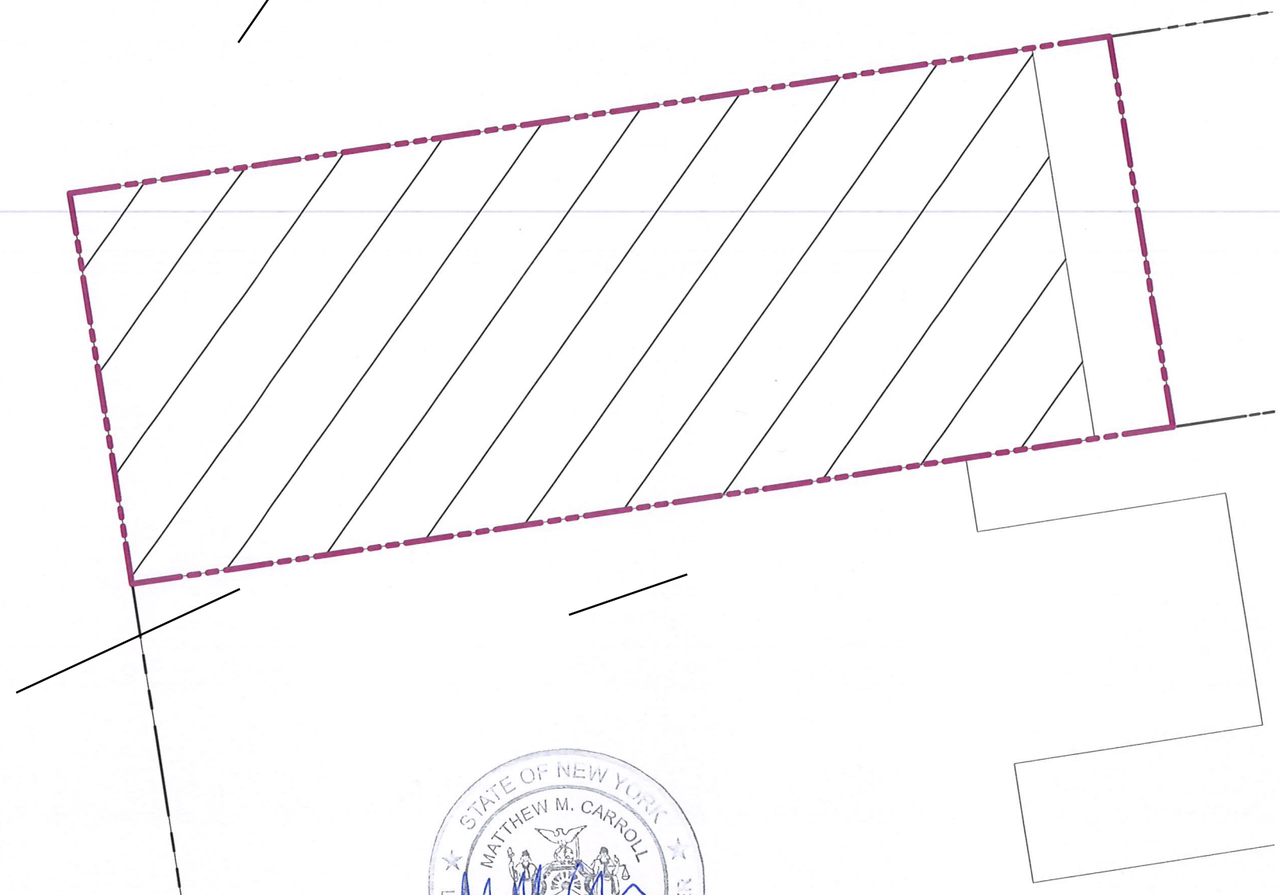
DRAWN BY	CHECKED BY	DATE	SCALE
MC	MM	APRIL 2017	AS NOTED

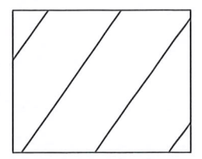
DRAWING TITLE: REMEDIAL COVER TYPE

DRAWING NO.: Figure 10

Van Buren Street

Patchen Avenue





Extent of Vapor Barrier

Basemap Features Source: New York City Dept. of Finance & NYC Open Data.

0 5' 10' 20'

Drawing Scale

CLIENT

19 PATCHEN AVENUE
BROOKLYN, NEW YORK

CONSULTANT

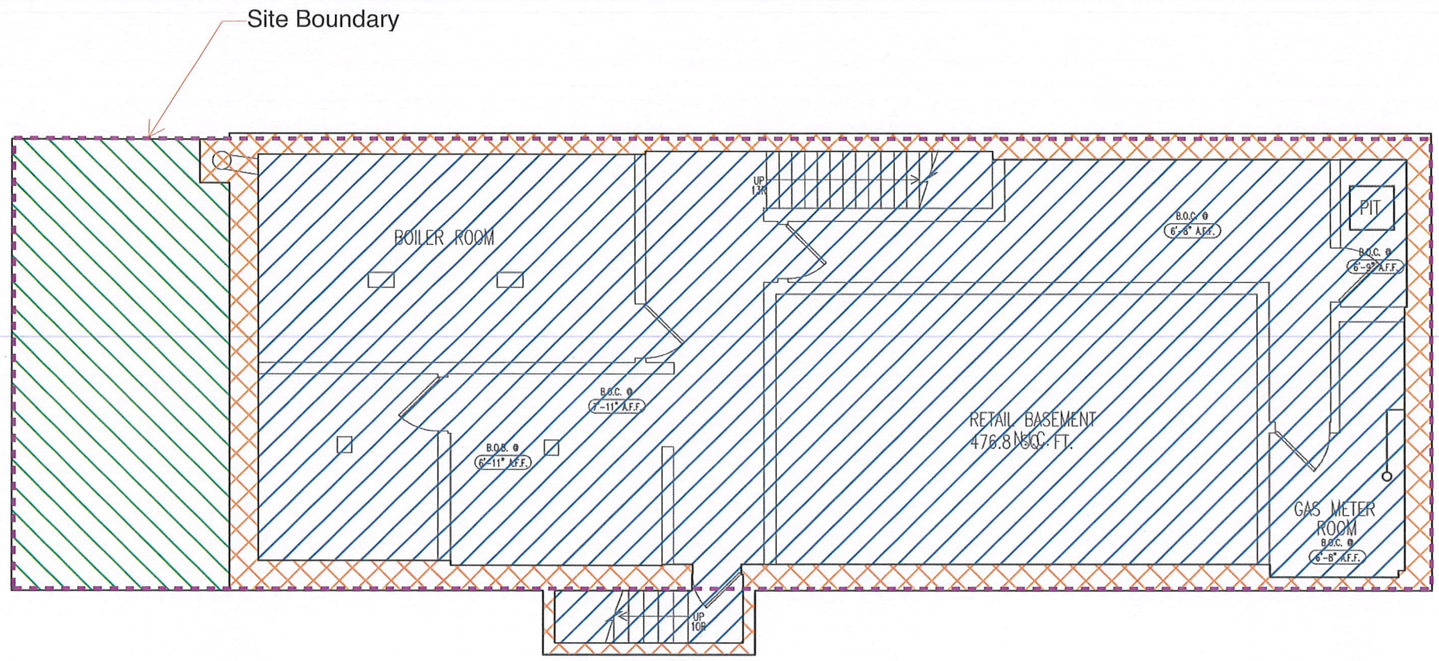
TENEN ENVIRONMENTAL

TENEN ENVIRONMENTAL, LLC
121 West 27th Street
Suite 702
New York, NY 10001
O: 646-606-2332
F: 646-606-2379

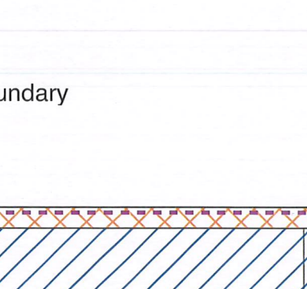
DRAWN BY	CHECKED BY	DATE	SCALE:
MC	MM	APRIL 2017	AS NOTED

DRAWING TITLE: EXTENT OF VAPOR BARRIER

DRAWING NO.: Figure 11



ES:



Basemap Source:
Aufgang Architects, LLC, Suffern, NY,
Proposed Repair and Rennovation for BEC New Communities HDFC, Inc.,
Proj #1518, Dwg. #A-100.00, 6/28/15

Legend

- 4-6 inch concrete slab on grade
- 4-6 inch concrete slab at 10 feet below grade
- 4-6 inch concrete subgrade walls from 0-10 feet below grade

0 4' 8' 16'
Drawing Scale

SITE
19 Patchen Avenue

CONSULTANT
TENEN ENVIRONMENTAL

TENEN ENVIRONMENTAL, LLC
121 West 27th Street
Suite 702
New York, NY 10001
O: 646-606-2332
F: 646-606-2379

DRAWN BY	CHECKED BY	DATE	SCALE:
LM	CZ	12/17/2019	As Noted

DRAWING TITLE:
Extent of Composite Cover System

DRAWING NO.
Figure 12

Airpura
AIR PURIFIERS

C600-DLX

SPECIFIC CHEMICALS - VOCS

REMOVE SPECIFIC AIRBORNE CHEMICALS INCLUDING VOLATILE ORGANIC COMPOUNDS

THE AIRPURA C600
Available in White / Black / Cream

THE AIRPURA LIMITED WARRANTY
5 years parts / 10 years labor

THE AIRPURA C600-DLX CHEMICAL ABATEMENT UNIT OFFERS YOU:

- **26 LB ENHANCED IMPREGNATED ACTIVATED CARBON BED** Adsorbs airborne chemicals including volatile organic compounds (VOCs)
- **HEPA-BARRIER POST FILTER** Traps particles after the carbon bed.
- **560 CFM INTEGRATED FAN / MOTOR** Largest CFM available in a portable unit.
- **VARIABLE SPEED MOTOR** Gives you flexible air flow options.
- **PROPER CONTACT TIMES FOR EFFECTIVE FILTRATION** Correctly calibrated air flow / bed depth for efficient adsorbtion.
- **PRESSURE SEALED FILTER CHAMBER** Unique pressure seal on the filter chamber ensures all contaminants are filtered and non escape.
- **CALL OUR AIR QUALITY EXPERTS** For the solution to your air pollution problem.

OVER 4000 CHEMICALS CAN BE REMOVED

Carbon blends are available to deal with over 4000 airborne chemicals including:

Ammonias
Nitrous dioxide
Nitrous trioxide
Monoethylamine
CHydrogen Sulfide
Mercury vapors
Chlorine dioxide
Hydrogen Bromide
Sulfur dioxide
Hydrogen fluoride
Hydrogen chloride
Benzene
Methylene Chloride
Radioactive Iodine
Toulene
Napthene
Pesticides
Chlorine
Mold Mycotoxins

FILTER LIFE

Carbon filters should be changed as needed in heavy applications and at least every 24 months in normal use. Airpura carbon canisters are refillable to save costs.

Hepa filters should be changed every 12 months

Pre-filters can be vacuumed from the exterior of the unit and should be changed every 12 months depending on use the exterior of the unit and should be changed every 12 months depending on use.

PROTECT YOURSELF WITH AIRPURA HIGH EFFICIENCY AIR PURIFICATION

C600-DLX

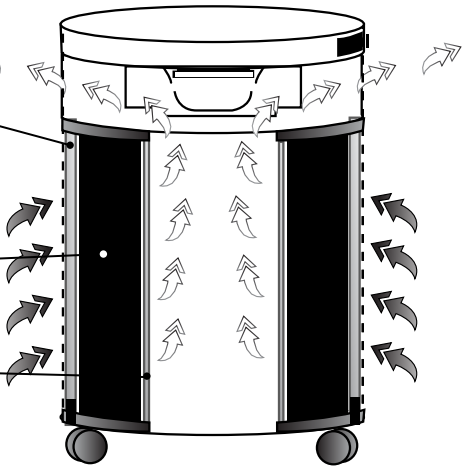
AIRBORNE CHEMICALS & VOCS

FILTRATION SYSTEM

Cleanable pre-filter
Vacuum through grill and change every 12 months

26 lb Enhanced Impregnated Carbon filter
Enhanced carbon to capture VOCs more efficiently

HEPA-Barrier post filter
Traps carbon dust and particles



UNIQUE FEATURES

- **ALL METAL HOUSING** ensures no plastic vapors are emitted.
- **MOTOR OUT OF THE AIR FLOW.** Most air purifiers blow the clean air over the motor and pick up impurities.
- **ELECTRICAL PARTS IN A SEALED CHAMBER** out of the airflow. Increases safety and prevents off-gassing.
- **PRESSURE SEALED FILTER CHAMBER** prevents leakage of polluted air around filters.
- **FELT GASKETS SEAL THE FILTER CHAMBER.** Maximize filtration with no rubber off-gassing found with other filters.
- **CLEAN MODERN APPEARANCE** fits in any decor.
- **LOW NOISE LEVEL** (at 6 feet) 28.1db on low 62.3db on high (560 cfm).

TECHNICAL SPECIFICATIONS

ODOR, AIRBORNE CHEMICAL AND VOC CONTROL
26 lbs super enhanced impregnated activated carbon 13" x 13" x 7.5"

CARBON BED
3" deep x 570 sq" surface

AIR FLOW 560 CFM
More cfm than any other portable unit available

PRE-FILTER
570 sq in x 1 in

POST PARTICLE FILTER
306 sq in

SIZE
23" x 15"

WEIGHT
49 lbs total

VOLTAGE OPTIONS
115 or 220 volts

WATTS
120 on high / 40 on low

SOUND LEVEL
28.1 db on low (at 6 feet)
62.3 db on high (560 cfm)
(Room level 25.1 db)

ETL CERTIFIED
Conforms to CSA C22.2 no 113 ANSI / UL 507

SPECIALLY DESIGNED TO REMOVE SPECIFIC AIRBORNE CHEMICALS AND VOCS

DWELL TIME

For best results the correct dwell time of the pollutants over the carbon bed is vital. The 560 CFM impeller/motor combined with the variable speed control and unimpeded airflow of the Airpura 600 series allows you to set the airflow precisely and achieve the results you need.

EXPERTISE YOU CAN CALL ON

Airpura air quality experts can offer you a solution to most airborne chemical problems. Contact your Airpura dealer or call us directly to discuss your needs.

YOUR AIRPURA™ DEALER

SAFE EFFECTIVE AIR FILTRATION FOR YOUR BETTER HEALTH

Land Science®
a division of REGENESIS®

PRODUCT DATA SHEET

Retro-Coat™ SEALER

Product Description

Retro-Coat SEALER is a two part, solvent-free clear epoxy sealer. It has no odor during application and no toxic byproducts. It is normally applied anywhere up to 20 mils (80 SF/gal) in a single coat. Used as a top coat for the Retro-Coat system**, Retro-Coat SEALER** has enhanced flexibility with a 9% tensile elongation for improved mechanical impact and thermal shock resistance. It dries to a high gloss, water white finish.

Typical Application

Retro-Coat SEALER is recommended to be used as a top clear coat when using a decorative finish in combination with the Retro-Coat system. When applied over a decorative flake or quartz system, **Retro-COAT SEALER** is an ideal clear coat because of its lack of solvents and no odor. **Retro-Coat SEALER** is also an ideal topcoat for the standard Retro-Coat system as it will provide a sacrificial wearing surface that will increase the system's ability to withstand and mask, scuffing, tire marks, and superficial scratches.

Chemical Resistance

Retro-Coat™ SEALER is a modified acrylic epoxy and therefore has slightly different chemical resistance properties than Retro-Coat. If the chemical resistance of the top coat is very important it is advised to not use **Retro-Coat SEALER** as a protective top coat or sacrificial layer, instead us the standard Retro-Coat system.

Physical Properties

Tensile Strength	(ASTM D-638)	: 1560 psi	Bond Strength to Quarry Tile	: >1000 psi
Tensile Elongation	(D-638)	: 9%	Vapor Transmission Rate (E-96)	: .03 perms
Flexural Strength	(D-790)	: 7035 psi	Water Absorption (D-570)	: 0.2% in 24hrs.
Hardness, Shore D	(D-2240)	: 80	Taber Abrasion (D-1044)	: 105 mg loss.
			60° Gloss	: 95

Physical Characteristics

Density, lbs/gal.
Pt. A : 9.5
Pt. B : 8.6
A&B Mixed : 9.2

Viscosity @ 77°F, cps
Pt. A : 700
Pt. B : 400
A&B Mixed : 600

Mixing Ratios — **By Volume** — **By Weight**
Pt. A : Pt. B — **1.75:1** — **1.94:1**

Curing Times @	**50° F**	**77°F**	**90°F**
Pot Life	65 min.	55 min.	25 min.
Working Times	55 min.	40 min.	20 min.
Hard, Foot Traffic	70 hrs.	30 hrs.	20 hrs.

Maximum hardness and chemical resistance are achieved after 7 days at 77°F

Color Availability

Standard color is clear and not pigmented.

Shelf Life: 1 Year at 60-80°F in unopened containers.

Packaging and Coverage Rates *(for 10 mil coverage)*

4 Gallon Kit	:	640 SF
20 Gallon Kit	:	3200 SF
100 Gallon Kit	:	16,000 SF

Installation

Particular care must be taken to follow those instructions precisely to assure proper installation. These instructions pertain to a standard 20 mil application; please contact us if the desired application is different.

1. No primer is necessary, as **Retro-Coat SEALER** is self priming and meant to be applied directly over Retro-Coat. Allow to dry tack free.
2. **Retro-Coat SEALER** can be applied by a roller or notched rubber squeegee. Recommended coverage is 160 SF per gallon per coat.
3. Apply the mixed material with a short nap roller, a squeegee or a brush. Apply approximately 160 SF per gallon per coat to achieve a finished thickness of about 10 mils depending on the substrate. For application thickness greater than 15 mils, use of a spiked roller is recommended to help eliminate air bubbles.
4. Multiple coats can usually be applied as soon as the first coat is tack free. If the base coast is allowed to dry hard, (for truck traffic), it must be sanded prior to application of the second coat.
5. A suitable aggregate may be broadcast onto the surface after backrolling to provide more anti-slip profile to the finished surface. It is advisable to test various types and sizes of aggregate to achieve the desired finished profile.

Note: Failure to follow the above instruction, unless expressly authorized by a Land Science Technologies Representative, will void our material warranty.

Precautions

1. **Do not apply more than 20 mils (80SF/gallon) per coat, as clarity is diminished.**
2. **Recoat window without sanding at 70ºF: 40 hours**

Product Specification

The specified area shall receive an application of **Retro-Coat SEALER** as manufactured by **Land Science Technologies, San Clemente, California.** The system shall be installed by precisely following the manufacturer's published recommendations pertaining to surface preparation, mixing, and application. The material shall be a low odor, solvent-free, 100% solids, high gloss flexibilized epoxy system with good resilience to resist thermal and mechanical shock. The system must adhere to damp as well as dry concrete, wood, metal, tile, terrazzo, and sound existing epoxy and urethane coatings. It shall have an elongation of 9% in the unfilled form, when tested using ASTM D-638. The maximum film hardness shall be a Shore D of 80. The system shall be unaffected by oils, greases, and resist such chemicals as 36% hydrochloric acid, 10% nitric acid, 30% phosphoric and 50% sodium hydroxide.

Land Science®
a division of REGENESIS®

PRODUCT DATA SHEET

Retro-Coat™ PRIMER

Product Description

Retro-Coat™ PRIMER is a low viscosity, two part, 100% solids epoxy primer. It is virtually odorless and non-toxic. **Retro-Coat PRIMER** has excellent damp, as well as dry adhesion to concrete, masonry surfaces, wood and gyp board. With a very low viscosity of 250 centipoise, it readily penetrates porous substrates to provide an excellent mechanical bond. Where faster curing times are required, specify **Retro-Coat PRIMER-FC**.

Typical Application

Applied to a 6 mil thickness, **Retro-Coat PRIMER** provides an ideal substrate for **Retro-Coat**, but may not be required when top coating thickness is greater than 20 mil or a specific aesthetic look is desired. Prior to the application of **Retro-Coat, Retro-Coat PRIMER** should be allowed to dry tack free to maximize its effectiveness.

In areas where concrete is spalled or needs to be leveled **Geo-Seal PRIMER-S** is more appropriate.

Installation

Please refer to our Application Specs for detailed instructions. Particular care must be taken to follow those instructions precisely to assure proper installation.

1. New concrete should be allowed to cure a minimum of 28 days and/or be checked with a rubber mat or plastic sheet to insure adequate curing time has occurred. If this is not possible, contact Land Science Technologies for further information.
2. All surfaces to be covered should be power washed, shot blasted, acid etched, scarified or sanded to present a clean, sound substrate to which to bond to. The prepared surface should have a ph of 7.
3. Part A and B should be mixed in the prescribed ratio, using a low speed jiffy-style mixer (maximum 750 rpm), for at least 60 seconds.
4. **Retro-Coat PRIMER** is a 100% solids epoxy and no solvents are necessary.
5. Apply the mixed material with a fine nap adhesive roller, squeegee or brush. Apply at approximately 200-250 SF per gallon, depending on surface porosity.
6. Allow to dry prior to the application of **Retro-Coat**.

Note: Failure to follow the above instruction, unless expressly authorized by a Land Science Technologies Representative, will void our material warranty.

Precautions

1. **Retro-Coat Primer-FC is very fast reacting; pour out of bucket immediately after mixing and spread with squeegee.**
2. **Only Retro-Coat Primer-FC can be applied below 50°F.**
3. **Recoat windows at 70°: Retro-Coat Primer - 18 hours; Retro-Coat Primer-FC - 10 hours for expanding recoat window, broadcast in aggregate into primer.**
4. **Never apply Retro-Coat Primer or Retro-Coat Primer-FC more than 15 mils (100SF/gallon) per pass as it will not cure hard in greater thicknesses.**

Product Specification

The specified area shall receive an application of **Retro-Coat PRIMER** as manufactured by **Land Science Technologies, San Clemente, California.** The system shall be installed by precisely following the manufacturers published recommendations pertaining to surface preparation, mixing, and application. The material shall be a low odor, solvent free, 100% solids epoxy primer with excellent adhesion to damp as well as dry concrete, metal and wood. It should be able to adhere to brick and tile, exceeding1000 psi on an Elcometer pull test.

Physical Characteristics

Density, lbs/gal.	**Pt. A**	**Pt. B**	**A&B Mixed**
Retro-Coat Primer	9.5	8.0	9.2
Retro-Coat Primer-FC	9.5	8.2	9.3
Viscosity@77°F, cps	**Pt. A**	**Pt. B**	**A&B Mixed**
Retro-Coat Primer	476	60	250
Retro-Coat Primer-FC	476	60	250

Mixing Ratios (Part A:Part B)		
	By Volume	**By Weight**
Retro-Coat PRIMER	3.5:1	4.1:1
Retro-Coat PRIMER-FC	4.6:1	5.4:1

Curing Times@		**40°F**	**50°F**	**77°F**	**90°F**
Retro-Coat Primer	Pot Life	----	35 min.	25 min.	15 min.
	Tack Free	----	40 hrs.	10 hrs.	5 hrs.
	Set Hard	----	72 hrs.	18 hrs.	9 hrs.
Retro-Coat Primer-FC	Pot Life	----	10 min.	9 min.	9 min.
	Tack Free	----	18 hrs.	5 hrs.	2 hrs.
	Set Hard	----	30 hrs.	9 hrs.	4 hrs.

Packaging and Coverage Rates

	Retro-Coat Primer & Retro-Coat Primer-FC
4 Gallon Kit:	1000 SF
20 Gallon Kit :	5000 SF
100 Gallon Drum Kit :	25,000 SF

APPENDIX J – Emerging Contaminants Sampling

TENEN ENVIRONMENTAL

121 West 27th Street, Suite 702
New York, NY 10001
(646) 606-2332

May 23, 2019

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A
625 Broadway, 12th Floor
Albany, NY 12233-7014

Attn: Matthew Mashhadi, Project Manager

Re: Emerging Contaminant Sampling – September 2018
19 Patchen Avenue – Brooklyn, NY
Block 1618, Lot 8
BCP Site #C224232

Dear Justin:

Tenen Environmental, LLC (Tenen) has prepared this summary of emerging contaminants groundwater results for the 19 Patchen Avenue Site in Brooklyn, NY. These samples were collected on September 21, 2018.

Background

On behalf of the Volunteer, Tenen has collected groundwater samples to investigate emerging contaminants in groundwater at the Site. The samples were collected in response to a request from the Department.

Summary of Emerging Contaminants Sampling

Samples were collected from existing monitoring wells MW-1 though MW-6 and deep monitoring well MW-1D. Samples were collected using low-flow techniques in accordance with EPA Region 1 Low-Stress (Low-Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells. (EQASOP-GW 001 Revision 3 dated July 30, 1996 Revised: January 19, 2010). Samples were collected in accordance with the Quality Assurance Project Plan (QAPP) and the New York State Department of Environmental Conservation (NYSDEC) July 2018 Groundwater Sampling for Emerging Contaminants guidance document. One duplicate and one field blank were collected.

All groundwater samples were analyzed for 1,4-dioxane and perfluoroalkyl acids (PFAAs). Samples were analyzed by EPA Methods 537 and 8270D SIM.

Sample Analysis

The samples were sent under chain-of-custody documentation to Alpha Analytical, Inc. (Alpha). Alpha is certified by the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) as LABIDs 11148 and 11627. All groundwater samples were analyzed for 1,4-dioxane and PFAAs.

Sample Results

A summary of the results is included as Table 1 and the laboratory deliverables are included in Attachment 1. The method detection limit (MDL) was less than 2 nanograms per liter (ng/L) for PFAAs.

All PFAA compounds were compared to the EPA Drinking Water Health Advisory level of 70 ng/L and 1,4-Dioxane was compared to the EPA Cancer Reference Concentration of 35 ng/L.

All concentrations of PFAA compounds were below 70 ng/L. All concentrations of 1,4-Dioxane were below the EPA Cancer Reference Concentration.

Sincerely,
Tenen Environmental, LLC

Matthew M. Carroll, PE
Principal / Environmental Engineer

Table
Attachment 1: Laboratory Deliverables

Tables

Table 1 - Emerging Contaminant Sampling Results
19 Patchen Avenue - Brooklyn, NY

SAMPLE ID:	EPA-DWHS	EPA-10-6 Cancer Reference Concentration	MW-1-D		MW-1		MW-2		MW-4		MW-4 DUP		MW-5		MW-6		MW-3		FIELD BLANK	
LAB ID:			L1837978-01		L1837978-02		L1837978-03		L1837978-04		L1837978-05		L1837978-06		L1837978-07		L1837978-08		L1837978-09	
COLLECTION DATE:			9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018		9/21/2018	
1,4 DIOXANE BY 8270D-SIM Units: ug/l			Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,4-Dioxane	--	0.35	0.0735	U	0.0708	U	0.0735	U	0.0765	U	0.0735	U	0.0735	U	0.075	U	0.0694	U	-	-
PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION																				
Perfluorobutanoic Acid (PFBA)	0.07	--	0.00567		0.00613		0.00776		0.00524		0.00464		0.00602		0.00863		0.00383		0.000127	U
Perfluoropentanoic Acid (PFPeA)	0.07	--	0.0102		0.0127		0.0242		0.00759		0.00696		0.00623		0.015		0.00652		0.000083	U
Perfluorobutanesulfonic Acid (PFBS)	0.07	--	0.00342		0.00333		0.00344		0.00261		0.00229		0.0035		0.00304		0.00142	J	0.000106	U
Perfluorohexanoic Acid (PFHxA)	0.07	--	0.0104		0.00957		0.016		0.00672		0.00655		0.00577		0.0125		0.00465		0.000122	U
Perfluoroheptanoic Acid (PFHpA)	0.07	--	0.0106		0.00763		0.0153		0.00548		0.00456		0.00653		0.012		0.00222		0.000089	U
Perfluorohexanesulfonic Acid (PFHxS)	0.07	--	0.00671		0.00433		0.00596		0.00225		0.00252		0.00312		0.00451		0.00097	J	0.000104	U
Perfluorooctanoic Acid (PFOA)	0.07	--	0.0457		0.0396		0.0804		0.041		0.039		0.061		0.0575		0.00762		0.000049	U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.07	--	0.0191		0.00018	U	0.000176	U	0.0103		0.012		0.00515		0.0066		0.00018	U	0.000187	U
Perfluoroheptanesulfonic Acid (PFHpS)	0.07	--	0.000144	U	0.000144	U	0.000141	U	0.000145	U	0.000476	J	0.000145	U	0.00014	U	0.000144	U	0.00015	U
Perfluorononanoic Acid (PFNA)	0.07	--	0.000093	U	0.00162	J	0.00144	J	0.000739	J	0.000816	J	0.000094	U	0.000848	J	0.00222		0.000097	U
Perfluorooctanesulfonic Acid (PFOS)	0.07	--	0.00455		0.0225		0.0418		0.0154		0.0151		0.011		0.0302		0.0171		0.00134	J
Perfluorodecanoic Acid (PFDA)	0.07	--	0.000176	U	0.000176	U	0.000173	U	0.000178	U	0.000178	U	0.000178	U	0.000172	U	0.000177	U	0.000184	U
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	0.07	--	0.000269	U	0.000269	U	0.000264	U	0.000271	U	0.000272	U	0.000272	U	0.000263	U	0.00027	U	0.000281	U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.07	--	0.000232	U	0.000232	U	0.000228	U	0.00138	J	0.000234	U	0.000234	U	0.000227	U	0.000233	U	0.000242	U
Perfluoroundecanoic Acid (PFUnA)	0.07	--	0.000177	U	0.000177	U	0.000174	U	0.000178	U	0.000179	U	0.000179	U	0.000173	U	0.000178	U	0.000184	U
Perfluorodecanesulfonic Acid (PFDS)	0.07	--	0.000206	U	0.000206	U	0.000202	U	0.000207	U	0.000208	U	0.000208	U	0.000201	U	0.000207	U	0.000215	U
Perfluorooctanesulfonamide (FOSA)	0.07	--	0.00021	U	0.00021	U	0.000206	U	0.000212	U	0.000212	U	0.000212	U	0.000205	U	0.000211	U	0.000219	U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.07	--	0.000345	U	0.000345	U	0.000339	U	0.000348	U	0.000349	U	0.000349	U	0.000338	U	0.000346	U	0.00036	U
Perfluorododecanoic Acid (PFDoA)	0.07	--	0.000085	U	0.000085	U	0.000083	U	0.000085	U	0.000086	U	0.000086	U	0.000083	U	0.000085	U	0.000088	U
Perfluorotridecanoic Acid (PFTrDA)	0.07	--	0.000084	U	0.000084	U	0.000082	U	0.000084	U	0.000085	U	0.000085	U	0.000082	U	0.000084	U	0.000087	U
Perfluorotetradecanoic Acid (PFTA)	0.07	--	0.000067	U	0.000067	U	0.000065	U	0.000067	U	0.000067	U	0.000067	U	0.000065	U	0.000067	U	0.00007	U

Notes:
EPA-DWHS - EPA Drinking Water Health Advisory
Q - Laboratory Qualifier
J - Estimated Value
U - the MDL is shown
MDL - Method of Detection Limit
ug/l - Micrograms per liter

Attachment 1
Laboratory Deliverables

ANALYTICAL REPORT

Lab Number:	L1837978
Client:	Tenen Environmental, LLC 121 West 27th Street Suite 702 New York City, NY 10001
ATTN:	Matt Carroll
Phone:	(646) 606-2332
Project Name:	19 PATCHEN AVE.
Project Number:	19 PATCHEN AVE
Report Date:	10/15/18

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1837978-01	MW-1-D	WATER	BROOKLYN	09/21/18 10:35	09/21/18
L1837978-02	MW-1	WATER	BROOKLYN	09/21/18 12:35	09/21/18
L1837978-03	MW-2	WATER	BROOKLYN	09/21/18 09:55	09/21/18
L1837978-04	MW-4	WATER	BROOKLYN	09/21/18 12:00	09/21/18
L1837978-05	MW-4 DUP	WATER	BROOKLYN	09/21/18 12:10	09/21/18
L1837978-06	MW-5	WATER	BROOKLYN	09/21/18 14:10	09/21/18
L1837978-07	MW-6	WATER	BROOKLYN	09/21/18 16:05	09/21/18
L1837978-08	MW-3	WATER	BROOKLYN	09/21/18 16:15	09/21/18
L1837978-09	FIELD BLANK	WATER	BROOKLYN	09/21/18 16:20	09/21/18
L1837978-10	TRIP BLANK	WATER	BROOKLYN	09/21/18 00:00	09/21/18

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	19 PATCHEN AVE.	**Lab Number:**	L1837978
Project Number:	19 PATCHEN AVE	**Report Date:**	10/15/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Perfluorinated Alkyl Acids by Isotope Dilution

The WG1161650-3 LCSD recovery, associated with L1837978-01 through -09, is above the 50-150% acceptance criteria for low level 522 (537) for perfluorononanesulfonic acid (pfns) (154%); however, the associated samples are non-detect to the RL for this target analyte. The results of the original analysis are reported.

The WG1161650-4 MS recovery, performed on L1837978-06, is outside the acceptance criteria for 1h,1h,2h,2h-perfluorodecanesulfonic acid (8:2fts) (189%).

The WG1161650-4/-5 MS/MSD RPDs, performed on L1837978-06, are outside the acceptance criteria for 1h,1h,2h,2h-perfluorodecanesulfonic acid (8:2fts) (60%) and n-ethyl perfluorooctanesulfonamidoacetic acid (netfosaa) (42%).

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 10/15/18

ORGANICS

VOLATILES

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-01
Client ID: MW-1-D
Sample Location: BROOKLYN

Date Collected: 09/21/18 10:35
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/18 15:38
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	2.6		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-01 Date Collected: 09/21/18 10:35

Client ID: MW-1-D Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.28	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-01 Date Collected: 09/21/18 10:35

Client ID: MW-1-D Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	96		70-130

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-02
Client ID: MW-1
Sample Location: BROOKLYN

Date Collected: 09/21/18 12:35
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/18 16:04
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	3.5		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	12		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-02 Date Collected: 09/21/18 12:35

Client ID: MW-1 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.27	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-02 Date Collected: 09/21/18 12:35

Client ID: MW-1 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	96		70-130

Project Name: 19 PATCHEN AVE.
Lab Number: L1837978
Project Number: 19 PATCHEN AVE
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-03
Client ID: MW-2
Sample Location: BROOKLYN

Date Collected: 09/21/18 09:55
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/18 16:29
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	2.1	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	12		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-03 Date Collected: 09/21/18 09:55

Client ID: MW-2 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.41	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-03 Date Collected: 09/21/18 09:55

Client ID: MW-2 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	97		70-130

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-04
Client ID: MW-4
Sample Location: BROOKLYN

Date Collected: 09/21/18 12:00
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/18 16:55
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	8.6		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	23		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-04 Date Collected: 09/21/18 12:00

Client ID: MW-4 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.44	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-04 Date Collected: 09/21/18 12:00

Client ID: MW-4 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	99		70-130

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-05
Client ID: MW-4 DUP
Sample Location: BROOKLYN

Date Collected: 09/21/18 12:10
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/18 17:20
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	7.4		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	19		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-05 Date Collected: 09/21/18 12:10

Client ID: MW-4 DUP Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.40	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-05 Date Collected: 09/21/18 12:10

Client ID: MW-4 DUP Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	98		70-130

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-06
Client ID: MW-5
Sample Location: BROOKLYN

Date Collected: 09/21/18 14:10
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/18 17:46
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	2.7		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	10		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-06 Date Collected: 09/21/18 14:10

Client ID: MW-5 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-06 Date Collected: 09/21/18 14:10

Client ID: MW-5 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	98		70-130

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-07
Client ID: MW-6
Sample Location: BROOKLYN

Date Collected: 09/21/18 16:05
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/18 18:12
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.2	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	12		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-07 Date Collected: 09/21/18 16:05

Client ID: MW-6 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.81		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-07 Date Collected: 09/21/18 16:05

Client ID: MW-6 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	97		70-130

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-08
Client ID: MW-3
Sample Location: BROOKLYN

Date Collected: 09/21/18 16:15
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/18 18:37
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.4	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	72		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-08 Date Collected: 09/21/18 16:15

Client ID: MW-3 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	1.5		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-08 Date Collected: 09/21/18 16:15

Client ID: MW-3 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	97		70-130

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-10
Client ID: TRIP BLANK
Sample Location: BROOKLYN

Date Collected: 09/21/18 00:00
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/25/18 19:03
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-10 Date Collected: 09/21/18 00:00

Client ID: TRIP BLANK Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-10 Date Collected: 09/21/18 00:00

Client ID: TRIP BLANK Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/25/18 10:58
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-08,10 Batch: WG1160786-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/25/18 10:58
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-08,10 Batch: WG1160786-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/25/18 10:58
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-08,10 Batch: WG1160786-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	91		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1837978

Report Date: 10/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1160786-3 WG1160786-4								
Methylene chloride	90		90		70-130	0		20
1,1-Dichloroethane	88		86		70-130	2		20
Chloroform	84		84		70-130	0		20
Carbon tetrachloride	88		87		63-132	1		20
1,2-Dichloropropane	90		91		70-130	1		20
Dibromochloromethane	91		89		63-130	2		20
1,1,2-Trichloroethane	93		92		70-130	1		20
Tetrachloroethene	94		91		70-130	3		20
Chlorobenzene	89		87		75-130	2		20
Trichlorofluoromethane	92		90		62-150	2		20
1,2-Dichloroethane	85		86		70-130	1		20
1,1,1-Trichloroethane	90		86		67-130	5		20
Bromodichloromethane	84		85		67-130	1		20
trans-1,3-Dichloropropene	93		92		70-130	1		20
cis-1,3-Dichloropropene	89		90		70-130	1		20
1,1-Dichloropropene	85		82		70-130	4		20
Bromoform	88		88		54-136	0		20
1,1,2,2-Tetrachloroethane	96		96		67-130	0		20
Benzene	89		88		70-130	1		20
Toluene	93		90		70-130	3		20
Ethylbenzene	92		91		70-130	1		20
Chloromethane	67		68		64-130	1		20
Bromomethane	41		41		39-139	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1837978

Report Date: 10/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1160786-3 WG1160786-4								
Vinyl chloride	75		75		55-140	0		20
Chloroethane	92		89		55-138	3		20
1,1-Dichloroethene	93		90		61-145	3		20
trans-1,2-Dichloroethene	89		88		70-130	1		20
Trichloroethene	84		84		70-130	0		20
1,2-Dichlorobenzene	95		93		70-130	2		20
1,3-Dichlorobenzene	93		91		70-130	2		20
1,4-Dichlorobenzene	90		89		70-130	1		20
Methyl tert butyl ether	94		97		63-130	3		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	88		88		70-130	0		20
Dibromomethane	88		89		70-130	1		20
1,2,3-Trichloropropane	98		99		64-130	1		20
Acrylonitrile	90		93		70-130	3		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	98		98		36-147	0		20
Acetone	88		89		58-148	1		20
Carbon disulfide	87		85		51-130	2		20
2-Butanone	88		89		63-138	1		20
Vinyl acetate	92		92		70-130	0		20
4-Methyl-2-pentanone	92		92		59-130	0		20
2-Hexanone	99		99		57-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1160786-3 WG1160786-4								
Bromochloromethane	93		95		70-130	2		20
2,2-Dichloropropane	89		87		63-133	2		20
1,2-Dibromoethane	97		97		70-130	0		20
1,3-Dichloropropane	97		95		70-130	2		20
1,1,1,2-Tetrachloroethane	90		87		64-130	3		20
Bromobenzene	91		90		70-130	1		20
n-Butylbenzene	92		90		53-136	2		20
sec-Butylbenzene	93		92		70-130	1		20
tert-Butylbenzene	90		88		70-130	2		20
o-Chlorotoluene	89		90		70-130	1		20
p-Chlorotoluene	93		92		70-130	1		20
1,2-Dibromo-3-chloropropane	86		86		41-144	0		20
Hexachlorobutadiene	82		81		63-130	1		20
Isopropylbenzene	90		89		70-130	1		20
p-Isopropyltoluene	91		89		70-130	2		20
Naphthalene	97		98		70-130	1		20
n-Propylbenzene	96		95		69-130	1		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20
1,2,4-Trichlorobenzene	87		86		70-130	1		20
1,3,5-Trimethylbenzene	96		95		64-130	1		20
1,2,4-Trimethylbenzene	90		90		70-130	0		20
1,4-Dioxane	70		88		56-162	**23**	Q	20
p-Diethylbenzene	88		87		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08,10 Batch: WG1160786-3 WG1160786-4								
p-Ethyltoluene	94		93		70-130	1		20
1,2,4,5-Tetramethylbenzene	88		87		70-130	1		20
Ethyl ether	92		96		59-134	4		20
trans-1,4-Dichloro-2-butene	86		88		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		92		70-130
Toluene-d8	104		103		70-130
4-Bromofluorobenzene	105		104		70-130
Dibromofluoromethane	95		94		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1837978

Report Date: 10/15/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1160786-6 WG1160786-7 QC Sample: L1837978-06 Client ID: MW-5												
Methylene chloride	ND	10	9.7	97		10	100		70-130	3		20
1,1-Dichloroethane	ND	10	9.6	96		10	100		70-130	4		20
Chloroform	2.7	10	12	93		13	103		70-130	8		20
Carbon tetrachloride	ND	10	8.8	88		10	100		63-132	13		20
1,2-Dichloropropane	ND	10	9.4	94		10	100		70-130	6		20
Dibromochloromethane	ND	10	9.4	94		10	100		63-130	6		20
1,1,2-Trichloroethane	ND	10	9.8	98		11	110		70-130	12		20
Tetrachloroethene	10	10	16	**60**	Q	19	90		70-130	17		20
Chlorobenzene	ND	10	8.5	85		9.8	98		75-130	14		20
Trichlorofluoromethane	ND	10	9.4	94		11	110		62-150	16		20
1,2-Dichloroethane	ND	10	9.8	98		10	100		70-130	2		20
1,1,1-Trichloroethane	ND	10	9.3	93		10	100		67-130	7		20
Bromodichloromethane	ND	10	9.5	95		10	100		67-130	5		20
trans-1,3-Dichloropropene	ND	10	9.3	93		10	100		70-130	7		20
cis-1,3-Dichloropropene	ND	10	8.4	84		9.4	94		70-130	11		20
1,1-Dichloropropene	ND	10	7.6	76		9.0	90		70-130	17		20
Bromoform	ND	10	8.7	87		9.4	94		54-136	8		20
1,1,2,2-Tetrachloroethane	ND	10	9.7	97		10	100		67-130	3		20
Benzene	ND	10	9.2	92		10	100		70-130	8		20
Toluene	ND	10	8.6	86		10	100		70-130	15		20
Ethylbenzene	ND	10	8.2	82		9.6	96		70-130	16		20
Chloromethane	ND	10	8.0	80		9.6	96		64-130	18		20
Bromomethane	ND	10	2.5	**25**	Q	3.8	**38**	Q	39-139	**41**	Q	20

Matrix Spike Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1160786-6 WG1160786-7 QC Sample: L1837978-06 Client ID: MW-5												
Vinyl chloride	ND	10	7.4	74		8.5	85		55-140	14		20
Chloroethane	ND	10	9.8	98		11	110		55-138	12		20
1,1-Dichloroethene	ND	10	9.0	90		10	100		61-145	11		20
trans-1,2-Dichloroethene	ND	10	8.9	89		9.9	99		70-130	11		20
Trichloroethene	ND	10	8.6	86		9.7	97		70-130	12		20
1,2-Dichlorobenzene	ND	10	8.5	85		9.5	95		70-130	11		20
1,3-Dichlorobenzene	ND	10	8.0	80		9.0	90		70-130	12		20
1,4-Dichlorobenzene	ND	10	7.9	79		9.0	90		70-130	13		20
Methyl tert butyl ether	ND	10	10	100		11	110		63-130	10		20
p/m-Xylene	ND	20	16	80		19	95		70-130	17		20
o-Xylene	ND	20	16	80		19	95		70-130	17		20
cis-1,2-Dichloroethene	ND	10	9.3	93		10	100		70-130	7		20
Dibromomethane	ND	10	9.7	97		10	100		70-130	3		20
1,2,3-Trichloropropane	ND	10	9.7	97		10	100		64-130	3		20
Acrylonitrile	ND	10	10	100		11	110		70-130	10		20
Styrene	ND	20	16	80		19	95		70-130	17		20
Dichlorodifluoromethane	ND	10	9.1	91		11	110		36-147	19		20
Acetone	ND	10	11	110		12	120		58-148	9		20
Carbon disulfide	ND	10	8.5	85		9.8	98		51-130	14		20
2-Butanone	ND	10	9.6	96		10	100		63-138	4		20
Vinyl acetate	ND	10	8.4	84		9.0	90		70-130	7		20
4-Methyl-2-pentanone	ND	10	9.8	98		11	110		59-130	12		20
2-Hexanone	ND	10	10	100		11	110		57-130	10		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1160786-6 WG1160786-7 QC Sample: L1837978-06 Client ID: MW-5												
Bromochloromethane	ND	10	10	100		11	110		70-130	10		20
2,2-Dichloropropane	ND	10	8.2	82		9.2	92		63-133	11		20
1,2-Dibromoethane	ND	10	9.9	99		11	110		70-130	11		20
1,3-Dichloropropane	ND	10	9.9	99		11	110		70-130	11		20
1,1,1,2-Tetrachloroethane	ND	10	9.4	94		10	100		64-130	6		20
Bromobenzene	ND	10	8.2	82		9.3	93		70-130	13		20
n-Butylbenzene	ND	10	6.8	68		8.2	82		53-136	19		20
sec-Butylbenzene	ND	10	7.0	70		8.4	84		70-130	18		20
tert-Butylbenzene	ND	10	7.0	70		8.4	84		70-130	18		20
o-Chlorotoluene	ND	10	7.7	77		8.8	88		70-130	13		20
p-Chlorotoluene	ND	10	7.9	79		9.0	90		70-130	13		20
1,2-Dibromo-3-chloropropane	ND	10	8.8	88		9.2	92		41-144	4		20
Hexachlorobutadiene	ND	10	5.9	**59**	Q	7.2	72		63-130	20		20
Isopropylbenzene	ND	10	7.1	71		8.5	85		70-130	18		20
p-Isopropyltoluene	ND	10	6.8	**68**	Q	8.3	83		70-130	20		20
Naphthalene	ND	10	9.3	93		10	100		70-130	7		20
n-Propylbenzene	ND	10	7.5	75		9.0	90		69-130	18		20
1,2,3-Trichlorobenzene	ND	10	8.8	88		9.8	98		70-130	11		20
1,2,4-Trichlorobenzene	ND	10	7.0	70		8.0	80		70-130	13		20
1,3,5-Trimethylbenzene	ND	10	7.6	76		8.9	89		64-130	16		20
1,2,4-Trimethylbenzene	ND	10	7.4	74		8.6	86		70-130	15		20
1,4-Dioxane	ND	500	220J	**44**	Q	400	80		56-162	**58**	Q	20
p-Diethylbenzene	ND	10	6.6	**66**	Q	8.0	80		70-130	19		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08,10 QC Batch ID: WG1160786-6 WG1160786-7 QC Sample: L1837978-06 Client ID: MW-5												
p-Ethyltoluene	ND	10	7.3	73		8.8	88		70-130	19		20
1,2,4,5-Tetramethylbenzene	ND	10	6.5	**65**	Q	7.7	77		70-130	17		20
Ethyl ether	ND	10	9.7	97		11	110		59-134	13		20
trans-1,4-Dichloro-2-butene	ND	10	8.8	88		9.4	94		70-130	7		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		99		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	101		99		70-130
Toluene-d8	102		103		70-130

SEMIVOLATILES

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-01
Client ID: MW-1-D
Sample Location: BROOKLYN

Date Collected: 09/21/18 10:35
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/03/18 19:17
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/28/18 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	147	73.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	16		15-110

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-01
Client ID: MW-1-D
Sample Location: BROOKLYN

Date Collected: 09/21/18 10:35
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 10/13/18 21:42
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	5.67		ng/l	1.85	0.121	1
Perfluoropentanoic Acid (PFPeA)	10.2		ng/l	1.85	0.079	1
Perfluorobutanesulfonic Acid (PFBS)	3.42		ng/l	1.85	0.102	1
Perfluorohexanoic Acid (PFHxA)	10.4		ng/l	1.85	0.117	1
Perfluoroheptanoic Acid (PFHpA)	10.6		ng/l	1.85	0.086	1
Perfluorohexanesulfonic Acid (PFHxS)	6.71		ng/l	1.85	0.100	1
Perfluorooctanoic Acid (PFOA)	45.7		ng/l	1.85	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	19.1		ng/l	1.85	0.180	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.85	0.144	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.85	0.093	1
Perfluorooctanesulfonic Acid (PFOS)	4.55		ng/l	1.85	0.103	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.85	0.176	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.85	0.269	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.85	0.232	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.85	0.177	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.85	0.206	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.85	0.210	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.85	0.345	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.85	0.085	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.85	0.084	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.85	0.067	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-01 Date Collected: 09/21/18 10:35

Client ID: MW-1-D Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	99		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	126		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	108		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	98		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	107		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	57		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	78		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	82		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	54		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	39		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	78		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	46		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	54		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	64		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	81		33-143

Project Name: 19 PATCHEN AVE.
Lab Number: L1837978
Project Number: 19 PATCHEN AVE
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-02
Client ID: MW-1
Sample Location: BROOKLYN

Date Collected: 09/21/18 12:35
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/05/18 20:05
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/28/18 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	142	70.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-02
Client ID: MW-1
Sample Location: BROOKLYN

Date Collected: 09/21/18 12:35
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 10/13/18 21:59
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	6.13		ng/l	1.85	0.121	1
Perfluoropentanoic Acid (PFPeA)	12.7		ng/l	1.85	0.079	1
Perfluorobutanesulfonic Acid (PFBS)	3.33		ng/l	1.85	0.102	1
Perfluorohexanoic Acid (PFHxA)	9.57		ng/l	1.85	0.117	1
Perfluoroheptanoic Acid (PFHpA)	7.63		ng/l	1.85	0.086	1
Perfluorohexanesulfonic Acid (PFHxS)	4.33		ng/l	1.85	0.100	1
Perfluorooctanoic Acid (PFOA)	39.6		ng/l	1.85	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.85	0.180	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.85	0.144	1
Perfluorononanoic Acid (PFNA)	1.62	J	ng/l	1.85	0.093	1
Perfluorooctanesulfonic Acid (PFOS)	22.5		ng/l	1.85	0.103	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.85	0.176	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.85	0.269	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.85	0.232	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.85	0.177	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.85	0.206	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.85	0.210	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.85	0.345	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.85	0.085	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.85	0.084	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.85	0.067	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-02 Date Collected: 09/21/18 12:35

Client ID: MW-1 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	101		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	121		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	114		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	104		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	118		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	50		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	84		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	107		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	37		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	57		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	79		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	48		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	65		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	78		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	84		33-143

Project Name: 19 PATCHEN AVE.
Lab Number: L1837978
Project Number: 19 PATCHEN AVE
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-03
Client ID: MW-2
Sample Location: BROOKLYN

Date Collected: 09/21/18 09:55
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/05/18 20:34
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/28/18 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	147	73.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-03
Client ID: MW-2
Sample Location: BROOKLYN

Date Collected: 09/21/18 09:55
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 10/13/18 22:15
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	7.76		ng/l	1.82	0.119	1
Perfluoropentanoic Acid (PFPeA)	24.2		ng/l	1.82	0.078	1
Perfluorobutanesulfonic Acid (PFBS)	3.44		ng/l	1.82	0.100	1
Perfluorohexanoic Acid (PFHxA)	16.0		ng/l	1.82	0.115	1
Perfluoroheptanoic Acid (PFHpA)	15.3		ng/l	1.82	0.084	1
Perfluorohexanesulfonic Acid (PFHxS)	5.96		ng/l	1.82	0.098	1
Perfluorooctanoic Acid (PFOA)	80.4		ng/l	1.82	0.046	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.82	0.176	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.82	0.141	1
Perfluorononanoic Acid (PFNA)	1.44	J	ng/l	1.82	0.092	1
Perfluorooctanesulfonic Acid (PFOS)	41.8		ng/l	1.82	0.101	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.82	0.173	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.82	0.264	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.82	0.228	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.82	0.174	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.82	0.202	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.82	0.206	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.82	0.339	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.82	0.083	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.82	0.082	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.82	0.065	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-03 Date Collected: 09/21/18 09:55

Client ID: MW-2 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	106		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	123		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	122		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	117		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	114		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	41		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	27		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	52		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	92		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	21		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	48		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	71		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	93		33-143

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-04
Client ID: MW-4
Sample Location: BROOKLYN

Date Collected: 09/21/18 12:00
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/03/18 20:41
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/28/18 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	153	76.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	17		15-110

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-04
Client ID: MW-4
Sample Location: BROOKLYN

Date Collected: 09/21/18 12:00
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 10/13/18 22:32
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	5.24		ng/l	1.86	0.122	1
Perfluoropentanoic Acid (PFPeA)	7.59		ng/l	1.86	0.080	1
Perfluorobutanesulfonic Acid (PFBS)	2.61		ng/l	1.86	0.103	1
Perfluorohexanoic Acid (PFHxA)	6.72		ng/l	1.86	0.118	1
Perfluoroheptanoic Acid (PFHpA)	5.48		ng/l	1.86	0.086	1
Perfluorohexanesulfonic Acid (PFHxS)	2.25		ng/l	1.86	0.100	1
Perfluorooctanoic Acid (PFOA)	41.0		ng/l	1.86	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	10.3		ng/l	1.86	0.181	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.86	0.145	1
Perfluorononanoic Acid (PFNA)	0.739	J	ng/l	1.86	0.094	1
Perfluorooctanesulfonic Acid (PFOS)	15.4		ng/l	1.86	0.104	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.86	0.178	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.86	0.271	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	1.38	J	ng/l	1.86	0.234	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.86	0.178	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.86	0.207	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.86	0.212	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.86	0.348	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.86	0.085	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.86	0.084	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.86	0.067	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-04 Date Collected: 09/21/18 12:00

Client ID: MW-4 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	96		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	112		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	106		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	38		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	80		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	30		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	55		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	54		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	67		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	81		33-143

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-05
Client ID: MW-4 DUP
Sample Location: BROOKLYN

Date Collected: 09/21/18 12:10
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/03/18 21:09
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/28/18 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	147	73.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	18		15-110

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-05
Client ID: MW-4 DUP
Sample Location: BROOKLYN

Date Collected: 09/21/18 12:10
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 10/13/18 22:48
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	4.64		ng/l	1.87	0.123	1
Perfluoropentanoic Acid (PFPeA)	6.96		ng/l	1.87	0.080	1
Perfluorobutanesulfonic Acid (PFBS)	2.29		ng/l	1.87	0.103	1
Perfluorohexanoic Acid (PFHxA)	6.55		ng/l	1.87	0.118	1
Perfluoroheptanoic Acid (PFHpA)	4.56		ng/l	1.87	0.087	1
Perfluorohexanesulfonic Acid (PFHxS)	2.52		ng/l	1.87	0.101	1
Perfluorooctanoic Acid (PFOA)	39.0		ng/l	1.87	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	12.0		ng/l	1.87	0.182	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.476	J	ng/l	1.87	0.145	1
Perfluorononanoic Acid (PFNA)	0.816	J	ng/l	1.87	0.094	1
Perfluorooctanesulfonic Acid (PFOS)	15.1		ng/l	1.87	0.104	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.87	0.178	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.87	0.272	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.87	0.234	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.87	0.179	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.87	0.208	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.87	0.212	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.87	0.349	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.87	0.086	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.87	0.085	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.87	0.067	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-05 Date Collected: 09/21/18 12:10

Client ID: MW-4 DUP Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	95		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	106		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	112		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	117		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	113		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	39		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	88		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	29		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	57		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	80		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	74		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	88		33-143

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-06
Client ID: MW-5
Sample Location: BROOKLYN

Date Collected: 09/21/18 14:10
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/03/18 21:37
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/28/18 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	147	73.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	18		15-110

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-06
Client ID: MW-5
Sample Location: BROOKLYN

Date Collected: 09/21/18 14:10
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 10/13/18 23:05
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	6.02		ng/l	1.87	0.123	1
Perfluoropentanoic Acid (PFPeA)	6.23		ng/l	1.87	0.080	1
Perfluorobutanesulfonic Acid (PFBS)	3.50		ng/l	1.87	0.103	1
Perfluorohexanoic Acid (PFHxA)	5.77		ng/l	1.87	0.118	1
Perfluoroheptanoic Acid (PFHpA)	6.53		ng/l	1.87	0.087	1
Perfluorohexanesulfonic Acid (PFHxS)	3.12		ng/l	1.87	0.101	1
Perfluorooctanoic Acid (PFOA)	61.0		ng/l	1.87	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	5.15		ng/l	1.87	0.182	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.87	0.145	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.87	0.094	1
Perfluorooctanesulfonic Acid (PFOS)	11.0		ng/l	1.87	0.104	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.87	0.178	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.87	0.272	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.87	0.234	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.87	0.179	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.87	0.208	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.87	0.212	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.87	0.349	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.87	0.086	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.87	0.085	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.87	0.067	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-06 Date Collected: 09/21/18 14:10

Client ID: MW-5 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	97		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	101		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	112		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	113		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	40		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	82		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	38		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	61		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	82		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	26		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	55		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	65		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	44		33-143

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-07
Client ID: MW-6
Sample Location: BROOKLYN

Date Collected: 09/21/18 16:05
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/04/18 12:36
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/28/18 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	150	75.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-07
Client ID: MW-6
Sample Location: BROOKLYN

Date Collected: 09/21/18 16:05
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 10/14/18 00:11
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	8.63		ng/l	1.81	0.119	1
Perfluoropentanoic Acid (PFPeA)	15.0		ng/l	1.81	0.078	1
Perfluorobutanesulfonic Acid (PFBS)	3.04		ng/l	1.81	0.100	1
Perfluorohexanoic Acid (PFHxA)	12.5		ng/l	1.81	0.114	1
Perfluoroheptanoic Acid (PFHpA)	12.0		ng/l	1.81	0.084	1
Perfluorohexanesulfonic Acid (PFHxS)	4.51		ng/l	1.81	0.098	1
Perfluorooctanoic Acid (PFOA)	57.5		ng/l	1.81	0.046	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	6.60		ng/l	1.81	0.176	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.81	0.140	1
Perfluorononanoic Acid (PFNA)	0.848	J	ng/l	1.81	0.091	1
Perfluorooctanesulfonic Acid (PFOS)	30.2		ng/l	1.81	0.101	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.81	0.172	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.81	0.263	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.81	0.227	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.81	0.173	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.81	0.201	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.81	0.205	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.81	0.338	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.81	0.083	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.81	0.082	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.81	0.065	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-07 Date Collected: 09/21/18 16:05

Client ID: MW-6 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	81		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	91		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	113		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	107		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	98		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	107		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	35		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	79		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	31		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	54		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	11		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	47		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	65		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		33-143

Project Name: 19 PATCHEN AVE.
Lab Number: L1837978
Project Number: 19 PATCHEN AVE
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-08
Client ID: MW-3
Sample Location: BROOKLYN

Date Collected: 09/21/18 16:15
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/04/18 14:11
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/28/18 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	139	69.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	17		15-110

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-08
Client ID: MW-3
Sample Location: BROOKLYN

Date Collected: 09/21/18 16:15
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 10/14/18 00:27
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	3.83		ng/l	1.86	0.122	1
Perfluoropentanoic Acid (PFPeA)	6.52		ng/l	1.86	0.080	1
Perfluorobutanesulfonic Acid (PFBS)	1.42	J	ng/l	1.86	0.102	1
Perfluorohexanoic Acid (PFHxA)	4.65		ng/l	1.86	0.117	1
Perfluoroheptanoic Acid (PFHpA)	2.22		ng/l	1.86	0.086	1
Perfluorohexanesulfonic Acid (PFHxS)	0.970	J	ng/l	1.86	0.100	1
Perfluorooctanoic Acid (PFOA)	7.62		ng/l	1.86	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.86	0.180	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.86	0.144	1
Perfluorononanoic Acid (PFNA)	2.22		ng/l	1.86	0.094	1
Perfluorooctanesulfonic Acid (PFOS)	17.1		ng/l	1.86	0.104	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.86	0.177	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.86	0.270	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.86	0.233	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.86	0.178	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.86	0.207	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.86	0.211	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.86	0.346	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.86	0.085	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.86	0.084	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.86	0.067	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-08 Date Collected: 09/21/18 16:15

Client ID: MW-3 Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	101		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	112		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	124		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	112		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	103		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	34		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	31		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	53		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	82		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	34		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	50		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	67		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	75		33-143

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-09
Client ID: FIELD BLANK
Sample Location: BROOKLYN

Date Collected: 09/21/18 16:20
Date Received: 09/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 10/14/18 00:44
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.93	0.127	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.93	0.083	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.93	0.106	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.93	0.122	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.93	0.089	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.93	0.104	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.93	0.049	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.93	0.187	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.93	0.150	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.93	0.097	1
Perfluorooctanesulfonic Acid (PFOS)	1.34	J	ng/l	1.93	0.108	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.93	0.184	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.93	0.281	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.93	0.242	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.93	0.184	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.93	0.215	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.93	0.219	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.93	0.360	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.93	0.088	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.93	0.087	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.93	0.070	1

Project Name: 19 PATCHEN AVE. **Lab Number:** L1837978

Project Number: 19 PATCHEN AVE **Report Date:** 10/15/18

SAMPLE RESULTS

Lab ID: L1837978-09 Date Collected: 09/21/18 16:20

Client ID: FIELD BLANK Date Received: 09/21/18

Sample Location: BROOKLYN Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	91		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	93		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	94		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	109		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	84		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	32		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	25		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	49		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	119		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	20		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	70		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	78		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	60		33-143

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 10/13/18 17:34
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-09 Batch: WG1161650-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.131
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.086
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.110
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.126
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.092
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.108
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.050
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	0.194
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.155
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.101
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.112
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.190
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.291
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.250
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.191
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.222
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.227
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.373
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.092
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.090
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.072

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 10/13/18 17:34
Analyst: PB

Extraction Method: EPA 537
Extraction Date: 09/27/18 18:30

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-09 Batch: WG1161650-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	106		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	111		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	127		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	126		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	118		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	117		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	112		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	39		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	116		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	39		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	57		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	80		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	83		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	97		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	106		33-143

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/03/18 11:24
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/28/18 08:30

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-08 Batch: WG1161870-1					
1,4-Dioxane	ND		ng/l	150	75.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1837978

Report Date: 10/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-09 Batch: WG1161650-2 WG1161650-3								
Perfluorobutanoic Acid (PFBA)	102		99		67-148	3		30
Perfluoropentanoic Acid (PFPeA)	104		103		63-161	1		30
Perfluorobutanesulfonic Acid (PFBS)	99		106		65-157	7		30
Perfluorohexanoic Acid (PFHxA)	114		107		69-168	6		30
Perfluoroheptanoic Acid (PFHpA)	94		87		58-159	8		30
Perfluorohexanesulfonic Acid (PFHxS)	92		96		69-177	4		30
Perfluorooctanoic Acid (PFOA)	94		104		63-159	10		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	157		154		49-187	2		30
Perfluoroheptanesulfonic Acid (PFHpS)	100		106		61-179	6		30
Perfluorononanoic Acid (PFNA)	92		106		68-171	14		30
Perfluorooctanesulfonic Acid (PFOS)	80		91		52-151	13		30
Perfluorodecanoic Acid (PFDA)	121		116		63-171	4		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	112		100		56-173	11		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	89		98		60-166	10		30
Perfluoroundecanoic Acid (PFUnA)	89		86		60-153	3		30
Perfluorodecanesulfonic Acid (PFDS)	137		128		38-156	7		30
Perfluorooctanesulfonamide (FOSA)	87		86		46-170	1		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	151		103		45-170	**38**	Q	30
Perfluorododecanoic Acid (PFDoA)	113		105		67-153	7		30
Perfluorotridecanoic Acid (PFTrDA)	104		99		48-158	5		30
Perfluorotetradecanoic Acid (PFTA)	111		113		59-182	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1837978

Report Date: 10/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-09 Batch: WG1161650-2 WG1161650-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	94		93		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	99		98		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	102		107		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	107		111		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	110		106		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		101		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97		95		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	32		41		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		88		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85		94		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		92		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	36		40		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	63		75		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	95		91		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	75		80		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	56		58		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	73		76		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	105		99		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1837978

Report Date: 10/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-08		Batch: WG1161870-2 WG1161870-3					
1,4-Dioxane	106		105		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	23		24		15-110

Matrix Spike Analysis
Batch Quality Control

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1161650-4 WG1161650-5 QC Sample: L1837978-06 Client ID: MW-5												
Perfluorobutanoic Acid (PFBA)	6.02	39.1	47.2	105		47.2	105		67-148	0		30
Perfluoropentanoic Acid (PFPeA)	6.23	39.1	49.6	111		50.0	112		63-161	1		30
Perfluorobutanesulfonic Acid (PFBS)	3.50	39.1	44.3	104		45.4	107		65-157	2		30
Perfluorohexanoic Acid (PFHxA)	5.77	39.1	48.6	110		54.5	124		69-168	11		30
Perfluoroheptanoic Acid (PFHpA)	6.53	39.1	38.6	82		44.5	97		58-159	14		30
Perfluorohexanesulfonic Acid (PFHxS)	3.12	39.1	52.4	126		45.3	108		69-177	15		30
Perfluorooctanoic Acid (PFOA)	61.0	39.1	98.8	97		97.6	93		63-159	1		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	5.15	39.1	49.8	114		60.5	141		49-187	19		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	39.1	39.5	101		42.6	109		61-179	8		30
Perfluorononanoic Acid (PFNA)	ND	39.1	40.2	103		43.7	111		68-171	8		30
Perfluorooctanesulfonic Acid (PFOS)	11.0	39.1	45.3	88		47.0	92		52-151	4		30
Perfluorodecanoic Acid (PFDA)	ND	39.1	47.8	122		48.2	123		63-171	1		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	39.1	73.7	**189**	Q	39.8	101		56-173	**60**	Q	30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	39.1	40.1	103		53.5	136		60-166	29		30
Perfluoroundecanoic Acid (PFUnA)	ND	39.1	40.5	104		42.6	109		60-153	5		30
Perfluorodecanesulfonic Acid (PFDS)	ND	39.1	42.3	108		47.0	120		38-156	11		30
Perfluorooctanesulfonamide (FOSA)	ND	39.1	39.9	102		39.7	101		46-170	1		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	39.1	41.4	106		63.1	161		45-170	**42**	Q	30
Perfluorododecanoic Acid (PFDoA)	ND	39.1	42.2	108		39.9	102		67-153	6		30
Perfluorotridecanoic Acid (PFTrDA)	ND	39.1	29.9	76		24.6	63		48-158	19		30
Perfluorotetradecanoic Acid (PFTA)	ND	39.1	40.8	104		48.5	124		59-182	17		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 19 PATCHEN AVE.

Project Number: 19 PATCHEN AVE

Lab Number: L1837978

Report Date: 10/15/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1161650-4 WG1161650-5 QC Sample: L1837978-06 Client ID: MW-5												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	29		46		7-170
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	62		54		1-244
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	46		43		23-146
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	56		34		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	78		73		40-144
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		86		38-144
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	107		98		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		104		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	93		86		47-153
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	52		52		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	36		**24**	Q	33-143
Perfluoro[13C4]Butanoic Acid (MPFBA)	88		84		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	96		89		16-173
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	39		21		1-87
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		83		42-146
Perfluoro[13C8]Octanoic Acid (M8PFOA)	87		83		36-149
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87		77		34-146
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	110		90		31-159

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1837978-01A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-01B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-01C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-01D	Amber 500ml unpreserved	A	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-01E	Amber 500ml unpreserved	A	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-01F	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-01G	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-01H	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-02A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-02B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-02C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-02D	Amber 500ml unpreserved	A	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-02E	Amber 500ml unpreserved	A	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-02F	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-02G	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-02H	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-03A	Vial HCl preserved	C	NA		2.7	Y	Absent		NYTCL-8260(14)
L1837978-03B	Vial HCl preserved	C	NA		2.7	Y	Absent		NYTCL-8260(14)
L1837978-03C	Vial HCl preserved	C	NA		2.7	Y	Absent		NYTCL-8260(14)
L1837978-03D	Amber 500ml unpreserved	C	7	7	2.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-03E	Amber 500ml unpreserved	C	7	7	2.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)

*Values in parentheses indicate holding time in days

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1837978-03F	3 Plastic Trizma/1 Plastic/1 H20+Trizma	C	NA		2.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-03G	3 Plastic Trizma/1 Plastic/1 H20+Trizma	C	NA		2.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-03H	3 Plastic Trizma/1 Plastic/1 H20+Trizma	C	NA		2.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-04A	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-04B	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-04C	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-04D	Amber 500ml unpreserved	B	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-04E	Amber 500ml unpreserved	B	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-04F	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-04G	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-04H	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-05A	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-05B	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-05C	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-05D	Amber 500ml unpreserved	B	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-05E	Amber 500ml unpreserved	B	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-05F	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-05G	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-05H	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-06A	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-06A1	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-06A2	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-06B	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-06B1	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-06B2	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-06C	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-06C1	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)
L1837978-06C2	Vial HCl preserved	B	NA		3.0	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1837978-06D	Amber 500ml unpreserved	B	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-06D1	Amber 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-06D2	Amber 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-06E	Amber 500ml unpreserved	B	7	7	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-06E1	Amber 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-06E2	Amber 500ml unpreserved	B	NA		3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-06F	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-06F1	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-06F2	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-06G	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-06G1	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-06G2	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-06H	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-06H1	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-06H2	3 Plastic Trizma/1 Plastic/1 H20+Trizma	B	NA		3.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-07A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-07B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-07C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-07D	Amber 500ml unpreserved	A	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-07E	Amber 500ml unpreserved	A	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-07F	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-07G	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-07H	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-08A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-08B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-08C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1837978-08D	Amber 500ml unpreserved	A	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1837978-08E	Amber 500ml unpreserved	A	7	7	2.6	Y	Absent		A2-1,4-DIOXANE-SIM(7)

*Values in parentheses indicate holding time in days

Project Name: 19 PATCHEN AVE.
Project Number: 19 PATCHEN AVE

Lab Number: L1837978
Report Date: 10/15/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1837978-08F	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-08G	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-08H	3 Plastic Trizma/1 Plastic/1 H20+Trizma	A	NA		2.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-09F	3 Plastic Trizma/1 Plastic/1 H20+Trizma	C	NA		2.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-09G	3 Plastic Trizma/1 Plastic/1 H20+Trizma	C	NA		2.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-09H	3 Plastic Trizma/1 Plastic/1 H20+Trizma	C	NA		2.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1837978-10A	Vial HCl preserved	C	NA		2.7	Y	Absent		NYTCL-8260(14)
L1837978-10B	Vial HCl preserved	C	NA		2.7	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	19 PATCHEN AVE.	**Lab Number:**	L1837978
Project Number:	19 PATCHEN AVE	**Report Date:**	10/15/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample¿s toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers

Project Name:	19 PATCHEN AVE.	**Lab Number:**	L1837978
Project Number:	19 PATCHEN AVE	**Report Date:**	10/15/18

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	19 PATCHEN AVE.	**Lab Number:**	L1837978
Project Number:	19 PATCHEN AVE	**Report Date:**	10/15/18

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

122 Determination of Selected Perfluorintated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

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
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab: 9/22/18

ALPHA Job #: L1837978

Client Information
Client: Tenen Envi
Address:
Phone:
Fax:
Email: mcarroll@tenen-env.com

Project Information
Project Name: 19 Patchen Ave
Project Location: Brooklyn
Project #
(Use Project name as Project #) X
Project Manager: Matt Carroll
ALPHAQuote #:

Turn-Around Time
Standard X
Rush (only if pre approved) ☐
Due Date:
# of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
X Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC	1,4 Dioxane	PFAS	Sample Specific Comments	Total Bottle
37978-01	MW-1D	9/21/18	1035	GW	CZ	X	X	X		20
02	MW-1		1235			X	X	X		20
03	MW-2		0955			X	X	X		20
04	MW-4		1200			X	X	X		20
05	MW-4 DUP		1210			X	X	X		20
06	MW-5		1410			X	X	X		20
06	MW-5-MS		1420			X	X	X		20
06	MW-5-MSD		1430			X	X	X		20
07	MW-6		1605			X	X	X		20
08	MW-3		1615			X	X	X		20

Container Type	V	A	P						
Preservative	B	A	O						

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/21/18 1625	George Wagner	9/21/18 1625
George Wagner	9/21/18 1920	Paul Mazzella	9/21/18 1930
Paul Mazzella	9/22/18 1230		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ALPHA ANALYTICAL

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd in Lab: 9/22/18

ALPHA Job #: L1837978

Project Information
Project Name: 19 Patch Ave
Project Location:
Project #
(Use Project name as Project #) ☒
Project Manager:
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: Tenen Env!
Address:
Phone:
Fax:
Email: mccurdy@tenen-env.com

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: PFAA	VOC							Sample Specific Comments	Total Bottles
37978-09	Field Blank	9/21/18	1620		CZ	X									3
10	Trip Blank	9/21/18					X								3
	Container Type					P	V								
	Preservative					O	B								

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	9/21/18 1625	George Wagner	9/21/18 1625
George Wagner	9/21/18 1920	Paul Mazzella	9/21/18 1930
Paul Mazzella	9/22/18 12:30		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)