
REMEDIAL INVESTIGATION REPORT

for

538-542 WEST 29TH STREET

NEW YORK, NEW YORK

NYSDEC BCP NO.: PENDING

NYC TAX BLOCK 700, LOTS 55, 56 AND 57

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CERTIFICATION

I, Jason J. Hayes, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.


Jason J. Hayes, P.E.



6/18/2019

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LIST OF ACRONYMS

Acronym	Definition
6 NYCRR	Title 6 New York City Rules and Regulations
AAI	All Appropriate Inquiries
AARCO	AARCO Environmental Services Corp.
Alpha	Alpha Analytical Laboratories
AOC	Area of Concern
AGV	Air Guideline Value
ASP	Analytical Services Protocols
ASTM	American Society of Testing and Materials
AS/SVE	Air Sparge/Soil Vapor Extraction
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BER	Business Environmental Risk
bgs	Below grade surface
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CAMP	Community Air Monitoring Program
CEQR	City Environmental Quality Review
CHASP	Construction Health and Safety Plan
CSM	Conceptual Site Model
COC	Contaminant of Concern
CU	Commercial Use
CVOC	Chlorinated Volatile Organic Compound
DER	Division of Environmental Remediation
DO	Dissolved Oxygen
DUSR	Data Usability Summary Report
ELAP	Environmental Laboratory Approval Program
ESA	Environmental Site Assessment
ESI	Environmental Site Investigation
eV	Electron Volt
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FWRIA	Fish and Wildlife Resources Impact Analysis
GPR	Ground Penetrating Radar
GQS	Groundwater Quality Standards
HASP	Health and Safety Plan
Hydro Tech	Hydro Tech Environmental Engineering and Geology, DPC
IDW	Investigation Derived Waste
L/min	Liters per Minute
Langan	Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.

Acronym	Definition
LNAPL	Light Non-Aqueous Phase Liquid
mg/kg	Milligrams per kilogram
µg/m ³	Micrograms per cubic meter
µg/L	Microgram per liter
MTBE	Methyl tert butyl ether
NAVD88	North American Vertical Datum of 1988
NOVA	NOVA Geophysical & Environmental, Inc.
NTU	Nephelometric Turbidity Units
NYCDOB	New York City Department of Buildings
NYCDEP	New York City Department of Environmental Protection
NYCOER	New York City Office of Environmental Remediation
NYSDOH	New York State Department of Health
NYSDEC	New York State Department of Environmental Conservation
ORP	Oxidation-Reduction Potential
P.W. Grosser	P.W. Grosser Consulting, Inc.
PCB	Polychlorinated Biphenyls
PAH	Polycyclic Aromatic Hydrocarbons
PCE	Tetrachloroethene
PID	Photoionization Detector
PPE	Personal Protective Equipment
Ppm	Parts per million
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
RAWP	Remedial Action Work Plan
REC	Recognized Environmental Condition
RL	Reporting Limit
RI	Remedial Investigation
RIR	Remediation Investigation Report
RURR	Restricted Use Restricted-Residential Use
SCO	Soil Cleanup Objective
SGVs	Standards and Guidance Values
SMMP	Soil/Materials Management Plan
SVOC	Semivolatile Organic Compound
TAL	Target Analyte List
TCE	Trichloroethene
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
UN/DOT	United Nations/Department of Transportation
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank

Acronym	Definition
UU	Unrestricted Use
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound

1.0 INTRODUCTION

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) prepared this Remedial Investigation Report (RIR) on behalf of W29 Owner LLC (the Volunteer) for the property located at 538-542 West 29th Street in the Chelsea neighborhood of New York, New York (the “site”). The Volunteer applied to the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) to remediate the site in conjunction with site redevelopment, pursuant to a forthcoming Brownfield Cleanup Agreement (BCA) (BCP Site No. Pending). The site is also listed with an environmental E-Designation (E-142) for hazardous materials, noise (window wall attenuation and alternative means of ventilation), and air quality resulting from a City Environmental Quality Review (CEQR) during the June 23, 2005 High Line/ West Chelsea rezoning (CEQR #03DCP069M). Satisfaction of the E-Designation requirements is subject to review and approval by the New York City Mayor’s Office of Environmental Remediation (OER).

This RIR presents environmental data and findings from the May 2014 Phase II Environmental Site Assessment (ESA) implemented by P.W. Grosser Consulting, Inc. (P.W. Grosser), the June 2016 Remedial Investigation implemented by Hydro Tech Environmental Engineering and Geology, DPC (Hydro Tech), and the May to June 2018 RI implemented by Langan. The objective of the investigations was to supplement existing environmental data and determine, to the extent possible, the nature and extent of contamination in soil, soil vapor, and groundwater. Information presented in this RIR will be used to evaluate appropriate remedial action alternatives.

The RIR is organized as follows:

- Section 2.0 describes the setting and physical characteristics of the site.
- Section 3.0 describes the site background including result of previous investigations and identified areas of concern (AOCs).
- Section 4.0 presents the investigation field procedures.
- Section 5.0 describes in the field observations and analytical results.
- Section 6.0 presents an assessment of the site contaminant exposure risks to human, fish, and wildlife receptors.
- Section 7.0 presents the nature and extent of contamination in site media as determined through the field investigation and analysis of environmental samples.
- Section 8.0 summarizes the results of the investigation and presents conclusions based on field observations and analytical results.
- Section 9.0 presents the references used in preparation of this report.

2.0 SITE PHYSICAL CHARACTERISTICS

2.1 Site Description

The approximately 9,900-square-foot site is located at 538-542 West 29th Street in the Chelsea neighborhood of New York, New York and is identified as Manhattan Borough Tax Map Block 700, Lots 55, 56, and 57. The site is improved with one three-story commercial building (Lot 55), one three-story mixed-use commercial and residential building (Lot 56), and one two-story warehouse (Lot 57). All of the buildings are currently vacant. The site is bounded by West 29th Street to the north, mixed-use residential and commercial buildings followed by the elevated High Line and Tenth Avenue to the east, a multi-story residential apartment building followed by West 28th Street to the south, and a multi-story mixed-use residential and commercial building followed by Eleventh Avenue to the west. The No. 7 subway southern extension runs north-south below Eleventh Avenue, which is about 200 feet to the west of the site. A Site Location Map and Site Plan are provided as Figure 1 and Figure 2, respectively.

2.1.1 Description of Surrounding Properties

The site is located in an urban area primarily characterized by residential, commercial, and light industrial properties. Surrounding property usage is summarized in the following table:

Direction	Block	Lot	Adjoining Properties	Surrounding Properties
North	701	1	West 29 th Ministorage (302 Eleventh Avenue)	Multiple-story residential building
		7501	529 West 29 th Street Apartments (529 West 29 th Street)	
East	700	54	Residential Development (536 West 29 th Street)	Multiple-story mixed-use residential and commercial buildings, followed by the elevated High Line
South	700	9	Avalon Residential Apartments (539 West 29 th Street)	Multiple-story mixed-use residential and commercial buildings
West	700	59	Residential Development (546 West 29 th Street)	Two-story commercial and industrial building

Land use within a half mile of the site is primarily urbanized and includes mixed-use buildings, subway tunnels, park land, day care centers and school facilities. The nearest ecological receptor is the Hudson River, which is located about 1,300 feet west of the site. Sensitive receptors located within a half-mile of the site are listed in the following table:

Number	Name (Approximate distance from Site)	Address
1	Bright Horizons Day Care at Hudson Yards (approximately 100 feet northeast)	529 West 29 th Street New York, NY 10001
2	Avenues: The World School (approximately 0.2 miles southeast)	259 Tenth Avenue New York, NY 10001
3	The High Line Park (approximately 0.2 miles east)	Tenth Avenue New York, NY 10001
4	New York Alternative High School (approximately 0.5 miles northeast)	269 West 35 th Street New York, NY 10001
5	New York Public School 11 (approximately 0.5 miles southeast)	320 West 21 st Street New York, NY 10011
6	Bella Abzug Park (approximately 0.2 miles northeast)	Hudson Boulevard East & W 34 th Street New York, NY 10001
7	Chelsea Park (approximately 0.1 miles southeast)	West 29 th Street & 9 th Avenue New York, NY 10001
8	Chelsea Waterside Park (approximately 0.3 miles southwest)	557 W 23 rd Street New York, NY 10001
9	Hillsong Church (approximately 0.5 miles northeast)	311 W 34 th Street New York, NY 10001
10	Keswell School (approximately 0.4 miles southeast)	331 W 25 th Street New York, NY 10001
11	Saint Columba Church (approximately 0.4 miles southeast)	343 W 25 th Street New York, NY 10001
12	Manor Community Church (approximately 0.4 miles southeast)	350 W 26 th Street New York, NY 10001
13	Saint Michael's Catholic Church (approximately 0.3 miles northeast)	424 W 34 th Street New York, NY 10001
14	City Knoll Middle School (approximately 0.3 miles northeast)	425 West 33 rd Street New York, NY 10001

A map showing the surrounding land uses with descriptions of the adjoining properties is included as Figure 3.

2.1.2 Topography

According to a survey performed by Geoland Land Surveying P.C., dated April 3, 2018, the site elevation ranges from about 11.87 to 12.1 feet as referenced to the North American Vertical

Datum of 1988 (NAVD88) and gradually slopes downward from east to west. The topography in the area surrounding the site gently slopes to the west toward the Hudson River. According to the Federal Emergency Management Agency (FEMA) Preliminary Flood Insurance Rate Map (FIRM) dated December 5, 2013 (Map Number 3604970069G), the site is located in Zone X, which is designated as an area of minimal floor hazard with a 0.2 percent annual chance flood.

2.1.3 Surface Water and Drainage

The site footprint is covered by impervious concrete building slabs. The majority of runoff from the site is expected to drain to the city sewers via catch basins located along the street curbs to the north of the site along West 29th Street.

2.1.4 Wetlands

Potential wetlands on or near the site were evaluated by reviewing the National Wetlands Inventory and NYSDEC regulated wetlands. There are no mapped wetlands located on or near the site.

2.2 Geology and Hydrogeology

2.2.1 Regional and Site Geology

Available United State Geologic Survey (USGS) geologic maps and historic topographic maps were reviewed to obtain general geologic and geotechnical information about the site. New York City geology is generally characterized by layers of fill and native soil above metamorphic bedrock. The native soil was generally deposited during the last glacial advance and retreat in the New York City area. The three predominant metamorphic rock formations found in New York City are the Manhattan Schist, the Inwood Marble and the Fordham Gneiss. The site is underlain by the Hartland formation bedrock consisting of granite, schist and amphibolite. Bedrock is generally about 20 to 30 feet below grade in this area of Manhattan.

Based on previous subsurface investigations performed at the site, the subsurface strata consists of historic fill predominately consisting of sand with varying amounts of gravel, silt, wood, brick, asphalt, concrete, ash, slag, and coal. The fill layer extends to depths ranging from about 3 to 12 feet below grade surface (bgs). The fill layer is underlain by native soil characterized by brown, fine to medium sand with varying amounts of silt and fine gravel.

2.2.2 Regional and Site Hydrogeology

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

influencing groundwater include depth to bedrock, the presence of artificial fill, and variability in local geology and groundwater sources or sinks.

Groundwater in this part of New York City is not used as a potable water source. Potable water provided to the City of New York is derived from surface impoundments in the Croton, Catskill, and Delaware watersheds. Based on previous investigations performed at the site, groundwater depth is expected at about 9.2 to 11.5 feet below sidewalk grade and appears to flow west toward the Hudson River.

3.0 SITE BACKGROUND

3.1 Historical and Current Site and Surrounding Properties Use

The site was developed prior to 1890 with two unspecified use buildings which were demolished between 1899 and 1922. Lot 57 was formerly used as a lumber storage yard (1909-1944) and various auto repair facilities over a span of about 50 years (1945-1994). In 1995, the Lot 57 was purchased by Gotham Seafood Corporation, a seafood wholesaler. Sanborn maps indicate that Lots 55 and 56 were improved with mixed use-residential and commercial developments from about 1890 to 2005. Certificates of Occupancy (CO) provided by the New York City Department of Buildings (NYCDOB) identified an auto repair shop within Lot 56 in 1924 and 2012. In addition, available CO's for Lot 55 dated 1970 and 1987 identified manufacturing and a heating plant with potential fuel storage. Currently, all of the lots are vacant.

Adjoining properties were historically used for residential, commercial, industrial and manufacturing operations. Historical uses of the site and surrounding properties are shown in Figure 4.

3.2 Proposed Redevelopment Plan

The proposed site development is in the conceptual phase and is anticipated to include demolition of the on-site buildings and construction of a new commercial building with two cellar levels. The building would require site-wide excavation to about 30 feet bgs for the building cellar and foundation, which will necessitate dewatering to lower the groundwater table (encountered at about 9.2 to 11.5 feet bgs). To address site contaminants, the plan is to remediate the site, concurrently with redevelopment, through the New York State BCP. The cleanup would be completed in accordance with a NYSDEC-approved Remedial Action Work Plan (RAWP) and site-specific Construction Health and Safety Plan (CHASP) and the goal will be a Track 1 unrestricted use cleanup.

3.3 Previous Environmental Reports

Environmental reports prepared for the site include the following:

- April 2, 2014 Phase I ESA, prepared by AEI Consultants
- May 2014 Phase II ESA, prepared by P.W. Grosser
- June 2016 Remedial Investigation Report, prepared by Hydro Tech
- April 2018 Phase I ESA, prepared by ESPL Environmental Consultants Corporation
- March 11, 2019 Phase I Environmental Site ESA, prepared by Langan
- March 11, 2019, Phase II Environmental Site Investigation (ESI) Report, prepared by Langan

Reports are summarized below and available reports are included in Appendix A.

April 2, 2014 Phase I ESA, prepared by AEI Consultants

The Phase I ESA was completed for 542 West 29th Street (Lot 57) in general accordance with American Society of Testing and Materials (ASTM) International Standard E1527-13 and the United States Environmental Protection (USEPA) All Appropriate Inquiries (AAI) Rule. The following recognized environmental conditions (RECs) were identified:

- Historic Site Use: The site historically operated as an auto repair facility for about 50 years (1945-1994) and was historically surrounded by auto repair facilities, commercial parking lots/garages and a former metal fabrication facility. Inadvertent releases of petroleum products, solvents, and/or other hazardous materials may have occurred associated with the historical use of the site, or may have migrated to the site from surrounding properties, and adversely impacted soil, groundwater and soil vapor.
- Documented Soil and Groundwater Impacts at the South-Adjoining Property: The Avalon West Chelsea residential development adjoins the site to the south, and subsurface contamination was reported in 2007. Elevated levels of petroleum-related compounds and chlorinated solvents were identified in soil and groundwater. The chlorinated solvents were identified on the eastern side of the Avalon West Chelsea property and determined to originate from up-gradient automotive repair operations or from an up-gradient former metal fabrication operation southeast of the site along West 28th Street. The sources of the petroleum contamination were not directly identified due to the presence of several active and historic auto repair facilities within and in the vicinity of the Avalon property.

During the Avalon West Chelsea residential redevelopment, a test pit was excavated directly south of 542 West 29th Street (Lot 57). Strong petroleum-like odors were documented as far as 100 feet from the test pit. Subsurface sampling was conducted in January 2012 within the footprint of the Avalon West Chelsea residential development and included collection of soil samples, installation of temporary monitoring wells, and collection of groundwater samples. Petroleum contaminants were identified above NYSDEC standards in both soil and groundwater. The chlorinated solvent, cis-1,2-dichloroethene was identified in one groundwater sample above NYSDEC standards. Remediation via in situ chemical oxidation was conducted at the Avalon West Chelsea development in May 2013. Following treatment, soil samples were collected and all samples met soil cleanup objectives; however, groundwater impacts above the targeted guidelines were still identified.

- Closed Petroleum Spill at Vicinity Property: 524 West 29th Street, located about 260 feet southeast and up-gradient to the site, was listed as "Closed-Lack of Recent Info" in the New York Leaking Tanks and New York Spills databases. According to the regulatory database, a release was reported at this site on October 20, 2003 due to petroleum-contaminated soil and groundwater encountered when one 4,000-gallon and one 550-gallon gasoline underground storage tanks (UST) were removed from the property. Elevated levels of benzene, xylene, methyl tertiary-butyl ether (MTBE), and toluene were found in soil and groundwater samples collected from the UST footprints. Air Sparge/Soil

Vapor Extraction (AS/SVE) remediation techniques were performed at the property from November to December 2011. Air samples were collected after four weeks and all targeted volatile organic compounds (VOC) were non-detect. Groundwater contaminant concentrations declined and the AS/SVE system reached asymptotic recovery rates. Additional remediation was not warranted or feasible. The spill case was closed on March 12, 2012. Based on the facility's close proximity to the site, residual contamination from the USTs may have impacted groundwater and soil vapor within Lot 57.

May 2014, Phase II ESA, prepared by P.W. Grosser

P.W. Grosser completed a Phase II ESA at 542 West 29th Street (Lot 57) in June 2014 to determine if subsurface soil, soil vapor and groundwater conditions at the property were impacted as a result of the findings from the April 2, 2008 Phase I ESA performed by AEI Consultants. The investigation included the advancement of five soil borings, collection of three groundwater samples from soil borings, installation and collection of three sub-slab soil vapor samples, and collection of three indoor and one outdoor air samples. Field observations and laboratory analytical results are summarized below:

- Soil: Five soil borings were advanced up to 8 feet bgs using a track-mounted GeoProbe[®] rig throughout the site. No evidence of petroleum impacts (e.g., staining, odors or photoionization detector [PID] readings above background) were observed during the soil boring investigation. Soil samples were analyzed for VOCs and compared to the NYSDEC Unrestricted Use (UU) Soil Cleanup Objectives (SCOs). No VOCs were detected in soil samples collected with the exception of acetone. Acetone is a common laboratory reagent, and its presence in soil samples at the site is likely the result of laboratory contamination.
- Groundwater: Groundwater samples were analyzed for VOCs and analytical results were compared to the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (SGVs) for drinking water (Class GA). Two VOCs, benzene and MTBE (maximum concentrations of 1.4 micrograms per liter [µg/L] and 11 µg/L, respectively), were detected in groundwater from soil boring location SB-1 (Lot 57) at concentrations above the NYSDEC criteria. These contaminants are common gasoline constituents. Based on the lack of an on-site source, PW Grosser asserted that it appears the VOC contamination in groundwater is related to an off-site source.
- Soil Vapor: Sub-slab soil vapor and air samples were analyzed for VOCs and analytical results were compared to the Air Guideline Values (AGV) and Soil Vapor/Indoor Air Matrices specified in the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 and revised May 2017. Trichloroethene (TCE) was detected above AGVs at a concentration of 2.78 micrograms per cubic meter (µg/m³) in sub-slab sample SS-3.

NYSDOH provides decision matrices for eight chlorinated VOCs (carbon tetrachloride, 1,1-dichloroethene, cis-1,2-dichloroethene, TCE, methylene chloride, tetrachloroethene [PCE], 1,1,1-trichloroethane, and vinyl chloride). The decision matrices recommend a range of activities (e.g., monitor, mitigate) based on the sub-slab and indoor air sample results. Three of the eight VOCs that can be evaluated using the NYSDOH decision matrices were detected in sub-slab soil vapor samples (PCE, TCE, and 1,1,1-trichloroethane). Based on the concentrations reported, PW Grosser concluded that no further action is recommended pursuant to the NYSDOH decision matrices.

June 2016, Remedial Investigation Report, prepared by Hydro Tech

Hydro Tech performed a Remedial Investigation (RI) at 542 West 29th Street (Lot 57) to determine the nature and extent of contamination and to establish remedial action objectives. The investigation consisted of a site inspection, advancement of five soil borings, installation of three groundwater monitoring wells, installation of two soil vapor points and collection of ten soil, three groundwater, and two soil vapor samples and one indoor ambient air sample. Field observations and laboratory analytical results are summarized below:

- Stratigraphy: Historic fill was observed up to 12 feet bgs.
- Soil: Five soil borings were advanced up to 12 bgs using a track-mounted GeoProbe[®] rig. No evidence of petroleum impacts (e.g., staining, odors or PID readings above background) were observed during the soil boring investigation. Soil samples were analyzed for VOCs, semivolatile organic compounds (SVOC), polychlorinated biphenyl (PCB), pesticides, and metals and compared to the NYSDEC UU and Restricted Use Restricted-Residential Use (RURR) SCOs. PCBs and pesticides were not detected at concentrations exceeding SCOs. One VOC (acetone) and seven SVOCs (benzo[a]anthracene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[b]fluoranthene, chrysene, dibenzo[a,h]anthracene, and indeno[1,2,3-cd]pyrene) were detected above UU and RURR SCOs, respectively. Metals (arsenic, barium, cadmium, copper, lead, mercury, nickel, hexavalent chromium, zinc, selenium and nickel) were detected at concentrations above UU SCOs and lead, mercury, barium, copper, and cadmium were detected at concentration above RURR SCOs in both shallow and deep soil samples.
- Groundwater: Groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, and metals (total and dissolved) and analytical results were compared to the NYSDEC Title 6 New York City Rules and Regulation (6 NYCRR) Part 703.5 class GA Groundwater Quality Standards (GQS). Six SVOCs (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, and indeno[1,2,3-cd]pyrene) and six dissolved metals (arsenic, magnesium, manganese, selenium, sodium, and thallium) were detected at concentrations greater than their respective GQSs. VOCs, PCBs and pesticides were not detected above GQSs.
- Soil Vapor: Soil vapor and air samples were analyzed for VOCs and analytical results were compared to the NYSDOH AGV and Soil Vapor/Indoor Air Matrices specified in the

NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 and revised May 2017. The maximum total petroleum VOCs detected in soil vapor samples were lower than the total petroleum concentration for indoor air. TCE was detected above AGVs at a concentration of 6.9 µg/m³ in soil vapor sample SV-1. Methylene chloride was detected above AGVs at a concentration of 110 µg/m³ in soil vapor sample SV-2. Six of the eight VOCs that can be evaluated using the NYSDOH decision matrices were detected in sub-slab soil vapor samples (PCE, TCE, carbon tetrachloride, cis-1,2-dichloroethene, methylene chloride, and 1,1,1-trichloroethane). Based on the concentrations reported, Hydro Tech concluded no further action is recommended pursuant to the NYSDOH decision matrices.

April 2018 Phase I ESA, prepared by ESPL Environmental Consultants Corporation

The Phase I ESA was completed for 538-540 West 29th Street (Lots 55 and 56) in general accordance with ASTM International Standard E1527-13 and the USEPA AAI Rule. The following REC was identified:

- **E-Designation:** The site was listed in the New York City Department of Buildings (NYCDOB) with an environmental E-Designation (E-142) for hazardous materials, noise attenuation, and air quality.

March 11, 2019 Phase I ESA, prepared by Langan

The Phase I ESA was completed for 538-542 West 29th Street (Lots 55, 56, and 57) in accordance with ASTM International Standard E1527-13 and the USEPA AAI Rule. The following RECs and Business Environmental Risks (BER) were identified:

- **REC 1 - Documented Contamination at the Site:** The site was previously developed for commercial, residential and minor manufacturing uses including: a lumber yard (1930); auto repair facility (1924-2012); private garage (1950-1987); a light manufacturer (1970); and auto repair shop (1927 to 2005). Based on the analytical data generated during environmental investigations at the site in 2014, 2016, and 2018, there is documented soil, groundwater and soil vapor contamination at the site. Petroleum-related VOCs and SVOCs were detected in soil and groundwater at concentrations exceeding applicable regulatory criteria. Sub-slab and soil vapor analytical results identified petroleum and chlorinated solvent-related compounds beneath the existing building slabs.

Open NYSDEC Spill Nos. 1805506 and 1805508 were reported on August 20, 2018 due to identification of petroleum impacts to soil, soil vapor and groundwater during a subsurface investigation performed at 538 and 540 West 29th Street. The petroleum impacts were observed in the southern portions of Tax Lots 55 and 56.

- **REC 2 - Historical Use of Adjoining and Surrounding Properties:** Historical uses of adjoining and surrounding properties include:
 - A gasoline filling station located at 563 West 29th Street (1930)

- Auto repair shops/garages (516-520 West 29th Street [1938, 2002 to 2005, 2010], 522-532 West 29th Street [1930, 1963-2001], 539 West 28th Street [1930], 546 West 29th Street [1930], 548 West 29th Street [1976 to 2006], 312 Eleventh Avenue [1930 to 2005])
- A planning mill (lumber) and box factory located at 547-557 West 28th Street (1890 to 1911)
- A light manufacturer (1956) and chemical dying factory (1968) located at 515 West 29th Street
- A chemical corporation located at 533 West 29th Street (1920)
- A motor freight station at 529-537 West 29th Street (1950 to 1991)

Multiple surrounding properties are subject to environmental regulatory oversight through the OER and NYSDEC based on historic site use or documented contamination. Adjacent and surrounding sites with environmental regulatory oversight include: Avalon West Chelsea (282 Eleventh Avenue), Midtown Center Auto (548 West 29th Street), 534 West 29th Street (VCP Site No. 14CVCP199M), 550 West 29th Street (Voluntary Cleanup Program [VCP] Site No. 15CVCP060M) and 522-532 West 29th Street (VCP Site No. 13CVCP151M). Publicly available documents associated with these sites reported petroleum and chlorinated solvent impacts in soil, groundwater and/or soil vapor that may have contributed to the documented contamination at the site.

- BER 1 – E-Designation: The site is listed with an environmental E-Designation (E-142) for hazardous materials, noise (window wall attenuation and alternative means of ventilation), and air quality resulting from the June 23, 2005 High Line/ West Chelsea rezoning (CEQR #03DCP069M). Satisfaction of the E-Designation requirements is subject to review and approval by the OER. If the site is remediated under the BCP, the OER will defer to the NYSDEC for compliance with the E-Designation for hazardous materials.
- BER 2 - Historic Fill: Based on previous subsurface investigations performed at the site in 2014, 2016, and 2018, historic fill was identified at the site. Historic fill is typical in this area of NYC. The fill layer, predominately consisting of sand with varying amounts of gravel, silt, wood, brick, asphalt, concrete, ash, slag, and coal, extends to depths ranging from about 3 to 12 feet below grade surface. The presence of this material does not trigger a regulatory reporting requirement, but will require implementation of management and off-site disposal that can carry a cost premium as compared to clean native soil during any future site redevelopment that includes excavation and off-site disposal.

March 11, 2019 Phase II ESI, prepared by Langan

The Phase II ESI was prepared for due diligence purposes and summarizes the May/June 2018 RI, in addition to previous site investigations performed in May 2014 and June 2016 at the site.

The results of the investigations are included in this RIR, and the Phase II ESI is included in Appendix A.

3.4 Summary of Areas of Concern

The following AOCs represent portions of the site that required further investigation and were developed based on site observations, the site development history, and the findings of the previous environmental reports. The AOCs investigated include the following:

1. AOC 1 – Historic Fill: AOC 1 represents a layer of historic fill of unknown origin identified between ground surface to about 12 feet bgs. According to subsurface investigations performed at the site in 2014, 2016, and 2018, historic fill predominately consisting of sand with varying amounts of gravel, silt, wood, brick, asphalt, concrete, ash, slag, and coal, extends to depths ranging from about 3 to 12 feet bgs. Contaminants associated with historic fill were identified in soil samples collected including concentrations of SVOCs and metals above UU and RURR SCOs.
2. AOC 2 – Historical Site Use: The site was previously developed for commercial, residential and minor manufacturing uses including: a lumber yard (1930); auto repair facility (1924-2012); private garage (1950-1987); heating plant with potential fuel storage (1970, 1987), a light manufacturer (1970); and auto repair shop (1927 to 2005). Leakage or spillage of petroleum products, solvents, or other hazardous substances or chemicals associated with these historical site uses may have adversely impacted soil, soil vapor, and/or groundwater beneath the site.
3. AOC 3 - Historical Use of Adjoining and Surrounding Properties: Historical uses of adjoining and surrounding properties include: A gasoline filling station located at 563 West 29th Street (1930); auto repair shops/garages (516-520 West 29th Street [1938, 2002 to 2005, 2010], 522-532 West 29th Street [1930, 1963-2001], 539 West 28th Street [1930], 546 West 29th Street [1930], 548 West 29th Street [1976 to 2006], 312 Eleventh Avenue [1930 to 2005]); a planning mill (lumber) and box factory located at 547-557 West 28th Street (1890 to 1911); a light manufacturer (1956) and chemical dying factory (1968) located at 515 West 29th Street; a chemical corporation located at 533 West 29th Street (1920); and a motor freight station at 529-537 West 29th Street (1950 to 1991). Undocumented spills or releases of petroleum products or hazardous substances associated with historical uses of nearby properties may have adversely affected groundwater or soil vapor beneath the site.

In addition, multiple surrounding properties are subject to environmental regulatory oversight through OER and NYSDEC based on historic site use or documented contamination. Adjacent and surrounding sites with environmental regulatory oversight include: Avalon West Chelsea (282 Eleventh Avenue), Midtown Center Auto (548 West 29th Street), 534 West 29th Street (VCP Site No. 14CVCP199M), 550 West 29th Street (VCP Site No. 15CVCP060M) and 522-532 West 29th Street (VCP Site No. 13CVCP151M).

Publicly available documents associated with these sites reported petroleum and chlorinated solvent impacts in soil, groundwater and/or soil vapor that may have contributed to the documented contamination at the site.

4.0 FIELD INVESTIGATION

The RI was performed at the site between May 2014 and June 2018. A description of the May 2014 and June 2016 field investigations performed at 542 West 29th Street (Lot 57) are summarized in Section 3.3 and previous reports are included in Appendix A. In May/June 2018, Langan performed a RI at 538 (Lot 55) and 540 (Lot 56) West 29th Street. The purpose of the May/June 2018 RI was to further delineate the nature and extent of impacts, in accordance with DER-10-3.1, to formulate a conceptual site model and an effective strategy for site remediation.

The scope of the May/June 2018 RI included the field tasks listed below to supplement the data and findings of previous investigations:

- Geophysical survey to identify subsurface anomalies consistent with utilities, subsurface structures, physical obstructions, and USTs, and to pre-clear soil boring locations;
- Advancement of six soil borings (SB01 through SB06), and collection of 21 soil samples, including two field duplicate quality assurance/quality control (QA/QC) samples;
- Installation of two temporary groundwater monitoring wells (TW03 and TW05) and collection of three groundwater samples, including one duplicate QA/QC sample; and
- Installation of 2 sub-slab and 2 soil vapor probes (4 total) and collection of 4 soil vapor samples, and one ambient air sample.

Langan conducted the May/June 2018 RI in accordance with 6 NYCRR Part 375, NYSDEC DER-10 (May 2010), NYSDEC Draft BCP Guide (May 2004), and the NYSDOH Guidance for Evaluation Soil Vapor Intrusion in the State of New York (May 2017). A sample summary is provided as Table 1. Sample locations are shown on Figure 5. A photograph log documenting the investigation is included as Appendix B. Each component of the May/June 2018 RI is further described in the following sections.

4.1 Utility Mark-out and Geophysical Investigation

Prior to beginning the field investigation, the New York One Call Center was contacted for Code 753 utility mark-outs. A geophysical investigation was implemented by NOVA Geophysical & Environmental, Inc. (NOVA) of Douglaston, New York. The survey used ground-penetrating radar (GPR) to identify potential USTs and locate buried utilities and substructures in the vicinity of each boring location. Borings were relocated as necessary to avoid subsurface utilities and other subsurface impediments. A copy of the geophysical survey report is included in Appendix C.

4.2 Soil Investigation

4.2.1 Soil Boring Investigation Methodology

Six soil borings (SB01 through SB06) were advanced by AARCO Environmental Services Corp. (AARCO) between May 31 and June 1, 2018. Boring locations were selected to provide sufficient site coverage and to evaluate the AOCs listed in Section 3.4. A direct-push Geoprobe® 420M

limited access rig and Geoprobe® 6610DT were used to advance borings to 10 to 16 feet bgs, as summarized below:

- Borings SB01, SB02, and SB03 were advanced to about 10 feet bgs in the cellar of 538 West 29th Street (Lot 55) to characterize soil which was not previously sampled; and
- Borings SB04, SB05, and SB06 were advanced to about 16 feet bgs on the ground floor of 540 West 29th Street (Lot 56) to characterize soil which was not previously sampled.

Soil samples were collected continuously from surface grade to the final depth of each boring into 2-foot-long or 4-foot-long Macro-Core® samplers equipped with dedicated acetate liners. Recovered soil was screened for visual, olfactory, and instrumental evidence of environmental impacts and was visually classified for soil type, grain size, color, texture, and moisture content. Instrument screening for the presence of VOCs was performed with a PID equipped with a 10.6 electron volt (eV) lamp. Following sample collection, two borings (SB03 and SB05) were converted to temporary groundwater monitoring wells. Boring logs documenting these observations are included in Appendix D. A map showing the boring locations is presented on Figure 5. Soil cuttings were backfilled into the original boring locations that were not converted into monitoring wells and/or containerized into UN/Department of Transportation (DOT)-approved 55-gallon steel drums.

4.2.2 Sampling Methodology

A total of 21 soil samples (including QA/QC samples) were collected for laboratory analysis. For each soil boring, a minimum of three samples were collected; one from the shallow fill (0 to 2 feet bgs), one from the historic fill interval, and one from the bottom of the originally proposed excavation depth (12 to 13 feet bgs) or from native material if observed below fill at 13 to 14 feet bgs. When applicable, soil sample collection was generally biased toward the intervals with the greatest evidence of environmental impacts (i.e., PID readings above background, staining, chemical/petroleum-like odors).

Grab samples submitted for VOC analysis were collected directly from the Geoprobe® acetate liner via laboratory-supplied Terra Core® soil sample kits. The sample containers were labeled, placed in a laboratory-supplied cooler, and packed with ice (to maintain a temperature of $4 \pm 2^{\circ}\text{C}$). The samples were relinquished, under standard chain-of-custody protocol, to a courier for delivery to Alpha Analytical Laboratories (Alpha), a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory in Westborough, Massachusetts.

Soil samples collected from soil borings SB01 through SB06 were analyzed for Target Compound List (TCL)/NYSDEC Part 375 List VOCs by USEPA Method 8260C, TCL/Part 375 SVOCs by USEPA Method 8270D, PCBs by USEPA Method 3546, Pesticides by USEPA Method 3546, herbicides by USEPA Method 8151A, and Target Analyte List (TAL)/Part 375 metals (cyanide, hexavalent chromium and trivalent chromium) by USEPA Method 6010C. The approximate soil boring locations are shown on Figure 5. A sample collection summary is provided as Table 1.

4.3 Groundwater Investigation

4.3.1 Monitoring Well Installation and Development

Langan field personnel documented the conversion of two soil borings (SB03 and SB05) into two temporary groundwater monitoring (TW03 and TW05) wells by AARCO. One groundwater sample was collected from each temporary monitoring well to characterize groundwater conditions and investigate potential groundwater impacts associated with identified AOCs. One duplicate groundwater sample was collected. Groundwater monitoring wells were installed to investigate potential impacts to groundwater associated with the identified AOCs and to characterize groundwater conditions.

Temporary monitoring wells TW03 and TW05 were constructed using 1-inch-diameter polyvinyl chloride (PVC) riser pipes attached to 10-foot-long 0.02-inch slotted screens. The temporary monitoring wells were constructed so that the well screen straddled the observed groundwater table. The well annulus around the screen of each well was backfilled with No. 2 sand up to about the top of the screen. An about 0.5- to 1-foot-thick hydrated bentonite seal was installed above the sand pack and the borehole annulus was backfilled with soil cuttings to the surface (TW05 only). Following installation, each temporary well was purged using a peristaltic pump until the water ran clear. Purged water was containerized in a labeled drum and stored on-site awaiting disposal at a facility permitted to accept the material. Following sampling activities, the temporary wells were removed, the boreholes were backfilled with No. 2 sand, sealed with bentonite, and the surrounding concrete cover was restored. Monitoring well construction details are presented in Table 2 and well construction logs are included in Appendix E.

4.3.2 Groundwater Sampling

Groundwater samples were collected immediately following development of temporary groundwater monitoring wells TW03 and TW05. Monitoring wells were sampled in accordance with the USEPA's low-flow groundwater sampling procedure to allow for collection of a representative sample ("Low Stress Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells," EQASOP-GW 001, January 19, 2010). Prior to sample collection, total volatile headspace measurements were collected. Groundwater was purged from each well until groundwater parameters (pH, conductivity, turbidity, dissolved oxygen [DO], temperature, Nephelometric turbidity units [NTU], and oxidation-reduction potential [ORP]) stabilized. At least three well casing volumes were purged from each well before samples were collected using a peristaltic pump and dedicated polyethylene tubing.

Three groundwater samples, including one duplicate sample, were collected into labeled, laboratory-supplied glassware and delivered via courier service to Alpha for analysis of TCL/Part 375 VOCs by USEPA Method 8260C, TCL/Part 375 SVOCs by USEPA method 8270D, PCBs by USEPA Method 3546, pesticides by USEPA Method 3546, herbicides by USEPA Method 8151A, and TAL/Part 375 metals (total and dissolved - including cyanide, trivalent and hexavalent

chromium) by USEPA method 6010C. The approximate groundwater monitoring well locations are shown on Figure 5 and groundwater sampling logs are included in Appendix E.

Groundwater testing was performed during the RI to support the identification and evaluation of remedial alternatives. The results of the additional analyses were used to inform the RAWP remedial alternatives analysis.

4.4 Soil Vapor Investigation

4.4.1 Soil Vapor Probe Installation

Langan documented installation of two soil vapor probes (SV01 and SV03) and two sub-slab soil vapor probes (SV02 and SV04) by AARCO. Sub-slab soil vapor probes SV02 and SV04 were installed immediately below the cellar slab of 538 West 29th Street (Lot 55) using a portable electric rig. Soil vapor probes SV01 and SV03 were installed from the first floor of 540 West 29th Street (Lot 56) using a direct-push Geoprobe® 6610DT track-mounted drill rig. Soil vapor probes comprised of a 1 7/8-inch polyethylene implant threaded into 3/16-inch-diameter polyethylene tubing and were installed in accordance with the last revised May 2017 NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The annulus of each probe was filled with No. 2 sand followed by hydrated bentonite seal to surface grade. Soil vapor construction logs are included in Appendix F.

4.4.2 Soil Vapor Sampling and Analysis

As a QA/QC measure, an inert tracer gas (helium) was introduced into an above-grade sampling chamber to verify that the soil vapor and sub-slab vapor probes were properly sealed above the target sampling depth, thereby preventing subsurface infiltration of ambient air. Helium concentrations of less than 10 percent in the sample train confirmed the integrity of the seal. The tracer gas test was performed on the same day as the sampling at each probe.

Each soil vapor probe was purged using a MultiRAE meter at a rate of 0.2 liters per minute (L/min) to evacuate a minimum of three sampling tube volumes prior to sample collection. The purged soil vapor was also monitored for VOCs and the value was recorded. After purging was complete, soil vapor samples were collected into laboratory-supplied, batch-certified, 2.7-Liter Summa canisters that were calibrated for a sample rate of about 0.05 L/min over about 120 minutes of sampling. For QA/QC purposes, one ambient air sample was collected from the north-adjointing sidewalk to analyze ambient air conditions and determine whether conditions existed on the site during soil vapor sampling that could have potentially interfered with sampling results. Following sample collection, the labeled canisters were picked up and delivered via courier service to Alpha under standard chain-of-custody protocol. Soil vapor and ambient air samples were analyzed for VOCs by USEPA method TO-15. The approximate soil vapor, sub-slab soil vapor and ambient air locations are shown on Figure 5 and soil vapor sampling logs are included in Appendix F.

4.5 Quality Assurance/Quality Control Sampling

As part of the May/ June 2018 RI, trip blanks and field duplicate samples were collected and submitted for laboratory analysis for QA/QC purposes; these samples are detailed in Table 1. Matrix-specific QA/QC samples that were collected for the RI are summarized below:

Soil QA/QC Samples

- Two field duplicate samples
- Two trip blanks

Groundwater QA/QC Samples

- One field duplicate sample
- One trip blank

Soil Vapor QA/QC Samples

- One ambient air sample

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

Trip blank samples were collected to assess the potential for contamination of the sample containers and samples during transport from the laboratory, to the field, and back to the laboratory for analysis. Trip blanks contain about 40 milliliters of acidic water (doped with hydrochloric acid) that is prepared and sealed by the laboratory when the empty sample containers are shipped to the field, and then unsealed and analyzed for VOCs by the laboratory when the sample shipment is received from the field.

4.6 Data Validation

Analytical data was submitted to a validator for review in accordance with USEPA and NYSDEC validation protocols. Data usability summary reports (DUSR) and the data validator's credentials are provided in Appendix G.

4.6.1 Data Usability Summary Report Preparation

A DUSR was prepared for each delivery group following data validation. The DUSR presents the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain-of-custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. For each of the organic analytical methods, the following was assessed:

- Holding times

- Instrument tuning
- Instrument calibrations
- Blank results
- System monitoring compounds or surrogate recovery compounds (as applicable)
- Internal standard recovery results
- Target compound identification
- Chromatogram quality
- Compound quantization and reported detection limits
- System performance
- Results verification

For each of the inorganic compounds, the following was assessed:

- Holding times
- Calibrations
- Blank results
- Interference check sample
- Laboratory check samples
- Duplicates
- Matrix Spike
- Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) QC
- ICP serial dilutions
- Results verification and reported detection limits

Based on the results of data validation, the following qualifiers may be assigned to the data in accordance with the USEPA guidelines and best professional judgment:

- **R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- **J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- **UU** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.

- **U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- **NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

After data validation was complete, validated data was used to prepare the tables and figures included in this report.

4.7 Field Equipment Decontamination

Handheld sampling equipment, including oil/water interface probes and water quality meters were decontaminated using an Alconox[®]-based solution and triple rinsed with distilled water. Down-hole drilling equipment was decontaminated between each boring by rinsing with an Alconox[®]-based solution. Decontamination wastewater was placed into UN/DOT-approved 55-gallon drums for future off-site disposal.

4.8 Investigation-Derived Waste Management

Investigation derived waste (IDW) generated during the RI was properly handled and containerized. Groundwater from monitoring well development and purging, and decontamination water were placed into UN/DOT-approved 55-gallon steel drums with sealed tops. Drill cuttings exhibiting no evidence of chemical or petroleum impacts were used to backfill soil borings. One groundwater drum was staged in a secured area on-site (540 West 29th Street) pending transport by a licensed waste hauler for disposal at an approved facility.

5.0 FIELD OBSERVATIONS AND ANALYTICAL RESULTS

This section summarizes the field observations and laboratory analytical results from the May 2014 Phase II ESI, the April 2016 RI, and the May-June 2018 RI. Soil analytical results are compared to the 6 NYCRR Part 375 UU, RURR and Restricted Commercial Use (CU) SCOs. Groundwater analytical results are compared to the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (SGVs) for drinking water (Class GA). Soil vapor sample results are compared to either ambient outdoor air, ambient indoor air and/or the decisions matrices provided in May 2017 update to the 2006 NYSDOH AGVs Soil Vapor Intrusion Guidance.

A summary of the soil, groundwater, and soil vapor samples collected during the May 2014 Phase II ESI, the April 2016 RI, and the May/June 2018 RI is included in Table 1. Copies of the laboratory analytical reports are included in Appendix A (May 2014 Phase II ESI and April 2016 RI) and Appendix H (May/June 2018 RI). Summaries of the analytical results for the soil, groundwater, and soil vapor samples are provided in the following tables:

- Table 3A - Soil Sample Analytical Results– Volatile Organic Compounds
- Table 3B - Soil Sample Analytical Results– Semivolatile Organic Compounds, Pesticides, Herbicides, PCBs and Metals
- Table 4 - Groundwater Sample Analytical Results
- Table 5 - Soil Vapor, Indoor Air, and Ambient Air Sample Analytical Results
- Table 6 - Quality Assurance/ Quality Control Sample Results Summary

5.1 Geophysical Investigation Findings

The April 2016 geophysical survey was conducted using GPR across 542 West 29th Street (Lot 57). No anomalies consistent with USTs were identified.

The May/June 2018 RI geophysical survey identified scattered anomalies across the footprints of 538 (Lot 55) and 540 (Lot 56) West 29th Street; the majority of identified anomalies were consistent with utilities (i.e., electric, telecom, gas, sewer line and water line). A sump pump was identified in the northwest corner of the cellar in 538 West 29th Street (Lot 55). Anomalies consistent with USTs were not observed. A copy of the May/June 2018 geophysical report is included in Appendix C.

5.2 Geology and Hydrogeology

Provided below is a description of the geologic and hydrogeologic observations made during the May 2014 Phase II ESI, the April 2016 RI, and the May/ June 2018 RI. A cross-sectional diagram showing the inferred soil profile is shown on Figure 6, and soil boring logs are provided in Appendix A (May 2014 Phase II ESI and April 2016 RI) and Appendix D (May/June 2018 RI).

5.2.1 Historic Fill

Historic fill was encountered immediately beneath the building foundation slabs and extends to depths varying from about 7.5 to 10 feet bgs at 540 West 29th Street (Lot 56), and from about 3 to 12 feet bgs at 542 West 29th Street (Lot 57). Historic fill was encountered below the cellar slab at 538 West 29th Street (Lot 55) at depths ranging from 3 to 5 feet below cellar grade. The historic fill predominately consists of brown fine- to medium-grained sand with varying amounts of gravel, concrete, asphalt, charcoal, slag, ash, wood, brick, and glass.

5.2.2 Native Soil Layers

The historic fill layer is underlain by native soils typically consisting of reddish-brown to olive, fine- to medium-grained silty sand with varying amounts of gravel and silt. The sand generally extended to the termination depth of each boring advanced during the environmental investigations. This stratigraphy was generally consistent across the site.

5.2.3 Bedrock

The USGS “Bedrock and Engineering Geologic Maps of New York County and Parts Kings and Queens Counties, New York, and Parts of Bergen and Hudson Counties, New Jersey” indicates that the bedrock underlying the site is part of the Hartland Formation. Bedrock was not encountered during previous environmental investigations and this RI, but in general is found about 20 to 30 feet bgs in this area of Manhattan.

5.2.4 Hydrogeology

Synoptic groundwater level measurements were collected on May 7, 2016 and June 1, 2018 from monitoring wells installed within 542 West 29th Street and from two temporary monitoring wells located within 538 and 540 West 29th Street. Groundwater was encountered at 3.2 feet below cellar grade at 538 West 29th Street (Lot 55), 9.2 to 11 feet bgs at 540 West 29th Street (Lot 56) and from 8 to 11.51 feet bgs at 542 West 29th Street (Lot 57). Based on the well gauging results, groundwater appears to flow west toward the Hudson River, which is relatively consistent with regional topography.

5.3 Soil Findings

5.3.1 Field Observations

Petroleum-like impacts, evidenced by odors, staining and PID readings above background levels were observed at similar depths in two of the six soil borings advanced during the May/June 2018 RI. Impacts were not observed in the May 2014 Phase II ESI or the April 2016 RI. The depth intervals at which petroleum impacts were apparent and the associated highest recorded PID readings are provided in the following table:

Soil Boring ID	Depth Interval of Observed Impacts (feet below grade)	Max PID Reading (ppm)	Impacts Observed	Soil Boring Location
SB03	0 to 10*	408 (4 to 5 feet below cellar grade)	Petroleum-like odors	538 West 29 th Street (Lot 55, cellar)
SB06	14 to 15	1.6 (14 to 15 feet bgs)	Petroleum-like odors, staining	540 West 29 th Street (Lot 56, first floor)

ppm = parts per million

*Soil Boring SB03 Installed on May 31, 2018 within the cellar of 538 West 29th Street (Lot 55)

5.3.2 Analytical Results

A summary of laboratory detections for soil samples collected during the May 2014 Phase II ESI, April 2016 RI, and May/June 2018 RI, with comparisons to NYSDEC Part 375 UU, RURR, and CU SCOs, is provided in Tables 3A and 3B. Copies of the laboratory analytical reports are included in Appendix A (May 2014 Phase II ESI and April 2016 RI) and Appendix H (May/June 2018 RI). Soil sample results that exceed UU, RURR and CU SCOs for samples collected during previous environmental investigations are shown on Figure 7.

The following sections present a summary of concentrations that exceeded their respective UU, RURR and/or CU SCOs, organized by analytical parameter. Analytes detected above the UU SCOs are listed below with those above the RURR SCOs shown as **bold** and those above CU SCOs shown as **bold and underline**.

VOCs

Four VOCs were detected in soil at concentrations above the UU SCOs from samples collected in soil borings SB-2, SB03, SB04 at depths ranging from immediately below the site cover to 3 feet bgs. The table below shows the high and low concentrations of VOCs above their respective UU SCOs:

Parameter	Range of Concentrations Detected above SCO		UU, RURR and CU SCOs
	Low	High	
Acetone*	0.061 milligrams per kilogram (mg/kg) in SB06_6-8	74 mg/kg in SB-2(1.5-3.5)	UU: 0.05 mg/kg RURR: 100 mg/kg CU: 500 mg/kg
Benzene	0.18 mg/kg in SB03_0-1**	0.66 mg/kg in SB04_1-3	UU: 0.06 mg/kg RURR: 4.8 mg/kg CU: 44 mg/kg
n-Propylbenzene	8.2 mg/kg in SB03_3-4**		UU: 3.9 mg/kg RURR: 100 mg/kg CU: 500 mg/kg

Parameter	Range of Concentrations Detected above SCO		UU, RURR and CU SCOs
	Low	High	
Total xylenes	0.53 mg/kg in SB03_0-1**		UU: 0.26 mg/kg RURR: 100 mg/kg CU: 500 mg/kg

*Acetone is a common laboratory contaminant and therefore, its presence in soil results is not likely representative of site conditions.

** Soil Boring SB03 Installed on May 31, 2018 within the cellar of 538 West 29th Street (Lot 55).

SVOCs

Seven SVOCs were detected in soil at concentrations above UU, RURR, and CU SCOs from samples collected in soil borings SB01, SB04, SP-2, SP-3, and SP-5 at depths ranging from immediately below the site cover to about 8 feet bgs. SVOC-impacted material appears confined to the historic fill. The table below provides a summary of low and high range SVOC concentrations that were detected above their respective 6 NYCRR Part 375 UU, RURR (shown in bold), and CU (shown in bold and underlined) SCOs:

Parameter	Range of Concentrations Detected above SCO		UU, RURR and CU SCOs
	Low	High	
Benzo(a)anthracene	1.3 mg/kg in SB04_6-8	<u>25</u> mg/kg in SB01_0-2*	UU: 1 mg/kg RURR: 1 mg/kg CU: 5.6 mg/kg
Benzo(a)pyrene	<u>1.1</u> mg/kg in SB04_6-8	<u>16</u> mg/kg in SB01_0-2*	UU: 1 mg/kg RURR: 1 mg/kg CU: 1 mg/kg
Benzo(b)fluoranthene	1.01 mg/kg in SP-3 (0-2)	<u>19</u> mg/kg in SB01_0-2*	UU: 1 mg/kg RURR: 1 mg/kg CU: 5.6 mg/kg
Benzo(k)fluoranthene	0.895 mg/kg in SP-5 (10-12)	4.4 mg/kg in SBDUP01_053118**	UU: 0.8 mg/kg RURR: 3.9 mg/kg CU: 56 mg/kg
Chrysene	1.5 mg/kg in SB04_6-8	25 mg/kg in SB01_0-2*	UU: 1 mg/kg RURR: 3.9 mg/kg CU: 56 mg/kg
Dibenzo(a)anthracene	<u>0.565</u> mg/kg in SP-2 (0-2)	<u>2.3</u> mg/kg in SB01_0-2*	UU: 0.33 mg/kg RURR: 0.33 mg/kg CU: 0.56 mg/kg
Indeno(1,2,3-cd)pyrene	0.71 mg/kg in SB04_6-8	<u>8.8</u> mg/kg in SB01_0-2*	UU: 0.5 mg/kg RURR: 0.5 mg/kg CU: 5.6 mg/kg

* Soil samples within the cellar of 538 West 29th Street (Lot 55).

***=SBDUP01_053118 is a duplicate of the parent sample SB01_0-2.*

Pesticides, Herbicides and PCBs

Pesticides, herbicides and PCBs were not detected at concentrations above UU SCO.

Metals

Ten metals were detected in soil at concentrations above UU, RURR and/or CU SCOs from samples collected in soil borings SP-1 to SP-5, SB04, and SB05 at depths ranging from immediately below the site cover to about 12 feet bgs. The highest concentrations appear to be located within the historic fill layer and generally begin to diminish with depth. The following table provides a summary of low and high range metal concentrations that were detected above their respective Part 375 UU, RURR (shown in bold) and CU (shown in bold and underlined) SCOs.

Parameter	Range of Concentrations Detected above SCO		UU, RURR and CU SCOs
	Low	High	
Arsenic	13.5 mg/kg in SP-4 (0-2)	15.2 mg/kg in SP-3 (0-2)	UU: 13 mg/kg RURR: 16 mg/kg CU: 16 mg/kg
Barium	506 mg/kg in SP-1 (4-6)	587 mg/kg in SP-3 (0-2)	UU: 350 mg/kg RURR: 400 mg/kg CU: 400 mg/kg
Cadmium	3.7 mg/kg in SP-1 (4-6)	8.25 mg/kg in SP-3 (0-2)	UU: 2.5 mg/kg RURR: 4.3 mg/kg CU: 9.3 mg/kg
Copper	58.2 mg/kg in SP-2 (0-2)	6,370 mg/kg in SP-3 (0-2)	UU: 50 mg/kg RURR: 270 mg/kg CU: 270 mg/kg
Hexavalent Chromium	1.96 mg/kg in SP-3 (10-12)		UU: 1 mg/kg RURR: 110 mg/kg CU: 400 mg/kg
Lead	135 mg/kg in SB04_1-3	5,650 mg/kg in SB05_7-8	UU: 63 mg/kg RURR: 400 mg/kg CU: 1,000 mg/kg
Mercury	0.22 mg/kg in SB04_1-3	7.39 mg/kg in SP-5 (10-12)	UU: 0.18 mg/kg RURR: 0.81 mg/kg CU: 2.8 mg/kg
Nickel	30.1 mg/kg in SP-5 (10-12)	114 mg/kg in SP-1 (4-6)	UU: 30 mg/kg RURR: 310 mg/kg CU: 310 mg/kg

Parameter	Range of Concentrations Detected above SCO		UU, RURR and CU SCOs
	Low	High	
Selenium	5.48 mg/kg in SP-1 (4-6)		UU: 3.9 mg/kg RURR: 180 mg/kg CU: 1,500 mg/kg
Zinc	210 mg/kg in SP-2 (0-2)	3,000 mg/kg in SB05_7-8	UU: 109 mg/kg RURR: 10,000 mg/kg CU: 10,000 mg/kg

5.4 Groundwater Findings

5.4.1 Field Observations

Prior to sampling, monitoring wells were gauged for the presence of free product (i.e., light, non-aqueous phase liquid [LNAPL]) with an oil-water interface probe. Free product was not detected; however, petroleum-like odors were observed in purged groundwater generated from TW03 during the May/June 2018 RI. Monitoring well headspace PID measurements ranged from 0.0 to 47.9 ppm (highest reading in TW03) during sampling. Groundwater was encountered at 3.2 feet below cellar grade at 538 West 29th Street (Lot 55), 9.2 to 11 feet bgs at 540 West 29th Street (Lot 56) and from 8 to 11.51 feet bgs at 542 West 29th Street (Lot 57). Groundwater generally flows to the west.

5.4.2 Analytical Results

A summary of the groundwater sample laboratory detections compared to TOGS Class GA SGVs is presented in Table 4. Groundwater sample locations and results that exceed their respective TOGS Class GA SGVs are presented on Figure 8. Copies of the laboratory analytical reports are included in Appendix A (May 2014 Phase II ESI and April 2016 RI) and Appendix H (May/June 2018 RI).

The following contaminants were detected at concentrations exceeding the NYSDEC SGVs:

VOCs

Groundwater samples collected from SB-1(GW), and TW03 contained concentrations of VOCs above TOGS Class GA SGVs as shown in the following table:

Parameter	Range of Concentrations Detected above TOGS Class GA SGV		TOGS Class GA SGV
	Low	High	
1,2,4,5-Tetramethylbenzene	55 µg/L in TW03_060118		5 µg/L
1,2,4-Trimethylbenzene	49 µg/L in TW03_060118		5 µg/L
Benzene	1.4 µg/L in SB-1 (GW)	46 µg/L in TW03_060118	1 µg/L
Ethylbenzene	13 µg/L in TW03_060118		5 µg/L
Isopropylbenzene	34 µg/L in TW03_060118		5 µg/L
Methyl tert butyl ether	11 µg/L in SB-1 (GW)		10 µg/L
Naphthalene	32 µg/L in TW03_060118		10 µg/L
n-Butylbenzene	11 µg/L in TW03_060118		5 µg/L
n-Propylbenzene	79 µg/L in TW03_060118		5 µg/L
sec-Butylbenzene	8.5 µg/L in TW03_060118		5 µg/L

SVOCs

Groundwater samples collected from TW03 and MW-3 contained concentrations of one or more SVOCs above their respective TOGS Class GA SGVs as shown in the following table:

Parameter	Range of Concentrations Detected above TOGS Class GA SGV		TOGS Class GA SGV
	Low	High	
Benzo(a)anthracene	0.05 µg/L in TW03_060118	0.274 µg/L in MW-3	0.002 µg/L
Benzo(a)pyrene	0.168 µg/L in MW-3		0.002 µg/L
Benzo(b)fluoranthene	0.168 µg/L in MW-3		0.002 µg/L
Benzo(k)fluoranthene	0.158 µg/L in MW-3		0.002 µg/L
Chrysene	0.05 µg/L in TW03_060118	0.211 µg/L in MW-3	0.002 µg/L
Indeno(1,2,3-cd)pyrene	0.126 µg/L in MW-3		0.002 µg/L

Pesticides, Herbicides and PCBs

Pesticides, herbicides and PCBs were not detected at concentrations above TOGS Class GA SGVs.

Total Metals

Groundwater samples collected from monitoring wells MW-1, MW-2, MW-3, TW03, and TW05 contained concentrations of one or more of nine total metals that exceeded the TOGS Class GA SGVs as shown in the following table:

Parameter	Range of Concentrations Detected above TOGS Class GA SGV		TOGS Class GA SGV
	Low	High	
Arsenic	164 µg/L in MW-3	911 µg/L in MW-2	25 µg/L
Copper	229 µg/L in MW-1		200 µg/L
Iron	1,910 µg/L in MW-2	22,600 µg/L in TW03_060118	300 µg/L
Lead	177 µg/L in MW-1	495 µg/L in MW-3	25 µg/L
Magnesium	69,600 µg/L in TW05_060118	91,500 µg/L in MW-2	35,000 µg/L
Manganese	2,882 µg/L in TW03_060118	10,960 µg/L in TW05_060118	300 µg/L
Selenium	16 µg/L in MW-1		10 µg/L
Sodium	438,000 µg/L in MW-3	618,000 µg/L in TW05_060118	20,000 µg/L
Thallium	6 µg/L in MW-3	13 µg/L in MW-2	0.5 µg/L

Dissolved Metals

Groundwater samples collected from monitoring wells MW-1, MW-2, MW-3, TW03, and TW05 contained concentrations of one or more of nine dissolved metals that exceeded the TOGS Class GA SGVs as shown in the following table:

Parameter	Range of Concentrations Detected above TOGS Class GA SGV		TOGS Class GA SGV
	Low	High	
Arsenic	111 µg/L in MW-3	468 µg/L in MW-2	25 µg/L
Iron	4,370 µg/L in TWDUP01_060118*	14,800 µg/L in TW03_060118	300 µg/L
Magnesium	70,800 µg/L in TW05_060118	82,900 µg/L in MW-2	35,000 µg/L
Manganese	1,830 µg/L in MW-3	11,740 µg/L in TW05_060118	300 µg/L
Selenium	12 µg/L in MW-3	17 µg/L in MW-1	10 µg/L
Sodium	376,000 µg/L in MW-2	602,000 µg/L in TW05_060118	20,000 µg/L
Thallium	11 µg/L in MW-1	15 µg/L in MW-2	0.5 µg/L

*TWDUP01_060118 is a duplicate of the parent sample TW05_060118

5.5 Soil Vapor Results

The following samples were collected and submitted for laboratory analysis of USEPA TO-15 VOCs during the site investigations:

- Three sub-slab soil vapor samples, three co-located indoor ambient air samples, and one outdoor ambient air sample (May 2014 Phase II ESA);
- Two soil vapor and one indoor ambient air samples (April 2016 RI); and
- Two sub-slab, two soil vapor, and one outdoor ambient air sample (May/June 2018 RI).

Total VOC concentrations in soil vapor samples ranged from 101 $\mu\text{g}/\text{m}^3$ in SV-1 (Lot 57) to 519,247 $\mu\text{g}/\text{m}^3$ in SV04 (Lot 55). Chlorinated VOCs (CVOC) were identified in soil vapor samples collected across the site, with the highest concentrations located in the southern and southeast portions of the site.

No standard currently exists for soil vapor samples in New York State. For reference, soil vapor samples were compared to NYSDOH AGVs. The maximum detected concentrations above AGVs of TCE and PCE in soil vapor and/or sub-slab vapor were 6.9 $\mu\text{g}/\text{m}^3$ and 317 $\mu\text{g}/\text{m}^3$, respectively. In addition, methylene chloride was detected at a maximum concentration of 110 $\mu\text{g}/\text{m}^3$ at SV02 in exceedance of its associated AGV of 60 $\mu\text{g}/\text{m}^3$.

Petroleum-related VOCs (e.g., benzene, toluene, ethylbenzene, and total xylenes [BTEX]) were detected in soil vapor samples at concentrations above those detected in the ambient air samples. BTEX concentrations detected in soil vapor ranged from non-detect in samples SS-1, SV-1, and SV-2 (Lot 57) to 34,240 $\mu\text{g}/\text{m}^3$ in SV04 (Lot 56).

Where indoor air and sub-slab vapor samples were collected, the NYSDOH decision matrices were used to evaluate recommended actions (e.g., monitor, mitigate). The NYSDOH decision matrix recommendations include "No Further Action" for detected compounds.

Soil vapor, sub-slab soil vapor, indoor air and ambient air sample results are summarized in Table 5. The soil vapor sample results are shown on Figure 9, and the laboratory analytical reports can be found in Appendix A (May 2014 Phase II ESI and April 2016 RI) and Appendix H (May/June 2018 RI).

5.6 QA/QC Sample Results

Duplicate, field blanks and trip blank samples collected during the RI are detailed in Table 1. Duplicate samples were collected at a frequency of 1 per 20 primary samples. QA/QC samples results were also evaluated as part of data validation. Analytical results for field and trip blank samples are summarized in Table 6.

5.7 Data Usability

New York Analytical Services Protocols (ASP) Category B laboratory reports for the soil, groundwater and soil vapor samples collected during the May/June 2018 RI were provided by Alpha and were forwarded to Langan's data validator. Additional data validation from the May 2014 Phase II ESA, April 2016 RI will be performed pending access to the original raw data, and will be provided to NYSDEC in an amendment to this RIR. Data qualifiers were updated following

completion of the DUSR. Copies of the DUSRs are provided in Appendix G. The results of the data validation review are summarized below.

The data were determined to be acceptable. Completeness, defined as the percentage of analytical results that are judged to be valid, is 100 percent. No major deficiencies were identified. All data is considered useable as qualified.

5.8 Evaluation of Areas of Concern

This section discusses the results of the May 2014 Phase II ESA, April 2016 RI, and May/June 2018 RI with respect to the AOCs described in Section 3.4.

5.8.1 AOC 1: Historic Fill

Historic fill encountered immediately beneath the building foundation slabs extended to depths varying from about 7.5 to 10 feet bgs at 540 West 29th Street (Lots 56), and from about 3 to 12 feet bgs at 542 West 29th Street (Lot 57). Historic fill was encountered below the cellar slab at 538 West 29th Street (Lot 55) at depths ranging from 3 to 5 feet below cellar grade. The historic fill predominately consists of brown fine- to medium-grained sand with varying amounts of gravel, concrete, asphalt, charcoal, slag, ash, wood, brick, and glass. The historic fill layer was encountered across the site. A summary of the analytical results from historic fill for AOC 1 are summarized as follows:

AOC 1 - Soil

- VOCs (acetone, benzene, n-propylbenzene, and total xylenes) were detected at concentrations exceeding their respective UU SCOs in four soil borings (SB-2, SB03, SB04, and SB06) from samples collected within the historic fill.
- SVOCs (benzo[a]anthracene, benzo[a]pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo[a,h]anthracene and indeno[1,2,3-cd]pyrene) were detected above the UU, RURR and/or CU SCOs in samples collected from the historic fill layer in soil borings SB01, SP-1, SP-2, SB04, and SP-5.
- Metals were detected at concentrations exceeding their respective UU SCOs (arsenic, hexavalent chromium, nickel, selenium, and zinc), and RURR/ CU SCOs (barium, cadmium, copper, lead, and mercury) in samples collected from the historic fill layer.
- Total PCBs and pesticides were not detected above UU SCOs in soil samples collected.

AOC 1 - Groundwater

- Several petroleum-related VOCs were detected at concentrations above TOGS Class GA SGVs, including 1,2,4,5-tetramethylbenzene, 1,2,4-trimethylbenzene, benzene, ethylbenzene, MTBE, isopropyl benzene, naphthalene, n-butylbenzene, n-propylbenzene, and sec-butylbenzene. This contamination is also associated with AOC 2 and 3.

- SVOCs, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene, were detected above TOGS Class GA SGVs.
- Metals (arsenic, copper, iron, lead, magnesium, manganese, selenium, sodium and thallium) were detected at concentrations above the above TOGS Class GA SGVs in groundwater samples. Dissolved copper and lead were not detected in groundwater samples; therefore, the detections in unfiltered samples are likely the result of suspended solids in groundwater derived from historic fill. With the exception of arsenic, the concentrations detected are attributed to regional groundwater contamination and are not considered a localized concern. The presence of arsenic at a concentration above its TOGS Class GA SGV may be due to the quality of the historic fill.

AOC 1 - Soil Vapor

Historic fill does not appear to have impacted soil vapor.

AOC 1 - Conclusions

Historic fill was identified in all borings extending to depths from 3 to about 12 feet bgs. VOCs, SVOCs, and metals were detected above UU, RURR and CU SCOs in samples of historic fill, with the deepest exceedance identified at 10 to 12 feet bgs. Concentrations of SVOCs and metals are likely associated with the general quality of the fill placed at the site or historical industrial uses of the site (i.e., auto repair, heating plant, manufacturing, lumber yard – AOC 2).

Similar compounds detected in soil were also identified in groundwater at concentrations above TOGS Class GA SGVs. SVOC and metals concentrations detected in groundwater are likely related to entrained sediments that may be related to on-site historic fill. Iron, magnesium, manganese, selenium and sodium are regionally present in groundwater throughout New York City. The analytical data indicate that the contaminants associated with historic fill have not impacted soil vapor.

5.8.2 AOC 2: Historical Use of the Site

The site was developed prior to 1890 with two unspecified use buildings that were demolished between 1899 and 1922. Lot 57 was formerly used as a lumber storage yard (1909-1944) and various auto repair facilities over a span of about 50 years (1945-1994). In 1995, the Lot 57 was purchased by Gotham Seafood Corporation, a seafood wholesaler. Sanborn maps indicate that Lots 55 and 56 were improved with mixed use-residential and commercial developments from about 1890 to 2005. CO's provided by the NYCDOB identified an auto repair shop within Lot 56 in 1924 and 2012. In addition, available CO's for Lot 55 dated 1970 and 1987 identified manufacturing and a heating plant with potential fuel storage. The historic on-site operations within Lots 55, 56, and 57 may have included the use of metals, petroleum, and solvents. Releases of petroleum products, solvents, and/or other hazardous materials associated with auto

repair during the 50 years of on-site operations appear to have adversely affected soil, groundwater and/or soil vapor. A summary of AOC 2 findings is provided below:

AOC 2 - Geophysical Survey

- The April 2016 geophysical survey was conducted using GPR across 542 West 29th Street (Lot 57). The May/June 2018 geophysical survey identified scattered anomalies across the footprints of 538 (Lot 55) and 540 (Lot 56) West 29th Street; the majority of identified anomalies were consistent with utilities (i.e., electric, telecom, gas, sewer line and water line). A sump pump was identified in the northwest corner of the cellar in 538 West 29th Street (Lot 55). Anomalies consistent with USTs were not observed.

AOC 2 - Soil

- Petroleum-like impacts, evidenced by odors, staining and/or PID readings above background levels were observed at similar depths in two of the six soil borings advanced during the May/ June 2018 RI. Elevated PID readings above background and petroleum-like odors were observed in soil borings SB03 (maximum PID reading of 408 ppm VOCs) and SB06 (maximum PID reading of 1.6 ppm VOCs). Petroleum-like odors were observed in soil boring SB03 from 0 to 10 feet below cellar grade. Petroleum-like odors and gray staining were observed in soil boring SB06 from 14 to 15 feet bgs.
- Petroleum-related VOCs, including benzene, n-propylbenzene, and total xylenes, were detected at concentrations exceeding their respective UU SCOs in four soil borings (SB-2, SB03, SB04, and SB06).
- Metals, including barium, copper, mercury, and lead, were present at concentrations above levels typical in historic fill (AOC 1) in the southwest portion of the site where historic site usage included auto repair. SVOCs detected in historic fill are likely attributed to historic auto repair operations or the quality of historic fill placed beneath the site.

AOC 2 - Groundwater

- Petroleum-related VOCs detected in groundwater samples above TOGS Class GA SGVs (1,2,4,5-tetramethylbenzene, 1,2,4-trimethylbenzene, benzene, ethylbenzene, isopropylbenzene, naphthalene, n-butylbenzene, n-propylbenzene, sec-butylbenzene, and MTBE) are attributed to the former auto repair activities documented in Lots 56 and 57 or an off-site (AOC 3) source. SVOCs (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, and indeno[1,2,3-cd]pyrene) are associated with historic site usage including auto repair, the quality of historic fill placed beneath the site (AOC 1), or an off-site (AOC 3) source. SVOCs were identified in groundwater samples collected in the southwest portion of the site (MW-3) at concentrations exceeding their respective TOGS Class GA SGVs.

- Free product was not detected; however, petroleum-like odors were observed in purged groundwater generated from TW03 during the May/June 2018 RI. Monitoring well headspace PID measurements ranged from 0.0 to 47.9 ppm during sampling.

AOC 2 – Soil Vapor

- Elevated BTEX compounds above background levels were detected in soil vapor samples throughout the site. BTEX concentrations detected in soil vapor ranged from non-detect in samples SS-1, SV-1, and SV-2 (Lot 57) to 34,240 $\mu\text{g}/\text{m}^3$ in SV04 (Lot 56).
- CVOCs, including TCE (non-detect to 6.9 $\mu\text{g}/\text{m}^3$ in SV-1), PCE (non-detect to 317 $\mu\text{g}/\text{m}^3$ in SV04) and vinyl chloride (non-detect to 1.39 $\mu\text{g}/\text{m}^3$ in SV01), were identified in soil vapor samples collected across the site, with the highest concentrations located in the southern and southeast portions of the site.

AOC 2 Conclusions

The geophysical surveys did not identify anomalies indicative of storage tanks, vaults, or other buried abandoned structures.

Metals detected in historic fill samples may be related to the historical site use as an auto repair facility (Lots 56 and 57) or may be indicative of historic fill present beneath building foundations (AOC 1). In particular, barium, copper, mercury, and lead were present at concentrations above levels typical in historic fill in the southwest portion of the site where historic site usage included auto repair.

SVOCs detected in historic fill are likely attributed to the quality of the historic fill (AOC 1), historic auto repair operations on-site (AOC 2) and may have been contributed to by an off-site (AOC 3) source.

Petroleum-related VOCs detected in groundwater samples above TOGS Class GA SGVs are attributed to the former auto repair activities documented in Lots 56 and 57 and may have been contributed to by an off-site (AOC 3) source. CVOCs and petroleum-related VOCs detected in soil and sub-slab soil vapor samples may be indicative of a chemical and/or petroleum release associated with historical site use as an auto repair facility and may have been contributed to by an off-site source (AOC 3).

Based on field observations and soil analytical results, two petroleum spills were reported to the NYSDEC for Lot 55 (Spill No. 1805506- 538 West 29th Street) and Lot 56 (Spill No. 1805508- 540 West 29th Street).

5.8.3 AOC 3: Historical Use of Adjoining and Surrounding Properties

Historical uses of adjoining and surrounding properties included gasoline filling stations, auto repair shops/garages, a planing mill (lumber) and box factory, manufacturing, a chemical dying factory, a chemical corporation, and a motor freight station. Undocumented spills or releases of

petroleum products or hazardous substances associated with historical uses of nearby properties may have adversely affected groundwater or soil vapor beneath the site.

In addition, multiple surrounding properties are subject to environmental regulatory oversight through the OER and NYSDEC based on historic site use or documented contamination. Adjacent and surrounding sites with environmental regulatory oversight include: Avalon West Chelsea (282 Eleventh Avenue), Midtown Center Auto (548 West 29th Street), 534 West 29th Street (VCP Site No. 14CVCP199M), 550 West 29th Street (VCP Site No. 15CVCP060M) and 522-532 West 29th Street (VCP Site No. 13CVCP151M). Publicly available documents associated with these sites reported petroleum and chlorinated solvent impacts in soil, groundwater and/or soil vapor that may have contributed to the documented contamination at the site.

Contaminants of Concern (COCs) associated with AOC 3 include petroleum compounds and chlorinated solvents. A summary of the findings for AOC 3 is provided below:

- Petroleum-like impacts, evidenced by odors, staining and/or PID readings above background levels were observed at similar depths in two of the six soil borings advanced during the May/June 2018 RI. In addition, petroleum-related VOCs were detected at concentrations exceeding their respective UU SCOs in two soil borings. The petroleum impacts to soil are further described in AOC 2 above.
- Petroleum-related VOCs were detected in groundwater samples above TOGS Class GA SGVs and petroleum-like odors were observed in purged groundwater generated from TW03 during the May/June 2018 RI. Monitoring well headspace PID measurements ranged from 0.0 to 47.9 ppm during sampling. The petroleum impacts to groundwater are further described in AOC 2 above.
- PCE was detected in three soil vapor samples collected at the site. PCE concentrations detected in soil vapor ranged from 10 $\mu\text{g}/\text{m}^3$ in SV-1 to 15.6 $\mu\text{g}/\text{m}^3$ in SV01. PCE was detected in three sub-slab soil vapor samples at concentrations ranging from 1.48 $\mu\text{g}/\text{m}^3$ in SS-2 to 317 $\mu\text{g}/\text{m}^3$ in SV04. PCE was detected in the ambient air samples at a concentration of 0.678 $\mu\text{g}/\text{m}^3$ in SVAA to 0.814 $\mu\text{g}/\text{m}^3$ in OA-1. PCE concentrations detected in indoor air samples ranged from 2.67 $\mu\text{g}/\text{m}^3$ in IA-1 to 2.82 $\mu\text{g}/\text{m}^3$ in IA-2.
- TCE was detected in one sub-slab soil vapor sample at a concentrations of 2.78 $\mu\text{g}/\text{m}^3$ in SS-3, and at a concentration of 6.9 $\mu\text{g}/\text{m}^3$ in soil vapor sample SV-1. Vinyl chloride was also detected in one soil vapor sample SV01 at a concentration of 1.39 $\mu\text{g}/\text{m}^3$.
- Elevated BTEX compounds were detected in soil and soil vapor samples, and are further described in AOC 2 above.

AOC 3 - Conclusions

Petroleum impacts to soil, groundwater and soil vapor in the southern portion of the site may be related to an off-site source (e.g., historic spill to the south) or an on-site source (AOC 2). A PCE

source to soil vapor was not identified on-site and may be related to an off-site source. In addition, TCE was only detected in one sub-slab soil vapor (SS-3) and one soil vapor sample (SV-1), both of which are located in the western portion of the site (Lot 57). Potential off-site sources include gasoline filling stations, auto repair shops/garages, a planing mill (lumber) and box factory, manufacturing, a chemical dying factory, a chemical corporation, and a motor freight station.

6.0 QUALITATIVE HUMAN AND FISH/WILDLIFE EXPOSURE ASSESSMENT

Human health exposure risk was evaluated for both current and future site and off-site conditions, in accordance with the May 2010 NYSDEC Final DER-10 Technical Guidance for Site Investigation and Remediation. The assessment includes an evaluation of potential sources and migration pathways of site contamination, potential receptors, exposure media, and receptor intake routes and exposure pathways.

In addition to the human health exposure assessment, NYSDEC DER-10 requires an on-site and off-site Fish and Wildlife Resources Impact Analysis (FWRIA) if certain criteria are met. Based on the requirements stipulated in Section 3.10 and Appendix 3C of DER-10, there was no need to prepare an FWRIA for the site. A completed copy of the DER-10 Appendix 3C decision key is included as Appendix I.

6.1 Current Conditions

The site is located at 538-542 West 29th Street (Block 700, Lots 55, 56 and 57) in the Chelsea neighborhood of Manhattan, New York. The site occupies a footprint of about 9,900-square-feet and is currently improved with one three-story commercial building (Lot 55), one three-story mixed-use commercial and residential building (Lot 56), and one two-story warehouse (Lot 57). The buildings are currently vacant. The site is bounded by West 29th Street to the north, mixed-use residential and commercial buildings to the east, a multi-story residential apartment to the south, and a multi-story mixed-use residential and commercial building to the west. The No. 7 subway southern extension runs north-south below Eleventh Avenue, which is about 200 feet to the west of the site. A Site Location Map and Site Plan are provided as Figure 1 and Figure 2, respectively.

6.2 Proposed Conditions

The proposed site development is in the conceptual phase and is anticipated to include demolition of the on-site buildings and construction of a new commercial building with two cellar levels. The building would require site-wide excavation to about 30 feet below bgs for the building cellar and foundation, which will necessitate dewatering to lower the groundwater table (encountered at about 9.2 to 11.5 feet bgs).

6.3 Conceptual Site Model

A conceptual site model (CSM) was developed based on the RI findings and previous investigations to produce a simplified framework for understanding the distribution of impacted materials, potential migration pathways, and potentially complete exposure pathways.

6.3.1 Potential Sources of Contamination

Potential sources of contamination have been identified and include historic fill, historic site usage, and off-site sources.

Historic Fill

Historic fill was encountered immediately beneath the building foundation slabs and extends to depths varying from about 7.5 to 10 feet bgs at 540 West 29th Street (Lot 56), and from about 3 to 12 feet bgs at 542 West 29th Street (Lot 57). Historic fill was encountered below the cellar slab at 538 West 29th Street (Lot 55) at depths ranging from 3 to 5 feet below cellar grade. SVOCs and metals detected at concentrations above the Part 375 UU, RURR and CU SCOs, are likely related to the nature of the historic fill. Additionally, SVOCs in groundwater may be related to the nature of the historic fill.

Historic Site Usage and Off-Site Sources

Petroleum-like impacts, evidenced by odors, staining and/or PID readings above background levels were observed at similar depths in two soil borings from 0 to 10 feet below cellar grade (SB03) and 14 to 15 feet bgs (SB06). Petroleum-related VOCs were detected at concentrations exceeding their respective UU SCOs in two soil borings. Petroleum-related VOCs were detected in groundwater samples above TOGS Class GA SGVs and petroleum-like odors were observed in purged groundwater generated from TW03 during the May/ June 2018 RI. Monitoring well headspace PID measurements ranged from 0.0 to 47.9 ppm during sampling. Petroleum related VOCs were identified in soil and sub-slab soil vapor samples. The petroleum impacts to soil, groundwater and soil vapor are likely associated with historic site usage as an auto repair facility for over 50 years, or an off-site source to the south.

CVOCs were detected in soil vapor; however, the site investigation found no on-site sources of chlorinated VOCs in soil or groundwater. CVOC concentrations in sub-slab and soil vapor samples may originate from an unidentified site source or an off-site source.

6.3.2 Exposure Media

Impacted media includes soil, groundwater, and soil vapor. Analytical data from the subsurface investigations indicates the historic fill across the site contains VOCs, SVOCs and metals in excess of regulatory standards. Groundwater was encountered at 3.2 feet below cellar grade at 538 West 29th Street (Lot 55), 9.2 to 11 feet bgs at 540 West 29th Street (Lot 56) and from 8 to 11.51 feet bgs at 542 West 29th Street (Lot 57) and impacts include VOCs, SVOCs, and metals. Soil vapor is impacted with both petroleum-related VOCs and CVOCs.

6.3.3 Receptor Populations

The site is currently vacant with limited access to authorized workers and the project development team. Under future conditions, human receptors may include construction and remediation workers, authorized guests visiting the site, and the public adjacent to the site, as well as potential future building occupants.

6.4 Potential Exposure Pathways – On-Site

6.4.1 Current Conditions

The site footprint is covered by impervious surfaces consisting of concrete building slabs. Human exposure to contaminated soil through dermal absorption, inhalation, and ingestion is minimal and controlled through the presence of the impervious surfaces. There is a potential exposure pathway through dermal absorption, inhalation, and ingestion during soil sampling associated with site investigation, but it is controlled through the implementation of the Health and Safety Plan (HASP). Access to the site is restricted by locked gates; therefore, human exposure to contaminated soil is limited.

Groundwater at the site has been shown to be contaminated. Groundwater in this area of New York City is not used as a potable water source. There is a potential exposure pathway during groundwater sampling associated with site investigation. The potential pathway is through dermal absorption, inhalation and ingestion. This pathway is also controlled through implementation of the HASP.

Soil vapor is impacted by VOCs and CVOCs. There is a potential exposure pathway during soil vapor sampling associated with site investigation and intrusion through potential cracks in the building slab. The potential pathway is through inhalation. This pathway is also controlled through implementation of the HASP.

6.4.2 Construction/Remediation Condition

Construction and remediation may result in potential exposures to soil, groundwater and soil vapor site contaminants in the absence of a HASP and a Community Air Monitoring Plan (CAMP). Construction and remedial activities will likely include demolition, excavation and off-site disposal of impacted soil, dewatering and construction of foundation components. In the absence of a HASP and CAMP, this scenario presents the potential for exposure of soil contaminants to construction and remediation workers and the public adjacent to the site via dermal absorption, ingestion, and inhalation of vapors and particulate matter. This exposure pathway will be minimized through the implementation of the HASP, CAMP, and vapor and dust suppression techniques.

6.4.3 Proposed Future Conditions

The proposed development is for commercial use. Upon completion of the new development, the entirety of the site footprint will be excavated into bedrock below the static groundwater depth.

There is no pathway for ingesting groundwater COCs, since the site and surrounding areas obtain their drinking water supply from surface water reservoirs located upstate and not from groundwater. Future conditions will likely have a deed restriction on site and groundwater use to prevent exposure if residual contamination remains. The proposed development includes site-wide excavation to about 30 feet bgs into bedrock and removal of all soil/fill from the site. The

bottom of foundation slab will be below the groundwater table, which allows no space for contaminated soil vapor to accumulate, should it exist post-remedy. Regardless, the potential for soil vapor intrusion will be evaluated as part of the RAWP.

Engineering controls are not anticipated post-remedy, but if required, institutional controls will be put in place to require maintenance of engineering controls that serve to mitigate exposure under future conditions.

6.5 Potential Exposure Pathways – Off-Site

Contaminated soil has the potential to be transported off-site by wind in the form of dust or on the tires of vehicles or equipment leaving the site during development and create an exposure risk to the public adjacent to the site. Groundwater will be removed during construction via dewatering and will be pre-treated and discharged to the New York City sewer system, per New York City Department of Environmental Protection (NYCDEP) permit requirements, or containerized in a temporary storage tank pending disposal at a permitted off-site facility. Therefore, the potential for public exposure to site groundwater on adjacent sites will be minimized. Metal impacts to groundwater are considered a regional problem and are not considered a localized concern. During construction and remediation, soil vapor will primarily migrate vertically through the subsurface and will dissipate and dilute with ambient air.

The potential off-site migration of site soil, groundwater and/or soil vapor contaminants is not expected to result in a complete exposure pathway for current, construction-phase, or future conditions for the following reasons:

- Current- The site is located in an urban area and predominantly covered with continuous, relatively impervious surface covering (i.e. buildings, and concrete slabs and asphalt)
- Construction Phase- During site remediation and construction, the following protective measures will be implemented:
 - Air monitoring will be conducted for particulates (i.e., dust) and VOCs during intrusive activities as part of a CAMP. Dust and/or vapor suppression techniques will be employed to limit potential for off-site migration of soil and vapors.
 - Vehicle tires and undercarriages will be washed as necessary prior to leaving the site to prevent tracking material off-site.
 - A soil erosion/sediment control plan will be implemented during construction to control off-site migration of soil.
- Future- The site is proposed for a Track 1 cleanup and residual impacts are not anticipated. If a Track 1 is not obtained, the site will be capped and soil and groundwater exposure will be eliminated except during sampling activities which will be managed under a HASP. Groundwater in New York City is not used as a potable water source and

the nearest ecological receptor, the Hudson River, is located about 1,300 feet to the west. Accumulation of soil vapor beneath the building is not anticipated considering the building foundation slab is expected to extend into the groundwater table. Additionally, a continuous site-wide waterproofing system will be installed below the slab and along the vertical subgrade foundation sidewalls.

6.6 Evaluation of Human Health Exposure

Based on the CSM and review of environmental data, complete on-site exposure pathways appear to be present in the absence of protective measures and remediation. The complete exposure pathways indicate there is a risk of exposure to humans from site contaminants via exposure to soil, groundwater, and soil vapor for current and construction conditions.

Complete exposure pathways have the following five elements: 1) a contaminant source; 2) a contaminant release and transport mechanism; 3) a point of exposure; 4) a route of exposure; and 5) a receptor population. A discussion of the five elements comprising a complete pathway as they pertain to the site is provided below.

6.6.1 Current Conditions

Contaminant sources include 1) historic fill with varying levels of VOCs, SVOCs, and metals contamination; 2) Historic site usage that may be related to petroleum-impacted soil, groundwater and soil vapor (documented under NYSDEC Spill Nos. 1805506 and 1805508) and CVOC soil vapor impacts; and 3) historical uses of adjacent and surrounding sites that may be related to CVOCs and petroleum-related contaminants in groundwater and soil vapor.

Contaminant release and transport mechanisms include contaminated soil dermal contact during sampling and dust generation and transport during drilling (dermal, ingestion, inhalation), contaminated groundwater dermal contact, ingestion or inhalation during sampling, and volatilization of contaminants from the soil and groundwater matrices to the soil vapor phase (inhalation).

Under current conditions, the likelihood of exposure to humans is limited, as site access is restricted to authorized workers and guests. The site footprint contains impervious covers (i.e., buildings, concrete) and exposure to soil, groundwater or soil vapor is minimal. Exposure to contaminants in soil and groundwater via dermal contact or ingestion during investigation is minimized, as these activities would occur under a HASP/CHASP with CAMP to limit exposure to site workers and the community. In addition, groundwater is not used as potable water supply in Manhattan.

6.6.2 Construction/Remediation Activities

During development and remediation, points of exposure include disturbed and exposed soil during excavation, dust and organic vapors generated during excavation, and contaminated groundwater that could be encountered during excavation and/or dewatering operations. Routes of exposure include ingestion and dermal absorption of contaminated soil and groundwater,

inhalation of organic vapors arising from contaminated soil and groundwater (specifically in the area of petroleum and CVOC impacts), and inhalation of dust arising from contaminated soil. The receptor population includes construction and remediation workers and, to a lesser extent, the public adjacent to the site.

The potential for completed exposure pathways is present since all five elements exist; however, the risk will be minimized by the implementation of appropriate health and safety measures during construction and remediation, such as monitoring the air for organic vapors and dust, using vapor and dust suppression measures, cleaning truck undercarriages before they leave the site to prevent off-site soil tracking, maintaining site security, and wearing the appropriate personal protective equipment (PPE).

A CHASP, Soil/Materials Management Plan (SMMP), and CAMP will be implemented and includes measures such as conducting an air-monitoring program, donning PPE, covering soil stockpiles, altering work sequencing, maintaining a secure construction entrance, proper housekeeping, and applying vapor and dust suppression measures to prevent off-site migration of contaminants during construction. Such measures will prevent completion of potential migration pathways for soil, groundwater and soil vapor.

6.6.3 Proposed Future Conditions

For the proposed future conditions, residual contaminants may remain on-site; however, the proposed development includes site-wide excavation to about 30 feet bgs into bedrock and removal of all soil/fill from the site. If a Track 1 cleanup is not practicable, residual contaminants may remain on site and exposure pathways will be minimized through the use of engineering and institutional controls. Exposures during sampling activities will be managed under a HASP. Groundwater in New York City is not used as a potable water source and the nearest ecological receptor, the Hudson River, is located about 1,300 feet to the west. The receptor population includes commercial use occupants, patrons and employees, and the nearby community, including children. Accumulation of soil vapor beneath the building is not anticipated considering the building foundation slab is expected to extend into the groundwater table. Additionally, a continuous site-wide waterproofing system will be installed below the slab and along the vertical subgrade foundation sidewalls.

6.6.4 Human Health Exposure Assessment Conclusions

1. Under current conditions, there is a marginal risk for human exposure to site contaminants. The primary exposure pathways are dermal contact, ingestion and inhalation of soil, soil vapor, or groundwater by authorized site visitors during sampling activities. The exposure risks can be avoided or minimized by following the appropriate health and safety and vapor and dust suppression measures outlined in the site-specific HASP and CAMP during investigation activities.

2. In the absence of a HASP and CAMP, there is a moderate risk of exposure during construction and remediation activities. The primary exposure pathways are:
 - a. Dermal contact, ingestion and inhalation of contaminated soil, groundwater or soil vapor by construction workers.
 - b. Dermal contact, ingestion and inhalation of soil (dust) and inhalation of soil vapor by the community in the vicinity of the site.

These exposure risks can be avoided or minimized by following a SMMP, and CAMP and by following the appropriate health and safety, vapor and dust suppression and site security measures outlined in a site-specific HASP.

3. The existence of a complete exposure pathway for site contaminants to human receptors during proposed future conditions is unlikely, as soil will be excavated into existing bedrock and transported to an off-site disposal facility and residual soil is not anticipated below new foundation elements. If present, residual contamination would be managed through the use of ECs/ICs following site development. Regional groundwater is not used as a potable water source in Manhattan so exposure to regional groundwater contaminants is unlikely. The potential pathway for soil vapor intrusion into the building will be addressed by completion of the remedial excavation, installation of the building foundation below the water table and installation of a site-wide waterproofing/ vapor barrier as part of construction.
4. It is unlikely that a complete exposure pathway exists for the migration of site contaminants to off-site human receptors for current, construction phase, or future conditions. Monitoring and control measures would be used during investigation and construction to prevent completion of this pathway. Under future conditions, the site will be remediated and, if necessary, engineering controls may be implemented (e.g. site-wide cap and a waterproofing/ vapor barrier) to prevent completion of this pathway.

7.0 NATURE AND EXTENT OF CONTAMINATION

This section evaluates the nature and extent of soil, groundwater and soil vapor contamination. The nature and extent of the contamination is derived from a combination of field observations and analytical data that were discussed in Section 5.0, and incorporates field observations and analytical data from the RI performed at the site between May 2014 and June 2018.

7.1 Soil Contamination

Soil contamination is divided into the following classifications:

1. Historic Fill
2. Petroleum-Impacted Soil/Fill

7.1.1 Historic Fill

Contaminants related to historic fill at the site include VOCs, SVOCs, and metals. Historic fill exists across the site, extending from surface grade to depths ranging from about 3 to 12 feet bgs. Soil samples collected from the historic fill layer contained concentrations of VOCs (benzene, n-propylbenzene, and total xylenes), SVOCs (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, and indeno[1,2,3-cd]pyrene), and metals (arsenic, barium, cadmium, hexavalent chromium, copper, lead, mercury, nickel, selenium, and zinc) exceeding their respective UU and, in some cases, RURR and/or CU SCOs.

7.1.2 Petroleum-Impacted Soil/Fill

During the May/June 2018 RI, petroleum-like odors and PID readings were observed in two soil borings, SB03 and SB06, located in the southern portion of Lot 55 and Lot 56. Petroleum-like odors were observed between 0 and 10 feet below cellar grade in boring SB03, with a maximum PID reading of 408 ppm recorded at 4 feet below cellar grade. Petroleum-like odors and staining were identified at 14 feet below cellar grade in boring SB06 with a PID reading of 1.6 ppm. Analytical results for soil samples collected from borings SB03 and SB04 exhibited concentrations of petroleum-related VOCs, including benzene, n-propylbenzene, and total xylenes, exceeding UU SCOs. The concentrations of petroleum-related VOCs in the southern portion of the site may be indicative of a historical on-site release associated with former auto repair usage or an adjacent off-site source. Contaminant concentrations above the Part 375 UU SCOs were not identified in native soil underlying historic fill.

7.2 Groundwater Contamination

Groundwater contamination is divided into the following classifications:

1. Petroleum-Contaminated Groundwater
2. Regional Groundwater Quality

3. Arsenic-Contaminated Groundwater

7.2.1 Petroleum-Contaminated Groundwater

During the May/June 2018 RI, sheen and petroleum-like odors were observed during well development/ purging activities at TW03 and TW05. Analytical results for samples collected from wells TW03 and SB-1 (GW) in the southeast and southern portions of the site, respectively, exhibited concentrations of petroleum-related VOCs (1,2,4,5-tetramethylbenzene, 1,2,4-trimethylbenzene, benzene, ethylbenzene, isopropylbenzene, MTBE, naphthalene, n-butylbenzene, n-propylbenzene, sec-butylbenzene) exceeding their respective TOGS Class GA SGVs. Groundwater VOC contamination appears localized to the southern and southeast portions of the site in the vicinity of wells TW03 and SB-1 (GW) and is likely due to a release in this area associated with former auto repair usage or an off-site source migrating to the site.

7.2.2 Regional Groundwater Quality

Metals concentrations detected above TOGS Class GA SGVs include nine total metals (arsenic, copper, iron, lead, magnesium, manganese, selenium, sodium, and thallium) and seven dissolved metals (arsenic, iron, magnesium, manganese, selenium, sodium, and thallium). With the exception of arsenic, the concentrations detected are attributed to regional groundwater contamination and are not considered a localized concern.

7.2.3 Arsenic-Contaminated Groundwater

Arsenic was detected above TOGS Class GA SGVs in four dissolved metal samples. The presence of arsenic at a concentration above its TOGS Class GA SGV may be the result of historical site usage as an auto repair facility or due to the quality of the historic fill. Note that arsenic was not identified in soil above RURR SCOs.

7.3 Soil Vapor Contamination

Total VOC concentrations in soil vapor samples ranged from 101 µg/m³ in SV-1 (Lot 57) to 519,247 µg/m³ in SV04 (Lot 55). The maximum detected concentrations of TCE and PCE in soil vapor and/or sub-slab vapor were 6.9 µg/m³ and 317 µg/m³, respectively, in soil vapor sample SV-1 (May 2014 Phase II ESA) and sub-slab vapor sample SV04 (May/June 2018 RI). In addition, methylene chloride was detected at a maximum concentration of 110 µg/m³ at SV-2 (April 2016 RI). BTEX concentrations detected in soil vapor ranged from 32.1 µg/m³ in SS-3 to 34,240 µg/m³ in SV04 compared to an ambient air concentrations of 8.7 µg/m³. The highest concentrations of CVOCs and BTEX compounds were detected in the southern and southeastern portions of the site. The soil vapor contamination is likely a result of historic site operations (e.g., auto repair) and may have been contributed to by an off-site source (adjacent spills/industrial operations).

8.0 CONCLUSIONS

The conclusions are based on data collected during the May 2014 Phase II ESA, April 2016 RI, and May/June 2018 RI. The findings summarized herein are based on both qualitative data (field observations and instrumental readings), and soil, groundwater, and soil vapor laboratory analytical results. Findings and conclusions are as follows:

1. Stratigraphy: Historic fill was encountered immediately beneath the building foundation slabs and extends to depths varying from about 7.5 to 10 feet bgs at 540 West 29th Street (Lots 56), and from about 3 to 12 feet bgs at 542 West 29th Street (Lot 57). Historic fill was encountered below the cellar slab at 538 West 29th Street (Lot 55) at depths ranging from 3 to 5 feet below cellar grade. The historic fill predominately consists of brown fine- to medium-grained sand with varying amounts of gravel, concrete, asphalt, charcoal, slag, ash, wood, brick, and glass. The layer of historic fill is typical for this area of NYC. The fill layer is underlain by native soils typically consisting of reddish-brown to olive, fine- to medium-grained silty sand with varying amounts of gravel and silt. Petroleum impacts, evidenced by odors, staining, and/or PID readings above background levels, were apparent in two soil borings (SB03 and SB06) at depths ranging from about 0 to 10 feet bgs and 14 to 15 feet bgs, respectively.
2. Hydrogeology: Groundwater was encountered at 3.2 feet below cellar grade at 538 West 29th Street (Lot 55), 9.2 to 11 feet bgs at 540 West 29th Street (Lot 56) and from 8 to 11.51 feet bgs at 542 West 29th Street (Lot 57). Based on the well gauging results, groundwater appears to flow west toward the Hudson River, which is relatively consistent with regional topography.
3. Historic Fill Quality: Fill contains SVOCs and metals at concentrations above UU, RURR and/or CU SCOs. VOCs were also identified within the historic fill, but are likely associated with the petroleum impacts discussed below.
4. Native Soil: The native soil samples did not exceed the Part 375 UU SCOs.
5. Groundwater Quality: VOCs, SVOCs, and metals (total and dissolved) were detected at concentrations above the TOGS Class GA SGVs in multiple groundwater samples collected from across the site footprint. The metals are considered typical of regional groundwater conditions, with the exception of arsenic. Arsenic is likely attributed to as off-site source, regional conditions or interference from the soil matrix (entrained sediment) in groundwater samples. Note that arsenic was not identified in soil above RURR SCOs.
6. Petroleum-Impacted Soil, Groundwater and Soil Vapor:
 - a. Petroleum impacts, evidenced by odors, staining, and/or PID readings above background levels, were apparent in two soil borings (SB03 and SB06) at depths ranging from about 0 to 10 feet bgs and 14 to 15 feet bgs, respectively.

Petroleum-related VOCs were detected in two soil borings (SB03 and SB04) collected from 0 to 4 feet bgs and 1 to 3 feet bgs, respectively, at concentrations exceeding UU SCOs. Potential petroleum-related SVOCs were detected in 7 soil samples collected from 0 to 8 feet bgs at concentrations exceeding UU, RURR, and/or CU SCOs. The total VOC and SVOC concentrations detected throughout the site indicate petroleum impacts are likely the result of a historical spill from former site usage or indicate a potential off-site source.

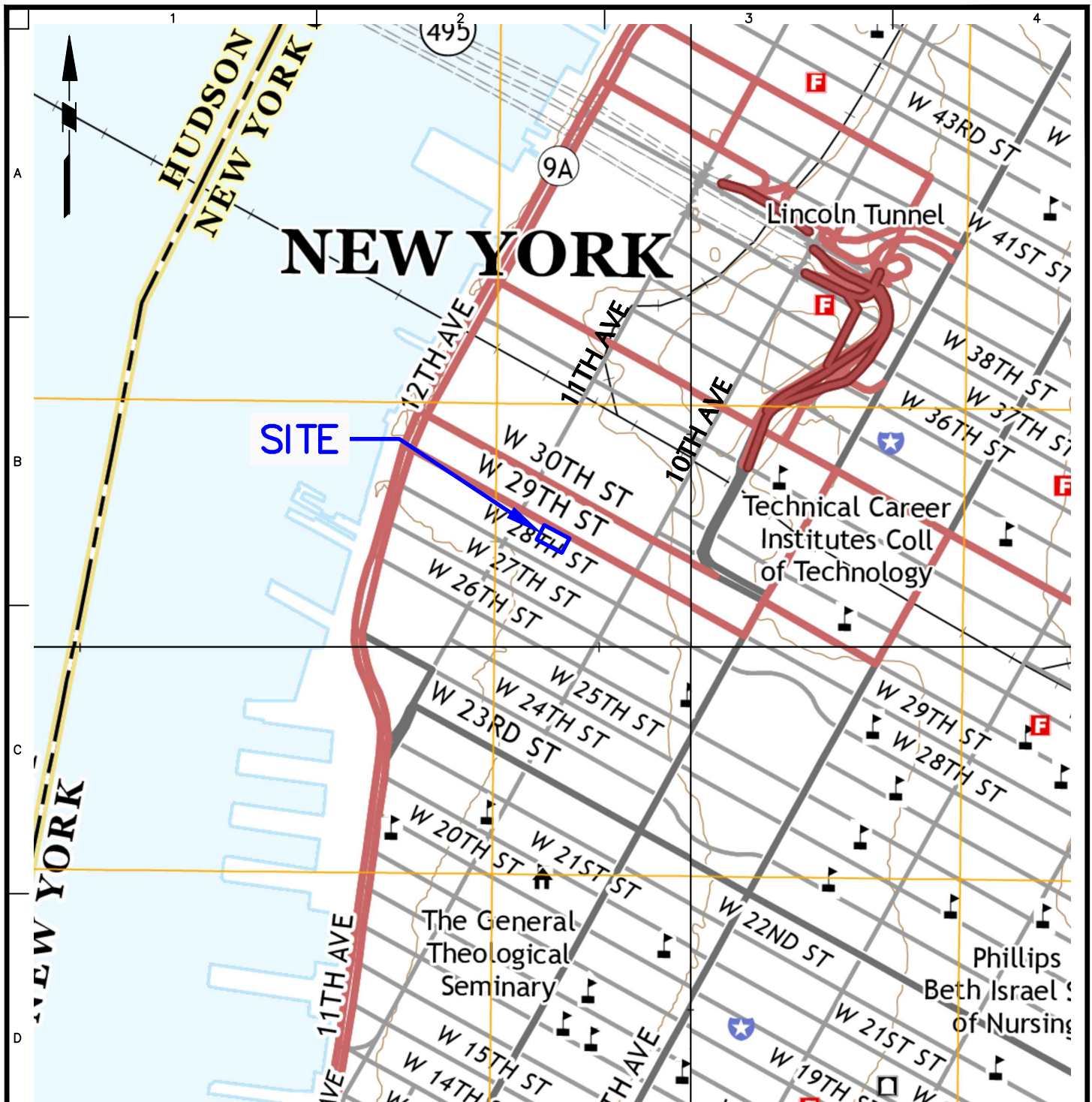
- b. Petroleum-related VOCs were detected in groundwater at concentrations exceeding TOGS Class GA SGVs at wells located in the southern and southeastern portions of the site. An elevated headspace reading and petroleum-like odors were observed in the monitoring well TW03 (47.9 ppm).
 - c. Elevated BTEX compounds above background levels were detected in soil vapor samples throughout the site. BTEX concentrations detected in soil vapor ranged from about 32.1 $\mu\text{g}/\text{m}^3$ in SS-3 to 34,240 $\mu\text{g}/\text{m}^3$ in SV04 compared to an ambient air concentrations of 8.42 $\mu\text{g}/\text{m}^3$ and 8.7 $\mu\text{g}/\text{m}^3$, respectively. Total VOC concentrations in soil vapor samples ranged from 101 $\mu\text{g}/\text{m}^3$ in SV-1 (Lot 57) to 519,247 $\mu\text{g}/\text{m}^3$ in SV04 (Lot 55).
 - d. Based on the field observations and analytical results of soil, soil vapor and groundwater sampling at the site, two petroleum spills were reported to the NYSDEC for Lot 55 (Spill No. 1805506- 538 West 29th Street) and Lot 56 (Spill No. 1805508- 540 West 29th Street). The presence of petroleum-related VOCs in soil, groundwater and soil vapor may be attributed to a combination of releases from site operations (former auto repair) and adjacent and surrounding properties.
7. CVOC-Impacted Soil Vapor: CVOCs were identified in soil vapor and sub-slab vapor samples collected across the site, with the highest concentrations located in the southern and southeast portions of the site. No standard currently exists for soil vapor samples in New York State. For reference, soil vapor samples were compared to NYSDOH AGVs. The maximum detected concentrations above AGVs of TCE and PCE in soil vapor and/or sub-slab vapor were 6.9 and 317 $\mu\text{g}/\text{m}^3$, respectively. In addition, methylene chloride was detected at a maximum concentration of 110 $\mu\text{g}/\text{m}^3$ at SV02 in exceedance of its associated AGV of 60 $\mu\text{g}/\text{m}^3$. Where paired indoor air and sub-slab vapor samples were collected, the NYSDOH decision matrices were used to evaluate recommended actions (e.g., monitor, mitigate). The NYSDOH decision matrix recommendations include "No Further Action" for detected compounds.
8. Sufficient analytical data was gathered during the previous studies to establish site-specific soil cleanup levels and to develop a remedy for the site. To better delineate the petroleum spill impacts, a supplemental remedial investigation will be performed along the southern site boundary to further evaluate AOCs and COCs defined across the site.

The supplemental results and the final remedy will be described and evaluated in a RAWP prepared in accordance with NYS BCP guidelines. The remedy will address historic fill impacted with SVOCs and metals, petroleum impacted soil, groundwater and soil vapor and arsenic in groundwater.

9.0 REFERENCES

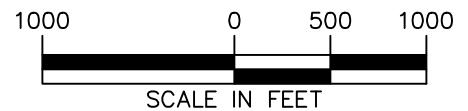
1. New York State Department of Health, Final Guidance for the Evaluation of Soil Vapor Intrusion in the State of New York, dated October 2006 and applicable revisions (March 2017).
2. New York State Department of Environmental Conservation, Division of Environmental Remediation, Draft Brownfield Cleanup Program Guide, dated May 2004.
3. New York State Department of Environmental Conservation, DER-10 Technical Guidance for Site Investigation and Remediation, issued May 3, 2010; effective June 18, 2010.
4. New York State Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) dated June 1998.
5. United States Environmental Protection Agency, Low Flow Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells, EQASOP-GW 001, January 19, 2010.
6. New York State Department of Environmental Conservation, Part 375 of Title 6 of the New York Compilation of Codes, Rules, and Regulations, Effective December 14, 2006.
7. AEI Consultants, Phase I Environmental Site Assessment, dated April 2, 2014
8. P.W. Grosser Consulting, Inc., Phase II Environmental Site Assessment, dated May 2014
9. Hydro Tech Environmental Engineering and Geology, DPC, Remedial Investigation Report, dated June 2016.
10. Geoland Land Surveying P.C., Architectural Survey, dated April 3, 2018.
11. USGS, Bedrock and Engineering Geologic Maps of New York County and Parts Kings and Queens Counties, New York, and Parts of Bergen and Hudson Counties, New Jersey.

FIGURES



NOTES:

1. SITE BOUNDARY IS APPROXIMATE.
2. BASE MAP TAKEN FROM UNITED STATES GEOLOGICAL SURVEY 7.5 MINUTE TOPOGRAPHIC MAPS FOR THE BROOKLYN, CENTRAL PARK, JERSEY CITY AND WEEHAWKEN QUADRANGLES, DATED 2016.



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Project

**538-542 WEST
29TH STREET**

BLOCK No. 700, LOT Nos. 55,
56 & 57

NEW YORK

NEW YORK

Figure Title

**SITE
LOCATION
MAP**

Project No.

170515401

Date

10/19/2018

Drawn By

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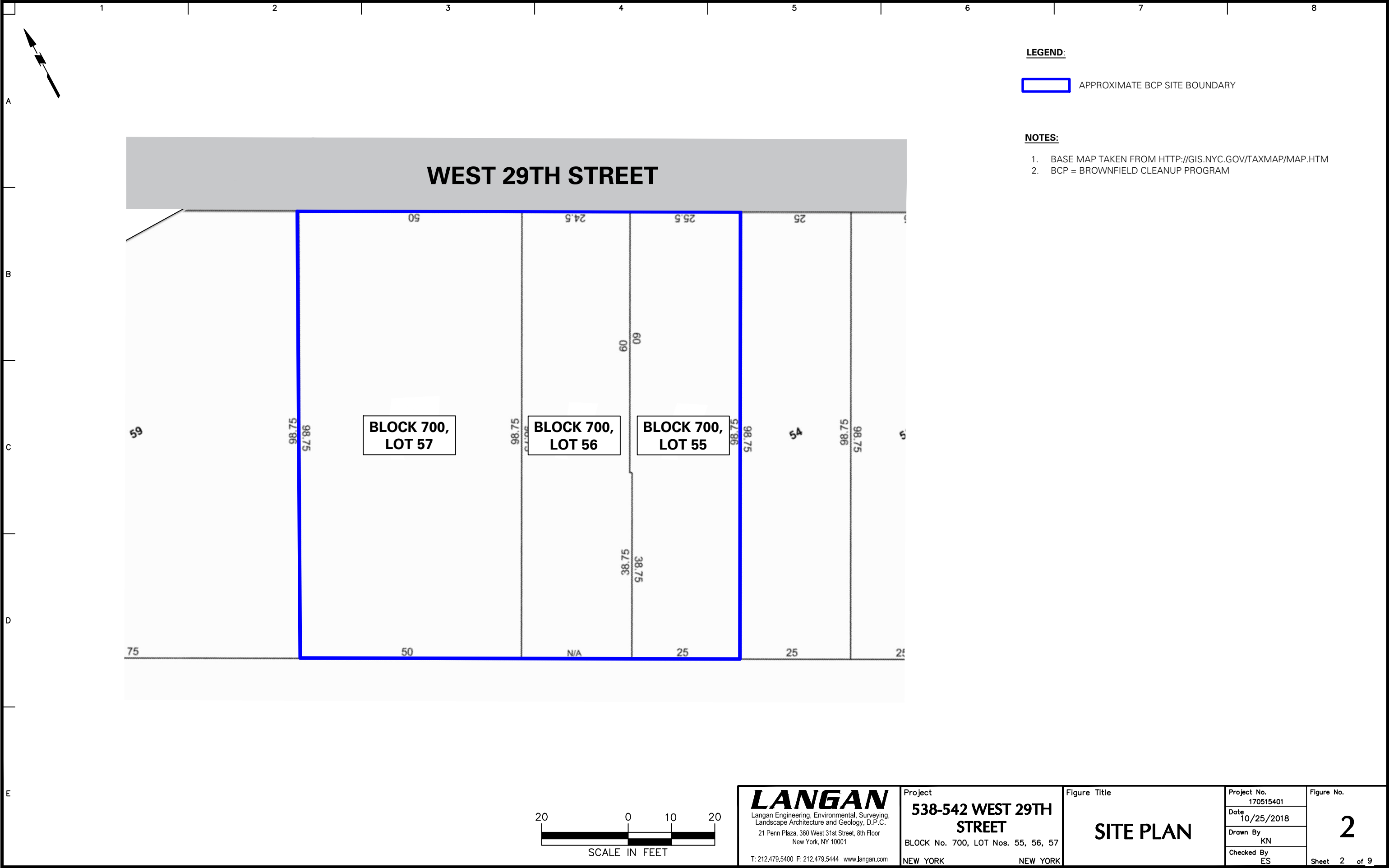
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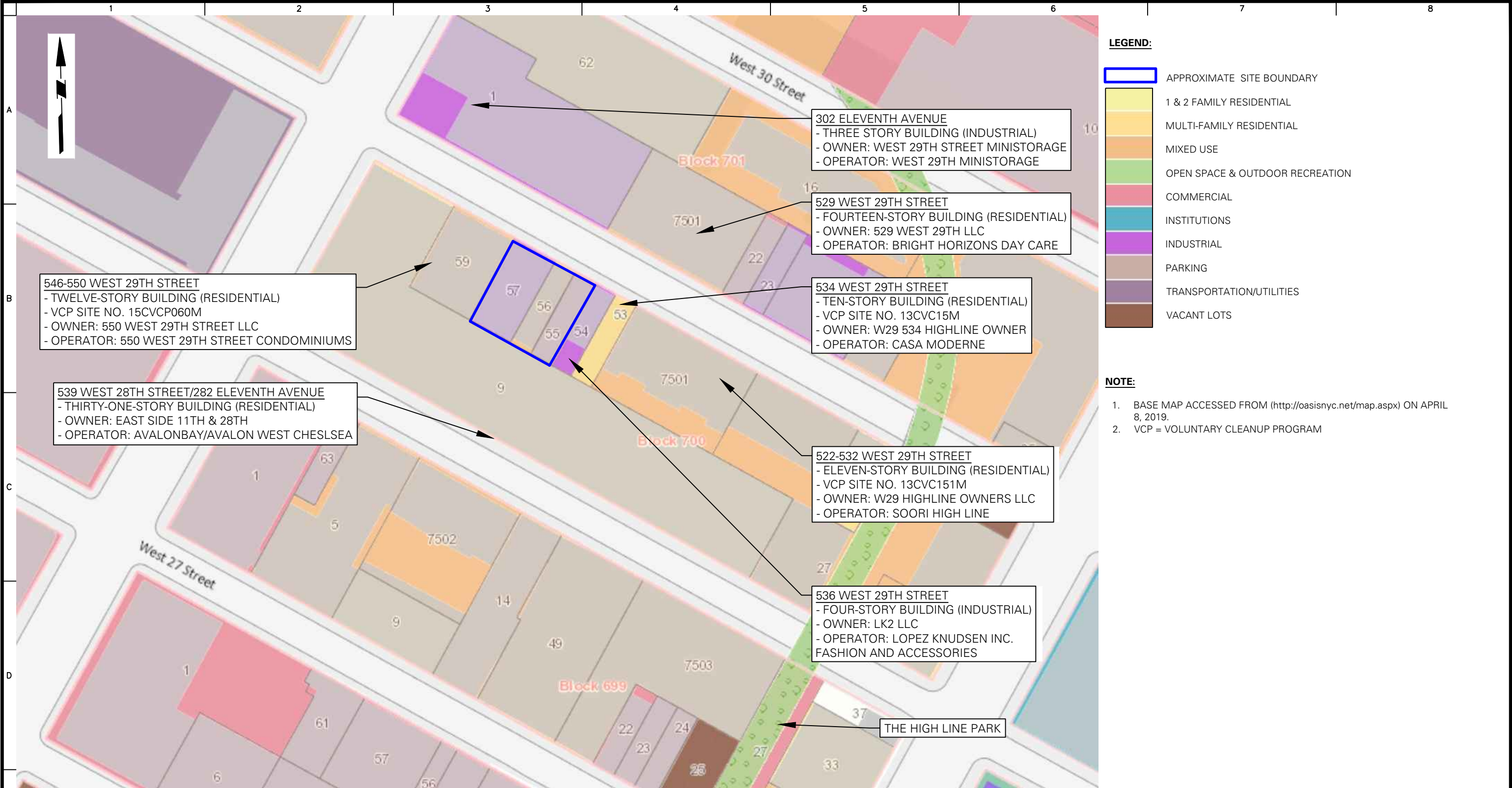
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Figure No.

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Sheet 1 of 9

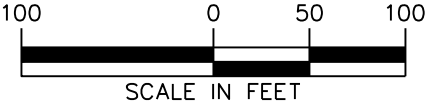




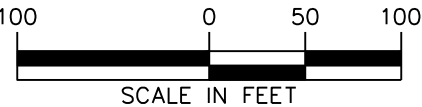
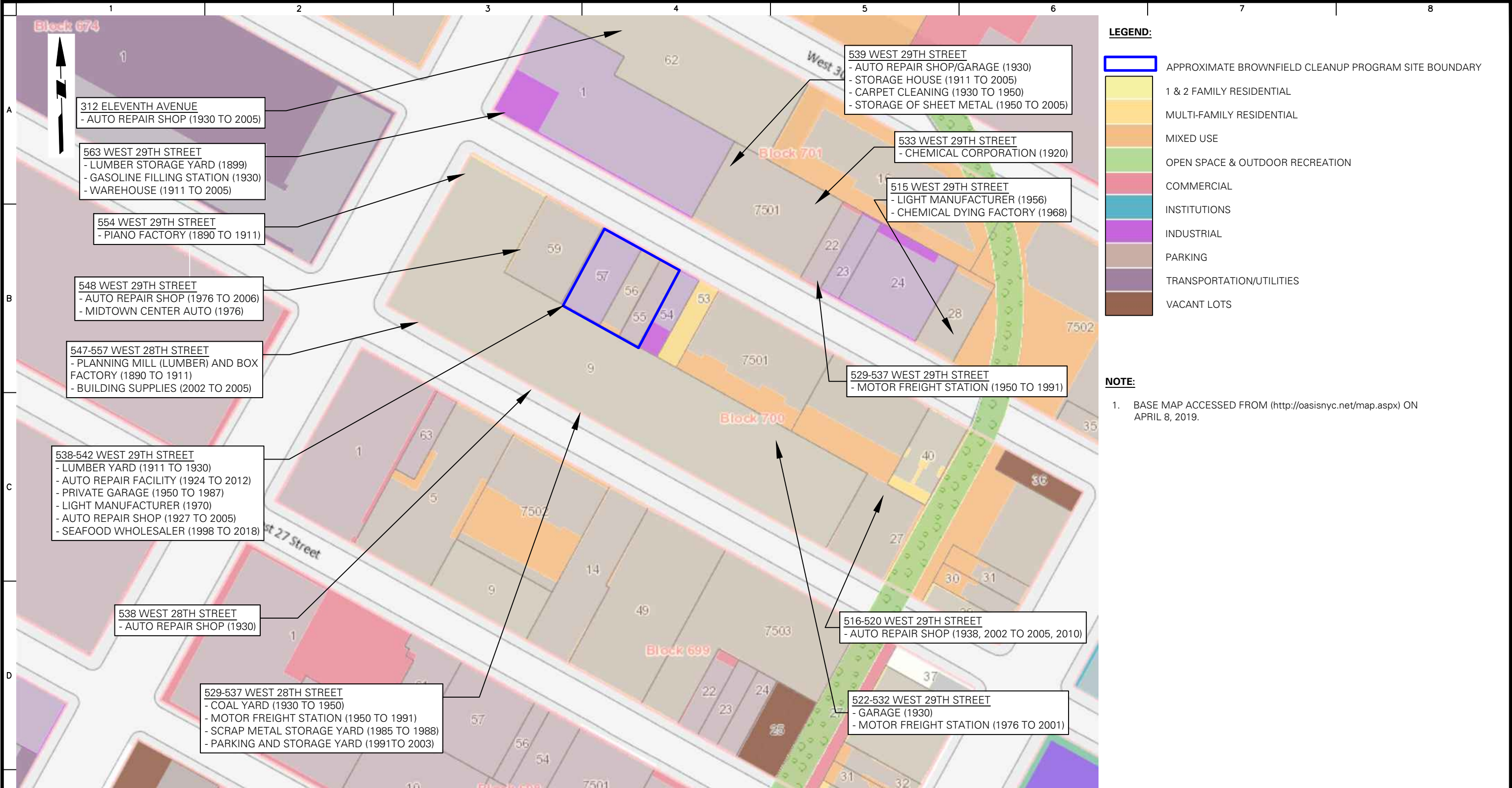
LEGEND:

- APPROXIMATE SITE BOUNDARY
- 1 & 2 FAMILY RESIDENTIAL
- MULTI-FAMILY RESIDENTIAL
- MIXED USE
- OPEN SPACE & OUTDOOR RECREATION
- COMMERCIAL
- INSTITUTIONS
- INDUSTRIAL
- PARKING
- TRANSPORTATION/UTILITIES
- VACANT LOTS

- NOTE:**
- BASE MAP ACCESSED FROM (<http://oasisnyc.net/map.aspx>) ON APRIL 8, 2019.
 - VCP = VOLUNTARY CLEANUP PROGRAM



LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor New York, NY 10001 T: 212.479.5400 F: 212.479.5444 www.langan.com	Project 538-542 WEST 29TH STREET BLOCK No. 700, LOT Nos. 55, 56, 57 NEW YORK NEW YORK	Figure Title ADJOINING PROPERTIES AND SURROUNDING USES MAP	Project No. 170515401 Date 03/28/2019 Drawn By KN Checked By ES	Figure No. 3 Sheet 3 of 9

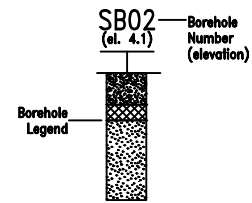


LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor New York, NY 10001 T: 212.479.5400 F: 212.479.5444 www.langan.com	Project 538-542 WEST 29TH STREET BLOCK No. 700, LOT Nos. 55, 56, 57 NEW YORK NEW YORK	Figure Title HISTORICAL SITE AND SURROUNDING LAND USES MAP	Project No. 170515401	Figure No. 4
			Date 03/28/2019	
			Drawn By KN	
			Checked By ES	Sheet 4 of 9

- NOTES:**

1. BASE MAP IS REFERENCED FROM "ARCHITECTURAL SURVEY", PREPARED BY GEOLAND LAND SURVEYING P.C., DATED APRIL 3, 2018.
2. BORING LOCATIONS ARE APPROXIMATE.
3. THIS PROFILE REPRESENTS A GENERALIZED SOIL CROSS SECTION INTERPRETED FROM WIDELY SPACED BORINGS. SOIL AND GROUNDWATER MAY VARY IN TYPE, LOCATION, ELEVATION, AND ENVIRONMENTAL AND ENGINEERING PROPERTIES BETWEEN POINTS OF EXPLORATION. VARIATIONS IN SUBSURFACE CONDITIONS SHOULD BE EXPECTED BETWEEN BORINGS.
4. ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). ALL ELEVATIONS ARE APPROXIMATE.

EXPLANATION:



LEGEND:

- APPROXIMATE BROWNFIELD CLEANUP PROGRAM
BOUNDARY**
- (GW)**  PREVIOUS SOIL BORING LOCATION (MAY 2014,
PERFORMED BY PWGC STRATEGIC ENVIRONMENTAL
AND ENGINEERING SOLUTIONS)
- SP-4**  PREVIOUS SOIL BORING LOCATION (APRIL 2016,
PERFORMED BY HYDRO TECH ENVIRONMENTAL, DPC)
- MW-1/SP-1**  PREVIOUS SOIL BORING LOCATION WITH OVERBURDEN
MONITORING WELL (APRIL 2016, PERFORMED BY
HYDRO TECH ENVIRONMENTAL, DPC)

- SB04 SOIL BORING LOCATION (JUNE 2018, PERFORMED BY LANGAN)

SB01/TW01 SOIL BORING LOCATION WITH OVERBURDEN TEMPORARY MONITORING WELL (JUNE 2018, PERFORMED BY LANGAN)

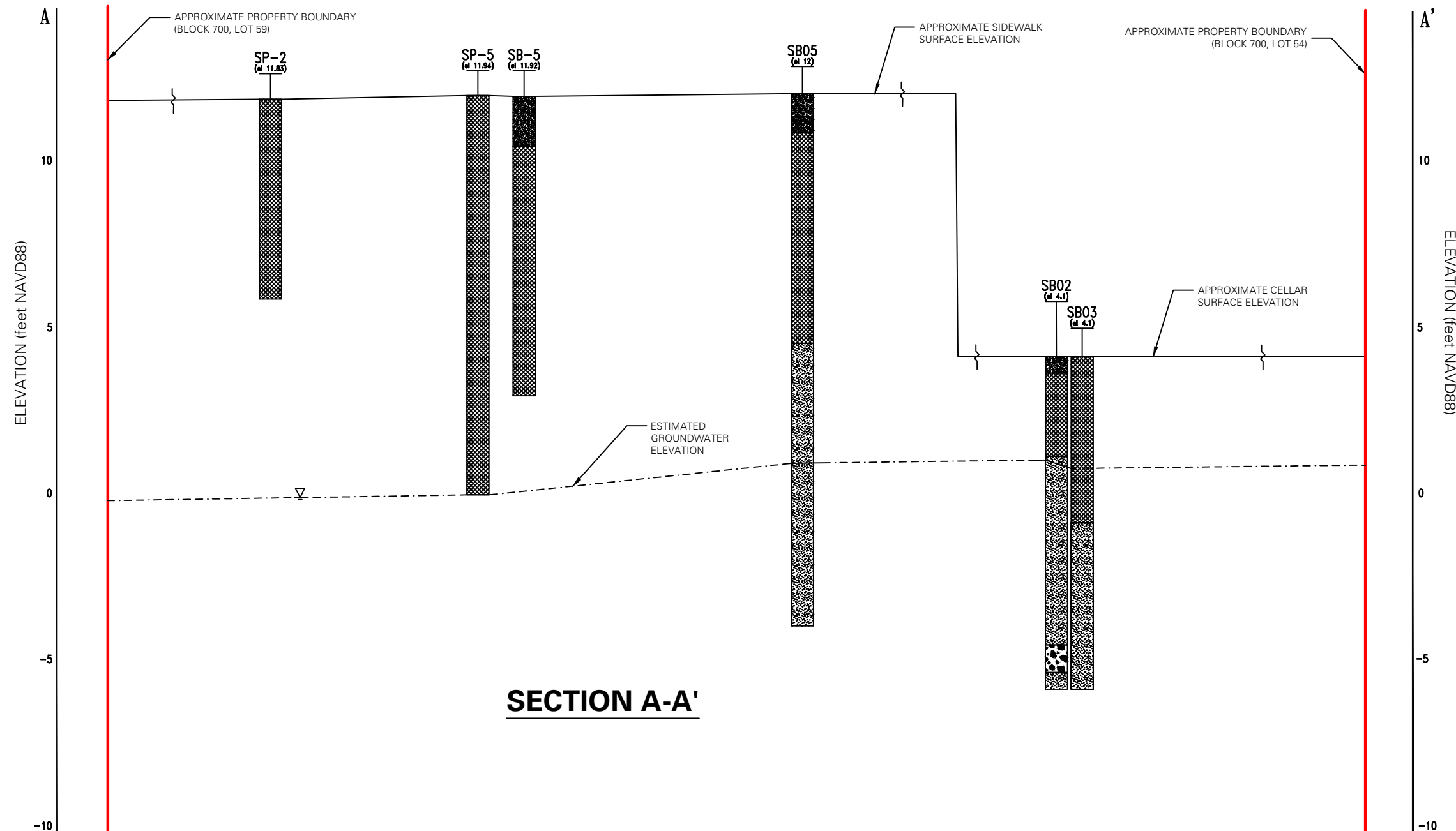
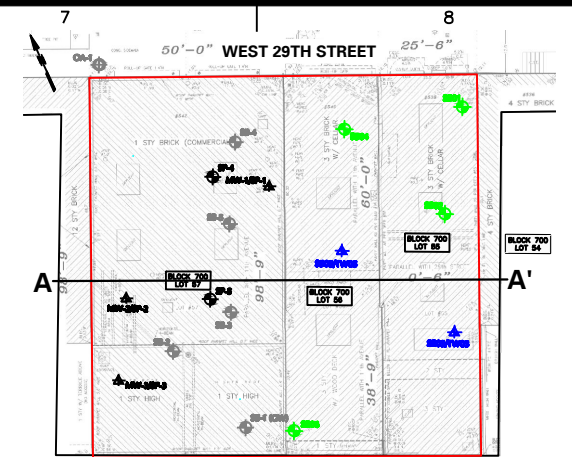
▽ APPROXIMATE GROUNDWATER ELEVATION

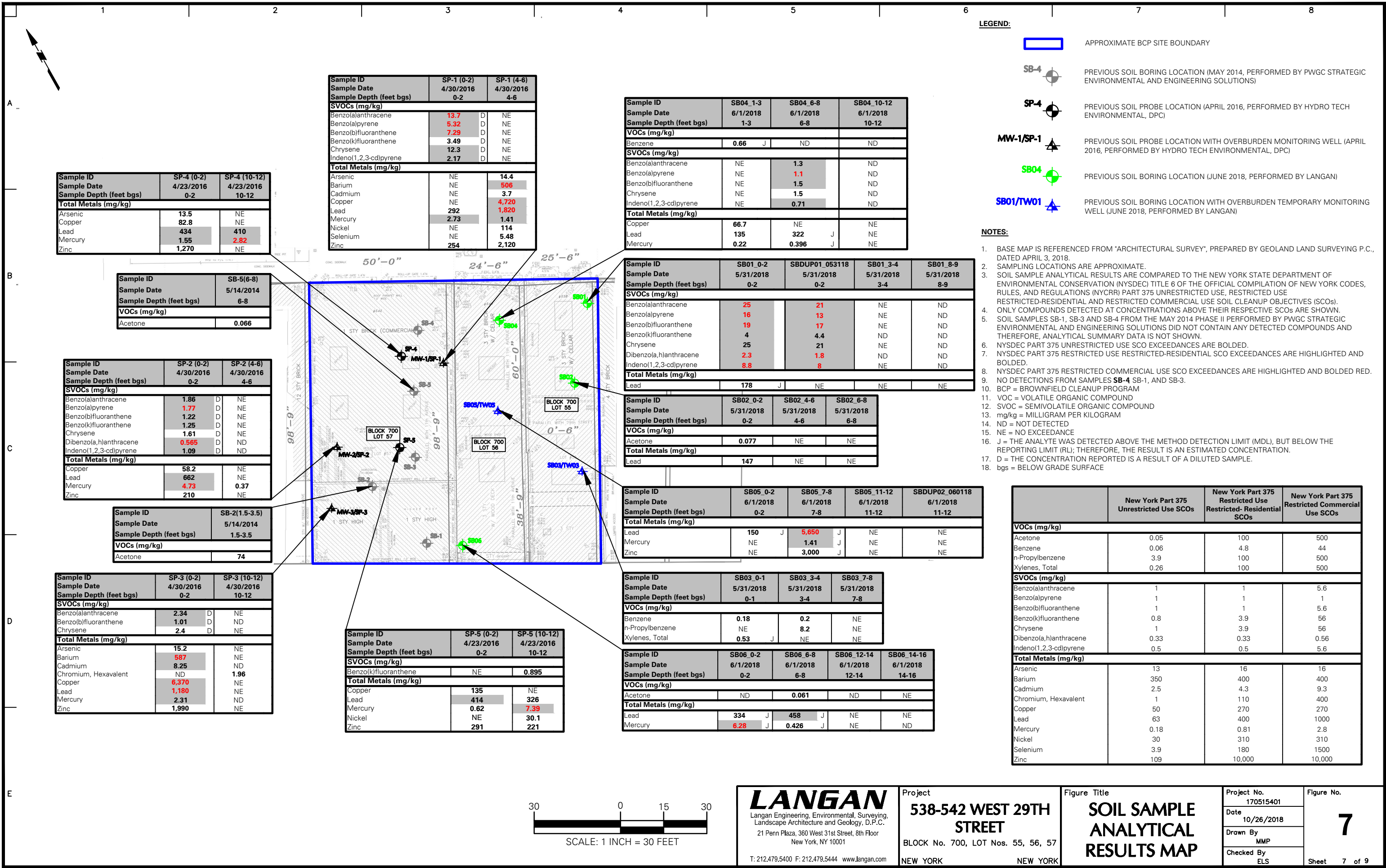
CONCRETE

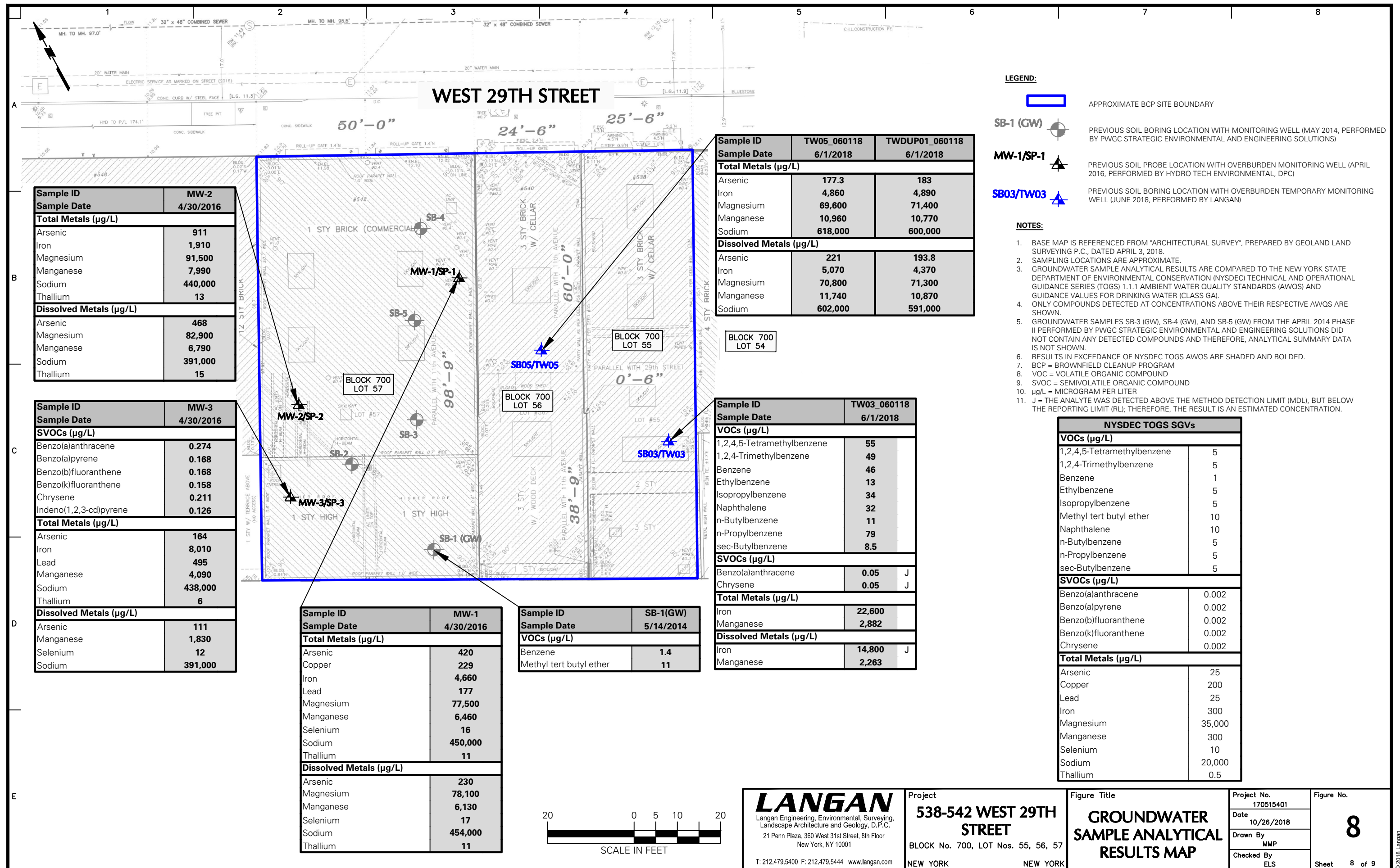
SAND

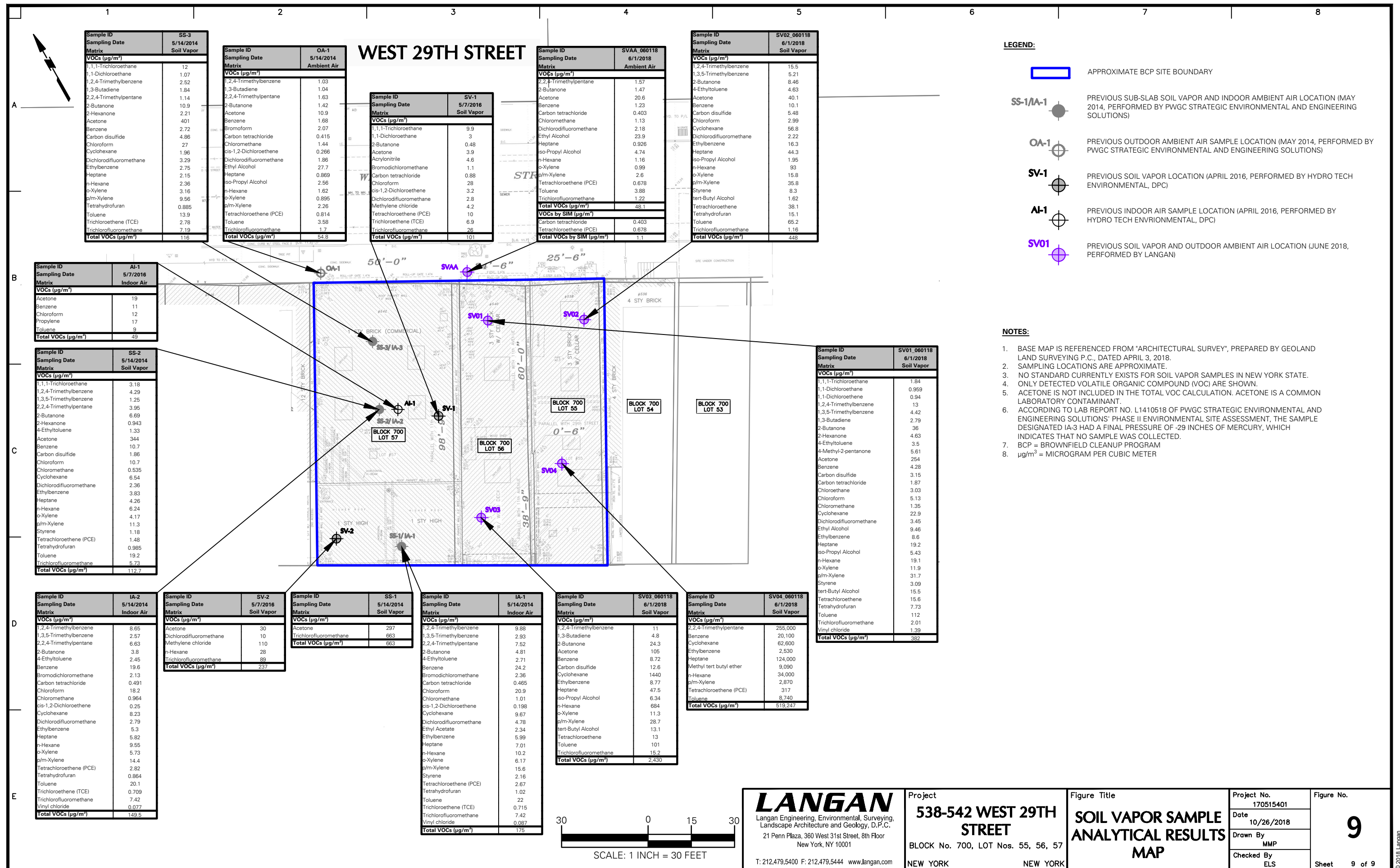
FILL

GRAVEL









TABLES

Table 1
Sample Collection Summary
Remedial Investigation Report

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Boring Location	Sample Name	Sample Depth (feet bgs)	Date	Investigation	Target Sample Interval	Analysis
Soil						
SB-1	SB-1 (6-8)	6-8	5/14/2014	2014 Phase II ESA	Top of groundwater table	TCL VOCs
SB-2	SB-2 (1.5-3.5)	1.5-3.5			Top of groundwater table	
SB-4	SB-4 (6-8)	6-8			Top of groundwater table	
SB-5	SB-5 (6-8)	6-8			Top of groundwater table	
SP-1	SP-1 (0-2)	0-2	4/30/2016	2016 RI	Shallow fill 0-2'	TCL VOCs, SVOCs, Pesticides, PCBs, TAL Metals
	SP-1 (4-6)	4-6			Deep fill 4-6'	
SP-2	SP-2 (0-2)	0-2			Shallow fill 0-2'	
	SP-2 (4-6)	4-6			Deep fill 4-6'	
SP-3	SP-3 (0-2)	0-2			Shallow fill 0-2'	
	SP-3 (10-12)	10-12			Groundwater interface	
SP-4	SP-4 (0-2)	0-2	4/23/2016		Shallow fill 0-2'	
	SP-4 (10-12)	10-12			Groundwater interface	
SP-5	SP-5 (0-2)	0-2			Shallow fill 0-2'	
	SP-5 (10-12)	10-12			Groundwater interface	
SB01	SB01_0-2	0-2	5/31/2018	2018 RI	Shallow fill 0-2'	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides, Herbicides, and Part 375/ TAL Metals (including Hexavalent chromium, Trivalent chromium and Total cyanide)
	SB01_3-4	3-4			Fill material	
	SB01_8-9	8-9			Native material	
SB02	SB02_0-2	0-2			Shallow fill 0-2'	
	SB02_4-6	4.5-6			Native material	
	SB02_6-8	6-8			Native material	
SB03/TW03	SB03_0-1	0-1			Shallow fill 0-2'	
	SB03_3-4	3-4			Most contaminated	
	SB03_7-8	7-8			Native material	
SB04	SB04_1-3	1-3	6/1/2018		Shallow fill 0-2'	
	SB04_6-8	6-8			Native material	
	SB04_10-12	10-12			Native material	
SB05	SB05_0-2	0-2			Shallow fill 0-2'	
	SB05_7-8	7-8			Bottom of fill material	
	SB05_11-12	11-12			Native material	
SB06/TW06	SB06_0-2	0-2			Shallow fill 0-2'	
	SB06_6-8	6-8			Fill material	
	SB06_12-14	12-14			Native material	
	SB06_14-16	14-16			Most contaminated	
Groundwater						
SB01	SB-1	5-9	5/14/2014	2014 Phase II ESA	Top of water table	TCL VOCs
SB04	SB-4					
SB05	SB-5					
MW-1	MW-1	6-21	5/7/2016	2016 RI	5 feet above the groundwater level to 10 feet below the groundwater level	VOCs, SVOCs, Pesticides, PCBs, TAL Metals, Hexavalent chromium and Trivalent chromium
MW-2	MW-2					
MW-3	MW-3					
TW03	TW03_060118	0-10	6/1/2018	2018 RI	Well screens straddles water table	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
TW05	TW05_060118	6-16				
Soil Vapor						
SS-1	SS-1	0.2 (below slab)	5/14/2014	2014 Phase II ESA	Sub-slab	TO-15 VOCs
SS-2	SS-2					
SS-3	SS-3					
IA-1	IA-1	NA			Indoor Ambient Air	
IA-2	IA-2					
IA-3	IA-3					
OA-1	OA-1				Outdoor Ambient Air	
SV-1	SV-1	6	5/7/2016	2016 RI	2 feet above groundwater table	
SV-2	SV-2	6			Indoor Ambient Air	
AI-1	AI-1	NA				
SV01	SV01_060118	7	6/1/2018	2018 RI	2 feet above groundwater table	
SV02	SV02_060118	0.6			Sub-slab	
SV03	SV03_060118	7			2 feet above groundwater table	
SV04	SV04_060118	0.6			Sub-slab	
NA	AA01_060118	NA			Outdoor Ambient Air	

Notes and Qualifiers:

1. TCL = Target Compound List

2. TAL = Target Analyte List

3. VOC = Volatile Organic Compound

4. SVOC = Semivolatile Organic Compound

5. PCBs = Polychlorinated biphenyls

6. bgs = Below grade surface

7. NA = Not Applicable
8. TO-15 = Compendium Method TO-15 used to determine toxic organic compounds in soil vapor and ambient air samples

9. SODUP01_053118 is a duplicate of the parent sample SB01_0-2

10. SODUP02_060118 is a duplicate of the parent sample SB05_11-12

11. GWDUP01_060118 is a duplicate of the parent sample TW05_060118

12. Phase II Environmental Site Assessment (ESA) completed by PWGC Strategic Environmental and Engineering Solutions in May 2014.

13. Remedial Investigation (RI) completed by Hydro Tech Environmental, DPC in April 2016.

14. RI completed by Langan in May-June 2018.

Table 1
Sample Collection Summary
Remedial Investigation Report

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Boring Location	Sample Name	Sample Depth (feet bgs)	Date	Investigation	Target Sample Interval	Analysis
Quality Assurance/Quality Control						
Trip Blank	Trip Blank	NA	5/7/2016	2016 RI	Trip Blank	TCL VOCs
FB-1	FB-1				Field Blank	VOCs, SVOCs, Pesticides/PCBs, TAL Metals, Hexavalent chromium and Trivalent chromium
SB01	SBDUP01_053118	0-2	5/31/2018	2018 RI	SB01_0-2 Duplicate	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides, Herbicides, and Part 375/ TAL Metals (including Hexavalent chromium, Trivalent chromium and Total cyanide)
SB05	SBDUP02_060118	11-12	6/1/2018		SB05_11-12 Duplicate	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
SB05	TWDUP01_060118	6-16			TW05_060118 Duplicate	
NA	SBTB01_053118	NA	5/31/2018		Day 1: Cooler #1	TCL VOCs
NA	SBTB02_060118		6/1/2018		Day 2: Cooler #1	
NA	GWTB01_060118				Day 2: Cooler #2	

- Notes and Qualifiers:
1. TCL = Target Compound List

2. TAL = Target Analyte List

3. VOC = Volatile Organic Compound

4. SVOC = Semivolatile Organic Compound

5. PCBs = Polychlorinated biphenyls

6. bgs = Below grade surface

7. NA = Not Applicable
8. TO-15 = Compendium Method TO-15 used to determine toxic organic compounds in soil vapor and ambient air samples

9. SODUP01_053118 is a duplicate of the parent sample SB01_0-2

10. SODUP02_060118 is a duplicate of the parent sample SB05_11-12

11. GWDUP01_060118 is a duplicate of the parent sample TW05_060118

12. Phase II Environmental Site Assessment (ESA) completed by PWGC Strategic Environmental and Engineering Solutions in May 2014.

13. Remedial Investigation (RI) completed by Hydro Tech Environmental, DPC in April 2016.

14. Phase II Environmental Site Investigation (ESI) completed by Langan in May-June 2018.

Table 2
Monitoring Well Construction Summary
Remedial Investigation Report

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Well ID	Investigation	Installation Location	Installation Date	Well Status	Screened Interval (feet bgs)	Total Depth (feet bgs)	Construction Material
MW-1	RI 2016	Lot 57 - First Floor	5/7/2016	Permanent	6-21	21	1-inch diameter, PVC
MW-2							
MW-3							
TW03_060118	RI 2018	Lot 55 - Cellar	6/1/2018	Temporary	0-10	10	
TW05_060118		Lot 56 - First Floor			6-16	16	

Notes:

1. bgs = Below grade surface
2. PVC = Polyvinyl chloride
3. Remedial Investigation (RI) completed by Hydro Tech Environmental, DPC in April 2016.
4. RI completed by Langan in May-June 2018.

Table 3A
Soil Sample Analytical Results
Remedial Investigation Report - VOCs

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Investigation Sample Location Sample ID Sampling Date Lab Sample ID Sample Depth (feet bgs)	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	NYSDEC Part 375 Restricted Commercial Use SCOs	Phase II ESA 2014				RI 2016										RI 2018			
				SB-1	SB-2	SB-4	SB-5	SP-1		SP-2		SP-3		SP-4		SP-5		SB01			
				SB-1 6-8	SB-2 1.5-3.5	SB-4 6-8	SB-5 6-8	SP-1 0-2	SP-1 4-6	SP-2 0-2	SP-2 4-6	SP-3 0-2	SP-3 10-12	SP-4 0-2	SP-4 10-12	SP-5 0-2	SP-5 10-12	SB01 0-2	SBDUP01_053118	SB01 3-4	SB01 8-9
				5/14/2014 L1410502-01 6-8	5/14/2014 L1410502-02 1.5-3.5	5/14/2014 L1410502-03 6-8	5/14/2014 L1410502-04 6-8	4/30/2016 16E0060-01 0-2	4/30/2016 16E0060-02 4-6	4/30/2016 16E0060-03 0-2	4/30/2016 16E0060-04 4-6	4/23/2016 16E0060-05 0-2	4/23/2016 16E0060-06 10-12	4/23/2016 16D0971-01 0-2	4/23/2016 16D0971-02 10-12	4/23/2016 16D0971-03 0-2	4/23/2016 16D0971-05 10-12	5/31/2018 L1820045-01 0-2	5/31/2018 L1820045-10 0-2	5/31/2018 L1820045-02 3-4	5/31/2018 L1820045-03 8-9
Volatile Organic Compounds by Method 8260/5035 (mg/kg)																					
1,1-Dichloropropene	~	~	~	0.0062 U	0.0067 U	0.0093 U	0.0092 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0054 U	0.0048 U	NT	0.006 U
1,2,4,5-Tetramethylbenzene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0043 U	0.0038 U	0.0032 U	0.0048 U
1,2,4-Trimethylbenzene	3.6	52	~	0.0062 U	0.0067 U	0.0093 U	0.0092 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0054 U	0.0048 U	0.004 U	0.006 U
1,2-Dichloroethene, Total	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0011 U	0.00096 U	0.0008 U	0.0013 U
1,3,5-Trimethylbenzene	8.4	52	~	0.0062 U	0.0067 U	0.0093 U	0.0092 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0054 U	0.0048 U	0.004 U	0.006 U
2-Butanone	0.12	100	500	0.012 U	0.0036 J	0.018 U	0.018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0053 U	0.0022 U	0.011 U	0.0096 U	0.008 U	0.012 U
Acetone	0.05	100	500	0.011 J	74	0.024	0.066	0.0077 J	0.0074 J	0.018	0.0046 U	0.008 U	0.0051 U	0.028	0.007 J	0.038	0.0044 U	0.011 U	0.0029 J	0.0073 J	0.02
Benzene	0.06	4.8	44	0.0012 U	0.0013 U	0.0018 U	0.0018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0011 U	0.00096 U	0.0008 U	0.0012 U
Bromochloromethane	~	~	~	0.0062 U	0.0067 U	0.0093 U	0.0092 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0054 U	0.0048 U	0.004 U	0.006 U
Carbon disulfide	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.011 U	0.0096 U	0.008 U	0.012 U
Chloroform	0.37	49	350	0.0018 U	0.002 U	0.0013 J	0.0028 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0016 U	0.0014 U	0.0012 U	0.0018 U
cis-1,2-Dichloroethene	0.25	100	500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0011 U	0.00096 U	0.0008 U	0.0013 J
cis-1,3-Dichloropropene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0011 U	0.00096 U	0.0008 U	0.0012 U
Dichlorodifluoromethane	~	~	~	0.012 U	0.13	0.018 U	0.018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.011 U	0.0096 U	0.008 U	0.012 U
Ethyl Benzene	1	41	390	0.0012 U	0.0013 U	0.0018 U	0.0018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0011 U	0.00096 U	0.0008 U	0.0012 U
Isopropylbenzene	~	~	~	0.0012 U	0.0013 U	0.0018 U	0.0018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0011 U	0.00096 U	0.0008 U	0.0012 U
Methylene chloride	0.05	100	500	0.0028 J	0.0032 J	0.004	0.0068 J	0.021 B	0.018 B	0.048 B	0.0046 U	0.008 U	0.0051 U	0.0075 U	0.0048 U	0.0051 U	0.0044 U	0.011 U	0.0096 U	0.008 U	0.012 U
Methyl tert-butyl ether (MTBE)	0.93	100	500	0.0025 U	0.0027 U	0.0037 U	0.0037 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0021 U	0.0019 U	0.0016 U	0.0024 U
Naphthalene	12	100	500	NT	NT	NT	NT	0.0074 JB	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.015 J	0.0018 J	0.0055 J	0.011 J
n-Butylbenzene	12	100	500	0.0012 U	0.0013 U	0.0018 U	0.0018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0011 U	0.00096 U	0.0008 U	0.0012 U
n-Propylbenzene	3.9	100	500	0.0012 U	0.0013 U	0.0018 U	0.0018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0011 U	0.00096 U	0.0008 U	0.0012 U
o-Xylene	~	~	~	0.0025 U	0.0027 U	0.0037 U	0.0037 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0021 U	0.0019 U	0.0016 U	0.0024 U
p- & m- Xylenes	~	~	~	0.0012 U	0.0013 U	0.0018 U	0.0018 U	0.0054 U	0.0057 U	0.0055 U	0.0046 U	0.008 U	0.0051 U	0.0075 U	0.0048 U	0.0051 U	0.0044 U	0.0021 U	0.0019 U	0.0016 U	0.0024 U
p-Chlorotoluene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0054 U	0.0048 U	0.004 U	0.006 U
p-Diethylbenzene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0043 U	0.0038 U	0.0032 U	0.0048 U
p-Ethyltoluene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0043 U	0.0038 U	0.0032 U	0.0048 U
p-Isopropyltoluene	~	~	~	0.0012 U	0.0013 U	0.0018 U	0.0018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0011 U	0.00096 U	0.0008 U	0.0012 U
sec-Butylbenzene	11	100	500	0.0012 U	0.0013 U	0.0018 U	0.0018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0011 U	0.00096 U	0.0008 U	0.0012 U
tert-Butylbenzene	5.9	100	500	0.0062 U	0.0067 U	0.0093 U	0.0092 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0054 U	0.0048 U	0.004 U	0.006 U
Tetrachloroethene	1.3	19	150	0.0012 U	0.0013 U	0.0018 U	0.0018 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0011 U	0.00096 U	0.0008 U	0.0012 U
Toluene	0.7	100	500	0.0018 U	0.002 U	0.0028 U	0.0028 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0016 U	0.0014 U	0.0012 U	0.0018 U
Trichloroethene	0.47	21	200	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0011 U	0.00096 U	0.0008 U	0.0012 U
Trichlorofluoromethane	~	~	~	0.0062 U	0.0071	0.0093 U	0.0093 U	0.0027 U	0.0029 U	0.0027 U	0.0023 U	0.004 U	0.0026 U	0.0038 U	0.0024 U	0.0026 U	0.0022 U	0.0054 U	0.0048 U	0.004 U	0.006 U
Xylenes, Total	0.26	100	500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0021 U	0.0019 U	0.0016 U	0.0024 U
Volatile Organic Compounds by Method EPA 5035 High (mg/kg)																					
1,3,5-Trimethylbenzene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Hexanone	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromochloromethane	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,2-Dichloroethene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,3-Dichloropropene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Isopropylbenzene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
n-Butylbenzene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
n-Propylbenzene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
p-Chlorotoluene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
p-Diethylbenzene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Toluene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Trichloroethene	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Xylenes, Total	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes and Qualifiers:

1. Grab soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use, Restricted Use Restricted-Residential, and Restricted Use Commercial Soil Cleanup Objectives (SCOs).
2. Phase II Environmental Site Assessment (ESA) completed by PWGC Strategic Environmental and Engineering Solutions in May 2014.
3. Remedial Investigation (RI) completed by Hydro Tech Environmental, DPC in April 2016.
4. Remedial Investigation (RI) completed by Langan in May-June 2018.
5. Only detected compounds are shown in the table.
6. Compounds detected above Unrestricted Use SCOs are bolded.
7. Compounds with reporting limits (RLs) above the Unrestricted Use are italicized.
8. VOC= Volatile organic compound
9. bgs = Below grade surface
10. mg/kg = Milligram per kilogram
11. ~ = Criterion does not exist.
12. Sample SBDUP01_053118 is a duplicate sample of SB01_0-2.
13. Sample SBDUP02_060118 is a duplicate sample of SB05_11-12.
14. NT = Not Tested
15. U = The analyte was analyzed for; but was not detected at a level greater than or equal to the RL; the value shown in the table is the RL.
16. J = The analyte was detected above the Method Detection Limit (MDL), but below the RL; therefore, the result is an estimated concentration.
17. B = The analyte was detected above the RL in the associated method blank.
18. UJ = The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.

Table 3A
Soil Sample Analytical Results
Remedial Investigation Report - VOCs

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Sample Location Sample ID Sampling Date Lab Sample ID Sample Depth (feet bgs)	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	NYSDEC Part 375 Restricted Commercial Use SCOs	RI 2018																
				SB02			SB03			SB04			SB05				SB06			
				SB02_0-2 5/31/2018 L1820045-04 0-2	SB02_4-6 5/31/2018 L1820045-05 4-6	SB02_6-8 5/31/2018 L1820045-06 6-8	SB03_0-1 5/31/2018 L1820045-07 0-1	SB03_3-4 5/31/2018 L1820045-08 3-4	SB03_7-8 5/31/2018 L1820045-09 7-8	SB04_1-3 6/1/2018 L1820339-03 1-3	SB04_6-8 6/1/2018 L1820339-04 6-8	SB04_10-12 6/1/2018 L1820339-05 10-12	SB05_0-2 6/1/2018 L1820339-06 0-2	SB05_7-8 6/1/2018 L1820339-07 7-8	SB05_11-12 6/1/2018 L1820339-08 11-12	SBDUP02_060118 6/1/2018 L1820339-12 11-12	SB06_0-2 6/1/2018 L1820339-09 0-2	SB06_6-8 6/1/2018 L1820339-10 6-8	SB06_12-14 6/1/2018 L1820339-11 12-14	SB06_14-16 6/1/2018 L1820339-02 14-16
				Volatile Organic Compounds by Method 8260/5035 (mg/kg)																
1,1-Dichloropropene	~	~	~	0.0046 UJ	0.0046 U	0.0058 UJ	0.26 UJ	0.61 UJ	0.36 UJ	0.48 U	0.0064 UJ	0.0042 UJ	0.0062 UJ	0.0076 UJ	0.0044 UJ	0.006 UJ	0.0049 UJ	0.005 UJ	0.0049 UJ	0.0047 U
1,2,4,5-Tetramethylbenzene	~	~	~	0.00094 J	0.0037 U	0.00031 J	0.22	8.3	1.2	0.39 U	0.0051 U	0.0033 U	0.005 U	0.0061 U	0.0035 U	0.0048 U	0.00036 J	0.00052 J	0.0039 U	0.0033 J
1,2,4-Trimethylbenzene	3.6	52	~	0.003 J	0.0046 U	0.00062 J	0.44	0.41 J	0.08 J	0.48 U	0.0064 U	0.0042 U	0.0062 U	0.0076 U	0.0044 U	0.006 U	0.0025 J	0.00031 J	0.00022 J	0.0047 U
1,2-Dichloroethene, Total	~	~	~	0.00092 U	0.00044 J	0.00073 J	0.053 U	0.12 U	0.071 U	0.0012 U	0.0013 U	0.00083 U	0.0012 U	0.0015 U	0.00088 U	0.0012 U	0.00098 U	0.00099 U	0.00098 U	0.00095 U
1,3,5-Trimethylbenzene	8.4	52	~	0.0013 J	0.0046 U	0.00024 J	0.042 J	0.054 J	0.36 U	0.023 J	0.0064 U	0.0042 U	0.0062 U	0.0076 U	0.0044 U	0.006 U	0.0013 J	0.0001 J	0.0049 U	0.0047 U
2-Butanone	0.12	100	500	0.0092 U	0.0092 U	0.012 U	0.53 U	1.2 U	0.71 U	0.48 U	0.013 UJ	0.0083 U	0.012 U	0.015 U	0.0088 U	0.012 U	0.0098 U	0.0099 U	0.0098 U	0.0095 U
Acetone	0.05	100	500	0.077	0.018	0.015	0.53 U	1.2 U	0.71 U	0.39 UJ	0.013 U	0.033	0.012 U	0.0092 J	0.0088 U	0.0074 J	0.0098 U	0.061	0.0098 U	0.017
Benzene	0.06	4.8	44	0.0011	0.00092 U	0.0012 U	0.18	0.2	0.033 J	0.66 J	0.0013 U	0.00083 U	0.0012 U	0.0015 U	0.00088 U	0.0012 U	0.00098 U	0.00099 U	0.00098 U	0.00042 J
Bromochloromethane	~	~	~	0.0046 UJ	0.0046 U	0.0058 UJ	0.26 UJ	0.61 UJ	0.36 UJ	0.032 J	0.0064 UJ	0.0042 UJ	0.0062 UJ	0.0076 UJ	0.0044 UJ	0.006 UJ	0.0049 UJ	0.005 UJ	0.0049 UJ	0.0047 U
Carbon disulfide	~	~	~	0.0018 J	0.0092 U	0.012 U	0.53 U	1.2 U	0.71 U	0.39 UJ	0.013 U	0.0083 U	0.012 U	0.015 U	0.0088 U	0.012 U	0.0098 U	0.0099 U	0.0098 U	0.0095 UJ
Chloroform	0.37	49	350	0.0014 UJ	0.0014 U	0.0018 UJ	0.079 UJ	0.18 UJ	0.11 UJ	0.097 U	0.0019 U	0.0012 U	0.0019 U	0.0023 U	0.0013 U	0.0018 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U
cis-1,2-Dichloroethene	0.25	100	500	0.00092 UJ	0.00044 J	0.00073 J	0.053 UJ	0.12 UJ	0.071 UJ	0.094 J	0.0013 UJ	0.00083 UJ	0.0012 UJ	0.0015 UJ	0.00088 UJ	0.0012 UJ	0.00098 UJ	0.00099 UJ	0.00098 UJ	0.00095 U
cis-1,3-Dichloropropene	~	~	~	0.00092 UJ	0.00092 U	0.0012 UJ	0.053 UJ	0.12 UJ	0.071 UJ	0.26 J	0.0013 UJ	0.00083 UJ	0.0012 UJ	0.0015 UJ	0.00088 UJ	0.0012 UJ	0.00098 UJ	0.00099 UJ	0.00098 UJ	0.00095 U
Dichlorodifluoromethane	~	~	~	0.0092 UJ	0.0092 UJ	0.012 U	0.53 U	1.2 U	0.71 U	0.097 UJ	0.013 UJ	0.0083 UJ	0.012 UJ	0.015 UJ	0.0088 UJ	0.012 UJ	0.0098 UJ	0.0099 UJ	0.0098 UJ	0.0095 UJ
Ethyl Benzene	1	41	390	0.0017	0.00092 U	0.0012 U	0.23	0.28	0.055 J	0.97 U	0.0013 U	0.00083 U	0.0012 U	0.0015 U	0.00088 U	0.0012 U	0.00098 U	0.00099 U	0.00098 U	0.0028
Isopropylbenzene	~	~	~	0.00097	0.00092 U	0.0012 U	0.078	2.6	0.36	0.031 J	0.0013 U	0.00083 U	0.0012 U	0.0015 U	0.00088 U	0.0012 U	0.00098 U	0.00099 U	0.00098 U	0.004
Methylene chloride	0.05	100	500	0.0092 UJ	0.0092 U	0.012 U	0.53 U	1.2 U	0.71 U	0.97 U	0.013 U	0.0083 U	0.012 U	0.015 U	0.0088 U	0.012 U	0.0098 U	0.0099 U	0.0098 U	0.0095 U
Methyl tert-butyl ether (MTBE)	0.93	100	500	0.0004 J	0.00076 J	0.0023 U	0.07 J	0.24 U	0.14 U	0.48 U	0.0025 U	0.0017 U	0.0025 U	0.003 U	0.0018 U	0.0024 U	0.002 U	0.002 U	0.0014 J	0.00028 J
Naphthalene	12	100	500	0.56 J	0.002 J	0.093 J	1.9 J	1.3 J	0.42 J	0.097 U	0.0064 UJ	0.0042 UJ	0.0062 UJ	0.0076 UJ	0.0044 UJ	0.006 UJ	0.0049 UJ	0.0017 J	0.0049 UJ	0.00045 J
n-Butylbenzene	12	100	500	0.00092 U	0.00092 U	0.0012 U	0.12	3.7	0.51	0.024 J	0.0013 U	0.00083 U	0.0012 U	0.0015 U	0.00088 U	0.0012 U	0.00098 U	0.00099 U	0.00098 U	0.00079 J
n-Propylbenzene	3.9	100	500	0.00048 J	0.00092 U	0.0012 U	0.4	8.2	1.1	0.022 J	0.0013 U	0.00083 U	0.0012 U	0.0015 U	0.00088 U	0.0012 U	0.00098 U	0.00099 U	0.00098 U	0.0066
o-Xylene	~	~	~	0.0012 J	0.0018 U	0.0023 U	0.073 J	0.24 U	0.14 U	0.097 U	0.0025 U	0.0017 U	0.0025 U	0.003 U	0.0018 U	0.0024 U	0.002 U	0.002 U	0.002 U	0.0019 U
p- & m- Xylenes	~	~	~	0.0013 J	0.0018 U	0.0023 U	0.46	0.054 J	0.047 J	0.48 U	0.0025 U	0.0017 U	0.0025 U	0.003 U	0.0018 U	0.0024 U	0.002 U	0.002 U	0.002 U	0.0019 U
p-Chlorotoluene	~	~	~	0.0046 U	0.0046 U	0.0058 U	0.26 U	0.61 U	0.36 U	0.036 J	0.0064 U	0.0042 U	0.0062 U	0.0076 U	0.0044 U	0.006 U	0.0049 U	0.005 U	0.0049 U	0.0047 U
p-Diethylbenzene	~	~	~	0.0063	0.0037 U	0.0047 U	0.21 U	2.9	0.37	0.15 J	0.0051 U	0.0033 U	0.005 U	0.0061 U	0.0035 U	0.0048 U	0.0039 U	0.004 U	0.0039 U	0.0038 U
p-Ethyltoluene	~	~	~	0.0046	0.0037 U	0.00053 J	0.24	0.34 J	0.058 J	0.48 U	0.0051 U	0.0033 U	0.005 U	0.0061 U	0.0035 U	0.0048 U	0.00062 J	0.00055 J	0.0039 U	0.0038 U
p-Isopropyltoluene	~	~	~	0.0075	0.00092 U	0.0012 U	0.026 J	0.087 J	0.071 U	0.097 U	0.0013 U	0.00083 U	0.0012 U	0.0015 U	0.00088 U	0.0012 U	0.00098 U	0.00099 U	0.00098 U	0.00095 U
sec-Butylbenzene	11	100	500	0.00027 J	0.00092 U	0.0012 U	0.04 J	1.7	0.24	0.097 U	0.0013 U	0.00083 U	0.0012 U	0.0015 U	0.00088 U	0.0012 U	0.00098 U	0.00099 U	0.00098 U	0.00082 J
tert-Butylbenzene	5.9	100	500	0.0046 U	0.0046 U	0.0058 U	0.26 U	0.065 J	0.36 U	0.48 U	0.0064 U	0.0042 U	0.0062 U	0.0076 U	0.0044 U	0.006 U	0.0049 U	0.005 U	0.0049 U	0.0047 U
Tetrachloroethene	1.3	19	150	0.00092 UJ	0.00092 U	0.0012 UJ	0.053 UJ	0.12 UJ	0.071 UJ	0.13	0.0013 UJ	0.00083 UJ	0.0012 UJ	0.0015 UJ	0.00088 UJ	0.0012 UJ	0.00098 UJ	0.00099 UJ	0.00098 UJ	0.00095 U
Toluene	0.7	100	500	0.0014 U	0.0014 U	0.0018 U	0.12	0.18	0.11 U	0.18	0.0019 U	0.0012 U	0.0019 U	0.0023 U	0.0013 U	0.0018 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U
Trichloroethene	0.47	21	200	0.00092 U	0.00092 U	0.0012 U	0.053 U	0.12 U	0.071 U	0.11	0.0013 U	0.00083 U	0.0012 U	0.0015 U	0.00088 U	0.0012 U	0.00098 U	0.00099 U	0.00098 U	0.00095 U
Trichlorofluoromethane	~	~	~	0.0046 UJ	0.0046 U	0.0058 UJ	0.26 UJ	0.61 UJ	0.36 UJ	0.48 U	0.0064 UJ	0.0042 UJ	0.0062 UJ	0.0076 UJ	0.0044 UJ	0.006 UJ	0.0049 UJ	0.005 UJ	0.0049 UJ	0.0047 U
Xylenes, Total	0.26	100	500	0.0025 J	0.0018 U	0.0023 U	0.53	0.054 J	0.047 J	0.19 J	0.0025 U	0.0017 U	0.0025 U	0.003 U	0.0018 U	0.0024 U	0.002 U	0.002 U	0.002 U	0.0019 U
Volatile Organic Compounds by Method EPA 5035 High (mg/kg)																				
1,3,5-Trimethylbenzene	~	~	~	0.25 U	NT	NT	NT	NT	NT	0.023 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Hexanone	~	~	~	0.5 U	NT	NT	NT	NT	NT	0.38 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzene	~	~	~	0.5 U	NT	NT	NT	NT	NT	0.66 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromochloromethane	~	~	~	0.05 U	NT	NT	NT	NT	NT	0.032 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,2-Dichloroethene	~	~	~	0.076 U	NT	NT	NT	NT	NT	0.094 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,3-Dichloropropene	~	~	~	0.25 U	NT	NT	NT	NT	NT	0.26 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Isopropylbenzene	~	~	~	0.05 U	NT	NT	NT	NT	NT	0.031 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
n-Butylbenzene	~	~	~	0.1 U	NT	NT	NT	NT	NT	0.024 J	NT	NT	NT	NT	NT	NT	NT			

Table 3B
Soil Sample Analytical Results - SVOC, Pest, PCB, Herb and Metals
Remedial Investigation Report

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Investigation Sample Location Sample ID Sampling Date Lab Sample ID Sample Depth (feet bgs)	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted-Residential SCOs	NYSDEC Part 375 Restricted Commercial Use SCOs	Phase II ESA 2014				RI 2016								RI 2018																			
				SB-1	SB-2	SB-4	SB-5	SP-1		SP-2		SP-3		SP-4		SP-5		SB01																	
				SB-1 6-8	SB-2 1.5-3.5	SB-4 6-8	SB-5 6-8	SP-1 0-2	SP-1 4-6	SP-2 0-2	SP-2 4-6	SP-3 0-2	SP-3 10-12	SP-4 0-2	SP-4 10-12	SP-5 0-2	SP-5 10-12	SB01 0-2	SBDUP01_053118	SB01 3-4	SB01 8-9														
				5/14/2014 L1410502-01 6-8	5/14/2014 L1410502-02 1.5-3.5	5/14/2014 L1410502-03 6-8	5/14/2014 L1410502-04 6-8	4/30/2016 16E0060-01 0-2	4/30/2016 16E0060-02 4-6	4/30/2016 16E0060-03 0-2	4/30/2016 16E0060-04 4-6	4/30/2016 16E0060-05 0-2	4/30/2016 16E0060-06 10-12	4/23/2016 16D0971-01 0-2	4/23/2016 16D0971-02 10-12	4/23/2016 16D0971-03 0-2	4/23/2016 16D0971-05 10-12	5/31/2018 L1820045-01 0-2	5/31/2018 L1820045-10 0-2	5/31/2018 L1820045-02 3-4	5/31/2018 L1820045-03 8-9														
Semivolatile Organic Compounds (SVOC) (mg/kg)																																			
2-Methylnaphthalene	~	~	~	NT	NT	NT	NT	1.13	U	0.0477	U	0.0458	U	0.0473	U	0.0471	U	0.0445	U	0.0475	U	0.0478	U	0.0445	U	0.0466	U	6.7	J	3.6	J	0.036	J	0.23	U
3-Methylphenol/4-Methylphenol	0.33	100	500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0475	U	0.0478	U	0.0445	U	0.0466	U	0.26	U	0.26	U	0.27	U	0.27	U	
Acenaphthene	20	100	500	NT	NT	NT	NT	2.71	D	0.0477	U	0.463	D	0.0473	U	0.16	D	0.0445	U	0.0475	U	0.0625	JD	0.0445	U	0.0625	JD	6.7	4.2	0.035	J	0.15	U		
Acenaphthylene	100	100	500	NT	NT	NT	NT	1.13	U	0.0477	U	0.0854	JD	0.0473	U	0.0471	U	0.0445	U	0.0475	U	0.0478	U	0.0445	U	0.0466	U	1.2	0.77	0.15	U	0.15	U		
Anthracene	100	100	500	NT	NT	NT	NT	6.84	D	0.0477	U	0.925	D	0.0473	U	0.537	D	0.0445	U	0.0614	JD	0.254	D	0.0717	JD	0.349	D	14	8.6	0.052	J	0.11	U		
Benzo(a)anthracene	1	1	5.6	NT	NT	NT	NT	13.7	D	0.0974	D	1.86	D	0.0725	JD	2.34	D	0.0745	JD	0.249	D	0.792	D	0.248	D	0.707	D	25	21	0.084	J	0.11	U		
Benzo(a)pyrene	1	1	1	NT	NT	NT	NT	5.32	D	0.0753	JD	1.77	D	0.0672	JD	0.822	D	0.0445	U	0.205	D	0.561	D	0.312	D	0.519	D	16	13	0.049	J	0.15	U		
Benzo(b)fluoranthene	1	1	5.6	NT	NT	NT	NT	7.29	D	0.057	JD	1.22	D	0.0634	JD	1.01	D	0.0445	U	0.218	D	0.378	D	0.303	D	0.59	D	19	17	0.065	J	0.11	U		
Benzo(ghi)perylene	100	100	500	NT	NT	NT	NT	1.76	JD	0.115	D	1.16	D	0.0627	JD	0.383	D	0.0445	U	0.0765	JD	0.192	D	0.153	D	0.522	D	10	8.8	0.032	J	0.15	U		
Benzo(k)fluoranthene	0.8	3.9	56	NT	NT	NT	NT	3.49	D	0.0646	JD	1.25	D	0.0551	JD	1	D	0.0445	U	0.1760	D	0.4370	D	0.2780	D	0.895	D	4	4.4	0.11	U	0.11	U		
Biphenyl	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	1.3	1.2	0.42	U	0.43	U			
Bis(2-ethylhexyl)phthalate	~	~	~	NT	NT	NT	NT	1.13	U	0.0477	U	0.0458	U	0.0473	U	0.232	D	0.0445	U	0.0475	U	0.0478	U	0.0445	U	0.0466	U	0.18	U	0.18	U	0.19	U		
Butyl benzyl phthalate	~	~	~	NT	NT	NT	NT	1.13	U	0.0477	U	0.0458	U	0.0473	U	3.25	D	0.0445	U	0.0475	U	0.0478	U	0.0445	U	0.0466	U	0.18	U	0.18	U	0.19	U		
Carbazole	~	~	~	NT	NT	NT	NT	9.81	D	0.0477	U	0.369	D	0.0473	U	1.05	D	0.11	D	NT	NT	NT	NT	NT	NT	NT	3	1.9	0.19	U	0.19	U			
Chrysene	1	3.9	56	NT	NT	NT	NT	12.3	D	0.13	D	1.61	D	0.0695	JD	2.4	D	0.0688	JD	0.235	D	0.722	D	0.305	D	0.821	D	25	21	0.089	J	0.11	U		
Dibenz(a,h)anthracene	0.33	0.33	0.56	NT	NT	NT	NT	1.13	U	0.0477	U	0.565	D	0.0473	U	0.153	D	0.0445	U	0.0475	U	0.0915	JD	0.0809	JD	0.216	D	2.3	1.8	0.11	U	0.11	U		
Dibenzofuran	7	59	350	NT	NT	NT	NT	1.13	U	0.0477	U	0.245	D	0.0473	U	0.0714	JD	0.0445	U	0.0475	U	0.0478	U	0.0445	U	0.0466	U	4	2.6	0.019	J	0.19	U		
Di-n-butylphthalate	~	~	~	NT	NT	NT	NT	1.13	U	0.0477	U	0.0679	JD	0.0473	U	0.0774	JD	0.0445	U	0.0475	U	0.0478	U	0.0445	U	0.0466	U	0.18	U	0.18	U	0.19	U		
Fluoranthene	100	100	500	NT	NT	NT	NT	34.3	D	0.32	D	5.24	D	0.141	D	6.06	D	0.175	D	0.436	D	1.53	D	0.522	D	1.6	D	46	40	0.18	U	0.028	J		
Fluorene	30	100	500	NT	NT	NT	NT	4.42	D	0.0477	U	0.416	D	0.0473	U	0.237	D	0.083	JD	0.0475	U	0.0587	JD	0.0445	U	0.055	JD	5.8	J	3	J	0.026	J		
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	NT	NT	NT	NT	2.17	JD	0.0905	JD	1.09	D	0.0473	U	0.42	D	0.0445	U	0.0742	JD	0.203	D	0.128	D	0.427	D	8.8	8	0.028	J	0.15	U		
Naphthalene	12	100	500	NT	NT	NT	NT	1.13	U	0.0477	U	0.161	D	0.0473	U	0.0471	U	0.0445	U	0.0475	U	0.0478	U	0.0445	U	0.0758	JD	8.7	2.9	0.051	J	0.19	U		
Phenanthrene	100	100	500	NT	NT	NT	NT	28.3	D	0.255	D	2.93	D	0.0959	D	3.06	D	0.184	D	0.223	D	1.04	D	0.172	D	1.07	D	83	67	0.36	J	0.053	J		
Phenol	0.33	100	500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.0475	U	0.0478	U	0.0445	U	0.0466	U	0.18	U	0.18	U	0.19	U	0.19	U		
Phenanthrene	100	100	500	NT	NT	NT	NT	28.3	D	0.255	D	2.93	D	0.0959	D	3.06	D	0.184	D	0.223	D	1.04	D	0.172	D	1.07	D	57	50	0.22	U	0.035	J		
Pesticides (mg/kg)																																			
4,4'-DDE	0.0033	8.9	62	NT	NT	NT	NT	0.00269	U	0.00282	U	0.00271	U	0.0028	U	0.00279	U	0.00263	U	0.00188	U	0.00189	U	0.00176	U	0.00184	U	0.00171	U	0.00174	U	0.00179	U	0.0018	U
Endosulfan II	2.4	24	200	NT	NT	NT	NT	0.00269	U	0.00282	U	0.00271	U	0.0028	U	0.00279	U	0.00263	U	0.00188	U	0.00189	U	0.00176	U	0.00184	U	0.0639	PI	0.0776	PI	0.00194	U	0.0018	U
Endrin	0.014	11	89	NT	NT	NT	NT	0.00269	U	0.00282	U	0.00271	U	0.0028	U	0.00279	U	0.00263	U	0.00188	U	0.00189	U	0.00176	U	0.00184	U	0.000711	U	0.000726	U	0.000745	U	0.000354	J
Polychlorinated Biphenyls (PCB) (mg/kg)																																			
Aroclor 1242	0.1	1	1	NT	NT	NT	NT	0.0271	U	0.0285	U	0.0274	U	0.0283	U	0.0282	U	0.0266	U	0.0189	U	0.0191	U	0.0177	U	0.0186	U	0.0359	U	0.0369	U	0.0368	U	0.0361	U
Aroclor 1260	0.1	1	1	NT	NT	NT	NT	0.0271	U	0.0285	U	0.0274	U	0.0283	U	0.0282	U	0.0266	U	0.0189	U	0.0191	U	0.0177	U	0.0186	U	0.0359	U	0.0369	U	0.0368	U	0.0361	U
PCBs, Total	0.1	1	1	NT	NT	NT	NT	0.0271	U	0.0285	U	0.0274	U	0.0283	U	0.0282	U	0.0266	U	0.0189	U	0.0191	U	0.0177	U	0.0186	U	0.0359	U	0.0369	U	0.0368	U	0.0361	U
Herbicides (mg/kg)																																			
Total Herbicides	~	~	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	
Total Metals (mg/kg)																																			
Aluminum, Total	~	~	~	NT	NT	NT	NT	3,300		5,080		6,690		4,090		3,960		4,630		4,260		7,090		3,280		7,760		5,240		3,740		6,940		3,140	
Antimony, Total	~	~	~	NT	NT	NT	NT	0.543	U	2.18		0.57		15.4	U	0.566		0.532	U	0.568	U	0.572	U	0.532	U	0.558	U	0.7	J	4.42	U	4.42	U	4.57	U
Arsenic, Total	13	16	16	NT	NT	NT	NT	7.4		14.4		8.25		2.09		15.2		2.4		13.5		2.58		3.9		6.56		1.92		1.64		0.79	J	0.758	J
Barium, Total	350	400	400	NT	NT	NT	NT	17																											

Table SB
Soil Sample Analytical Results - SVOC, Pest, PCB, Herb and Metals
Remedial Investigation Report

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Investigation Sample Location Sample ID Sampling Date Lab Sample ID Sample Depth (feet bgs)	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use Restricted-Residential SCOs	NYSDEC Part 375 Restricted Commercial Use SCOs	RI 2018																	
				SB02			SB03			SB04			SB05			SB06					
				SB02 0-2	SB02 4-6	SB02 6-8	SB03 0-1	SB03 3-4	SB03 7-8	SB04 1-3	SB04 6-8	SB04 10-12	SB05 0-2	SB05 7-8	SB05 11-12	SBDUP02_060118	SB06 0-2	SB06 6-8	SB06 12-14	SB06 14-16	
				5/31/2018 L1820045-04 0-2	5/31/2018 L1820045-05 4-6	5/31/2018 L1820045-06 6-8	5/31/2018 L1820045-07 0-1	5/31/2018 L1820045-08 3-4	5/31/2018 L1820045-09 7-8	6/1/2018 L1820339-03 1-3	6/1/2018 L1820339-04 6-8	6/1/2018 L1820339-05 10-12	6/1/2018 L1820339-06 0-2	6/1/2018 L1820339-07 7-8	6/1/2018 L1820339-08 11-12	6/1/2018 L1820339-12 11-12	6/1/2018 L1820339-09 0-2	6/1/2018 L1820339-10 6-8	6/1/2018 L1820339-11 12-14	6/1/2018 L1820339-02 14-16	
Semivolatile Organic Compounds (SVOC) (mg/kg)																					
2-Methylnaphthalene	~	~	~	0.49	0.18	J	0.24	U	1	8	E	1.3	1.4	0.21	J	0.22	U	0.23	U	0.22	U
3-Methylphenol/4-Methylphenol	0.33	100	500	0.26	U	0.28	U	0.29	U	0.27	U	0.26	U	0.074	J	0.26	U	0.27	U	0.26	U
Acenaphthene	20	100	500	0.49	0.12	J	0.16	U	0.43	0.33	0.076	J	0.15	U	0.15	U	0.15	U	0.14	U	
Acenaphthylene	100	100	500	0.032	J	0.16	U	0.16	U	0.15	U	0.16	U	0.062	J	0.34	0.15	U	0.15	U	
Anthracene	100	100	500	0.76	0.18	U	0.12	U	0.77	0.19	0.068	J	0.058	J	0.38	0.11	U	0.11	U		
Benzo(a)anthracene	1	1	5.6	0.96	0.28	U	0.12	U	0.81	0.11	U	0.082	J	0.14	1.3	0.11	U	0.056	J		
Benzo(a)pyrene	1	1	1	0.6	0.18	U	0.16	U	0.53	0.14	U	0.05	J	0.061	J	1.1	0.15	U	0.15	U	
Benzo(b)fluoranthene	1	1	5.6	0.65	0.22	U	0.12	U	0.58	0.11	U	0.06	J	0.14	1.5	0.11	U	0.051	J		
Benzo(ghi)perylene	100	100	500	0.38	0.1	J	0.16	U	0.28	0.14	U	0.027	J	0.14	J	0.63	0.15	U	0.045	J	
Benzo(k)fluoranthene	0.8	3.9	56	0.28	0.072	J	0.12	U	0.22	0.11	U	0.12	U	0.11	U	1	0.11	U	0.11	U	
Biphenyl	~	~	~	0.1	J	0.45	U	0.45	U	0.14	J	0.37	J	0.47	U	0.091	J	0.056	J		
Bis(2-ethylhexyl)phthalate	~	~	~	0.18	U	0.2	U	0.2	U	0.19	U	0.18	U	0.2	U	0.18	U	0.19	U	0.19	U
Butyl benzyl phthalate	~	~	~	0.18	U	0.2	U	0.2	U	0.19	U	0.18	U	0.2	U	0.18	U	0.19	U	0.19	U
Carbazole	~	~	~	0.18	0.057	J	0.2	U	0.15	J	0.18	U	0.2	U	0.025	J	0.42	0.18	U	0.19	U
Chrysene	1	3.9	56	1	0.28	U	0.12	U	0.84	0.022	J	0.084	J	0.26	1.5	0.11	U	0.063	J		
Dibenz(a,h)anthracene	0.33	0.33	0.56	0.082	J	0.12	U	0.12	U	0.062	J	0.11	U	0.12	U	0.022	J	0.15	U		
Dibenzofuran	7	59	350	0.22	0.07	J	0.2	U	0.22	0.28	0.058	J	0.036	J	0.34	0.18	U	0.19	U		
Di-n-butylphthalate	~	~	~	0.18	U	0.2	U	0.2	U	0.19	U	0.18	U	0.2	U	0.18	U	0.19	U		
Fluoranthene	100	100	500	2	0.62	U	0.12	U	1.7	0.053	J	0.17	0.23	3.6	0.11	U	0.082	J			
Fluorene	30	100	500	0.4	0.1	J	0.2	U	0.54	0.86	0.15	J	0.18	U	0.25	0.18	U	0.19	U		
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	0.36	0.092	J	0.16	U	0.26	0.14	U	0.16	U	0.074	J	0.71	0.15	U	0.04	J	
Naphthalene	12	100	500	1	0.45	U	0.2	U	1.3	1.3	0.13	J	0.95	0.45	0.18	U	0.16	J			
Phenanthrene	100	100	500	3.9	1.1	U	0.12	U	3.4	1.5	0.52	0.38	3.9	0.11	U	0.096	J	0.14	0.11	U	
Phenol	0.33	100	500	0.033	J	0.2	U	0.2	U	0.19	U	0.18	U	0.047	J	0.18	U	0.19	U		
Phenanthrene	100	100	500	2.5	0.78	U	0.12	U	2.3	0.26	0.24	0.22	0.11	U	0.087	J	0.12	0.11	U		
Pesticides (mg/kg)																					
4,4'-DDE	0.0033	8.9	62	0.0174	U	0.00181	U	0.00185	U	0.0353	U	0.0172	U	0.00197	U	0.0017	U	0.00188	U		
Endosulfan II	2.4	24	200	0.0174	U	0.00159	J	0.00185	U	0.0353	U	0.0172	U	0.00197	U	0.00152	JPI	0.00188	U		
Endrin	0.014	11	89	0.012	P	0.00131	U	0.00077	U	0.0147	U	0.00715	U	0.00082	U	0.000709	U	0.000786	U		
Polychlorinated Biphenyls (PCB) (mg/kg)																					
Aroclor 1242	0.1	1	1	0.0355	U	0.0399	U	0.0378	U	0.0364	U	0.0342	U	0.0412	U	0.0357	U	0.0384	U		
Aroclor 1260	0.1	1	1	0.0355	U	0.0399	U	0.0378	U	0.0364	U	0.0342	U	0.0412	U	0.0357	U	0.0384	U		
PCBs, Total	0.1	1	1	0.0355	U	0.0399	U	0.0378	U	0.0364	U	0.0342	U	0.0412	U	0.0357	U	0.0384	U		
Herbicides (mg/kg)																					
Total Herbicides	~	~	~	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Total Metals (mg/kg)																					
Aluminum, Total	~	~	~	7,420	5,670	7,470	5,810	4,200	3,090	2,010	5,100	5,640	2,630	3,530	5,090	8,240	6,180	4,690	3,390	3,300	
Antimony, Total	~	~	~	0.415	J	4.63	U	4.53	U	4.5	U	5.06	J	4.41	U	5.08	J	4.49	U		
Arsenic, Total	13	16	16	1.92	1.67	2.74	1.61	0.698	J	0.415	J	5.71	J	1.6	3.96	1.32	2.68	4.18	4.21		
Barium, Total	350	400	400	112	30.3	44.6	31.1	99.7	33.1	62.1	J	98.9	J	39.8	J	47.6	J	155	J		
Beryllium, Total	7.2	72	590	0.38	J	0.232	J	0.317	J	0.324	J	0.238	J	0.223	J	0.142	J	0.286	J		
Cadmium, Total	2.5	4.3	9.3	0.182	J	0.176	J	0.281	J	0.27	J	0.156	J	0.235	J	0.351	J	0.304	J		
Calcium, Total	~	~	~	35,200	7,200	1,410	3,140	1,480	3,600	16,200	8,010	2,180	33,000	95,400	2,060	J	975	J			
Chromium, Hexavalent	1	110	400	0.883	U	0.54	J	0.608	J	0.916	U	0.865	U	1.02	U	0.906	U	0.916	U		
Chromium, Trivalent	30	180	1500	12	8.8	J	17	J	14	11	9.9	7.2	11	J	13	4.6	23	10			
Chromium, Total	~	~	~	11.8	9.31	17.3	13.7	11.2	9.9	7.2	11.7	13.4	4.58	7.2	11.7	13.4	4.58	22.9	9.98		
Cobalt, Total	~	~	~	5.06	4.42	5.66	4.68	3.82	3.09	3.74	4.58	5.1	3.27	3.01	5.29	6.19	5.17	3.64	3.36		
Copper, Total	50	270	270	25.3	7.21	10.2	16.9	10.1	10.1	66.7	J	23.9	J	13.1	J	14.9	J	24.8	J		
Cyanide, Total	27	~	27	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~		
Iron, Total	~	~	~	8,450	9170	14,200	9,750	7,480	7,160	6,590	10,700	11,200	4,300	11,000	10,800	14,500	12,000	9,870	8,070		
Lead, Total	63	400	1000	147	6.68	5.89	14.3	4	4.35	J	135	J	322	J	8.94	J	150	J			
Magnesium, Total	~	~	~	3,960	1,890	2,330	2,070	1,930	1,770	966	2,410	2,650	3,110	2,600	2,450	2,600	2,450	1,640	1,640		
Manganese, Total	1600	2000	10000	252	176	260	143	85.5	228	63.4	J	330	J	364	J	113	J	156	J		
Mercury, Total	0.18	0.81	~	0.096	0.076	U	0.075	U	0.092	0.068	U	0.08	U	0.22	J	0.396	J	0.021	J		
Nickel, Total	30	310	310	10.4	9.1	11.3	11.4	8.95	7.44	10.8	J	10.5	12	8.55	12	12.9	14.2	11.4	8.37		
Potassium, Total	~	~	~	1,350	630	653	892	994	727	669	996	871	886	1,010	758	625	882	698	555		
Selenium, Total	3.9	180	1500	0.432	J	0.685	J	0.534	J	0.576	J	0.46	J	0.567	J	1.67	U	1.84	U		
Silver, Total	2	180	1500	0.864	U	0.926	U	0.905	U	0.9	U	0.821	U	0.923	U	0.882	U	0.872	U		
Sodium, Total	~	~	~	473	172	J	137	J	198	142	J	89.9	J	1,020	316	192	841	1,040	187		
Thallium, Total	~	~	~	1.73	U	1.85	U	1.81	U	1.8	U	1.64	U	2.02	U	1.67	U	1.84	U		
Vanadium, Total	~	~	~	18.5	12	20.4	17.5	14.2	12.5	14.4	J	14	16.5	8.13	11.3	13.8	15.3	17.7	16.2		
Zinc, Total	109	10000	10000	35	16.1	21.8	36.2	12.1	10.6	104	J	78.2	J	21.3	J	76.5	J	3,000	J		

Table 4
Groundwater Sample Analytical Results
Remedial Investigation Report

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Investigation	Sample Location	NYSDEC TOGS SGVs	Phase II ESA 2014			RI 2016			RI 2018										
Sample ID	SB-1		SB-4	SB-5	MW-1	MW-2	MW-3	SB03	SB05	TWDUP01									
Sampling Date	SB-1 (GW)		SB-4 (GW)	SB-5 (GW)	MW-1	MW-2	MW-3	TW03_060118	TW05_060118	TWDUP01_060118									
Lab Sample ID	5/14/2014 L1410502-05		5/14/2014 L1410502-06	5/14/2014 L1410502-07	5/7/2016 16E0327-01	5/7/2016 16E0327-02	5/7/2016 16E0327-03	6/1/2018 L1820339-13	6/1/2018 L1820339-14	6/1/2018 L1820339-15									
Volatile Organic Compounds (µg/L)																			
1,1-Dichloroethane	5	0.87	J	2.5	U	0.7	J	0.51	1.1	0.6	2.5	U	2.5	U	2.5	U			
1,1-Dichloroethene	5	0.5	U	0.5	U	0.5	U	0.39	1.1	1.5	0.5	U	0.88		0.93				
1,2,4,5-Tetramethylbenzene	5	2	U	2	U	2	U	0.2	0.2	0.2	55		2	U	2	U			
1,2,4-Trimethylbenzene	5	2.5	U	2.5	U	2.5	U	0.29	J	0.26	J	49	2.5	U	2.5	U			
1,2-Dichloroethene, Total	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	2.5	U	1.8	J	1.9	J			
1,3,5-Trimethylbenzene	5	2.5	U	2.5	U	2.5	U	0.2	U	0.2	U	1	J	2.5	U	2.5	U		
1,3-Dichloropropane	5	1.4	U	0.5	U	0.5	U	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U		
Acetone	50	4.6	J	5	U	2	J	1	U	1	U	7.5	J	5	UJ	5	UJ		
Benzene	1	1.4		0.5	U	0.5	U	0.2	U	0.2	U	0.33	J	46	0.5	U	0.5	U	
Bromobenzene	5	2.5	U	1.1	J	1.8	J	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U		
Chloroform	7	2.5	U	2.5	U	2.5	U	<0.2	U	1.8	2.7	2.5	UJ	2.5	U	2.5	U		
Chloromethane	~	2.5	U	2.5	U	2.5	U	<0.2	U	<0.2	U	2.2	2.5	U	2.5	U	2.5	U	
Chloroform	~	2.5	U	2.5	U	2.5	U	0.2	U	1.8	2.7	2.5	U	2.5	U	2.5	U		
Chloromethane	~	2.5	U	2.5	U	2.5	U	0.2	U	0.2	U	2.2	2.5	U	2.5	U	2.5	U	
cis-1,2-Dichloroethene	5	2.5	U	0.88	J	2.5	U	0.62	0.7	1.2	2.5	U	1.8	J	1.9	J	U	U	
Ethylbenzene	5	2.5	U	2.5	U	2.5	U	0.2	U	0.2	U	13	2.5	U	2.5	U	2.5	U	
Isopropylbenzene	5	2.5	U	2.5	U	2.5	U	0.2	U	0.2	U	34	2.5	U	2.5	U	2.5	U	
Methyl tert butyl ether	10	11		1.1	J	1.8	J	1.4	2.8	3.7	2.5	0.95	J	0.98	J	U	U	U	
Naphthalene	10	2.5	U	2.5	U	2.5	U	1	U	1	U	32	2.5	U	2.5	U	2.5	U	
n-Butylbenzene	5	2.5	U	2.5	U	2.5	U	0.2	U	0.2	U	11	2.5	U	2.5	U	2.5	U	
n-Propylbenzene	5	2.5	U	2.5	U	2.5	U	0.2	U	0.2	U	79	2.5	U	2.5	U	2.5	U	
o-Xylene	5	2.5	U	2.5	U	2.5	U	0.2	U	0.2	U	0.24	J	1.9	J	2.5	U	2.5	U
p/m-Xylene	5	2.5	U	2.5	U	2.5	U	0.5	U	0.5	U	0.67	J	5	2.5	U	2.5	U	U
p-Diethylbenzene	~	2	U	2	U	2	U	0.2	U	0.2	U	0.2	U	14	2	U	2	U	U
p-Ethyltoluene	~	2	U	2	U	2	U	0.2	U	0.2	U	0.2	U	5.4	2	U	2	U	U
sec-Butylbenzene	5	2.5	U	2.5	U	2.5	U	0.2	U	0.2	U	8.5	2.5	U	2.5	U	2.5	U	U
tert-Butylbenzene	5	2.5	U	2.5	U	2.5	U	0.2	U	0.2	U	0.7	J	2.5	U	2.5	U	2.5	U
Tetrachloroethene	5	0.5	U	0.5	U	0.5	U	0.2	U	0.21	J	0.2	U	0.5	U	0.5	U	0.5	U
Toluene	5	2.5	U	2.5	U	2.5	U	0.26	J	0.25	J	0.42	J	4	2.5	U	2.5	U	U
trans-1,2-Dichloroethene	5	2.5	U	2.5	U	2.5	U	0.2	U	0.24	J	0.2	U	2.5	U	2.5	U	2.5	U
Trichloroethene	5	0.5	U	0.33	J	0.5	U	0.24	J	0.32	J	0.2	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethylene	~	2.5	U	2.5	U	2.5	U	0.2	U	0.24	J	0.2	U	0.5	U	0.5	U	0.5	U
Trichloroethylene	~	0.5	U	0.33	J	0.5	U	0.24	J	0.32	J	0.2	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	2	1	U	1	U	1	U	0.2	U	0.2	U	0.21	J	1	UJ	0.73	J	0.7	J
Xylenes, Total	~	NT	NT	NT	NT	NT	NT	NT	NT	0.91	J	6.9	J	2.5	U	2.5	U	2.5	U
Total VOCs	~	17.87		2.31		4.5		3.71		8.78		14.14		386.4		5.21		6.41	
Semivolatile Organic Compounds (µg/L)																			
2-Methylnaphthalene	~	NT	NT	NT	2.98	U	2.98	U	2.91	U	32	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthene	20	NT	NT	NT	0.0541	U	0.0541	U	0.653	U	3.8	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	~	NT	NT	NT	0.0541	U	0.0541	U	0.0526	U	0.71	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	50	NT	NT	NT	0.0541	U	0.0541	U	0.284	U	0.46	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)anthracene	0.002	NT	NT	NT	0.0541	U	0.0541	U	0.274	U	0.05	J	0.1	U	0.1	U	0.1	U	U
Benzo(a)pyrene	0.002	NT	NT	NT	0.0541	U	0.0541	U	0.168	U	0.1	U	0.1	U	0.1	U	0.1	U	U
Benzo(b)fluoranthene	0.002	NT	NT	NT	0.0541	U	0.0541	U	0.168	U	0.1	U	0.1	U	0.1	U	0.1	U	U
Benzo(ghi)perylene	~	NT	NT	NT	0.0541	U	0.0541	U	0.137	U	0.1	U	0.1	U	0.1	U	0.1	U	U
Benzo(k)fluoranthene	0.002	NT	NT	NT	0.0541	U	0.0541	U	0.158	U	0.1	U	0.1	U	0.1	U	0.1	U	U
Biphenyl	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	3.1	2	U	2	U	2	U	2	U
Carbazole	~	NT	NT	NT	1.42	U	1.42	U	1.38	U	2.2	2	U	2	U	2	U	2	U
Chrysene	0.002	NT	NT	NT	0.0541	U	0.0541	U	0.211	U	0.05	J	0.1	U	0.1	U	0.1	U	U
Dibenzo(a,h)anthracene	~	NT	NT	NT	0.0541	U	0.0541	U	0.632	U	0.1	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	~	NT	NT	NT	2.61	U	2.61	U	2.54	U	3.4	2	U	2	U	2	U	2	U
Fluoranthene	50	NT	NT	NT	0.0541	U	0.0541	U	0.916	U	0.34	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	50	NT	NT	NT	0.0541	U	0.0541	U	0.663	U	6.5	0.1	U	0.1	U	0.1	U	0.1	U
Indeno(1,2,3-cd)pyrene	0.002	NT	NT	NT	0.0541	U	0.0541	U	0.126	U	0.1	U	0.1	U	0.1	U	0.1	U	U
Naphthalene	10	NT	NT	NT	0.0541	U	0.0541	U	0.147	U	9.8	0.1	U	0.1	U	0.1	U	0.1	U
Phenanthrene	50	NT	NT	NT	0.108	U	0.0541	U	3.38	U	6	0.1	U	0.1	U	0.1	U	0.1	U
Pyrene	50	NT	NT	NT	0.0541	U	0.0541	U	0.832	U	0.47	0.1	U	0.1	U	0.1	U	0.1	U
Pesticides (µg/L)																			
4,4'-DDT	0.2	NT	NT	NT	0.00421	U	0.00432	U	0.00471	U	0.029	U	0.063	J	0.025	J	U	U	U
Herbicides (µg/L)																			
Total Herbicides	~	NT	NT	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND
Polychlorinated Biphenyls (PCBs) (µg/L)																			
PCBs, Total	0.09	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Metals (µg/L)																			
Aluminum, Total	~	NT	NT	NT	1,490		1,350		4,670		4,670		552		563				
Antimony, Total	3	NT	NT	NT	6	U	6	U	6	U	0.44	U	0.78	J	0.87	J			
Arsenic, Total	25	NT	NT	NT	420		911		164		12.27		177.3		183				
Barium, Total	1000	NT	NT	NT	211		87		127		266.4		567.5		574				
Beryllium, Total	3	NT	NT	NT	1	U	1	U	1	U	0.44	J	0.5	U	0.5	U			
Cadmium, Total	5	NT	NT	NT	3	U	3	U	3	U	0.1	J	0.2	U	0.2	U			
Calcium, Total	~	NT	NT	NT	315,000		395,000		114,000		37,400		334,000		341,000				
Chromium, Trivalent	~	NT	NT	NT	13		10	U											

Table 5
Soil Vapor, Indoor Air, and Ambient Air Sample Analytical Results
Remedial Investigation Report

538-542 West 29th Street
New York, New York
Langan Project No 170515401

Investigation Sample Location Sample ID Sampling Date Lab Sample ID Sample Type	CAS Number	Phase II ESA 2014										RI 2016				Phase II ESI 2018													
		OA-1 5/14/2014 L1410518-07 OA	IA-1/SS-1				IA-2/SS-2		SS-3 5/14/2014 L1410518-03 SUBSLAB	AI-1 AI-1 5/7/2016 16E0322-03 IA	SV-1 SV-1 5/7/2016 16E0322-01 SV	SV-2 SV-2 5/7/2016 16E0322-02 SV	SVAA SVAA_060118 6/1/2018 L1820382-05 AA	SV01 SV01_060118 6/1/2018 L1820382-01 SV	SV02 SV02_060118 6/1/2018 L1820382-02 SUBSLAB	SV03 SV03_060118 6/1/2018 L1820382-03 SV	SV04 SV04_060118 6/1/2018 L1820382-04 SUBSLAB												
			IA-1 5/14/2014 L1410518-04 IA	SS-1 5/14/2014 L1410518-01 SUBSLAB	IA-2 5/14/2014 L1410518-05 IA	SS-2 5/14/2014 L1410518-02 SUBSLAB																							
Result		Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q							
Volatile Organic Compounds (µg/m³)																													
1,1,1-Trichloroethane	71-55-6	0.109	U	0.109	U	30.6	U	0.109	U	3.18	U	12	U	9.4	U	9.9	D	10	U	0.109	U	1.84	U	1.09	U	5.46	U	118	U
1,1,2,2-Tetrachloroethane	79-34-5	1.37	U	1.37	U	38.5	U	1.37	U	1.37	U	1.37	U	12	U	0.8	U	13	U	1.37	U	1.37	U	1.37	U	6.87	U	1490	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NT		NT		NT		NT		NT		NT		13	U	0.9	U	14	U	1.53	U	1.53	U	1.53	U	7.66	U	1660	U
1,1,2-Trichloroethane	79-00-5	1.09	U	1.09	U	30.6	U	1.09	U	1.09	U	1.09	U	9.4	U	0.64	U	10	U	1.09	U	1.09	U	1.09	U	5.46	U	1180	U
1,1-Dichloroethane	75-34-3	0.809	U	0.809	U	22.7	U	0.809	U	0.809	U	1.07	U	6.9	U	3	D	7.5	U	0.809	U	0.959	U	0.809	U	4.05	U	878	U
1,1-Dichloroethene	75-35-4	0.079	U	0.079	U	22.2	U	0.079	U	0.793	U	0.793	U	6.8	U	0.46	U	7.4	U	0.079	U	0.94	U	0.793	U	3.96	U	86	U
1,2,4-Trichlorobenzene	120-82-1	1.48	U	1.48	U	41.6	U	1.48	U	1.48	U	1.48	U	13	U	0.87	U	14	U	1.48	U	1.48	U	1.48	U	7.42	U	1,610	U
1,2,4-Trimethylbenzene	95-63-6	1.03		9.88		27.6		8.65		4.29		2.52		8.4	U	0.57	U	9.1	U	0.983	U	13		15.5		11		1,070	U
1,2-Dibromoethane	106-93-4	1.54	U	1.54	U	43.1	U	1.54	U	1.54	U	1.54	U	13	U	0.9	U	14	U	1.54	U	1.54	U	1.54	U	7.69	U	1670	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	NT		NT		NT		NT		NT		NT		12	U	0.82	U	13	U	1.4	U	1.4	U	1.4	U	6.99	U	1520	U
1,2-Dichlorobenzene	95-50-1	1.2	U	1.2	U	33.7	U	1.2	U	1.2	U	1.2	U	10	U	0.7	U	11	U	1.2	U	1.2	U	1.2	U	6.01	U	1300	U
1,2-Dichloroethane	107-06-2	0.809	U	0.809	U	22.7	U	0.809	U	0.809	U	0.809	U	6.9	U	0.47	U	7.5	U	0.809	U	0.809	U	0.809	U	4.05	U	878	U
1,2-Dichloropropane	78-87-5	0.924	U	0.924	U	25.9	U	0.924	U	0.924	U	0.924	U	7.9	U	0.54	U	8.6	U	0.924	U	0.924	U	0.924	U	4.62	U	1000	U
1,3,5-Trimethylbenzene	108-67-8	0.983	U	2.93		27.6		2.57		1.25		0.983	U	8.4	U	0.57	U	9.1	U	0.983	U	4.42		5.21		4.92	U	1,070	U
1,3-Butadiene	106-99-0	1.04		0.442	U	12.4		0.442	U	0.442	U	1.84		11	U	0.78	U	12	U	0.442	U	2.79		0.442	U	4.8		480	U
1,3-Dichlorobenzene	541-73-1	1.2	U	1.2	U	33.7	U	1.2	U	1.2	U	1.2	U	10	U	0.7	U	11	U	1.2	U	1.2	U	1.2	U	6.01	U	1300	U
1,4-Dichlorobenzene	106-46-7	1.2	U	1.2	U	33.7	U	1.2	U	1.2	U	1.2	U	10	U	0.7	U	11	U	1.2	U	1.2	U	1.2	U	6.01	U	1300	U
1,3-Dichloropropane	142-28-9	NT		NT		NT		NT		NT		NT		7.9	U	0.54	U	8.6	U	NT		NT		NT		NT		NT	
1,4-Dioxane (P-Dioxane)	123-91-1	0.721	U	0.721	U	20.2	U	0.721	U	0.721	U	0.721	U	12	U	0.84	U	13	U	0.721	U	0.721	U	0.721	U	3.6	U	782	U
2,2,4-Trimethylpentane	540-84-1	1.63		7.52		26.2		6.63		3.95		1.14		NT		NT		NT		1.57		0.934	U	0.934	U	4.67	U	255,000	
2-Butanone	78-93-3	1.42		4.81		16.5		3.8		6.69		10.9		5.1	U	0.48	D	5.5	U	1.47		36		8.46		24.3		1,600	U
2-Hexanone	591-78-6	0.82	U	0.82	U	23	U	0.82	U	0.943		2.21		14	U	0.96	U	15	U	0.82	U	4.63		0.82	U	4.1	U	889	U
3-Chloropropene	107-05-1	0.626	U	0.626	U	17.6	U	0.626	U	0.626	U	0.626	U	27	U	1.8	U	29	U	0.626	U	0.626	U	0.626	U	3.13	U	679	U
4-Ethyltoluene	622-96-8	0.983	U	2.71		27.6		2.45		1.33		0.983	U	NT		NT		NT		0.983	U	3.5		4.63		4.92	U	1,070	U
4-Methyl-2-pentanone	108-10-1	0.82	U	0.82	U	23	U	0.82	U	0.82	U	0.82	U	7	U	0.48	U	7.6	U	2.05	U	5.61		2.05	U	10.2	U	2,230	U
Acetone	67-64-1	10.9		2.38	U	297		2.38	U	344		401		19	D	3.9	D	30	D	20.6		254		40.1		105		2,590	U
Acrylonitrile	107-13-1	NT		NT		NT		NT		NT		NT		3.7	U	4.6	D	4	U	NT		NT		NT		NT		NT	
Benzene	71-43-2	1.68		24.2		17.9	U	19.6		10.7		2.72		11	D	0.37	U	5.9	U	1.23		4.28		10.1		8.72		20,100	
Benzyl chloride	100-44-7	1.04	U	1.04	U	29	U	1.04	U	1.04	U	1.04	U	8.9	U	0.6	U	9.6	U	1.04	U	1.04	U	1.04	U	5.18	U	1120	U
Bromodichloromethane	75-27-4	1.34	U	2.36		37.6		2.13		1.34	U	1.34	U	11	U	1.1	D	12	U	1.34	U	1.34	U	1.34	U	6.7	U	1,450	U
Bromoform	75-25-2	2.07		2.07	U	58		2.07	U	2.07	U	2.07	U	18	U	1.2	U	19	U	2.07	U	2.07	U	2.07	U	10.3	U	2240	U
Bromomethane	74-83-9	0.777	U	0.777	U	21.8	U	0.777	U	0.777	U	0.777	U	6.7	U	0.45	U	7.2	U	0.777	U	0.777	U	0.777	U	3.88	U	843	U
Carbon disulfide	75-15-0	0.623	U	0.623	U	17.5	U	0.623	U	1.86		4.86		5.3	U	0.36	U	5.8	U	0.623	U	3.15		5.48		12.6		676	U
Carbon tetrachloride	56-23-5	0.415		0.465		35.3		0.491		1.26	U	1.26	U	2.7	U	0.88	D	2.9	U	0.403		1.87		1.26	U	6.29	U	137	U
Chlorobenzene	108-90-7	0.921	U	0.921	U	25.8	U	0.921	U	0.921	U	0.921	U	7.9	U	0.54	U	8.6	U	0.921	U	0.921	U	0.921	U	4.61	U	999	U
Chloroethane	75-00-3	0.528	U	0.528	U	14.8	U	0.528	U	0.528	U	0.528	U	4.5	U	0.31	U	4.9	U	0.528	U	3.03		0.528	U	2.64	U	573	U
Chloroform	67-66-3	0.977	U	20.9		27.4		18.2		10.7		27		12	D	28	D	9.1	U	0.977	U	5.13		2.99		4.88	U	1,060	U
Chloromethane	74-87-3	1.44		1.01		11.6		0.964		0.535		0.413	U	3.5	U	0.24	U	3.8	U	1.13		1.35		0.413	U	2.07	U	448	U
cis-1,2-Dichloroethene	156-59-2	0.266		0.198		22.2		0.25		0.793	U	0.793	U	6.8	U	3.2	D	7.4	U	0.079	U	0.793	U	0.793	U	3.96	U	86	U
cis-1,3-Dichloropropene	10061-01-5	0.908	U	9.67	U	25.3	U	0.908	U	0.908	U	0.908	U	7.8	U	0.53	U	8.4	U	0.908	U	0.908	U	0.908	U	4.54	U	985	U
Cyclohexane	110-82-7	0.688	U	9.67		19.3		8.23		6.54		1.96		5.9	U	0.4	U	6.4	U	0.688	U	22.9		56.8		1,440		62,600	
Dibromochloromethane	124-48-1	1.7	U	1.7	U	47.8	U	1.7	U	1.7	U	1.7	U	15	U	0.99	U	16	U	1.7	U	1.7	U	1.7	U	8.52	U	1850	U
Dichlorodifluoromethane	75-71-8	1.86		4.78		27.7		2.79		2.36		3.29		8.5	U	2.8	D	10	D	2.18		3.45		2.22		4.94	U	1,070	U
Ethyl Acetate																													

Table 6
Quality Assurance/Quality Control Sample Results Summary
Remedial Invesitgation Report

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Investigation	RI 2016				RI 2018					
Sample ID	Trip Blank		FB-1		SBTB01_053118		SBTB02_060118		GWTB01_060118	
Sampling Date	5/7/2016		5/7/2016		5/31/2018		6/1/2018		6/1/2018	
Lab Sample ID	16E0327-04		16E0327-05		L1820045-11		L1820339-01		L1820339-16	
Sample Type	Groundwater Trip Blank		Groundwater Field Blank		Soil Trip Blank		Soil Trip Blank		Groundwater Trip Blank	
Volatile Organic Compounds (µg/L)										
1,1,1,2-Tetrachloroethane	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,1,1-Trichloroethane	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,1,2,2-Tetrachloroethane	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.2	U	0.2	U	NT		NT		NT	
1,1,2-Trichloroethane	0.2	U	0.2	U	1.5	U	1.5	U	1.5	U
1,1-Dichloroethane	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,1-Dichloroethene	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,2,3-Trichlorobenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,2,3-Trichloropropane	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,2,4,5-Tetramethylbenzene	0.2	U	0.2	U	2	U	2	U	2	U
1,2,4-Trichlorobenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,2,4-Trimethylbenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,2-Dibromo-3-chloropropane	0.2	U	0.2	U	2.5	UJ	2.5	U	2.5	U
1,2-Dibromoethane	0.2	U	0.2	U	2	U	2	U	2	U
1,2-Dichlorobenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	0.2	U	0.2	U	0.5	U	0.5	UJ	0.5	UJ
1,2-Dichloroethene, Total	NT		NT		2.5	U	2.5	U	2.5	U
1,2-Dichloropropane	0.2	U	0.2	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,3-Dichlorobenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,3-Dichloropropane	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,3-Dichloropropene, Total	NT		NT		0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
1,4-Dioxane	NT		NT		250	UJ	250	UJ	250	UJ
2,2-Dichloropropane	0.2	U	0.2	U	2.5	U	2.5	UJ	2.5	UJ
2-Butanone	0.8	U	0.8	U	5	UJ	5	UJ	5	UJ
2-Chlorotoluene	0.2	U	0.2	U	NT		NT		NT	
2-Hexanone	0.2	U	0.2	U	5	UJ	5	U	5	U
4-Chlorotoluene	0.2	U	0.2	U	NT		NT		NT	
4-Methyl-2-pentanone	0.2	U	0.2	U	5	UJ	5	U	5	U
Acetone	1	U	1	U	5	U	5	UJ	5	UJ
Acrylonitrile	0.2	U	0.2	U	5	UJ	5	U	5	U
Benzene	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Bromobenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Bromochloromethane	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Bromodichloromethane	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Bromoform	0.2	U	0.2	U	2	UJ	2	U	2	U
Bromomethane	0.2	U	0.2	U	2.5	UJ	2.5	U	2.5	U
Carbon disulfide	0.2	U	0.2	U	5	U	5	U	5	U
Carbon tetrachloride	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Chloroethane	0.2	U	0.2	U	2.5	UJ	2.5	U	2.5	U
Chloroform	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Chloromethane	0.2	U	0.2	U	2.5	UJ	2.5	U	2.5	U
cis-1,2-Dichloroethene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
cis-1,3-Dichloropropene	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Dibromomethane	0.2	U	0.2	U	5	U	5	U	5	U
Dichlorodifluoromethane	0.2	U	0.2	U	5	UJ	5	U	5	U
Ethyl ether	NT		NT		2.5	UJ	2.5	U	2.5	U
Ethylbenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Hexachlorobutadiene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Isopropylbenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Methyl tert butyl ether	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Methylene chloride	1	U	1	U	2.5	U	2.5	U	2.5	U
n-Butylbenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
n-Propylbenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Naphthalene	NT		NT		2.5	UJ	2.5	U	2.5	U
o-Chlorotoluene	NT		NT		2.5	U	2.5	U	2.5	U
o-Xylene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
p-Chlorotoluene	NT		NT		2.5	U	2.5	U	2.5	U
p-Diethylbenzene	0.2	U	0.2	U	2	U	2	U	2	U
p-Ethyltoluene	0.2	U	0.2	U	2	U	2	U	2	U
p-Isopropyltoluene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
p/m-Xylene	0.5	U	0.5	U	2.5	U	2.5	U	2.5	U
sec-Butylbenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Styrene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
tert-Butylbenzene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Tetrachloroethene	0.2	U	0.2	U	0.5	U	0.5	U	0.5	U
Toluene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
trans-1,2-Dichloroethene	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
trans-1,3-Dichloropropene	0.2	U	0.2	U	0.5	UJ	0.5	UJ	0.5	UJ
trans-1,4-Dichloro-2-butene	NT		NT		2.5	UJ	2.5	UJ	2.5	UJ
Trichloroethene	0.2	U	0.2	U	0.5	UJ	0.5	U	0.5	U
Trichlorofluoromethane	0.2	U	0.2	U	2.5	U	2.5	U	2.5	U
Vinyl acetate	NT		NT		5	U	5	U	5	U
Vinyl chloride	0.2	U	0.2	U	1	UJ	1	U	1	U
Xylenes, Total	NT		NT		2.5	U	2.5	U	2.5	U

Notes and Qualifiers:

1. Remedial Investigation (RI) completed by Hydro Tech Environmental, DPC in April 2016
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Table 6
Quality Assurance/Quality Control Sample Results Summary
Remedial Invesitgation Report

538-542 West 29th Street
New York, New York
Langan Project No.: 170515401

Investigation Sample ID Sampling Date Lab Sample ID Sample Type	RI 2016			RI 2018		
	Trip Blank	FB-1		SBTB01_053118	SBTB02_060118	GWTB01_060118
	5/7/2016	5/7/2016		5/31/2018	6/1/2018	6/1/2018
	16E0327-04	16E0327-05		L1820045-11	L1820339-01	L1820339-16
Sample Type	Groundwater Trip Blank	Groundwater Field Blank		Soil Trip Blank	Soil Trip Blank	Groundwater Trip Blank
Semivolatile Organic Compounds (µg/L)						
1,2,4-Trichlorobenzene	NT	2.67	U	NT	NT	NT
1,2-Dichlorobenzene	NT	2.69	U	NT	NT	NT
1,3-Dichlorobenzene	NT	2.82	U	NT	NT	NT
1,4-Dichlorobenzene	NT	2.39	U	NT	NT	NT
2,4-Dinitrotoluene	NT	1.74	U	NT	NT	NT
2,6-Dinitrotoluene	NT	1.74	U	NT	NT	NT
2-Chloronaphthalene	NT	2.38	U	NT	NT	NT
2-Methylnaphthalene	NT	2.98	U	NT	NT	NT
2-Nitroaniline	NT	1.82	U	NT	NT	NT
3,3'-Dichlorobenzidine	NT	1.37	U	NT	NT	NT
3-Nitroaniline	NT	1.82	U	NT	NT	NT
4-Bromophenyl phenyl ether	NT	1.44	U	NT	NT	NT
4-Chloroaniline	NT	3.22	U	NT	NT	NT
4-Chlorophenyl phenyl ether	NT	2.65	U	NT	NT	NT
4-Nitroaniline	NT	2.9	U	NT	NT	NT
Acenaphthene	NT	0.0541	U	NT	NT	NT
Acenaphthylene	NT	0.0541	U	NT	NT	NT
Aniline	NT	1.62	U	NT	NT	NT
Anthracene	NT	0.0541	U	NT	NT	NT
Benzo(a)anthracene	NT	0.0541	U	NT	NT	NT
Benzo(a)pyrene	NT	0.0541	U	NT	NT	NT
Benzo(b)fluoranthene	NT	0.0541	U	NT	NT	NT
Benzo(g,h,i)perylene	NT	0.0541	U	NT	NT	NT
Benzo(k)fluoranthene	NT	0.0541	U	NT	NT	NT
Benzyl butyl phthalate	NT	0.921	U	NT	NT	NT
Bis(2-chloroethoxy)methane	NT	1.91	U	NT	NT	NT
Bis(2-chloroethyl)ether	NT	1.62	U	NT	NT	NT
Bis(2-chloroisopropyl)ether	NT	3.23	U	NT	NT	NT
Bis(2-ethylhexyl)phthalate	NT	0.541	U	NT	NT	NT
Carbazole	NT	1.42	U	NT	NT	NT
Chrysene	NT	0.0541	U	NT	NT	NT
Dibenzo(a,h)anthracene	NT	0.0541	U	NT	NT	NT
Dibenzofuran	NT	2.61	U	NT	NT	NT
Diethyl phthalate	NT	2.77	U	NT	NT	NT
Dimethyl phthalate	NT	2.06	U	NT	NT	NT
Di-n-butyl phthalate	NT	2.22	U	NT	NT	NT
Di-n-octyl phthalate	NT	1.21	U	NT	NT	NT
Fluoranthene	NT	0.0541	U	NT	NT	NT
Fluorene	NT	0.0541	U	NT	NT	NT
Hexachlorobenzene	NT	0.0216	U	NT	NT	NT
Hexachlorobutadiene	NT	0.541	U	NT	NT	NT
Hexachlorocyclopentadiene	NT	2.74	U	NT	NT	NT
Hexachloroethane	NT	0.541	U	NT	NT	NT
Indeno(1,2,3-cd)pyrene	NT	0.0541	U	NT	NT	NT
Isophorone	NT	2.9	U	NT	NT	NT
Naphthalene	NT	0.0541	U	NT	NT	NT
Nitrobenzene	NT	0.27	U	NT	NT	NT
N-Nitrosodimethylamine	NT	0.541	U	NT	NT	NT
N-nitroso-di-n-propylamine	NT	2.77	U	NT	NT	NT
N-Nitrosodiphenylamine	NT	5.41	U	NT	NT	NT
Phenanthrene	NT	0.0541	U	NT	NT	NT
Pyrene	NT	0.0541	U	NT	NT	NT
Pyridine	NT	4.23	U	NT	NT	NT
Total SVOC's	NT	ND		NT	NT	NT
Pesticides (µg/L)						
4,4'-DDD	NT	0.00444	U	NT	NT	NT
4,4'-DDE	NT	0.00444	U	NT	NT	NT
4,4'-DDT	NT	0.00444	U	NT	NT	NT
Aldrin	NT	0.00444	U	NT	NT	NT
alpha-BHC	NT	0.00444	U	NT	NT	NT
alpha-Chlordane	NT	0.00444	U	NT	NT	NT
beta-BHC	NT	0.00444	U	NT	NT	NT
Chlordane, total	NT	0.0444	U	NT	NT	NT
delta-BHC	NT	0.00444	U	NT	NT	NT
Dieldrin	NT	0.00222	U	NT	NT	NT
Endosulfan I	NT	0.00444	U	NT	NT	NT
Endosulfan II	NT	0.00444	U	NT	NT	NT
Endosulfan sulfate	NT	0.00444	U	NT	NT	NT
Endrin	NT	0.00444	U	NT	NT	NT
Endrin aldehyde	NT	0.0111	U	NT	NT	NT
Endrin ketone	NT	0.0111	U	NT	NT	NT
gamma-BHC (Lindane)	NT	0.00444	U	NT	NT	NT
gamma-Chlordane	NT	0.0111	U	NT	NT	NT
Heptachlor	NT	0.00444	U	NT	NT	NT
Heptachlor epoxide	NT	0.00444	U	NT	NT	NT
Methoxychlor	NT	0.00444	U	NT	NT	NT
Toxaphene	NT	0.111	U	NT	NT	NT

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New York, New York
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	16E0327-04	16E0327-05		L1820045-11	L1820339-01	L1820339-16
	Groundwater Trip Blank	Groundwater Field Blank		Soil Trip Blank	Soil Trip Blank	Groundwater Trip Blank
Polychorintated Biphenyls (PCBs) (µg/L)						
Aroclor 1016	NT	0.0556	U	NT	NT	NT
Aroclor 1221	NT	0.0556	U	NT	NT	NT
Aroclor 1232	NT	0.0556	U	NT	NT	NT
Aroclor 1242	NT	0.0556	U	NT	NT	NT
Aroclor 1248	NT	0.0556	U	NT	NT	NT
Aroclor 1254	NT	0.0556	U	NT	NT	NT
Aroclor 1260	NT	0.0556	U	NT	NT	NT
Total PCBs	NT	0.0556	U	NT	NT	NT
Metals (mg/L)						
Aluminum	NT	0.056	U	NT	NT	NT
Antimony	NT	0.006	U	NT	NT	NT
Arsenic	NT	0.004	U	NT	NT	NT
Barium	NT	0.011	U	NT	NT	NT
Beryllium	NT	0.001	U	NT	NT	NT
Cadmium	NT	0.003	U	NT	NT	NT
Calcium	NT	0.056	U	NT	NT	NT
Chromium	NT	0.006	U	NT	NT	NT
Cobalt	NT	0.006	U	NT	NT	NT
Copper	NT	0.003	U	NT	NT	NT
Iron	NT	0.078		NT	NT	NT
Lead	NT	0.003	U	NT	NT	NT
Magnesium	NT	0.056	U	NT	NT	NT
Manganese	NT	0.006	U	NT	NT	NT
Nickel	NT	0.006	U	NT	NT	NT
Potassium	NT	0.056	U	NT	NT	NT
Selenium	NT	0.011	U	NT	NT	NT
Silver	NT	0.006	U	NT	NT	NT
Sodium	NT	0.970		NT	NT	NT
Thallium	NT	0.006	U	NT	NT	NT
Vanadium	NT	0.011	U	NT	NT	NT
Zinc	NT	0.011	U	NT	NT	NT
Dissolved Metals (mg/L)						
Aluminum	NT	0.056	U	NT	NT	NT
Antimony	NT	0.006	U	NT	NT	NT
Arsenic	NT	0.004	U	NT	NT	NT
Barium	NT	0.011	U	NT	NT	NT
Beryllium	NT	0.001	U	NT	NT	NT
Cadmium	NT	0.003	U	NT	NT	NT
Calcium	NT	0.056	U	NT	NT	NT
Chromium	NT	0.006	U	NT	NT	NT
Cobalt	NT	0.006	U	NT	NT	NT
Copper	NT	0.003	U	NT	NT	NT
Iron	NT	0.092		NT	NT	NT
Lead	NT	0.003	U	NT	NT	NT
Magnesium	NT	0.056	U	NT	NT	NT
Manganese	NT	0.006	U	NT	NT	NT
Nickel	NT	0.006	U	NT	NT	NT
Potassium	NT	0.056	U	NT	NT	NT
Selenium	NT	0.011	U	NT	NT	NT
Silver	NT	0.006	U	NT	NT	NT
Sodium	NT	1.11		NT	NT	NT
Thallium	NT	0.006	U	NT	NT	NT
Vanadium	NT	0.011	U	NT	NT	NT
Zinc	NT	0.013		NT	NT	NT

- Notes and Qualifiers:**
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APPENDIX A
PREVIOUS REPORTS
(SEPARATE ATTACHMENT)

APPENDIX B
PHOTO DOCUMENTATION LOG



Photo 1, 5/31/2018: Soil recovery from soil boring SB2, facing down.



Photo 2, 5/31/2018: Soil recovery from soil boring SB1, facing down.



Photo 3, 5/31/2018: View of temporary well TW-3, facing southwest.



Photo 4, 5/31/2018: View of soil vapor point SV-2, facing north.



Photo 5, 5/31/2018: Closeup view of impacted soil from SB03, facing down.



Photo 6, 6/1/2018: AARCO advancing soil boring SB4 using a Geoprobe 6610DT, facing north.

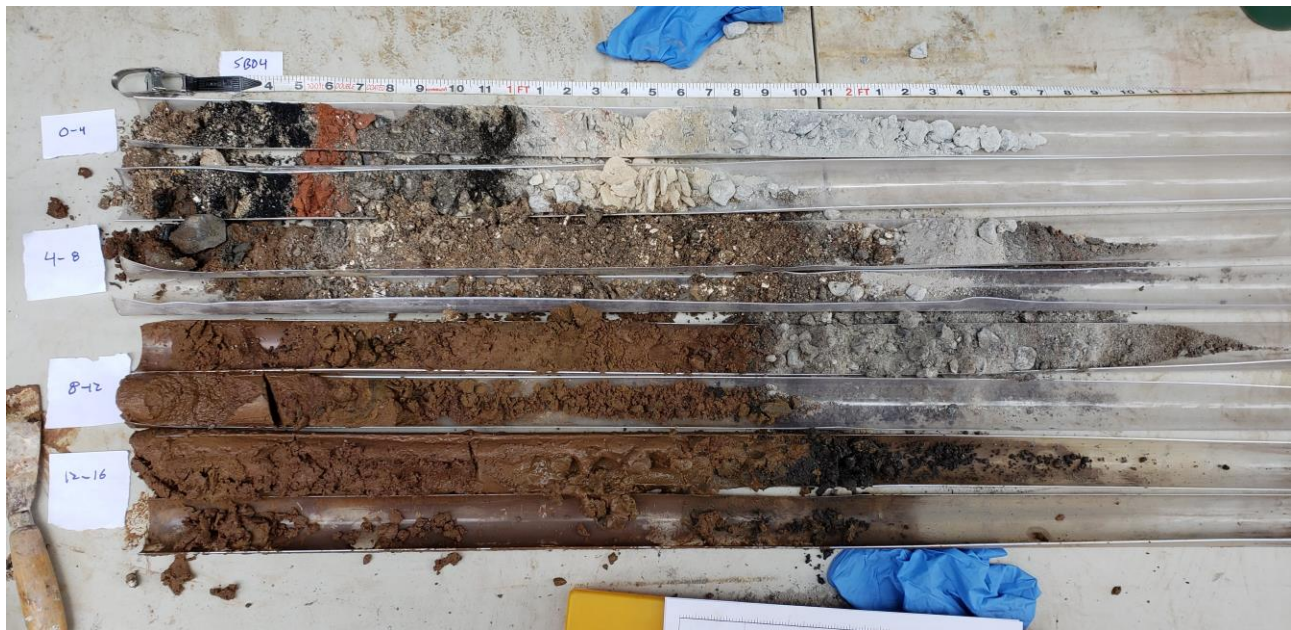


Photo 7, 6/1/2018: Soil recovery from soil boring SB4, facing down.



Photo 8, 6/1/2018: Soil recovery from boring SB5, facing down.



Photo 9, 6/1/2018: Soil recovery from boring SB6, facing down.

APPENDIX C
GEOPHYSICAL SURVEY

GEOPHYSICAL ENGINEERING SURVEY REPORT

Commercial Site

**538-540 West 29th Street,
New York, New York 10001**

NOVA PROJECT NUMBER

18-0785

DATED

June 8, 2018

PREPARED FOR:

LANGAN

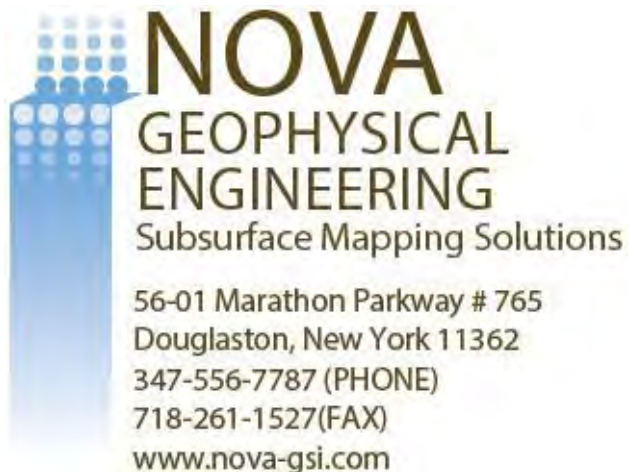
21 Penn Plaza

360 West 31st Street, 8th Floor

New York, NY 10001-2727

www.langan.com

PREPARED BY:



NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS

56-01 Marathon Parkway #765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
www.nova-gsi.com

June 8, 2018

Emily Snead
Senior Staff Scientist

LANGAN

21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-2727
Direct: 212.479.5432
Mobile: 508.918.8558

Re: Geophysical Engineering Survey (GES) Report
Commercial Site
538-540 West 29th Street,
New York, New York 10001

Dear Ms. Snead:

Nova Geophysical Services (NOVA) is pleased to provide the findings of the geophysical engineering survey (GES) at the above referenced project site: 538-540 West 29th Street, New York, New York 10001 (the "Site").

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a geophysical engineering survey (GES) consisting of a Ground Penetrating Radar (GPR) and Electromagnetic (EM) survey at the site. The purpose of this survey is to locate and identify utilities, underground storage tanks and other substructures on May 31st, 2018.

The equipment selected for this investigation was a Sensors and Software Noggin 250 MHz ground penetrating radar (GPR) with a shielded antenna and a Radio Detection RD7100 Electromagnetic utility locator.

A GPR system consists of a radar control unit, control cable, and transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transducer via the control cable. The transmitter electronics amplify the trigger pulse into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the

subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

A typical electromagnetic (EM) utility locating system consists of a transmitter unit and a receiver unit. The receiver unit can be used independently of the transmitter unit in order to detect utility lines with an inherent EM signature (electric utility lines, water lines, etc.). If needed a current at a specific frequency can also be placed on a utility that is being located. This can be done via the transmitter unit by either direct connection or induction via an EM field varying at specific frequency. The receiver unit is then set to the selected frequency and the electromagnetic field created by the current running through the utility can be located allowing the utility to be marked.

GEOPHYSICAL METHODS

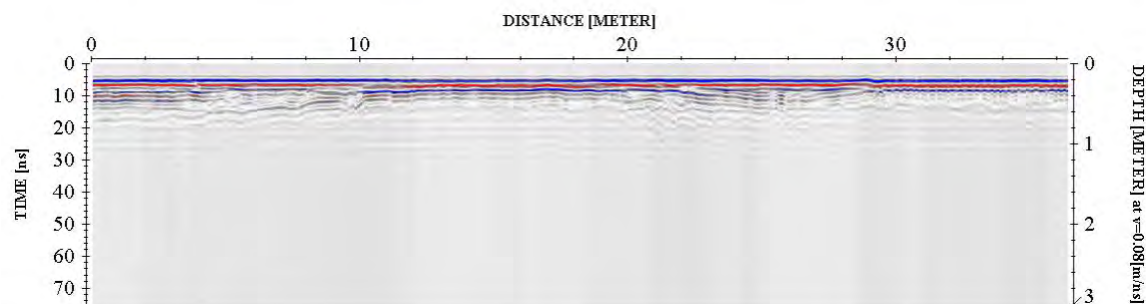
The project site was screened using GPR to search the specified area and inspected for reflections, which could be indicative of substructures and utilities within the subsurface. An EM utility locator was used to help determine the locations of utilities within the survey area.

EM data was collected and interpreted on site and suspected utilities marked as needed. GPR data profiles were collected for the areas of the Site specified by the client and processed as specified below.

DATA PROCESSING

In order to improve the quality of the results and to better identify anomalies NOVA processed the collected data. The processing work flow is briefly described in this section.

Step 1. Import Raw RAMAC data to standard processing format

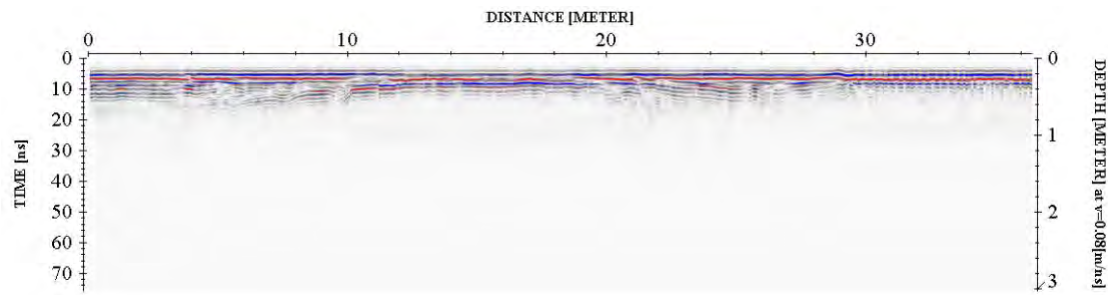


GEOPHYSICAL ENGINEERING SURVEY REPORT

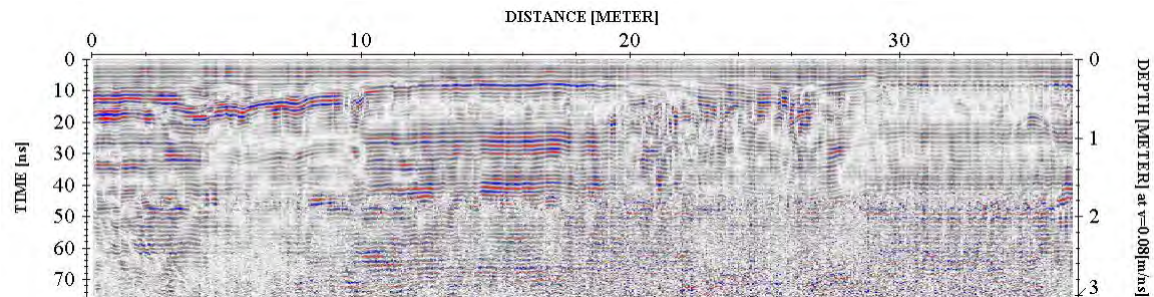
[Commercial Site](#)

538-540 West 29th Street,
New York, New York 10001

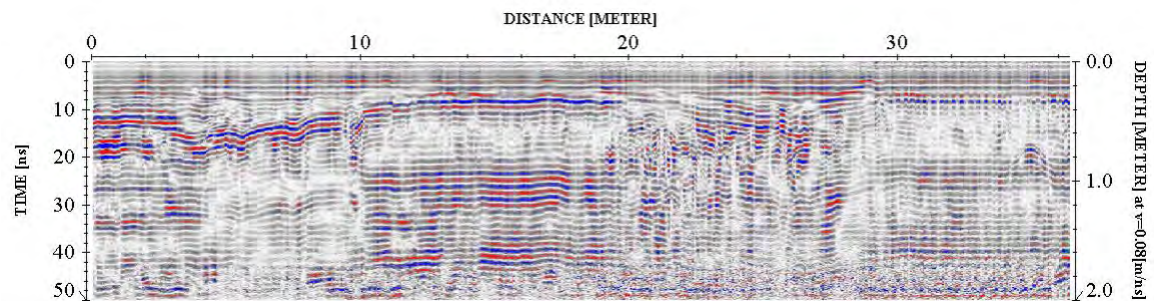
Step 2. Remove instrument noise (*dewow*)



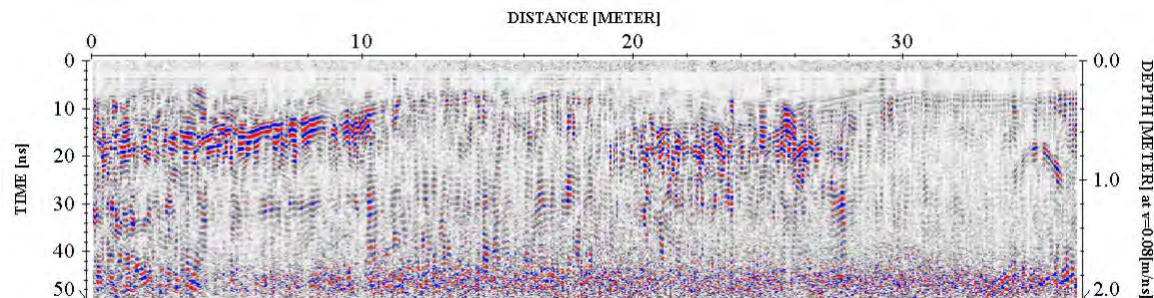
Step 3. Correct for attenuation losses (*energy decay function*)



Step 4. Remove static from bottom of profile (*time cut*)



Step 5. Mute horizontal ringing/noise (*subtracting average*)



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and represents the subsurface anomalies much more accurately.

PHYSICAL SETTINGS

NOVA observed the following physical conditions at the time of the survey.

Weather: Overcast

Temperature: 70° F

Surface: Concrete

Geophysical Noise Level: Geophysical noise at the site was high due to being in an urban environment. Substantial portions of 538 West 29th Street were also unable to be scanned with the GPR due to space constraints.

RESULTS

The results of the geophysical engineering survey (GES) identified the following at the project site:

- Sewer, water, telecommunications, gas and electric service lines were identified during the GES and are shown in the site survey plan.
- Multiple electrical conduits feeding outlets in the floor were identified in 540 West 29th Street. Their locations are shown in the site survey plan.
- A sump pump and drain were identified within the survey area and are shown in the survey plan.
- No large anomalies resembling an underground storage tanks (USTs) were identified within the site survey area.
- All detected subsurface anomalies were marked in the onsite mark out.
- NOVA cleared and marked all of the proposed boring locations at the project site..

GEOPHYSICAL ENGINEERING SURVEY REPORT

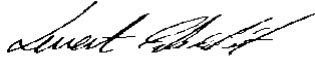
Commercial Site

538-540 West 29th Street,
New York, New York 10001

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

NOVA Geophysical Services



Levent Eskicakit, P.G., E.P.

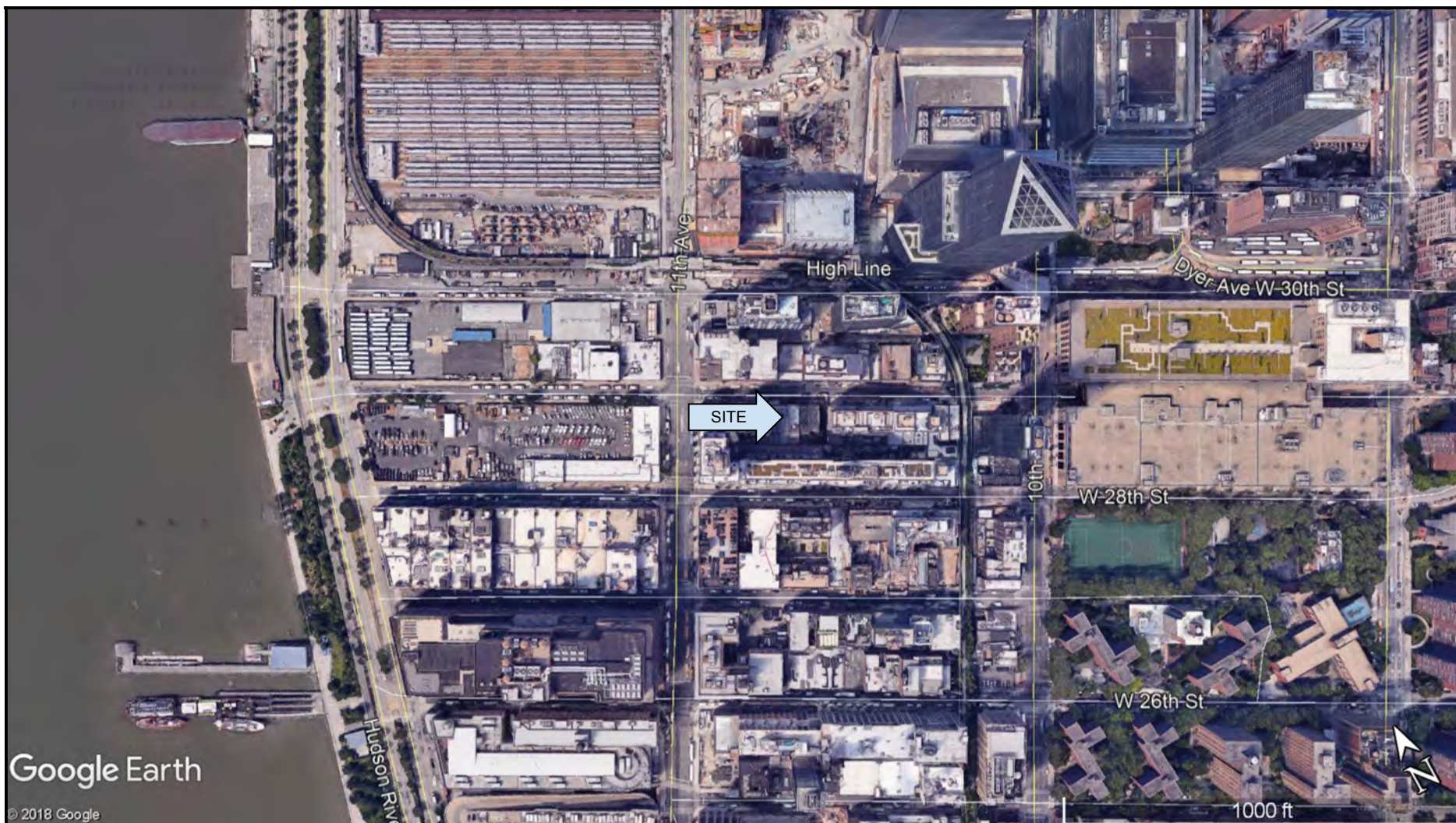
Project Engineer

Attachments:

Geophysical Images

Survey Plan

Location Map



Google Earth

© 2018 Google

NOVA
GEOPHYSICAL
ENGINEERING
 Subsurface Mapping Solutions
 56-01 Marathon Parkway # 765
 Douglaston, New York 11362
 347-556-7787 (PHONE)
 718-261-1527(FAX)
www.nova-gsi.com

SITE LOCATION MAP

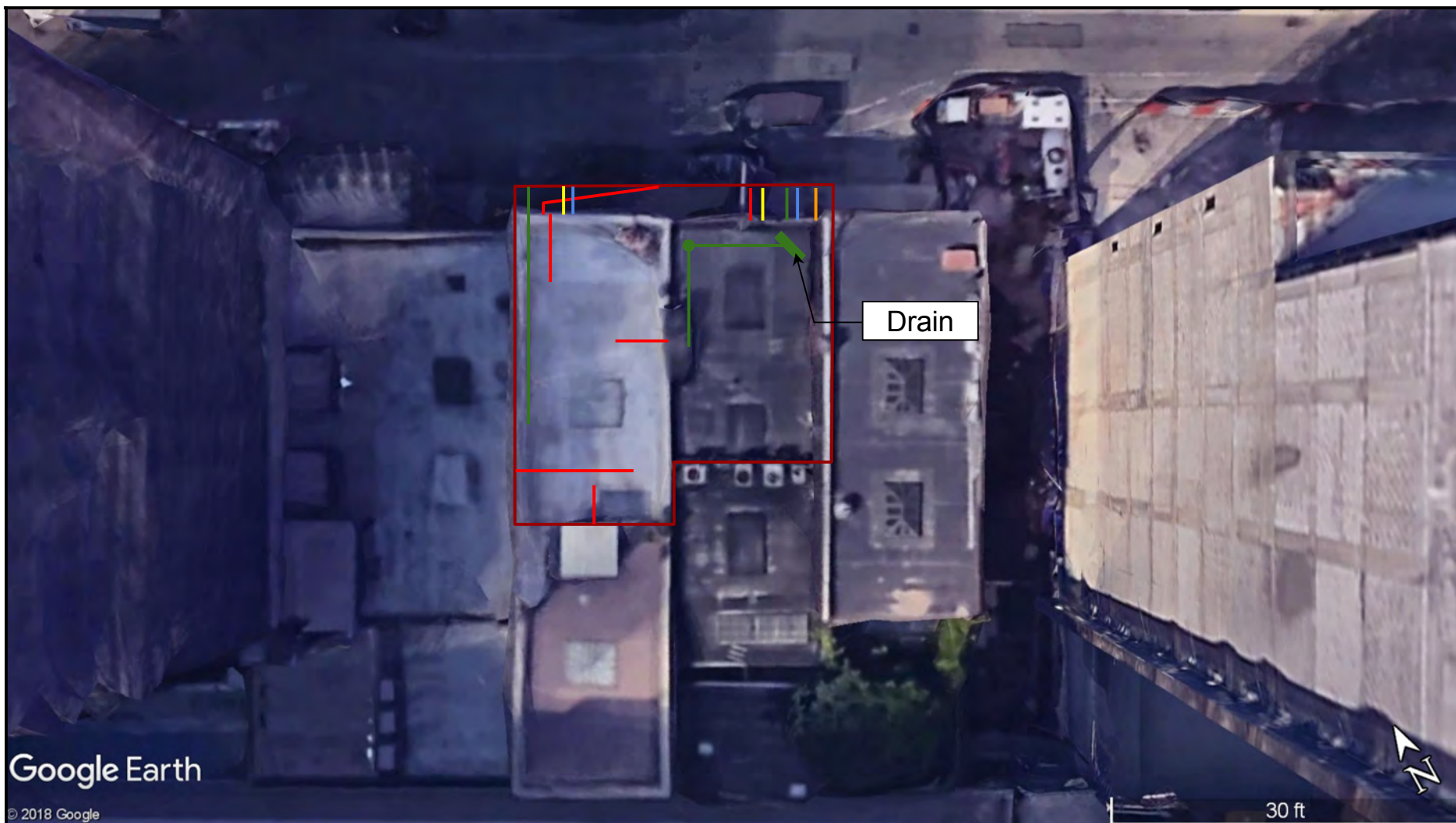
SITE: **Commercial Site**
 538-540 West 28th Street,
 New York, New York 10001

CLIENT: Langan

DATE: May 31st, 2018

AUTH: Chris Steinley

LEGEND



	SURVEY PLAN	LEGEND
 NOVA GEOPHYSICAL ENGINEERING Subsurface Mapping Solutions 56-01 Marathon Parkway # 765 Douglaston, New York 11362 347-556-7787 (PHONE) 718-261-1527(FAX) www.nova-gsi.com	SITE: Commercial Site 538-540 West 28th Street, New York, New York 10001 CLIENT: Langan DATE: May 31st, 2018 AUTH: Chris Steinley	 Survey Area  Sewer  Telecom  Electric  Water  Gas  Sump Pump

GEOPHYSICAL IMAGES

Commercial Site

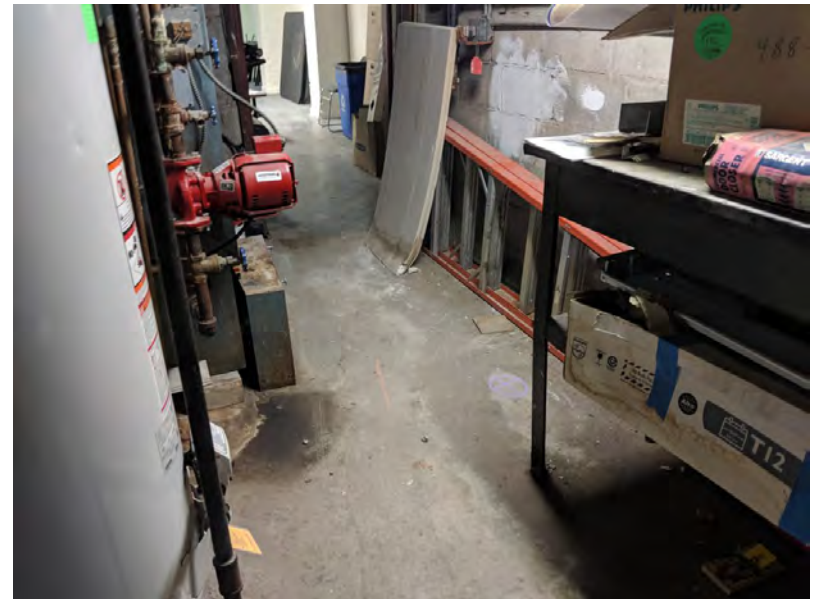
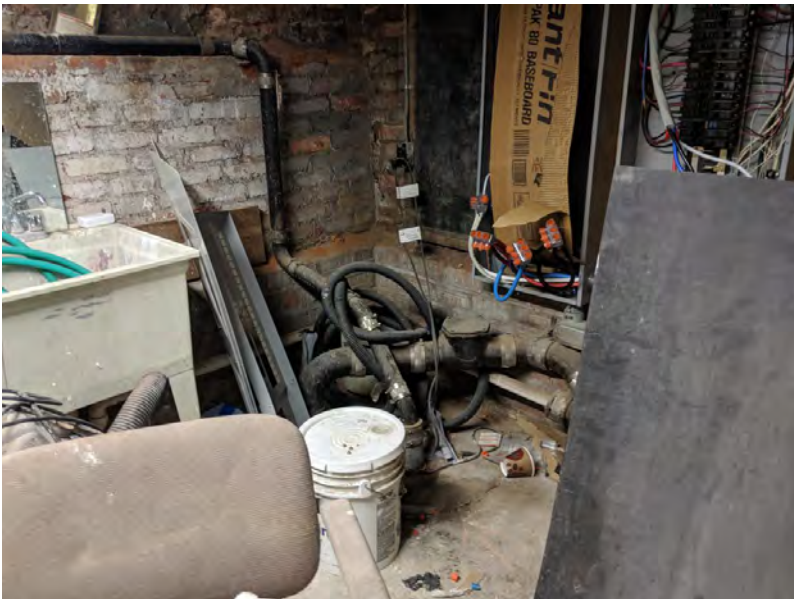
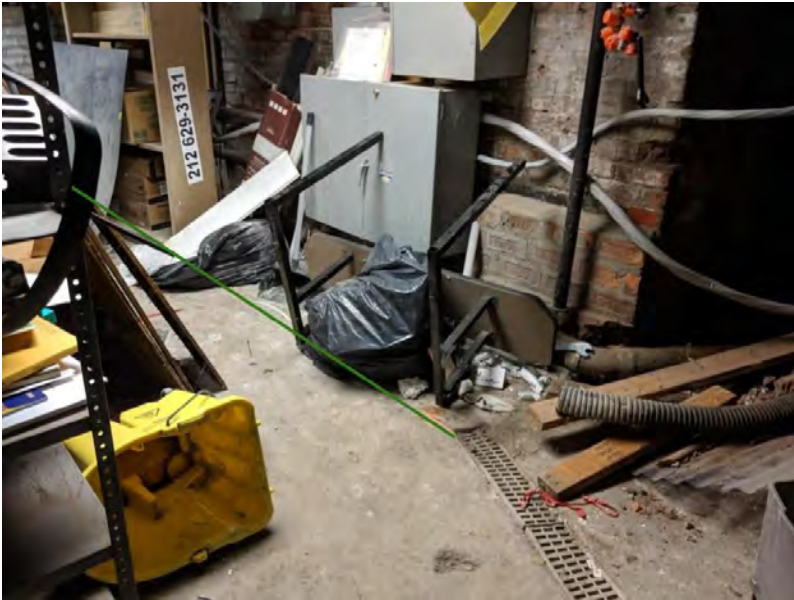
538-540 West 29th Street,
New York, New York 10001
May 31st, 2018



GEOPHYSICAL IMAGES

Commercial Site

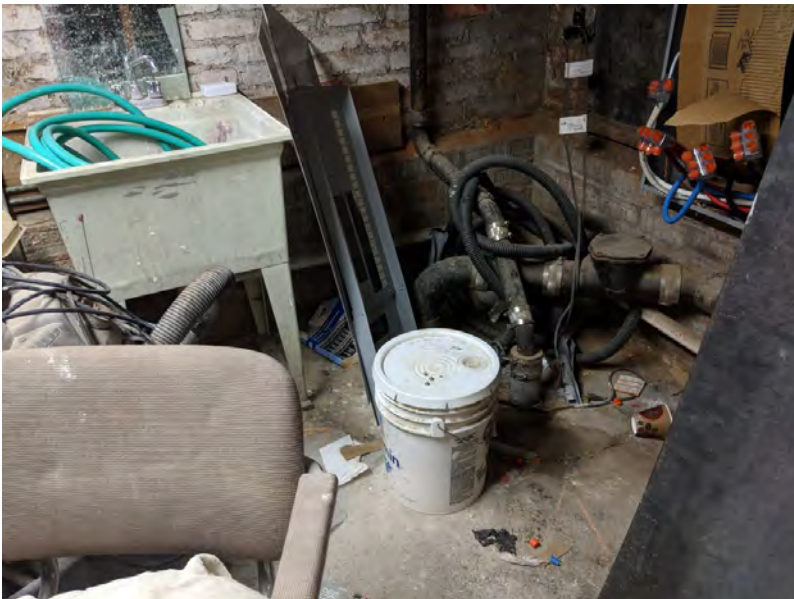
538-540 West 29th Street,
New York, New York 10001
May 31st, 2018



GEOPHYSICAL IMAGES

Commercial Site

538-540 West 29th Street,
New York, New York 10001
May 31st, 2018



GEOPHYSICAL IMAGES

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May 31st, 2018



GEOPHYSICAL IMAGES

Commercial Site

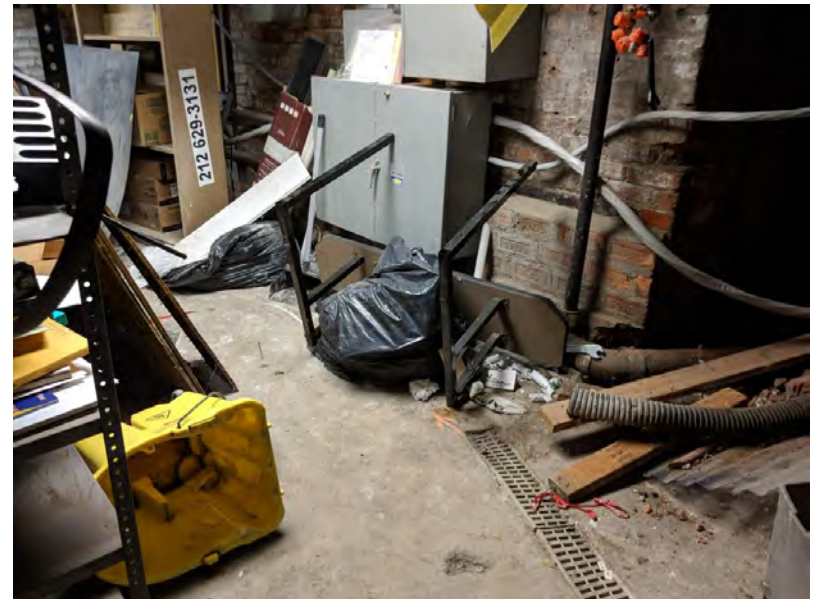
538-540 West 29th Street,
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May 31st, 2018



GEOPHYSICAL IMAGES

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May 31st, 2018



GEOPHYSICAL IMAGES

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May 31st, 2018



GEOPHYSICAL IMAGES

Commercial Site

538-540 West 29th Street,
New York, New York 10001
May 31st, 2018



APPENDIX D
SOIL BORING LOGS

\\LANGAN.COM\DATA\NY\DATA41\170515401\PROJECT DATA\DISCIPLINE\ENVIRONMENTAL\GINT\LOGS\REMEDIAL INVESTIGATION REPORT\BORING LOGS SB01-SB06.GPJ ... 10/30/2018 11:24:04 AM ... Report Log - LANGAN

Project 538-542 West 29th Street				Project No. 170515401					
Location Manhattan, NY				Elevation and Datum N/A					
Drilling Company AARCO Environmental Services, Corp.				Date Started 5/31/18		Date Finished 5/31/18			
Drilling Equipment Geoprobe 420M				Completion Depth 10 ft		Rock Depth N/A			
Size and Type of Bit 2-inch Direct Push				Number of Samples		Disturbed 3			
Casing Diameter (in) N/A				Casing Depth (ft) N/A		Undisturbed N/A			
Casing Hammer N/A				Weight (lbs) N/A		Drop (in) N/A			
Sampler 2 foot long Macrocore				Drilling Foreman Adam Hutchinson					
Sampler Hammer N/A				Field Engineer Kevin Garrett					
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
				Number	Type	Recov. (in)	Penetr. resist. BL/in		PID Reading (ppm)
		R1a (0-3") CONCRETE	0						Collect Soil Samples SB01_0-2 and SBDUP01_053118
		R1b (3-5") loose, brown, medium SAND, some fine sand, trace fine gravel, slag (dry) [FILL]	1	R1	MACROCORE	18	NA	0.0	
		R1c (5-18") medium-dense, red, fine SAND, some medium sand, trace fine gravel (dry) [FILL]	2					0.0	
			3	R2	MACROCORE	9	NA	0.0	
			4						
		R2a (0-5") medium-dense, red, fine SAND, trace fine gravel, trace silt (wet) [FILL]							Collect Soil Sample SB01_3-4
		R2b (5-9") medium-dense, brown, medium SAND, some fine sand (wet)	5	R3	MACROCORE	4	NA	0.0	
		R3 (0-4") loose, red, medium SAND, some fine gravel, some fine sand (wet)	6						
		R4 NO RECOVERY	7	R4	MACROCORE	0	NA		Collect Soil Sample SB01_8-9
			8						
			9	R5	MACROCORE	18	NA	0.0	
			10					0.0	
			11					0.0	
		R5a (0-7") loose, red, medium SAND, some fine gravel, trace fine sand (wet)							End of boring at 10 feet bgs. Backfill with soil cuttings and patch hole with cement.
		R5b (7-18") medium-dense, olive, fine SAND, some silt, some fine gravel (wet)	12						
			13						
			14						
			15						
			16						
			17						
			18						
			19						
			20						

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Project 538-542 West 29th Street				Project No. 170515401			
Location Manhattan, NY				Elevation and Datum N/A			
Drilling Company AARCO Environmental Services, Corp.				Date Started 5/31/18		Date Finished 5/31/18	
Drilling Equipment Geoprobe 420M				Completion Depth 10 ft		Rock Depth N/A	
Size and Type of Bit 2-inch Direct Push				Number of Samples 5		Disturbed N/A	
Casing Diameter (in) N/A		Casing Depth (ft) N/A		Water Level (ft.) First 3		Undisturbed N/A	
Casing Hammer N/A		Weight (lbs) N/A		Drop (in) N/A		Core N/A	
Sampler 2 foot long Macrocore				Drilling Foreman Adam Hutchinson			
Sampler Hammer N/A				Field Engineer Kevin Garrett			

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
				Number	Type	Recov. (in)	Penetr. resist	PID Reading (ppm)		
 		R1a (0-6") CONCRETE	0						Collect Soil Sample SB02_0-2	
		R1b (6-13") medium-dense, brown, fine SAND, trace fine gravel, trace wood, trace brick, trace asphalt (dry) [FILL]	1	R1	MACROCORE	20	NA	4.7		
		R1c (13-20") medium-dense, reddish-brown, fine SAND, trace fine gravel (dry) [FILL]	2					2.3		
				3	R2	MACROCORE	8	NA	1.6	Collect Soil Sample SB02_4-6
		R2 (0-8") loose, olive, fine SAND, some silt, trace fine sand (wet)	4					0.7		
		R3a (0-7") loose, light brown, fine SAND, some medium sand, trace silt (wet)	5	R3	MACROCORE	18	NA	0.0		
		R3b (7-16") loose, light brown, fine SAND, some silt (wet)	6					0.0		
				7	R4	MACROCORE	17	NA	0.0	Collect Soil Sample SB02_6-8
		R3c (16-18") medium-dense, reddish-brown, fine SAND, trace fine gravel, trace medium sand, trace silt (wet)	8					0.0		
		R4a (0-10") loose, reddish-brown, fine SAND, some silt, some fine gravel (wet)	9	R5	MACROCORE	16	NA	0.0		
			10					0.0	End of boring at 10 feet bgs. Backfill with soil cuttings and patch hole with cement.	
	R4b (10-17") medium-dense, reddish-brown, fine SAND, some silt (wet)	11								
	R5a (0-10") loose, red, fine GRAVEL, some medium sand, some fine sand, trace silt (wet)	12								
	R5b (10-17") loose, dark olive, medium SAND, fine gravel (wet)	13								
		14								
		15								
		16								
		17								
		18								
		19								
			20							

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Project 538-542 West 29th Street				Project No. 170515401			
Location Manhattan, NY				Elevation and Datum N/A			
Drilling Company AARCO Environmental Services, Corp.				Date Started 5/31/18		Date Finished 5/31/18	
Drilling Equipment Geoprobe 420M				Completion Depth 10 ft		Rock Depth N/A	
Size and Type of Bit 2-inch Direct Push				Number of Samples 5		Disturbed N/A	
Casing Diameter (in) N/A				Casing Depth (ft) N/A		Undisturbed N/A	
Casing Hammer N/A				Weight (lbs) N/A		Drop (in) N/A	
Sampler 2 foot long Macrocore				Drilling Foreman Adam Hutchinson			
Sampler Hammer N/A				Field Engineer Kevin Garrett			

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)			
				Number	Type	Recov. (in)	Penetr. resist BL/in		PID Reading (ppm)		
X		R1a (0-2") loose, tan, medium SAND, some fine sand, trace fine gravel, trace concrete (dry) [FILL] R1b (2-8") loose, brown, fine SAND, trace fine gravel, trace silt (dry) [FILL]	0	R1	MACROCORE	8	NA	40.7	Collect Soil Sample SB03_0-1		
			1								
			2								
			3	R2	MACROCORE	9	NA			408 357	Collect Soil Sample SB03_3-4 Petroleum-like odor 0-10 feet
		R2 (0-9") loose, red, medium SAND, trace fine gravel, trace silt (moist to wet) [FILL]	4								
		5	R3	MACROCORE	9	NA	120				
	R3 (0-9") loose, reddish-brown, medium SAND, some fine gravel, some fine sand (wet)	6									
		7	R4	MACROCORE	10	NA		41.7	Collect Soil Sample SB03_7-8		
	R4 (0-10") loose, reddish-brown, medium SAND, some fine gravel, some fine sand (wet) R5a (0-20") loose, reddish-brown, medium SAND, some fine gravel, some fine sand (wet)	8									
		9	R5	MACROCORE	24	NA				18.3 12.7 6.5 5.2	
	R5b (20-24") medium-dense, olive, fine SAND, some silt, trace medium sand (wet)	10									
		11					End of boring at 10 feet bgs. Backfill with soil cuttings and patch hole with cement.				
		12									
		13									
		14									
		15									
		16									
		17									
		18									
		19									
		20									

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Project 538-542 West 29th Street				Project No. 170515401			
Location Manhattan, NY				Elevation and Datum N/A			
Drilling Company AARCO Environmental Services, Corp.				Date Started 6/1/18		Date Finished 6/1/18	
Drilling Equipment Geoprobe 6610DT				Completion Depth 16 ft		Rock Depth N/A	
Size and Type of Bit 2-inch Direct Push				Number of Samples 4		Undisturbed N/A	
Casing Diameter (in) N/A		Casing Depth (ft) N/A		Water Level (ft.) First ∇ 11		Completion ∇ N/A	
Casing Hammer N/A		Weight (lbs) N/A		Drop (in) N/A		24 HR. ∇ N/A	
Sampler 4 foot long Macrocore				Drilling Foreman Adam Hutchinson			
Sampler Hammer N/A				Field Engineer Kevin Garrett			

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist	PID Reading (ppm)	
		R1a (0-15") CONCRETE	0						
		R1b (15-27") loose, black, fine GRAVEL, some medium sand, trace fine sand, trace brick, trace asphalt, trace wood (dry) [FILL]	1					0.0	Collect Soil Sample SB04_1-3
	2		R1	MACROCORE	27	NA	0.0		
	3						0.0		
	4						0.0		
		R2a (0-1") loose, gray, medium SAND, some fine gravel, trace medium sand (dry) [FILL] R2b (1-17") loose, brown, medium SAND, some fine gravel, some fine sand, trace brick, trace asphalt (dry) [FILL] R2c (17-23") medium-dense, brown, fine SAND, some coarse gravel, trace silt, trace charcoal (dry) [FILL]	5						Collect Soil Sample SB04_6-8
	6		R2	MACROCORE	23	NA	0.0		
	7						0.0		
	8						0.0		
		R3 (0-19") medium-dense, brown, fine SAND, some silt, trace fine gravel (moist to wet)	9						Collect Soil Sample SB04_10-12
	10		R3	MACROCORE	19	NA	0.0		
	11						0.0		
	12						0.0		
		R4a (0-1") medium-dense, black, fine SAND, some medium sand, trace fine gravel (wet) R4b (1-11") soft, brown, fine SAND, some silt (wet) R4c (11-23") medium-dense, reddish-brown, medium SAND, some fine sand (wet)	13						End of boring at 16 feet bgs. Backfill with soil cuttings and patch hole with cement.
	14		R4	MACROCORE	23	NA	0.0		
	15						0.0		
16						0.0			
			17						
			18						
			19						
			20						

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Project 538-542 West 29th Street				Project No. 170515401			
Location Manhattan, NY				Elevation and Datum N/A			
Drilling Company AARCO Environmental Services, Corp.				Date Started 6/1/18		Date Finished 6/1/18	
Drilling Equipment Geoprobe 6610DT				Completion Depth 16 ft		Rock Depth N/A	
Size and Type of Bit 2-inch Direct Push				Number of Samples 4		Undisturbed N/A	
Casing Diameter (in) N/A		Casing Depth (ft) N/A		Water Level (ft.) First ∇ 11		Completion ∇ N/A	
Casing Hammer N/A		Weight (lbs) N/A		Drop (in) N/A		Drilling Foreman Adam Hutchinson	
Sampler 4 foot long Macrocore				Field Engineer Kevin Garrett			
Sampler Hammer N/A		Weight (lbs) N/A		Drop (in) N/A			

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist	PID Reading (ppm)	
CONCRETE		R1a (0-14") CONCRETE	0					0.0	Collect Soil Sample SB05_0-2
			1					0.0	
GRAVEL		R1b (14-28") dense, gray to black, fine GRAVEL, some medium sand, some fine sand, some charcoal, some slag, some ash (dry) [FILL]	2	R1	MACROCORE	28	NA	0.0	
	3								
	4								
	5								
SAND		R2a (0-10") loose, light brown, fine SAND, some fine gravel, some concrete, some asphalt (dry) [FILL] R2b (10-14") medium-dense, brown, fine SAND, trace silt, trace coarse gravel (moist)	6	R2	MACROCORE	14	NA	0.0	Collect Soil Sample SB05_7-8
	7						0.0		
	8								
	9								
SAND		R3a (0-4") dense, brown, fine SAND, trace silt, trace fine gravel (wet) R3b (4-12") loose, reddish-brown, medium SAND, some fine sand, trace silt (wet)	10	R3	MACROCORE	12	NA	0.0	Collect Soil Samples SB05_11-12 and SBDUP02_060118
	11						0.0		
	12								
	13								
SAND		R4a (0-9") loose, brown, medium SAND, some fine sand, trace fine gravel, trace silt (wet)	14	R4	MACROCORE	9	NA	0.0	End of boring at 16 feet bgs. Backfill with soil cuttings and patch hole with cement.
	15								
	16								
	17								
			18						
			19						
			20						

Project				Project No.			
538-542 West 29th Street				170515401			
Location				Elevation and Datum			
Manhattan, NY				N/A			
Drilling Company				Date Started		Date Finished	
AARCO Environmental Services, Corp.				6/1/18		6/1/18	
Drilling Equipment				Completion Depth		Rock Depth	
Geoprobe 6610DT				16 ft		N/A	
Size and Type of Bit				Number of Samples		Disturbed	
2-inch Direct Push				4		Undisturbed	
Casing Diameter (in)				Water Level (ft.)		Completion	
N/A				First		24 HR.	
Casing Hammer				11		N/A	
Weight (lbs)				N/A		N/A	
Drop (in)				N/A		N/A	
Sampler				Drilling Foreman			
4 foot long Macrocore				Adam Hutchinson			
Sampler Hammer				Field Engineer			
N/A				Kevin Garrett			
Weight (lbs)				N/A			
Drop (in)				N/A			
MATERIAL SYMBOL				Sample Data			
Elev. (ft)				Remarks			
Sample Description				(Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)			
R1a (0-17") CONCRETE				0			
R1b (17-26") loose, brown, fine SAND, some medium sand, trace fine gravel (dry) [FILL]				1			
R2a (0-7") loose, brown, fine SAND, trace medium sand, trace fine gravel (dry) [FILL]				2			
R2b (7-12") medium-dense, tan, fine SAND, trace silt, trace fine gravel (dry) [FILL]				3			
R2c (12-15") medium-dense, black, medium SAND, some fine gravel, trace fine sand (dry) [FILL]				4			
R2d (15-23") dense, reddish-brown, medium SAND, some fine sand, some fine gravel, trace silt (moist)				5			
R3 (0-15") dense, reddish-brown, medium SAND, some fine gravel, trace find sand (wet)				6			
R4a (0-21") medium-dense, reddish-brown, fine SAND, some fine gravel, trace medium sand (wet)				7			
R4b (21-29") dense, tan, medium SAND, some fine sand, trace fine gravel (wet)				8			
R4c (29-48") dense, gray, medium SAND, some fine sand, trace fine gravel (wet)				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

APPENDIX E
GROUNDWATER MONITORING WELL CONSTRUCTION AND
SAMPLING LOGS

WELL DEVELOPMENT SUMMARY

Well No.

TW03

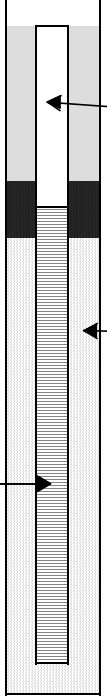
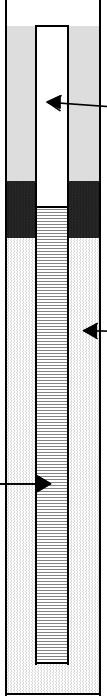
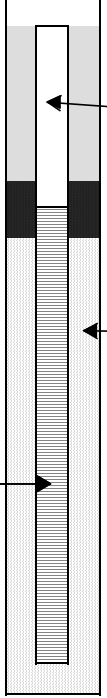
PROJECT		PROJECT NO.																																																																													
538-542 West 29th St		170515401																																																																													
LOCATION		ELEVATION AND DATUM																																																																													
New York, New York		NA																																																																													
DRILLING AGENCY		DATE STARTED	DATE FINISHED																																																																												
AARCO Environmental Services, Corp.		5/31/2018	5/31/2018																																																																												
DRILLING EQUIPMENT		DRILLER																																																																													
Geoprobe® 420 M		Adam Hutchinson																																																																													
SIZE AND TYPE OF BIT		INSPECTOR																																																																													
2-inch Direct Push		Kevin Garrett																																																																													
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)																																																																													
2 inches		Overburden																																																																													
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL																																																																													
PVC	1 inch	No. 2 sand																																																																													
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL																																																																												
PVC No. 20 Slot	1 inch	No. 2 Sand	Bentonite																																																																												
METHOD OF INSTALLATION																																																																															
A Geoprobe 420 M limited access rig was used to advance the boring SB05 to about 10.5 feet below cellar grade. A 1-inch diameter PVC temporary monitoring well was installed which consisted of 10 feet of 0.020-inch well screen, and 1 foot of solid 1-inch diameter PVC riser. The well screen was installed from about 10.5 below cellar grade to 0.5 feet above cellar grade. The temporary well was backfilled with clean No. 2 sand and sealed with 6 inches of bentonite. Following sampling activities, the temporary well was removed, the borehole was backfilled with No. 2 sand, sealed with bentonite, and the concrete cover was restored.																																																																															
WELL DEVELOPMENT DATA																																																																															
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Peristaltic																																																																												
DRILLER OR LANGAN	Langan	MAX PUMP RATE	1 LPM																																																																												
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	1.5 gal																																																																												
DEVELOPMENT CONFIRMATION	Well developed using peristaltic pump and dedicated polyethylene tubing.																																																																														
TOP OF CASING	ELEVATION	DEPTH (ft)	<table border="1"> <thead> <tr> <th colspan="2">WELL DETAILS</th> <th>SUMMARY SOIL CLASSIFICATION</th> <th>DEPTH (FT)</th> </tr> </thead> <tbody> <tr> <td>TOP OF SEAL</td> <td>ELEVATION</td> <td>NA</td> <td>(+) 0.5</td> </tr> <tr> <td>TOP OF SEAL</td> <td>DEPTH (ft)</td> <td>(-) 0.5</td> <td></td> </tr> <tr> <td>TOP OF FILTER</td> <td>ELEVATION</td> <td>NA</td> <td>0.0</td> </tr> <tr> <td>TOP OF FILTER</td> <td>DEPTH (ft)</td> <td>0.0</td> <td></td> </tr> <tr> <td>TOP OF SCREEN</td> <td>ELEVATION</td> <td>NA</td> <td>0.0</td> </tr> <tr> <td>TOP OF SCREEN</td> <td>DEPTH (ft)</td> <td>0.0</td> <td></td> </tr> <tr> <td>BOTTOM OF BORING</td> <td>ELEVATION</td> <td>NA</td> <td>10.5</td> </tr> <tr> <td>BOTTOM OF BORING</td> <td>DEPTH (ft)</td> <td>10.5</td> <td></td> </tr> <tr> <td>SCREEN LENGTH</td> <td colspan="2"></td> <td>10 feet</td> </tr> <tr> <td>SLOT SIZE</td> <td colspan="2"></td> <td>No. 20 Slot; 0.020 Inches</td> </tr> <tr> <td colspan="4">GROUNDWATER ELEVATIONS</td> </tr> <tr> <td>ELEVATION</td> <td>DATE</td> <td>DEPTH TO WATER</td> <td></td> </tr> <tr> <td>NA</td> <td>5/31/2018</td> <td>3.2 ft</td> <td></td> </tr> <tr> <td>ELEVATION</td> <td>DATE</td> <td>DEPTH TO WATER</td> <td></td> </tr> <tr> <td>ELEVATION</td> <td>DATE</td> <td>DEPTH TO WATER</td> <td></td> </tr> <tr> <td>ELEVATION</td> <td>DATE</td> <td>DEPTH TO WATER</td> <td></td> </tr> <tr> <td>ELEVATION</td> <td>DATE</td> <td>DEPTH TO WATER</td> <td></td> </tr> <tr> <td>ELEVATION</td> <td>DATE</td> <td>DEPTH TO WATER</td> <td></td> </tr> </tbody> </table>	WELL DETAILS		SUMMARY SOIL CLASSIFICATION	DEPTH (FT)	TOP OF SEAL	ELEVATION	NA	(+) 0.5	TOP OF SEAL	DEPTH (ft)	(-) 0.5		TOP OF FILTER	ELEVATION	NA	0.0	TOP OF FILTER	DEPTH (ft)	0.0		TOP OF SCREEN	ELEVATION	NA	0.0	TOP OF SCREEN	DEPTH (ft)	0.0		BOTTOM OF BORING	ELEVATION	NA	10.5	BOTTOM OF BORING	DEPTH (ft)	10.5		SCREEN LENGTH			10 feet	SLOT SIZE			No. 20 Slot; 0.020 Inches	GROUNDWATER ELEVATIONS				ELEVATION	DATE	DEPTH TO WATER		NA	5/31/2018	3.2 ft		ELEVATION	DATE	DEPTH TO WATER		ELEVATION	DATE	DEPTH TO WATER		ELEVATION	DATE	DEPTH TO WATER		ELEVATION	DATE	DEPTH TO WATER		ELEVATION	DATE	DEPTH TO WATER	
WELL DETAILS		SUMMARY SOIL CLASSIFICATION		DEPTH (FT)																																																																											
TOP OF SEAL	ELEVATION	NA		(+) 0.5																																																																											
TOP OF SEAL	DEPTH (ft)	(-) 0.5																																																																													
TOP OF FILTER	ELEVATION	NA		0.0																																																																											
TOP OF FILTER	DEPTH (ft)	0.0																																																																													
TOP OF SCREEN	ELEVATION	NA		0.0																																																																											
TOP OF SCREEN	DEPTH (ft)	0.0																																																																													
BOTTOM OF BORING	ELEVATION	NA		10.5																																																																											
BOTTOM OF BORING	DEPTH (ft)	10.5																																																																													
SCREEN LENGTH			10 feet																																																																												
SLOT SIZE			No. 20 Slot; 0.020 Inches																																																																												
GROUNDWATER ELEVATIONS																																																																															
ELEVATION	DATE	DEPTH TO WATER																																																																													
NA	5/31/2018	3.2 ft																																																																													
ELEVATION	DATE	DEPTH TO WATER																																																																													
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ELEVATION	DATE	DEPTH TO WATER																																																																													
ELEVATION	DATE	DEPTH TO WATER																																																																													
1-foot casing length	NA	(+) 0.5																																																																													
TOP OF SEAL	ELEVATION	NA	(-) 0.5																																																																												
TOP OF SEAL	DEPTH (ft)	(-) 0.5																																																																													
TOP OF FILTER	ELEVATION	NA	0.0																																																																												
TOP OF FILTER	DEPTH (ft)	0.0																																																																													
TOP OF SCREEN	ELEVATION	NA	0.0																																																																												
TOP OF SCREEN	DEPTH (ft)	0.0																																																																													
BOTTOM OF BORING	ELEVATION	NA	10.5																																																																												
BOTTOM OF BORING	DEPTH (ft)	10.5																																																																													
SCREEN LENGTH			10 feet																																																																												
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LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York

WELL DEVELOPMENT SUMMARY

Well No.

TW05

PROJECT		PROJECT NO.	
538-542 W 29th St		170515401	
LOCATION		ELEVATION AND DATUM	
New York, New York		NA	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		6/1/2018	6/1/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 6610 DT		Adam Hutchinson	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Kevin Garrett	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2 inch		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	1 inch	No. 2 sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	1 inch	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
A track-mounted Geoprobe 6610 DT rig was used to advance the boring SB05 to about to about 16 feet below cellar grade. A 1-inch diameter PVC temporary monitoring well was installed which consisted of 10 feet of 0.020-inch well screen, and 6 feet of solid 1-inch diameter PVC riser. The well screen was installed from about 16 to 0 feet below cellar grade. The temporary well was backfilled with clean No. 2 sand (filter boack) and sealed with about 12 inches of hydrated bentonite. The remaining portion of the borehole surrounding the PVC riser was backfilled with soil cuttings exhibiting no impacts. Following sampling activities, the temporary well was removed, the borehole was backfilled with No. 2 sand, sealed with bentonite, and the concrete cover was restored.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Peristaltic
DRILLER OR LANGAN	Langan	MAX PUMP RATE	1 LPM
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	1.25 gal
Well developed using peristaltic pump.			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	NA	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	
	NA	(-) 5.0	
TOP OF FILTER	ELEVATION	DEPTH (ft)	Soil Cuttings (Backfill)
	NA	(-) 6.0	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	Bentonite Seal
	NA	(-) 6.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	No. 2 Filter Sand
	NA	(-) 16.0	
SCREEN LENGTH	10 feet		No. 2 Filter Sand
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
NA	6/1/2018	9.2 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.			
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York			

GROUND WATER SAMPLE FIELD INFORMATION FORM

[illegible]

GROUND WATER SAMPLE FIELD INFORMATION FORM

[illegible]

APPENDIX F
SOIL VAPOR CONSTRUCTION AND SAMPLING LOGS

SOIL VAPOR SAMPLING LOG SHEET

Sample Number: SV01_060118

PROJECT: 538-542 W 29th St		PROJECT NO.: 170515401	
LOCATION: New York, New York		SURFACE ELEVATION AND DATUM: NA	
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 5/31/2018	DATE FINISHED: 5/31/2018
INSTALLATION FOREMAN: Adam Hutchinson		SAMPLE DATE STARTED: 6/1/2018	DATE FINISHED: 6/1/2018
INSTALLATION EQUIPMENT: Geoprobe® 6610 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister	
INSPECTOR: Kevin Garrett		SAMPLER: Kevin Garrett	
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 70s Wind: Indoors Precipitation: Indoors Pressure: 30.04	
METHOD OF INSTALLATION AND PURGING: Advance Geoprobe 6610 DT to 7 feet below grade surface (bgs), install 2-inch soil vapor probe, backfill with No. 2 sand to 0.5 feet bgs, and seal to surface with hydrated bentonite.			
TUBING TYPE/DIAMETER: 3/16-inch ID, 1/4-inch OD Teflon-Lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: None	
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: 2-inch Polyethylene Probe		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite	
BOREHOLE DIAMETER: 2 inches		FILTER PACK MATERIAL (Sand or Glass Beads): None (Preferred)	
PURGE VOLUME (L):	0.02	IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)	
PURGE FLOW RATE (ML/MIN):	200		
PID AFTER PURGE (PPM):	24	DEPTH (FEET FROM SURFACE)	
HELIUM TESTS	Pre-sampling Post-sampling		
HELIUM TEST IN BUCKET(%):	18.5% 15.7%	NOTES	
HELIUM TEST IN TUBE (PPM):	0.0% 0.0%		
SAMPLE START TIME:	12:00	The diagram shows a vertical cross-section of the ground. At the top is the 'SURFACE'. Below it is a layer labeled 'Top of Seal'. Below that is a layer labeled 'Top of Pack'. At the bottom is the 'Tube Depth' marked with a checkmark. The depth from the surface to the top of the seal is 0.0 feet. The depth from the surface to the top of the pack is 0.5 feet. The total depth of the tube is 7 feet.	
SAMPLE STOP TIME:	14:00		
TOTAL SAMPLE TIME (MIN):	120		
REGULATOR FLOW RATE (L/MIN):	0.0225		
VOLUME OF SAMPLE (LITERS):	2.70		
PID AFTER SAMPLE (PPM):	23.3		
SAMPLE MOISTURE CONTENT:	NA		
CAN SERIAL NUMBER:	2184		
REGULATOR SERIAL NUMBER:	1006		
CAN START VACUUM PRESS. (" HG):	-29.66		
CAN STOP VACUUM PRESS. (" HG):	-6.48		
SAMPLE LOCATION SKETCH		NOTES	
See Sample Location Plan			
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727			

SOIL VAPOR SAMPLING LOG SHEET

Sample Number: SV02_060118

PROJECT: 538-542 W 29th St		PROJECT NO.: 170515401																			
LOCATION: New York, New York		SURFACE ELEVATION AND DATUM: NA																			
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 5/31/2018	DATE FINISHED: 5/31/2018																		
INSTALLATION FOREMAN: Adam Hutchinson		SAMPLE DATE STARTED: 6/1/2018	DATE FINISHED: 6/1/2018																		
INSTALLATION EQUIPMENT: Portable Electric Rig		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																			
INSPECTOR: Adam Hutchinson		SAMPLER: Kevin Garrett																			
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 70s Wind: Indoors Precipitation: Indoors Pressure: 30.04																			
METHOD OF INSTALLATION AND PURGING: AARCO advanced subslab vapor point to 3-inches below the top of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch below grade surface, and the remainder of the borehole was sealed with bentonite.																					
TUBING TYPE/DIAMETER: 3/16-inch ID, 1/4-inch OD Teflon-Lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: NA																			
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: 2-inch Polyethylene Probe		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																			
BOREHOLE DIAMETER: 2 inches		FILTER PACK MATERIAL (Sand or Glass Beads): None (Preferred)																			
PURGE VOLUME (L):	0.02	<table border="1"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)</th> <th>DEPTH (FEET FROM SURFACE)</th> <th>NOTES</th> </tr> </thead> <tbody> <tr> <td>SURFACE</td> <td>SURFACE</td> <td></td> <td></td> </tr> <tr> <td rowspan="3"> </td> <td></td> <td>0.0</td> <td></td> </tr> <tr> <td></td> <td>0.1</td> <td></td> </tr> <tr> <td></td> <td>0.3</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)		DEPTH (FEET FROM SURFACE)	NOTES	SURFACE	SURFACE					0.0			0.1			0.3	
IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)				DEPTH (FEET FROM SURFACE)	NOTES																
SURFACE	SURFACE																				
				0.0																	
				0.1																	
				0.3																	
PURGE FLOW RATE (ML/MIN):	200																				
PID AFTER PURGE (PPM):	134																				
HELIUM TESTS																					
	Pre-sampling Post-sampling																				
HELIUM TEST IN BUCKET(%):	15.6% 17.6%																				
HELIUM TEST IN TUBE (PPM):	0.0% 0.0%																				
SAMPLE START TIME:	8:48																				
SAMPLE STOP TIME:	10:48																				
TOTAL SAMPLE TIME (MIN):	120																				
REGULATOR FLOW RATE (L/MIN):	0.0225																				
VOLUME OF SAMPLE (LITERS):	2.70																				
PID AFTER SAMPLE (PPM):	127																				
SAMPLE MOISTURE CONTENT:	NA																				
CAN SERIAL NUMBER:	1745																				
REGULATOR SERIAL NUMBER:	1029																				
CAN START VACUUM PRESS. (" HG):	-29.74																				
CAN STOP VACUUM PRESS. (" HG):	-6.15																				
SAMPLE LOCATION SKETCH		NOTES																			
See Sample Location Plan																					
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727																					

SOIL VAPOR SAMPLING LOG SHEET

Sample Number: SV03_060118

PROJECT: 538-542 W 29th St		PROJECT NO.: 170515401																	
LOCATION: Manhattan		SURFACE ELEVATION AND DATUM: NA																	
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 6/1/2018	DATE FINISHED: 6/1/2018																
INSTALLATION FOREMAN: Adam Hutchinson		SAMPLE DATE STARTED: 6/1/2018	DATE FINISHED: 6/1/2018																
INSTALLATION EQUIPMENT: Geoprobe® 6610 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																	
INSPECTOR: Kevin Garrett		SAMPLER: Kevin Garrett																	
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 70s Wind: Indoors Precipitation: Indoors Pressure: 30.04																	
METHOD OF INSTALLATION AND PURGING: Advance Geoprobe 6610 DT to 7 feet below grade surface (bgs), install 2-inch soil vapor probe, backfill with No. 2 sand to 0.5 feet bgs, seal to surface with hydrated bentonite.																			
TUBING TYPE/DIAMETER: 3/16-inch ID, 1/4-inch OD Teflon-Lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: None																	
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: 2-inch Polyethylene Probe		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																	
BOREHOLE DIAMETER: 2 inches		FILTER PACK MATERIAL (Sand or Glass Beads): None (Preferred)																	
PURGE VOLUME (L):	0.02	<table border="1"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)</th> <th>DEPTH (FEET FROM SURFACE)</th> <th>NOTES</th> </tr> </thead> <tbody> <tr> <td>SURFACE</td> <td>SURFACE</td> <td></td> <td></td> </tr> <tr> <td colspan="2" rowspan="3"> </td> <td>Top of Seal</td> <td>0.0</td> </tr> <tr> <td>Top of Pack</td> <td>0.5</td> </tr> <tr> <td>Tube Depth</td> <td>7</td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)		DEPTH (FEET FROM SURFACE)	NOTES	SURFACE	SURFACE					Top of Seal	0.0	Top of Pack	0.5	Tube Depth	7
IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)				DEPTH (FEET FROM SURFACE)	NOTES														
SURFACE	SURFACE																		
				Top of Seal	0.0														
				Top of Pack	0.5														
				Tube Depth	7														
PURGE FLOW RATE (ML/MIN):	200																		
PID AFTER PURGE (PPM):	27.3																		
HELIUM TESTS																			
	Pre-sampling Post-sampling																		
HELIUM TEST IN BUCKET(%):	18.5% 13.9%																		
HELIUM TEST IN TUBE (PPM):	0.0% 0.0%																		
SAMPLE START TIME:	12:00																		
SAMPLE STOP TIME:	14:00																		
TOTAL SAMPLE TIME (MIN):	120																		
REGULATOR FLOW RATE (L/MIN):	120																		
VOLUME OF SAMPLE (LITERS):	0.0225																		
PID AFTER SAMPLE (PPM):	2.70																		
SAMPLE MOISTURE CONTENT:	NA																		
CAN SERIAL NUMBER:	478																		
REGULATOR SERIAL NUMBER:	745																		
CAN START VACUUM PRESS. (" HG):	-29.71																		
CAN STOP VACUUM PRESS. (" HG):	-5.6																		
SAMPLE LOCATION SKETCH		NOTES																	
See Sample Location Plan																			
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SOIL VAPOR SAMPLING LOG SHEET

Sample Number: SV04_060118

PROJECT: 538-542 W 29th St		PROJECT NO.: 170515401																						
LOCATION: New York, New York		SURFACE ELEVATION AND DATUM: NA																						
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 5/31/2018	DATE FINISHED: 5/31/2018																					
INSTALLATION FOREMAN: Adam Hutchinson		SAMPLE DATE STARTED: 6/1/2018	DATE FINISHED: 6/1/2018																					
INSTALLATION EQUIPMENT: Portable Electric Rig		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																						
INSPECTOR: Kevin Garrett		SAMPLER: Kevin Garrett																						
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 70s Wind: Indoors Precipitation: Indoors Pressure: 30.04																						
METHOD OF INSTALLATION AND PURGING: AARCO advanced subslab vapor point to 3-inches below the top of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite.																								
TUBING TYPE/DIAMETER: 3/16-inch ID, 1/4-inch OD Teflon-Lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: None																						
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: 2-inch Polyethylene Probe		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																						
BOREHOLE DIAMETER: 2 inches		FILTER PACK MATERIAL (Sand or Glass Beads): None (Preferred)																						
PURGE VOLUME (L): 0.02 PURGE FLOW RATE (ML/MIN): 200 PID AFTER PURGE (PPM): 5000+ HELIUM TESTS <table border="1"> <tr> <th>Pre-sampling</th> <th>Post-sampling</th> </tr> <tr> <td>18.5%</td> <td>14.2%</td> </tr> <tr> <td>0.0%</td> <td>0.0%</td> </tr> </table> HELIUM TEST IN BUCKET(%): HELIUM TEST IN TUBE (PPM): SAMPLE START TIME: 8:44 SAMPLE STOP TIME: 10:44 TOTAL SAMPLE TIME (MIN): 120 REGULATOR FLOW RATE (L/MIN): 0.0225 VOLUME OF SAMPLE (LITERS): 2.70 PID AFTER SAMPLE (PPM): 5000+ SAMPLE MOISTURE CONTENT: NA CAN SERIAL NUMBER: 2241 REGULATOR SERIAL NUMBER: 931 CAN START VACUUM PRESS. (" HG): -28.44 CAN STOP VACUUM PRESS. (" HG): -5.02		Pre-sampling	Post-sampling	18.5%	14.2%	0.0%	0.0%	<table border="1"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)</th> <th>DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th>SURFACE</th> <th>SURFACE</th> <th></th> </tr> </thead> <tbody> <tr> <td rowspan="3"> </td> <td>Top of Seal</td> <td>0.0</td> <td rowspan="3"></td> </tr> <tr> <td>Top of Pack</td> <td>0.1</td> </tr> <tr> <td>Tube Depth</td> <td>0.3</td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)		DEPTH (FEET FROM SURFACE)	NOTES	SURFACE	SURFACE			Top of Seal	0.0		Top of Pack	0.1	Tube Depth	0.3
Pre-sampling	Post-sampling																							
18.5%	14.2%																							
0.0%	0.0%																							
IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)		DEPTH (FEET FROM SURFACE)	NOTES																					
SURFACE	SURFACE																							
	Top of Seal	0.0																						
	Top of Pack	0.1																						
	Tube Depth	0.3																						
SAMPLE LOCATION SKETCH		NOTES																						
See Sample Location Plan																								
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Sample Number: SVAA_060118

Sample Number: SVAA_060118

PROJECT: 538-542 W 29th St	PROJECT NO.: 170515401
LOCATION: New York, New York	SURFACE ELEVATION AND DATUM: NA
SAMPLER: Kevin Garrett	SAMPLE DATE STARTED: 6/1/2018 DATE FINISHED: 6/1/2018
INSPECTOR: Kevin Garrett	TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister
POTENTIAL SAMPLE INTERFERENCES: None	WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 70s Wind: Indoors Precipitation: Indoors Pressure: 30.04
METHOD OF INSTALLATION AND SAMPLING: Langan field screened the sample location with a MiniRAE 3000 photoionization detector prior to sampling. Sample consisted of 2.7 L Summa canister fitted with a 2-hour flow control valve. The flow controller was zeroed and valve opened to initiate the 2-hour sample collection. The sample and flow controller were checked every half hour during sampling to ensure proper operation.	
SAMPLE DETAILS	SAMPLE LOCATION SKETCH
HEIGHT ABOVE GROUND (FT): PID BEFORE SAMPLE (PPM): SAMPLE START TIME: SAMPLE STOP TIME: TOTAL SAMPLE TIME (MIN): REGULATOR FLOW RATE (L/MIN): VOLUME OF SAMPLE (LITERS): PID AFTER SAMPLE (PPM): SAMPLE MOISTURE CONTENT: CAN SERIAL NUMBER: REGULATOR SERIAL NUMBER: CAN START VACUUM PRESS. (" HG): CAN STOP VACUUM PRESS. (" HG):	See Sample Location Plan
NOTES	
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APPENDIX G
DATA USABILITY SUMMARY REPORT

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

To: Kimberly Nagotko, Langan Senior Staff Geologist

From: Emily Strake, Langan Senior Project Chemist

Date: October 23, 2018

Re: Data Usability Summary Report
For West 29th Street
Samples Collected in May and June, 2018
Langan Project No.: 170515401

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of samples collected in 2018 by Langan Engineering and Environmental Services ("Langan") at the West 29th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), herbicides, polychlorinated biphenyls (PCBs), pesticides, metals, mercury (Hg), cyanide (CN), and hexavalent chromium (CrVI), trivalent chromium (CrIII), and total solids by the methods specified below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Method 8270D and 8270D SIM
- Herbicides by SW-846 Method 8151A
- PCBs by SW-846 Method 8082A
- Pesticides by SW-846 Method 8081B
- Metals by SW-846 Method 6010C and 6020A
- Mercury by SW-846 Method 7471B
- Cyanide by SW-846 Method 9012B
- Hexavalent Chromium by SW-846 Method 7196A
- Trivalent Chromium (calculated)

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

Technical Memorandum

Data Usability Summary Report
For West 29th Street
2018 Samples
Langan Project No.: 170515401
October 23, 2018 Page 2 of 9

TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1820339	L1820339-13	TW03_060118	6/1/2018	VOCs, SVOCs, SVOCs SIM, Herbicides, PCBs, Pesticides, Metals, CN, CrVI, CrIII
L1820339	L1820339-14	TW05_060118	6/1/2018	VOCs, SVOCs, SVOCs SIM Herbicides, PCBs, Pesticides, Metals, CN, CrVI, CrIII
L1820339	L1820339-15	TWDUP01_060118	6/1/2018	VOCs, SVOCs, SVOCs SIM, Herbicides, PCBs, Pesticides, Metals, CN, CrVI, CrIII
L1820339	L1820339-16	GWTB01_060118	6/1/2018	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-17, "Validating Chlorinated Herbicides" (December 2010, Revision 3.1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-36A, "Pesticide Data Validation" (October 2016, Revision 1), USEPA Region II SOP #HW-3a, "ICP-AES Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and Cyanide Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

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

Technical Memorandum

Data Usability Summary Report
For West 29th Street
2018 Samples
Langan Project No.: 170515401
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quantification, chromatograms, overall system performance, serial dilutions, dual column performance, field duplicate, and field blank sample results.

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

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

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

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
GWTB01_060118	8260C	107-06-2	1,2-Dichloroethane	UJ
GWTB01_060118	8260C	123-91-1	1,4-Dioxane	UJ
GWTB01_060118	8260C	594-20-7	2,2-Dichloropropane	UJ
GWTB01_060118	8260C	78-93-3	2-Butanone	UJ
GWTB01_060118	8260C	67-64-1	Acetone	UJ
GWTB01_060118	8260C	10061-02-6	trans-1,3-Dichloropropene	UJ
GWTB01_060118	8260C	110-57-6	trans-1,4-Dichloro-2-butene	UJ
TW03_060118	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
TW03_060118	8260C	96-18-4	1,2,3-Trichloropropane	UJ
TW03_060118	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
TW03_060118	8260C	107-06-2	1,2-Dichloroethane	UJ
TW03_060118	8260C	123-91-1	1,4-Dioxane	UJ
TW03_060118	8260C	78-93-3	2-Butanone	UJ
TW03_060118	8081B	72-55-9	4,4'-DDE	UJ
TW03_060118	8260C	108-10-1	4-Methyl-2-pentanone	UJ
TW03_060118	8260C	67-64-1	Acetone	J
TW03_060118	8260C	107-13-1	Acrylonitrile	UJ
TW03_060118	6020A	7440-36-0	Antimony, Dissolved	U (0.004)
TW03_060118	6020A	7440-36-0	Antimony, Total	U (0.004)
TW03_060118	8270D	65-85-0	Benzoic Acid	UJ
TW03_060118	8260C	74-83-9	Bromomethane	UJ
TW03_060118	8260C	75-15-0	Carbon disulfide	UJ
TW03_060118	8260C	75-00-3	Chloroethane	UJ
TW03_060118	8260C	74-87-3	Chloromethane	UJ
TW03_060118	8081B	319-86-8	Delta-BHC	UJ
TW03_060118	8260C	75-71-8	Dichlorodifluoromethane	UJ
TW03_060118	8081B	959-98-8	Endosulfan I	UJ
TW03_060118	8260C	60-29-7	Ethyl ether	UJ
TW03_060118	8081B	76-44-8	Heptachlor	UJ
TW03_060118	6020A	7439-89-6	Iron, Dissolved	J
TW03_060118	8260C	110-57-6	trans-1,4-Dichloro-2-butene	UJ
TW03_060118	8260C	75-69-4	Trichlorofluoromethane	UJ
TW03_060118	8260C	75-01-4	Vinyl chloride	UJ
TW05_060118	8260C	107-06-2	1,2-Dichloroethane	UJ
TW05_060118	8260C	123-91-1	1,4-Dioxane	UJ
TW05_060118	8260C	594-20-7	2,2-Dichloropropane	UJ
TW05_060118	8260C	78-93-3	2-Butanone	UJ
TW05_060118	8081B	72-55-9	4,4'-DDE	UJ
TW05_060118	8081B	50-29-3	4,4'-DDT	J
TW05_060118	8260C	67-64-1	Acetone	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
TW05_060118	6020A	7440-36-0	Antimony, Dissolved	U (0.004)
TW05_060118	6020A	7440-36-0	Antimony, Total	U (0.004)
TW05_060118	8270D	65-85-0	Benzoic Acid	UJ
TW05_060118	6020A	7440-48-4	Cobalt, Dissolved	J
TW05_060118	8081B	319-86-8	Delta-BHC	UJ
TW05_060118	8081B	959-98-8	Endosulfan I	UJ
TW05_060118	8081B	76-44-8	Heptachlor	UJ
TW05_060118	8260C	10061-02-6	trans-1,3-Dichloropropene	UJ
TW05_060118	8260C	110-57-6	trans-1,4-Dichloro-2-butene	UJ
TWDUP01_060118	8260C	107-06-2	1,2-Dichloroethane	UJ
TWDUP01_060118	8260C	123-91-1	1,4-Dioxane	UJ
TWDUP01_060118	8260C	594-20-7	2,2-Dichloropropane	UJ
TWDUP01_060118	8260C	78-93-3	2-Butanone	UJ
TWDUP01_060118	8081B	72-55-9	4,4'-DDE	UJ
TWDUP01_060118	8081B	50-29-3	4,4'-DDT	J
TWDUP01_060118	8260C	67-64-1	Acetone	UJ
TWDUP01_060118	6020A	7440-36-0	Antimony, Dissolved	U (0.004)
TWDUP01_060118	6020A	7440-36-0	Antimony, Total	U (0.004)
TWDUP01_060118	8270D	65-85-0	Benzoic Acid	UJ
TWDUP01_060118	6020A	7440-48-4	Cobalt, Dissolved	J
TWDUP01_060118	8081B	319-86-8	Delta-BHC	UJ
TWDUP01_060118	8081B	959-98-8	Endosulfan I	UJ
TWDUP01_060118	8081B	76-44-8	Heptachlor	UJ
TWDUP01_060118	8260C	10061-02-6	trans-1,3-Dichloropropene	UJ
TWDUP01_060118	8260C	110-57-6	trans-1,4-Dichloro-2-butene	UJ

MAJOR DEFICIENCIES:

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

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MINOR DEFICIENCIES:

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

VOCs by SW-846 Method 8260C

The ICAL for instrument WG1123557 exhibited a RF below the control limit for 1,2-dibromo-3-chloropropane (0.044), 1,4-dioxane (0.001), 2-butanone (0.041), 4-methyl-2-pentanone (0.049), acetone (0.029), and acrylonitrile (0.032). The associated results in sample TW03_060118 are qualified as "J" and "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA122 exhibited a RF below the control limit for 1,4-dioxane (0.001), 2-butanone (0.076), and acetone (0.046). The associated results in samples TW05_060118, TWDUP01_060118, and GWTB01_060118 are qualified as "UJ" based on potential indeterminate bias.

The ICV for instrument VOA101 exhibited a %D above the control limit for bromomethane (-39.8%), carbon disulfide (-22.7%), chloroethane (-31.3%), chloromethane (-49.3%), dichlorodifluoromethane (-69.2%), ethyl ether (-23.8%), trichlorofluoromethane (-23.8%), and vinyl chloride (-44.9%). The associated results in sample TW03_060118 are qualified as "UJ" based on potential indeterminate bias.

The ICV for instrument VOA122 exhibited a %D above the control limit for 2,2-dichloropropane (28.9%), trans-1,3-dichloropropene (20.2%), and trans-1,4-dichloro-2-butene (26.7%). The associated results in samples TW05_060118, TWDUP01_060118, and GWTB01_060118 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123557 on instrument VOA101 exhibited a %D above the control limit for 1,2,3-trichlorobenzene (21.5%), 1,2,3-trichloropropane (-22.3%), 1,2-dichloroethane (-24.8%), and trans-1,4-dichloro-2-butene (-36.3%). The associated results in sample TW03_060118 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123465 on instrument VOA122 exhibited a %D above the control limit for 1,2-dichloroethane (21.5%). The associated results in samples TW05_060118, TWDUP01_060118, and GWTB01_060118 are qualified as "UJ" based on potential indeterminate bias.

SVOCs by SW-846 Method 8270D

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The LCS/LCSD for batch WG1122496 exhibited a RPD above the control limit for benzoic acid (49%). The associated results in samples TW03_060118, TW05_060118, and TWDUP01_060118 are qualified as "UJ" based on potential indeterminate bias.

Pesticides by SW-846 Method 8081B

The LCS/LCSD for batch WG1123884 exhibited a RPD above the control limit for delta-BHC (30%), heptachlor (21%), 4,4'-DDE (25%), and endosulfan I (23%). The associated results in samples TW03_060118, TW05_060118, and TWDUP01_060118 are qualified as "UJ" based on potential indeterminate bias.

The field duplicate TWDUP01_060118 and parent sample TW05_060118 exhibited an absolute difference above the reporting limit for 4,4'-DDT (0.038 ug/L). The associated results are qualified as "J" based on potential indeterminate bias.

Metals by SW-846 Method 6010C

The method blank (MB) for batch WG1123102 exhibited a detection of antimony, total (1.38 µg/L). The associated results in samples TW03_060118, TW05_060118, and TWDUP01_060118 are qualified as "U" based on potential blank contamination.

Metals by SW-846 Method 6020A

The MB for batch WG1123373 exhibited a detection of antimony, dissolved (0.85 µg/L). The associated results in samples TW03_060118, TW05_060118, and TWDUP01_060118 are qualified as "U" based on potential blank contamination.

The MS for batch WG1123373 exhibited a percent recovery above the UCL for iron, dissolved (130%). The associated results in sample TW03_060118 are qualified as "J" based on potential high bias.

The field duplicate TW05_060118 and parent sample TWDUP01_060118 exhibited a RPD above the control limit for cobalt, dissolved (34.8%). The associated results are qualified as "J" based on potential indeterminate bias.

OTHER DEFICIENCIES:

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

VOCs by SW-846 Method 8260C

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The surrogate 1,2-dichloroethane-d4 in sample TW03_060118 exhibited a percent recovery above the UCL (133%). The other 3 surrogates were recovered within the acceptance limits. No qualification is necessary.

The MB for batch WG1123557 exhibited a detection of carbon disulfide (0.109 µg/L), methylene chloride (0.082 µg/L), and hexachlorobutadiene (0.325 µg/L). The associated results in sample TW03_060118 are non-detect. No qualification is necessary.

The LCS for batch WG1123557 exhibited a percent recovery above the UCL for trans-1,4-dichloro-2-butene (140%). The associated results in sample TW03_060118 are non-detect. No qualification is necessary.

SVOCs by SW-846 Method 8270D

The LCS for batch WG1122496 exhibited a percent recovery above the UCL for p-chloro-m-cresol (98%). The associated results in samples TW03_060118, TW05_060118, and TWDUP01_060118 are non-detect. No qualification is necessary.

Metals by SW-846 Method 6010C

The MB for batch WG1123102 exhibited a detection of calcium, total (59 ug/L), iron, total (29.8 ug/L), and manganese, total (0.54 µg/L). The associated results in samples TW03_060118, TW05_060118, and TWDUP01_060118 are >10X the blank concentration. No qualification is necessary.

Metals by SW-846 Method 6020A

The MB for batch WG1123373 exhibited a detection of iron, dissolved (21.8 µg/L). The associated results in samples TW03_060118, TW05_060118, and TWDUP01_060118 are >10X the blank concentration. No qualification is necessary.

COMMENTS:

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

- TWDUP01_060118 and TW05: 4,4'-DDT, cobalt (dissolved)

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

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

Signed:



Emily Strake, CEP
Senior Project Chemist

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Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Kimberly Nagotko, Langan Senior Staff Geologist

From: Emily Strake, Langan Senior Project Chemist

Date: October 23, 2018

Re: Data Usability Summary Report
For West 29th Street
Soil samples Collected in May and June, 2018
Langan Project No.: 170515401

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil samples collected in 2018 by Langan Engineering and Environmental Services ("Langan") at the West 29th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), herbicides, polychlorinated biphenyls (PCBs), pesticides, metals, mercury (Hg), cyanide (CN), and hexavalent chromium (CrVI), trivalent chromium (CrIII), and total solids by the methods specified below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Method 8270D and 8270D SIM
- Herbicides by SW-846 Method 8151A
- PCBs by SW-846 Method 8082A
- Pesticides by SW-846 Method 8081B
- Metals by SW-846 Method 6010C and 6020A
- Mercury by SW-846 Method 7471B
- Cyanide by SW-846 Method 9012B
- Hexavalent Chromium by SW-846 Method 7196A
- Trivalent Chromium (calculated)
- Total Solids by Standard Method 2540G

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

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TABLE 1: SAMPLE SUMMARY

SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1820045	L1820045-01	SB01_0-2	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-02	SB01_3-4	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-03	SB01_8-9	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-04	SB02_0-2	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-05	SB02_4-6	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-06	SB02_6-8	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-07	SB03_0-1	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-08	SB03_3-4	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-09	SB03_7-8	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-10	SBDUP01_053118	5/31/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820045	L1820045-11	SBTB01_053118	5/31/2018	VOCs
L1820339	L1820339-01	SBTB02_060118	6/1/2018	VOCs
L1820339	L1820339-02	SB06_14-16	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820339	L1820339-03	SB04_1-3	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1820339	L1820339-04	SB04_6-8	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820339	L1820339-05	SB04_10-12	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820339	L1820339-06	SB05_0-2	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820339	L1820339-07	SB05_7-8	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820339	L1820339-08	SB05_11-12	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820339	L1820339-09	SB06_0-2	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820339	L1820339-10	SB06_6-8	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820339	L1820339-11	SB06_12-14	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids
L1820339	L1820339-12	SBDUP02_060118	6/1/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, Total Solids

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-17, "Validating Chlorinated Herbicides" (December 2010, Revision 3.1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-36A, "Pesticide Data Validation" (October 2016, Revision 1), USEPA Region II SOP #HW-3a, "ICP-AES Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and

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Cyanide Data Validation” (September 2016, Revision 1), the USEPA Contract Laboratory Program “National Functional Guidelines for Organic Superfund Methods Data Review” (EPA-540-R-2017-002, January 2017), USEPA “National Functional Guidelines for Inorganic Superfund Methods Data Review” (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

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

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

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

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

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TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
SB01_0-2	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB01_0-2	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB01_0-2	8260C	563-58-6	1,1-Dichloropropene	UJ
SB01_0-2	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB01_0-2	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB01_0-2	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB01_0-2	8260C	106-93-4	1,2-Dibromoethane	UJ
SB01_0-2	8260C	142-28-9	1,3-Dichloropropane	UJ
SB01_0-2	8270D	51-28-5	2,4-Dinitrophenol	UJ
SB01_0-2	8270D	606-20-2	2,6-Dinitrotoluene	UJ
SB01_0-2	8270D	91-57-6	2-Methylnaphthalene	J
SB01_0-2	8270D	88-74-4	2-Nitroaniline	UJ
SB01_0-2	8270D	88-75-5	2-Nitrophenol	UJ
SB01_0-2	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SB01_0-2	6010C	7440-39-3	Barium, Total	J
SB01_0-2	8260C	74-97-5	Bromochloromethane	UJ
SB01_0-2	8260C	75-27-4	Bromodichloromethane	UJ
SB01_0-2	8260C	75-25-2	Bromoform	UJ
SB01_0-2	8260C	56-23-5	Carbon tetrachloride	UJ
SB01_0-2	8260C	67-66-3	Chloroform	UJ
SB01_0-2	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB01_0-2	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB01_0-2	6010C	7440-48-4	Cobalt, Total	J
SB01_0-2	SW9012B	57-12-5	Cyanide, Total	UJ
SB01_0-2	8260C	74-95-3	Dibromomethane	UJ
SB01_0-2	8260C	60-29-7	Ethyl ether	UJ
SB01_0-2	8270D	86-73-7	Fluorene	J
SB01_0-2	6010C	7439-92-1	Lead, Total	J
SB01_0-2	6010C	7439-95-4	Magnesium, Total	J
SB01_0-2	6010C	7439-96-5	Manganese, Total	J
SB01_0-2	8081B	72-43-5	Methoxychlor	UJ

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SB01_0-2	8260C	91-20-3	Naphthalene	J
SB01_0-2	8270D	91-20-3	Naphthalene	J
SB01_0-2	6010C	7440-02-0	Nickel, Total	J
SB01_0-2	8260C	127-18-4	Tetrachloroethene	UJ
SB01_0-2	8260C	75-69-4	Trichlorofluoromethane	UJ
SB01_3-4	8260C	74-83-9	Bromomethane	UJ
SB01_3-4	SW9012B	57-12-5	Cyanide, Total	UJ
SB01_3-4	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB01_3-4	8081B	8001-35-2	Toxaphene	UJ
SB01_3-4	8260C	110-57-6	trans-1,4-Dichloro-2-butene	UJ
SB01_3-4	8260C	108-05-4	Vinyl acetate	UJ
SB01_8-9	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB01_8-9	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB01_8-9	8260C	563-58-6	1,1-Dichloropropene	UJ
SB01_8-9	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB01_8-9	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB01_8-9	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB01_8-9	8260C	106-93-4	1,2-Dibromoethane	UJ
SB01_8-9	8260C	142-28-9	1,3-Dichloropropane	UJ
SB01_8-9	8270D	51-28-5	2,4-Dinitrophenol	UJ
SB01_8-9	8270D	606-20-2	2,6-Dinitrotoluene	UJ
SB01_8-9	8270D	88-74-4	2-Nitroaniline	UJ
SB01_8-9	8270D	88-75-5	2-Nitrophenol	UJ
SB01_8-9	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SB01_8-9	8260C	74-97-5	Bromochloromethane	UJ
SB01_8-9	8260C	75-27-4	Bromodichloromethane	UJ
SB01_8-9	8260C	75-25-2	Bromoform	UJ
SB01_8-9	8260C	56-23-5	Carbon tetrachloride	UJ
SB01_8-9	8260C	67-66-3	Chloroform	UJ
SB01_8-9	8260C	156-59-2	cis-1,2-Dichloroethene	J
SB01_8-9	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB01_8-9	SW9012B	57-12-5	Cyanide, Total	UJ

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SB01_8-9	8260C	74-95-3	Dibromomethane	UJ
SB01_8-9	8260C	60-29-7	Ethyl ether	UJ
SB01_8-9	8260C	91-20-3	Naphthalene	J
SB01_8-9	8260C	127-18-4	Tetrachloroethene	UJ
SB01_8-9	8081B	8001-35-2	Toxaphene	UJ
SB01_8-9	8260C	75-69-4	Trichlorofluoromethane	UJ
SB02_0-2	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB02_0-2	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB02_0-2	8260C	563-58-6	1,1-Dichloropropene	UJ
SB02_0-2	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB02_0-2	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB02_0-2	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB02_0-2	8260C	106-93-4	1,2-Dibromoethane	UJ
SB02_0-2	8260C	142-28-9	1,3-Dichloropropane	UJ
SB02_0-2	8270D	51-28-5	2,4-Dinitrophenol	UJ
SB02_0-2	8270D	606-20-2	2,6-Dinitrotoluene	UJ
SB02_0-2	8270D	88-74-4	2-Nitroaniline	UJ
SB02_0-2	8270D	88-75-5	2-Nitrophenol	UJ
SB02_0-2	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SB02_0-2	8260C	74-97-5	Bromochloromethane	UJ
SB02_0-2	8260C	75-27-4	Bromodichloromethane	UJ
SB02_0-2	8260C	75-25-2	Bromoform	UJ
SB02_0-2	8260C	74-83-9	Bromomethane	UJ
SB02_0-2	8260C	56-23-5	Carbon tetrachloride	UJ
SB02_0-2	8260C	67-66-3	Chloroform	UJ
SB02_0-2	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB02_0-2	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB02_0-2	SW9012B	57-12-5	Cyanide, Total	UJ
SB02_0-2	8260C	74-95-3	Dibromomethane	UJ
SB02_0-2	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB02_0-2	8081B	1031-07-8	Endosulfan sulfate	UJ
SB02_0-2	8081B	53494-70-5	Endrin ketone	UJ

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SB02_0-2	8260C	60-29-7	Ethyl ether	UJ
SB02_0-2	8260C	91-20-3	Naphthalene	J
SB02_0-2	8260C	127-18-4	Tetrachloroethene	UJ
SB02_0-2	8081B	8001-35-2	Toxaphene	UJ
SB02_0-2	8260C	110-57-6	trans-1,4-Dichloro-2-butene	UJ
SB02_0-2	8260C	75-69-4	Trichlorofluoromethane	UJ
SB02_0-2	8260C	108-05-4	Vinyl acetate	UJ
SB02_4-6	8270D	51-28-5	2,4-Dinitrophenol	UJ
SB02_4-6	8270D	606-20-2	2,6-Dinitrotoluene	UJ
SB02_4-6	8270D	88-74-4	2-Nitroaniline	UJ
SB02_4-6	8270D	88-75-5	2-Nitrophenol	UJ
SB02_4-6	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SB02_4-6	8260C	74-83-9	Bromomethane	UJ
SB02_4-6	SW9012B	57-12-5	Cyanide, Total	UJ
SB02_4-6	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB02_4-6	8081B	8001-35-2	Toxaphene	UJ
SB02_4-6	8260C	110-57-6	trans-1,4-Dichloro-2-butene	UJ
SB02_4-6	8260C	108-05-4	Vinyl acetate	UJ
SB02_6-8	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB02_6-8	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB02_6-8	8260C	563-58-6	1,1-Dichloropropene	UJ
SB02_6-8	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB02_6-8	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB02_6-8	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB02_6-8	8260C	106-93-4	1,2-Dibromoethane	UJ
SB02_6-8	8260C	142-28-9	1,3-Dichloropropane	UJ
SB02_6-8	8270D	51-28-5	2,4-Dinitrophenol	UJ
SB02_6-8	8270D	606-20-2	2,6-Dinitrotoluene	UJ
SB02_6-8	8270D	88-74-4	2-Nitroaniline	UJ
SB02_6-8	8270D	88-75-5	2-Nitrophenol	UJ
SB02_6-8	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SB02_6-8	8260C	74-97-5	Bromochloromethane	UJ

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SB02_6-8	8260C	75-27-4	Bromodichloromethane	UJ
SB02_6-8	8260C	75-25-2	Bromoform	UJ
SB02_6-8	8260C	56-23-5	Carbon tetrachloride	UJ
SB02_6-8	8260C	67-66-3	Chloroform	UJ
SB02_6-8	8260C	156-59-2	cis-1,2-Dichloroethene	J
SB02_6-8	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB02_6-8	SW9012B	57-12-5	Cyanide, Total	UJ
SB02_6-8	8260C	74-95-3	Dibromomethane	UJ
SB02_6-8	8260C	60-29-7	Ethyl ether	UJ
SB02_6-8	8260C	91-20-3	Naphthalene	J
SB02_6-8	8260C	127-18-4	Tetrachloroethene	UJ
SB02_6-8	8081B	8001-35-2	Toxaphene	UJ
SB02_6-8	8260C	75-69-4	Trichlorofluoromethane	UJ
SB03_0-1	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB03_0-1	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB03_0-1	8260C	563-58-6	1,1-Dichloropropene	UJ
SB03_0-1	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB03_0-1	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB03_0-1	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB03_0-1	8260C	106-93-4	1,2-Dibromoethane	UJ
SB03_0-1	8260C	142-28-9	1,3-Dichloropropane	UJ
SB03_0-1	8270D	51-28-5	2,4-Dinitrophenol	UJ
SB03_0-1	8270D	606-20-2	2,6-Dinitrotoluene	UJ
SB03_0-1	8270D	88-74-4	2-Nitroaniline	UJ
SB03_0-1	8270D	88-75-5	2-Nitrophenol	UJ
SB03_0-1	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SB03_0-1	8260C	74-97-5	Bromochloromethane	UJ
SB03_0-1	8260C	75-27-4	Bromodichloromethane	UJ
SB03_0-1	8260C	75-25-2	Bromoform	UJ
SB03_0-1	8260C	56-23-5	Carbon tetrachloride	UJ
SB03_0-1	8260C	67-66-3	Chloroform	UJ
SB03_0-1	8260C	156-59-2	cis-1,2-Dichloroethene	UJ

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SB03_0-1	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB03_0-1	SW9012B	57-12-5	Cyanide, Total	UJ
SB03_0-1	8260C	74-95-3	Dibromomethane	UJ
SB03_0-1	8081B	1031-07-8	Endosulfan sulfate	UJ
SB03_0-1	8081B	53494-70-5	Endrin ketone	UJ
SB03_0-1	8260C	60-29-7	Ethyl ether	UJ
SB03_0-1	8260C	91-20-3	Naphthalene	J
SB03_0-1	8260C	127-18-4	Tetrachloroethene	UJ
SB03_0-1	8081B	8001-35-2	Toxaphene	UJ
SB03_0-1	8260C	75-69-4	Trichlorofluoromethane	UJ
SB03_3-4	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB03_3-4	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB03_3-4	8260C	563-58-6	1,1-Dichloropropene	UJ
SB03_3-4	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB03_3-4	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB03_3-4	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB03_3-4	8260C	106-93-4	1,2-Dibromoethane	UJ
SB03_3-4	8260C	142-28-9	1,3-Dichloropropane	UJ
SB03_3-4	8270D	51-28-5	2,4-Dinitrophenol	UJ
SB03_3-4	8270D	606-20-2	2,6-Dinitrotoluene	UJ
SB03_3-4	8270D	88-74-4	2-Nitroaniline	UJ
SB03_3-4	8270D	88-75-5	2-Nitrophenol	UJ
SB03_3-4	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SB03_3-4	8260C	74-97-5	Bromochloromethane	UJ
SB03_3-4	8260C	75-27-4	Bromodichloromethane	UJ
SB03_3-4	8260C	75-25-2	Bromoform	UJ
SB03_3-4	8260C	56-23-5	Carbon tetrachloride	UJ
SB03_3-4	8260C	67-66-3	Chloroform	UJ
SB03_3-4	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB03_3-4	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB03_3-4	SW9012B	57-12-5	Cyanide, Total	UJ
SB03_3-4	8260C	74-95-3	Dibromomethane	UJ

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SB03_3-4	8081B	1031-07-8	Endosulfan sulfate	UJ
SB03_3-4	8081B	53494-70-5	Endrin ketone	UJ
SB03_3-4	8260C	60-29-7	Ethyl ether	UJ
SB03_3-4	8260C	91-20-3	Naphthalene	J
SB03_3-4	8260C	127-18-4	Tetrachloroethene	UJ
SB03_3-4	8081B	8001-35-2	Toxaphene	UJ
SB03_3-4	8260C	75-69-4	Trichlorofluoromethane	UJ
SB03_7-8	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB03_7-8	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB03_7-8	8260C	563-58-6	1,1-Dichloropropene	UJ
SB03_7-8	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB03_7-8	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB03_7-8	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB03_7-8	8260C	106-93-4	1,2-Dibromoethane	UJ
SB03_7-8	8260C	142-28-9	1,3-Dichloropropane	UJ
SB03_7-8	8270D	51-28-5	2,4-Dinitrophenol	UJ
SB03_7-8	8270D	606-20-2	2,6-Dinitrotoluene	UJ
SB03_7-8	8270D	88-74-4	2-Nitroaniline	UJ
SB03_7-8	8270D	88-75-5	2-Nitrophenol	UJ
SB03_7-8	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SB03_7-8	8260C	74-97-5	Bromochloromethane	UJ
SB03_7-8	8260C	75-27-4	Bromodichloromethane	UJ
SB03_7-8	8260C	75-25-2	Bromoform	UJ
SB03_7-8	8260C	56-23-5	Carbon tetrachloride	UJ
SB03_7-8	8260C	67-66-3	Chloroform	UJ
SB03_7-8	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB03_7-8	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB03_7-8	SW9012B	57-12-5	Cyanide, Total	UJ
SB03_7-8	8260C	74-95-3	Dibromomethane	UJ
SB03_7-8	8260C	60-29-7	Ethyl ether	UJ
SB03_7-8	8081B	72-43-5	Methoxychlor	UJ
SB03_7-8	8260C	91-20-3	Naphthalene	J

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SB03_7-8	8260C	127-18-4	Tetrachloroethene	UJ
SB03_7-8	8260C	75-69-4	Trichlorofluoromethane	UJ
SBDUP01_053118	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SBDUP01_053118	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SBDUP01_053118	8260C	563-58-6	1,1-Dichloropropene	UJ
SBDUP01_053118	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SBDUP01_053118	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SBDUP01_053118	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SBDUP01_053118	8260C	106-93-4	1,2-Dibromoethane	UJ
SBDUP01_053118	8260C	142-28-9	1,3-Dichloropropane	UJ
SBDUP01_053118	8270D	51-28-5	2,4-Dinitrophenol	UJ
SBDUP01_053118	8270D	606-20-2	2,6-Dinitrotoluene	UJ
SBDUP01_053118	8270D	91-57-6	2-Methylnaphthalene	J
SBDUP01_053118	8270D	88-74-4	2-Nitroaniline	UJ
SBDUP01_053118	8270D	88-75-5	2-Nitrophenol	UJ
SBDUP01_053118	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SBDUP01_053118	6010C	7440-39-3	Barium, Total	J
SBDUP01_053118	8260C	74-97-5	Bromochloromethane	UJ
SBDUP01_053118	8260C	75-27-4	Bromodichloromethane	UJ
SBDUP01_053118	8260C	75-25-2	Bromoform	UJ
SBDUP01_053118	8260C	56-23-5	Carbon tetrachloride	UJ
SBDUP01_053118	8260C	67-66-3	Chloroform	UJ
SBDUP01_053118	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SBDUP01_053118	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SBDUP01_053118	6010C	7440-48-4	Cobalt, Total	J
SBDUP01_053118	SW9012B	57-12-5	Cyanide, Total	UJ
SBDUP01_053118	8260C	74-95-3	Dibromomethane	UJ
SBDUP01_053118	8260C	60-29-7	Ethyl ether	UJ
SBDUP01_053118	8270D	86-73-7	Fluorene	J
SBDUP01_053118	6010C	7439-92-1	Lead, Total	J
SBDUP01_053118	6010C	7439-95-4	Magnesium, Total	J
SBDUP01_053118	6010C	7439-96-5	Manganese, Total	J

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SBDUP01_053118	8081B	72-43-5	Methoxychlor	UJ
SBDUP01_053118	8270D	91-20-3	Naphthalene	J
SBDUP01_053118	8260C	91-20-3	Naphthalene	J
SBDUP01_053118	6010C	7440-02-0	Nickel, Total	J
SBDUP01_053118	8260C	127-18-4	Tetrachloroethene	UJ
SBDUP01_053118	8260C	75-69-4	Trichlorofluoromethane	UJ
SBTB01_053118	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SBTB01_053118	8260C	123-91-1	1,4-Dioxane	UJ
SBTB01_053118	8260C	78-93-3	2-Butanone	UJ
SBTB01_053118	8260C	591-78-6	2-Hexanone	UJ
SBTB01_053118	8260C	108-10-1	4-Methyl-2-pentanone	UJ
SBTB01_053118	8260C	107-13-1	Acrylonitrile	UJ
SBTB01_053118	8260C	75-25-2	Bromoform	UJ
SBTB01_053118	8260C	74-83-9	Bromomethane	UJ
SBTB01_053118	8260C	75-00-3	Chloroethane	UJ
SBTB01_053118	8260C	74-87-3	Chloromethane	UJ
SBTB01_053118	8260C	75-71-8	Dichlorodifluoromethane	UJ
SBTB01_053118	8260C	60-29-7	Ethyl ether	UJ
SBTB01_053118	8260C	91-20-3	Naphthalene	UJ
SBTB01_053118	8260C	10061-02-6	trans-1,3-Dichloropropene	UJ
SBTB01_053118	8260C	110-57-6	trans-1,4-Dichloro-2-butene	UJ
SBTB01_053118	8260C	79-01-6	Trichloroethene	UJ
SBTB01_053118	8260C	75-01-4	Vinyl chloride	UJ
SB04_10-12	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB04_10-12	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB04_10-12	8260C	563-58-6	1,1-Dichloropropene	UJ
SB04_10-12	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB04_10-12	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB04_10-12	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB04_10-12	8260C	106-93-4	1,2-Dibromoethane	UJ
SB04_10-12	8260C	107-06-2	1,2-Dichloroethane	UJ
SB04_10-12	8260C	142-28-9	1,3-Dichloropropane	UJ

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SB04_10-12	8260C	594-20-7	2,2-Dichloropropane	UJ
SB04_10-12	6010C	7440-39-3	Barium, Total	J
SB04_10-12	8260C	74-97-5	Bromochloromethane	UJ
SB04_10-12	8260C	75-27-4	Bromodichloromethane	UJ
SB04_10-12	8260C	75-25-2	Bromoform	UJ
SB04_10-12	8260C	74-83-9	Bromomethane	UJ
SB04_10-12	8260C	56-23-5	Carbon tetrachloride	UJ
SB04_10-12	8260C	75-00-3	Chloroethane	UJ
SB04_10-12	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB04_10-12	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB04_10-12	6010C	7440-50-8	Copper, Total	J
SB04_10-12	SW9012B	57-12-5	Cyanide, Total	UJ
SB04_10-12	8081B	319-86-8	Delta-BHC	UJ
SB04_10-12	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB04_10-12	8260C	60-29-7	Ethyl ether	UJ
SB04_10-12	6010C	7439-92-1	Lead, Total	J
SB04_10-12	6010C	7439-96-5	Manganese, Total	J
SB04_10-12	7471B	7439-97-6	Mercury, Total	J
SB04_10-12	8260C	91-20-3	Naphthalene	UJ
SB04_10-12	8260C	127-18-4	Tetrachloroethene	UJ
SB04_10-12	8260C	75-69-4	Trichlorofluoromethane	UJ
SB04_10-12	8260C	75-01-4	Vinyl chloride	UJ
SB04_10-12	6010C	7440-66-6	Zinc, Total	J
SB04_1-3	8260C	123-91-1	1,4-Dioxane	UJ
SB04_1-3	8270D	51-28-5	2,4-Dinitrophenol	UJ
SB04_1-3	8270D	121-14-2	2,4-Dinitrotoluene	UJ
SB04_1-3	8260C	591-78-6	2-Hexanone	UJ
SB04_1-3	8270D	534-52-1	4,6-Dinitro-o-cresol	UJ
SB04_1-3	8270D	100-02-7	4-Nitrophenol	UJ
SB04_1-3	8260C	67-64-1	Acetone	J
SB04_1-3	6010C	7440-39-3	Barium, Total	J
SB04_1-3	8270D	108-60-1	Bis(2-chloroisopropyl)ether	UJ

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SB04_1-3	8260C	74-83-9	Bromomethane	UJ
SB04_1-3	8260C	75-15-0	Carbon disulfide	UJ
SB04_1-3	8260C	56-23-5	Carbon tetrachloride	UJ
SB04_1-3	8260C	74-87-3	Chloromethane	UJ
SB04_1-3	6010C	7440-50-8	Copper, Total	J
SB04_1-3	SW9012B	57-12-5	Cyanide, Total	UJ
SB04_1-3	8081B	319-86-8	Delta-BHC	UJ
SB04_1-3	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB04_1-3	6010C	7439-92-1	Lead, Total	J
SB04_1-3	6010C	7439-96-5	Manganese, Total	J
SB04_1-3	7471B	7439-97-6	Mercury, Total	J
SB04_1-3	6010C	7440-02-0	Nickel, Total	J
SB04_1-3	6010C	7440-62-2	Vanadium, Total	J
SB04_1-3	6010C	7440-66-6	Zinc, Total	J
SB04_6-8	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB04_6-8	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB04_6-8	8260C	563-58-6	1,1-Dichloropropene	UJ
SB04_6-8	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB04_6-8	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB04_6-8	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB04_6-8	8260C	106-93-4	1,2-Dibromoethane	UJ
SB04_6-8	8260C	107-06-2	1,2-Dichloroethane	UJ
SB04_6-8	8260C	142-28-9	1,3-Dichloropropane	UJ
SB04_6-8	8260C	594-20-7	2,2-Dichloropropane	UJ
SB04_6-8	6010C	7440-39-3	Barium, Total	J
SB04_6-8	8260C	74-97-5	Bromochloromethane	UJ
SB04_6-8	8260C	75-27-4	Bromodichloromethane	UJ
SB04_6-8	8260C	75-25-2	Bromoform	UJ
SB04_6-8	8260C	74-83-9	Bromomethane	UJ
SB04_6-8	8260C	56-23-5	Carbon tetrachloride	UJ
SB04_6-8	8260C	75-00-3	Chloroethane	UJ
SB04_6-8	8260C	156-59-2	cis-1,2-Dichloroethene	UJ

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SB04_6-8	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB04_6-8	6010C	7440-50-8	Copper, Total	J
SB04_6-8	SW9012B	57-12-5	Cyanide, Total	J
SB04_6-8	8081B	319-86-8	Delta-BHC	UJ
SB04_6-8	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB04_6-8	8260C	60-29-7	Ethyl ether	UJ
SB04_6-8	6010C	7439-92-1	Lead, Total	J
SB04_6-8	6010C	7439-96-5	Manganese, Total	J
SB04_6-8	7471B	7439-97-6	Mercury, Total	J
SB04_6-8	8260C	91-20-3	Naphthalene	UJ
SB04_6-8	8260C	127-18-4	Tetrachloroethene	UJ
SB04_6-8	8260C	75-69-4	Trichlorofluoromethane	UJ
SB04_6-8	8260C	75-01-4	Vinyl chloride	UJ
SB04_6-8	6010C	7440-66-6	Zinc, Total	J
SB05_0-2	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB05_0-2	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB05_0-2	8260C	563-58-6	1,1-Dichloropropene	UJ
SB05_0-2	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB05_0-2	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB05_0-2	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB05_0-2	8260C	106-93-4	1,2-Dibromoethane	UJ
SB05_0-2	8260C	107-06-2	1,2-Dichloroethane	UJ
SB05_0-2	8260C	142-28-9	1,3-Dichloropropane	UJ
SB05_0-2	8260C	594-20-7	2,2-Dichloropropane	UJ
SB05_0-2	6010C	7440-39-3	Barium, Total	J
SB05_0-2	8260C	74-97-5	Bromochloromethane	UJ
SB05_0-2	8260C	75-27-4	Bromodichloromethane	UJ
SB05_0-2	8260C	75-25-2	Bromoform	UJ
SB05_0-2	8260C	74-83-9	Bromomethane	UJ
SB05_0-2	8260C	56-23-5	Carbon tetrachloride	UJ
SB05_0-2	8260C	75-00-3	Chloroethane	UJ
SB05_0-2	8260C	156-59-2	cis-1,2-Dichloroethene	UJ

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SB05_0-2	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB05_0-2	6010C	7440-50-8	Copper, Total	J
SB05_0-2	SW9012B	57-12-5	Cyanide, Total	UJ
SB05_0-2	8081B	319-86-8	Delta-BHC	UJ
SB05_0-2	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB05_0-2	8260C	60-29-7	Ethyl ether	UJ
SB05_0-2	6010C	7439-92-1	Lead, Total	J
SB05_0-2	6010C	7439-96-5	Manganese, Total	J
SB05_0-2	7471B	7439-97-6	Mercury, Total	J
SB05_0-2	8260C	91-20-3	Naphthalene	UJ
SB05_0-2	8260C	127-18-4	Tetrachloroethene	UJ
SB05_0-2	8260C	75-69-4	Trichlorofluoromethane	UJ
SB05_0-2	8260C	75-01-4	Vinyl chloride	UJ
SB05_0-2	6010C	7440-66-6	Zinc, Total	J
SB05_11-12	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB05_11-12	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB05_11-12	8260C	563-58-6	1,1-Dichloropropene	UJ
SB05_11-12	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB05_11-12	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB05_11-12	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB05_11-12	8260C	106-93-4	1,2-Dibromoethane	UJ
SB05_11-12	8260C	107-06-2	1,2-Dichloroethane	UJ
SB05_11-12	8260C	142-28-9	1,3-Dichloropropane	UJ
SB05_11-12	8260C	594-20-7	2,2-Dichloropropane	UJ
SB05_11-12	6010C	7440-39-3	Barium, Total	J
SB05_11-12	8260C	74-97-5	Bromochloromethane	UJ
SB05_11-12	8260C	75-27-4	Bromodichloromethane	UJ
SB05_11-12	8260C	75-25-2	Bromoform	UJ
SB05_11-12	8260C	74-83-9	Bromomethane	UJ
SB05_11-12	6010C	7440-70-2	Calcium, Total	J
SB05_11-12	8260C	56-23-5	Carbon tetrachloride	UJ
SB05_11-12	8260C	75-00-3	Chloroethane	UJ

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SB05_11-12	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB05_11-12	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB05_11-12	6010C	7440-50-8	Copper, Total	J
SB05_11-12	SW9012B	57-12-5	Cyanide, Total	UJ
SB05_11-12	8081B	319-86-8	Delta-BHC	UJ
SB05_11-12	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB05_11-12	8260C	60-29-7	Ethyl ether	UJ
SB05_11-12	6010C	7439-92-1	Lead, Total	J
SB05_11-12	6010C	7439-96-5	Manganese, Total	J
SB05_11-12	7471B	7439-97-6	Mercury, Total	J
SB05_11-12	8260C	91-20-3	Naphthalene	UJ
SB05_11-12	8260C	127-18-4	Tetrachloroethene	UJ
SB05_11-12	8260C	75-69-4	Trichlorofluoromethane	UJ
SB05_11-12	8260C	75-01-4	Vinyl chloride	UJ
SB05_11-12	6010C	7440-66-6	Zinc, Total	J
SB05_7-8	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB05_7-8	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB05_7-8	8260C	563-58-6	1,1-Dichloropropene	UJ
SB05_7-8	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB05_7-8	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB05_7-8	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB05_7-8	8260C	106-93-4	1,2-Dibromoethane	UJ
SB05_7-8	8260C	107-06-2	1,2-Dichloroethane	UJ
SB05_7-8	8260C	142-28-9	1,3-Dichloropropane	UJ
SB05_7-8	8260C	594-20-7	2,2-Dichloropropane	UJ
SB05_7-8	6010C	7440-39-3	Barium, Total	J
SB05_7-8	8260C	74-97-5	Bromochloromethane	UJ
SB05_7-8	8260C	75-27-4	Bromodichloromethane	UJ
SB05_7-8	8260C	75-25-2	Bromoform	UJ
SB05_7-8	8260C	74-83-9	Bromomethane	UJ
SB05_7-8	8260C	56-23-5	Carbon tetrachloride	UJ
SB05_7-8	8260C	75-00-3	Chloroethane	UJ

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SB05_7-8	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB05_7-8	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB05_7-8	6010C	7440-50-8	Copper, Total	J
SB05_7-8	SW9012B	57-12-5	Cyanide, Total	J
SB05_7-8	8081B	319-86-8	Delta-BHC	UJ
SB05_7-8	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB05_7-8	8260C	60-29-7	Ethyl ether	UJ
SB05_7-8	6010C	7439-92-1	Lead, Total	J
SB05_7-8	6010C	7439-96-5	Manganese, Total	J
SB05_7-8	7471B	7439-97-6	Mercury, Total	J
SB05_7-8	8260C	91-20-3	Naphthalene	UJ
SB05_7-8	8260C	127-18-4	Tetrachloroethene	UJ
SB05_7-8	8260C	75-69-4	Trichlorofluoromethane	UJ
SB05_7-8	8260C	75-01-4	Vinyl chloride	UJ
SB05_7-8	6010C	7440-66-6	Zinc, Total	J
SB06_0-2	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB06_0-2	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB06_0-2	8260C	563-58-6	1,1-Dichloropropene	UJ
SB06_0-2	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB06_0-2	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB06_0-2	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB06_0-2	8260C	106-93-4	1,2-Dibromoethane	UJ
SB06_0-2	8260C	107-06-2	1,2-Dichloroethane	UJ
SB06_0-2	8260C	142-28-9	1,3-Dichloropropane	UJ
SB06_0-2	8260C	594-20-7	2,2-Dichloropropane	UJ
SB06_0-2	6010C	7440-39-3	Barium, Total	J
SB06_0-2	8260C	74-97-5	Bromochloromethane	UJ
SB06_0-2	8260C	75-27-4	Bromodichloromethane	UJ
SB06_0-2	8260C	75-25-2	Bromoform	UJ
SB06_0-2	8260C	74-83-9	Bromomethane	UJ
SB06_0-2	8260C	56-23-5	Carbon tetrachloride	UJ
SB06_0-2	8260C	75-00-3	Chloroethane	UJ

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SB06_0-2	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB06_0-2	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB06_0-2	6010C	7440-50-8	Copper, Total	J
SB06_0-2	SW9012B	57-12-5	Cyanide, Total	UJ
SB06_0-2	8081B	319-86-8	Delta-BHC	UJ
SB06_0-2	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB06_0-2	8260C	60-29-7	Ethyl ether	UJ
SB06_0-2	6010C	7439-92-1	Lead, Total	J
SB06_0-2	6010C	7439-96-5	Manganese, Total	J
SB06_0-2	7471B	7439-97-6	Mercury, Total	J
SB06_0-2	8260C	91-20-3	Naphthalene	UJ
SB06_0-2	8260C	127-18-4	Tetrachloroethene	UJ
SB06_0-2	8260C	75-69-4	Trichlorofluoromethane	UJ
SB06_0-2	8260C	75-01-4	Vinyl chloride	UJ
SB06_0-2	6010C	7440-66-6	Zinc, Total	J
SB06_12-14	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB06_12-14	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB06_12-14	8260C	563-58-6	1,1-Dichloropropene	UJ
SB06_12-14	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB06_12-14	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ
SB06_12-14	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB06_12-14	8260C	106-93-4	1,2-Dibromoethane	UJ
SB06_12-14	8260C	107-06-2	1,2-Dichloroethane	UJ
SB06_12-14	8260C	142-28-9	1,3-Dichloropropane	UJ
SB06_12-14	8260C	594-20-7	2,2-Dichloropropane	UJ
SB06_12-14	6010C	7440-39-3	Barium, Total	J
SB06_12-14	8260C	74-97-5	Bromochloromethane	UJ
SB06_12-14	8260C	75-27-4	Bromodichloromethane	UJ
SB06_12-14	8260C	75-25-2	Bromoform	UJ
SB06_12-14	8260C	74-83-9	Bromomethane	UJ
SB06_12-14	8260C	56-23-5	Carbon tetrachloride	UJ
SB06_12-14	8260C	75-00-3	Chloroethane	UJ

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SB06_12-14	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB06_12-14	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB06_12-14	6010C	7440-50-8	Copper, Total	J
SB06_12-14	SW9012B	57-12-5	Cyanide, Total	UJ
SB06_12-14	8081B	319-86-8	Delta-BHC	UJ
SB06_12-14	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB06_12-14	8260C	60-29-7	Ethyl ether	UJ
SB06_12-14	6010C	7439-92-1	Lead, Total	J
SB06_12-14	6010C	7439-96-5	Manganese, Total	J
SB06_12-14	7471B	7439-97-6	Mercury, Total	J
SB06_12-14	8260C	91-20-3	Naphthalene	UJ
SB06_12-14	8260C	127-18-4	Tetrachloroethene	UJ
SB06_12-14	8260C	75-69-4	Trichlorofluoromethane	UJ
SB06_12-14	8260C	75-01-4	Vinyl chloride	UJ
SB06_12-14	6010C	7440-66-6	Zinc, Total	J
SB06_14-16	8260C	591-78-6	2-Hexanone	UJ
SB06_14-16	8270D	92-52-4	Biphenyl	UJ
SB06_14-16	8270D	86-74-8	Carbazole	UJ
SB06_14-16	8260C	75-15-0	Carbon disulfide	UJ
SB06_14-16	8260C	56-23-5	Carbon tetrachloride	UJ
SB06_14-16	8081B	57-74-9	Chlordane	UJ
SB06_14-16	8260C	74-87-3	Chloromethane	UJ
SB06_14-16	SW7196A	18540-29-9	Chromium, Hexavalent	UJ
SB06_14-16	SW9012B	57-12-5	Cyanide, Total	UJ
SB06_14-16	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB06_14-16	8270D	77-47-4	Hexachlorocyclopentadiene	UJ
SB06_14-16	8081B	8001-35-2	Toxaphene	UJ
SB06_6-8	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SB06_6-8	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SB06_6-8	8260C	563-58-6	1,1-Dichloropropene	UJ
SB06_6-8	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SB06_6-8	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ

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SB06_6-8	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SB06_6-8	8260C	106-93-4	1,2-Dibromoethane	UJ
SB06_6-8	8260C	107-06-2	1,2-Dichloroethane	UJ
SB06_6-8	8260C	142-28-9	1,3-Dichloropropane	UJ
SB06_6-8	8260C	594-20-7	2,2-Dichloropropane	UJ
SB06_6-8	6010C	7440-39-3	Barium, Total	J
SB06_6-8	8260C	74-97-5	Bromochloromethane	UJ
SB06_6-8	8260C	75-27-4	Bromodichloromethane	UJ
SB06_6-8	8260C	75-25-2	Bromoform	UJ
SB06_6-8	8260C	74-83-9	Bromomethane	UJ
SB06_6-8	8260C	56-23-5	Carbon tetrachloride	UJ
SB06_6-8	8260C	75-00-3	Chloroethane	UJ
SB06_6-8	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SB06_6-8	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SB06_6-8	6010C	7440-50-8	Copper, Total	J
SB06_6-8	SW9012B	57-12-5	Cyanide, Total	UJ
SB06_6-8	8081B	319-86-8	Delta-BHC	UJ
SB06_6-8	8260C	75-71-8	Dichlorodifluoromethane	UJ
SB06_6-8	8260C	60-29-7	Ethyl ether	UJ
SB06_6-8	6010C	7439-92-1	Lead, Total	J
SB06_6-8	6010C	7439-96-5	Manganese, Total	J
SB06_6-8	7471B	7439-97-6	Mercury, Total	J
SB06_6-8	8260C	91-20-3	Naphthalene	J
SB06_6-8	8260C	127-18-4	Tetrachloroethene	UJ
SB06_6-8	8260C	75-69-4	Trichlorofluoromethane	UJ
SB06_6-8	8260C	75-01-4	Vinyl chloride	UJ
SB06_6-8	6010C	7440-66-6	Zinc, Total	J
SBDUP02_060118	8260C	630-20-6	1,1,1,2-Tetrachloroethane	UJ
SBDUP02_060118	8260C	71-55-6	1,1,1-Trichloroethane	UJ
SBDUP02_060118	8260C	563-58-6	1,1-Dichloropropene	UJ
SBDUP02_060118	8260C	87-61-6	1,2,3-Trichlorobenzene	UJ
SBDUP02_060118	8260C	120-82-1	1,2,4-Trichlorobenzene	UJ

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SBDUP02_060118	8260C	96-12-8	1,2-Dibromo-3-chloropropane	UJ
SBDUP02_060118	8260C	106-93-4	1,2-Dibromoethane	UJ
SBDUP02_060118	8260C	107-06-2	1,2-Dichloroethane	UJ
SBDUP02_060118	8260C	142-28-9	1,3-Dichloropropane	UJ
SBDUP02_060118	8260C	594-20-7	2,2-Dichloropropane	UJ
SBDUP02_060118	6010C	7440-39-3	Barium, Total	J
SBDUP02_060118	8260C	74-97-5	Bromochloromethane	UJ
SBDUP02_060118	8260C	75-27-4	Bromodichloromethane	UJ
SBDUP02_060118	8260C	75-25-2	Bromoform	UJ
SBDUP02_060118	8260C	74-83-9	Bromomethane	UJ
SBDUP02_060118	6010C	7440-70-2	Calcium, Total	J
SBDUP02_060118	8260C	56-23-5	Carbon tetrachloride	UJ
SBDUP02_060118	8260C	75-00-3	Chloroethane	UJ
SBDUP02_060118	8260C	156-59-2	cis-1,2-Dichloroethene	UJ
SBDUP02_060118	8260C	10061-01-5	cis-1,3-Dichloropropene	UJ
SBDUP02_060118	6010C	7440-50-8	Copper, Total	J
SBDUP02_060118	SW9012B	57-12-5	Cyanide, Total	UJ
SBDUP02_060118	8081B	319-86-8	Delta-BHC	UJ
SBDUP02_060118	8260C	75-71-8	Dichlorodifluoromethane	UJ
SBDUP02_060118	8260C	60-29-7	Ethyl ether	UJ
SBDUP02_060118	6010C	7439-92-1	Lead, Total	J
SBDUP02_060118	6010C	7439-96-5	Manganese, Total	J
SBDUP02_060118	7471B	7439-97-6	Mercury, Total	J
SBDUP02_060118	8260C	91-20-3	Naphthalene	UJ
SBDUP02_060118	8260C	127-18-4	Tetrachloroethene	UJ
SBDUP02_060118	8260C	75-69-4	Trichlorofluoromethane	UJ
SBDUP02_060118	8260C	75-01-4	Vinyl chloride	UJ
SBDUP02_060118	6010C	7440-66-6	Zinc, Total	J
SBTB02_060118	8260C	107-06-2	1,2-Dichloroethane	UJ
SBTB02_060118	8260C	123-91-1	1,4-Dioxane	UJ
SBTB02_060118	8260C	594-20-7	2,2-Dichloropropane	UJ
SBTB02_060118	8260C	78-93-3	2-Butanone	UJ

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SBTB02_060118	8260C	67-64-1	Acetone	UJ
SBTB02_060118	8260C	10061-02-6	trans-1,3-Dichloropropene	UJ
SBTB02_060118	8260C	110-57-6	trans-1,4-Dichloro-2-butene	UJ

MAJOR DEFICIENCIES:

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

MINOR DEFICIENCIES:

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

L1820045:

VOCs by SW-846 Method 8260C

The laboratory control sample and duplicate (LCS/LCSD) for batch WG1122975 exhibited a relative percent difference (RPD) above the control limit for bromomethane (30%) and 1,4-dioxane (31%). The associated results in sample SBTB01_053118 are qualified as "UJ" based on potential indeterminate bias.

The initial calibration (ICAL) for instrument VOA105 exhibited a response factor (RF) below the control limit for 1,4-dioxane (0.0010), 2-butanone (0.0460), 2-hexanone (0.0830), 4-methyl-2-pentanone (0.0430), acrylonitrile (0.0360), bromomethane (0.0690), and chloroethane (0.0810). The associated results in sample SBTB01_053118 are qualified as "UJ" based on potential indeterminate bias.

The initial calibration verification (ICV) for instrument VOA104 exhibited a percent difference (%D) above the control limit for bromomethane (-24.2%). The associated results in samples SB01_3-4, SB02_0-2, and SB02_4-6 are qualified as "UJ" based on potential indeterminate bias.

The ICV for instrument VOA100 exhibited a %D above the control limit for 1,1,1,2-tetrachloroethane (-20.9%), 1,1-dichloropropene (-22.8%), 1,2,3-trichlorobenzene (-21.6%), 1,2,4-trichlorobenzene (-21.4%), 1,2-dibromo-3-chloropropane (-24.4%), 1,2-dibromoethane (-21.6%), 1,3-dichloropropane (-20.8%), bromochloromethane (-20.7%), bromodichloromethane (-20.2%), bromoform (-23.8%), cis-1,2-dichloroethene (-22.4%), cis-1,3-dichloropropene

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(-22.2%), ethyl ether (-24.2%), naphthalene (-24.6%), and trichlorofluoromethane (-22.9%). The associated results in samples SB01_0-2, SB01_8-9, SB02_0-2, SB02_6-8, SB03_0-1, SB03_3-4, SB03_7-8, and SBDUP01_053118 are qualified as "J" and "UJ" based on potential indeterminate bias.

The ICV for instrument VOA105 exhibited a %D above the control limit for 1,2-dibromo-3-chloropropane (32.6%), bromoform (23.3%), chloromethane (-31.6%), dichlorodifluoromethane (-53.1%), ethyl ether (-22%), naphthalene (23.9%), trans-1,3-dichloropropene (24.7%), and vinyl chloride (-23.3%). The associated results in sample SBTB01_053118 are qualified as "UJ" based on potential indeterminate bias.

The ICV for instrument VOA105 exhibited a RF below the control limit for trichloroethene (0.185). The associated results in sample SBTB01_053118 are qualified as "UJ" based on potential indeterminate bias.

The continuing calibration verification (CCV) for batch WG1123402 on instrument VOA104 exhibited a %D above the control limit for dichlorodifluoromethane (26.8%), trans-1,4-dichloro-2-butene (21.7%), and vinyl acetate (22.1%). The associated results in samples SB01_3-4 and SB02_4-6 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123411 on instrument VOA104 exhibited a %D above the control limit for dichlorodifluoromethane (26.8%), trans-1,4-dichloro-2-butene (21.7%), and vinyl acetate (22.1%). The associated results in sample SB02_0-2 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1122929 on instrument VOA100 exhibited a %D above the control limit for 1,1,1-trichloroethane (-25.2%), carbon tetrachloride (-32%), chloroform (-20.2%), dibromomethane (-20.4%), and tetrachloroethene (-22.8%). The associated results in samples SB01_0-2, SB01_8-9, SB02_0-2, SB02_6-8, and SBDUP01_053118 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123151 on instrument VOA100 exhibited a %D above the control limit for 1,1,1-trichloroethane (-25.2%), carbon tetrachloride (-32%), chloroform (-20.2%), dibromomethane (-20.4%), and tetrachloroethene (-22.8%). The associated results in samples SB03_0-1, SB03_3-4, and SB03_7-8 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1122975 on instrument VOA105 exhibited a %D above the control limit for trans-1,4-dichloro-2-butene (29.5%). The associated results in sample SBTB01_053118 are qualified as "UJ" based on potential indeterminate bias.

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SVOCs by SW-846 Method 8270D

The field duplicate SBDUP01_053118 and parent sample SB01_0-2 exhibited a RPD above the control limit for 2-methylnaphthalene (60.2%), fluorene (63.6%), and naphthalene (100%). The associated results in samples SBDUP01_053118 and SB01_0-2 are qualified as "J" based on potential indeterminate bias.

The CCV for batch WG1122680 on instrument SV109 exhibited a %D above the control limit for 2,4-dinitrophenol (-20.3%), 2,6-dinitrotoluene (-31.5%), 2-nitroaniline (-32.8%), 2-nitrophenol (-39.6%), and 4,6-dinitro-o-cresol (-26.7%). The associated results in samples SB01_0-2, SB01_8-9, SB02_0-2, SB02_4-6, SB02_6-8, SB03_0-1, SB03_3-4, SB03_7-8, and SBDUP01_053118 are qualified as "UJ" based on potential indeterminate bias.

Pesticides by SW-846 Method 8081B

The surrogate decachlorobiphenyl in sample SB01_0-2 exhibited a percent recovery above the UCL (287, 202%). The associated results in sample SB01_0-2 are qualified as "J" based on potential high bias.

The surrogate decachlorobiphenyl in sample SBDUP01_053118 exhibited a percent recovery above the UCL (406, 266%). The associated results in sample SBDUP01_053118 are qualified as "J" based on potential high bias.

The CCV for batch WG1122816 on instrument PEST20 exhibited a %D above the control limit for methoxychlor (29.2%). The associated results in samples SB01_0-2, SB03_7-8, and SBDUP01_053118 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123546 on instrument PEST11 exhibited a %D above the control limit for toxaphene (-21.8%). The associated results in samples SB01_3-4, SB01_8-9, SB02_4-6, and SB02_6-8 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123544 on instrument PEST15 exhibited a %D above the control limit for endosulfan sulfate (-16.3%), endrin ketone (-16.3%), and toxaphene (-32.8%). The associated results in samples SB02_0-2, SB03_0-1, and SB03_3-4 are qualified as "UJ" based on potential indeterminate bias.

Metals by SW-846 Method 6010C

The field duplicate SBDUP01_053118 and parent sample SB01_0-2 exhibited a RPD above the control limit for barium, total (52.4%), lead, total (136.8%), magnesium, total (124.7%),

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manganese, total (52.9%), and nickel, total (79.3%). The associated results in samples SBDUP01_053118 and SB01_0-2 are qualified as "J" based on potential indeterminate bias.

The field duplicate SBDUP01_053118 and parent sample SB01_0-2 exhibited an absolute difference above the reporting limit for cobalt, total (5.63 mg/kg). The associated results in samples SBDUP01_053118 and SB01_0-2 are qualified as "J" based on potential indeterminate bias.

Cyanide by Method 9012B

The LCS/LCSD for batch WG1122457 exhibited a RPD above the control limit for cyanide, total (56%). The associated results in samples SB01_0-2, SB01_3-4, SB01_8-9, SB02_0-2, SB02_4-6, SB02_6-8, SB03_0-1, and SB03_3-4 are qualified as "UJ" based on potential indeterminate bias.

The LCS/LCSD for batch WG1122460 exhibited a RPD above the control limit for cyanide, total (55%). The associated results in samples SB03_7-8 and SBDUP01_053118 are qualified as "UJ" based on potential indeterminate bias.

L1820339:

VOCs by SW-846 Method 8260C

The surrogates toluene-d8 and 4-bromofluorobenzene in sample SB04_1-3 exhibited a percent recovery above the upper control limit (UCL) (131% and 179%, respectively). The associated results in sample SB04_1-3 are qualified as "J" based on potential high bias.

The ICAL for instrument VOA122 exhibited a RF below the control limit for 1,4-dioxane (0.001), 2-butanone (0.076), and acetone (0.046). The associated results in sample SBTB02_060118 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.004). The associated results in sample SB04_1-3 are qualified as "UJ" based on potential indeterminate bias.

The ICV for instrument VOA100 exhibited a %D above the control limit for 1,1,1,2-tetrachloroethane (-20.9%), 1,1-dichloropropene (-22.8%), 1,2,3-trichlorobenzene (-21.6%), 1,2,4-trichlorobenzene (-21.4%), 1,2-dibromo-3-chloropropane (-24.4%), 1,2-dibromoethane (-21.6%), 1,3-dichloropropane (-24.1%), bromochloromethane (-20.7%), bromodichloromethane (-20.2%), bromoform (-23.8%), cis-1,2-dichloroethene (-22.4%), cis-1,3-dichloropropene (-22.2%), ethyl ether (-24.2%), naphthalene (-24.6%), and trichlorofluoromethane (-22.9%). The associated results in samples SB04_6-8, SB04_10-12, SB05_0-2, SB05_7-8, SB05_11-12,

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SB06_0-2, SB06_6-8, SB06_12-14, and SBDUP02_060118 are qualified as "J" or "UJ" based on potential indeterminate bias.

The ICV for instrument VOA122 exhibited a %D above the control limit for 2,2-dichloropropane (28.9%), trans-1,3-dichloropropene (20.2%), and trans-1,4-dichloro-2-butene (26.7%). The associated results in sample SBTB02_060118 are qualified as "UJ" based on potential indeterminate bias.

The ICV for instrument VOA123 exhibited a %D above the control limit for bromomethane (-28.9%). The associated results in sample SB04_1-3 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123948 on instrument VOA111 exhibited a %D above the control limit for 2-hexanone (22.2%), carbon disulfide (24.9%), carbon tetrachloride (-20.9%), chloromethane (31.9%), and dichlorodifluoromethane (28.2%). The associated results in samples SB06_14-16 and SB04_1-3 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123639 on instrument VOA100 exhibited a %D above the control limit for 1,2,3-trichlorobenzene (21.5%), 1,2,3-trichloropropane (-22.3%), 1,2-dichloroethane (-24.8%), and trans-1,4-dichloro-2-butene (-36.3%). The associated results in samples SB04_6-8, SB04_10-12, SB05_0-2, SB05_7-8, SB05_11-12, SB06_0-2, SB06_6-8, SB06_12-14, and SBDUP02_060118 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123465 on instrument VOA122 exhibited a %D above the control limit for 1,2-dichloroethane (21.5%). The associated results in sample SBTB02_060118 are qualified as "UJ" based on potential indeterminate bias.

SVOCs by SW-846 Method 8270D

The LCS/LCSD for batch WG1123660 exhibited a RPD above the control limit for hexachlorocyclopentadiene (54%). The associated results in sample SB06_14-16 are qualified as "UJ" based on potential indeterminate bias.

The laboratory control sample (LCS) for batch WG1123660 exhibited a percent recovery below the lower control limit (LCL) for biphenyl (50%) and carbazole (51%). The associated results in sample SB06_14-16 are qualified as "UJ" based on potential low bias.

The CCV for batch WG1123989 on instrument GCMS5 exhibited a %D above the control limit for 2,4-dinitrophenol (-42.9%), 2,4-dinitrotoluene (-20.4%), 4,6-dinitro-o-cresol (-37.2%), 4-nitrophenol (-29.5%), and bis(2-chloroisopropyl)ether (-26.8%). The associated results in sample SB04_1-3 are qualified as "UJ" based on potential indeterminate bias.

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Pesticides by SW-846 Method 8081B

The CCV for batch WG1124343 on instrument PEST11 exhibited a %D above the control limit for chlordane (-28.8%) and toxaphene (-33%). The associated results in sample SB06_14-16 are qualified as "UJ" based on potential indeterminate bias.

The CCV for batch WG1123574 on instrument PEST18 exhibited a %D above the control limit for delta-BHC (22.1%). The associated results in samples SB04_1-3, SB04_6-8, SB04_10-12, SB05_0-2, SB05_7-8, SB05_11-12, SB06_0-2, SB06_6-8, SB06_12-14, and SBDUP02_060118 are qualified as "UJ" based on potential indeterminate bias.

Metals by SW-846 Method 6010C

The matrix spike (MS) for batch WG1123199 exhibited a percent recovery above the UCL for barium, total (127%), copper, total (146%), lead, total (569%), manganese, total (129%), and zinc, total (126%). The associated results in samples SB04_1-3, SB04_6-8, SB04_10-12, SB05_0-2, SB05_7-8, SB05_11-12, SB06_0-2, SB06_6-8, SB06_12-14, and SBDUP02_060118 are qualified as "J" based on potential high bias.

The field duplicate SB05_11-12 and parent sample SBDUP02_060118 exhibited a RPD above the control limit for calcium, total (71.5%). The associated results are qualified as "J" based on potential indeterminate bias.

The lab duplicate and parent sample SB04_1-3 exhibited a RPD above the control limit for barium, total (28%), copper, total (52%), iron, total (65%), lead, total (132%), manganese, total (29%), nickel, total (34%), vanadium, total (30%), zinc, total (39%), and lead, total (25%). The associated results in sample SB04_1-3 are qualified as "J" based on potential indeterminate bias.

Mercury by SW-846 Method 7471B

The MS for batch WG1122868 exhibited a percent recovery below the LCL for mercury, total (51%). The associated results in samples SB04_1-3, SB04_6-8, SB04_10-12, SB05_0-2, SB05_7-8, SB05_11-12, SB06_0-2, SB06_6-8, SB06_12-14, and SBDUP02_060118 are qualified as "J" based on potential low bias.

Cyanide by SW-846 Method 9012B

The LCS for batch WG1122634 exhibited a percent recovery below the LCL for cyanide, total (77, 69%). The associated results in samples SB04_1-3, SB04_6-8, SB04_10-12, SB05_0-2,

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SB05_7-8, SB05_11-12, SB06_0-2, SB06_6-8, SB06_12-14, and SBDUP02_060118 are qualified as "J" or "UJ" based on potential low bias.

The LCS for batch WG1123793 exhibited a percent recovery below the LCL for cyanide, total (32, 32%). The associated results in sample SB06_14-16 are qualified as "UJ" based on potential low bias.

Hexavalent Chromium by SW-846 Method 7196A

The LCS for batch WG1123625 exhibited a percent recovery below the LCL for chromium, hexavalent (77%). The associated results in sample SB06_14-16 are qualified as "UJ" based on potential low bias.

OTHER DEFICIENCIES:

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

L1820045:

VOCs by SW-846 Method 8260C

The MB for batch WG1122975 exhibited a detection of methylene chloride (0.1 ug/L), hexachlorobutadiene (0.236 ug/L), 1,2,4-trichlorobenzene (0.085 ug/L), naphthalene (0.548 ug/L), and 1,2,3-trichlorobenzene (0.193 ug/L). The associated results in sample SBTB01_053118 are non-detect. No qualification is necessary.

The LCS for batch WG1123151 exhibited a percent recovery above the UCL for carbon tetrachloride (132%). The associated results in samples SB03_0-1, SB03_3-4, and SB03_7-8 are non-detect. No qualification is necessary.

The LCS for batch WG1122929 exhibited a percent recovery above the UCL for carbon tetrachloride (132%). The associated results in samples SB01_0-2, SB01_8-9, SB02_0-2, SB02_6-8, and SBDUP01_053118 are non-detect. No qualification is necessary.

Herbicides by SW-846 Method 8151A

The LCS for batch WG1121697 exhibited a percent recovery above the UCL for 2,4-d (179, 163%). The associated results in samples SB01_0-2, SB01_3-4, SB01_8-9, SB02_0-2, SB02_4-6, SB02_6-8, SB03_0-1, SB03_3-4, SB03_7-8, and SBDUP01_053118 are non-detect. No qualification is necessary.

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Pesticides by SW-846 Method 8081B

The surrogates 2,4,5,6-Tetrachloro-m-xylene and decachlorobiphenyl in sample SB03_0-1 exhibited a percent recovery below the LCL (0, 0%). Analysis of sample SB03_0-1 was performed at >10X dilution. No qualification is necessary.

The surrogate decachlorobiphenyl in sample SB03_3-4 exhibited a percent recovery above the UCL (180, 172%). The associated results are non-detect. No qualification is necessary.

L1820339:

VOCs by SW-846 Method 8260C

The surrogate 1,2-dichloroethane-d4 in sample SB06_6-8 exhibited a percent recovery above the UCL (132%). The other 3 surrogates were recovered within the acceptance limits. No qualification is necessary.

The LCS for batch WG1123639 exhibited a percent recovery above the UCL for carbon tetrachloride (138, 141%), trichlorofluoromethane (146, 147%), and 1,1,1-trichloroethane (132, 134%). The associated results in samples SB04_6-8, SB04_10-12, SB05_0-2, SB05_7-8, SB05_11-12, SB06_0-2, SB06_6-8, SB06_12-14, and SBDUP02_060118 are non-detect. No qualification is necessary.

SVOCs by SW-846 Method 8270D

The LCS for batch WG1124120 exhibited a percent recovery above the UCL for phenol (93%). The associated results in sample SB06_12-14 are non-detect. No qualification is necessary.

Herbicides by SW-846 Method 8151A

The LCS for batch WG1124048 exhibited a percent recovery above the UCL for 2,4-D (166%). The associated results in sample SB06_14-16 are non-detect. No qualification is necessary.

Metals by SW-846 Method 6010C

The MB for batch WG1123199 exhibited a detection of iron, total (1.03 mg/kg) and manganese, total (0.092 mg/kg). The associated results in samples SB04_1-3, SB04_6-8, SB04_10-12, SB05_0-2, SB05_7-8, SB05_11-12, SB06_0-2, SB06_6-8, SB06_12-14, and SBDUP02_060118 are >10X the blank concentration. No qualification is necessary.

The MB for batch WG1123666 exhibited a detection of calcium, total (1.87 mg/kg). The associated results in sample SB06_14-16 are >10X the blank concentration. No qualification is necessary.

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The MS for batch WG1123199 exhibited a percent recovery above the UCL for aluminum, total (634%), calcium, total (830%), and iron, total (1030%). The associated results in sample SB04_1-3 are >4X the spiked amount. No qualification is necessary.

COMMENTS:

Field duplicate and parent sample pairs were collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 1X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 50% for soil. The following analytes did not meet the precision criteria:

- SBDUP01_053118 and SB01_0-2: 2-methylnaphthalene, barium (total), cobalt (total), fluorene, lead (total), magnesium (total), manganese (total), naphthalene, nickel (total)
- SBDUP02_060118 and SB05_11-12: calcium (total)

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

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

Signed:



Emily Strake, CEP
Senior Project Chemist

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

To: Kimberly Nagotko, Langan Senior Staff Geologist

From: Emily Strake, Langan Senior Project Chemist

Date: October 23, 2018

Re: Data Usability Summary Report
For West 29th Street
Samples Collected in May and June, 2018
Langan Project No.: 170515401

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of canister air samples collected in 2018 by Langan Engineering and Environmental Services ("Langan") at the West 29th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs) by the methods specified below.

- VOCs by TO-15 and TO-15 SIM

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

TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1820382	L1820382-01	SV01_060118	6/1/2018	VOCs
L1820382	L1820382-02	SV02_060118	6/1/2018	VOCs
L1820382	L1820382-03	SV03_060118	6/1/2018	VOCs
L1820382	L1820382-04	SV04_060118	6/1/2018	VOCs
L1820382	L1820382-05	SVAA_060118	6/1/2018	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II SOP #HW-31, "Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15" (September 2016, Revision 6) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the

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Data Usability Summary Report
For West 29th Street
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originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, target compound identification and quantification, chromatograms, and overall system performance.

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

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

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

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
No qualification necessary.				

MAJOR DEFICIENCIES:

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

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Data Usability Summary Report
For West 29th Street
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October 23, 2018 Page 3 of 3

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. No minor deficiencies were identified.

OTHER DEFICIENCIES:

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

VOCs by USEPA Method TO-15

The MB for batch WG1123624 exhibited a detection of acetone ($0.124 \mu\text{g}/\text{m}^3$). The associated results in samples SV01_060118, SV02_060118, SV03_060118, and SV04_060118 are >10X the blank concentration. No qualification is necessary.

The MB for batch WG1123625 exhibited a detection of acetone ($0.107 \mu\text{g}/\text{m}^3$). The associated results in samples SV04_060118 and SVAA_060118 are >10X the blank concentration. No qualification is necessary.

The MB for batch WG1123625 exhibited a detection of methylene chloride ($0.038 \mu\text{g}/\text{m}^3$) and dibromomethane ($0.092 \mu\text{g}/\text{m}^3$). The associated results in samples SV04_060118 and SVAA_060118 are non-detect. No qualification is necessary.

COMMENTS:

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

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

Signed:



Emily Strake, CEP
Senior Project Chemist

APPENDIX H
LABORATORY DATA REPORTS



ANALYTICAL REPORT

Lab Number:	L1820045
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Emily Snead
Phone:	(212) 479-5432
Project Name:	538-542 WEST 29TH ST.
Project Number:	170515401
Report Date:	06/07/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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

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



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1820045-01	SB01_0-2	SOIL	MANHATTAN	05/31/18 12:12	05/31/18
L1820045-02	SB01_3-4	SOIL	MANHATTAN	05/31/18 12:22	05/31/18
L1820045-03	SB01_8-9	SOIL	MANHATTAN	05/31/18 12:29	05/31/18
L1820045-04	SB02_0-2	SOIL	MANHATTAN	05/31/18 11:20	05/31/18
L1820045-05	SB02_4-6	SOIL	MANHATTAN	05/31/18 11:27	05/31/18
L1820045-06	SB02_6-8	SOIL	MANHATTAN	05/31/18 11:35	05/31/18
L1820045-07	SB03_0-1	SOIL	MANHATTAN	05/31/18 09:58	05/31/18
L1820045-08	SB03_3-4	SOIL	MANHATTAN	05/31/18 10:05	05/31/18
L1820045-09	SB03_7-8	SOIL	MANHATTAN	05/31/18 10:17	05/31/18
L1820045-10	SBDUP01_053118	SOIL	MANHATTAN	05/31/18 00:00	05/31/18
L1820045-11	SBTB01_053118	WATER	MANHATTAN	05/31/18 00:00	05/31/18

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

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: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

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.

Volatile Organics

L1820045-04 was analyzed as a High Level Methanol in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial Low Level analysis. The results of both analyses are reported.

L1820045-08: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Pesticides

L1820045-01: The surrogate recoveries are outside the acceptance criteria for decachlorobiphenyl (287%/202%); however, the sample was not re-extracted due to coelution with obvious interferences.

L1820045-04, -07, and -08: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1820045-07: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

L1820045-08: The surrogate recoveries are outside the acceptance criteria for decachlorobiphenyl (180%/172%); however, the sample was not re-extracted due to coelution with obvious interferences.

L1820045-10: The surrogate recoveries are outside the acceptance criteria for decachlorobiphenyl (406%/266%); however, the sample was not re-extracted due to coelution with obvious interferences.

Total Metals

L1820045-01 through -10: 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.

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

Case Narrative (continued)

Cyanide, Total

The WG1122457-2/-3 LCS/LCSD recoveries (33%/58%), associated with L1820045-01 through -08, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported. The LCS/LCSD RPD (56%) is above the acceptance criteria.

The WG1122460-2/-3 LCS/LCSD recoveries (33%/58%), associated with L1820045-09 and -10, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported. In addition, the WG1122460-2/-3 LCS/LCSD RPD (55%) is above the acceptance criteria.

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: 06/07/18

ORGANICS

VOLATILES

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-01
Client ID: SB01_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:12
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/06/18 12:37
Analyst: JC
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.8	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.29	1
Chloroform	ND		ug/kg	1.6	0.40	1
Carbon tetrachloride	ND		ug/kg	1.1	0.37	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.24	1
Dibromochloromethane	ND		ug/kg	1.1	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.34	1
Tetrachloroethene	ND		ug/kg	1.1	0.32	1
Chlorobenzene	ND		ug/kg	1.1	0.37	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.45	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.38	1
Bromodichloromethane	ND		ug/kg	1.1	0.33	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.25	1
1,3-Dichloropropene, Total	ND		ug/kg	1.1	0.22	1
1,1-Dichloropropene	ND		ug/kg	5.4	0.35	1
Bromoform	ND		ug/kg	4.3	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.32	1
Benzene	ND		ug/kg	1.1	0.21	1
Toluene	ND		ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.18	1
Chloromethane	ND		ug/kg	5.4	0.47	1
Bromomethane	ND		ug/kg	2.1	0.36	1
Vinyl chloride	ND		ug/kg	2.1	0.34	1
Chloroethane	ND		ug/kg	2.1	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.40	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.26	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-01**Date Collected:** 05/31/18 12:12**Client ID:** SB01_0-2**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	1.1	0.32	1
1,2-Dichlorobenzene	ND		ug/kg	5.4	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	5.4	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	5.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.16	1
p/m-Xylene	ND		ug/kg	2.1	0.38	1
o-Xylene	ND		ug/kg	2.1	0.36	1
Xylenes, Total	ND		ug/kg	2.1	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.37	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.26	1
Dibromomethane	ND		ug/kg	11	0.26	1
Styrene	ND		ug/kg	2.1	0.43	1
Dichlorodifluoromethane	ND		ug/kg	11	0.54	1
Acetone	ND		ug/kg	11	2.5	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.74	1
Vinyl acetate	ND		ug/kg	11	0.16	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.26	1
1,2,3-Trichloropropane	ND		ug/kg	11	0.19	1
2-Hexanone	ND		ug/kg	11	0.72	1
Bromochloromethane	ND		ug/kg	5.4	0.38	1
2,2-Dichloropropane	ND		ug/kg	5.4	0.48	1
1,2-Dibromoethane	ND		ug/kg	4.3	0.21	1
1,3-Dichloropropane	ND		ug/kg	5.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.1	0.34	1
Bromobenzene	ND		ug/kg	5.4	0.24	1
n-Butylbenzene	ND		ug/kg	1.1	0.24	1
sec-Butylbenzene	ND		ug/kg	1.1	0.23	1
tert-Butylbenzene	ND		ug/kg	5.4	0.26	1
o-Chlorotoluene	ND		ug/kg	5.4	0.24	1
p-Chlorotoluene	ND		ug/kg	5.4	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.4	0.42	1
Hexachlorobutadiene	ND		ug/kg	5.4	0.37	1
Isopropylbenzene	ND		ug/kg	1.1	0.21	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.22	1
Naphthalene	15		ug/kg	5.4	0.15	1
Acrylonitrile	ND		ug/kg	11	0.55	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-01
Client ID: SB01_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:12
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.4	0.27	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.4	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.4	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.4	0.20	1
1,4-Dioxane	ND		ug/kg	43	15.	1
p-Diethylbenzene	ND		ug/kg	4.3	4.3	1
p-Ethyltoluene	ND		ug/kg	4.3	0.25	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.3	0.17	1
Ethyl ether	ND		ug/kg	5.4	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	0.42	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	108		70-130

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-02
Client ID: SB01_3-4
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:22
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/06/18 23:00
Analyst: MV
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	8.0	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.22	1
Chloroform	ND		ug/kg	1.2	0.30	1
Carbon tetrachloride	ND		ug/kg	0.80	0.28	1
1,2-Dichloropropane	ND		ug/kg	2.8	0.18	1
Dibromochloromethane	ND		ug/kg	0.80	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.25	1
Tetrachloroethene	ND		ug/kg	0.80	0.24	1
Chlorobenzene	ND		ug/kg	0.80	0.28	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.33	1
1,2-Dichloroethane	ND		ug/kg	0.80	0.20	1
1,1,1-Trichloroethane	ND		ug/kg	0.80	0.28	1
Bromodichloromethane	ND		ug/kg	0.80	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	0.80	0.17	1
cis-1,3-Dichloropropene	ND		ug/kg	0.80	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.80	0.17	1
1,1-Dichloropropene	ND		ug/kg	4.0	0.26	1
Bromoform	ND		ug/kg	3.2	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.80	0.24	1
Benzene	ND		ug/kg	0.80	0.15	1
Toluene	ND		ug/kg	1.2	0.16	1
Ethylbenzene	ND		ug/kg	0.80	0.14	1
Chloromethane	ND		ug/kg	4.0	0.35	1
Bromomethane	ND		ug/kg	1.6	0.27	1
Vinyl chloride	ND		ug/kg	1.6	0.25	1
Chloroethane	ND		ug/kg	1.6	0.25	1
1,1-Dichloroethene	ND		ug/kg	0.80	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.19	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-02**Date Collected:** 05/31/18 12:22**Client ID:** SB01_3-4**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.80	0.24	1
1,2-Dichlorobenzene	ND		ug/kg	4.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	4.0	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	4.0	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.6	0.12	1
p/m-Xylene	ND		ug/kg	1.6	0.28	1
o-Xylene	ND		ug/kg	1.6	0.27	1
Xylenes, Total	ND		ug/kg	1.6	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.80	0.27	1
1,2-Dichloroethene, Total	ND		ug/kg	0.80	0.19	1
Dibromomethane	ND		ug/kg	8.0	0.19	1
Styrene	ND		ug/kg	1.6	0.32	1
Dichlorodifluoromethane	ND		ug/kg	8.0	0.40	1
Acetone	7.3	J	ug/kg	8.0	1.8	1
Carbon disulfide	ND		ug/kg	8.0	0.88	1
2-Butanone	ND		ug/kg	8.0	0.55	1
Vinyl acetate	ND		ug/kg	8.0	0.12	1
4-Methyl-2-pentanone	ND		ug/kg	8.0	0.20	1
1,2,3-Trichloropropane	ND		ug/kg	8.0	0.14	1
2-Hexanone	ND		ug/kg	8.0	0.53	1
Bromochloromethane	ND		ug/kg	4.0	0.28	1
2,2-Dichloropropane	ND		ug/kg	4.0	0.36	1
1,2-Dibromoethane	ND		ug/kg	3.2	0.16	1
1,3-Dichloropropane	ND		ug/kg	4.0	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.80	0.25	1
Bromobenzene	ND		ug/kg	4.0	0.18	1
n-Butylbenzene	ND		ug/kg	0.80	0.18	1
sec-Butylbenzene	ND		ug/kg	0.80	0.17	1
tert-Butylbenzene	ND		ug/kg	4.0	0.20	1
o-Chlorotoluene	ND		ug/kg	4.0	0.18	1
p-Chlorotoluene	ND		ug/kg	4.0	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	0.32	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.28	1
Isopropylbenzene	ND		ug/kg	0.80	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.80	0.16	1
Naphthalene	5.5		ug/kg	4.0	0.11	1
Acrylonitrile	ND		ug/kg	8.0	0.41	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-02
Client ID: SB01_3-4
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:22
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.80	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.0	0.20	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.0	0.17	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.0	0.13	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.0	0.15	1
1,4-Dioxane	ND		ug/kg	32	12.	1
p-Diethylbenzene	ND		ug/kg	3.2	3.2	1
p-Ethyltoluene	ND		ug/kg	3.2	0.19	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.2	0.12	1
Ethyl ether	ND		ug/kg	4.0	0.21	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.0	0.31	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	97		70-130

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-03

Date Collected: 05/31/18 12:29

Client ID: SB01_8-9

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/06/18 13:29

Analyst: JC

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.32	1
Chloroform	ND		ug/kg	1.8	0.44	1
Carbon tetrachloride	ND		ug/kg	1.2	0.41	1
1,2-Dichloropropane	ND		ug/kg	4.2	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.21	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.38	1
Tetrachloroethene	ND		ug/kg	1.2	0.36	1
Chlorobenzene	ND		ug/kg	1.2	0.42	1
Trichlorofluoromethane	ND		ug/kg	6.0	0.50	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.42	1
Bromodichloromethane	ND		ug/kg	1.2	0.37	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.28	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.25	1
1,1-Dichloropropene	ND		ug/kg	6.0	0.39	1
Bromoform	ND		ug/kg	4.8	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.36	1
Benzene	ND		ug/kg	1.2	0.23	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.20	1
Chloromethane	ND		ug/kg	6.0	0.52	1
Bromomethane	ND		ug/kg	2.4	0.40	1
Vinyl chloride	ND		ug/kg	2.4	0.38	1
Chloroethane	ND		ug/kg	2.4	0.38	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.44	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.29	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-03**Date Collected:** 05/31/18 12:29**Client ID:** SB01_8-9**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	1.2	0.36	1
1,2-Dichlorobenzene	ND		ug/kg	6.0	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	6.0	0.26	1
1,4-Dichlorobenzene	ND		ug/kg	6.0	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.18	1
p/m-Xylene	ND		ug/kg	2.4	0.42	1
o-Xylene	ND		ug/kg	2.4	0.40	1
Xylenes, Total	ND		ug/kg	2.4	0.40	1
cis-1,2-Dichloroethene	1.3		ug/kg	1.2	0.41	1
1,2-Dichloroethene, Total	1.3		ug/kg	1.2	0.29	1
Dibromomethane	ND		ug/kg	12	0.29	1
Styrene	ND		ug/kg	2.4	0.48	1
Dichlorodifluoromethane	ND		ug/kg	12	0.60	1
Acetone	20		ug/kg	12	2.7	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.83	1
Vinyl acetate	ND		ug/kg	12	0.18	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.21	1
2-Hexanone	ND		ug/kg	12	0.80	1
Bromochloromethane	ND		ug/kg	6.0	0.43	1
2,2-Dichloropropane	ND		ug/kg	6.0	0.54	1
1,2-Dibromoethane	ND		ug/kg	4.8	0.24	1
1,3-Dichloropropane	ND		ug/kg	6.0	0.22	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.38	1
Bromobenzene	ND		ug/kg	6.0	0.26	1
n-Butylbenzene	ND		ug/kg	1.2	0.27	1
sec-Butylbenzene	ND		ug/kg	1.2	0.26	1
tert-Butylbenzene	ND		ug/kg	6.0	0.30	1
o-Chlorotoluene	ND		ug/kg	6.0	0.26	1
p-Chlorotoluene	ND		ug/kg	6.0	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.0	0.47	1
Hexachlorobutadiene	ND		ug/kg	6.0	0.42	1
Isopropylbenzene	ND		ug/kg	1.2	0.23	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.24	1
Naphthalene	11		ug/kg	6.0	0.16	1
Acrylonitrile	ND		ug/kg	12	0.62	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-03
Client ID: SB01_8-9
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:29
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.26	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.0	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.0	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.0	0.22	1
1,4-Dioxane	ND		ug/kg	48	17.	1
p-Diethylbenzene	ND		ug/kg	4.8	4.8	1
p-Ethyltoluene	ND		ug/kg	4.8	0.28	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.8	0.19	1
Ethyl ether	ND		ug/kg	6.0	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	0.47	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	108		70-130

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-04

Date Collected: 05/31/18 11:20

Client ID: SB02_0-2

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/06/18 13:55

Analyst: JC

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.2	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.25	1
Chloroform	ND		ug/kg	1.4	0.34	1
Carbon tetrachloride	ND		ug/kg	0.92	0.32	1
1,2-Dichloropropane	ND		ug/kg	3.2	0.21	1
Dibromochloromethane	ND		ug/kg	0.92	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.29	1
Tetrachloroethene	ND		ug/kg	0.92	0.28	1
Chlorobenzene	ND		ug/kg	0.92	0.32	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.38	1
1,2-Dichloroethane	ND		ug/kg	0.92	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.92	0.32	1
Bromodichloromethane	ND		ug/kg	0.92	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	0.92	0.19	1
cis-1,3-Dichloropropene	ND		ug/kg	0.92	0.21	1
1,3-Dichloropropene, Total	ND		ug/kg	0.92	0.19	1
1,1-Dichloropropene	ND		ug/kg	4.6	0.30	1
Bromoform	ND		ug/kg	3.7	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.92	0.27	1
Benzene	1.1		ug/kg	0.92	0.18	1
Toluene	ND		ug/kg	1.4	0.18	1
Ethylbenzene	1.7		ug/kg	0.92	0.16	1
Chloromethane	ND		ug/kg	4.6	0.40	1
Bromomethane	ND		ug/kg	1.8	0.31	1
Vinyl chloride	ND		ug/kg	1.8	0.29	1
Chloroethane	ND		ug/kg	1.8	0.29	1
1,1-Dichloroethene	ND		ug/kg	0.92	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.22	1

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04

Date Collected: 05/31/18 11:20

Client ID: SB02_0-2

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.92	0.28	1
1,2-Dichlorobenzene	ND		ug/kg	4.6	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.6	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	4.6	0.17	1
Methyl tert butyl ether	0.40	J	ug/kg	1.8	0.14	1
p/m-Xylene	1.3	J	ug/kg	1.8	0.32	1
o-Xylene	1.2	J	ug/kg	1.8	0.31	1
Xylenes, Total	2.5	J	ug/kg	1.8	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	0.92	0.31	1
1,2-Dichloroethene, Total	ND		ug/kg	0.92	0.22	1
Dibromomethane	ND		ug/kg	9.2	0.22	1
Styrene	ND		ug/kg	1.8	0.37	1
Dichlorodifluoromethane	ND		ug/kg	9.2	0.46	1
Acetone	77		ug/kg	9.2	2.1	1
Carbon disulfide	1.8	J	ug/kg	9.2	1.0	1
2-Butanone	ND		ug/kg	9.2	0.63	1
Vinyl acetate	ND		ug/kg	9.2	0.14	1
4-Methyl-2-pentanone	ND		ug/kg	9.2	0.22	1
1,2,3-Trichloropropane	ND		ug/kg	9.2	0.16	1
2-Hexanone	ND		ug/kg	9.2	0.61	1
Bromochloromethane	ND		ug/kg	4.6	0.33	1
2,2-Dichloropropane	ND		ug/kg	4.6	0.41	1
1,2-Dibromoethane	ND		ug/kg	3.7	0.18	1
1,3-Dichloropropane	ND		ug/kg	4.6	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.92	0.29	1
Bromobenzene	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	ND		ug/kg	0.92	0.21	1
sec-Butylbenzene	0.27	J	ug/kg	0.92	0.20	1
tert-Butylbenzene	ND		ug/kg	4.6	0.23	1
o-Chlorotoluene	ND		ug/kg	4.6	0.20	1
p-Chlorotoluene	ND		ug/kg	4.6	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.6	0.36	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.32	1
Isopropylbenzene	0.97		ug/kg	0.92	0.18	1
p-Isopropyltoluene	7.5		ug/kg	0.92	0.18	1
Naphthalene	470	E	ug/kg	4.6	0.13	1
Acrylonitrile	ND		ug/kg	9.2	0.47	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04
Client ID: SB02_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:20
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	0.48	J	ug/kg	0.92	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.6	0.23	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.6	0.20	1
1,3,5-Trimethylbenzene	1.3	J	ug/kg	4.6	0.15	1
1,2,4-Trimethylbenzene	3.0	J	ug/kg	4.6	0.17	1
1,4-Dioxane	ND		ug/kg	37	13.	1
p-Diethylbenzene	6.3		ug/kg	3.7	3.7	1
p-Ethyltoluene	4.6		ug/kg	3.7	0.22	1
1,2,4,5-Tetramethylbenzene	0.94	J	ug/kg	3.7	0.14	1
Ethyl ether	ND		ug/kg	4.6	0.24	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.6	0.36	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04
Client ID: SB02_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:20
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/07/18 02:07
Analyst: MV
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	500	83.	1
1,1-Dichloroethane	ND		ug/kg	76	14.	1
Chloroform	ND		ug/kg	76	19.	1
Carbon tetrachloride	ND		ug/kg	50	17.	1
1,2-Dichloropropane	ND		ug/kg	180	11.	1
Dibromochloromethane	ND		ug/kg	50	8.9	1
1,1,2-Trichloroethane	ND		ug/kg	76	16.	1
Tetrachloroethene	ND		ug/kg	50	15.	1
Chlorobenzene	ND		ug/kg	50	18.	1
Trichlorofluoromethane	ND		ug/kg	250	21.	1
1,2-Dichloroethane	ND		ug/kg	50	12.	1
1,1,1-Trichloroethane	ND		ug/kg	50	18.	1
Bromodichloromethane	ND		ug/kg	50	16.	1
trans-1,3-Dichloropropene	ND		ug/kg	50	10.	1
cis-1,3-Dichloropropene	ND		ug/kg	50	12.	1
1,3-Dichloropropene, Total	ND		ug/kg	50	10.	1
1,1-Dichloropropene	ND		ug/kg	250	16.	1
Bromoform	ND		ug/kg	200	12.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	15.	1
Benzene	ND		ug/kg	50	9.7	1
Toluene	ND		ug/kg	76	9.8	1
Ethylbenzene	ND		ug/kg	50	8.6	1
Chloromethane	ND		ug/kg	250	22.	1
Bromomethane	ND		ug/kg	100	17.	1
Vinyl chloride	ND		ug/kg	100	16.	1
Chloroethane	ND		ug/kg	100	16.	1
1,1-Dichloroethene	ND		ug/kg	50	19.	1
trans-1,2-Dichloroethene	ND		ug/kg	76	12.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-04**Date Collected:** 05/31/18 11:20**Client ID:** SB02_0-2**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	50	15.	1
1,2-Dichlorobenzene	ND		ug/kg	250	9.2	1
1,3-Dichlorobenzene	ND		ug/kg	250	11.	1
1,4-Dichlorobenzene	ND		ug/kg	250	9.2	1
Methyl tert butyl ether	ND		ug/kg	100	7.7	1
p/m-Xylene	ND		ug/kg	100	18.	1
o-Xylene	ND		ug/kg	100	17.	1
Xylene (Total)	ND		ug/kg	100	17.	1
cis-1,2-Dichloroethene	ND		ug/kg	50	17.	1
1,2-Dichloroethene (total)	ND		ug/kg	50	12.	1
Dibromomethane	ND		ug/kg	500	12.	1
Styrene	ND		ug/kg	100	20.	1
Dichlorodifluoromethane	ND		ug/kg	500	25.	1
Acetone	ND		ug/kg	500	120	1
Carbon disulfide	ND		ug/kg	500	55.	1
2-Butanone	ND		ug/kg	500	35.	1
Vinyl acetate	ND		ug/kg	500	7.7	1
4-Methyl-2-pentanone	ND		ug/kg	500	12.	1
1,2,3-Trichloropropane	ND		ug/kg	500	8.9	1
2-Hexanone	ND		ug/kg	500	34.	1
Bromochloromethane	ND		ug/kg	250	18.	1
2,2-Dichloropropane	ND		ug/kg	250	23.	1
1,2-Dibromoethane	ND		ug/kg	200	10.	1
1,3-Dichloropropane	ND		ug/kg	250	9.2	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	50	16.	1
Bromobenzene	ND		ug/kg	250	11.	1
n-Butylbenzene	ND		ug/kg	50	11.	1
sec-Butylbenzene	ND		ug/kg	50	11.	1
tert-Butylbenzene	ND		ug/kg	250	12.	1
o-Chlorotoluene	ND		ug/kg	250	11.	1
p-Chlorotoluene	ND		ug/kg	250	9.2	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	250	20.	1
Hexachlorobutadiene	ND		ug/kg	250	18.	1
Isopropylbenzene	ND		ug/kg	50	9.8	1
p-Isopropyltoluene	ND		ug/kg	50	10.	1
Naphthalene	560		ug/kg	250	7.0	1
Acrylonitrile	ND		ug/kg	500	26.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04
Client ID: SB02_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:20
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	ND		ug/kg	50	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	250	13.	1
1,2,4-Trichlorobenzene	ND		ug/kg	250	11.	1
1,3,5-Trimethylbenzene	ND		ug/kg	250	8.1	1
1,2,4-Trimethylbenzene	ND		ug/kg	250	9.4	1
1,4-Dioxane	ND		ug/kg	2000	730	1
1,4-Diethylbenzene	ND		ug/kg	200	200	1
4-Ethyltoluene	ND		ug/kg	200	12.	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	200	7.9	1
Ethyl ether	ND		ug/kg	250	13.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	94		70-130

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-05
Client ID: SB02_4-6
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:27
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/06/18 23:27
Analyst: MV
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.2	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.25	1
Chloroform	ND		ug/kg	1.4	0.34	1
Carbon tetrachloride	ND		ug/kg	0.92	0.32	1
1,2-Dichloropropane	ND		ug/kg	3.2	0.21	1
Dibromochloromethane	ND		ug/kg	0.92	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.29	1
Tetrachloroethene	ND		ug/kg	0.92	0.28	1
Chlorobenzene	ND		ug/kg	0.92	0.32	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.38	1
1,2-Dichloroethane	ND		ug/kg	0.92	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.92	0.32	1
Bromodichloromethane	ND		ug/kg	0.92	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	0.92	0.19	1
cis-1,3-Dichloropropene	ND		ug/kg	0.92	0.21	1
1,3-Dichloropropene, Total	ND		ug/kg	0.92	0.19	1
1,1-Dichloropropene	ND		ug/kg	4.6	0.30	1
Bromoform	ND		ug/kg	3.7	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.92	0.28	1
Benzene	ND		ug/kg	0.92	0.18	1
Toluene	ND		ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.92	0.16	1
Chloromethane	ND		ug/kg	4.6	0.40	1
Bromomethane	ND		ug/kg	1.8	0.31	1
Vinyl chloride	ND		ug/kg	1.8	0.29	1
Chloroethane	ND		ug/kg	1.8	0.29	1
1,1-Dichloroethene	ND		ug/kg	0.92	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.22	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-05**Date Collected:** 05/31/18 11:27**Client ID:** SB02_4-6**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.92	0.28	1
1,2-Dichlorobenzene	ND		ug/kg	4.6	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.6	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	4.6	0.17	1
Methyl tert butyl ether	0.76	J	ug/kg	1.8	0.14	1
p/m-Xylene	ND		ug/kg	1.8	0.32	1
o-Xylene	ND		ug/kg	1.8	0.31	1
Xylenes, Total	ND		ug/kg	1.8	0.31	1
cis-1,2-Dichloroethene	0.44	J	ug/kg	0.92	0.32	1
1,2-Dichloroethene, Total	0.44	J	ug/kg	0.92	0.22	1
Dibromomethane	ND		ug/kg	9.2	0.22	1
Styrene	ND		ug/kg	1.8	0.37	1
Dichlorodifluoromethane	ND		ug/kg	9.2	0.46	1
Acetone	18		ug/kg	9.2	2.1	1
Carbon disulfide	ND		ug/kg	9.2	1.0	1
2-Butanone	ND		ug/kg	9.2	0.64	1
Vinyl acetate	ND		ug/kg	9.2	0.14	1
4-Methyl-2-pentanone	ND		ug/kg	9.2	0.22	1
1,2,3-Trichloropropane	ND		ug/kg	9.2	0.16	1
2-Hexanone	ND		ug/kg	9.2	0.62	1
Bromochloromethane	ND		ug/kg	4.6	0.33	1
2,2-Dichloropropane	ND		ug/kg	4.6	0.42	1
1,2-Dibromoethane	ND		ug/kg	3.7	0.18	1
1,3-Dichloropropane	ND		ug/kg	4.6	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.92	0.29	1
Bromobenzene	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	ND		ug/kg	0.92	0.21	1
sec-Butylbenzene	ND		ug/kg	0.92	0.20	1
tert-Butylbenzene	ND		ug/kg	4.6	0.23	1
o-Chlorotoluene	ND		ug/kg	4.6	0.20	1
p-Chlorotoluene	ND		ug/kg	4.6	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.6	0.36	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.32	1
Isopropylbenzene	ND		ug/kg	0.92	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.92	0.19	1
Naphthalene	2.0	J	ug/kg	4.6	0.13	1
Acrylonitrile	ND		ug/kg	9.2	0.47	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-05
Client ID: SB02_4-6
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:27
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.92	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.6	0.23	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.6	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.6	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.6	0.17	1
1,4-Dioxane	ND		ug/kg	37	13.	1
p-Diethylbenzene	ND		ug/kg	3.7	3.7	1
p-Ethyltoluene	ND		ug/kg	3.7	0.22	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.7	0.14	1
Ethyl ether	ND		ug/kg	4.6	0.24	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.6	0.36	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	96		70-130

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-06
Client ID: SB02_6-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:35
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/06/18 14:47
Analyst: MKS
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.9	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.32	1
Chloroform	ND		ug/kg	1.8	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.40	1
1,2-Dichloropropane	ND		ug/kg	4.1	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.37	1
Tetrachloroethene	ND		ug/kg	1.2	0.35	1
Chlorobenzene	ND		ug/kg	1.2	0.41	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.49	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.41	1
Bromodichloromethane	ND		ug/kg	1.2	0.36	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.27	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.24	1
1,1-Dichloropropene	ND		ug/kg	5.8	0.38	1
Bromoform	ND		ug/kg	4.7	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.35	1
Benzene	ND		ug/kg	1.2	0.22	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.20	1
Chloromethane	ND		ug/kg	5.8	0.51	1
Bromomethane	ND		ug/kg	2.3	0.40	1
Vinyl chloride	ND		ug/kg	2.3	0.37	1
Chloroethane	ND		ug/kg	2.3	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.44	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.28	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-06**Date Collected:** 05/31/18 11:35**Client ID:** SB02_6-8**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	1.2	0.35	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.26	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.18	1
p/m-Xylene	ND		ug/kg	2.3	0.41	1
o-Xylene	ND		ug/kg	2.3	0.40	1
Xylenes, Total	ND		ug/kg	2.3	0.40	1
cis-1,2-Dichloroethene	0.73	J	ug/kg	1.2	0.40	1
1,2-Dichloroethene, Total	0.73	J	ug/kg	1.2	0.28	1
Dibromomethane	ND		ug/kg	12	0.28	1
Styrene	ND		ug/kg	2.3	0.47	1
Dichlorodifluoromethane	ND		ug/kg	12	0.58	1
Acetone	15		ug/kg	12	2.7	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.81	1
Vinyl acetate	ND		ug/kg	12	0.18	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.21	1
2-Hexanone	ND		ug/kg	12	0.78	1
Bromochloromethane	ND		ug/kg	5.8	0.42	1
2,2-Dichloropropane	ND		ug/kg	5.8	0.53	1
1,2-Dibromoethane	ND		ug/kg	4.7	0.23	1
1,3-Dichloropropane	ND		ug/kg	5.8	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.37	1
Bromobenzene	ND		ug/kg	5.8	0.26	1
n-Butylbenzene	ND		ug/kg	1.2	0.27	1
sec-Butylbenzene	ND		ug/kg	1.2	0.25	1
tert-Butylbenzene	ND		ug/kg	5.8	0.29	1
o-Chlorotoluene	ND		ug/kg	5.8	0.26	1
p-Chlorotoluene	ND		ug/kg	5.8	0.21	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.46	1
Hexachlorobutadiene	ND		ug/kg	5.8	0.41	1
Isopropylbenzene	ND		ug/kg	1.2	0.23	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.24	1
Naphthalene	93		ug/kg	5.8	0.16	1
Acrylonitrile	ND		ug/kg	12	0.60	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-06
Client ID: SB02_6-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:35
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.25	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.25	1
1,3,5-Trimethylbenzene	0.24	J	ug/kg	5.8	0.19	1
1,2,4-Trimethylbenzene	0.62	J	ug/kg	5.8	0.22	1
1,4-Dioxane	ND		ug/kg	47	17.	1
p-Diethylbenzene	ND		ug/kg	4.7	4.7	1
p-Ethyltoluene	0.53	J	ug/kg	4.7	0.27	1
1,2,4,5-Tetramethylbenzene	0.31	J	ug/kg	4.7	0.18	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	114		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	107		70-130

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-07

Date Collected: 05/31/18 09:58

Client ID: SB03_0-1

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/06/18 15:39

Analyst: MKS

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	530	87.	1
1,1-Dichloroethane	ND		ug/kg	79	14.	1
Chloroform	ND		ug/kg	79	20.	1
Carbon tetrachloride	ND		ug/kg	53	18.	1
1,2-Dichloropropane	ND		ug/kg	180	12.	1
Dibromochloromethane	ND		ug/kg	53	9.3	1
1,1,2-Trichloroethane	ND		ug/kg	79	16.	1
Tetrachloroethene	ND		ug/kg	53	16.	1
Chlorobenzene	ND		ug/kg	53	18.	1
Trichlorofluoromethane	ND		ug/kg	260	22.	1
1,2-Dichloroethane	ND		ug/kg	53	13.	1
1,1,1-Trichloroethane	ND		ug/kg	53	18.	1
Bromodichloromethane	ND		ug/kg	53	16.	1
trans-1,3-Dichloropropene	ND		ug/kg	53	11.	1
cis-1,3-Dichloropropene	ND		ug/kg	53	12.	1
1,3-Dichloropropene, Total	ND		ug/kg	53	11.	1
1,1-Dichloropropene	ND		ug/kg	260	17.	1
Bromoform	ND		ug/kg	210	12.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	53	16.	1
Benzene	180		ug/kg	53	10.	1
Toluene	120		ug/kg	79	10.	1
Ethylbenzene	230		ug/kg	53	9.0	1
Chloromethane	ND		ug/kg	260	23.	1
Bromomethane	ND		ug/kg	100	18.	1
Vinyl chloride	ND		ug/kg	100	17.	1
Chloroethane	ND		ug/kg	100	17.	1
1,1-Dichloroethene	ND		ug/kg	53	20.	1
trans-1,2-Dichloroethene	ND		ug/kg	79	13.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-07**Date Collected:** 05/31/18 09:58**Client ID:** SB03_0-1**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	53	16.	1
1,2-Dichlorobenzene	ND		ug/kg	260	9.6	1
1,3-Dichlorobenzene	ND		ug/kg	260	11.	1
1,4-Dichlorobenzene	ND		ug/kg	260	9.6	1
Methyl tert butyl ether	70	J	ug/kg	100	8.1	1
p/m-Xylene	460		ug/kg	100	18.	1
o-Xylene	73	J	ug/kg	100	18.	1
Xylenes, Total	530	J	ug/kg	100	18.	1
cis-1,2-Dichloroethene	ND		ug/kg	53	18.	1
1,2-Dichloroethene, Total	ND		ug/kg	53	13.	1
Dibromomethane	ND		ug/kg	530	13.	1
Styrene	ND		ug/kg	100	21.	1
Dichlorodifluoromethane	ND		ug/kg	530	26.	1
Acetone	ND		ug/kg	530	120	1
Carbon disulfide	ND		ug/kg	530	58.	1
2-Butanone	ND		ug/kg	530	36.	1
Vinyl acetate	ND		ug/kg	530	8.1	1
4-Methyl-2-pentanone	ND		ug/kg	530	13.	1
1,2,3-Trichloropropane	ND		ug/kg	530	9.3	1
2-Hexanone	ND		ug/kg	530	35.	1
Bromochloromethane	ND		ug/kg	260	19.	1
2,2-Dichloropropane	ND		ug/kg	260	24.	1
1,2-Dibromoethane	ND		ug/kg	210	10.	1
1,3-Dichloropropane	ND		ug/kg	260	9.6	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	53	17.	1
Bromobenzene	ND		ug/kg	260	12.	1
n-Butylbenzene	120		ug/kg	53	12.	1
sec-Butylbenzene	40	J	ug/kg	53	11.	1
tert-Butylbenzene	ND		ug/kg	260	13.	1
o-Chlorotoluene	ND		ug/kg	260	12.	1
p-Chlorotoluene	ND		ug/kg	260	9.6	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	260	21.	1
Hexachlorobutadiene	ND		ug/kg	260	18.	1
Isopropylbenzene	78		ug/kg	53	10.	1
p-Isopropyltoluene	26	J	ug/kg	53	11.	1
Naphthalene	1900		ug/kg	260	7.3	1
Acrylonitrile	ND		ug/kg	530	27.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-07
Client ID: SB03_0-1
Sample Location: MANHATTAN

Date Collected: 05/31/18 09:58
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	400		ug/kg	53	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	260	13.	1
1,2,4-Trichlorobenzene	ND		ug/kg	260	11.	1
1,3,5-Trimethylbenzene	42	J	ug/kg	260	8.5	1
1,2,4-Trimethylbenzene	440		ug/kg	260	9.8	1
1,4-Dioxane	ND		ug/kg	2100	760	1
p-Diethylbenzene	ND		ug/kg	210	210	1
p-Ethyltoluene	240		ug/kg	210	12.	1
1,2,4,5-Tetramethylbenzene	220		ug/kg	210	8.2	1
Ethyl ether	ND		ug/kg	260	14.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	260	21.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	106		70-130

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-08 D

Date Collected: 05/31/18 10:05

Client ID: SB03_3-4

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/06/18 16:05

Analyst: MKS

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	1200	200	2.5
1,1-Dichloroethane	ND		ug/kg	180	33.	2.5
Chloroform	ND		ug/kg	180	45.	2.5
Carbon tetrachloride	ND		ug/kg	120	42.	2.5
1,2-Dichloropropane	ND		ug/kg	430	28.	2.5
Dibromochloromethane	ND		ug/kg	120	22.	2.5
1,1,2-Trichloroethane	ND		ug/kg	180	38.	2.5
Tetrachloroethene	ND		ug/kg	120	37.	2.5
Chlorobenzene	ND		ug/kg	120	43.	2.5
Trichlorofluoromethane	ND		ug/kg	610	51.	2.5
1,2-Dichloroethane	ND		ug/kg	120	30.	2.5
1,1,1-Trichloroethane	ND		ug/kg	120	43.	2.5
Bromodichloromethane	ND		ug/kg	120	38.	2.5
trans-1,3-Dichloropropene	ND		ug/kg	120	26.	2.5
cis-1,3-Dichloropropene	ND		ug/kg	120	28.	2.5
1,3-Dichloropropene, Total	ND		ug/kg	120	26.	2.5
1,1-Dichloropropene	ND		ug/kg	610	40.	2.5
Bromoform	ND		ug/kg	490	29.	2.5
1,1,2,2-Tetrachloroethane	ND		ug/kg	120	36.	2.5
Benzene	200		ug/kg	120	24.	2.5
Toluene	ND		ug/kg	180	24.	2.5
Ethylbenzene	280		ug/kg	120	21.	2.5
Chloromethane	ND		ug/kg	610	54.	2.5
Bromomethane	ND		ug/kg	240	41.	2.5
Vinyl chloride	ND		ug/kg	240	39.	2.5
Chloroethane	ND		ug/kg	240	39.	2.5
1,1-Dichloroethene	ND		ug/kg	120	46.	2.5
trans-1,2-Dichloroethene	ND		ug/kg	180	30.	2.5

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-08 D

Date Collected: 05/31/18 10:05

Client ID: SB03_3-4

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	120	37.	2.5
1,2-Dichlorobenzene	ND		ug/kg	610	22.	2.5
1,3-Dichlorobenzene	ND		ug/kg	610	27.	2.5
1,4-Dichlorobenzene	ND		ug/kg	610	22.	2.5
Methyl tert butyl ether	ND		ug/kg	240	19.	2.5
p/m-Xylene	54	J	ug/kg	240	43.	2.5
o-Xylene	ND		ug/kg	240	41.	2.5
Xylenes, Total	54	J	ug/kg	240	41.	2.5
cis-1,2-Dichloroethene	ND		ug/kg	120	42.	2.5
1,2-Dichloroethene, Total	ND		ug/kg	120	30.	2.5
Dibromomethane	ND		ug/kg	1200	29.	2.5
Styrene	ND		ug/kg	240	49.	2.5
Dichlorodifluoromethane	ND		ug/kg	1200	61.	2.5
Acetone	ND		ug/kg	1200	280	2.5
Carbon disulfide	ND		ug/kg	1200	140	2.5
2-Butanone	ND		ug/kg	1200	85.	2.5
Vinyl acetate	ND		ug/kg	1200	19.	2.5
4-Methyl-2-pentanone	ND		ug/kg	1200	30.	2.5
1,2,3-Trichloropropane	ND		ug/kg	1200	22.	2.5
2-Hexanone	ND		ug/kg	1200	82.	2.5
Bromochloromethane	ND		ug/kg	610	44.	2.5
2,2-Dichloropropane	ND		ug/kg	610	55.	2.5
1,2-Dibromoethane	ND		ug/kg	490	24.	2.5
1,3-Dichloropropane	ND		ug/kg	610	22.	2.5
1,1,1,2-Tetrachloroethane	ND		ug/kg	120	39.	2.5
Bromobenzene	ND		ug/kg	610	27.	2.5
n-Butylbenzene	3700		ug/kg	120	28.	2.5
sec-Butylbenzene	1700		ug/kg	120	27.	2.5
tert-Butylbenzene	85	J	ug/kg	610	30.	2.5
o-Chlorotoluene	ND		ug/kg	610	27.	2.5
p-Chlorotoluene	ND		ug/kg	610	22.	2.5
1,2-Dibromo-3-chloropropane	ND		ug/kg	610	49.	2.5
Hexachlorobutadiene	ND		ug/kg	610	43.	2.5
Isopropylbenzene	2600		ug/kg	120	24.	2.5
p-Isopropyltoluene	87	J	ug/kg	120	25.	2.5
Naphthalene	1300		ug/kg	610	17.	2.5
Acrylonitrile	ND		ug/kg	1200	63.	2.5

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-08 D
Client ID: SB03_3-4
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:05
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	8200		ug/kg	120	26.	2.5
1,2,3-Trichlorobenzene	ND		ug/kg	610	31.	2.5
1,2,4-Trichlorobenzene	ND		ug/kg	610	26.	2.5
1,3,5-Trimethylbenzene	54	J	ug/kg	610	20.	2.5
1,2,4-Trimethylbenzene	410	J	ug/kg	610	23.	2.5
1,4-Dioxane	ND		ug/kg	4900	1800	2.5
p-Diethylbenzene	2900		ug/kg	490	490	2.5
p-Ethyltoluene	340	J	ug/kg	490	29.	2.5
1,2,4,5-Tetramethylbenzene	8300		ug/kg	490	19.	2.5
Ethyl ether	ND		ug/kg	610	32.	2.5
trans-1,4-Dichloro-2-butene	ND		ug/kg	610	48.	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	97		70-130

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-09
Client ID: SB03_7-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:17
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/06/18 16:31
Analyst: MKS
Percent Solids: 79%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	710	120	1
1,1-Dichloroethane	ND		ug/kg	110	19.	1
Chloroform	ND		ug/kg	110	26.	1
Carbon tetrachloride	ND		ug/kg	71	24.	1
1,2-Dichloropropane	ND		ug/kg	250	16.	1
Dibromochloromethane	ND		ug/kg	71	12.	1
1,1,2-Trichloroethane	ND		ug/kg	110	22.	1
Tetrachloroethene	ND		ug/kg	71	21.	1
Chlorobenzene	ND		ug/kg	71	25.	1
Trichlorofluoromethane	ND		ug/kg	360	30.	1
1,2-Dichloroethane	ND		ug/kg	71	17.	1
1,1,1-Trichloroethane	ND		ug/kg	71	25.	1
Bromodichloromethane	ND		ug/kg	71	22.	1
trans-1,3-Dichloropropene	ND		ug/kg	71	15.	1
cis-1,3-Dichloropropene	ND		ug/kg	71	16.	1
1,3-Dichloropropene, Total	ND		ug/kg	71	15.	1
1,1-Dichloropropene	ND		ug/kg	360	23.	1
Bromoform	ND		ug/kg	280	17.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	71	21.	1
Benzene	33	J	ug/kg	71	14.	1
Toluene	ND		ug/kg	110	14.	1
Ethylbenzene	55	J	ug/kg	71	12.	1
Chloromethane	ND		ug/kg	360	31.	1
Bromomethane	ND		ug/kg	140	24.	1
Vinyl chloride	ND		ug/kg	140	22.	1
Chloroethane	ND		ug/kg	140	22.	1
1,1-Dichloroethene	ND		ug/kg	71	26.	1
trans-1,2-Dichloroethene	ND		ug/kg	110	17.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-09**Date Collected:** 05/31/18 10:17**Client ID:** SB03_7-8**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	71	21.	1
1,2-Dichlorobenzene	ND		ug/kg	360	13.	1
1,3-Dichlorobenzene	ND		ug/kg	360	16.	1
1,4-Dichlorobenzene	ND		ug/kg	360	13.	1
Methyl tert butyl ether	ND		ug/kg	140	11.	1
p/m-Xylene	47	J	ug/kg	140	25.	1
o-Xylene	ND		ug/kg	140	24.	1
Xylenes, Total	47	J	ug/kg	140	24.	1
cis-1,2-Dichloroethene	ND		ug/kg	71	24.	1
1,2-Dichloroethene, Total	ND		ug/kg	71	17.	1
Dibromomethane	ND		ug/kg	710	17.	1
Styrene	ND		ug/kg	140	28.	1
Dichlorodifluoromethane	ND		ug/kg	710	36.	1
Acetone	ND		ug/kg	710	160	1
Carbon disulfide	ND		ug/kg	710	78.	1
2-Butanone	ND		ug/kg	710	49.	1
Vinyl acetate	ND		ug/kg	710	11.	1
4-Methyl-2-pentanone	ND		ug/kg	710	17.	1
1,2,3-Trichloropropane	ND		ug/kg	710	12.	1
2-Hexanone	ND		ug/kg	710	47.	1
Bromochloromethane	ND		ug/kg	360	25.	1
2,2-Dichloropropane	ND		ug/kg	360	32.	1
1,2-Dibromoethane	ND		ug/kg	280	14.	1
1,3-Dichloropropane	ND		ug/kg	360	13.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	71	23.	1
Bromobenzene	ND		ug/kg	360	16.	1
n-Butylbenzene	510		ug/kg	71	16.	1
sec-Butylbenzene	240		ug/kg	71	15.	1
tert-Butylbenzene	ND		ug/kg	360	18.	1
o-Chlorotoluene	ND		ug/kg	360	16.	1
p-Chlorotoluene	ND		ug/kg	360	13.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	360	28.	1
Hexachlorobutadiene	ND		ug/kg	360	25.	1
Isopropylbenzene	360		ug/kg	71	14.	1
p-Isopropyltoluene	ND		ug/kg	71	14.	1
Naphthalene	420		ug/kg	360	9.8	1
Acrylonitrile	ND		ug/kg	710	36.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-09
Client ID: SB03_7-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:17
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	1100		ug/kg	71	15.	1
1,2,3-Trichlorobenzene	ND		ug/kg	360	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	360	15.	1
1,3,5-Trimethylbenzene	ND		ug/kg	360	11.	1
1,2,4-Trimethylbenzene	80	J	ug/kg	360	13.	1
1,4-Dioxane	ND		ug/kg	2800	1000	1
p-Diethylbenzene	370		ug/kg	280	280	1
p-Ethyltoluene	58	J	ug/kg	280	17.	1
1,2,4,5-Tetramethylbenzene	1200		ug/kg	280	11.	1
Ethyl ether	ND		ug/kg	360	18.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	360	28.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-10
Client ID: SBDUP01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/06/18 15:13
Analyst: MKS
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.6	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.26	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.96	0.33	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.96	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.30	1
Tetrachloroethene	ND		ug/kg	0.96	0.29	1
Chlorobenzene	ND		ug/kg	0.96	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.40	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.96	0.34	1
Bromodichloromethane	ND		ug/kg	0.96	0.30	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.96	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.96	0.20	1
1,1-Dichloropropene	ND		ug/kg	4.8	0.31	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.96	0.28	1
Benzene	ND		ug/kg	0.96	0.18	1
Toluene	ND		ug/kg	1.4	0.19	1
Ethylbenzene	ND		ug/kg	0.96	0.16	1
Chloromethane	ND		ug/kg	4.8	0.42	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.30	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.36	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.23	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-10
Client ID: SBDUP01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.96	0.29	1
1,2-Dichlorobenzene	ND		ug/kg	4.8	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	4.8	0.17	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.15	1
p/m-Xylene	ND		ug/kg	1.9	0.34	1
o-Xylene	ND		ug/kg	1.9	0.32	1
Xylenes, Total	ND		ug/kg	1.9	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.33	1
1,2-Dichloroethene, Total	ND		ug/kg	0.96	0.23	1
Dibromomethane	ND		ug/kg	9.6	0.23	1
Styrene	ND		ug/kg	1.9	0.38	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.48	1
Acetone	2.9	J	ug/kg	9.6	2.2	1
Carbon disulfide	ND		ug/kg	9.6	1.0	1
2-Butanone	ND		ug/kg	9.6	0.66	1
Vinyl acetate	ND		ug/kg	9.6	0.15	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	0.23	1
1,2,3-Trichloropropane	ND		ug/kg	9.6	0.17	1
2-Hexanone	ND		ug/kg	9.6	0.64	1
Bromochloromethane	ND		ug/kg	4.8	0.34	1
2,2-Dichloropropane	ND		ug/kg	4.8	0.43	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.19	1
1,3-Dichloropropane	ND		ug/kg	4.8	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.96	0.30	1
Bromobenzene	ND		ug/kg	4.8	0.21	1
n-Butylbenzene	ND		ug/kg	0.96	0.22	1
sec-Butylbenzene	ND		ug/kg	0.96	0.21	1
tert-Butylbenzene	ND		ug/kg	4.8	0.24	1
o-Chlorotoluene	ND		ug/kg	4.8	0.21	1
p-Chlorotoluene	ND		ug/kg	4.8	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	0.38	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.33	1
Isopropylbenzene	ND		ug/kg	0.96	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.96	0.19	1
Naphthalene	1.8	J	ug/kg	4.8	0.13	1
Acrylonitrile	ND		ug/kg	9.6	0.49	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-10
Client ID: SBDUP01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.96	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.8	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.8	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.8	0.18	1
1,4-Dioxane	ND		ug/kg	38	14.	1
p-Diethylbenzene	ND		ug/kg	3.8	3.8	1
p-Ethyltoluene	ND		ug/kg	3.8	0.22	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.8	0.15	1
Ethyl ether	ND		ug/kg	4.8	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	0.38	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	106		70-130

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-11
Client ID: SBTB01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 06/05/18 19:03
Analyst: NLK

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: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-11
Client ID: SBTB01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
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: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-11
Client ID: SBTB01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
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	96		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 08:43
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01,03-04,06,10 Batch: WG1122929-12					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.21
1,1-Dichloropropene	ND		ug/kg	5.0	0.33
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 08:43
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01,03-04,06,10 Batch: WG1122929-12					
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
Xylenes, Total	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.24
Dibromomethane	ND		ug/kg	10	0.24
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
Vinyl acetate	ND		ug/kg	10	0.15
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.18
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
2,2-Dichloropropane	ND		ug/kg	5.0	0.45
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
1,3-Dichloropropane	ND		ug/kg	5.0	0.18
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.22
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
o-Chlorotoluene	ND		ug/kg	5.0	0.22

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 08:43
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01,03-04,06,10 Batch: WG1122929-12					
p-Chlorotoluene	ND		ug/kg	5.0	0.18
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Hexachlorobutadiene	ND		ug/kg	5.0	0.35
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
Acrylonitrile	ND		ug/kg	10	0.51
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
1,4-Dioxane	ND		ug/kg	40	14.
p-Diethylbenzene	ND		ug/kg	4.0	4.0
p-Ethyltoluene	ND		ug/kg	4.0	0.23
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.16
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	111		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/05/18 18:38
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1122975-5					
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: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/05/18 18:38
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1122975-5					
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: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/05/18 18:38
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1122975-5					
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

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**Method Blank Analysis**
Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 06/05/18 18:38

Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1122975-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 08:43
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 07-09 Batch: WG1123151-5					
Methylene chloride	ND		ug/kg	500	82.
1,1-Dichloroethane	ND		ug/kg	75	14.
Chloroform	ND		ug/kg	75	18.
Carbon tetrachloride	ND		ug/kg	50	17.
1,2-Dichloropropane	ND		ug/kg	180	11.
Dibromochloromethane	ND		ug/kg	50	8.8
1,1,2-Trichloroethane	ND		ug/kg	75	16.
Tetrachloroethene	ND		ug/kg	50	15.
Chlorobenzene	ND		ug/kg	50	17.
Trichlorofluoromethane	ND		ug/kg	250	21.
1,2-Dichloroethane	ND		ug/kg	50	12.
1,1,1-Trichloroethane	ND		ug/kg	50	18.
Bromodichloromethane	ND		ug/kg	50	15.
trans-1,3-Dichloropropene	ND		ug/kg	50	10.
cis-1,3-Dichloropropene	ND		ug/kg	50	12.
1,3-Dichloropropene, Total	ND		ug/kg	50	10.
1,1-Dichloropropene	ND		ug/kg	250	16.
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	15.
Benzene	ND		ug/kg	50	9.6
Toluene	ND		ug/kg	75	9.8
Ethylbenzene	ND		ug/kg	50	8.5
Chloromethane	ND		ug/kg	250	22.
Bromomethane	ND		ug/kg	100	17.
Vinyl chloride	ND		ug/kg	100	16.
Chloroethane	ND		ug/kg	100	16.
1,1-Dichloroethene	ND		ug/kg	50	19.
trans-1,2-Dichloroethene	ND		ug/kg	75	12.
Trichloroethene	ND		ug/kg	50	15.

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 08:43
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 07-09 Batch: WG1123151-5					
1,2-Dichlorobenzene	ND		ug/kg	250	9.1
1,3-Dichlorobenzene	ND		ug/kg	250	11.
1,4-Dichlorobenzene	ND		ug/kg	250	9.1
Methyl tert butyl ether	ND		ug/kg	100	7.6
p/m-Xylene	ND		ug/kg	100	18.
o-Xylene	ND		ug/kg	100	17.
Xylenes, Total	ND		ug/kg	100	17.
cis-1,2-Dichloroethene	ND		ug/kg	50	17.
1,2-Dichloroethene, Total	ND		ug/kg	50	12.
Dibromomethane	ND		ug/kg	500	12.
Styrene	ND		ug/kg	100	20.
Dichlorodifluoromethane	ND		ug/kg	500	25.
Acetone	ND		ug/kg	500	110
Carbon disulfide	ND		ug/kg	500	55.
2-Butanone	ND		ug/kg	500	34.
Vinyl acetate	ND		ug/kg	500	7.6
4-Methyl-2-pentanone	ND		ug/kg	500	12.
1,2,3-Trichloropropane	ND		ug/kg	500	8.8
2-Hexanone	ND		ug/kg	500	33.
Bromochloromethane	ND		ug/kg	250	18.
2,2-Dichloropropane	ND		ug/kg	250	22.
1,2-Dibromoethane	ND		ug/kg	200	10.
1,3-Dichloropropane	ND		ug/kg	250	9.2
1,1,1,2-Tetrachloroethane	ND		ug/kg	50	16.
Bromobenzene	ND		ug/kg	250	11.
n-Butylbenzene	ND		ug/kg	50	11.
sec-Butylbenzene	ND		ug/kg	50	11.
tert-Butylbenzene	ND		ug/kg	250	12.
o-Chlorotoluene	ND		ug/kg	250	11.

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 08:43
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 07-09 Batch: WG1123151-5					
p-Chlorotoluene	ND		ug/kg	250	9.2
1,2-Dibromo-3-chloropropane	ND		ug/kg	250	20.
Hexachlorobutadiene	ND		ug/kg	250	17.
Isopropylbenzene	ND		ug/kg	50	9.7
p-Isopropyltoluene	ND		ug/kg	50	10.
Naphthalene	ND		ug/kg	250	6.9
Acrylonitrile	ND		ug/kg	500	26.
n-Propylbenzene	ND		ug/kg	50	11.
1,2,3-Trichlorobenzene	ND		ug/kg	250	12.
1,2,4-Trichlorobenzene	ND		ug/kg	250	11.
1,3,5-Trimethylbenzene	ND		ug/kg	250	8.0
1,2,4-Trimethylbenzene	ND		ug/kg	250	9.3
1,4-Dioxane	ND		ug/kg	2000	720
p-Diethylbenzene	ND		ug/kg	200	200
p-Ethyltoluene	ND		ug/kg	200	12.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	200	7.8
Ethyl ether	ND		ug/kg	250	13.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	20.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 21:12
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,05 Batch: WG1123402-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.21
1,1-Dichloropropene	ND		ug/kg	5.0	0.33
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	0.49	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30

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Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
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 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,05 Batch: WG1123402-5					
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
Xylenes, Total	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.24
Dibromomethane	ND		ug/kg	10	0.24
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
Vinyl acetate	ND		ug/kg	10	0.15
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.18
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
2,2-Dichloropropane	ND		ug/kg	5.0	0.45
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
1,3-Dichloropropane	ND		ug/kg	5.0	0.18
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.22
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
o-Chlorotoluene	ND		ug/kg	5.0	0.22

Project Name: 538-542 WEST 29TH ST.

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Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
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 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,05 Batch: WG1123402-5					
p-Chlorotoluene	ND		ug/kg	5.0	0.18
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Hexachlorobutadiene	ND		ug/kg	5.0	0.35
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
Acrylonitrile	ND		ug/kg	10	0.51
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
1,4-Dioxane	ND		ug/kg	40	14.
p-Diethylbenzene	ND		ug/kg	4.0	4.0
p-Ethyltoluene	ND		ug/kg	4.0	0.23
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.16
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	82		70-130
Toluene-d8	118		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	92		70-130

Project Name: 538-542 WEST 29TH ST.

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Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
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 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1123411-5					
Methylene chloride	ND		ug/kg	500	82.
1,1-Dichloroethane	ND		ug/kg	75	14.
Chloroform	ND		ug/kg	75	18.
Carbon tetrachloride	ND		ug/kg	50	17.
1,2-Dichloropropane	ND		ug/kg	180	11.
Dibromochloromethane	ND		ug/kg	50	8.8
2-Chloroethylvinyl ether	ND		ug/kg	1000	31.
1,1,2-Trichloroethane	ND		ug/kg	75	16.
Tetrachloroethene	ND		ug/kg	50	15.
Chlorobenzene	ND		ug/kg	50	17.
Trichlorofluoromethane	ND		ug/kg	250	21.
1,2-Dichloroethane	ND		ug/kg	50	12.
1,1,1-Trichloroethane	ND		ug/kg	50	18.
Bromodichloromethane	ND		ug/kg	50	15.
trans-1,3-Dichloropropene	ND		ug/kg	50	10.
cis-1,3-Dichloropropene	ND		ug/kg	50	12.
1,3-Dichloropropene, Total	ND		ug/kg	50	10.
1,1-Dichloropropene	ND		ug/kg	250	16.
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	15.
Benzene	ND		ug/kg	50	9.6
Toluene	ND		ug/kg	75	9.8
Ethylbenzene	ND		ug/kg	50	8.5
Chloromethane	ND		ug/kg	250	22.
Bromomethane	25	J	ug/kg	100	17.
Vinyl chloride	ND		ug/kg	100	16.
Chloroethane	ND		ug/kg	100	16.
1,1-Dichloroethene	ND		ug/kg	50	19.
trans-1,2-Dichloroethene	ND		ug/kg	75	12.

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

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Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 21:12
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1123411-5					
Trichloroethene	ND		ug/kg	50	15.
1,2-Dichlorobenzene	ND		ug/kg	250	9.1
1,3-Dichlorobenzene	ND		ug/kg	250	11.
1,4-Dichlorobenzene	ND		ug/kg	250	9.1
Methyl tert butyl ether	ND		ug/kg	100	7.6
p/m-Xylene	ND		ug/kg	100	18.
o-Xylene	ND		ug/kg	100	17.
Xylene (Total)	ND		ug/kg	100	17.
cis-1,2-Dichloroethene	ND		ug/kg	50	17.
1,2-Dichloroethene (total)	ND		ug/kg	50	12.
Dibromomethane	ND		ug/kg	500	12.
Styrene	ND		ug/kg	100	20.
Dichlorodifluoromethane	ND		ug/kg	500	25.
Acetone	ND		ug/kg	500	110
Carbon disulfide	ND		ug/kg	500	55.
2-Butanone	ND		ug/kg	500	34.
Vinyl acetate	ND		ug/kg	500	7.6
4-Methyl-2-pentanone	ND		ug/kg	500	12.
1,2,3-Trichloropropane	ND		ug/kg	500	8.8
2-Hexanone	ND		ug/kg	500	33.
Bromochloromethane	ND		ug/kg	250	18.
2,2-Dichloropropane	ND		ug/kg	250	22.
1,2-Dibromoethane	ND		ug/kg	200	10.
1,3-Dichloropropane	ND		ug/kg	250	9.2
1,1,1,2-Tetrachloroethane	ND		ug/kg	50	16.
Bromobenzene	ND		ug/kg	250	11.
n-Butylbenzene	ND		ug/kg	50	11.
sec-Butylbenzene	ND		ug/kg	50	11.
tert-Butylbenzene	ND		ug/kg	250	12.

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 21:12
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1123411-5					
o-Chlorotoluene	ND		ug/kg	250	11.
p-Chlorotoluene	ND		ug/kg	250	9.2
1,2-Dibromo-3-chloropropane	ND		ug/kg	250	20.
Hexachlorobutadiene	ND		ug/kg	250	17.
Isopropylbenzene	ND		ug/kg	50	9.7
p-Isopropyltoluene	ND		ug/kg	50	10.
Naphthalene	ND		ug/kg	250	6.9
Acrylonitrile	ND		ug/kg	500	26.
Isopropyl Ether	ND		ug/kg	200	14.
tert-Butyl Alcohol	ND		ug/kg	3000	150
n-Propylbenzene	ND		ug/kg	50	11.
1,2,3-Trichlorobenzene	ND		ug/kg	250	12.
1,2,4-Trichlorobenzene	ND		ug/kg	250	11.
1,3,5-Trimethylbenzene	ND		ug/kg	250	8.0
1,2,4-Trimethylbenzene	ND		ug/kg	250	9.3
Methyl Acetate	ND		ug/kg	1000	23.
Ethyl Acetate	ND		ug/kg	1000	100
Acrolein	ND		ug/kg	1200	400
Cyclohexane	ND		ug/kg	1000	22.
1,4-Dioxane	ND		ug/kg	2000	720
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	1000	26.
1,4-Diethylbenzene	ND		ug/kg	200	200
4-Ethyltoluene	ND		ug/kg	200	12.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	200	7.8
Tetrahydrofuran	ND		ug/kg	1000	50.
Ethyl ether	ND		ug/kg	250	13.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	20.
Methyl cyclohexane	ND		ug/kg	200	12.
Ethyl-Tert-Butyl-Ether	ND		ug/kg	200	8.9

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 21:12
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1123411-5					
Tertiary-Amyl Methyl Ether	ND		ug/kg	200	12.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	118		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	92		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01,03-04,06,10 Batch: WG1122929-10 WG1122929-11								
Methylene chloride	110		104		70-130	6		30
1,1-Dichloroethane	113		108		70-130	5		30
Chloroform	120		116		70-130	3		30
Carbon tetrachloride	132	Q	122		70-130	8		30
1,2-Dichloropropane	107		105		70-130	2		30
Dibromochloromethane	124		119		70-130	4		30
1,1,2-Trichloroethane	107		104		70-130	3		30
Tetrachloroethene	123		115		70-130	7		30
Chlorobenzene	116		112		70-130	4		30
Trichlorofluoromethane	126		122		70-139	3		30
1,2-Dichloroethane	118		116		70-130	2		30
1,1,1-Trichloroethane	125		120		70-130	4		30
Bromodichloromethane	121		118		70-130	3		30
trans-1,3-Dichloropropene	115		113		70-130	2		30
cis-1,3-Dichloropropene	116		114		70-130	2		30
1,1-Dichloropropene	115		112		70-130	3		30
Bromoform	118		119		70-130	1		30
1,1,2,2-Tetrachloroethane	111		112		70-130	1		30
Benzene	110		106		70-130	4		30
Toluene	108		103		70-130	5		30
Ethylbenzene	112		108		70-130	4		30
Chloromethane	86		81		52-130	6		30
Bromomethane	112		110		57-147	2		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01,03-04,06,10 Batch: WG1122929-10 WG1122929-11								
Vinyl chloride	101		94		67-130	7		30
Chloroethane	116		109		50-151	6		30
1,1-Dichloroethene	108		104		65-135	4		30
trans-1,2-Dichloroethene	114		110		70-130	4		30
Trichloroethene	116		114		70-130	2		30
1,2-Dichlorobenzene	116		112		70-130	4		30
1,3-Dichlorobenzene	116		114		70-130	2		30
1,4-Dichlorobenzene	113		111		70-130	2		30
Methyl tert butyl ether	113		109		66-130	4		30
p/m-Xylene	111		108		70-130	3		30
o-Xylene	113		110		70-130	3		30
cis-1,2-Dichloroethene	118		115		70-130	3		30
Dibromomethane	120		114		70-130	5		30
Styrene	110		108		70-130	2		30
Dichlorodifluoromethane	91		87		30-146	4		30
Acetone	96		94		54-140	2		30
Carbon disulfide	87		83		59-130	5		30
2-Butanone	90		106		70-130	16		30
Vinyl acetate	112		112		70-130	0		30
4-Methyl-2-pentanone	102		101		70-130	1		30
1,2,3-Trichloropropane	111		114		68-130	3		30
2-Hexanone	97		100		70-130	3		30
Bromochloromethane	122		123		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01,03-04,06,10 Batch: WG1122929-10 WG1122929-11								
2,2-Dichloropropane	118		112		70-130	5		30
1,2-Dibromoethane	118		113		70-130	4		30
1,3-Dichloropropane	114		114		69-130	0		30
1,1,1,2-Tetrachloroethane	120		120		70-130	0		30
Bromobenzene	118		114		70-130	3		30
n-Butylbenzene	113		111		70-130	2		30
sec-Butylbenzene	113		110		70-130	3		30
tert-Butylbenzene	114		110		70-130	4		30
o-Chlorotoluene	109		87		70-130	30		30
p-Chlorotoluene	112		109		70-130	3		30
1,2-Dibromo-3-chloropropane	112		110		68-130	2		30
Hexachlorobutadiene	118		115		67-130	3		30
Isopropylbenzene	115		110		70-130	4		30
p-Isopropyltoluene	114		110		70-130	4		30
Naphthalene	108		110		70-130	2		30
Acrylonitrile	108		113		70-130	5		30
n-Propylbenzene	114		108		70-130	5		30
1,2,3-Trichlorobenzene	113		114		70-130	1		30
1,2,4-Trichlorobenzene	118		115		70-130	3		30
1,3,5-Trimethylbenzene	112		109		70-130	3		30
1,2,4-Trimethylbenzene	113		111		70-130	2		30
1,4-Dioxane	101		96		65-136	5		30
p-Diethylbenzene	114		110		70-130	4		30

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01,03-04,06,10 Batch: WG1122929-10 WG1122929-11								
p-Ethyltoluene	113		109		70-130	4		30
1,2,4,5-Tetramethylbenzene	113		109		70-130	4		30
Ethyl ether	112		107		67-130	5		30
trans-1,4-Dichloro-2-butene	108		106		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		112		70-130
Toluene-d8	103		101		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	108		109		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1122975-3 WG1122975-4								
Methylene chloride	94		98		70-130	4		20
1,1-Dichloroethane	94		99		70-130	5		20
Chloroform	96		100		70-130	4		20
Carbon tetrachloride	93		99		63-132	6		20
1,2-Dichloropropane	96		100		70-130	4		20
Dibromochloromethane	80		83		63-130	4		20
1,1,2-Trichloroethane	97		100		70-130	3		20
Tetrachloroethene	94		99		70-130	5		20
Chlorobenzene	95		99		75-130	4		20
Trichlorofluoromethane	93		96		62-150	3		20
1,2-Dichloroethane	95		97		70-130	2		20
1,1,1-Trichloroethane	94		100		67-130	6		20
Bromodichloromethane	93		97		67-130	4		20
trans-1,3-Dichloropropene	84		88		70-130	5		20
cis-1,3-Dichloropropene	96		100		70-130	4		20
1,1-Dichloropropene	95		100		70-130	5		20
Bromoform	72		76		54-136	5		20
1,1,2,2-Tetrachloroethane	93		98		67-130	5		20
Benzene	97		100		70-130	3		20
Toluene	96		100		70-130	4		20
Ethylbenzene	96		100		70-130	4		20
Chloromethane	89		93		64-130	4		20
Bromomethane	49		66		39-139	30	Q	20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1122975-3 WG1122975-4								
Vinyl chloride	93		98		55-140	5		20
Chloroethane	97		99		55-138	2		20
1,1-Dichloroethene	92		97		61-145	5		20
trans-1,2-Dichloroethene	94		100		70-130	6		20
Trichloroethene	94		97		70-130	3		20
1,2-Dichlorobenzene	95		100		70-130	5		20
1,3-Dichlorobenzene	94		100		70-130	6		20
1,4-Dichlorobenzene	94		99		70-130	5		20
Methyl tert butyl ether	94		98		63-130	4		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	95		100		70-130	5		20
Dibromomethane	94		98		70-130	4		20
1,2,3-Trichloropropane	95		90		64-130	5		20
Acrylonitrile	93		97		70-130	4		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	92		96		36-147	4		20
Acetone	86		89		58-148	3		20
Carbon disulfide	90		96		51-130	6		20
2-Butanone	92		96		63-138	4		20
Vinyl acetate	97		100		70-130	3		20
4-Methyl-2-pentanone	86		93		59-130	8		20
2-Hexanone	82		87		57-130	6		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1122975-3 WG1122975-4								
Bromochloromethane	98		100		70-130	2		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	94		96		70-130	2		20
1,3-Dichloropropane	96		98		70-130	2		20
1,1,1,2-Tetrachloroethane	94		97		64-130	3		20
Bromobenzene	94		98		70-130	4		20
n-Butylbenzene	100		110		53-136	10		20
sec-Butylbenzene	98		100		70-130	2		20
tert-Butylbenzene	98		100		70-130	2		20
o-Chlorotoluene	95		100		70-130	5		20
p-Chlorotoluene	95		100		70-130	5		20
1,2-Dibromo-3-chloropropane	70		76		41-144	8		20
Hexachlorobutadiene	96		110		63-130	14		20
Isopropylbenzene	98		100		70-130	2		20
p-Isopropyltoluene	100		110		70-130	10		20
Naphthalene	78		88		70-130	12		20
n-Propylbenzene	97		100		69-130	3		20
1,2,3-Trichlorobenzene	88		100		70-130	13		20
1,2,4-Trichlorobenzene	91		100		70-130	9		20
1,3,5-Trimethylbenzene	98		100		64-130	2		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	88		120		56-162	31	Q	20
p-Diethylbenzene	99		100		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1122975-3 WG1122975-4								
p-Ethyltoluene	99		100		70-130	1		20
1,2,4,5-Tetramethylbenzene	93		99		70-130	6		20
Ethyl ether	97		99		59-134	2		20
trans-1,4-Dichloro-2-butene	70		82		70-130	16		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		100		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	99		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 07-09 Batch: WG1123151-3 WG1123151-4								
Methylene chloride	110		104		70-130	6		30
1,1-Dichloroethane	113		108		70-130	5		30
Chloroform	120		116		70-130	3		30
Carbon tetrachloride	132	Q	122		70-130	8		30
1,2-Dichloropropane	107		105		70-130	2		30
Dibromochloromethane	124		119		70-130	4		30
1,1,2-Trichloroethane	107		104		70-130	3		30
Tetrachloroethene	123		115		70-130	7		30
Chlorobenzene	116		112		70-130	4		30
Trichlorofluoromethane	126		122		70-139	3		30
1,2-Dichloroethane	118		116		70-130	2		30
1,1,1-Trichloroethane	125		120		70-130	4		30
Bromodichloromethane	121		118		70-130	3		30
trans-1,3-Dichloropropene	115		113		70-130	2		30
cis-1,3-Dichloropropene	116		114		70-130	2		30
1,1-Dichloropropene	115		112		70-130	3		30
Bromoform	118		119		70-130	1		30
1,1,2,2-Tetrachloroethane	111		112		70-130	1		30
Benzene	110		106		70-130	4		30
Toluene	108		103		70-130	5		30
Ethylbenzene	112		108		70-130	4		30
Chloromethane	86		81		52-130	6		30
Bromomethane	112		110		57-147	2		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 07-09 Batch: WG1123151-3 WG1123151-4								
Vinyl chloride	101		94		67-130	7		30
Chloroethane	116		109		50-151	6		30
1,1-Dichloroethene	108		104		65-135	4		30
trans-1,2-Dichloroethene	114		110		70-130	4		30
Trichloroethene	116		114		70-130	2		30
1,2-Dichlorobenzene	116		112		70-130	4		30
1,3-Dichlorobenzene	116		114		70-130	2		30
1,4-Dichlorobenzene	113		111		70-130	2		30
Methyl tert butyl ether	113		109		66-130	4		30
p/m-Xylene	111		108		70-130	3		30
o-Xylene	113		110		70-130	3		30
cis-1,2-Dichloroethene	118		115		70-130	3		30
Dibromomethane	120		114		70-130	5		30
Styrene	110		108		70-130	2		30
Dichlorodifluoromethane	91		87		30-146	4		30
Acetone	96		94		54-140	2		30
Carbon disulfide	87		83		59-130	5		30
2-Butanone	90		106		70-130	16		30
Vinyl acetate	112		112		70-130	0		30
4-Methyl-2-pentanone	102		101		70-130	1		30
1,2,3-Trichloropropane	111		114		68-130	3		30
2-Hexanone	97		100		70-130	3		30
Bromochloromethane	122		123		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 07-09 Batch: WG1123151-3 WG1123151-4								
2,2-Dichloropropane	118		112		70-130	5		30
1,2-Dibromoethane	118		113		70-130	4		30
1,3-Dichloropropane	114		114		69-130	0		30
1,1,1,2-Tetrachloroethane	120		120		70-130	0		30
Bromobenzene	118		114		70-130	3		30
n-Butylbenzene	113		111		70-130	2		30
sec-Butylbenzene	113		110		70-130	3		30
tert-Butylbenzene	114		110		70-130	4		30
o-Chlorotoluene	109		87		70-130	30		30
p-Chlorotoluene	112		109		70-130	3		30
1,2-Dibromo-3-chloropropane	112		110		68-130	2		30
Hexachlorobutadiene	118		115		67-130	3		30
Isopropylbenzene	115		110		70-130	4		30
p-Isopropyltoluene	114		110		70-130	4		30
Naphthalene	108		110		70-130	2		30
Acrylonitrile	108		113		70-130	5		30
n-Propylbenzene	114		108		70-130	5		30
1,2,3-Trichlorobenzene	113		114		70-130	1		30
1,2,4-Trichlorobenzene	118		115		70-130	3		30
1,3,5-Trimethylbenzene	112		109		70-130	3		30
1,2,4-Trimethylbenzene	113		111		70-130	2		30
1,4-Dioxane	101		96		65-136	5		30
p-Diethylbenzene	114		110		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 07-09 Batch: WG1123151-3 WG1123151-4								
p-Ethyltoluene	113		109		70-130	4		30
1,2,4,5-Tetramethylbenzene	113		109		70-130	4		30
Ethyl ether	112		107		67-130	5		30
trans-1,4-Dichloro-2-butene	108		106		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		112		70-130
Toluene-d8	103		100		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	108		109		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 Batch: WG1123402-3 WG1123402-4								
Methylene chloride	96		105		70-130	9		30
1,1-Dichloroethane	88		94		70-130	7		30
Chloroform	92		93		70-130	1		30
Carbon tetrachloride	93		96		70-130	3		30
1,2-Dichloropropane	101		96		70-130	5		30
Dibromochloromethane	88		89		70-130	1		30
1,1,2-Trichloroethane	94		89		70-130	5		30
Tetrachloroethene	107		104		70-130	3		30
Chlorobenzene	93		92		70-130	1		30
Trichlorofluoromethane	94		98		70-139	4		30
1,2-Dichloroethane	82		80		70-130	2		30
1,1,1-Trichloroethane	92		93		70-130	1		30
Bromodichloromethane	94		90		70-130	4		30
trans-1,3-Dichloropropene	85		82		70-130	4		30
cis-1,3-Dichloropropene	100		88		70-130	13		30
1,1-Dichloropropene	98		100		70-130	2		30
Bromoform	90		90		70-130	0		30
1,1,2,2-Tetrachloroethane	98		94		70-130	4		30
Benzene	99		98		70-130	1		30
Toluene	96		91		70-130	5		30
Ethylbenzene	92		91		70-130	1		30
Chloromethane	95		96		52-130	1		30
Bromomethane	100		97		57-147	3		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 Batch: WG1123402-3 WG1123402-4								
Vinyl chloride	99		102		67-130	3		30
Chloroethane	82		84		50-151	2		30
1,1-Dichloroethene	113		118		65-135	4		30
trans-1,2-Dichloroethene	98		105		70-130	7		30
Trichloroethene	98		97		70-130	1		30
1,2-Dichlorobenzene	95		95		70-130	0		30
1,3-Dichlorobenzene	95		93		70-130	2		30
1,4-Dichlorobenzene	91		90		70-130	1		30
Methyl tert butyl ether	94		98		66-130	4		30
p/m-Xylene	96		94		70-130	2		30
o-Xylene	94		93		70-130	1		30
cis-1,2-Dichloroethene	102		105		70-130	3		30
Dibromomethane	93		90		70-130	3		30
Styrene	95		94		70-130	1		30
Dichlorodifluoromethane	73		75		30-146	3		30
Acetone	90		97		54-140	7		30
Carbon disulfide	101		108		59-130	7		30
2-Butanone	84		94		70-130	11		30
Vinyl acetate	78		79		70-130	1		30
4-Methyl-2-pentanone	100		89		70-130	12		30
1,2,3-Trichloropropane	91		88		68-130	3		30
2-Hexanone	82		78		70-130	5		30
Bromochloromethane	107		108		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 Batch: WG1123402-3 WG1123402-4								
2,2-Dichloropropane	91		91		70-130	0		30
1,2-Dibromoethane	94		94		70-130	0		30
1,3-Dichloropropane	96		92		69-130	4		30
1,1,1,2-Tetrachloroethane	95		96		70-130	1		30
Bromobenzene	98		98		70-130	0		30
n-Butylbenzene	87		87		70-130	0		30
sec-Butylbenzene	91		90		70-130	1		30
tert-Butylbenzene	93		93		70-130	0		30
o-Chlorotoluene	86		85		70-130	1		30
p-Chlorotoluene	86		86		70-130	0		30
1,2-Dibromo-3-chloropropane	98		94		68-130	4		30
Hexachlorobutadiene	103		103		67-130	0		30
Isopropylbenzene	93		92		70-130	1		30
p-Isopropyltoluene	94		94		70-130	0		30
Naphthalene	108		105		70-130	3		30
Acrylonitrile	97		97		70-130	0		30
n-Propylbenzene	90		90		70-130	0		30
1,2,3-Trichlorobenzene	104		102		70-130	2		30
1,2,4-Trichlorobenzene	104		105		70-130	1		30
1,3,5-Trimethylbenzene	91		91		70-130	0		30
1,2,4-Trimethylbenzene	91		91		70-130	0		30
1,4-Dioxane	112		100		65-136	11		30
p-Diethylbenzene	95		94		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 Batch: WG1123402-3 WG1123402-4								
p-Ethyltoluene	93		94		70-130	1		30
1,2,4,5-Tetramethylbenzene	95		94		70-130	1		30
Ethyl ether	92		98		67-130	6		30
trans-1,4-Dichloro-2-butene	78		73		70-130	7		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	82		81		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	95		98		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1123411-3 WG1123411-4								
Methylene chloride	96		105		70-130	9		30
1,1-Dichloroethane	88		94		70-130	7		30
Chloroform	92		93		70-130	1		30
Carbon tetrachloride	93		96		70-130	3		30
1,2-Dichloropropane	101		96		70-130	5		30
Dibromochloromethane	88		89		70-130	1		30
2-Chloroethylvinyl ether	92		80		70-130	14		30
1,1,2-Trichloroethane	94		89		70-130	5		30
Tetrachloroethene	107		104		70-130	3		30
Chlorobenzene	93		92		70-130	1		30
Trichlorofluoromethane	94		98		70-139	4		30
1,2-Dichloroethane	82		80		70-130	2		30
1,1,1-Trichloroethane	92		93		70-130	1		30
Bromodichloromethane	94		90		70-130	4		30
trans-1,3-Dichloropropene	85		82		70-130	4		30
cis-1,3-Dichloropropene	100		88		70-130	13		30
1,1-Dichloropropene	98		100		70-130	2		30
Bromoform	90		90		70-130	0		30
1,1,2,2-Tetrachloroethane	98		94		70-130	4		30
Benzene	99		98		70-130	1		30
Toluene	96		91		70-130	5		30
Ethylbenzene	92		91		70-130	1		30
Chloromethane	95		96		52-130	1		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1123411-3 WG1123411-4								
Bromomethane	100		97		57-147	3		30
Vinyl chloride	99		102		67-130	3		30
Chloroethane	82		84		50-151	2		30
1,1-Dichloroethene	113		118		65-135	4		30
trans-1,2-Dichloroethene	98		105		70-130	7		30
Trichloroethene	98		97		70-130	1		30
1,2-Dichlorobenzene	95		95		70-130	0		30
1,3-Dichlorobenzene	95		93		70-130	2		30
1,4-Dichlorobenzene	91		90		70-130	1		30
Methyl tert butyl ether	94		98		66-130	4		30
p/m-Xylene	96		94		70-130	2		30
o-Xylene	94		93		70-130	1		30
cis-1,2-Dichloroethene	102		105		70-130	3		30
Dibromomethane	93		90		70-130	3		30
Styrene	95		94		70-130	1		30
Dichlorodifluoromethane	73		75		30-146	3		30
Acetone	90		97		54-140	7		30
Carbon disulfide	101		108		59-130	7		30
2-Butanone	84		94		70-130	11		30
Vinyl acetate	78		79		70-130	1		30
4-Methyl-2-pentanone	100		89		70-130	12		30
1,2,3-Trichloropropane	91		88		68-130	3		30
2-Hexanone	82		78		70-130	5		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1123411-3 WG1123411-4								
Bromochloromethane	107		108		70-130	1		30
2,2-Dichloropropane	91		91		70-130	0		30
1,2-Dibromoethane	94		94		70-130	0		30
1,3-Dichloropropane	96		92		69-130	4		30
1,1,1,2-Tetrachloroethane	95		96		70-130	1		30
Bromobenzene	98		98		70-130	0		30
n-Butylbenzene	87		87		70-130	0		30
sec-Butylbenzene	91		90		70-130	1		30
tert-Butylbenzene	93		93		70-130	0		30
o-Chlorotoluene	86		85		70-130	1		30
p-Chlorotoluene	86		86		70-130	0		30
1,2-Dibromo-3-chloropropane	98		94		68-130	4		30
Hexachlorobutadiene	103		103		67-130	0		30
Isopropylbenzene	93		92		70-130	1		30
p-Isopropyltoluene	94		94		70-130	0		30
Naphthalene	108		105		70-130	3		30
Acrylonitrile	97		97		70-130	0		30
Isopropyl Ether	83		88		66-130	6		30
tert-Butyl Alcohol	93		98		70-130	5		30
n-Propylbenzene	90		90		70-130	0		30
1,2,3-Trichlorobenzene	104		102		70-130	2		30
1,2,4-Trichlorobenzene	104		105		70-130	1		30
1,3,5-Trimethylbenzene	91		91		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1123411-3 WG1123411-4								
1,2,4-Trimethylbenzene	91		91		70-130	0		30
Methyl Acetate	96		101		51-146	5		30
Ethyl Acetate	91		88		70-130	3		30
Acrolein	101		114		70-130	12		30
Cyclohexane	99		100		59-142	1		30
1,4-Dioxane	112		100		65-136	11		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	112		119		50-139	6		30
1,4-Diethylbenzene	95		94		70-130	1		30
4-Ethyltoluene	93		94		70-130	1		30
1,2,4,5-Tetramethylbenzene	95		94		70-130	1		30
Tetrahydrofuran	97		106		66-130	9		30
Ethyl ether	92		98		67-130	6		30
trans-1,4-Dichloro-2-butene	78		73		70-130	7		30
Methyl cyclohexane	104		104		70-130	0		30
Ethyl-Tert-Butyl-Ether	88		94		70-130	7		30
Tertiary-Amyl Methyl Ether	98		98		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	82		81		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	95		98		70-130

SEMIVOLATILES

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-01**Date Collected:** 05/31/18 12:12**Client ID:** SB01_0-2**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Extraction Method:** EPA 3546**Analytical Method:** 1,8270D**Extraction Date:** 06/02/18 19:43**Analytical Date:** 06/05/18 23:48**Analyst:** CB**Percent Solids:** 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	6700		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	34000	E	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	7700	E	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-01**Date Collected:** 05/31/18 12:12**Client ID:** SB01_0-2**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	38.	1
Benzo(a)anthracene	23000	E	ug/kg	110	20.	1
Benzo(a)pyrene	17000	E	ug/kg	140	44.	1
Benzo(b)fluoranthene	23000	E	ug/kg	110	30.	1
Benzo(k)fluoranthene	4000		ug/kg	110	29.	1
Chrysene	19000	E	ug/kg	110	19.	1
Acenaphthylene	1200		ug/kg	140	28.	1
Anthracene	13000	E	ug/kg	110	35.	1
Benzo(ghi)perylene	10000	E	ug/kg	140	21.	1
Fluorene	5800		ug/kg	180	18.	1
Phenanthrene	48000	E	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	2300		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	10000	E	ug/kg	140	25.	1
Pyrene	38000	E	ug/kg	110	18.	1
Biphenyl	1300		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	4000		ug/kg	180	17.	1
2-Methylnaphthalene	6700		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-01
Client ID: SB01_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:12
Date Received: 05/31/18
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	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	3000		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	81		10-136
4-Terphenyl-d14	85		18-120

Project Name: 538-542 WEST 29TH ST.**Project Number:** 170515401**Lab Number:** L1820045**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-01 D

Client ID: SB01_0-2

Sample Location: MANHATTAN

Date Collected: 05/31/18 12:12

Date Received: 05/31/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8270D

Analytical Date: 06/06/18 13:54

Analyst: PS

Percent Solids: 91%

Extraction Method: EPA 3546

Extraction Date: 06/02/18 19:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	46000		ug/kg	2200	420	20
Naphthalene	8700		ug/kg	3600	440	20
Benzo(a)anthracene	25000		ug/kg	2200	410	20
Benzo(a)pyrene	16000		ug/kg	2900	890	20
Benzo(b)fluoranthene	19000		ug/kg	2200	610	20
Chrysene	25000		ug/kg	2200	380	20
Anthracene	14000		ug/kg	2200	710	20
Benzo(ghi)perylene	9800		ug/kg	2900	430	20
Phenanthrene	83000		ug/kg	2200	440	20
Indeno(1,2,3-cd)pyrene	8800		ug/kg	2900	510	20
Pyrene	57000		ug/kg	2200	360	20

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-02**Date Collected:** 05/31/18 12:22**Client ID:** SB01_3-4**Date Received:** 05/31/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Extraction Method:** EPA 3546**Analytical Method:** 1,8270D**Extraction Date:** 06/02/18 19:43**Analytical Date:** 06/06/18 13:28**Analyst:** PS**Percent Solids:** 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	35	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	33.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	49.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	180		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	51	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	64.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	63.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-02**Date Collected:** 05/31/18 12:22**Client ID:** SB01_3-4**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	84	J	ug/kg	110	21.	1
Benzo(a)pyrene	49	J	ug/kg	150	45.	1
Benzo(b)fluoranthene	65	J	ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	89	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	52	J	ug/kg	110	36.	1
Benzo(ghi)perylene	32	J	ug/kg	150	22.	1
Fluorene	26	J	ug/kg	190	18.	1
Phenanthrene	360		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	28	J	ug/kg	150	26.	1
Pyrene	220		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	19	J	ug/kg	190	18.	1
2-Methylnaphthalene	36	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	19.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-02
Client ID: SB01_3-4
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:22
Date Received: 05/31/18
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	190	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	60		18-120

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-03

Date Collected: 05/31/18 12:29

Client ID: SB01_8-9

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/02/18 19:43

Analytical Date: 06/05/18 20:22

Analyst: CB

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	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	28	J	ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-03**Date Collected:** 05/31/18 12:29**Client ID:** SB01_8-9**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	53	J	ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	35	J	ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	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	79.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		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	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	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	270	30.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-03
Client ID: SB01_8-9
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:29
Date Received: 05/31/18
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	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	86		30-120
2,4,6-Tribromophenol	97		10-136
4-Terphenyl-d14	69		18-120

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-04

Date Collected: 05/31/18 11:20

Client ID: SB02_0-2

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/02/18 19:43

Analytical Date: 06/05/18 22:31

Analyst: CB

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	490		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	2000		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	1000		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-04**Date Collected:** 05/31/18 11:20**Client ID:** SB02_0-2**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	38.	1
Benzo(a)anthracene	960		ug/kg	110	21.	1
Benzo(a)pyrene	600		ug/kg	150	45.	1
Benzo(b)fluoranthene	650		ug/kg	110	31.	1
Benzo(k)fluoranthene	280		ug/kg	110	29.	1
Chrysene	1000		ug/kg	110	19.	1
Acenaphthylene	32	J	ug/kg	150	28.	1
Anthracene	760		ug/kg	110	36.	1
Benzo(ghi)perylene	380		ug/kg	150	22.	1
Fluorene	400		ug/kg	180	18.	1
Phenanthrene	3900		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	82	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	360		ug/kg	150	26.	1
Pyrene	2500		ug/kg	110	18.	1
Biphenyl	100	J	ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	220		ug/kg	180	17.	1
2-Methylnaphthalene	490		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	33	J	ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04
Client ID: SB02_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:20
Date Received: 05/31/18
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	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	180		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	86		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	87		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	76		18-120

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-05

Date Collected: 05/31/18 11:27

Client ID: SB02_4-6

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/02/18 19:43

Analytical Date: 06/05/18 22:05

Analyst: CB

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	120	J	ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	200	19.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	620		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	450		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	49.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	66.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-05**Date Collected:** 05/31/18 11:27**Client ID:** SB02_4-6**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	280		ug/kg	120	22.	1
Benzo(a)pyrene	180		ug/kg	160	48.	1
Benzo(b)fluoranthene	220		ug/kg	120	33.	1
Benzo(k)fluoranthene	72	J	ug/kg	120	31.	1
Chrysene	280		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	180		ug/kg	120	38.	1
Benzo(ghi)perylene	100	J	ug/kg	160	23.	1
Fluorene	100	J	ug/kg	200	19.	1
Phenanthrene	1100		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	92	J	ug/kg	160	27.	1
Pyrene	780		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	450	45.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	70	J	ug/kg	200	18.	1
2-Methylnaphthalene	180	J	ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	200	64.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-05
Client ID: SB02_4-6
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:27
Date Received: 05/31/18
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	200	37.	1
Benzoic Acid	ND		ug/kg	630	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	57	J	ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	58		18-120

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-06

Date Collected: 05/31/18 11:35

Client ID: SB02_6-8

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/02/18 19:43

Analytical Date: 06/05/18 19:56

Analyst: CB

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-06**Date Collected:** 05/31/18 11:35**Client ID:** SB02_6-8**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	ND		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	95.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	31.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-06
Client ID: SB02_6-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:35
Date Received: 05/31/18
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	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	ND		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	94		10-136
4-Terphenyl-d14	65		18-120

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-07

Date Collected: 05/31/18 09:58

Client ID: SB03_0-1

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/02/18 19:43

Analytical Date: 06/05/18 22:57

Analyst: CB

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	430		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1700		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	1300		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-07**Date Collected:** 05/31/18 09:58**Client ID:** SB03_0-1**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	810		ug/kg	110	21.	1
Benzo(a)pyrene	530		ug/kg	150	46.	1
Benzo(b)fluoranthene	580		ug/kg	110	32.	1
Benzo(k)fluoranthene	220		ug/kg	110	30.	1
Chrysene	840		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	770		ug/kg	110	36.	1
Benzo(ghi)perylene	280		ug/kg	150	22.	1
Fluorene	540		ug/kg	190	18.	1
Phenanthrene	3400		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	62	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	260		ug/kg	150	26.	1
Pyrene	2300		ug/kg	110	19.	1
Biphenyl	140	J	ug/kg	430	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	220		ug/kg	190	18.	1
2-Methylnaphthalene	1000		ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-07
Client ID: SB03_0-1
Sample Location: MANHATTAN

Date Collected: 05/31/18 09:58
Date Received: 05/31/18
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	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	150	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	101		10-136
4-Terphenyl-d14	83		18-120

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-08
 Client ID: SB03_3-4
 Sample Location: MANHATTAN

Date Collected: 05/31/18 10:05
 Date Received: 05/31/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 06/05/18 20:48
 Analyst: CB
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 06/02/18 19:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	330		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	53	J	ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	1300		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-08**Date Collected:** 05/31/18 10:05**Client ID:** SB03_3-4**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	22	J	ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	190		ug/kg	110	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	860		ug/kg	180	17.	1
Phenanthrene	1500		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	260		ug/kg	110	18.	1
Biphenyl	370	J	ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	280		ug/kg	180	17.	1
2-Methylnaphthalene	7600	E	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-08**Date Collected:** 05/31/18 10:05**Client ID:** SB03_3-4**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	92		10-136
4-Terphenyl-d14	67		18-120

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-08 D
 Client ID: SB03_3-4
 Sample Location: MANHATTAN

Date Collected: 05/31/18 10:05
 Date Received: 05/31/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 06/06/18 23:04
 Analyst: RC
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 06/02/18 19:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

2-Methylnaphthalene	8000		ug/kg	420	43.	2

Project Name: 538-542 WEST 29TH ST.**Project Number:** 170515401**Lab Number:** L1820045**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-09

Client ID: SB03_7-8

Sample Location: MANHATTAN

Date Collected: 05/31/18 10:17

Date Received: 05/31/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8270D

Analytical Date: 06/05/18 21:14

Analyst: CB

Percent Solids: 79%

Extraction Method: EPA 3546

Extraction Date: 06/02/18 19:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	76	J	ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	37.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	36.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	41.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	170		ug/kg	120	24.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	250	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	590	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	27.	1
Naphthalene	130	J	ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	32.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	71.	1
Butyl benzyl phthalate	ND		ug/kg	200	52.	1
Di-n-butylphthalate	ND		ug/kg	200	39.	1
Di-n-octylphthalate	ND		ug/kg	200	70.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS****Lab ID:** L1820045-09**Date Collected:** 05/31/18 10:17**Client ID:** SB03_7-8**Date Received:** 05/31/18**Sample Location:** MANHATTAN**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	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	43.	1
Benzo(a)anthracene	82	J	ug/kg	120	23.	1
Benzo(a)pyrene	50	J	ug/kg	160	50.	1
Benzo(b)fluoranthene	60	J	ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	33.	1
Chrysene	84	J	ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	32.	1
Anthracene	68	J	ug/kg	120	40.	1
Benzo(ghi)perylene	27	J	ug/kg	160	24.	1
Fluorene	150	J	ug/kg	200	20.	1
Phenanthrene	520		ug/kg	120	25.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	24.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	240		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	470	48.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	40.	1
3-Nitroaniline	ND		ug/kg	200	39.	1
4-Nitroaniline	ND		ug/kg	200	85.	1
Dibenzofuran	58	J	ug/kg	200	19.	1
2-Methylnaphthalene	1300		ug/kg	250	25.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	39.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	33.	1
2,4-Dimethylphenol	ND		ug/kg	200	68.	1
2-Nitrophenol	ND		ug/kg	440	77.	1
4-Nitrophenol	ND		ug/kg	290	84.	1
2,4-Dinitrophenol	ND		ug/kg	980	96.	1
4,6-Dinitro-o-cresol	ND		ug/kg	530	98.	1
Pentachlorophenol	ND		ug/kg	160	45.	1
Phenol	ND		ug/kg	200	31.	1
2-Methylphenol	ND		ug/kg	200	32.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	300	32.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-09
Client ID: SB03_7-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:17
Date Received: 05/31/18
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	200	39.	1
Benzoic Acid	ND		ug/kg	660	210	1
Benzyl Alcohol	ND		ug/kg	200	63.	1
Carbazole	ND		ug/kg	200	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	48		10-136
4-Terphenyl-d14	59		18-120

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-10
 Client ID: SBDUP01_053118
 Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
 Date Received: 05/31/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 06/06/18 00:14
 Analyst: CB
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 06/02/18 19:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	4200		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	24000	E	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	2900		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-10
 Client ID: SBDUP01_053118
 Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
 Date Received: 05/31/18
 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	38.	1
Benzo(a)anthracene	18000	E	ug/kg	110	20.	1
Benzo(a)pyrene	12000	E	ug/kg	150	44.	1
Benzo(b)fluoranthene	16000	E	ug/kg	110	31.	1
Benzo(k)fluoranthene	4400		ug/kg	110	29.	1
Chrysene	16000	E	ug/kg	110	19.	1
Acenaphthylene	770		ug/kg	150	28.	1
Anthracene	8100	E	ug/kg	110	36.	1
Benzo(ghi)perylene	7600	E	ug/kg	150	21.	1
Fluorene	3000		ug/kg	180	18.	1
Phenanthrene	36000	E	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	1800		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	8000	E	ug/kg	150	25.	1
Pyrene	28000	E	ug/kg	110	18.	1
Biphenyl	1200		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	2600		ug/kg	180	17.	1
2-Methylnaphthalene	3600		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	69.	1
4-Nitrophenol	ND		ug/kg	260	74.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-10
Client ID: SBDUP01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
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	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	1900		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	56		18-120

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-10 D
Client ID: SBDUP01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 06/06/18 14:19
Analyst: PS
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 19:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	40000		ug/kg	2200	420	20
Benzo(a)anthracene	21000		ug/kg	2200	410	20
Benzo(a)pyrene	13000		ug/kg	2900	890	20
Benzo(b)fluoranthene	17000		ug/kg	2200	620	20
Chrysene	21000		ug/kg	2200	380	20
Anthracene	8600		ug/kg	2200	710	20
Benzo(ghi)perylene	8800		ug/kg	2900	430	20
Phenanthrene	67000		ug/kg	2200	440	20
Indeno(1,2,3-cd)pyrene	7900		ug/kg	2900	510	20
Pyrene	50000		ug/kg	2200	360	20

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/04/18 13:51
 Analyst: SZ

Extraction Method: EPA 3546
 Extraction Date: 06/02/18 12:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-10 Batch: WG1121873-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	140	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	18.
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	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	170	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	140	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	140	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/04/18 13:51
 Analyst: SZ

Extraction Method: EPA 3546
 Extraction Date: 06/02/18 12:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-10 Batch: WG1121873-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	39.
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	31.
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	22.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	37.
4-Chloroaniline	ND		ug/kg	160	29.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	30.
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.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	140	26.
2,4-Dimethylphenol	ND		ug/kg	160	53.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/04/18 13:51
 Analyst: SZ

Extraction Method: EPA 3546
 Extraction Date: 06/02/18 12:48

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-10 Batch: WG1121873-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	75.
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	520	160
Benzyl Alcohol	ND		ug/kg	160	49.
Carbazole	ND		ug/kg	160	16.

Tentatively Identified Compounds

Total TIC Compounds	328	J	ug/kg
Unknown Pyrrolidinone	162	J	ug/kg
Aldol Condensates	166	J	ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	83		18-120



Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG1121873-2 WG1121873-3								
Acenaphthene	77		80		31-137	4		50
1,2,4-Trichlorobenzene	71		75		38-107	5		50
Hexachlorobenzene	81		83		40-140	2		50
Bis(2-chloroethyl)ether	73		78		40-140	7		50
2-Chloronaphthalene	76		80		40-140	5		50
1,2-Dichlorobenzene	68		70		40-140	3		50
1,3-Dichlorobenzene	66		68		40-140	3		50
1,4-Dichlorobenzene	67		69		28-104	3		50
3,3'-Dichlorobenzidine	60		61		40-140	2		50
2,4-Dinitrotoluene	90		92		40-132	2		50
2,6-Dinitrotoluene	96		102		40-140	6		50
Fluoranthene	84		86		40-140	2		50
4-Chlorophenyl phenyl ether	78		80		40-140	3		50
4-Bromophenyl phenyl ether	85		86		40-140	1		50
Bis(2-chloroisopropyl)ether	74		78		40-140	5		50
Bis(2-chloroethoxy)methane	74		80		40-117	8		50
Hexachlorobutadiene	73		75		40-140	3		50
Hexachlorocyclopentadiene	73		76		40-140	4		50
Hexachloroethane	69		71		40-140	3		50
Isophorone	75		80		40-140	6		50
Naphthalene	72		75		40-140	4		50
Nitrobenzene	78		83		40-140	6		50
NDPA/DPA	82		84		36-157	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG1121873-2 WG1121873-3								
n-Nitrosodi-n-propylamine	75		79		32-121	5		50
Bis(2-ethylhexyl)phthalate	88		90		40-140	2		50
Butyl benzyl phthalate	94		94		40-140	0		50
Di-n-butylphthalate	85		87		40-140	2		50
Di-n-octylphthalate	91		93		40-140	2		50
Diethyl phthalate	83		85		40-140	2		50
Dimethyl phthalate	81		84		40-140	4		50
Benzo(a)anthracene	80		82		40-140	2		50
Benzo(a)pyrene	86		87		40-140	1		50
Benzo(b)fluoranthene	86		87		40-140	1		50
Benzo(k)fluoranthene	80		83		40-140	4		50
Chrysene	79		81		40-140	3		50
Acenaphthylene	80		84		40-140	5		50
Anthracene	82		83		40-140	1		50
Benzo(ghi)perylene	81		81		40-140	0		50
Fluorene	81		83		40-140	2		50
Phenanthrene	80		82		40-140	2		50
Dibenzo(a,h)anthracene	80		80		40-140	0		50
Indeno(1,2,3-cd)pyrene	83		83		40-140	0		50
Pyrene	83		84		35-142	1		50
Biphenyl	80		83		54-104	4		50
4-Chloroaniline	70		71		40-140	1		50
2-Nitroaniline	96		102		47-134	6		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG1121873-2 WG1121873-3								
3-Nitroaniline	78		77		26-129	1		50
4-Nitroaniline	93		94		41-125	1		50
Dibenzofuran	77		79		40-140	3		50
2-Methylnaphthalene	77		80		40-140	4		50
1,2,4,5-Tetrachlorobenzene	80		83		40-117	4		50
Acetophenone	76		81		14-144	6		50
2,4,6-Trichlorophenol	87		91		30-130	4		50
p-Chloro-m-cresol	84		89		26-103	6		50
2-Chlorophenol	75		81		25-102	8		50
2,4-Dichlorophenol	78		86		30-130	10		50
2,4-Dimethylphenol	80		87		30-130	8		50
2-Nitrophenol	95		102		30-130	7		50
4-Nitrophenol	106		106		11-114	0		50
2,4-Dinitrophenol	88		90		4-130	2		50
4,6-Dinitro-o-cresol	109		112		10-130	3		50
Pentachlorophenol	71		72		17-109	1		50
Phenol	72		77		26-90	7		50
2-Methylphenol	76		82		30-130.	8		50
3-Methylphenol/4-Methylphenol	82		90		30-130	9		50
2,4,5-Trichlorophenol	88		93		30-130	6		50
Benzoic Acid	47		44		10-110	7		50
Benzyl Alcohol	79		85		40-140	7		50
Carbazole	82		83		54-128	1		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-10 Batch: WG1121873-2 WG1121873-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	76		81		25-120
Phenol-d6	77		83		10-120
Nitrobenzene-d5	80		84		23-120
2-Fluorobiphenyl	78		82		30-120
2,4,6-Tribromophenol	95		96		10-136
4-Terphenyl-d14	83		85		18-120

PCBS

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-01
Client ID: SB01_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:12
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 12:43
Analyst: WR
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/04/18 08:45
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.9	4.07	1	A
Aroclor 1221	ND		ug/kg	35.9	5.46	1	A
Aroclor 1232	ND		ug/kg	35.9	3.53	1	A
Aroclor 1242	ND		ug/kg	35.9	4.39	1	A
Aroclor 1248	ND		ug/kg	35.9	4.03	1	A
Aroclor 1254	ND		ug/kg	35.9	2.93	1	A
Aroclor 1260	ND		ug/kg	35.9	3.75	1	A
Aroclor 1262	ND		ug/kg	35.9	2.95	1	A
Aroclor 1268	ND		ug/kg	35.9	2.54	1	A
PCBs, Total	ND		ug/kg	35.9	2.54	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	91		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-02
Client ID: SB01_3-4
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:22
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 14:14
Analyst: WR
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	4.17	1	A
Aroclor 1221	ND		ug/kg	36.8	5.60	1	A
Aroclor 1232	ND		ug/kg	36.8	3.62	1	A
Aroclor 1242	ND		ug/kg	36.8	4.50	1	A
Aroclor 1248	ND		ug/kg	36.8	4.13	1	A
Aroclor 1254	ND		ug/kg	36.8	3.00	1	A
Aroclor 1260	ND		ug/kg	36.8	3.84	1	A
Aroclor 1262	ND		ug/kg	36.8	3.02	1	A
Aroclor 1268	ND		ug/kg	36.8	2.60	1	A
PCBs, Total	ND		ug/kg	36.8	2.60	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	37		30-150	A
Decachlorobiphenyl	38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	35		30-150	B
Decachlorobiphenyl	38		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-03
Client ID: SB01_8-9
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:29
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 14:26
Analyst: WR
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.1	4.09	1	A
Aroclor 1221	ND		ug/kg	36.1	5.49	1	A
Aroclor 1232	ND		ug/kg	36.1	3.55	1	A
Aroclor 1242	ND		ug/kg	36.1	4.42	1	A
Aroclor 1248	ND		ug/kg	36.1	4.05	1	A
Aroclor 1254	ND		ug/kg	36.1	2.94	1	A
Aroclor 1260	ND		ug/kg	36.1	3.77	1	A
Aroclor 1262	ND		ug/kg	36.1	2.97	1	A
Aroclor 1268	ND		ug/kg	36.1	2.56	1	A
PCBs, Total	ND		ug/kg	36.1	2.56	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	45		30-150	A
Decachlorobiphenyl	43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	43		30-150	B
Decachlorobiphenyl	42		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04
Client ID: SB02_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:20
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 14:39
Analyst: WR
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.5	4.03	1	A
Aroclor 1221	ND		ug/kg	35.5	5.40	1	A
Aroclor 1232	ND		ug/kg	35.5	3.49	1	A
Aroclor 1242	ND		ug/kg	35.5	4.35	1	A
Aroclor 1248	ND		ug/kg	35.5	3.98	1	A
Aroclor 1254	ND		ug/kg	35.5	2.90	1	A
Aroclor 1260	ND		ug/kg	35.5	3.71	1	A
Aroclor 1262	ND		ug/kg	35.5	2.92	1	A
Aroclor 1268	ND		ug/kg	35.5	2.51	1	A
PCBs, Total	ND		ug/kg	35.5	2.51	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-05
Client ID: SB02_4-6
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:27
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 14:51
Analyst: WR
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.9	4.53	1	A
Aroclor 1221	ND		ug/kg	39.9	6.08	1	A
Aroclor 1232	ND		ug/kg	39.9	3.93	1	A
Aroclor 1242	ND		ug/kg	39.9	4.89	1	A
Aroclor 1248	ND		ug/kg	39.9	4.48	1	A
Aroclor 1254	ND		ug/kg	39.9	3.26	1	A
Aroclor 1260	ND		ug/kg	39.9	4.17	1	A
Aroclor 1262	ND		ug/kg	39.9	3.28	1	A
Aroclor 1268	ND		ug/kg	39.9	2.83	1	A
PCBs, Total	ND		ug/kg	39.9	2.83	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	45		30-150	A
Decachlorobiphenyl	44		30-150	A
2,4,5,6-Tetrachloro-m-xylene	45		30-150	B
Decachlorobiphenyl	44		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-06
Client ID: SB02_6-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:35
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 15:04
Analyst: WR
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.8	4.29	1	A
Aroclor 1221	ND		ug/kg	37.8	5.75	1	A
Aroclor 1232	ND		ug/kg	37.8	3.72	1	A
Aroclor 1242	ND		ug/kg	37.8	4.63	1	A
Aroclor 1248	ND		ug/kg	37.8	4.24	1	A
Aroclor 1254	ND		ug/kg	37.8	3.08	1	A
Aroclor 1260	ND		ug/kg	37.8	3.95	1	A
Aroclor 1262	ND		ug/kg	37.8	3.11	1	A
Aroclor 1268	ND		ug/kg	37.8	2.68	1	A
PCBs, Total	ND		ug/kg	37.8	2.68	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	47		30-150	A
Decachlorobiphenyl	45		30-150	A
2,4,5,6-Tetrachloro-m-xylene	47		30-150	B
Decachlorobiphenyl	44		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-07
Client ID: SB03_0-1
Sample Location: MANHATTAN

Date Collected: 05/31/18 09:58
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 15:16
Analyst: WR
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	4.13	1	A
Aroclor 1221	ND		ug/kg	36.4	5.55	1	A
Aroclor 1232	ND		ug/kg	36.4	3.59	1	A
Aroclor 1242	ND		ug/kg	36.4	4.46	1	A
Aroclor 1248	ND		ug/kg	36.4	4.09	1	A
Aroclor 1254	ND		ug/kg	36.4	2.97	1	A
Aroclor 1260	ND		ug/kg	36.4	3.81	1	A
Aroclor 1262	ND		ug/kg	36.4	3.00	1	A
Aroclor 1268	ND		ug/kg	36.4	2.58	1	A
PCBs, Total	ND		ug/kg	36.4	2.58	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	102		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-08
Client ID: SB03_3-4
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:05
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 16:27
Analyst: WR
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.2	3.88	1	A
Aroclor 1221	ND		ug/kg	34.2	5.21	1	A
Aroclor 1232	ND		ug/kg	34.2	3.37	1	A
Aroclor 1242	ND		ug/kg	34.2	4.19	1	A
Aroclor 1248	ND		ug/kg	34.2	3.84	1	A
Aroclor 1254	ND		ug/kg	34.2	2.79	1	A
Aroclor 1260	ND		ug/kg	34.2	3.57	1	A
Aroclor 1262	ND		ug/kg	34.2	2.81	1	A
Aroclor 1268	ND		ug/kg	34.2	2.42	1	A
PCBs, Total	ND		ug/kg	34.2	2.42	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-09
Client ID: SB03_7-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:17
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 16:40
Analyst: WR
Percent Solids: 79%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	41.2	4.67	1	A
Aroclor 1221	ND		ug/kg	41.2	6.27	1	A
Aroclor 1232	ND		ug/kg	41.2	4.05	1	A
Aroclor 1242	ND		ug/kg	41.2	5.04	1	A
Aroclor 1248	ND		ug/kg	41.2	4.62	1	A
Aroclor 1254	ND		ug/kg	41.2	3.36	1	A
Aroclor 1260	ND		ug/kg	41.2	4.30	1	A
Aroclor 1262	ND		ug/kg	41.2	3.39	1	A
Aroclor 1268	ND		ug/kg	41.2	2.92	1	A
PCBs, Total	ND		ug/kg	41.2	2.92	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-10
Client ID: SBDUP01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 16:53
Analyst: WR
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/04/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.9	4.18	1	A
Aroclor 1221	ND		ug/kg	36.9	5.61	1	A
Aroclor 1232	ND		ug/kg	36.9	3.63	1	A
Aroclor 1242	ND		ug/kg	36.9	4.52	1	A
Aroclor 1248	ND		ug/kg	36.9	4.14	1	A
Aroclor 1254	ND		ug/kg	36.9	3.01	1	A
Aroclor 1260	ND		ug/kg	36.9	3.85	1	A
Aroclor 1262	ND		ug/kg	36.9	3.03	1	A
Aroclor 1268	ND		ug/kg	36.9	2.61	1	A
PCBs, Total	ND		ug/kg	36.9	2.61	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	41		30-150	A
Decachlorobiphenyl	38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	43		30-150	B
Decachlorobiphenyl	39		30-150	B

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
 Analytical Date: 06/07/18 15:50
 Analyst: WR

Extraction Method: EPA 3546
 Extraction Date: 06/02/18 17:31
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/04/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02-10 Batch: WG1121914-1						
Aroclor 1016	ND		ug/kg	32.8	3.72	A
Aroclor 1221	ND		ug/kg	32.8	4.99	A
Aroclor 1232	ND		ug/kg	32.8	3.23	A
Aroclor 1242	ND		ug/kg	32.8	4.01	A
Aroclor 1248	ND		ug/kg	32.8	3.68	A
Aroclor 1254	3.12	J	ug/kg	32.8	2.68	A
Aroclor 1260	ND		ug/kg	32.8	3.42	A
Aroclor 1262	ND		ug/kg	32.8	2.70	A
Aroclor 1268	ND		ug/kg	32.8	2.32	A
PCBs, Total	3.12	J	ug/kg	32.8	2.32	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	45		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	48		30-150	B

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
 Analytical Date: 06/04/18 02:17
 Analyst: HT

Extraction Method: EPA 3546
 Extraction Date: 06/03/18 14:26
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/03/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1122005-1						
Aroclor 1016	ND		ug/kg	31.3	3.55	A
Aroclor 1221	ND		ug/kg	31.3	4.76	A
Aroclor 1232	ND		ug/kg	31.3	3.08	A
Aroclor 1242	ND		ug/kg	31.3	3.83	A
Aroclor 1248	ND		ug/kg	31.3	3.51	A
Aroclor 1254	ND		ug/kg	31.3	2.55	A
Aroclor 1260	ND		ug/kg	31.3	3.27	A
Aroclor 1262	ND		ug/kg	31.3	2.57	A
Aroclor 1268	ND		ug/kg	31.3	2.22	A
PCBs, Total	ND		ug/kg	31.3	2.22	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	80		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02-10 Batch: WG1121914-2 WG1121914-3									
Aroclor 1016	65		71		40-140	9		50	A
Aroclor 1260	60		65		40-140	8		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		64		30-150	A
Decachlorobiphenyl	51		56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		66		30-150	B
Decachlorobiphenyl	52		58		30-150	B

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

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: WG1122005-2 WG1122005-3									
Aroclor 1016	80		76		40-140	5		50	A
Aroclor 1260	84		79		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		83		30-150	A
Decachlorobiphenyl	75		68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		82		30-150	B
Decachlorobiphenyl	79		73		30-150	B

PESTICIDES

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-01
Client ID: SB01_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:12
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/06/18 00:33
Analyst: KEG
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 18:12
Cleanup Method: EPA 3620B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.71	0.334	1	A
Lindane	ND		ug/kg	0.711	0.318	1	A
Alpha-BHC	ND		ug/kg	0.711	0.202	1	A
Beta-BHC	ND		ug/kg	1.71	0.647	1	A
Heptachlor	ND		ug/kg	0.853	0.382	1	A
Aldrin	ND		ug/kg	1.71	0.601	1	A
Heptachlor epoxide	ND		ug/kg	3.20	0.960	1	A
Endrin	ND		ug/kg	0.711	0.292	1	A
Endrin aldehyde	ND		ug/kg	2.13	0.747	1	A
Endrin ketone	ND		ug/kg	1.71	0.439	1	A
Dieldrin	ND		ug/kg	1.07	0.533	1	A
4,4'-DDE	ND		ug/kg	1.71	0.395	1	A
4,4'-DDD	ND		ug/kg	1.71	0.609	1	A
4,4'-DDT	ND		ug/kg	3.20	1.37	1	A
Endosulfan I	ND		ug/kg	1.71	0.403	1	A
Endosulfan II	63.9	PI	ug/kg	1.71	0.570	1	A
Endosulfan sulfate	ND		ug/kg	0.711	0.338	1	A
Methoxychlor	ND		ug/kg	3.20	0.996	1	A
Toxaphene	ND		ug/kg	32.0	8.96	1	A
cis-Chlordane	ND		ug/kg	2.13	0.594	1	A
trans-Chlordane	ND		ug/kg	2.13	0.563	1	A
Chlordane	ND		ug/kg	13.9	5.65	1	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-01
Client ID: SB01_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:12
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	202	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	287	Q	30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-01
Client ID: SB01_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:12
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/05/18 15:11
Analyst: SL
Percent Solids: 91%
Methylation Date: 06/04/18 22:04

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	180	11.4	1	A
2,4,5-T	ND		ug/kg	180	5.59	1	A
2,4,5-TP (Silvex)	ND		ug/kg	180	4.80	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	124		30-150	A
DCAA	89		30-150	B

Project Name: 538-542 WEST 29TH ST.**Project Number:** 170515401**Lab Number:** L1820045**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-02

Client ID: SB01_3-4

Sample Location: MANHATTAN

Date Collected: 05/31/18 12:22

Date Received: 05/31/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8081B

Analytical Date: 06/07/18 12:49

Analyst: KEG

Percent Solids: 88%

Extraction Method: EPA 3546

Extraction Date: 06/02/18 18:12

Cleanup Method: EPA 3620B

Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.350	1	A
Lindane	ND		ug/kg	0.745	0.333	1	A
Alpha-BHC	ND		ug/kg	0.745	0.212	1	A
Beta-BHC	ND		ug/kg	1.79	0.678	1	A
Heptachlor	ND		ug/kg	0.894	0.401	1	A
Aldrin	ND		ug/kg	1.79	0.629	1	A
Heptachlor epoxide	ND		ug/kg	3.35	1.00	1	A
Endrin	ND		ug/kg	0.745	0.305	1	A
Endrin aldehyde	ND		ug/kg	2.23	0.782	1	A
Endrin ketone	ND		ug/kg	1.79	0.460	1	A
Dieldrin	ND		ug/kg	1.12	0.558	1	A
4,4'-DDE	ND		ug/kg	1.79	0.413	1	A
4,4'-DDD	ND		ug/kg	1.79	0.638	1	A
4,4'-DDT	ND		ug/kg	3.35	1.44	1	A
Endosulfan I	ND		ug/kg	1.79	0.422	1	A
Endosulfan II	1.94		ug/kg	1.79	0.597	1	A
Endosulfan sulfate	ND		ug/kg	0.745	0.354	1	A
Methoxychlor	ND		ug/kg	3.35	1.04	1	A
Toxaphene	ND		ug/kg	33.5	9.38	1	A
cis-Chlordane	ND		ug/kg	2.23	0.623	1	A
trans-Chlordane	ND		ug/kg	2.23	0.590	1	A
Chlordane	ND		ug/kg	14.5	5.92	1	A

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-02

Date Collected: 05/31/18 12:22

Client ID: SB01_3-4

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	66		30-150	B
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	68		30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-02
Client ID: SB01_3-4
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:22
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/04/18 23:02
Analyst: SL
Percent Solids: 88%
Methylation Date: 06/02/18 21:03

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	188	11.8	1	A
2,4,5-T	ND		ug/kg	188	5.81	1	A
2,4,5-TP (Silvex)	ND		ug/kg	188	4.99	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	95		30-150	B

Project Name: 538-542 WEST 29TH ST.**Project Number:** 170515401**Lab Number:** L1820045**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-03

Client ID: SB01_8-9

Sample Location: MANHATTAN

Date Collected: 05/31/18 12:29

Date Received: 05/31/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8081B

Analytical Date: 06/07/18 13:02

Analyst: KEG

Percent Solids: 87%

Extraction Method: EPA 3546

Extraction Date: 06/02/18 18:12

Cleanup Method: EPA 3620B

Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.80	0.352	1	A
Lindane	ND		ug/kg	0.748	0.334	1	A
Alpha-BHC	ND		ug/kg	0.748	0.212	1	A
Beta-BHC	ND		ug/kg	1.80	0.681	1	A
Heptachlor	ND		ug/kg	0.898	0.402	1	A
Aldrin	ND		ug/kg	1.80	0.632	1	A
Heptachlor epoxide	ND		ug/kg	3.37	1.01	1	A
Endrin	0.354	J	ug/kg	0.748	0.307	1	A
Endrin aldehyde	ND		ug/kg	2.24	0.786	1	A
Endrin ketone	ND		ug/kg	1.80	0.462	1	A
Dieldrin	ND		ug/kg	1.12	0.561	1	A
4,4'-DDE	ND		ug/kg	1.80	0.415	1	A
4,4'-DDD	ND		ug/kg	1.80	0.640	1	A
4,4'-DDT	ND		ug/kg	3.37	1.44	1	A
Endosulfan I	ND		ug/kg	1.80	0.424	1	A
Endosulfan II	ND		ug/kg	1.80	0.600	1	A
Endosulfan sulfate	ND		ug/kg	0.748	0.356	1	A
Methoxychlor	ND		ug/kg	3.37	1.05	1	A
Toxaphene	ND		ug/kg	33.7	9.43	1	A
cis-Chlordane	ND		ug/kg	2.24	0.626	1	A
trans-Chlordane	ND		ug/kg	2.24	0.592	1	A
Chlordane	ND		ug/kg	14.6	5.95	1	A

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-03

Date Collected: 05/31/18 12:29

Client ID: SB01_8-9

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	67		30-150	B
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	64		30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-03
Client ID: SB01_8-9
Sample Location: MANHATTAN

Date Collected: 05/31/18 12:29
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/05/18 15:30
Analyst: SL
Percent Solids: 87%
Methylation Date: 06/04/18 22:04

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	187	11.8	1	A
2,4,5-T	ND		ug/kg	187	5.81	1	A
2,4,5-TP (Silvex)	ND		ug/kg	187	4.98	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	117		30-150	A
DCAA	96		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04
Client ID: SB02_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:20
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/04/18 22:43
Analyst: SL
Percent Solids: 91%
Methylation Date: 06/02/18 21:03

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	180	11.4	1	A
2,4,5-T	ND		ug/kg	180	5.59	1	A
2,4,5-TP (Silvex)	ND		ug/kg	180	4.80	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	127		30-150	A
DCAA	119		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04 **D**
Client ID: SB02_0-2
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:20
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/07/18 13:44
Analyst: KEG
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 18:12
Cleanup Method: EPA 3620B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	17.4	3.40	10	A
Lindane	ND		ug/kg	7.23	3.23	10	A
Alpha-BHC	ND		ug/kg	7.23	2.05	10	A
Beta-BHC	ND		ug/kg	17.4	6.58	10	A
Heptachlor	ND		ug/kg	8.68	3.89	10	A
Aldrin	ND		ug/kg	17.4	6.11	10	A
Heptachlor epoxide	ND		ug/kg	32.5	9.76	10	A
Endrin	12.0	P	ug/kg	7.23	2.96	10	A
Endrin aldehyde	ND		ug/kg	21.7	7.59	10	A
Endrin ketone	ND		ug/kg	17.4	4.47	10	A
Dieldrin	ND		ug/kg	10.8	5.42	10	A
4,4'-DDE	ND		ug/kg	17.4	4.01	10	A
4,4'-DDD	ND		ug/kg	17.4	6.19	10	A
4,4'-DDT	ND		ug/kg	32.5	14.0	10	A
Endosulfan I	ND		ug/kg	17.4	4.10	10	A
Endosulfan II	ND		ug/kg	17.4	5.80	10	A
Endosulfan sulfate	ND		ug/kg	7.23	3.44	10	A
Methoxychlor	ND		ug/kg	32.5	10.1	10	A
Toxaphene	ND		ug/kg	325	91.1	10	A
cis-Chlordane	ND		ug/kg	21.7	6.05	10	A
trans-Chlordane	ND		ug/kg	21.7	5.73	10	A
Chlordane	ND		ug/kg	141	57.5	10	A

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-04 D

Date Collected: 05/31/18 11:20

Client ID: SB02_0-2

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	111		30-150	B
2,4,5,6-Tetrachloro-m-xylene	117		30-150	A
Decachlorobiphenyl	121		30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-05
Client ID: SB02_4-6
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:27
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/07/18 13:14
Analyst: KEG
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 18:12
Cleanup Method: EPA 3620B
Cleanup Date: 06/04/18

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	0.754	0.337	1	A
Alpha-BHC	ND		ug/kg	0.754	0.214	1	A
Beta-BHC	ND		ug/kg	1.81	0.687	1	A
Heptachlor	ND		ug/kg	0.905	0.406	1	A
Aldrin	ND		ug/kg	1.81	0.638	1	A
Heptachlor epoxide	ND		ug/kg	3.40	1.02	1	A
Endrin	1.31		ug/kg	0.754	0.309	1	A
Endrin aldehyde	ND		ug/kg	2.26	0.792	1	A
Endrin ketone	ND		ug/kg	1.81	0.466	1	A
Dieldrin	ND		ug/kg	1.13	0.566	1	A
4,4'-DDE	ND		ug/kg	1.81	0.419	1	A
4,4'-DDD	ND		ug/kg	1.81	0.646	1	A
4,4'-DDT	ND		ug/kg	3.40	1.46	1	A
Endosulfan I	ND		ug/kg	1.81	0.428	1	A
Endosulfan II	1.59	J	ug/kg	1.81	0.605	1	B
Endosulfan sulfate	ND		ug/kg	0.754	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	ND		ug/kg	2.26	0.631	1	A
trans-Chlordane	ND		ug/kg	2.26	0.598	1	A
Chlordane	ND		ug/kg	14.7	6.00	1	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-05
Client ID: SB02_4-6
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:27
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	64		30-150	B
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	57		30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-05
Client ID: SB02_4-6
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:27
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/05/18 15:50
Analyst: SL
Percent Solids: 83%
Methylation Date: 06/04/18 22:04

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	200	12.6	1	A
2,4,5-T	ND		ug/kg	200	6.19	1	A
2,4,5-TP (Silvex)	ND		ug/kg	200	5.31	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	129		30-150	A
DCAA	94		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-06
Client ID: SB02_6-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:35
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/07/18 13:27
Analyst: KEG
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 18:12
Cleanup Method: EPA 3620B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.85	0.362	1	A
Lindane	ND		ug/kg	0.770	0.344	1	A
Alpha-BHC	ND		ug/kg	0.770	0.219	1	A
Beta-BHC	ND		ug/kg	1.85	0.700	1	A
Heptachlor	ND		ug/kg	0.924	0.414	1	A
Aldrin	ND		ug/kg	1.85	0.650	1	A
Heptachlor epoxide	ND		ug/kg	3.46	1.04	1	A
Endrin	ND		ug/kg	0.770	0.316	1	A
Endrin aldehyde	ND		ug/kg	2.31	0.808	1	A
Endrin ketone	ND		ug/kg	1.85	0.476	1	A
Dieldrin	ND		ug/kg	1.15	0.577	1	A
4,4'-DDE	ND		ug/kg	1.85	0.427	1	A
4,4'-DDD	ND		ug/kg	1.85	0.659	1	A
4,4'-DDT	ND		ug/kg	3.46	1.48	1	A
Endosulfan I	ND		ug/kg	1.85	0.436	1	A
Endosulfan II	ND		ug/kg	1.85	0.617	1	A
Endosulfan sulfate	ND		ug/kg	0.770	0.366	1	A
Methoxychlor	ND		ug/kg	3.46	1.08	1	A
Toxaphene	ND		ug/kg	34.6	9.70	1	A
cis-Chlordane	ND		ug/kg	2.31	0.644	1	A
trans-Chlordane	ND		ug/kg	2.31	0.610	1	A
Chlordane	ND		ug/kg	15.0	6.12	1	A

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-06

Date Collected: 05/31/18 11:35

Client ID: SB02_6-8

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	57		30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-06
Client ID: SB02_6-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 11:35
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/05/18 16:10
Analyst: SL
Percent Solids: 84%
Methylation Date: 06/04/18 22:04

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	198	12.4	1	A
2,4,5-T	ND		ug/kg	198	6.12	1	A
2,4,5-TP (Silvex)	ND		ug/kg	198	5.26	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	127		30-150	A
DCAA	92		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-07
Client ID: SB03_0-1
Sample Location: MANHATTAN

Date Collected: 05/31/18 09:58
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/04/18 22:24
Analyst: SL
Percent Solids: 87%
Methylation Date: 06/02/18 21:03

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	188	11.9	1	A
2,4,5-T	ND		ug/kg	188	5.84	1	A
2,4,5-TP (Silvex)	ND		ug/kg	188	5.01	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	125		30-150	A
DCAA	121		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-07 D
Client ID: SB03_0-1
Sample Location: MANHATTAN

Date Collected: 05/31/18 09:58
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/07/18 13:57
Analyst: KEG
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 18:12
Cleanup Method: EPA 3620B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	35.3	6.91	20	A
Lindane	ND		ug/kg	14.7	6.57	20	A
Alpha-BHC	ND		ug/kg	14.7	4.18	20	A
Beta-BHC	ND		ug/kg	35.3	13.4	20	A
Heptachlor	ND		ug/kg	17.6	7.91	20	A
Aldrin	ND		ug/kg	35.3	12.4	20	A
Heptachlor epoxide	ND		ug/kg	66.2	19.8	20	A
Endrin	ND		ug/kg	14.7	6.03	20	A
Endrin aldehyde	ND		ug/kg	44.1	15.4	20	A
Endrin ketone	ND		ug/kg	35.3	9.09	20	A
Dieldrin	ND		ug/kg	22.0	11.0	20	A
4,4'-DDE	ND		ug/kg	35.3	8.16	20	A
4,4'-DDD	ND		ug/kg	35.3	12.6	20	A
4,4'-DDT	ND		ug/kg	66.2	28.4	20	A
Endosulfan I	ND		ug/kg	35.3	8.34	20	A
Endosulfan II	ND		ug/kg	35.3	11.8	20	A
Endosulfan sulfate	ND		ug/kg	14.7	7.00	20	A
Methoxychlor	ND		ug/kg	66.2	20.6	20	A
Toxaphene	ND		ug/kg	662	185.	20	A
cis-Chlordane	ND		ug/kg	44.1	12.3	20	A
trans-Chlordane	ND		ug/kg	44.1	11.6	20	A
Chlordane	ND		ug/kg	287	117.	20	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-07 D
Client ID: SB03_0-1
Sample Location: MANHATTAN

Date Collected: 05/31/18 09:58
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-08
Client ID: SB03_3-4
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:05
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/05/18 16:30
Analyst: SL
Percent Solids: 93%
Methylation Date: 06/04/18 22:04

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	175	11.0	1	A
2,4,5-T	ND		ug/kg	175	5.44	1	A
2,4,5-TP (Silvex)	ND		ug/kg	175	4.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	120		30-150	A
DCAA	99		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-08 D
Client ID: SB03_3-4
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:05
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/07/18 14:10
Analyst: KEG
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 18:12
Cleanup Method: EPA 3620B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	17.2	3.36	10	A
Lindane	ND		ug/kg	7.15	3.20	10	A
Alpha-BHC	ND		ug/kg	7.15	2.03	10	A
Beta-BHC	ND		ug/kg	17.2	6.51	10	A
Heptachlor	ND		ug/kg	8.58	3.85	10	A
Aldrin	ND		ug/kg	17.2	6.04	10	A
Heptachlor epoxide	ND		ug/kg	32.2	9.65	10	A
Endrin	ND		ug/kg	7.15	2.93	10	A
Endrin aldehyde	ND		ug/kg	21.4	7.51	10	A
Endrin ketone	ND		ug/kg	17.2	4.42	10	A
Dieldrin	ND		ug/kg	10.7	5.36	10	A
4,4'-DDE	ND		ug/kg	17.2	3.97	10	A
4,4'-DDD	ND		ug/kg	17.2	6.12	10	A
4,4'-DDT	ND		ug/kg	32.2	13.8	10	A
Endosulfan I	ND		ug/kg	17.2	4.05	10	A
Endosulfan II	ND		ug/kg	17.2	5.73	10	A
Endosulfan sulfate	ND		ug/kg	7.15	3.40	10	A
Methoxychlor	ND		ug/kg	32.2	10.0	10	A
Toxaphene	ND		ug/kg	322	90.1	10	A
cis-Chlordane	ND		ug/kg	21.4	5.98	10	A
trans-Chlordane	ND		ug/kg	21.4	5.66	10	A
Chlordane	ND		ug/kg	139	56.8	10	A

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-08 D

Date Collected: 05/31/18 10:05

Client ID: SB03_3-4

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	172	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	141		30-150	A
Decachlorobiphenyl	180	Q	30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-09
Client ID: SB03_7-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:17
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/06/18 02:15
Analyst: KEG
Percent Solids: 79%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 18:12
Cleanup Method: EPA 3620B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.97	0.386	1	A
Lindane	ND		ug/kg	0.820	0.367	1	A
Alpha-BHC	ND		ug/kg	0.820	0.233	1	A
Beta-BHC	ND		ug/kg	1.97	0.746	1	A
Heptachlor	ND		ug/kg	0.984	0.441	1	A
Aldrin	ND		ug/kg	1.97	0.693	1	A
Heptachlor epoxide	ND		ug/kg	3.69	1.11	1	A
Endrin	ND		ug/kg	0.820	0.336	1	A
Endrin aldehyde	ND		ug/kg	2.46	0.861	1	A
Endrin ketone	ND		ug/kg	1.97	0.507	1	A
Dieldrin	ND		ug/kg	1.23	0.615	1	A
4,4'-DDE	ND		ug/kg	1.97	0.455	1	A
4,4'-DDD	ND		ug/kg	1.97	0.702	1	A
4,4'-DDT	ND		ug/kg	3.69	1.58	1	A
Endosulfan I	ND		ug/kg	1.97	0.465	1	A
Endosulfan II	ND		ug/kg	1.97	0.658	1	A
Endosulfan sulfate	ND		ug/kg	0.820	0.390	1	A
Methoxychlor	ND		ug/kg	3.69	1.15	1	A
Toxaphene	ND		ug/kg	36.9	10.3	1	A
cis-Chlordane	ND		ug/kg	2.46	0.686	1	A
trans-Chlordane	ND		ug/kg	2.46	0.650	1	A
Chlordane	ND		ug/kg	16.0	6.52	1	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-09
Client ID: SB03_7-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:17
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	76		30-150	B
2,4,5,6-Tetrachloro-m-xylene	124		30-150	A
Decachlorobiphenyl	71		30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-09
Client ID: SB03_7-8
Sample Location: MANHATTAN

Date Collected: 05/31/18 10:17
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/05/18 17:09
Analyst: SL
Percent Solids: 79%
Methylation Date: 06/04/18 22:04

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	207	13.0	1	A
2,4,5-T	ND		ug/kg	207	6.41	1	A
2,4,5-TP (Silvex)	ND		ug/kg	207	5.50	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	115		30-150	A
DCAA	90		30-150	B

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-10
Client ID: SBDUP01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/06/18 02:28
Analyst: KEG
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 06/02/18 18:12
Cleanup Method: EPA 3620B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.341	1	A
Lindane	ND		ug/kg	0.726	0.325	1	A
Alpha-BHC	ND		ug/kg	0.726	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.661	1	A
Heptachlor	ND		ug/kg	0.871	0.391	1	A
Aldrin	ND		ug/kg	1.74	0.614	1	A
Heptachlor epoxide	ND		ug/kg	3.27	0.980	1	A
Endrin	ND		ug/kg	0.726	0.298	1	A
Endrin aldehyde	ND		ug/kg	2.18	0.762	1	A
Endrin ketone	ND		ug/kg	1.74	0.449	1	A
Dieldrin	ND		ug/kg	1.09	0.545	1	A
4,4'-DDE	ND		ug/kg	1.74	0.403	1	A
4,4'-DDD	ND		ug/kg	1.74	0.622	1	A
4,4'-DDT	ND		ug/kg	3.27	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.412	1	A
Endosulfan II	77.6	PI	ug/kg	1.74	0.582	1	A
Endosulfan sulfate	ND		ug/kg	0.726	0.346	1	A
Methoxychlor	ND		ug/kg	3.27	1.02	1	A
Toxaphene	ND		ug/kg	32.7	9.15	1	A
cis-Chlordane	ND		ug/kg	2.18	0.607	1	A
trans-Chlordane	ND		ug/kg	2.18	0.575	1	A
Chlordane	ND		ug/kg	14.2	5.77	1	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-10
Client ID: SBDUP01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	266	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	406	Q	30-150	A

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-10
Client ID: SBDUP01_053118
Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00
Date Received: 05/31/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/04/18 23:40
Analyst: SL
Percent Solids: 90%
Methylation Date: 06/02/18 21:03

Extraction Method: EPA 8151A
Extraction Date: 06/01/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	182	11.4	1	A
2,4,5-T	ND		ug/kg	182	5.63	1	A
2,4,5-TP (Silvex)	ND		ug/kg	182	4.83	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	133		30-150	A
DCAA	119		30-150	B

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 06/04/18 21:09
 Analyst: SL

Extraction Method: EPA 8151A
 Extraction Date: 06/01/18 21:00

Methylation Date: 06/02/18 21:03

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-10 Batch: WG1121697-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.02	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.31	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	114		30-150	A
DCAA	106		30-150	B

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/05/18 23:54
 Analyst: KEG

Extraction Method: EPA 3546
 Extraction Date: 06/02/18 18:12
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-10 Batch: WG1121917-1						
Delta-BHC	ND		ug/kg	1.54	0.301	A
Lindane	ND		ug/kg	0.641	0.286	A
Alpha-BHC	ND		ug/kg	0.641	0.182	A
Beta-BHC	ND		ug/kg	1.54	0.583	A
Heptachlor	ND		ug/kg	0.769	0.345	A
Aldrin	ND		ug/kg	1.54	0.541	A
Heptachlor epoxide	ND		ug/kg	2.88	0.865	A
Endrin	ND		ug/kg	0.641	0.263	A
Endrin aldehyde	ND		ug/kg	1.92	0.673	A
Endrin ketone	ND		ug/kg	1.54	0.396	A
Dieldrin	ND		ug/kg	0.961	0.480	A
4,4'-DDE	ND		ug/kg	1.54	0.356	A
4,4'-DDD	ND		ug/kg	1.54	0.548	A
4,4'-DDT	ND		ug/kg	2.88	1.24	A
Endosulfan I	ND		ug/kg	1.54	0.363	A
Endosulfan II	ND		ug/kg	1.54	0.514	A
Endosulfan sulfate	ND		ug/kg	0.641	0.305	A
Methoxychlor	ND		ug/kg	2.88	0.897	A
Toxaphene	ND		ug/kg	28.8	8.07	A
cis-Chlordane	ND		ug/kg	1.92	0.536	A
trans-Chlordane	ND		ug/kg	1.92	0.507	A
Chlordane	ND		ug/kg	12.5	5.09	A

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**Method Blank Analysis**
Batch Quality ControlAnalytical Method: 1,8081B
Analytical Date: 06/05/18 23:54
Analyst: KEGExtraction Method: EPA 3546
Extraction Date: 06/02/18 18:12
Cleanup Method: EPA 3620B
Cleanup Date: 06/04/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-10 Batch: WG1121917-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	60		30-150	B
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	58		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-10 Batch: WG1121697-2 WG1121697-3									
2,4-D	179	Q	163	Q	30-150	9		30	A
2,4,5-T	121		121		30-150	0		30	A
2,4,5-TP (Silvex)	138		142		30-150	3		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	116		117		30-150	A
DCAA	104		116		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-10 Batch: WG1121917-2 WG1121917-3									
Delta-BHC	82		78		30-150	5		30	A
Lindane	81		75		30-150	8		30	A
Alpha-BHC	86		81		30-150	6		30	A
Beta-BHC	80		72		30-150	11		30	A
Heptachlor	79		71		30-150	11		30	A
Aldrin	82		76		30-150	8		30	A
Heptachlor epoxide	77		71		30-150	8		30	A
Endrin	79		72		30-150	9		30	A
Endrin aldehyde	63		59		30-150	7		30	A
Endrin ketone	69		66		30-150	4		30	A
Dieldrin	86		79		30-150	8		30	A
4,4'-DDE	81		74		30-150	9		30	A
4,4'-DDD	80		73		30-150	9		30	A
4,4'-DDT	74		68		30-150	8		30	A
Endosulfan I	78		72		30-150	8		30	A
Endosulfan II	75		70		30-150	7		30	A
Endosulfan sulfate	59		56		30-150	5		30	A
Methoxychlor	64		59		30-150	8		30	A
cis-Chlordane	66		61		30-150	8		30	A
trans-Chlordane	57		55		30-150	4		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-10 Batch: WG1121917-2 WG1121917-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		64		30-150	B
Decachlorobiphenyl	61		58		30-150	B
2,4,5,6-Tetrachloro-m-xylene	67		62		30-150	A
Decachlorobiphenyl	61		57		30-150	A

METALS

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-01

Date Collected: 05/31/18 12:12

Client ID: SB01_0-2

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5240		mg/kg	8.65	2.33	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Antimony, Total	0.700	J	mg/kg	4.32	0.329	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Arsenic, Total	1.92		mg/kg	0.865	0.180	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Barium, Total	75.1		mg/kg	0.865	0.150	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Beryllium, Total	0.363	J	mg/kg	0.432	0.029	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Cadmium, Total	0.233	J	mg/kg	0.865	0.085	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Calcium, Total	28700		mg/kg	8.65	3.03	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Chromium, Total	10.2		mg/kg	0.865	0.083	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Cobalt, Total	8.84		mg/kg	1.73	0.144	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Copper, Total	29.2		mg/kg	0.865	0.223	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Iron, Total	7720		mg/kg	4.32	0.781	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Lead, Total	178		mg/kg	4.32	0.232	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Magnesium, Total	1960		mg/kg	8.65	1.33	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Manganese, Total	306		mg/kg	0.865	0.137	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Mercury, Total	0.096		mg/kg	0.070	0.015	1	06/02/18 08:00	06/04/18 15:26	EPA 7471B	1,7471B	KA
Nickel, Total	16.8		mg/kg	2.16	0.209	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Potassium, Total	1140		mg/kg	216	12.4	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Selenium, Total	0.778	J	mg/kg	1.73	0.223	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.865	0.245	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Sodium, Total	240		mg/kg	173	2.72	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.73	0.272	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Vanadium, Total	16.5		mg/kg	0.865	0.176	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
Zinc, Total	38.1		mg/kg	4.32	0.253	2	06/05/18 21:35	06/06/18 18:12	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	10		mg/kg	0.88	0.88	1		06/06/18 18:12	NA	107,-	



Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-02

Date Collected: 05/31/18 12:22

Client ID: SB01_3-4

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6940		mg/kg	8.97	2.42	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.49	0.341	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Arsenic, Total	0.790	J	mg/kg	0.897	0.187	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Barium, Total	60.0		mg/kg	0.897	0.156	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Beryllium, Total	0.574		mg/kg	0.449	0.030	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Cadmium, Total	0.314	J	mg/kg	0.897	0.088	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Calcium, Total	1690		mg/kg	8.97	3.14	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Chromium, Total	19.5		mg/kg	0.897	0.086	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Cobalt, Total	6.20		mg/kg	1.79	0.149	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Copper, Total	10.9		mg/kg	0.897	0.232	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Iron, Total	15700		mg/kg	4.49	0.810	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Lead, Total	8.52		mg/kg	4.49	0.240	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Magnesium, Total	2800		mg/kg	8.97	1.38	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Manganese, Total	239		mg/kg	0.897	0.143	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.071	0.015	1	06/02/18 08:00	06/04/18 15:32	EPA 7471B	1,7471B	KA
Nickel, Total	14.3		mg/kg	2.24	0.217	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Potassium, Total	2560		mg/kg	224	12.9	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Selenium, Total	0.897	J	mg/kg	1.79	0.232	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.897	0.254	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Sodium, Total	162	J	mg/kg	179	2.83	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.79	0.283	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Vanadium, Total	22.0		mg/kg	0.897	0.182	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
Zinc, Total	22.2		mg/kg	4.49	0.263	2	06/05/18 21:35	06/06/18 18:17	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	20		mg/kg	0.91	0.91	1		06/06/18 18:17	NA	107,-	



Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-03

Date Collected: 05/31/18 12:29

Client ID: SB01_8-9

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3140		mg/kg	9.13	2.46	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.57	0.347	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Arsenic, Total	0.758	J	mg/kg	0.913	0.190	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Barium, Total	25.7		mg/kg	0.913	0.159	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Beryllium, Total	0.210	J	mg/kg	0.457	0.030	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Cadmium, Total	0.155	J	mg/kg	0.913	0.090	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Calcium, Total	1680		mg/kg	9.13	3.20	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Chromium, Total	8.39		mg/kg	0.913	0.088	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Cobalt, Total	3.42		mg/kg	1.83	0.152	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Copper, Total	9.97		mg/kg	0.913	0.236	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Iron, Total	7180		mg/kg	4.57	0.825	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Lead, Total	3.32	J	mg/kg	4.57	0.245	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Magnesium, Total	1830		mg/kg	9.13	1.41	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Manganese, Total	252		mg/kg	0.913	0.145	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.072	0.015	1	06/02/18 08:00	06/04/18 15:33	EPA 7471B	1,7471B	KA
Nickel, Total	7.76		mg/kg	2.28	0.221	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Potassium, Total	675		mg/kg	228	13.2	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Selenium, Total	0.237	J	mg/kg	1.83	0.236	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.913	0.258	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Sodium, Total	170	J	mg/kg	183	2.88	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.83	0.288	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Vanadium, Total	11.3		mg/kg	0.913	0.185	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
Zinc, Total	11.3		mg/kg	4.57	0.268	2	06/05/18 21:35	06/06/18 18:21	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.9	J	mg/kg	0.92	0.92	1		06/06/18 18:21	NA	107,-	



Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04

Date Collected: 05/31/18 11:20

Client ID: SB02_0-2

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7420		mg/kg	8.64	2.33	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Antimony, Total	0.415	J	mg/kg	4.32	0.328	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Arsenic, Total	1.92		mg/kg	0.864	0.180	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Barium, Total	112		mg/kg	0.864	0.150	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Beryllium, Total	0.380	J	mg/kg	0.432	0.029	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Cadmium, Total	0.182	J	mg/kg	0.864	0.085	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Calcium, Total	35200		mg/kg	8.64	3.02	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Chromium, Total	11.8		mg/kg	0.864	0.083	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Cobalt, Total	5.06		mg/kg	1.73	0.143	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Copper, Total	25.3		mg/kg	0.864	0.223	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Iron, Total	8450		mg/kg	4.32	0.780	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Lead, Total	147		mg/kg	4.32	0.232	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Magnesium, Total	3960		mg/kg	8.64	1.33	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Manganese, Total	252		mg/kg	0.864	0.137	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Mercury, Total	0.096		mg/kg	0.070	0.015	1	06/02/18 08:00	06/04/18 15:35	EPA 7471B	1,7471B	KA
Nickel, Total	10.4		mg/kg	2.16	0.209	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Potassium, Total	1350		mg/kg	216	12.4	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Selenium, Total	0.432	J	mg/kg	1.73	0.223	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.864	0.245	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Sodium, Total	473		mg/kg	173	2.72	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.73	0.272	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Vanadium, Total	18.5		mg/kg	0.864	0.175	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
Zinc, Total	35.0		mg/kg	4.32	0.253	2	06/05/18 21:35	06/06/18 18:26	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.88	0.88	1		06/06/18 18:26	NA	107,-	



Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-05

Date Collected: 05/31/18 11:27

Client ID: SB02_4-6

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5670		mg/kg	9.26	2.50	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.63	0.352	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Arsenic, Total	1.67		mg/kg	0.926	0.193	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Barium, Total	30.3		mg/kg	0.926	0.161	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Beryllium, Total	0.232	J	mg/kg	0.463	0.031	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Cadmium, Total	0.176	J	mg/kg	0.926	0.091	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Calcium, Total	7200		mg/kg	9.26	3.24	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Chromium, Total	9.31		mg/kg	0.926	0.089	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Cobalt, Total	4.42		mg/kg	1.85	0.154	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Copper, Total	7.21		mg/kg	0.926	0.239	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Iron, Total	9170		mg/kg	4.63	0.836	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Lead, Total	6.68		mg/kg	4.63	0.248	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Magnesium, Total	1890		mg/kg	9.26	1.43	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Manganese, Total	176		mg/kg	0.926	0.147	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.076	0.016	1	06/02/18 08:00	06/04/18 15:37	EPA 7471B	1,7471B	KA
Nickel, Total	9.10		mg/kg	2.32	0.224	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Potassium, Total	630		mg/kg	232	13.3	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Selenium, Total	0.685	J	mg/kg	1.85	0.239	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.926	0.262	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Sodium, Total	172	J	mg/kg	185	2.92	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.85	0.292	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Vanadium, Total	12.0		mg/kg	0.926	0.188	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
Zinc, Total	16.1		mg/kg	4.63	0.271	2	06/05/18 21:35	06/06/18 18:30	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	8.8	J	mg/kg	0.96	0.96	1		06/06/18 18:30	NA	107,-	



Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-06

Date Collected: 05/31/18 11:35

Client ID: SB02_6-8

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7470		mg/kg	9.05	2.44	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.53	0.344	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Arsenic, Total	2.74		mg/kg	0.905	0.188	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Barium, Total	44.6		mg/kg	0.905	0.158	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Beryllium, Total	0.317	J	mg/kg	0.453	0.030	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Cadmium, Total	0.281	J	mg/kg	0.905	0.089	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Calcium, Total	1410		mg/kg	9.05	3.17	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Chromium, Total	17.3		mg/kg	0.905	0.087	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Cobalt, Total	5.66		mg/kg	1.81	0.150	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Copper, Total	10.2		mg/kg	0.905	0.234	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Iron, Total	14200		mg/kg	4.53	0.818	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Lead, Total	5.89		mg/kg	4.53	0.243	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Magnesium, Total	2330		mg/kg	9.05	1.39	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Manganese, Total	260		mg/kg	0.905	0.144	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.075	0.016	1	06/02/18 08:00	06/04/18 15:39	EPA 7471B	1,7471B	KA
Nickel, Total	11.3		mg/kg	2.26	0.219	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Potassium, Total	653		mg/kg	226	13.0	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Selenium, Total	0.534	J	mg/kg	1.81	0.234	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.905	0.256	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Sodium, Total	137	J	mg/kg	181	2.85	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.81	0.285	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Vanadium, Total	20.4		mg/kg	0.905	0.184	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
Zinc, Total	21.8		mg/kg	4.53	0.265	2	06/05/18 21:35	06/06/18 18:35	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	17	J	mg/kg	0.96	0.96	1		06/06/18 18:35	NA	107,-	



Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-07

Date Collected: 05/31/18 09:58

Client ID: SB03_0-1

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5810		mg/kg	9.00	2.43	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.50	0.342	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Arsenic, Total	1.61		mg/kg	0.900	0.187	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Barium, Total	31.1		mg/kg	0.900	0.156	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Beryllium, Total	0.324	J	mg/kg	0.450	0.030	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Cadmium, Total	0.270	J	mg/kg	0.900	0.088	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Calcium, Total	3140		mg/kg	9.00	3.15	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Chromium, Total	13.7		mg/kg	0.900	0.086	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Cobalt, Total	4.68		mg/kg	1.80	0.149	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Copper, Total	16.9		mg/kg	0.900	0.232	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Iron, Total	9750		mg/kg	4.50	0.812	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Lead, Total	14.3		mg/kg	4.50	0.241	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Magnesium, Total	2070		mg/kg	9.00	1.38	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Manganese, Total	143		mg/kg	0.900	0.143	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Mercury, Total	0.092		mg/kg	0.073	0.016	1	06/02/18 08:00	06/04/18 15:41	EPA 7471B	1,7471B	KA
Nickel, Total	11.4		mg/kg	2.25	0.218	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Potassium, Total	892		mg/kg	225	13.0	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Selenium, Total	0.576	J	mg/kg	1.80	0.232	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.900	0.255	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Sodium, Total	198		mg/kg	180	2.83	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.80	0.283	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Vanadium, Total	17.5		mg/kg	0.900	0.183	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB
Zinc, Total	36.2		mg/kg	4.50	0.264	2	06/05/18 21:35	06/06/18 18:39	EPA 3050B	1,6010C	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	14		mg/kg	0.92	0.92	1		06/06/18 18:39	NA	107,-	



Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-08

Date Collected: 05/31/18 10:05

Client ID: SB03_3-4

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4200		mg/kg	8.21	2.22	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.10	0.312	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Arsenic, Total	0.698	J	mg/kg	0.821	0.171	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Barium, Total	99.7		mg/kg	0.821	0.143	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Beryllium, Total	0.238	J	mg/kg	0.410	0.027	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Cadmium, Total	0.156	J	mg/kg	0.821	0.080	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Calcium, Total	1480		mg/kg	8.21	2.87	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Chromium, Total	11.2		mg/kg	0.821	0.079	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Cobalt, Total	3.82		mg/kg	1.64	0.136	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Copper, Total	13.1		mg/kg	0.821	0.212	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Iron, Total	7480		mg/kg	4.10	0.741	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Lead, Total	4.00	J	mg/kg	4.10	0.220	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Magnesium, Total	1930		mg/kg	8.21	1.26	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Manganese, Total	85.5		mg/kg	0.821	0.130	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.068	0.014	1	06/02/18 08:00	06/04/18 15:43	EPA 7471B	1,7471B	KA
Nickel, Total	8.95		mg/kg	2.05	0.199	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Potassium, Total	994		mg/kg	205	11.8	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Selenium, Total	0.460	J	mg/kg	1.64	0.212	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.821	0.232	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Sodium, Total	142	J	mg/kg	164	2.58	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.64	0.258	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Vanadium, Total	14.2		mg/kg	0.821	0.167	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
Zinc, Total	12.1		mg/kg	4.10	0.240	2	06/05/18 21:35	06/06/18 18:44	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.86	0.87	1		06/06/18 18:44	NA	107,-	



Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-09

Date Collected: 05/31/18 10:17

Client ID: SB03_7-8

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 79%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3090		mg/kg	10.1	2.73	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	5.06	0.384	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Arsenic, Total	0.415	J	mg/kg	1.01	0.210	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Barium, Total	33.1		mg/kg	1.01	0.176	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Beryllium, Total	0.223	J	mg/kg	0.506	0.033	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Cadmium, Total	0.162	J	mg/kg	1.01	0.099	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Calcium, Total	3600		mg/kg	10.1	3.54	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Chromium, Total	9.90		mg/kg	1.01	0.097	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Cobalt, Total	3.09		mg/kg	2.02	0.168	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Copper, Total	10.1		mg/kg	1.01	0.261	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Iron, Total	7160		mg/kg	5.06	0.914	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Lead, Total	4.35	J	mg/kg	5.06	0.271	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Magnesium, Total	1770		mg/kg	10.1	1.56	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Manganese, Total	228		mg/kg	1.01	0.161	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.080	0.017	1	06/02/18 08:00	06/04/18 15:45	EPA 7471B	1,7471B	KA
Nickel, Total	7.44		mg/kg	2.53	0.245	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Potassium, Total	727		mg/kg	253	14.6	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Selenium, Total	0.567	J	mg/kg	2.02	0.261	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	1.01	0.286	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Sodium, Total	89.9	J	mg/kg	202	3.19	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	2.02	0.319	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Vanadium, Total	12.5		mg/kg	1.01	0.205	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB
Zinc, Total	10.6		mg/kg	5.06	0.296	2	06/05/18 21:35	06/06/18 19:02	EPA 3050B	1,6010C	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	9.9		mg/kg	1.0	1.0	1		06/06/18 19:02	NA	107,-	



Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**SAMPLE RESULTS**

Lab ID: L1820045-10

Date Collected: 05/31/18 00:00

Client ID: SBDUP01_053118

Date Received: 05/31/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3740		mg/kg	8.83	2.38	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.42	0.336	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Arsenic, Total	1.64		mg/kg	0.883	0.184	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Barium, Total	43.9		mg/kg	0.883	0.154	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Beryllium, Total	0.185	J	mg/kg	0.442	0.029	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Cadmium, Total	0.247	J	mg/kg	0.883	0.087	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Calcium, Total	31700		mg/kg	8.83	3.09	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Chromium, Total	7.45		mg/kg	0.883	0.085	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Cobalt, Total	3.21		mg/kg	1.77	0.147	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Copper, Total	34.0		mg/kg	0.883	0.228	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Iron, Total	5710		mg/kg	4.42	0.798	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Lead, Total	33.4		mg/kg	4.42	0.237	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Magnesium, Total	8450		mg/kg	8.83	1.36	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Manganese, Total	178		mg/kg	0.883	0.140	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Mercury, Total	0.072		mg/kg	0.070	0.015	1	06/02/18 08:00	06/04/18 15:46	EPA 7471B	1,7471B	KA
Nickel, Total	7.26		mg/kg	2.21	0.214	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Potassium, Total	783		mg/kg	221	12.7	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Selenium, Total	0.601	J	mg/kg	1.77	0.228	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.883	0.250	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Sodium, Total	163	J	mg/kg	177	2.78	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.77	0.278	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Vanadium, Total	10.5		mg/kg	0.883	0.179	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
Zinc, Total	31.0		mg/kg	4.42	0.259	2	06/05/18 21:35	06/06/18 19:06	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.4		mg/kg	0.89	0.89	1		06/06/18 19:06	NA	107,-	



Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-10 Batch: WG1121784-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	06/02/18 08:00	06/04/18 14:56	1,7471B	KA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-10 Batch: WG1122742-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Iron, Total	0.384	J	mg/kg	2.00	0.361	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Manganese, Total	ND		mg/kg	0.400	0.064	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Potassium, Total	ND		mg/kg	100	5.76	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Selenium, Total	0.160	J	mg/kg	0.800	0.103	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Sodium, Total	ND		mg/kg	80.0	1.26	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	06/05/18 21:35	06/06/18 17:14	1,6010C	AB

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-10 Batch: WG1121784-2 SRM Lot Number: D098-540								
Mercury, Total	105		-		50-149	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-10 Batch: WG1122742-2 SRM Lot Number: D098-540					
Aluminum, Total	81	-	47-153	-	
Antimony, Total	137	-	6-194	-	
Arsenic, Total	96	-	83-117	-	
Barium, Total	95	-	82-118	-	
Beryllium, Total	94	-	83-117	-	
Cadmium, Total	91	-	82-117	-	
Calcium, Total	92	-	81-118	-	
Chromium, Total	96	-	83-119	-	
Cobalt, Total	93	-	84-116	-	
Copper, Total	95	-	84-116	-	
Iron, Total	103	-	60-140	-	
Lead, Total	93	-	82-117	-	
Magnesium, Total	92	-	76-124	-	
Manganese, Total	93	-	82-118	-	
Nickel, Total	92	-	82-117	-	
Potassium, Total	90	-	69-131	-	
Selenium, Total	96	-	78-121	-	
Silver, Total	99	-	80-120	-	
Sodium, Total	92	-	74-126	-	
Thallium, Total	94	-	80-119	-	
Vanadium, Total	97	-	79-121	-	

Lab Control Sample Analysis
Batch Quality Control**Project Name:** 538-542 WEST 29TH ST.**Project Number:** 170515401**Lab Number:** L1820045**Report Date:** 06/07/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-10 Batch: WG1122742-2 SRM Lot Number: D098-540					
Zinc, Total	93	-	81-119	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-10			QC Batch ID: WG1121784-3			QC Sample: L1820295-01			Client ID: MS Sample			
Mercury, Total	0.032J	0.152	0.213	140	Q	-	-		80-120	-		20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1122742-3 WG1122742-4 QC Sample: L1820281-01 Client ID: MS Sample									
Aluminum, Total	1850	170	2020	100	2230	225	Q 75-125	10	20
Antimony, Total	ND	42.5	39.2	92	38.2	91	75-125	3	20
Arsenic, Total	0.484J	10.2	11.4	112	10.7	106	75-125	6	20
Barium, Total	11.7	170	174	96	173	96	75-125	1	20
Beryllium, Total	0.087J	4.25	4.07	96	4.00	95	75-125	2	20
Cadmium, Total	0.087J	4.33	4.37	101	4.30	100	75-125	2	20
Calcium, Total	112.	850	1010	106	989	104	75-125	2	20
Chromium, Total	3.46	17	24.3	123	21.2	105	75-125	14	20
Cobalt, Total	1.90	42.5	42.0	94	41.4	94	75-125	1	20
Copper, Total	4.29	21.2	24.2	94	24.2	94	75-125	0	20
Iron, Total	4240	85	4830	694	Q 5810	1860	Q 75-125	18	20
Lead, Total	1.11J	43.3	44.0	102	43.2	100	75-125	2	20
Magnesium, Total	561.	850	1440	103	1480	109	75-125	3	20
Manganese, Total	84.8	42.5	145	142	Q 136	121	75-125	6	20
Nickel, Total	8.33	42.5	47.9	93	49.4	97	75-125	3	20
Potassium, Total	304.	850	1100	94	1170	103	75-125	6	20
Selenium, Total	0.363J	10.2	10.2	100	10.5	104	75-125	3	20
Silver, Total	ND	25.5	25.2	99	25.0	99	75-125	1	20
Sodium, Total	14.8J	850	872	103	859	102	75-125	2	20
Thallium, Total	ND	10.2	9.66	95	9.42	93	75-125	3	20
Vanadium, Total	5.13	42.5	47.7	100	46.6	98	75-125	2	20

Matrix Spike Analysis Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1122742-3 WG1122742-4 QC Sample: L1820281-01 Client ID: MS Sample									
Zinc, Total	5.68	42.5	48.1	100	47.4	99	75-125	1	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1121784-4 QC Sample: L1820295-01 Client ID: DUP Sample						
Mercury, Total	0.032J	0.034J	mg/kg	NC		20

INORGANICS & MISCELLANEOUS

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-01

Client ID: SB01_0-2

Sample Location: MANHATTAN

Date Collected: 05/31/18 12:12

Date Received: 05/31/18

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	91.2		%	0.100	NA	1	-	06/01/18 05:19	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.0	0.22	1	06/05/18 07:40	06/05/18 12:21	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.877	0.175	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-02

Client ID: SB01_3-4

Sample Location: MANHATTAN

Date Collected: 05/31/18 12:22

Date Received: 05/31/18

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	88.1		%	0.100	NA	1	-	06/01/18 05:19	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.1	0.23	1	06/05/18 07:40	06/05/18 12:22	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.908	0.182	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-03

Client ID: SB01_8-9

Sample Location: MANHATTAN

Date Collected: 05/31/18 12:29

Date Received: 05/31/18

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	86.9		%	0.100	NA	1	-	06/01/18 05:19	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.1	0.23	1	06/05/18 07:40	06/05/18 12:23	1,9010C/9012B	LH
Chromium, Hexavalent	0.472	J	mg/kg	0.920	0.184	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-04

Client ID: SB02_0-2

Sample Location: MANHATTAN

Date Collected: 05/31/18 11:20

Date Received: 05/31/18

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	90.6		%	0.100	NA	1	-	06/01/18 05:19	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.0	0.21	1	06/05/18 07:40	06/05/18 12:24	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.883	0.177	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-05

Client ID: SB02_4-6

Sample Location: MANHATTAN

Date Collected: 05/31/18 11:27

Date Received: 05/31/18

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	83.3		%	0.100	NA	1	-	06/01/18 05:19	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.1	0.24	1	06/05/18 07:40	06/05/18 12:25	1,9010C/9012B	LH
Chromium, Hexavalent	0.540	J	mg/kg	0.960	0.192	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-06

Client ID: SB02_6-8

Sample Location: MANHATTAN

Date Collected: 05/31/18 11:35

Date Received: 05/31/18

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	83.8		%	0.100	NA	1	-	06/01/18 05:19	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.2	0.25	1	06/05/18 07:40	06/05/18 12:26	1,9010C/9012B	LH
Chromium, Hexavalent	0.608	J	mg/kg	0.955	0.191	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-07

Client ID: SB03_0-1

Sample Location: MANHATTAN

Date Collected: 05/31/18 09:58

Date Received: 05/31/18

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	87.3		%	0.100	NA	1	-	06/01/18 05:19	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.1	0.23	1	06/05/18 07:40	06/05/18 12:27	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.916	0.183	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-08

Client ID: SB03_3-4

Sample Location: MANHATTAN

Date Collected: 05/31/18 10:05

Date Received: 05/31/18

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	92.5		%	0.100	NA	1	-	06/01/18 05:19	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.0	0.21	1	06/05/18 07:40	06/05/18 12:30	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.865	0.173	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-09

Client ID: SB03_7-8

Sample Location: MANHATTAN

Date Collected: 05/31/18 10:17

Date Received: 05/31/18

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	78.8		%	0.100	NA	1	-	06/01/18 05:19	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.2	0.26	1	06/05/18 07:40	06/05/18 12:31	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.02	0.203	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

SAMPLE RESULTS

Lab ID: L1820045-10

Client ID: SBDUP01_053118

Sample Location: MANHATTAN

Date Collected: 05/31/18 00:00

Date Received: 05/31/18

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	90.0		%	0.100	NA	1	-	06/02/18 13:56	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	06/05/18 07:40	06/05/18 12:34	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.889	0.178	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH



Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG1122385-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	06/04/18 22:50	06/05/18 13:28	1,7196A	NH
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG1122457-1										
Cyanide, Total	ND		mg/kg	0.92	0.19	1	06/05/18 07:40	06/05/18 12:12	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 09-10 Batch: WG1122460-1										
Cyanide, Total	ND		mg/kg	0.92	0.19	1	06/05/18 07:40	06/05/18 12:11	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Project Number: 170515401

Lab Number: L1820045

Report Date: 06/07/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1122385-2								
Chromium, Hexavalent	80		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG1122457-2 WG1122457-3								
Cyanide, Total	33	Q	58	Q	80-120	56	Q	35
General Chemistry - Westborough Lab Associated sample(s): 09-10 Batch: WG1122460-2 WG1122460-3								
Cyanide, Total	33	Q	58	Q	80-120	55	Q	35

Matrix Spike Analysis

Batch Quality Control

Project Name: 538-542 WEST 29TH ST.

Lab Number: L1820045

Project Number: 170515401

Report Date: 06/07/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1122385-4 QC Sample: L1820045-10 Client ID: SBDUP01_053118												
Chromium, Hexavalent	ND	909	887	98		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1122457-4 WG1122457-5 QC Sample: L1820485-01 Client ID: MS Sample												
Cyanide, Total	ND	11	11	96		11	98		75-125	0		35
General Chemistry - Westborough Lab Associated sample(s): 09-10 QC Batch ID: WG1122460-4 WG1122460-5 QC Sample: L1820045-09 Client ID: SB03_7-8												
Cyanide, Total	ND	12	12	100		12	96		75-125	0		35

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Lab Number: L1820045
Report Date: 06/07/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1121357-1 QC Sample: L1820082-01 Client ID: DUP Sample						
Solids, Total	95.5	95.1	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 10 QC Batch ID: WG1121865-1 QC Sample: L1819971-01 Client ID: DUP Sample						
Solids, Total	80.0	79.9	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1122385-6 QC Sample: L1820045-10 Client ID: SBDUP01_053118						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Serial_No:06071820:59
Lab Number: L1820045
Report Date: 06/07/18

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820045-01A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1820045-01B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-01C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-01D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820045-01F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-01G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-02A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1820045-02B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-02C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-02D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820045-02F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-02G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-03A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Serial_No: 06071820:59
Lab Number: L1820045
Report Date: 06/07/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820045-03B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-03C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-03D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1820045-03F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-03G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-04A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260H(14),NYTCL-8260HLW(14)
L1820045-04B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260H(14),NYTCL-8260HLW(14)
L1820045-04C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260H(14),NYTCL-8260HLW(14)
L1820045-04D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1820045-04F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-04G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-05A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1820045-05B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-05C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-05D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Serial_No: 06071820:59
Lab Number: L1820045
Report Date: 06/07/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820045-05F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-05G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-06A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1820045-06B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-06C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-06D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820045-06F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-06G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-07A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1820045-07B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-07C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-07D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820045-07F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-07G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-08A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1820045-08B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Serial_No: 06071820:59
Lab Number: L1820045
Report Date: 06/07/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820045-08C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-08D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820045-08F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-08G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-09A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1820045-09B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-09C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-09D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-09E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820045-09F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-09G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-10A	Vial MeOH preserved	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1820045-10B	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-10C	Vial water preserved	A	NA		5.5	Y	Absent	01-JUN-18 07:57	NYTCL-8260HLW(14)
L1820045-10D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1820045-10E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)

Project Name: 538-542 WEST 29TH ST.
Project Number: 170515401

Serial_No: 06071820:59
Lab Number: L1820045
Report Date: 06/07/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820045-10F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-10G	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1820045-11A	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260(14)
L1820045-11B	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260(14)

Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18

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).
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.
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.

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

Report Format: DU Report with 'J' Qualifiers



Project Name: 538-542 WEST 29TH ST.**Lab Number:** L1820045**Project Number:** 170515401**Report Date:** 06/07/18**Data Qualifiers**

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: 538-542 WEST 29TH ST.
Project Number: 170515401

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Report Date: 06/07/18

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 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: 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 300: DW: Bromide

EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 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, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, 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, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		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 _____ of _____		Date Rec'd in Lab 5/31/18		ALPHA Job # L1820045			
		Project Information Project Name: 538-542 West 29th St Project Location: Manhattan Project # 170515401 (Use Project name as Project #) ☐		Deliverables ☐ ASP-A ☒ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☐ Other		Billing Information ☒ Same as Client Info PO #					
Client Information Client: Langer Address: 360 W 31st St 8th Fl NY, NY 10001 Phone: 212 439-5400 Fax: _____ Email: esneed@langer.com		Project Manager: Emily Sneed ALPHAQuote #: _____ Turn-Around Time Standard ☐ Due Date: _____ Rush (only if pre approved) ☐ # of Days: _____		Regulatory Requirement ☐ NY TOGS ☒ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:					
These samples have been previously analyzed by Alpha ☐						ANALYSIS					
Other project specific requirements/comments:						Sample Filtration ☐ Done ☐ Lab to do ☐ Preservation ☐ Lab to do (Please Specify below)					
Please specify Metals or TAL.						Sample Specific Comments					
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix		Sampler's Initials		Analysis Results Part 375 VOCs, SVOCs, PCBs, PAHs, TAL metals (CN), tr/Hex chnrs	
20045-01		SB01-0-2		5/31/18 12:12		SD		KG		✓	
02		SB01-3-4		5/31/18 12:22		SD		KG		✓	
03		SB01-8-9		5/31/18 12:29		SD		KG		✓	
04		SB02-0-2		5/31/18 11:20		SD		KG		✓	
05		SB02-4-6		5/31/18 11:27		SD		KG		✓	
06		SB02-6-8		5/31/18 11:35		SD		KG		✓	
07		SB03-0-1		5/31/18 09:58		SD		KG		✓	
08		SB03-3-4		5/31/18 10:05		SD		KG		✓	
09		SB03-7-8		5/31/18 10:17		SD		KG		✓	
10		SB0VPO1-053118		5/31/18 00:00		SD		KG		✓	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type V		Preservative A		Relinquished By: 5/31/18 14:53 5/31/18 1915 5/31/18 2315	
Received By: 5/31/18 14:53 5/31/18 1915 5/31/18 2315		Date/Time 5/31/18 14:53 5/31/18 1915 5/31/18 2315		Received By: 5/31/18 14:53 5/31/18 1915 5/31/18 2315		Date/Time 5/31/18 14:53 5/31/18 1915 5/31/18 2315		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.)			

[illegible]



ANALYTICAL REPORT

Lab Number:	L1820339
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Emily Snead
Phone:	(212) 479-5432
Project Name:	538-540 W 29TH ST.
Project Number:	170515401
Report Date:	06/11/18

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

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



Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1820339-01	SBTB02_060118	WATER	MANHATTAN	06/01/18 00:00	06/01/18
L1820339-02	SB06_14-16	SOIL	MANHATTAN	06/01/18 12:20	06/01/18
L1820339-03	SB04_1-3	SOIL	MANHATTAN	06/01/18 09:34	06/01/18
L1820339-04	SB04_6-8	SOIL	MANHATTAN	06/01/18 09:42	06/01/18
L1820339-05	SB04_10-12	SOIL	MANHATTAN	06/01/18 09:55	06/01/18
L1820339-06	SB05_0-2	SOIL	MANHATTAN	06/01/18 10:30	06/01/18
L1820339-07	SB05_7-8	SOIL	MANHATTAN	06/01/18 10:40	06/01/18
L1820339-08	SB05_11-12	SOIL	MANHATTAN	06/01/18 10:56	06/01/18
L1820339-09	SB06_0-2	SOIL	MANHATTAN	06/01/18 12:02	06/01/18
L1820339-10	SB06_6-8	SOIL	MANHATTAN	06/01/18 12:08	06/01/18
L1820339-11	SB06_12-14	SOIL	MANHATTAN	06/01/18 12:15	06/01/18
L1820339-12	SBDUP02_060118	SOIL	MANHATTAN	06/01/18 00:00	06/01/18
L1820339-13	TW03_060118	WATER	MANHATTAN	06/01/18 11:30	06/01/18
L1820339-14	TW05_060118	WATER	MANHATTAN	06/01/18 13:30	06/01/18
L1820339-15	TWDUP01_060118	WATER	MANHATTAN	06/01/18 00:00	06/01/18
L1820339-16	GWTB01_060118	WATER	MANHATTAN	06/01/18 00:00	06/01/18

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

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: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

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.

Volatile Organics

L1820339-03: The internal standard (IS) response for 1,4-dichlorobenzene-d4 (18%) and the surrogate recoveries for toluene-d8 (131%) and 4-bromofluorobenzene (179%) were outside the acceptance criteria. A second low-level vial was analyzed, but yielded no internal standard recoveries. A high-level analysis was performed, and those results are also reported.

L1820339-10: The surrogate recovery for 1,2-dichloroethane-d4 (132%) is outside the acceptance criteria; however, since the sample was non-detect for all target analytes associated with this surrogate, re-analysis was not required.

L1820339-13: The surrogate recovery is outside the acceptance criteria for 1,2-dichloroethane-d4 (133%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Total Metals

L1820339-02 through -12: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1122868-3 MS recovery, performed on L1820339-03, is outside the acceptance criteria for mercury (51%). A post digestion spike was performed and was within acceptance criteria.

The WG1123199-3 MS recoveries for aluminum (634%), calcium (830%), iron (1030%), and manganese (129%), performed on L1820339-03, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1123199-3 MS recoveries, performed on L1820339-03, are outside the acceptance criteria for barium (127%), copper (146%), lead (569%), manganese (129%), and zinc (126%). A post digestion spike was performed and was within acceptance criteria.

The WG1123199-4 Laboratory Duplicate RPDs for barium (28%), copper (52%), iron (65%), lead (132%),

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

Case Narrative (continued)

manganese (29%), nickel (34%), vanadium (30%), and zinc (39%), performed on L1820339-03, are outside the acceptance criteria. The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

Dissolved Metals

The WG1123373-3 MS recovery, performed on L1820339-13, is outside the acceptance criteria for iron (130%). A post digestion spike was performed and was within acceptance criteria.

Cyanide, Total

The WG1122634-2/-3 LCS/LCSD recoveries (77%/69%), associated with L1820339-03 through -12, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1123793-2/-3 LCS/LCSD recoveries (32%/32%), associated with L1820339-02, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Hexavalent Chromium

The WG1123747-2 LCS recovery (77%), associated with L1820339-02, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

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: 06/11/18

ORGANICS

VOLATILES

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-01
 Client ID: SBTB02_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 06/06/18 22:47
 Analyst: NLK

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: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-01
Client ID: SBTB02_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
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: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-01**Date Collected:** 06/01/18 00:00**Client ID:** SBTB02_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	106		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	98		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-02

Date Collected: 06/01/18 12:20

Client ID: SB06_14-16

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/08/18 11:14

Analyst: MV

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.5	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.26	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.95	0.33	1
1,2-Dichloropropane	ND		ug/kg	3.3	0.22	1
Dibromochloromethane	ND		ug/kg	0.95	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.30	1
Tetrachloroethene	ND		ug/kg	0.95	0.29	1
Chlorobenzene	ND		ug/kg	0.95	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.40	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.95	0.33	1
Bromodichloromethane	ND		ug/kg	0.95	0.29	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.95	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.95	0.20	1
1,1-Dichloropropene	ND		ug/kg	4.7	0.31	1
Bromoform	ND		ug/kg	3.8	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.95	0.28	1
Benzene	0.42	J	ug/kg	0.95	0.18	1
Toluene	ND		ug/kg	1.4	0.18	1
Ethylbenzene	2.8		ug/kg	0.95	0.16	1
Chloromethane	ND		ug/kg	4.7	0.41	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.30	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.23	1

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-02

Date Collected: 06/01/18 12:20

Client ID: SB06_14-16

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.95	0.29	1
1,2-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.7	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
Methyl tert butyl ether	0.28	J	ug/kg	1.9	0.14	1
p/m-Xylene	ND		ug/kg	1.9	0.33	1
o-Xylene	ND		ug/kg	1.9	0.32	1
Xylenes, Total	ND		ug/kg	1.9	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.32	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.23	1
Dibromomethane	ND		ug/kg	9.5	0.23	1
Styrene	ND		ug/kg	1.9	0.38	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.47	1
Acetone	17		ug/kg	9.5	2.2	1
Carbon disulfide	ND		ug/kg	9.5	1.0	1
2-Butanone	ND		ug/kg	9.5	0.65	1
Vinyl acetate	ND		ug/kg	9.5	0.14	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	0.23	1
1,2,3-Trichloropropane	ND		ug/kg	9.5	0.17	1
2-Hexanone	ND		ug/kg	9.5	0.63	1
Bromochloromethane	ND		ug/kg	4.7	0.34	1
2,2-Dichloropropane	ND		ug/kg	4.7	0.43	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.19	1
1,3-Dichloropropane	ND		ug/kg	4.7	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.95	0.30	1
Bromobenzene	ND		ug/kg	4.7	0.21	1
n-Butylbenzene	0.79	J	ug/kg	0.95	0.22	1
sec-Butylbenzene	0.82	J	ug/kg	0.95	0.20	1
tert-Butylbenzene	ND		ug/kg	4.7	0.23	1
o-Chlorotoluene	ND		ug/kg	4.7	0.21	1
p-Chlorotoluene	ND		ug/kg	4.7	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	0.38	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.33	1
Isopropylbenzene	4.0		ug/kg	0.95	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.19	1
Naphthalene	0.45	J	ug/kg	4.7	0.13	1
Acrylonitrile	ND		ug/kg	9.5	0.49	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-02**Date Collected:** 06/01/18 12:20**Client ID:** SB06_14-16**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	6.6		ug/kg	0.95	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.7	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.7	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.7	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.7	0.18	1
1,4-Dioxane	ND		ug/kg	38	14.	1
p-Diethylbenzene	ND		ug/kg	3.8	3.8	1
p-Ethyltoluene	ND		ug/kg	3.8	0.22	1
1,2,4,5-Tetramethylbenzene	3.3	J	ug/kg	3.8	0.15	1
Ethyl ether	ND		ug/kg	4.7	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.7	0.37	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	100		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-03

Date Collected: 06/01/18 09:34

Client ID: SB04_1-3

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/08/18 11:40

Analyst: JC

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.32	1
Chloroform	ND		ug/kg	1.8	0.44	1
Carbon tetrachloride	ND		ug/kg	1.2	0.41	1
1,2-Dichloropropane	ND		ug/kg	4.2	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.21	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.38	1
Tetrachloroethene	ND		ug/kg	1.2	0.36	1
Chlorobenzene	ND		ug/kg	1.2	0.42	1
Trichlorofluoromethane	ND		ug/kg	6.0	0.50	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.42	1
Bromodichloromethane	ND		ug/kg	1.2	0.37	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.28	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.25	1
1,1-Dichloropropene	ND		ug/kg	6.0	0.39	1
Bromoform	ND		ug/kg	4.8	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.36	1
Benzene	ND		ug/kg	1.2	0.23	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.20	1
Chloromethane	ND		ug/kg	6.0	0.52	1
Bromomethane	ND		ug/kg	2.4	0.40	1
Vinyl chloride	ND		ug/kg	2.4	0.38	1
Chloroethane	ND		ug/kg	2.4	0.38	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.45	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.29	1

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-03

Date Collected: 06/01/18 09:34

Client ID: SB04_1-3

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	1.2	0.36	1
1,2-Dichlorobenzene	ND		ug/kg	6.0	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	6.0	0.26	1
1,4-Dichlorobenzene	ND		ug/kg	6.0	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.18	1
p/m-Xylene	ND		ug/kg	2.4	0.42	1
o-Xylene	ND		ug/kg	2.4	0.40	1
Xylenes, Total	ND		ug/kg	2.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.41	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.29	1
Dibromomethane	ND		ug/kg	12	0.29	1
Styrene	ND		ug/kg	2.4	0.48	1
Dichlorodifluoromethane	ND		ug/kg	12	0.60	1
Acetone	9.4	J	ug/kg	12	2.7	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.83	1
Vinyl acetate	ND		ug/kg	12	0.18	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.21	1
2-Hexanone	ND		ug/kg	12	0.80	1
Bromochloromethane	ND		ug/kg	6.0	0.43	1
2,2-Dichloropropane	ND		ug/kg	6.0	0.54	1
1,2-Dibromoethane	ND		ug/kg	4.8	0.24	1
1,3-Dichloropropane	ND		ug/kg	6.0	0.22	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.38	1
Bromobenzene	ND		ug/kg	6.0	0.26	1
n-Butylbenzene	ND		ug/kg	1.2	0.27	1
sec-Butylbenzene	ND		ug/kg	1.2	0.26	1
tert-Butylbenzene	ND		ug/kg	6.0	0.30	1
o-Chlorotoluene	ND		ug/kg	6.0	0.26	1
p-Chlorotoluene	ND		ug/kg	6.0	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.0	0.48	1
Hexachlorobutadiene	ND		ug/kg	6.0	0.42	1
Isopropylbenzene	ND		ug/kg	1.2	0.23	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.24	1
Naphthalene	ND		ug/kg	6.0	0.16	1
Acrylonitrile	ND		ug/kg	12	0.62	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-03**Date Collected:** 06/01/18 09:34**Client ID:** SB04_1-3**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.26	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.0	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.0	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.0	0.22	1
1,4-Dioxane	ND		ug/kg	48	17.	1
p-Diethylbenzene	ND		ug/kg	4.8	4.8	1
p-Ethyltoluene	ND		ug/kg	4.8	0.28	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.8	0.19	1
Ethyl ether	ND		ug/kg	6.0	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	0.47	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	131	Q	70-130
4-Bromofluorobenzene	179	Q	70-130
Dibromofluoromethane	109		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-03

Date Collected: 06/01/18 09:34

Client ID: SB04_1-3

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/11/18 10:19

Analyst: MV

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	970	160	1
1,1-Dichloroethane	ND		ug/kg	140	26.	1
Chloroform	94	J	ug/kg	140	36.	1
Carbon tetrachloride	ND		ug/kg	97	34.	1
1,2-Dichloropropane	ND		ug/kg	340	22.	1
Dibromochloromethane	ND		ug/kg	97	17.	1
1,1,2-Trichloroethane	ND		ug/kg	140	30.	1
Tetrachloroethene	130		ug/kg	97	29.	1
Chlorobenzene	ND		ug/kg	97	34.	1
Trichlorofluoromethane	ND		ug/kg	480	40.	1
1,2-Dichloroethane	ND		ug/kg	97	24.	1
1,1,1-Trichloroethane	ND		ug/kg	97	34.	1
Bromodichloromethane	ND		ug/kg	97	30.	1
trans-1,3-Dichloropropene	ND		ug/kg	97	20.	1
cis-1,3-Dichloropropene	ND		ug/kg	97	22.	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.25	1
1,1-Dichloropropene	ND		ug/kg	480	32.	1
Bromoform	ND		ug/kg	390	23.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	97	29.	1
Benzene	32	J	ug/kg	97	19.	1
Toluene	180		ug/kg	140	19.	1
Ethylbenzene	31	J	ug/kg	97	16.	1
Chloromethane	260	J	ug/kg	480	42.	1
Bromomethane	ND		ug/kg	190	33.	1
Vinyl chloride	ND		ug/kg	190	31.	1
Chloroethane	ND		ug/kg	190	31.	1
1,1-Dichloroethene	ND		ug/kg	97	36.	1
trans-1,2-Dichloroethene	ND		ug/kg	140	23.	1

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-03

Date Collected: 06/01/18 09:34

Client ID: SB04_1-3

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	110		ug/kg	97	29.	1
1,2-Dichlorobenzene	ND		ug/kg	480	18.	1
1,3-Dichlorobenzene	ND		ug/kg	480	21.	1
1,4-Dichlorobenzene	ND		ug/kg	480	18.	1
Methyl tert butyl ether	24	J	ug/kg	190	15.	1
p/m-Xylene	150	J	ug/kg	190	34.	1
o-Xylene	36	J	ug/kg	190	33.	1
Xylene (Total)	190	J	ug/kg	2.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	97	33.	1
1,2-Dichloroethene (total)	ND		ug/kg	1.2	0.29	1
Dibromomethane	ND		ug/kg	970	23.	1
Styrene	ND		ug/kg	190	39.	1
Dichlorodifluoromethane	ND		ug/kg	970	48.	1
Acetone	660	J	ug/kg	970	220	1
Carbon disulfide	ND		ug/kg	970	110	1
2-Butanone	380	J	ug/kg	970	67.	1
Vinyl acetate	ND		ug/kg	970	15.	1
4-Methyl-2-pentanone	ND		ug/kg	970	24.	1
1,2,3-Trichloropropane	ND		ug/kg	970	17.	1
2-Hexanone	ND		ug/kg	970	65.	1
Bromochloromethane	ND		ug/kg	480	35.	1
2,2-Dichloropropane	ND		ug/kg	480	44.	1
1,2-Dibromoethane	ND		ug/kg	390	19.	1
1,3-Dichloropropane	ND		ug/kg	480	18.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	97	31.	1
Bromobenzene	ND		ug/kg	480	21.	1
n-Butylbenzene	ND		ug/kg	97	22.	1
sec-Butylbenzene	ND		ug/kg	97	21.	1
tert-Butylbenzene	ND		ug/kg	480	24.	1
o-Chlorotoluene	ND		ug/kg	480	21.	1
p-Chlorotoluene	ND		ug/kg	480	18.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	480	38.	1
Hexachlorobutadiene	ND		ug/kg	480	34.	1
Isopropylbenzene	ND		ug/kg	97	19.	1
p-Isopropyltoluene	ND		ug/kg	97	20.	1
Naphthalene	22	J	ug/kg	480	13.	1
Acrylonitrile	ND		ug/kg	970	50.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-03**Date Collected:** 06/01/18 09:34**Client ID:** SB04_1-3**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	ND		ug/kg	97	21.	1
1,2,3-Trichlorobenzene	ND		ug/kg	480	24.	1
1,2,4-Trichlorobenzene	ND		ug/kg	480	21.	1
1,3,5-Trimethylbenzene	23	J	ug/kg	480	16.	1
1,2,4-Trimethylbenzene	ND		ug/kg	480	18.	1
1,4-Dioxane	ND		ug/kg	3900	1400	1
1,4-Diethylbenzene	ND		ug/kg	390	390	1
4-Ethyltoluene	ND		ug/kg	390	23.	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	390	15.	1
Ethyl ether	ND		ug/kg	480	25.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	480	38.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	97		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-04

Date Collected: 06/01/18 09:42

Client ID: SB04_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/07/18 12:38

Analyst: KD

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	13	2.1	1
1,1-Dichloroethane	ND		ug/kg	1.9	0.34	1
Chloroform	ND		ug/kg	1.9	0.47	1
Carbon tetrachloride	ND		ug/kg	1.3	0.44	1
1,2-Dichloropropane	ND		ug/kg	4.4	0.29	1
Dibromochloromethane	ND		ug/kg	1.3	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	1.9	0.40	1
Tetrachloroethene	ND		ug/kg	1.3	0.38	1
Chlorobenzene	ND		ug/kg	1.3	0.44	1
Trichlorofluoromethane	ND		ug/kg	6.4	0.53	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	1.3	0.44	1
Bromodichloromethane	ND		ug/kg	1.3	0.39	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	1.3	0.29	1
1,3-Dichloropropene, Total	ND		ug/kg	1.3	0.26	1
1,1-Dichloropropene	ND		ug/kg	6.4	0.42	1
Bromoform	ND		ug/kg	5.1	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.3	0.38	1
Benzene	ND		ug/kg	1.3	0.24	1
Toluene	ND		ug/kg	1.9	0.25	1
Ethylbenzene	ND		ug/kg	1.3	0.22	1
Chloromethane	ND		ug/kg	6.4	0.56	1
Bromomethane	ND		ug/kg	2.5	0.43	1
Vinyl chloride	ND		ug/kg	2.5	0.40	1
Chloroethane	ND		ug/kg	2.5	0.40	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.47	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.31	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-04**Date Collected:** 06/01/18 09:42**Client ID:** SB04_6-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	1.3	0.38	1
1,2-Dichlorobenzene	ND		ug/kg	6.4	0.23	1
1,3-Dichlorobenzene	ND		ug/kg	6.4	0.28	1
1,4-Dichlorobenzene	ND		ug/kg	6.4	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.19	1
p/m-Xylene	ND		ug/kg	2.5	0.45	1
o-Xylene	ND		ug/kg	2.5	0.43	1
Xylenes, Total	ND		ug/kg	2.5	0.43	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.44	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.31	1
Dibromomethane	ND		ug/kg	13	0.30	1
Styrene	ND		ug/kg	2.5	0.51	1
Dichlorodifluoromethane	ND		ug/kg	13	0.64	1
Acetone	ND		ug/kg	13	2.9	1
Carbon disulfide	ND		ug/kg	13	1.4	1
2-Butanone	ND		ug/kg	13	0.88	1
Vinyl acetate	ND		ug/kg	13	0.19	1
4-Methyl-2-pentanone	ND		ug/kg	13	0.31	1
1,2,3-Trichloropropane	ND		ug/kg	13	0.22	1
2-Hexanone	ND		ug/kg	13	0.85	1
Bromochloromethane	ND		ug/kg	6.4	0.45	1
2,2-Dichloropropane	ND		ug/kg	6.4	0.57	1
1,2-Dibromoethane	ND		ug/kg	5.1	0.25	1
1,3-Dichloropropane	ND		ug/kg	6.4	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.3	0.40	1
Bromobenzene	ND		ug/kg	6.4	0.28	1
n-Butylbenzene	ND		ug/kg	1.3	0.29	1
sec-Butylbenzene	ND		ug/kg	1.3	0.28	1
tert-Butylbenzene	ND		ug/kg	6.4	0.31	1
o-Chlorotoluene	ND		ug/kg	6.4	0.28	1
p-Chlorotoluene	ND		ug/kg	6.4	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.4	0.50	1
Hexachlorobutadiene	ND		ug/kg	6.4	0.44	1
Isopropylbenzene	ND		ug/kg	1.3	0.25	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.26	1
Naphthalene	ND		ug/kg	6.4	0.18	1
Acrylonitrile	ND		ug/kg	13	0.65	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-04**Date Collected:** 06/01/18 09:42**Client ID:** SB04_6-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.3	0.27	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.4	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.4	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.4	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.4	0.24	1
1,4-Dioxane	ND		ug/kg	51	18.	1
p-Diethylbenzene	ND		ug/kg	5.1	5.1	1
p-Ethyltoluene	ND		ug/kg	5.1	0.30	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	5.1	0.20	1
Ethyl ether	ND		ug/kg	6.4	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.4	0.50	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-05**Date Collected:** 06/01/18 09:55**Client ID:** SB04_10-12**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8260C**Analytical Date:** 06/07/18 13:04**Analyst:** KD**Percent Solids:** 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	8.3	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.22	1
Chloroform	ND		ug/kg	1.2	0.31	1
Carbon tetrachloride	ND		ug/kg	0.83	0.29	1
1,2-Dichloropropane	ND		ug/kg	2.9	0.19	1
Dibromochloromethane	ND		ug/kg	0.83	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.26	1
Tetrachloroethene	ND		ug/kg	0.83	0.25	1
Chlorobenzene	ND		ug/kg	0.83	0.29	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.35	1
1,2-Dichloroethane	ND		ug/kg	0.83	0.20	1
1,1,1-Trichloroethane	ND		ug/kg	0.83	0.29	1
Bromodichloromethane	ND		ug/kg	0.83	0.26	1
trans-1,3-Dichloropropene	ND		ug/kg	0.83	0.17	1
cis-1,3-Dichloropropene	ND		ug/kg	0.83	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.83	0.17	1
1,1-Dichloropropene	ND		ug/kg	4.2	0.27	1
Bromoform	ND		ug/kg	3.3	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.83	0.25	1
Benzene	ND		ug/kg	0.83	0.16	1
Toluene	ND		ug/kg	1.2	0.16	1
Ethylbenzene	ND		ug/kg	0.83	0.14	1
Chloromethane	ND		ug/kg	4.2	0.36	1
Bromomethane	ND		ug/kg	1.7	0.28	1
Vinyl chloride	ND		ug/kg	1.7	0.26	1
Chloroethane	ND		ug/kg	1.7	0.26	1
1,1-Dichloroethene	ND		ug/kg	0.83	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-05**Date Collected:** 06/01/18 09:55**Client ID:** SB04_10-12**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.83	0.25	1
1,2-Dichlorobenzene	ND		ug/kg	4.2	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	4.2	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.2	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.7	0.13	1
p/m-Xylene	ND		ug/kg	1.7	0.29	1
o-Xylene	ND		ug/kg	1.7	0.28	1
Xylenes, Total	ND		ug/kg	1.7	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.83	0.28	1
1,2-Dichloroethene, Total	ND		ug/kg	0.83	0.20	1
Dibromomethane	ND		ug/kg	8.3	0.20	1
Styrene	ND		ug/kg	1.7	0.33	1
Dichlorodifluoromethane	ND		ug/kg	8.3	0.42	1
Acetone	33		ug/kg	8.3	1.9	1
Carbon disulfide	ND		ug/kg	8.3	0.92	1
2-Butanone	ND		ug/kg	8.3	0.57	1
Vinyl acetate	ND		ug/kg	8.3	0.13	1
4-Methyl-2-pentanone	ND		ug/kg	8.3	0.20	1
1,2,3-Trichloropropane	ND		ug/kg	8.3	0.15	1
2-Hexanone	ND		ug/kg	8.3	0.55	1
Bromochloromethane	ND		ug/kg	4.2	0.30	1
2,2-Dichloropropane	ND		ug/kg	4.2	0.37	1
1,2-Dibromoethane	ND		ug/kg	3.3	0.16	1
1,3-Dichloropropane	ND		ug/kg	4.2	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.83	0.26	1
Bromobenzene	ND		ug/kg	4.2	0.18	1
n-Butylbenzene	ND		ug/kg	0.83	0.19	1
sec-Butylbenzene	ND		ug/kg	0.83	0.18	1
tert-Butylbenzene	ND		ug/kg	4.2	0.20	1
o-Chlorotoluene	ND		ug/kg	4.2	0.18	1
p-Chlorotoluene	ND		ug/kg	4.2	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	0.33	1
Hexachlorobutadiene	ND		ug/kg	4.2	0.29	1
Isopropylbenzene	ND		ug/kg	0.83	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.83	0.17	1
Naphthalene	ND		ug/kg	4.2	0.11	1
Acrylonitrile	ND		ug/kg	8.3	0.43	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-05**Date Collected:** 06/01/18 09:55**Client ID:** SB04_10-12**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.83	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.2	0.21	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.2	0.18	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.2	0.13	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.2	0.15	1
1,4-Dioxane	ND		ug/kg	33	12.	1
p-Diethylbenzene	ND		ug/kg	3.3	3.3	1
p-Ethyltoluene	ND		ug/kg	3.3	0.19	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.3	0.13	1
Ethyl ether	ND		ug/kg	4.2	0.22	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.2	0.33	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	110		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-06

Date Collected: 06/01/18 10:30

Client ID: SB05_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/07/18 13:30

Analyst: KD

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.9	0.34	1
Chloroform	ND		ug/kg	1.9	0.46	1
Carbon tetrachloride	ND		ug/kg	1.2	0.43	1
1,2-Dichloropropane	ND		ug/kg	4.4	0.28	1
Dibromochloromethane	ND		ug/kg	1.2	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	1.9	0.39	1
Tetrachloroethene	ND		ug/kg	1.2	0.38	1
Chlorobenzene	ND		ug/kg	1.2	0.43	1
Trichlorofluoromethane	ND		ug/kg	6.2	0.52	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.44	1
Bromodichloromethane	ND		ug/kg	1.2	0.38	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.29	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.26	1
1,1-Dichloropropene	ND		ug/kg	6.2	0.41	1
Bromoform	ND		ug/kg	5.0	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.37	1
Benzene	ND		ug/kg	1.2	0.24	1
Toluene	ND		ug/kg	1.9	0.24	1
Ethylbenzene	ND		ug/kg	1.2	0.21	1
Chloromethane	ND		ug/kg	6.2	0.54	1
Bromomethane	ND		ug/kg	2.5	0.42	1
Vinyl chloride	ND		ug/kg	2.5	0.39	1
Chloroethane	ND		ug/kg	2.5	0.39	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.46	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.30	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-06**Date Collected:** 06/01/18 10:30**Client ID:** SB05_0-2**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	1.2	0.38	1
1,2-Dichlorobenzene	ND		ug/kg	6.2	0.23	1
1,3-Dichlorobenzene	ND		ug/kg	6.2	0.27	1
1,4-Dichlorobenzene	ND		ug/kg	6.2	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.19	1
p/m-Xylene	ND		ug/kg	2.5	0.44	1
o-Xylene	ND		ug/kg	2.5	0.42	1
Xylenes, Total	ND		ug/kg	2.5	0.42	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.42	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.30	1
Dibromomethane	ND		ug/kg	12	0.30	1
Styrene	ND		ug/kg	2.5	0.50	1
Dichlorodifluoromethane	ND		ug/kg	12	0.62	1
Acetone	ND		ug/kg	12	2.8	1
Carbon disulfide	ND		ug/kg	12	1.4	1
2-Butanone	ND		ug/kg	12	0.86	1
Vinyl acetate	ND		ug/kg	12	0.19	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.30	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.22	1
2-Hexanone	ND		ug/kg	12	0.83	1
Bromochloromethane	ND		ug/kg	6.2	0.44	1
2,2-Dichloropropane	ND		ug/kg	6.2	0.56	1
1,2-Dibromoethane	ND		ug/kg	5.0	0.25	1
1,3-Dichloropropane	ND		ug/kg	6.2	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.40	1
Bromobenzene	ND		ug/kg	6.2	0.27	1
n-Butylbenzene	ND		ug/kg	1.2	0.28	1
sec-Butylbenzene	ND		ug/kg	1.2	0.27	1
tert-Butylbenzene	ND		ug/kg	6.2	0.31	1
o-Chlorotoluene	ND		ug/kg	6.2	0.28	1
p-Chlorotoluene	ND		ug/kg	6.2	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.2	0.49	1
Hexachlorobutadiene	ND		ug/kg	6.2	0.43	1
Isopropylbenzene	ND		ug/kg	1.2	0.24	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.25	1
Naphthalene	ND		ug/kg	6.2	0.17	1
Acrylonitrile	ND		ug/kg	12	0.64	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-06**Date Collected:** 06/01/18 10:30**Client ID:** SB05_0-2**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.27	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.2	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.2	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.2	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.2	0.23	1
1,4-Dioxane	ND		ug/kg	50	18.	1
p-Diethylbenzene	ND		ug/kg	5.0	5.0	1
p-Ethyltoluene	ND		ug/kg	5.0	0.29	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	5.0	0.19	1
Ethyl ether	ND		ug/kg	6.2	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	114		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-07

Date Collected: 06/01/18 10:40

Client ID: SB05_7-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/07/18 13:55

Analyst: KD

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	15	2.5	1
1,1-Dichloroethane	ND		ug/kg	2.3	0.41	1
Chloroform	ND		ug/kg	2.3	0.56	1
Carbon tetrachloride	ND		ug/kg	1.5	0.52	1
1,2-Dichloropropane	ND		ug/kg	5.3	0.35	1
Dibromochloromethane	ND		ug/kg	1.5	0.27	1
1,1,2-Trichloroethane	ND		ug/kg	2.3	0.48	1
Tetrachloroethene	ND		ug/kg	1.5	0.46	1
Chlorobenzene	ND		ug/kg	1.5	0.53	1
Trichlorofluoromethane	ND		ug/kg	7.6	0.64	1
1,2-Dichloroethane	ND		ug/kg	1.5	0.37	1
1,1,1-Trichloroethane	ND		ug/kg	1.5	0.53	1
Bromodichloromethane	ND		ug/kg	1.5	0.47	1
trans-1,3-Dichloropropene	ND		ug/kg	1.5	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	1.5	0.35	1
1,3-Dichloropropene, Total	ND		ug/kg	1.5	0.32	1
1,1-Dichloropropene	ND		ug/kg	7.6	0.50	1
Bromoform	ND		ug/kg	6.1	0.36	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.5	0.45	1
Benzene	ND		ug/kg	1.5	0.29	1
Toluene	ND		ug/kg	2.3	0.30	1
Ethylbenzene	ND		ug/kg	1.5	0.26	1
Chloromethane	ND		ug/kg	7.6	0.66	1
Bromomethane	ND		ug/kg	3.0	0.51	1
Vinyl chloride	ND		ug/kg	3.0	0.48	1
Chloroethane	ND		ug/kg	3.0	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.5	0.57	1
trans-1,2-Dichloroethene	ND		ug/kg	2.3	0.37	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-07**Date Collected:** 06/01/18 10:40**Client ID:** SB05_7-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	1.5	0.46	1
1,2-Dichlorobenzene	ND		ug/kg	7.6	0.28	1
1,3-Dichlorobenzene	ND		ug/kg	7.6	0.33	1
1,4-Dichlorobenzene	ND		ug/kg	7.6	0.28	1
Methyl tert butyl ether	ND		ug/kg	3.0	0.23	1
p/m-Xylene	ND		ug/kg	3.0	0.53	1
o-Xylene	ND		ug/kg	3.0	0.51	1
Xylenes, Total	ND		ug/kg	3.0	0.51	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	0.52	1
1,2-Dichloroethene, Total	ND		ug/kg	1.5	0.37	1
Dibromomethane	ND		ug/kg	15	0.36	1
Styrene	ND		ug/kg	3.0	0.61	1
Dichlorodifluoromethane	ND		ug/kg	15	0.76	1
Acetone	9.2	J	ug/kg	15	3.5	1
Carbon disulfide	ND		ug/kg	15	1.7	1
2-Butanone	ND		ug/kg	15	1.0	1
Vinyl acetate	ND		ug/kg	15	0.23	1
4-Methyl-2-pentanone	ND		ug/kg	15	0.37	1
1,2,3-Trichloropropane	ND		ug/kg	15	0.27	1
2-Hexanone	ND		ug/kg	15	1.0	1
Bromochloromethane	ND		ug/kg	7.6	0.54	1
2,2-Dichloropropane	ND		ug/kg	7.6	0.68	1
1,2-Dibromoethane	ND		ug/kg	6.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	7.6	0.28	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.5	0.48	1
Bromobenzene	ND		ug/kg	7.6	0.33	1
n-Butylbenzene	ND		ug/kg	1.5	0.35	1
sec-Butylbenzene	ND		ug/kg	1.5	0.33	1
tert-Butylbenzene	ND		ug/kg	7.6	0.38	1
o-Chlorotoluene	ND		ug/kg	7.6	0.34	1
p-Chlorotoluene	ND		ug/kg	7.6	0.28	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	7.6	0.60	1
Hexachlorobutadiene	ND		ug/kg	7.6	0.53	1
Isopropylbenzene	ND		ug/kg	1.5	0.30	1
p-Isopropyltoluene	ND		ug/kg	1.5	0.31	1
Naphthalene	ND		ug/kg	7.6	0.21	1
Acrylonitrile	ND		ug/kg	15	0.78	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-07**Date Collected:** 06/01/18 10:40**Client ID:** SB05_7-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.5	0.33	1
1,2,3-Trichlorobenzene	ND		ug/kg	7.6	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	7.6	0.33	1
1,3,5-Trimethylbenzene	ND		ug/kg	7.6	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	7.6	0.28	1
1,4-Dioxane	ND		ug/kg	61	22.	1
p-Diethylbenzene	ND		ug/kg	6.1	6.1	1
p-Ethyltoluene	ND		ug/kg	6.1	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	6.1	0.24	1
Ethyl ether	ND		ug/kg	7.6	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.6	0.60	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	110		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-08

Date Collected: 06/01/18 10:56

Client ID: SB05_11-12

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/07/18 14:21

Analyst: KD

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	8.8	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.24	1
Chloroform	ND		ug/kg	1.3	0.33	1
Carbon tetrachloride	ND		ug/kg	0.88	0.30	1
1,2-Dichloropropane	ND		ug/kg	3.1	0.20	1
Dibromochloromethane	ND		ug/kg	0.88	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.28	1
Tetrachloroethene	ND		ug/kg	0.88	0.27	1
Chlorobenzene	ND		ug/kg	0.88	0.31	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.37	1
1,2-Dichloroethane	ND		ug/kg	0.88	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.88	0.31	1
Bromodichloromethane	ND		ug/kg	0.88	0.27	1
trans-1,3-Dichloropropene	ND		ug/kg	0.88	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.88	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.88	0.18	1
1,1-Dichloropropene	ND		ug/kg	4.4	0.29	1
Bromoform	ND		ug/kg	3.5	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.88	0.26	1
Benzene	ND		ug/kg	0.88	0.17	1
Toluene	ND		ug/kg	1.3	0.17	1
Ethylbenzene	ND		ug/kg	0.88	0.15	1
Chloromethane	ND		ug/kg	4.4	0.38	1
Bromomethane	ND		ug/kg	1.8	0.30	1
Vinyl chloride	ND		ug/kg	1.8	0.28	1
Chloroethane	ND		ug/kg	1.8	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.88	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.21	1

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-08

Date Collected: 06/01/18 10:56

Client ID: SB05_11-12

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.88	0.27	1
1,2-Dichlorobenzene	ND		ug/kg	4.4	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.4	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	4.4	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.13	1
p/m-Xylene	ND		ug/kg	1.8	0.31	1
o-Xylene	ND		ug/kg	1.8	0.30	1
Xylenes, Total	ND		ug/kg	1.8	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	0.88	0.30	1
1,2-Dichloroethene, Total	ND		ug/kg	0.88	0.21	1
Dibromomethane	ND		ug/kg	8.8	0.21	1
Styrene	ND		ug/kg	1.8	0.35	1
Dichlorodifluoromethane	ND		ug/kg	8.8	0.44	1
Acetone	ND		ug/kg	8.8	2.0	1
Carbon disulfide	ND		ug/kg	8.8	0.97	1
2-Butanone	ND		ug/kg	8.8	0.61	1
Vinyl acetate	ND		ug/kg	8.8	0.13	1
4-Methyl-2-pentanone	ND		ug/kg	8.8	0.22	1
1,2,3-Trichloropropane	ND		ug/kg	8.8	0.16	1
2-Hexanone	ND		ug/kg	8.8	0.59	1
Bromochloromethane	ND		ug/kg	4.4	0.31	1
2,2-Dichloropropane	ND		ug/kg	4.4	0.40	1
1,2-Dibromoethane	ND		ug/kg	3.5	0.18	1
1,3-Dichloropropane	ND		ug/kg	4.4	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.88	0.28	1
Bromobenzene	ND		ug/kg	4.4	0.19	1
n-Butylbenzene	ND		ug/kg	0.88	0.20	1
sec-Butylbenzene	ND		ug/kg	0.88	0.19	1
tert-Butylbenzene	ND		ug/kg	4.4	0.22	1
o-Chlorotoluene	ND		ug/kg	4.4	0.19	1
p-Chlorotoluene	ND		ug/kg	4.4	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	0.35	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.31	1
Isopropylbenzene	ND		ug/kg	0.88	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.88	0.18	1
Naphthalene	ND		ug/kg	4.4	0.12	1
Acrylonitrile	ND		ug/kg	8.8	0.45	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-08**Date Collected:** 06/01/18 10:56**Client ID:** SB05_11-12**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.88	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.4	0.22	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.4	0.19	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.4	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.4	0.16	1
1,4-Dioxane	ND		ug/kg	35	13.	1
p-Diethylbenzene	ND		ug/kg	3.5	3.5	1
p-Ethyltoluene	ND		ug/kg	3.5	0.21	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.5	0.14	1
Ethyl ether	ND		ug/kg	4.4	0.23	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.4	0.34	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	111		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-09

Date Collected: 06/01/18 12:02

Client ID: SB06_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/07/18 14:47

Analyst: KD

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.8	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.26	1
Chloroform	ND		ug/kg	1.5	0.36	1
Carbon tetrachloride	ND		ug/kg	0.98	0.34	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.98	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31	1
Tetrachloroethene	ND		ug/kg	0.98	0.30	1
Chlorobenzene	ND		ug/kg	0.98	0.34	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.41	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.98	0.34	1
Bromodichloromethane	ND		ug/kg	0.98	0.30	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.98	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.98	0.20	1
1,1-Dichloropropene	ND		ug/kg	4.9	0.32	1
Bromoform	ND		ug/kg	3.9	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.98	0.29	1
Benzene	ND		ug/kg	0.98	0.19	1
Toluene	ND		ug/kg	1.5	0.19	1
Ethylbenzene	ND		ug/kg	0.98	0.17	1
Chloromethane	ND		ug/kg	4.9	0.43	1
Bromomethane	ND		ug/kg	2.0	0.33	1
Vinyl chloride	ND		ug/kg	2.0	0.31	1
Chloroethane	ND		ug/kg	2.0	0.31	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-09**Date Collected:** 06/01/18 12:02**Client ID:** SB06_0-2**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.98	0.30	1
1,2-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	4.9	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.15	1
p/m-Xylene	ND		ug/kg	2.0	0.34	1
o-Xylene	ND		ug/kg	2.0	0.33	1
Xylenes, Total	ND		ug/kg	2.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.34	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.24	1
Dibromomethane	ND		ug/kg	9.8	0.24	1
Styrene	ND		ug/kg	2.0	0.39	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.49	1
Acetone	ND		ug/kg	9.8	2.2	1
Carbon disulfide	ND		ug/kg	9.8	1.1	1
2-Butanone	ND		ug/kg	9.8	0.68	1
Vinyl acetate	ND		ug/kg	9.8	0.15	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	9.8	0.17	1
2-Hexanone	ND		ug/kg	9.8	0.66	1
Bromochloromethane	ND		ug/kg	4.9	0.35	1
2,2-Dichloropropane	ND		ug/kg	4.9	0.44	1
1,2-Dibromoethane	ND		ug/kg	3.9	0.20	1
1,3-Dichloropropane	ND		ug/kg	4.9	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.98	0.31	1
Bromobenzene	ND		ug/kg	4.9	0.22	1
n-Butylbenzene	ND		ug/kg	0.98	0.22	1
sec-Butylbenzene	ND		ug/kg	0.98	0.21	1
tert-Butylbenzene	ND		ug/kg	4.9	0.24	1
o-Chlorotoluene	ND		ug/kg	4.9	0.22	1
p-Chlorotoluene	ND		ug/kg	4.9	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	0.39	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.34	1
Isopropylbenzene	ND		ug/kg	0.98	0.19	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.20	1
Naphthalene	ND		ug/kg	4.9	0.14	1
Acrylonitrile	ND		ug/kg	9.8	0.50	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-09**Date Collected:** 06/01/18 12:02**Client ID:** SB06_0-2**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.98	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.9	0.25	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.9	0.21	1
1,3,5-Trimethylbenzene	1.3	J	ug/kg	4.9	0.16	1
1,2,4-Trimethylbenzene	2.5	J	ug/kg	4.9	0.18	1
1,4-Dioxane	ND		ug/kg	39	14.	1
p-Diethylbenzene	ND		ug/kg	3.9	3.9	1
p-Ethyltoluene	0.62	J	ug/kg	3.9	0.23	1
1,2,4,5-Tetramethylbenzene	0.36	J	ug/kg	3.9	0.15	1
Ethyl ether	ND		ug/kg	4.9	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	0.38	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	127		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	111		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-10

Date Collected: 06/01/18 12:08

Client ID: SB06_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/07/18 15:13

Analyst: KD

Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.9	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.27	1
Chloroform	ND		ug/kg	1.5	0.37	1
Carbon tetrachloride	ND		ug/kg	0.99	0.34	1
1,2-Dichloropropane	ND		ug/kg	3.5	0.22	1
Dibromochloromethane	ND		ug/kg	0.99	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31	1
Tetrachloroethene	ND		ug/kg	0.99	0.30	1
Chlorobenzene	ND		ug/kg	0.99	0.34	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.41	1
1,2-Dichloroethane	ND		ug/kg	0.99	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.99	0.35	1
Bromodichloromethane	ND		ug/kg	0.99	0.30	1
trans-1,3-Dichloropropene	ND		ug/kg	0.99	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.99	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.99	0.20	1
1,1-Dichloropropene	ND		ug/kg	5.0	0.32	1
Bromoform	ND		ug/kg	4.0	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.99	0.30	1
Benzene	ND		ug/kg	0.99	0.19	1
Toluene	ND		ug/kg	1.5	0.19	1
Ethylbenzene	ND		ug/kg	0.99	0.17	1
Chloromethane	ND		ug/kg	5.0	0.43	1
Bromomethane	ND		ug/kg	2.0	0.33	1
Vinyl chloride	ND		ug/kg	2.0	0.31	1
Chloroethane	ND		ug/kg	2.0	0.31	1
1,1-Dichloroethene	ND		ug/kg	0.99	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24	1

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-10

Date Collected: 06/01/18 12:08

Client ID: SB06_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.99	0.30	1
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.15	1
p/m-Xylene	ND		ug/kg	2.0	0.35	1
o-Xylene	ND		ug/kg	2.0	0.33	1
Xylenes, Total	ND		ug/kg	2.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	0.99	0.34	1
1,2-Dichloroethene, Total	ND		ug/kg	0.99	0.24	1
Dibromomethane	ND		ug/kg	9.9	0.24	1
Styrene	ND		ug/kg	2.0	0.40	1
Dichlorodifluoromethane	ND		ug/kg	9.9	0.50	1
Acetone	61		ug/kg	9.9	2.3	1
Carbon disulfide	ND		ug/kg	9.9	1.1	1
2-Butanone	ND		ug/kg	9.9	0.68	1
Vinyl acetate	ND		ug/kg	9.9	0.15	1
4-Methyl-2-pentanone	ND		ug/kg	9.9	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	9.9	0.18	1
2-Hexanone	ND		ug/kg	9.9	0.66	1
Bromochloromethane	ND		ug/kg	5.0	0.35	1
2,2-Dichloropropane	ND		ug/kg	5.0	0.44	1
1,2-Dibromoethane	ND		ug/kg	4.0	0.20	1
1,3-Dichloropropane	ND		ug/kg	5.0	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.99	0.31	1
Bromobenzene	ND		ug/kg	5.0	0.22	1
n-Butylbenzene	ND		ug/kg	0.99	0.22	1
sec-Butylbenzene	ND		ug/kg	0.99	0.21	1
tert-Butylbenzene	ND		ug/kg	5.0	0.24	1
o-Chlorotoluene	ND		ug/kg	5.0	0.22	1
p-Chlorotoluene	ND		ug/kg	5.0	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.39	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.34	1
Isopropylbenzene	ND		ug/kg	0.99	0.19	1
p-Isopropyltoluene	ND		ug/kg	0.99	0.20	1
Naphthalene	1.7	J	ug/kg	5.0	0.14	1
Acrylonitrile	ND		ug/kg	9.9	0.51	1

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-10

Date Collected: 06/01/18 12:08

Client ID: SB06_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.99	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.21	1
1,3,5-Trimethylbenzene	1.0	J	ug/kg	5.0	0.16	1
1,2,4-Trimethylbenzene	3.1	J	ug/kg	5.0	0.18	1
1,4-Dioxane	ND		ug/kg	40	14.	1
p-Diethylbenzene	ND		ug/kg	4.0	4.0	1
p-Ethyltoluene	0.55	J	ug/kg	4.0	0.23	1
1,2,4,5-Tetramethylbenzene	0.52	J	ug/kg	4.0	0.15	1
Ethyl ether	ND		ug/kg	5.0	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.39	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	132	Q	70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-11

Date Collected: 06/01/18 12:15

Client ID: SB06_12-14

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 06/07/18 15:39

Analyst: KD

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.8	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.26	1
Chloroform	ND		ug/kg	1.5	0.36	1
Carbon tetrachloride	ND		ug/kg	0.98	0.34	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.98	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31	1
Tetrachloroethene	ND		ug/kg	0.98	0.30	1
Chlorobenzene	ND		ug/kg	0.98	0.34	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.41	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.98	0.34	1
Bromodichloromethane	ND		ug/kg	0.98	0.30	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.98	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.98	0.20	1
1,1-Dichloropropene	ND		ug/kg	4.9	0.32	1
Bromoform	ND		ug/kg	3.9	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.98	0.29	1
Benzene	ND		ug/kg	0.98	0.19	1
Toluene	ND		ug/kg	1.5	0.19	1
Ethylbenzene	ND		ug/kg	0.98	0.17	1
Chloromethane	ND		ug/kg	4.9	0.43	1
Bromomethane	ND		ug/kg	2.0	0.33	1
Vinyl chloride	ND		ug/kg	2.0	0.31	1
Chloroethane	ND		ug/kg	2.0	0.31	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.36	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24	1

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-11

Date Collected: 06/01/18 12:15

Client ID: SB06_12-14

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	0.98	0.30	1
1,2-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	4.9	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
Methyl tert butyl ether	1.4	J	ug/kg	2.0	0.15	1
p/m-Xylene	ND		ug/kg	2.0	0.34	1
o-Xylene	ND		ug/kg	2.0	0.33	1
Xylenes, Total	ND		ug/kg	2.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.34	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.24	1
Dibromomethane	ND		ug/kg	9.8	0.23	1
Styrene	ND		ug/kg	2.0	0.39	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.49	1
Acetone	ND		ug/kg	9.8	2.2	1
Carbon disulfide	ND		ug/kg	9.8	1.1	1
2-Butanone	ND		ug/kg	9.8	0.68	1
Vinyl acetate	ND		ug/kg	9.8	0.15	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	9.8	0.17	1
2-Hexanone	ND		ug/kg	9.8	0.65	1
Bromochloromethane	ND		ug/kg	4.9	0.35	1
2,2-Dichloropropane	ND		ug/kg	4.9	0.44	1
1,2-Dibromoethane	ND		ug/kg	3.9	0.20	1
1,3-Dichloropropane	ND		ug/kg	4.9	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.98	0.31	1
Bromobenzene	ND		ug/kg	4.9	0.21	1
n-Butylbenzene	ND		ug/kg	0.98	0.22	1
sec-Butylbenzene	ND		ug/kg	0.98	0.21	1
tert-Butylbenzene	ND		ug/kg	4.9	0.24	1
o-Chlorotoluene	ND		ug/kg	4.9	0.22	1
p-Chlorotoluene	ND		ug/kg	4.9	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	0.39	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.34	1
Isopropylbenzene	ND		ug/kg	0.98	0.19	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.20	1
Naphthalene	ND		ug/kg	4.9	0.14	1
Acrylonitrile	ND		ug/kg	9.8	0.50	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-11**Date Collected:** 06/01/18 12:15**Client ID:** SB06_12-14**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.98	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.9	0.25	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.9	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.9	0.16	1
1,2,4-Trimethylbenzene	0.22	J	ug/kg	4.9	0.18	1
1,4-Dioxane	ND		ug/kg	39	14.	1
p-Diethylbenzene	ND		ug/kg	3.9	3.9	1
p-Ethyltoluene	ND		ug/kg	3.9	0.23	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.9	0.15	1
Ethyl ether	ND		ug/kg	4.9	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	0.38	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	108		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-12
 Client ID: SBDUP02_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 06/07/18 16:05
 Analyst: KD
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	12	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.32	1
Chloroform	ND		ug/kg	1.8	0.44	1
Carbon tetrachloride	ND		ug/kg	1.2	0.41	1
1,2-Dichloropropane	ND		ug/kg	4.2	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.21	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.37	1
Tetrachloroethene	ND		ug/kg	1.2	0.36	1
Chlorobenzene	ND		ug/kg	1.2	0.42	1
Trichlorofluoromethane	ND		ug/kg	6.0	0.50	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.42	1
Bromodichloromethane	ND		ug/kg	1.2	0.37	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.28	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.25	1
1,1-Dichloropropene	ND		ug/kg	6.0	0.39	1
Bromoform	ND		ug/kg	4.8	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.36	1
Benzene	ND		ug/kg	1.2	0.23	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.20	1
Chloromethane	ND		ug/kg	6.0	0.52	1
Bromomethane	ND		ug/kg	2.4	0.40	1
Vinyl chloride	ND		ug/kg	2.4	0.38	1
Chloroethane	ND		ug/kg	2.4	0.38	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.44	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.29	1

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-12
 Client ID: SBDUP02_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Trichloroethene	ND		ug/kg	1.2	0.36	1
1,2-Dichlorobenzene	ND		ug/kg	6.0	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	6.0	0.26	1
1,4-Dichlorobenzene	ND		ug/kg	6.0	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.18	1
p/m-Xylene	ND		ug/kg	2.4	0.42	1
o-Xylene	ND		ug/kg	2.4	0.40	1
Xylenes, Total	ND		ug/kg	2.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.41	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.29	1
Dibromomethane	ND		ug/kg	12	0.28	1
Styrene	ND		ug/kg	2.4	0.48	1
Dichlorodifluoromethane	ND		ug/kg	12	0.60	1
Acetone	7.4	J	ug/kg	12	2.7	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.82	1
Vinyl acetate	ND		ug/kg	12	0.18	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.21	1
2-Hexanone	ND		ug/kg	12	0.80	1
Bromochloromethane	ND		ug/kg	6.0	0.43	1
2,2-Dichloropropane	ND		ug/kg	6.0	0.54	1
1,2-Dibromoethane	ND		ug/kg	4.8	0.24	1
1,3-Dichloropropane	ND		ug/kg	6.0	0.22	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.38	1
Bromobenzene	ND		ug/kg	6.0	0.26	1
n-Butylbenzene	ND		ug/kg	1.2	0.27	1
sec-Butylbenzene	ND		ug/kg	1.2	0.26	1
tert-Butylbenzene	ND		ug/kg	6.0	0.30	1
o-Chlorotoluene	ND		ug/kg	6.0	0.26	1
p-Chlorotoluene	ND		ug/kg	6.0	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.0	0.47	1
Hexachlorobutadiene	ND		ug/kg	6.0	0.42	1
Isopropylbenzene	ND		ug/kg	1.2	0.23	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.24	1
Naphthalene	ND		ug/kg	6.0	0.16	1
Acrylonitrile	ND		ug/kg	12	0.61	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-12
Client ID: SBDUP02_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.26	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.0	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.0	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.0	0.22	1
1,4-Dioxane	ND		ug/kg	48	17.	1
p-Diethylbenzene	ND		ug/kg	4.8	4.8	1
p-Ethyltoluene	ND		ug/kg	4.8	0.28	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.8	0.19	1
Ethyl ether	ND		ug/kg	6.0	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	0.47	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	109		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-13
 Client ID: TW03_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 11:30
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 06/07/18 11:57
 Analyst: PD

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	46		ug/l	0.50	0.16	1
Toluene	4.0		ug/l	2.5	0.70	1
Ethylbenzene	13		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: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-13**Date Collected:** 06/01/18 11:30**Client ID:** TW03_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Refer to COC**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	2.5		ug/l	2.5	0.70	1
p/m-Xylene	5.0		ug/l	2.5	0.70	1
o-Xylene	1.9	J	ug/l	2.5	0.70	1
Xylenes, Total	6.9	J	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	7.5		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	11		ug/l	2.5	0.70	1
sec-Butylbenzene	8.5		ug/l	2.5	0.70	1
tert-Butylbenzene	0.70	J	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	34		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	32		ug/l	2.5	0.70	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-13**Date Collected:** 06/01/18 11:30**Client ID:** TW03_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Refer to COC**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	79		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	1.0	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	49		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	14		ug/l	2.0	0.70	1
p-Ethyltoluene	5.4		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	55		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	133	Q	70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	94		70-130

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-14
 Client ID: TW05_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 13:30
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 06/06/18 23:43
 Analyst: NLK

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	0.73	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.88		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-14**Date Collected:** 06/01/18 13:30**Client ID:** TW05_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Refer to COC**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	0.95	J	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	1.8	J	ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	1.8	J	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: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-14**Date Collected:** 06/01/18 13:30**Client ID:** TW05_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Refer to COC**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	107		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-15
Client ID: TWDUP01_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 06/07/18 00:11
Analyst: NLK

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	0.70	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.93		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-15
Client ID: TWDUP01_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Refer to COC

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	0.98	J	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	1.9	J	ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	1.9	J	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: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-15
 Client ID: TWDUP01_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 Field Prep: Refer to COC

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	104		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	98		70-130

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-16
 Client ID: GWTB01_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 06/07/18 00:38
 Analyst: NLK

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: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-16
Client ID: GWTB01_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
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: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-16
 Client ID: GWTB01_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 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	103		70-130
Dibromofluoromethane	98		70-130

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 20:27
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,14-16 Batch: WG1123465-5					
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: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 20:27
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,14-16 Batch: WG1123465-5					
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: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/18 20:27
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,14-16 Batch: WG1123465-5					
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	101		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	98		70-130

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/07/18 11:28
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1123557-5					
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: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/07/18 11:28
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1123557-5					
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: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/07/18 11:28
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1123557-5					
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	124		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	99		70-130

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/07/18 08:18
 Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 04-12 Batch: WG1123639-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.21
1,1-Dichloropropene	ND		ug/kg	5.0	0.33
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	0.45	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/07/18 08:18
 Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 04-12 Batch: WG1123639-5					
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
Xylenes, Total	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.24
Dibromomethane	ND		ug/kg	10	0.24
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
Vinyl acetate	ND		ug/kg	10	0.15
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.18
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
2,2-Dichloropropane	ND		ug/kg	5.0	0.45
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
1,3-Dichloropropane	ND		ug/kg	5.0	0.18
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.22
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
o-Chlorotoluene	ND		ug/kg	5.0	0.22

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/07/18 08:18
 Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 04-12 Batch: WG1123639-5					
p-Chlorotoluene	ND		ug/kg	5.0	0.18
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Hexachlorobutadiene	ND		ug/kg	5.0	0.35
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
Acrylonitrile	ND		ug/kg	10	0.51
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
1,4-Dioxane	ND		ug/kg	40	14.
p-Diethylbenzene	ND		ug/kg	4.0	4.0
p-Ethyltoluene	ND		ug/kg	4.0	0.23
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.16
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	117		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	109		70-130

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/08/18 08:12
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-03 Batch: WG1123948-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.21
1,1-Dichloropropene	ND		ug/kg	5.0	0.33
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/08/18 08:12
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-03 Batch: WG1123948-5					
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
Xylenes, Total	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.24
Dibromomethane	ND		ug/kg	10	0.24
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
Vinyl acetate	ND		ug/kg	10	0.15
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.18
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
2,2-Dichloropropane	ND		ug/kg	5.0	0.45
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
1,3-Dichloropropane	ND		ug/kg	5.0	0.18
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.22
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
o-Chlorotoluene	ND		ug/kg	5.0	0.22

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/08/18 08:12
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-03 Batch: WG1123948-5					
p-Chlorotoluene	ND		ug/kg	5.0	0.18
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Hexachlorobutadiene	ND		ug/kg	5.0	0.35
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
Acrylonitrile	ND		ug/kg	10	0.51
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
1,4-Dioxane	ND		ug/kg	40	14.
p-Diethylbenzene	ND		ug/kg	4.0	4.0
p-Ethyltoluene	ND		ug/kg	4.0	0.23
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.16
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	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	107		70-130

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/11/18 08:36
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 03 Batch: WG1124649-5					
Methylene chloride	ND		ug/kg	500	82.
1,1-Dichloroethane	ND		ug/kg	75	14.
Chloroform	ND		ug/kg	75	18.
Carbon tetrachloride	ND		ug/kg	50	17.
1,2-Dichloropropane	ND		ug/kg	180	11.
Dibromochloromethane	ND		ug/kg	50	8.8
2-Chloroethylvinyl ether	ND		ug/kg	1000	31.
1,1,2-Trichloroethane	ND		ug/kg	75	16.
Tetrachloroethene	ND		ug/kg	50	15.
Chlorobenzene	ND		ug/kg	50	17.
Trichlorofluoromethane	ND		ug/kg	250	21.
1,2-Dichloroethane	ND		ug/kg	50	12.
1,1,1-Trichloroethane	ND		ug/kg	50	18.
Bromodichloromethane	ND		ug/kg	50	15.
trans-1,3-Dichloropropene	ND		ug/kg	50	10.
cis-1,3-Dichloropropene	ND		ug/kg	50	12.
1,3-Dichloropropene, Total	ND		ug/kg	50	10.
1,1-Dichloropropene	ND		ug/kg	250	16.
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	15.
Benzene	ND		ug/kg	50	9.6
Toluene	40	J	ug/kg	75	9.8
Ethylbenzene	ND		ug/kg	50	8.5
Chloromethane	ND		ug/kg	250	22.
Bromomethane	ND		ug/kg	100	17.
Vinyl chloride	ND		ug/kg	100	16.
Chloroethane	ND		ug/kg	100	16.
1,1-Dichloroethene	ND		ug/kg	50	19.
trans-1,2-Dichloroethene	ND		ug/kg	75	12.

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/11/18 08:36
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 03 Batch: WG1124649-5					
Trichloroethene	ND		ug/kg	50	15.
1,2-Dichlorobenzene	ND		ug/kg	250	9.1
1,3-Dichlorobenzene	ND		ug/kg	250	11.
1,4-Dichlorobenzene	ND		ug/kg	250	9.1
Methyl tert butyl ether	ND		ug/kg	100	7.6
p/m-Xylene	ND		ug/kg	100	18.
o-Xylene	ND		ug/kg	100	17.
Xylene (Total)	ND		ug/kg	100	17.
cis-1,2-Dichloroethene	ND		ug/kg	50	17.
1,2-Dichloroethene (total)	ND		ug/kg	50	12.
Dibromomethane	ND		ug/kg	500	12.
Styrene	ND		ug/kg	100	20.
Dichlorodifluoromethane	ND		ug/kg	500	25.
Acetone	ND		ug/kg	500	110
Carbon disulfide	ND		ug/kg	500	55.
2-Butanone	ND		ug/kg	500	34.
Vinyl acetate	ND		ug/kg	500	7.6
4-Methyl-2-pentanone	ND		ug/kg	500	12.
1,2,3-Trichloropropane	ND		ug/kg	500	8.8
2-Hexanone	ND		ug/kg	500	33.
Bromochloromethane	ND		ug/kg	250	18.
2,2-Dichloropropane	ND		ug/kg	250	22.
1,2-Dibromoethane	ND		ug/kg	200	10.
1,3-Dichloropropane	ND		ug/kg	250	9.2
1,1,1,2-Tetrachloroethane	ND		ug/kg	50	16.
Bromobenzene	ND		ug/kg	250	11.
n-Butylbenzene	ND		ug/kg	50	11.
sec-Butylbenzene	ND		ug/kg	50	11.
tert-Butylbenzene	ND		ug/kg	250	12.

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/11/18 08:36
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 03 Batch: WG1124649-5					
o-Chlorotoluene	ND		ug/kg	250	11.
p-Chlorotoluene	ND		ug/kg	250	9.2
1,2-Dibromo-3-chloropropane	ND		ug/kg	250	20.
Hexachlorobutadiene	ND		ug/kg	250	17.
Isopropylbenzene	ND		ug/kg	50	9.7
p-Isopropyltoluene	ND		ug/kg	50	10.
Naphthalene	ND		ug/kg	250	6.9
Acrylonitrile	ND		ug/kg	500	26.
Isopropyl Ether	ND		ug/kg	200	14.
tert-Butyl Alcohol	ND		ug/kg	3000	150
n-Propylbenzene	ND		ug/kg	50	11.
1,2,3-Trichlorobenzene	ND		ug/kg	250	12.
1,2,4-Trichlorobenzene	ND		ug/kg	250	11.
1,3,5-Trimethylbenzene	ND		ug/kg	250	8.0
1,2,4-Trimethylbenzene	ND		ug/kg	250	9.3
Methyl Acetate	ND		ug/kg	1000	23.
Ethyl Acetate	ND		ug/kg	1000	100
Acrolein	ND		ug/kg	1200	400
Cyclohexane	ND		ug/kg	1000	22.
1,4-Dioxane	ND		ug/kg	2000	720
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	1000	26.
1,4-Diethylbenzene	ND		ug/kg	200	200
4-Ethyltoluene	ND		ug/kg	200	12.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	200	7.8
Tetrahydrofuran	ND		ug/kg	1000	50.
Ethyl ether	ND		ug/kg	250	13.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	20.
Methyl cyclohexane	ND		ug/kg	200	12.
Ethyl-Tert-Butyl-Ether	ND		ug/kg	200	8.9

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 06/11/18 08:36

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 03 Batch: WG1124649-5					
Tertiary-Amyl Methyl Ether	ND		ug/kg	200	12.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,14-16 Batch: WG1123465-3 WG1123465-4								
Methylene chloride	83		84		70-130	1		20
1,1-Dichloroethane	81		83		70-130	2		20
Chloroform	81		83		70-130	2		20
Carbon tetrachloride	83		85		63-132	2		20
1,2-Dichloropropane	81		83		70-130	2		20
Dibromochloromethane	90		92		63-130	2		20
1,1,2-Trichloroethane	91		96		70-130	5		20
Tetrachloroethene	94		93		70-130	1		20
Chlorobenzene	89		90		75-130	1		20
Trichlorofluoromethane	85		84		62-150	1		20
1,2-Dichloroethane	78		82		70-130	5		20
1,1,1-Trichloroethane	83		85		67-130	2		20
Bromodichloromethane	80		83		67-130	4		20
trans-1,3-Dichloropropene	93		95		70-130	2		20
cis-1,3-Dichloropropene	83		84		70-130	1		20
1,1-Dichloropropene	84		86		70-130	2		20
Bromoform	98		100		54-136	2		20
1,1,2,2-Tetrachloroethane	95		99		67-130	4		20
Benzene	88		91		70-130	3		20
Toluene	89		91		70-130	2		20
Ethylbenzene	91		93		70-130	2		20
Chloromethane	86		90		64-130	5		20
Bromomethane	89		88		39-139	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,14-16 Batch: WG1123465-3 WG1123465-4								
Vinyl chloride	85		84		55-140	1		20
Chloroethane	86		90		55-138	5		20
1,1-Dichloroethene	88		89		61-145	1		20
trans-1,2-Dichloroethene	86		88		70-130	2		20
Trichloroethene	81		84		70-130	4		20
1,2-Dichlorobenzene	94		96		70-130	2		20
1,3-Dichlorobenzene	95		96		70-130	1		20
1,4-Dichlorobenzene	94		96		70-130	2		20
Methyl tert butyl ether	84		88		63-130	5		20
p/m-Xylene	95		95		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	84		86		70-130	2		20
Dibromomethane	83		87		70-130	5		20
1,2,3-Trichloropropane	94		98		64-130	4		20
Acrylonitrile	82		88		70-130	7		20
Styrene	95		100		70-130	5		20
Dichlorodifluoromethane	84		83		36-147	1		20
Acetone	78		81		58-148	4		20
Carbon disulfide	85		85		51-130	0		20
2-Butanone	78		81		63-138	4		20
Vinyl acetate	81		85		70-130	5		20
4-Methyl-2-pentanone	84		89		59-130	6		20
2-Hexanone	82		88		57-130	7		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,14-16 Batch: WG1123465-3 WG1123465-4								
Bromochloromethane	89		91		70-130	2		20
2,2-Dichloropropane	91		92		63-133	1		20
1,2-Dibromoethane	92		95		70-130	3		20
1,3-Dichloropropane	90		93		70-130	3		20
1,1,1,2-Tetrachloroethane	91		93		64-130	2		20
Bromobenzene	94		95		70-130	1		20
n-Butylbenzene	95		97		53-136	2		20
sec-Butylbenzene	96		97		70-130	1		20
tert-Butylbenzene	95		97		70-130	2		20
o-Chlorotoluene	80		90		70-130	12		20
p-Chlorotoluene	95		95		70-130	0		20
1,2-Dibromo-3-chloropropane	94		97		41-144	3		20
Hexachlorobutadiene	91		92		63-130	1		20
Isopropylbenzene	95		96		70-130	1		20
p-Isopropyltoluene	97		98		70-130	1		20
Naphthalene	91		97		70-130	6		20
n-Propylbenzene	95		96		69-130	1		20
1,2,3-Trichlorobenzene	91		94		70-130	3		20
1,2,4-Trichlorobenzene	92		93		70-130	1		20
1,3,5-Trimethylbenzene	97		97		64-130	0		20
1,2,4-Trimethylbenzene	92		93		70-130	1		20
1,4-Dioxane	66		72		56-162	9		20
p-Diethylbenzene	95		97		70-130	2		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,14-16 Batch: WG1123465-3 WG1123465-4								
p-Ethyltoluene	98		98		70-130	0		20
1,2,4,5-Tetramethylbenzene	95		96		70-130	1		20
Ethyl ether	84		87		59-134	4		20
trans-1,4-Dichloro-2-butene	85		89		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		98		70-130
Toluene-d8	107		105		70-130
4-Bromofluorobenzene	102		101		70-130
Dibromofluoromethane	97		98		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1123557-3 WG1123557-4								
Methylene chloride	89		88		70-130	1		20
1,1-Dichloroethane	98		96		70-130	2		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	110		110		63-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	95		95		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	100		98		62-150	2		20
1,2-Dichloroethane	120		120		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	110		110		70-130	0		20
cis-1,3-Dichloropropene	110		110		70-130	0		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	110		100		54-136	10		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
Benzene	100		100		70-130	0		20
Toluene	97		97		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	71		73		64-130	3		20
Bromomethane	70		68		39-139	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1123557-3 WG1123557-4								
Vinyl chloride	72		69		55-140	4		20
Chloroethane	58		57		55-138	2		20
1,1-Dichloroethene	88		86		61-145	2		20
trans-1,2-Dichloroethene	95		92		70-130	3		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	110		100		70-130	10		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	97		96		70-130	1		20
Dibromomethane	120		110		70-130	9		20
1,2,3-Trichloropropane	120		120		64-130	0		20
Acrylonitrile	100		97		70-130	3		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	89		85		36-147	5		20
Acetone	110		100		58-148	10		20
Carbon disulfide	85		83		51-130	2		20
2-Butanone	94		87		63-138	8		20
Vinyl acetate	100		98		70-130	2		20
4-Methyl-2-pentanone	100		100		59-130	0		20
2-Hexanone	120		110		57-130	9		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1123557-3 WG1123557-4								
Bromochloromethane	100		98		70-130	2		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	110		100		70-130	10		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	110		110		64-130	0		20
Bromobenzene	110		100		70-130	10		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	110		110		70-130	0		20
o-Chlorotoluene	100		110		70-130	10		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	100		96		41-144	4		20
Hexachlorobutadiene	120		120		63-130	0		20
Isopropylbenzene	110		110		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	85		79		70-130	7		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	79		74		70-130	7		20
1,2,4-Trichlorobenzene	93		90		70-130	3		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
1,4-Dioxane	132		114		56-162	15		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1123557-3 WG1123557-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	110		110		70-130	0		20
Ethyl ether	96		92		59-134	4		20
trans-1,4-Dichloro-2-butene	140	Q	130		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	128		121		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	113		113		70-130
Dibromofluoromethane	101		101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 04-12 Batch: WG1123639-3 WG1123639-4								
Methylene chloride	104		103		70-130	1		30
1,1-Dichloroethane	115		115		70-130	0		30
Chloroform	120		121		70-130	1		30
Carbon tetrachloride	138	Q	141	Q	70-130	2		30
1,2-Dichloropropane	105		106		70-130	1		30
Dibromochloromethane	116		118		70-130	2		30
1,1,2-Trichloroethane	99		99		70-130	0		30
Tetrachloroethene	122		122		70-130	0		30
Chlorobenzene	112		114		70-130	2		30
Trichlorofluoromethane	146	Q	147	Q	70-139	1		30
1,2-Dichloroethane	123		125		70-130	2		30
1,1,1-Trichloroethane	132	Q	134	Q	70-130	2		30
Bromodichloromethane	120		123		70-130	2		30
trans-1,3-Dichloropropene	112		111		70-130	1		30
cis-1,3-Dichloropropene	112		114		70-130	2		30
1,1-Dichloropropene	122		123		70-130	1		30
Bromoform	111		111		70-130	0		30
1,1,2,2-Tetrachloroethane	103		105		70-130	2		30
Benzene	109		109		70-130	0		30
Toluene	107		106		70-130	1		30
Ethylbenzene	111		110		70-130	1		30
Chloromethane	118		116		52-130	2		30
Bromomethane	134		130		57-147	3		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 04-12 Batch: WG1123639-3 WG1123639-4								
Vinyl chloride	124		123		67-130	1		30
Chloroethane	125		125		50-151	0		30
1,1-Dichloroethene	114		117		65-135	3		30
trans-1,2-Dichloroethene	116		114		70-130	2		30
Trichloroethene	118		118		70-130	0		30
1,2-Dichlorobenzene	108		112		70-130	4		30
1,3-Dichlorobenzene	111		112		70-130	1		30
1,4-Dichlorobenzene	109		110		70-130	1		30
Methyl tert butyl ether	107		109		66-130	2		30
p/m-Xylene	110		110		70-130	0		30
o-Xylene	111		110		70-130	1		30
cis-1,2-Dichloroethene	117		115		70-130	2		30
Dibromomethane	112		116		70-130	4		30
Styrene	108		109		70-130	1		30
Dichlorodifluoromethane	137		139		30-146	1		30
Acetone	103		96		54-140	7		30
Carbon disulfide	108		107		59-130	1		30
2-Butanone	91		103		70-130	12		30
Vinyl acetate	114		114		70-130	0		30
4-Methyl-2-pentanone	97		95		70-130	2		30
1,2,3-Trichloropropane	105		111		68-130	6		30
2-Hexanone	99		101		70-130	2		30
Bromochloromethane	118		117		70-130	1		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 04-12 Batch: WG1123639-3 WG1123639-4								
2,2-Dichloropropane	126		123		70-130	2		30
1,2-Dibromoethane	112		111		70-130	1		30
1,3-Dichloropropane	109		109		69-130	0		30
1,1,1,2-Tetrachloroethane	121		120		70-130	1		30
Bromobenzene	109		112		70-130	3		30
n-Butylbenzene	110		111		70-130	1		30
sec-Butylbenzene	111		111		70-130	0		30
tert-Butylbenzene	111		113		70-130	2		30
o-Chlorotoluene	113		114		70-130	1		30
p-Chlorotoluene	107		110		70-130	3		30
1,2-Dibromo-3-chloropropane	102		110		68-130	8		30
Hexachlorobutadiene	115		119		67-130	3		30
Isopropylbenzene	111		112		70-130	1		30
p-Isopropyltoluene	111		113		70-130	2		30
Naphthalene	104		105		70-130	1		30
Acrylonitrile	109		110		70-130	1		30
n-Propylbenzene	110		110		70-130	0		30
1,2,3-Trichlorobenzene	108		111		70-130	3		30
1,2,4-Trichlorobenzene	113		114		70-130	1		30
1,3,5-Trimethylbenzene	109		110		70-130	1		30
1,2,4-Trimethylbenzene	109		110		70-130	1		30
1,4-Dioxane	90		95		65-136	5		30
p-Diethylbenzene	112		114		70-130	2		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 04-12 Batch: WG1123639-3 WG1123639-4								
p-Ethyltoluene	113		114		70-130	1		30
1,2,4,5-Tetramethylbenzene	110		111		70-130	1		30
Ethyl ether	109		111		67-130	2		30
trans-1,4-Dichloro-2-butene	107		107		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	120		120		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	110		110		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG1123948-3 WG1123948-4								
Methylene chloride	96		94		70-130	2		30
1,1-Dichloroethane	101		91		70-130	10		30
Chloroform	102		95		70-130	7		30
Carbon tetrachloride	121		106		70-130	13		30
1,2-Dichloropropane	88		92		70-130	4		30
Dibromochloromethane	110		114		70-130	4		30
1,1,2-Trichloroethane	98		101		70-130	3		30
Tetrachloroethene	99		103		70-130	4		30
Chlorobenzene	101		99		70-130	2		30
Trichlorofluoromethane	107		98		70-139	9		30
1,2-Dichloroethane	108		99		70-130	9		30
1,1,1-Trichloroethane	113		102		70-130	10		30
Bromodichloromethane	100		104		70-130	4		30
trans-1,3-Dichloropropene	100		106		70-130	6		30
cis-1,3-Dichloropropene	94		95		70-130	1		30
1,1-Dichloropropene	99		87		70-130	13		30
Bromoform	100		103		70-130	3		30
1,1,2,2-Tetrachloroethane	95		94		70-130	1		30
Benzene	96		86		70-130	11		30
Toluene	90		96		70-130	6		30
Ethylbenzene	97		95		70-130	2		30
Chloromethane	68		64		52-130	6		30
Bromomethane	97		91		57-147	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG1123948-3 WG1123948-4								
Vinyl chloride	80		74		67-130	8		30
Chloroethane	89		79		50-151	12		30
1,1-Dichloroethene	94		86		65-135	9		30
trans-1,2-Dichloroethene	97		92		70-130	5		30
Trichloroethene	105		102		70-130	3		30
1,2-Dichlorobenzene	100		102		70-130	2		30
1,3-Dichlorobenzene	104		102		70-130	2		30
1,4-Dichlorobenzene	103		100		70-130	3		30
Methyl tert butyl ether	107		99		66-130	8		30
p/m-Xylene	99		97		70-130	2		30
o-Xylene	100		96		70-130	4		30
cis-1,2-Dichloroethene	100		94		70-130	6		30
Dibromomethane	103		102		70-130	1		30
Styrene	98		95		70-130	3		30
Dichlorodifluoromethane	72		67		30-146	7		30
Acetone	100		86		54-140	15		30
Carbon disulfide	75		68		59-130	10		30
2-Butanone	90		81		70-130	11		30
Vinyl acetate	91		81		70-130	12		30
4-Methyl-2-pentanone	92		91		70-130	1		30
1,2,3-Trichloropropane	102		96		68-130	6		30
2-Hexanone	78		73		70-130	7		30
Bromochloromethane	108		101		70-130	7		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG1123948-3 WG1123948-4								
2,2-Dichloropropane	106		96		70-130	10		30
1,2-Dibromoethane	108		112		70-130	4		30
1,3-Dichloropropane	96		100		69-130	4		30
1,1,1,2-Tetrachloroethane	108		105		70-130	3		30
Bromobenzene	101		101		70-130	0		30
n-Butylbenzene	101		101		70-130	0		30
sec-Butylbenzene	103		100		70-130	3		30
tert-Butylbenzene	104		100		70-130	4		30
o-Chlorotoluene	102		98		70-130	4		30
p-Chlorotoluene	103		99		70-130	4		30
1,2-Dibromo-3-chloropropane	90		91		68-130	1		30
Hexachlorobutadiene	89		93		67-130	4		30
Isopropylbenzene	93		99		70-130	6		30
p-Isopropyltoluene	104		102		70-130	2		30
Naphthalene	98		101		70-130	3		30
Acrylonitrile	111		93		70-130	18		30
n-Propylbenzene	94		97		70-130	3		30
1,2,3-Trichlorobenzene	97		102		70-130	5		30
1,2,4-Trichlorobenzene	94		99		70-130	5		30
1,3,5-Trimethylbenzene	105		103		70-130	2		30
1,2,4-Trimethylbenzene	104		102		70-130	2		30
1,4-Dioxane	89		84		65-136	6		30
p-Diethylbenzene	100		100		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG1123948-3 WG1123948-4								
p-Ethyltoluene	99		98		70-130	1		30
1,2,4,5-Tetramethylbenzene	94		100		70-130	6		30
Ethyl ether	104		94		67-130	10		30
trans-1,4-Dichloro-2-butene	108		97		70-130	11		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		100		70-130
Toluene-d8	97		108		70-130
4-Bromofluorobenzene	94		100		70-130
Dibromofluoromethane	108		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 03 Batch: WG1124649-3 WG1124649-4								
Methylene chloride	109		106		70-130	3		30
1,1-Dichloroethane	106		102		70-130	4		30
Chloroform	104		102		70-130	2		30
Carbon tetrachloride	105		101		70-130	4		30
1,2-Dichloropropane	105		103		70-130	2		30
Dibromochloromethane	102		99		70-130	3		30
2-Chloroethylvinyl ether	105		103		70-130	2		30
1,1,2-Trichloroethane	105		103		70-130	2		30
Tetrachloroethene	103		99		70-130	4		30
Chlorobenzene	103		100		70-130	3		30
Trichlorofluoromethane	112		106		70-139	6		30
1,2-Dichloroethane	105		102		70-130	3		30
1,1,1-Trichloroethane	106		102		70-130	4		30
Bromodichloromethane	103		101		70-130	2		30
trans-1,3-Dichloropropene	105		103		70-130	2		30
cis-1,3-Dichloropropene	105		104		70-130	1		30
1,1-Dichloropropene	106		102		70-130	4		30
Bromoform	99		97		70-130	2		30
1,1,2,2-Tetrachloroethane	100		100		70-130	0		30
Benzene	103		100		70-130	3		30
Toluene	106		103		70-130	3		30
Ethylbenzene	105		102		70-130	3		30
Chloromethane	103		100		52-130	3		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 03 Batch: WG1124649-3 WG1124649-4								
Bromomethane	116		113		57-147	3		30
Vinyl chloride	106		103		67-130	3		30
Chloroethane	107		102		50-151	5		30
1,1-Dichloroethene	104		102		65-135	2		30
trans-1,2-Dichloroethene	105		102		70-130	3		30
Trichloroethene	103		100		70-130	3		30
1,2-Dichlorobenzene	102		100		70-130	2		30
1,3-Dichlorobenzene	104		100		70-130	4		30
1,4-Dichlorobenzene	102		100		70-130	2		30
Methyl tert butyl ether	104		102		66-130	2		30
p/m-Xylene	104		101		70-130	3		30
o-Xylene	104		101		70-130	3		30
cis-1,2-Dichloroethene	103		102		70-130	1		30
Dibromomethane	104		102		70-130	2		30
Styrene	106		103		70-130	3		30
Dichlorodifluoromethane	104		99		30-146	5		30
Acetone	102		98		54-140	4		30
Carbon disulfide	100		97		59-130	3		30
2-Butanone	96		93		70-130	3		30
Vinyl acetate	106		105		70-130	1		30
4-Methyl-2-pentanone	100		100		70-130	0		30
1,2,3-Trichloropropane	101		100		68-130	1		30
2-Hexanone	91		90		70-130	1		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 03 Batch: WG1124649-3 WG1124649-4								
Bromochloromethane	106		104		70-130	2		30
2,2-Dichloropropane	108		103		70-130	5		30
1,2-Dibromoethane	103		101		70-130	2		30
1,3-Dichloropropane	104		102		69-130	2		30
1,1,1,2-Tetrachloroethane	105		100		70-130	5		30
Bromobenzene	101		99		70-130	2		30
n-Butylbenzene	106		102		70-130	4		30
sec-Butylbenzene	105		101		70-130	4		30
tert-Butylbenzene	104		100		70-130	4		30
o-Chlorotoluene	119		116		70-130	3		30
p-Chlorotoluene	104		102		70-130	2		30
1,2-Dibromo-3-chloropropane	92		93		68-130	1		30
Hexachlorobutadiene	99		94		67-130	5		30
Isopropylbenzene	105		101		70-130	4		30
p-Isopropyltoluene	105		102		70-130	3		30
Naphthalene	101		99		70-130	2		30
Acrylonitrile	101		101		70-130	0		30
Isopropyl Ether	106		104		66-130	2		30
tert-Butyl Alcohol	95		96		70-130	1		30
n-Propylbenzene	105		102		70-130	3		30
1,2,3-Trichlorobenzene	103		100		70-130	3		30
1,2,4-Trichlorobenzene	105		100		70-130	5		30
1,3,5-Trimethylbenzene	105		102		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 03 Batch: WG1124649-3 WG1124649-4								
1,2,4-Trimethylbenzene	105		102		70-130	3		30
Methyl Acetate	103		103		51-146	0		30
Ethyl Acetate	104		103		70-130	1		30
Acrolein	100		97		70-130	3		30
Cyclohexane	105		103		59-142	2		30
1,4-Dioxane	101		101		65-136	0		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	107		103		50-139	4		30
1,4-Diethylbenzene	104		100		70-130	4		30
4-Ethyltoluene	105		102		70-130	3		30
1,2,4,5-Tetramethylbenzene	105		102		70-130	3		30
Tetrahydrofuran	100		99		66-130	1		30
Ethyl ether	104		102		67-130	2		30
trans-1,4-Dichloro-2-butene	104		105		70-130	1		30
Methyl cyclohexane	104		101		70-130	3		30
Ethyl-Tert-Butyl-Ether	105		104		70-130	1		30
Tertiary-Amyl Methyl Ether	103		102		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	101		100		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	99		99		70-130

SEMIVOLATILES

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-02

Date Collected: 06/01/18 12:20

Client ID: SB06_14-16

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/07/18 17:50

Analytical Date: 06/09/18 22:16

Analyst: EK

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	ND		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-02**Date Collected:** 06/01/18 12:20**Client ID:** SB06_14-16**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-02**Date Collected:** 06/01/18 12:20**Client ID:** SB06_14-16**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	76		18-120

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-03

Date Collected: 06/01/18 09:34

Client ID: SB04_1-3

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/04/18 18:33

Analytical Date: 06/08/18 21:56

Analyst: CB

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	230		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	950		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-03

Date Collected: 06/01/18 09:34

Client ID: SB04_1-3

Date Received: 06/01/18

Sample Location: MANHATTAN

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	38.	1
Benzo(a)anthracene	140		ug/kg	110	21.	1
Benzo(a)pyrene	61	J	ug/kg	150	45.	1
Benzo(b)fluoranthene	140		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	260		ug/kg	110	19.	1
Acenaphthylene	62	J	ug/kg	150	28.	1
Anthracene	58	J	ug/kg	110	36.	1
Benzo(ghi)perylene	140	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	380		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	22	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	74	J	ug/kg	150	26.	1
Pyrene	220		ug/kg	110	18.	1
Biphenyl	91	J	ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	36	J	ug/kg	180	17.	1
2-Methylnaphthalene	1400		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-03**Date Collected:** 06/01/18 09:34**Client ID:** SB04_1-3**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	25	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		25-120
Phenol-d6	60		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	23		10-136
4-Terphenyl-d14	54		18-120

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-04

Date Collected: 06/01/18 09:42

Client ID: SB04_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/04/18 18:33

Analytical Date: 06/07/18 09:18

Analyst: EK

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	150	J	ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	3600		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	450		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-04**Date Collected:** 06/01/18 09:42**Client ID:** SB04_6-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	1300		ug/kg	120	22.	1
Benzo(a)pyrene	1100		ug/kg	160	48.	1
Benzo(b)fluoranthene	1500		ug/kg	120	33.	1
Benzo(k)fluoranthene	530		ug/kg	120	32.	1
Chrysene	1500		ug/kg	120	21.	1
Acenaphthylene	340		ug/kg	160	31.	1
Anthracene	380		ug/kg	120	39.	1
Benzo(ghi)perylene	630		ug/kg	160	23.	1
Fluorene	250		ug/kg	200	19.	1
Phenanthrene	3900		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	150		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	710		ug/kg	160	28.	1
Pyrene	2800		ug/kg	120	20.	1
Biphenyl	56	J	ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	340		ug/kg	200	19.	1
2-Methylnaphthalene	210	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	950	93.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	95.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	47	J	ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	74	J	ug/kg	290	31.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-04**Date Collected:** 06/01/18 09:42**Client ID:** SB04_6-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	420		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	58		18-120

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-05

Date Collected: 06/01/18 09:55

Client ID: SB04_10-12

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/04/18 18:33

Analytical Date: 06/07/18 03:59

Analyst: EK

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	74	J	ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-05**Date Collected:** 06/01/18 09:55**Client ID:** SB04_10-12**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	38.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-05**Date Collected:** 06/01/18 09:55**Client ID:** SB04_10-12**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	60		18-120

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-06

Date Collected: 06/01/18 10:30

Client ID: SB05_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/04/18 18:33

Analytical Date: 06/07/18 07:59

Analyst: EK

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	82	J	ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	160	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-06**Date Collected:** 06/01/18 10:30**Client ID:** SB05_0-2**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	56	J	ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	51	J	ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	63	J	ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	45	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	96	J	ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	40	J	ug/kg	150	26.	1
Pyrene	87	J	ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-06**Date Collected:** 06/01/18 10:30**Client ID:** SB05_0-2**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		25-120
Phenol-d6	52		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	37		10-136
4-Terphenyl-d14	63		18-120

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-07

Client ID: SB05_7-8

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:40

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8270D

Analytical Date: 06/07/18 07:08

Analyst: EK

Percent Solids: 86%

Extraction Method: EPA 3546

Extraction Date: 06/04/18 18:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	120		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-07**Date Collected:** 06/01/18 10:40**Client ID:** SB05_7-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	63	J	ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	61	J	ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	66	J	ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	29	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	140		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	29	J	ug/kg	150	26.	1
Pyrene	120		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-07**Date Collected:** 06/01/18 10:40**Client ID:** SB05_7-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	35		10-136
4-Terphenyl-d14	69		18-120

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-08

Date Collected: 06/01/18 10:56

Client ID: SB05_11-12

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/04/18 18:33

Analytical Date: 06/07/18 04:25

Analyst: EK

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	ND		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-08**Date Collected:** 06/01/18 10:56**Client ID:** SB05_11-12**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-08**Date Collected:** 06/01/18 10:56**Client ID:** SB05_11-12**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	58		10-136
4-Terphenyl-d14	53		18-120

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-09

Date Collected: 06/01/18 12:02

Client ID: SB06_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/04/18 18:33

Analytical Date: 06/07/18 08:25

Analyst: EK

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	110		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-09**Date Collected:** 06/01/18 12:02**Client ID:** SB06_0-2**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	38.	1
Benzo(a)anthracene	52	J	ug/kg	110	20.	1
Benzo(a)pyrene	50	J	ug/kg	140	44.	1
Benzo(b)fluoranthene	75	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	72	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	39	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	78	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	40	J	ug/kg	140	25.	1
Pyrene	100	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	25	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-09**Date Collected:** 06/01/18 12:02**Client ID:** SB06_0-2**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	31		10-136
4-Terphenyl-d14	59		18-120

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-10

Date Collected: 06/01/18 12:08

Client ID: SB06_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 06/04/18 18:33

Analytical Date: 06/07/18 04:50

Analyst: EK

Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	ND		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-10**Date Collected:** 06/01/18 12:08**Client ID:** SB06_6-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	16.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-10**Date Collected:** 06/01/18 12:08**Client ID:** SB06_6-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	67		18-120

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-11**Client ID:** SB06_12-14**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 12:15**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8270D**Analytical Date:** 06/09/18 22:41**Analyst:** EK**Percent Solids:** 85%**Extraction Method:** EPA 3546**Extraction Date:** 06/09/18 08:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	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	ND		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-11**Date Collected:** 06/01/18 12:15**Client ID:** SB06_12-14**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	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	79.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		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	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	910	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	91.	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	270	30.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-11**Date Collected:** 06/01/18 12:15**Client ID:** SB06_12-14**Date Received:** 06/01/18**Sample Location:** MANHATTAN**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	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	31		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	24		10-136
4-Terphenyl-d14	54		18-120

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-12
 Client ID: SBDUP02_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 06/07/18 05:41
 Analyst: EK
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 06/04/18 18:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	ND		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-12
Client ID: SBDUP02_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
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	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-12
 Client ID: SBDUP02_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 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	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	63		10-136
4-Terphenyl-d14	58		18-120

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-13
 Client ID: TW03_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 11:30
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 06/07/18 02:43
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 06/06/18 00:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.73	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.69	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.71	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	3.1		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-13**Date Collected:** 06/01/18 11:30**Client ID:** TW03_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Refer to COC**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	3.4		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
2-Methylphenol	ND		ug/l	5.0	1.0	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Benzoic Acid	ND		ug/l	50	13.	1
Benzyl Alcohol	ND		ug/l	2.0	0.72	1
Carbazole	2.2		ug/l	2.0	0.63	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	88		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	91		41-149

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-13
 Client ID: TW03_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 11:30
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 06/07/18 13:27
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 06/06/18 00:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	3.8		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.34		ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	9.8		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	0.05	J	ug/l	0.10	0.04	1
Acenaphthylene	0.71		ug/l	0.10	0.04	1
Anthracene	0.46		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	6.5		ug/l	0.10	0.04	1
Phenanthrene	6.0		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	0.47		ug/l	0.10	0.04	1
2-Methylnaphthalene	32		ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-13

Date Collected: 06/01/18 11:30

Client ID: TW03_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	79		41-149

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-14
 Client ID: TW05_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 13:30
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 06/07/18 03:09
 Analyst: EK

Extraction Method: EPA 3510C
 Extraction Date: 06/06/18 00:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	4.9	0.65	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.66	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.72	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.67	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.69	1
3,3'-Dichlorobenzidine	ND		ug/l	4.9	1.4	1
2,4-Dinitrotoluene	ND		ug/l	4.9	0.83	1
2,6-Dinitrotoluene	ND		ug/l	4.9	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.72	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.68	1
Bis(2-chloroethoxy)methane	ND		ug/l	4.9	0.61	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.7	1
Isophorone	ND		ug/l	4.9	0.59	1
Nitrobenzene	ND		ug/l	2.0	0.74	1
NDPA/DPA	ND		ug/l	2.0	0.63	1
n-Nitrosodi-n-propylamine	ND		ug/l	4.9	0.68	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.9	0.89	1
Butyl benzyl phthalate	ND		ug/l	4.9	1.2	1
Di-n-butylphthalate	ND		ug/l	4.9	0.67	1
Di-n-octylphthalate	ND		ug/l	4.9	1.1	1
Diethyl phthalate	ND		ug/l	4.9	0.62	1
Dimethyl phthalate	ND		ug/l	4.9	0.64	1
Biphenyl	ND		ug/l	2.0	0.74	1
4-Chloroaniline	ND		ug/l	4.9	0.62	1
2-Nitroaniline	ND		ug/l	4.9	1.1	1
3-Nitroaniline	ND		ug/l	4.9	1.2	1
4-Nitroaniline	ND		ug/l	4.9	1.3	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-14**Date Collected:** 06/01/18 13:30**Client ID:** TW05_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Refer to COC**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.64	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	9.8	0.65	1
Acetophenone	ND		ug/l	4.9	0.83	1
2,4,6-Trichlorophenol	ND		ug/l	4.9	0.67	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.60	1
2-Chlorophenol	ND		ug/l	2.0	0.62	1
2,4-Dichlorophenol	ND		ug/l	4.9	0.75	1
2,4-Dimethylphenol	ND		ug/l	4.9	1.6	1
2-Nitrophenol	ND		ug/l	9.8	1.5	1
4-Nitrophenol	ND		ug/l	9.8	1.7	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
4,6-Dinitro-o-cresol	ND		ug/l	9.8	2.0	1
Phenol	ND		ug/l	4.9	1.8	1
2-Methylphenol	ND		ug/l	4.9	1.0	1
3-Methylphenol/4-Methylphenol	ND		ug/l	4.9	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	4.9	0.70	1
Benzoic Acid	ND		ug/l	49	13.	1
Benzyl Alcohol	ND		ug/l	2.0	0.71	1
Carbazole	ND		ug/l	2.0	0.61	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	88		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	88		41-149

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-14
Client ID: TW05_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 13:30
Date Received: 06/01/18
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 06/07/18 13:54
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 06/06/18 00:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.03	1
2-Chloronaphthalene	ND		ug/l	0.20	0.03	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.49	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.03	1
Anthracene	ND		ug/l	0.10	0.03	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.04	1
Pentachlorophenol	ND		ug/l	0.78	0.22	1
Hexachlorobenzene	ND		ug/l	0.78	0.03	1
Hexachloroethane	ND		ug/l	0.78	0.03	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-14

Date Collected: 06/01/18 13:30

Client ID: TW05_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	76		41-149

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-15
Client ID: TWDUP01_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 06/07/18 03:34
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 06/06/18 00:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	4.9	0.65	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.66	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.72	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.68	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.70	1
3,3'-Dichlorobenzidine	ND		ug/l	4.9	1.4	1
2,4-Dinitrotoluene	ND		ug/l	4.9	0.84	1
2,6-Dinitrotoluene	ND		ug/l	4.9	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.72	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.69	1
Bis(2-chloroethoxy)methane	ND		ug/l	4.9	0.62	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	4.9	0.59	1
Nitrobenzene	ND		ug/l	2.0	0.74	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	4.9	0.69	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.90	1
Butyl benzyl phthalate	ND		ug/l	4.9	1.2	1
Di-n-butylphthalate	ND		ug/l	4.9	0.68	1
Di-n-octylphthalate	ND		ug/l	4.9	1.1	1
Diethyl phthalate	ND		ug/l	4.9	0.62	1
Dimethyl phthalate	ND		ug/l	4.9	0.64	1
Biphenyl	ND		ug/l	2.0	0.75	1
4-Chloroaniline	ND		ug/l	4.9	0.62	1
2-Nitroaniline	ND		ug/l	4.9	1.1	1
3-Nitroaniline	ND		ug/l	4.9	1.2	1
4-Nitroaniline	ND		ug/l	4.9	1.3	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-15
 Client ID: TWDUP01_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.65	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	9.9	0.66	1
Acetophenone	ND		ug/l	4.9	0.84	1
2,4,6-Trichlorophenol	ND		ug/l	4.9	0.67	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.61	1
2-Chlorophenol	ND		ug/l	2.0	0.62	1
2,4-Dichlorophenol	ND		ug/l	4.9	0.76	1
2,4-Dimethylphenol	ND		ug/l	4.9	1.6	1
2-Nitrophenol	ND		ug/l	9.9	1.5	1
4-Nitrophenol	ND		ug/l	9.9	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.4	1
4,6-Dinitro-o-cresol	ND		ug/l	9.9	2.1	1
Phenol	ND		ug/l	4.9	1.9	1
2-Methylphenol	ND		ug/l	4.9	1.0	1
3-Methylphenol/4-Methylphenol	ND		ug/l	4.9	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	4.9	0.71	1
Benzoic Acid	ND		ug/l	49	13.	1
Benzyl Alcohol	ND		ug/l	2.0	0.72	1
Carbazole	ND		ug/l	2.0	0.62	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	84		41-149

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-15
 Client ID: TWDUP01_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 06/07/18 14:21
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 06/06/18 00:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.49	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.04	1
Pentachlorophenol	ND		ug/l	0.79	0.22	1
Hexachlorobenzene	ND		ug/l	0.79	0.03	1
Hexachloroethane	ND		ug/l	0.79	0.03	1

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-15**Date Collected:** 06/01/18 00:00**Client ID:** TWDUP01_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Refer to COC**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	74		41-149

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/07/18 01:02
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 06/04/18 18:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03-10,12 Batch: WG1122310-1					
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	44.
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	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	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	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	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: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/07/18 01:02
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 06/04/18 18:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03-10,12 Batch: WG1122310-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
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	32.
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	62.

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/07/18 01:02
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 06/04/18 18:33

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03-10,12 Batch: WG1122310-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	79.
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.

Tentatively Identified Compounds

Total TIC Compounds	247	J	ug/kg
Aldol Condensates	247	J	ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	101		25-120
Phenol-d6	104		10-120
Nitrobenzene-d5	99		23-120
2-Fluorobiphenyl	99		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	76		18-120

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/06/18 02:47
 Analyst: HL

Extraction Method: EPA 3510C
 Extraction Date: 06/05/18 08:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13-15 Batch: WG1122496-1					
Acenaphthene	ND		ug/l	2.0	0.59
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66
Hexachlorobenzene	ND		ug/l	2.0	0.58
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67
2-Chloronaphthalene	ND		ug/l	2.0	0.64
1,2-Dichlorobenzene	ND		ug/l	2.0	0.73
1,3-Dichlorobenzene	ND		ug/l	2.0	0.69
1,4-Dichlorobenzene	ND		ug/l	2.0	0.71
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1
Fluoranthene	ND		ug/l	2.0	0.57
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63
Hexachlorobutadiene	ND		ug/l	2.0	0.72
Hexachlorocyclopentadiene	ND		ug/l	20	7.8
Hexachloroethane	ND		ug/l	2.0	0.68
Isophorone	ND		ug/l	5.0	0.60
Naphthalene	ND		ug/l	2.0	0.68
Nitrobenzene	ND		ug/l	2.0	0.75
NDPA/DPA	ND		ug/l	2.0	0.64
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91
Butyl benzyl phthalate	ND		ug/l	5.0	1.3
Di-n-butylphthalate	ND		ug/l	5.0	0.69
Di-n-octylphthalate	ND		ug/l	5.0	1.1
Diethyl phthalate	ND		ug/l	5.0	0.63

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/06/18 02:47
 Analyst: HL

Extraction Method: EPA 3510C
 Extraction Date: 06/05/18 08:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13-15 Batch: WG1122496-1					
Dimethyl phthalate	ND		ug/l	5.0	0.65
Benzo(a)anthracene	ND		ug/l	2.0	0.61
Benzo(a)pyrene	ND		ug/l	2.0	0.54
Benzo(b)fluoranthene	ND		ug/l	2.0	0.64
Benzo(k)fluoranthene	ND		ug/l	2.0	0.60
Chrysene	ND		ug/l	2.0	0.54
Acenaphthylene	ND		ug/l	2.0	0.66
Anthracene	ND		ug/l	2.0	0.64
Benzo(ghi)perylene	ND		ug/l	2.0	0.61
Fluorene	ND		ug/l	2.0	0.62
Phenanthrene	ND		ug/l	2.0	0.61
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.55
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.71
Pyrene	ND		ug/l	2.0	0.57
Biphenyl	ND		ug/l	2.0	0.76
4-Chloroaniline	ND		ug/l	5.0	0.63
2-Nitroaniline	ND		ug/l	5.0	1.1
3-Nitroaniline	ND		ug/l	5.0	1.2
4-Nitroaniline	ND		ug/l	5.0	1.3
Dibenzofuran	ND		ug/l	2.0	0.66
2-Methylnaphthalene	ND		ug/l	2.0	0.72
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67
Acetophenone	ND		ug/l	5.0	0.85
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68
p-Chloro-m-cresol	ND		ug/l	2.0	0.62
2-Chlorophenol	ND		ug/l	2.0	0.63
2,4-Dichlorophenol	ND		ug/l	5.0	0.77
2,4-Dimethylphenol	ND		ug/l	5.0	1.6
2-Nitrophenol	ND		ug/l	10	1.5

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/06/18 02:47
 Analyst: HL

Extraction Method: EPA 3510C
 Extraction Date: 06/05/18 08:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13-15 Batch: WG1122496-1					
4-Nitrophenol	ND		ug/l	10	1.8
2,4-Dinitrophenol	ND		ug/l	20	5.5
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1
Pentachlorophenol	ND		ug/l	10	3.4
Phenol	ND		ug/l	5.0	1.9
2-Methylphenol	ND		ug/l	5.0	1.0
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72
Benzoic Acid	ND		ug/l	50	13.
Benzyl Alcohol	ND		ug/l	2.0	0.72
Carbazole	ND		ug/l	2.0	0.63

Tentatively Identified Compounds

Total TIC Compounds	44.0	J	ug/l
Aldol Condensates	6.02	J	ug/l
Unknown Pyrrolidinone	38.0	J	ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	66		41-149



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 06/07/18 11:12
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 06/06/18 00:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 13-15 Batch: WG1122829-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.04
Naphthalene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04
2-Methylnaphthalene	ND		ug/l	0.10	0.05
Pentachlorophenol	ND		ug/l	0.80	0.22
Hexachlorobenzene	ND		ug/l	0.80	0.03
Hexachloroethane	ND		ug/l	0.80	0.03

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**Method Blank Analysis**
Batch Quality Control**Analytical Method:** 1,8270D-SIM
Analytical Date: 06/07/18 11:12
Analyst: DV**Extraction Method:** EPA 3510C
Extraction Date: 06/06/18 00:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 13-15 Batch: WG1122829-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	10		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	79		41-149

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/09/18 19:43
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 06/07/18 17:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1123660-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/09/18 19:43
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 06/07/18 17:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1123660-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	27.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	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: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/09/18 19:43
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 06/07/18 17:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1123660-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	83		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	83		18-120

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/09/18 19:49
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 06/08/18 21:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1124120-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/09/18 19:49
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 06/08/18 21:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1124120-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	27.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	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: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 06/09/18 19:49
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 06/08/18 21:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1124120-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	98		10-136
4-Terphenyl-d14	92		18-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-10,12 Batch: WG1122310-2 WG1122310-3								
Acenaphthene	80		72		31-137	11		50
1,2,4-Trichlorobenzene	81		75		38-107	8		50
Hexachlorobenzene	78		69		40-140	12		50
Bis(2-chloroethyl)ether	85		78		40-140	9		50
2-Chloronaphthalene	83		75		40-140	10		50
1,2-Dichlorobenzene	82		76		40-140	8		50
1,3-Dichlorobenzene	78		73		40-140	7		50
1,4-Dichlorobenzene	80		74		28-104	8		50
3,3'-Dichlorobenzidine	60		55		40-140	9		50
2,4-Dinitrotoluene	83		73		40-132	13		50
2,6-Dinitrotoluene	84		74		40-140	13		50
Fluoranthene	75		68		40-140	10		50
4-Chlorophenyl phenyl ether	81		71		40-140	13		50
4-Bromophenyl phenyl ether	83		74		40-140	11		50
Bis(2-chloroisopropyl)ether	91		84		40-140	8		50
Bis(2-chloroethoxy)methane	88		80		40-117	10		50
Hexachlorobutadiene	81		76		40-140	6		50
Hexachlorocyclopentadiene	56		48		40-140	15		50
Hexachloroethane	82		77		40-140	6		50
Isophorone	88		80		40-140	10		50
Naphthalene	83		76		40-140	9		50
Nitrobenzene	84		78		40-140	7		50
NDPA/DPA	81		72		36-157	12		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-10,12 Batch: WG1122310-2 WG1122310-3								
n-Nitrosodi-n-propylamine	88		80		32-121	10		50
Bis(2-ethylhexyl)phthalate	90		82		40-140	9		50
Butyl benzyl phthalate	82		74		40-140	10		50
Di-n-butylphthalate	81		74		40-140	9		50
Di-n-octylphthalate	90		82		40-140	9		50
Diethyl phthalate	82		72		40-140	13		50
Dimethyl phthalate	87		77		40-140	12		50
Benzo(a)anthracene	78		71		40-140	9		50
Benzo(a)pyrene	76		70		40-140	8		50
Benzo(b)fluoranthene	79		69		40-140	14		50
Benzo(k)fluoranthene	74		70		40-140	6		50
Chrysene	76		68		40-140	11		50
Acenaphthylene	87		77		40-140	12		50
Anthracene	77		71		40-140	8		50
Benzo(ghi)perylene	77		70		40-140	10		50
Fluorene	80		71		40-140	12		50
Phenanthrene	75		69		40-140	8		50
Dibenzo(a,h)anthracene	78		70		40-140	11		50
Indeno(1,2,3-cd)pyrene	76		68		40-140	11		50
Pyrene	74		67		35-142	10		50
Biphenyl	87		78		54-104	11		50
4-Chloroaniline	80		75		40-140	6		50
2-Nitroaniline	93		81		47-134	14		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-10,12 Batch: WG1122310-2 WG1122310-3								
3-Nitroaniline	66		61		26-129	8		50
4-Nitroaniline	77		68		41-125	12		50
Dibenzofuran	81		72		40-140	12		50
2-Methylnaphthalene	85		78		40-140	9		50
1,2,4,5-Tetrachlorobenzene	88		78		40-117	12		50
Acetophenone	86		80		14-144	7		50
2,4,6-Trichlorophenol	88		77		30-130	13		50
p-Chloro-m-cresol	89		79		26-103	12		50
2-Chlorophenol	85		79		25-102	7		50
2,4-Dichlorophenol	89		80		30-130	11		50
2,4-Dimethylphenol	88		80		30-130	10		50
2-Nitrophenol	89		80		30-130	11		50
4-Nitrophenol	85		74		11-114	14		50
2,4-Dinitrophenol	72		63		4-130	13		50
4,6-Dinitro-o-cresol	92		76		10-130	19		50
Pentachlorophenol	66		57		17-109	15		50
Phenol	87		79		26-90	10		50
2-Methylphenol	88		80		30-130.	10		50
3-Methylphenol/4-Methylphenol	92		85		30-130	8		50
2,4,5-Trichlorophenol	87		77		30-130	12		50
Benzoic Acid	69		68		10-110	1		50
Benzyl Alcohol	92		83		40-140	10		50
Carbazole	76		69		54-128	10		50

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-10,12 Batch: WG1122310-2 WG1122310-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	84		75		25-120
Phenol-d6	85		75		10-120
Nitrobenzene-d5	81		74		23-120
2-Fluorobiphenyl	83		73		30-120
2,4,6-Tribromophenol	78		65		10-136
4-Terphenyl-d14	70		61		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13-15 Batch: WG1122496-2 WG1122496-3								
Acenaphthene	85		86		37-111	1		30
1,2,4-Trichlorobenzene	80		90		39-98	12		30
Hexachlorobenzene	77		79		40-140	3		30
Bis(2-chloroethyl)ether	82		94		40-140	14		30
2-Chloronaphthalene	84		92		40-140	9		30
1,2-Dichlorobenzene	76		86		40-140	12		30
1,3-Dichlorobenzene	76		84		40-140	10		30
1,4-Dichlorobenzene	76		86		36-97	12		30
3,3'-Dichlorobenzidine	66		69		40-140	4		30
2,4-Dinitrotoluene	107		111		48-143	4		30
2,6-Dinitrotoluene	105		116		40-140	10		30
Fluoranthene	85		86		40-140	1		30
4-Chlorophenyl phenyl ether	81		83		40-140	2		30
4-Bromophenyl phenyl ether	79		81		40-140	3		30
Bis(2-chloroisopropyl)ether	98		111		40-140	12		30
Bis(2-chloroethoxy)methane	86		98		40-140	13		30
Hexachlorobutadiene	75		83		40-140	10		30
Hexachlorocyclopentadiene	68		75		40-140	10		30
Hexachloroethane	78		87		40-140	11		30
Isophorone	90		103		40-140	13		30
Naphthalene	80		88		40-140	10		30
Nitrobenzene	90		100		40-140	11		30
NDPA/DPA	85		88		40-140	3		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13-15 Batch: WG1122496-2 WG1122496-3								
n-Nitrosodi-n-propylamine	87		99		29-132	13		30
Bis(2-ethylhexyl)phthalate	100		102		40-140	2		30
Butyl benzyl phthalate	95		97		40-140	2		30
Di-n-butylphthalate	92		93		40-140	1		30
Di-n-octylphthalate	98		100		40-140	2		30
Diethyl phthalate	91		95		40-140	4		30
Dimethyl phthalate	87		97		40-140	11		30
Benzo(a)anthracene	86		89		40-140	3		30
Benzo(a)pyrene	82		84		40-140	2		30
Benzo(b)fluoranthene	80		83		40-140	4		30
Benzo(k)fluoranthene	82		84		40-140	2		30
Chrysene	87		91		40-140	4		30
Acenaphthylene	88		98		45-123	11		30
Anthracene	89		91		40-140	2		30
Benzo(ghi)perylene	84		86		40-140	2		30
Fluorene	86		89		40-140	3		30
Phenanthrene	86		87		40-140	1		30
Dibenzo(a,h)anthracene	82		84		40-140	2		30
Indeno(1,2,3-cd)pyrene	82		84		40-140	2		30
Pyrene	84		85		26-127	1		30
Biphenyl	87		96		40-140	10		30
4-Chloroaniline	82		88		40-140	7		30
2-Nitroaniline	107		119		52-143	11		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13-15 Batch: WG1122496-2 WG1122496-3								
3-Nitroaniline	95		91		25-145	4		30
4-Nitroaniline	98		102		51-143	4		30
Dibenzofuran	83		86		40-140	4		30
2-Methylnaphthalene	85		92		40-140	8		30
1,2,4,5-Tetrachlorobenzene	82		91		2-134	10		30
Acetophenone	88		98		39-129	11		30
2,4,6-Trichlorophenol	88		97		30-130	10		30
p-Chloro-m-cresol	88		98	Q	23-97	11		30
2-Chlorophenol	80		90		27-123	12		30
2,4-Dichlorophenol	88		100		30-130	13		30
2,4-Dimethylphenol	89		100		30-130	12		30
2-Nitrophenol	101		116		30-130	14		30
4-Nitrophenol	64		69		10-80	8		30
2,4-Dinitrophenol	94		94		20-130	0		30
4,6-Dinitro-o-cresol	104		109		20-164	5		30
Pentachlorophenol	74		78		9-103	5		30
Phenol	35		41		12-110	16		30
2-Methylphenol	78		88		30-130	12		30
3-Methylphenol/4-Methylphenol	80		90		30-130	12		30
2,4,5-Trichlorophenol	88		95		30-130	8		30
Benzoic Acid	20		33		10-164	49	Q	30
Benzyl Alcohol	74		81		26-116	9		30
Carbazole	89		90		55-144	1		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13-15 Batch: WG1122496-2 WG1122496-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	49		54		21-120
Phenol-d6	34		39		10-120
Nitrobenzene-d5	85		96		23-120
2-Fluorobiphenyl	73		80		15-120
2,4,6-Tribromophenol	75		77		10-120
4-Terphenyl-d14	70		71		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 13-15 Batch: WG1122829-2 WG1122829-3								
Acenaphthene	81		79		40-140	3		40
2-Chloronaphthalene	70		68		40-140	3		40
Fluoranthene	80		78		40-140	3		40
Hexachlorobutadiene	59		56		40-140	5		40
Naphthalene	65		63		40-140	3		40
Benzo(a)anthracene	76		74		40-140	3		40
Benzo(a)pyrene	76		74		40-140	3		40
Benzo(b)fluoranthene	81		80		40-140	1		40
Benzo(k)fluoranthene	67		64		40-140	5		40
Chrysene	75		74		40-140	1		40
Acenaphthylene	80		78		40-140	3		40
Anthracene	77		75		40-140	3		40
Benzo(ghi)perylene	76		73		40-140	4		40
Fluorene	87		84		40-140	4		40
Phenanthrene	75		73		40-140	3		40
Dibenzo(a,h)anthracene	78		75		40-140	4		40
Indeno(1,2,3-cd)pyrene	88		85		40-140	3		40
Pyrene	77		75		40-140	3		40
2-Methylnaphthalene	65		62		40-140	5		40
Pentachlorophenol	78		78		40-140	0		40
Hexachlorobenzene	85		84		40-140	1		40
Hexachloroethane	59		56		40-140	5		40

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 13-15 Batch: WG1122829-2 WG1122829-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	53		50		21-120
Phenol-d6	39		36		10-120
Nitrobenzene-d5	89		83		23-120
2-Fluorobiphenyl	95		90		15-120
2,4,6-Tribromophenol	114		109		10-120
4-Terphenyl-d14	86		81		41-149

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1123660-2 WG1123660-3								
Acenaphthene	72		50		31-137	36		50
1,2,4-Trichlorobenzene	69		47		38-107	38		50
Hexachlorobenzene	72		50		40-140	36		50
Bis(2-chloroethyl)ether	72		48		40-140	40		50
2-Chloronaphthalene	69		49		40-140	34		50
1,2-Dichlorobenzene	70		47		40-140	39		50
1,3-Dichlorobenzene	67		46		40-140	37		50
1,4-Dichlorobenzene	69		46		28-104	40		50
3,3'-Dichlorobenzidine	61		44		40-140	32		50
2,4-Dinitrotoluene	75		51		40-132	38		50
2,6-Dinitrotoluene	73		50		40-140	37		50
Fluoranthene	70		49		40-140	35		50
4-Chlorophenyl phenyl ether	73		50		40-140	37		50
4-Bromophenyl phenyl ether	76		53		40-140	36		50
Bis(2-chloroisopropyl)ether	74		50		40-140	39		50
Bis(2-chloroethoxy)methane	72		49		40-117	38		50
Hexachlorobutadiene	70		49		40-140	35		50
Hexachlorocyclopentadiene	52		30	Q	40-140	54	Q	50
Hexachloroethane	70		47		40-140	39		50
Isophorone	72		49		40-140	38		50
Naphthalene	69		48		40-140	36		50
Nitrobenzene	70		46		40-140	41		50
NDPA/DPA	72		50		36-157	36		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1123660-2 WG1123660-3								
n-Nitrosodi-n-propylamine	72		49		32-121	38		50
Bis(2-ethylhexyl)phthalate	80		54		40-140	39		50
Butyl benzyl phthalate	74		52		40-140	35		50
Di-n-butylphthalate	74		52		40-140	35		50
Di-n-octylphthalate	82		55		40-140	39		50
Diethyl phthalate	72		50		40-140	36		50
Dimethyl phthalate	72		50		40-140	36		50
Benzo(a)anthracene	74		50		40-140	39		50
Benzo(a)pyrene	72		49		40-140	38		50
Benzo(b)fluoranthene	75		49		40-140	42		50
Benzo(k)fluoranthene	69		48		40-140	36		50
Chrysene	71		49		40-140	37		50
Acenaphthylene	73		51		40-140	35		50
Anthracene	71		50		40-140	35		50
Benzo(ghi)perylene	72		50		40-140	36		50
Fluorene	72		50		40-140	36		50
Phenanthrene	71		50		40-140	35		50
Dibenzo(a,h)anthracene	69		48		40-140	36		50
Indeno(1,2,3-cd)pyrene	70		48		40-140	37		50
Pyrene	69		49		35-142	34		50
Biphenyl	72		50	Q	54-104	36		50
4-Chloroaniline	69		53		40-140	26		50
2-Nitroaniline	76		52		47-134	38		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1123660-2 WG1123660-3								
3-Nitroaniline	61		45		26-129	30		50
4-Nitroaniline	69		48		41-125	36		50
Dibenzofuran	73		50		40-140	37		50
2-Methylnaphthalene	72		49		40-140	38		50
1,2,4,5-Tetrachlorobenzene	72		50		40-117	36		50
Acetophenone	72		50		14-144	36		50
2,4,6-Trichlorophenol	73		51		30-130	35		50
p-Chloro-m-cresol	74		50		26-103	39		50
2-Chlorophenol	71		49		25-102	37		50
2,4-Dichlorophenol	75		50		30-130	40		50
2,4-Dimethylphenol	75		50		30-130	40		50
2-Nitrophenol	75		50		30-130	40		50
4-Nitrophenol	73		48		11-114	41		50
2,4-Dinitrophenol	57		35		4-130	48		50
4,6-Dinitro-o-cresol	81		50		10-130	47		50
Pentachlorophenol	58		36		17-109	47		50
Phenol	72		48		26-90	40		50
2-Methylphenol	75		52		30-130.	36		50
3-Methylphenol/4-Methylphenol	78		53		30-130	38		50
2,4,5-Trichlorophenol	74		50		30-130	39		50
Benzoic Acid	50		40		10-110	22		50
Benzyl Alcohol	75		51		40-140	38		50
Carbazole	71		51	Q	54-128	33		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1123660-2 WG1123660-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	73		48		25-120
Phenol-d6	73		49		10-120
Nitrobenzene-d5	72		47		23-120
2-Fluorobiphenyl	73		50		30-120
2,4,6-Tribromophenol	77		52		10-136
4-Terphenyl-d14	68		49		18-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1124120-2 WG1124120-3								
Acenaphthene	79		84		31-137	6		50
1,2,4-Trichlorobenzene	75		81		38-107	8		50
Hexachlorobenzene	81		84		40-140	4		50
Bis(2-chloroethyl)ether	79		83		40-140	5		50
2-Chloronaphthalene	82		89		40-140	8		50
1,2-Dichlorobenzene	74		81		40-140	9		50
1,3-Dichlorobenzene	74		80		40-140	8		50
1,4-Dichlorobenzene	71		80		28-104	12		50
3,3'-Dichlorobenzidine	73		78		40-140	7		50
2,4-Dinitrotoluene	95		101		40-132	6		50
2,6-Dinitrotoluene	99		102		40-140	3		50
Fluoranthene	84		88		40-140	5		50
4-Chlorophenyl phenyl ether	79		83		40-140	5		50
4-Bromophenyl phenyl ether	83		86		40-140	4		50
Bis(2-chloroisopropyl)ether	81		88		40-140	8		50
Bis(2-chloroethoxy)methane	84		92		40-117	9		50
Hexachlorobutadiene	74		81		40-140	9		50
Hexachlorocyclopentadiene	89		98		40-140	10		50
Hexachloroethane	76		82		40-140	8		50
Isophorone	87		99		40-140	13		50
Naphthalene	79		87		40-140	10		50
Nitrobenzene	81		87		40-140	7		50
NDPA/DPA	84		89		36-157	6		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1124120-2 WG1124120-3								
n-Nitrosodi-n-propylamine	85		93		32-121	9		50
Bis(2-ethylhexyl)phthalate	100		106		40-140	6		50
Butyl benzyl phthalate	100		105		40-140	5		50
Di-n-butylphthalate	93		99		40-140	6		50
Di-n-octylphthalate	98		104		40-140	6		50
Diethyl phthalate	87		91		40-140	4		50
Dimethyl phthalate	94		96		40-140	2		50
Benzo(a)anthracene	83		88		40-140	6		50
Benzo(a)pyrene	90		94		40-140	4		50
Benzo(b)fluoranthene	86		89		40-140	3		50
Benzo(k)fluoranthene	88		92		40-140	4		50
Chrysene	80		85		40-140	6		50
Acenaphthylene	88		93		40-140	6		50
Anthracene	83		89		40-140	7		50
Benzo(ghi)perylene	93		98		40-140	5		50
Fluorene	83		88		40-140	6		50
Phenanthrene	82		86		40-140	5		50
Dibenzo(a,h)anthracene	99		105		40-140	6		50
Indeno(1,2,3-cd)pyrene	94		100		40-140	6		50
Pyrene	83		87		35-142	5		50
Biphenyl	85		94		54-104	10		50
4-Chloroaniline	69		74		40-140	7		50
2-Nitroaniline	98		104		47-134	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1124120-2 WG1124120-3								
3-Nitroaniline	75		76		26-129	1		50
4-Nitroaniline	84		86		41-125	2		50
Dibenzofuran	80		86		40-140	7		50
2-Methylnaphthalene	82		87		40-140	6		50
1,2,4,5-Tetrachlorobenzene	81		87		40-117	7		50
Acetophenone	80		87		14-144	8		50
2,4,6-Trichlorophenol	93		100		30-130	7		50
p-Chloro-m-cresol	96		100		26-103	4		50
2-Chlorophenol	87		94		25-102	8		50
2,4-Dichlorophenol	94		101		30-130	7		50
2,4-Dimethylphenol	93		104		30-130	11		50
2-Nitrophenol	97		111		30-130	13		50
4-Nitrophenol	99		105		11-114	6		50
2,4-Dinitrophenol	84		95		4-130	12		50
4,6-Dinitro-o-cresol	99		103		10-130	4		50
Pentachlorophenol	79		84		17-109	6		50
Phenol	87		93	Q	26-90	7		50
2-Methylphenol	88		96		30-130	9		50
3-Methylphenol/4-Methylphenol	90		98		30-130	9		50
2,4,5-Trichlorophenol	98		103		30-130	5		50
Benzoic Acid	46		70		10-110	41		50
Benzyl Alcohol	90		95		40-140	5		50
Carbazole	86		90		54-128	5		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1124120-2 WG1124120-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	85		94		25-120
Phenol-d6	89		96		10-120
Nitrobenzene-d5	84		91		23-120
2-Fluorobiphenyl	86		97		30-120
2,4,6-Tribromophenol	97		104		10-136
4-Terphenyl-d14	84		92		18-120

PCBS

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-02**Client ID:** SB06_14-16**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 12:20**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8082A**Analytical Date:** 06/09/18 00:58**Analyst:** HT**Percent Solids:** 88%**Extraction Method:** EPA 3546**Extraction Date:** 06/07/18 21:48**Cleanup Method:** EPA 3665A**Cleanup Date:** 06/08/18**Cleanup Method:** EPA 3660B**Cleanup Date:** 06/08/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.4	4.24	1	A
Aroclor 1221	ND		ug/kg	37.4	5.69	1	A
Aroclor 1232	ND		ug/kg	37.4	3.68	1	A
Aroclor 1242	ND		ug/kg	37.4	4.58	1	A
Aroclor 1248	ND		ug/kg	37.4	4.20	1	A
Aroclor 1254	ND		ug/kg	37.4	3.05	1	A
Aroclor 1260	ND		ug/kg	37.4	3.90	1	A
Aroclor 1262	ND		ug/kg	37.4	3.07	1	A
Aroclor 1268	ND		ug/kg	37.4	2.65	1	A
PCBs, Total	ND		ug/kg	37.4	2.65	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	79		30-150	B

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-03**Date Collected:** 06/01/18 09:34**Client ID:** SB04_1-3**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Extraction Method:** EPA 3546**Analytical Method:** 1,8082A**Extraction Date:** 06/04/18 19:36**Analytical Date:** 06/07/18 18:37**Cleanup Method:** EPA 3665A**Analyst:** KB**Cleanup Date:** 06/06/18**Percent Solids:** 91%**Cleanup Method:** EPA 3660B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.7	4.05	1	A
Aroclor 1221	ND		ug/kg	35.7	5.44	1	A
Aroclor 1232	ND		ug/kg	35.7	3.52	1	A
Aroclor 1242	ND		ug/kg	35.7	4.37	1	A
Aroclor 1248	ND		ug/kg	35.7	4.01	1	A
Aroclor 1254	ND		ug/kg	35.7	2.92	1	A
Aroclor 1260	ND		ug/kg	35.7	3.73	1	A
Aroclor 1262	ND		ug/kg	35.7	2.94	1	A
Aroclor 1268	ND		ug/kg	35.7	2.53	1	A
PCBs, Total	ND		ug/kg	35.7	2.53	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	52		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-04**Client ID:** SB04_6-8**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 09:42**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8082A**Analytical Date:** 06/07/18 18:49**Analyst:** KB**Percent Solids:** 84%**Extraction Method:** EPA 3546**Extraction Date:** 06/04/18 19:36**Cleanup Method:** EPA 3665A**Cleanup Date:** 06/06/18**Cleanup Method:** EPA 3660B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.4	4.36	1	A
Aroclor 1221	ND		ug/kg	38.4	5.84	1	A
Aroclor 1232	ND		ug/kg	38.4	3.78	1	A
Aroclor 1242	ND		ug/kg	38.4	4.70	1	A
Aroclor 1248	ND		ug/kg	38.4	4.31	1	A
Aroclor 1254	ND		ug/kg	38.4	3.13	1	A
Aroclor 1260	ND		ug/kg	38.4	4.01	1	A
Aroclor 1262	ND		ug/kg	38.4	3.16	1	A
Aroclor 1268	ND		ug/kg	38.4	2.72	1	A
PCBs, Total	ND		ug/kg	38.4	2.72	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-05**Client ID:** SB04_10-12**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 09:55**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8082A**Analytical Date:** 06/07/18 19:02**Analyst:** KB**Percent Solids:** 88%**Extraction Method:** EPA 3546**Extraction Date:** 06/04/18 19:36**Cleanup Method:** EPA 3665A**Cleanup Date:** 06/06/18**Cleanup Method:** EPA 3660B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.0	4.08	1	A
Aroclor 1221	ND		ug/kg	36.0	5.47	1	A
Aroclor 1232	ND		ug/kg	36.0	3.54	1	A
Aroclor 1242	ND		ug/kg	36.0	4.40	1	A
Aroclor 1248	ND		ug/kg	36.0	4.03	1	A
Aroclor 1254	ND		ug/kg	36.0	2.93	1	A
Aroclor 1260	ND		ug/kg	36.0	3.75	1	A
Aroclor 1262	ND		ug/kg	36.0	2.96	1	A
Aroclor 1268	ND		ug/kg	36.0	2.54	1	A
PCBs, Total	ND		ug/kg	36.0	2.54	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-06**Client ID:** SB05_0-2**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 10:30**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8082A**Analytical Date:** 06/07/18 19:14**Analyst:** KB**Percent Solids:** 87%**Extraction Method:** EPA 3546**Extraction Date:** 06/04/18 19:36**Cleanup Method:** EPA 3665A**Cleanup Date:** 06/06/18**Cleanup Method:** EPA 3660B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.6	4.27	1	A
Aroclor 1221	ND		ug/kg	37.6	5.73	1	A
Aroclor 1232	ND		ug/kg	37.6	3.70	1	A
Aroclor 1242	ND		ug/kg	37.6	4.60	1	A
Aroclor 1248	ND		ug/kg	37.6	4.22	1	A
Aroclor 1254	ND		ug/kg	37.6	3.07	1	A
Aroclor 1260	7.79	J	ug/kg	37.6	3.93	1	A
Aroclor 1262	ND		ug/kg	37.6	3.09	1	A
Aroclor 1268	ND		ug/kg	37.6	2.66	1	A
PCBs, Total	7.79	J	ug/kg	37.6	2.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-07**Date Collected:** 06/01/18 10:40**Client ID:** SB05_7-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Extraction Method:** EPA 3546**Analytical Method:** 1,8082A**Extraction Date:** 06/04/18 19:36**Analytical Date:** 06/07/18 19:27**Cleanup Method:** EPA 3665A**Analyst:** KB**Cleanup Date:** 06/06/18**Percent Solids:** 86%**Cleanup Method:** EPA 3660B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.0	4.20	1	A
Aroclor 1221	ND		ug/kg	37.0	5.64	1	A
Aroclor 1232	ND		ug/kg	37.0	3.64	1	A
Aroclor 1242	ND		ug/kg	37.0	4.53	1	A
Aroclor 1248	ND		ug/kg	37.0	4.15	1	A
Aroclor 1254	ND		ug/kg	37.0	3.02	1	A
Aroclor 1260	ND		ug/kg	37.0	3.86	1	A
Aroclor 1262	ND		ug/kg	37.0	3.04	1	A
Aroclor 1268	ND		ug/kg	37.0	2.62	1	A
PCBs, Total	ND		ug/kg	37.0	2.62	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-08

Client ID: SB05_11-12

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:56

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8082A

Analytical Date: 06/07/18 19:39

Analyst: KB

Percent Solids: 87%

Extraction Method: EPA 3546

Extraction Date: 06/04/18 19:36

Cleanup Method: EPA 3665A

Cleanup Date: 06/06/18

Cleanup Method: EPA 3660B

Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	4.17	1	A
Aroclor 1221	ND		ug/kg	36.8	5.60	1	A
Aroclor 1232	ND		ug/kg	36.8	3.62	1	A
Aroclor 1242	ND		ug/kg	36.8	4.50	1	A
Aroclor 1248	ND		ug/kg	36.8	4.13	1	A
Aroclor 1254	ND		ug/kg	36.8	3.00	1	A
Aroclor 1260	ND		ug/kg	36.8	3.84	1	A
Aroclor 1262	ND		ug/kg	36.8	3.02	1	A
Aroclor 1268	ND		ug/kg	36.8	2.60	1	A
PCBs, Total	ND		ug/kg	36.8	2.60	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-09
Client ID: SB06_0-2
Sample Location: MANHATTAN

Date Collected: 06/01/18 12:02
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 19:52
Analyst: KB
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 06/04/18 19:36
Cleanup Method: EPA 3665A
Cleanup Date: 06/06/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.8	4.06	1	A
Aroclor 1221	ND		ug/kg	35.8	5.46	1	A
Aroclor 1232	ND		ug/kg	35.8	3.53	1	A
Aroclor 1242	ND		ug/kg	35.8	4.39	1	A
Aroclor 1248	ND		ug/kg	35.8	4.02	1	A
Aroclor 1254	ND		ug/kg	35.8	2.92	1	A
Aroclor 1260	ND		ug/kg	35.8	3.74	1	A
Aroclor 1262	ND		ug/kg	35.8	2.95	1	A
Aroclor 1268	ND		ug/kg	35.8	2.54	1	A
PCBs, Total	ND		ug/kg	35.8	2.54	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-10**Client ID:** SB06_6-8**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 12:08**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8082A**Analytical Date:** 06/07/18 20:04**Analyst:** KB**Percent Solids:** 92%**Extraction Method:** EPA 3546**Extraction Date:** 06/04/18 19:36**Cleanup Method:** EPA 3665A**Cleanup Date:** 06/06/18**Cleanup Method:** EPA 3660B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.5	3.91	1	A
Aroclor 1221	ND		ug/kg	34.5	5.25	1	A
Aroclor 1232	ND		ug/kg	34.5	3.39	1	A
Aroclor 1242	11.5	J	ug/kg	34.5	4.22	1	A
Aroclor 1248	ND		ug/kg	34.5	3.87	1	A
Aroclor 1254	ND		ug/kg	34.5	2.81	1	A
Aroclor 1260	ND		ug/kg	34.5	3.60	1	A
Aroclor 1262	ND		ug/kg	34.5	2.83	1	A
Aroclor 1268	ND		ug/kg	34.5	2.44	1	A
PCBs, Total	11.5	J	ug/kg	34.5	2.44	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-11**Client ID:** SB06_12-14**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 12:15**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8082A**Analytical Date:** 06/07/18 20:17**Analyst:** KB**Percent Solids:** 85%**Extraction Method:** EPA 3546**Extraction Date:** 06/04/18 19:36**Cleanup Method:** EPA 3665A**Cleanup Date:** 06/06/18**Cleanup Method:** EPA 3660B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.5	4.36	1	A
Aroclor 1221	ND		ug/kg	38.5	5.86	1	A
Aroclor 1232	ND		ug/kg	38.5	3.78	1	A
Aroclor 1242	ND		ug/kg	38.5	4.71	1	A
Aroclor 1248	ND		ug/kg	38.5	4.32	1	A
Aroclor 1254	ND		ug/kg	38.5	3.14	1	A
Aroclor 1260	8.34	J	ug/kg	38.5	4.02	1	A
Aroclor 1262	ND		ug/kg	38.5	3.16	1	A
Aroclor 1268	ND		ug/kg	38.5	2.72	1	A
PCBs, Total	8.34	J	ug/kg	38.5	2.72	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-12
Client ID: SBDUP02_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 06/07/18 20:29
Analyst: KB
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 06/04/18 19:36
Cleanup Method: EPA 3665A
Cleanup Date: 06/06/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.5	4.26	1	A
Aroclor 1221	ND		ug/kg	37.5	5.71	1	A
Aroclor 1232	ND		ug/kg	37.5	3.69	1	A
Aroclor 1242	ND		ug/kg	37.5	4.59	1	A
Aroclor 1248	ND		ug/kg	37.5	4.21	1	A
Aroclor 1254	ND		ug/kg	37.5	3.06	1	A
Aroclor 1260	ND		ug/kg	37.5	3.92	1	A
Aroclor 1262	ND		ug/kg	37.5	3.08	1	A
Aroclor 1268	ND		ug/kg	37.5	2.66	1	A
PCBs, Total	ND		ug/kg	37.5	2.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-13
 Client ID: TW03_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 11:30
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 06/09/18 00:26
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 06/07/18 08:11
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/07/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/07/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-14
Client ID: TW05_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 13:30
Date Received: 06/01/18
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/09/18 00:39
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 06/07/18 08:11
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-15
Client ID: TWDUP01_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 06/09/18 00:52
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 06/07/18 08:11
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/18
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
 Analytical Date: 06/07/18 21:07
 Analyst: KB

Extraction Method: EPA 3546
 Extraction Date: 06/04/18 19:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/06/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 03-12 Batch: WG1122321-1						
Aroclor 1016	ND		ug/kg	31.7	3.60	A
Aroclor 1221	ND		ug/kg	31.7	4.83	A
Aroclor 1232	ND		ug/kg	31.7	3.12	A
Aroclor 1242	ND		ug/kg	31.7	3.88	A
Aroclor 1248	ND		ug/kg	31.7	3.56	A
Aroclor 1254	ND		ug/kg	31.7	2.59	A
Aroclor 1260	ND		ug/kg	31.7	3.31	A
Aroclor 1262	ND		ug/kg	31.7	2.61	A
Aroclor 1268	ND		ug/kg	31.7	2.25	A
PCBs, Total	ND		ug/kg	31.7	2.25	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
 Analytical Date: 06/08/18 07:48
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 06/07/18 08:11
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/07/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/07/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 13-15 Batch: WG1123399-1						
Aroclor 1016	ND		ug/l	0.083	0.020	A
Aroclor 1221	ND		ug/l	0.083	0.032	A
Aroclor 1232	ND		ug/l	0.083	0.027	A
Aroclor 1242	ND		ug/l	0.083	0.030	A
Aroclor 1248	ND		ug/l	0.083	0.023	A
Aroclor 1254	ND		ug/l	0.083	0.035	A
Aroclor 1260	ND		ug/l	0.083	0.020	A
Aroclor 1262	ND		ug/l	0.083	0.017	A
Aroclor 1268	ND		ug/l	0.083	0.027	A
PCBs, Total	ND		ug/l	0.083	0.017	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	85		30-150	B

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
 Analytical Date: 06/08/18 08:40
 Analyst: WR

Extraction Method: EPA 3546
 Extraction Date: 06/07/18 17:13
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/08/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/08/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02 Batch: WG1123656-1						
Aroclor 1016	ND		ug/kg	31.3	3.55	A
Aroclor 1221	ND		ug/kg	31.3	4.77	A
Aroclor 1232	ND		ug/kg	31.3	3.08	A
Aroclor 1242	ND		ug/kg	31.3	3.84	A
Aroclor 1248	ND		ug/kg	31.3	3.52	A
Aroclor 1254	ND		ug/kg	31.3	2.56	A
Aroclor 1260	ND		ug/kg	31.3	3.27	A
Aroclor 1262	ND		ug/kg	31.3	2.58	A
Aroclor 1268	ND		ug/kg	31.3	2.22	A
PCBs, Total	ND		ug/kg	31.3	2.22	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	84		30-150	B

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 03-12 Batch: WG1122321-2 WG1122321-3									
Aroclor 1016	92		92		40-140	0		50	A
Aroclor 1260	84		87		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		91		30-150	A
Decachlorobiphenyl	70		80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		94		30-150	B
Decachlorobiphenyl	74		81		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 13-15 Batch: WG1123399-2 WG1123399-3									
Aroclor 1016	75		75		40-140	0		50	A
Aroclor 1260	74		73		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		85		30-150	A
Decachlorobiphenyl	79		68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		87		30-150	B
Decachlorobiphenyl	89		77		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02 Batch: WG1123656-2 WG1123656-3									
Aroclor 1016	74		78		40-140	5		50	A
Aroclor 1260	80		96		40-140	18		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		87		30-150	A
Decachlorobiphenyl	78		79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		87		30-150	B
Decachlorobiphenyl	87		89		30-150	B

PESTICIDES

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-02

Client ID: SB06_14-16

Sample Location: MANHATTAN

Date Collected: 06/01/18 12:20

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8081B

Analytical Date: 06/09/18 21:32

Analyst: KB

Percent Solids: 88%

Extraction Method: EPA 3546

Extraction Date: 06/07/18 20:35

Cleanup Method: EPA 3620B

Cleanup Date: 06/08/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.75	0.343	1	A
Lindane	ND		ug/kg	0.731	0.327	1	A
Alpha-BHC	ND		ug/kg	0.731	0.208	1	A
Beta-BHC	ND		ug/kg	1.75	0.665	1	A
Heptachlor	ND		ug/kg	0.877	0.393	1	A
Aldrin	ND		ug/kg	1.75	0.617	1	A
Heptachlor epoxide	ND		ug/kg	3.29	0.986	1	A
Endrin	ND		ug/kg	0.731	0.300	1	A
Endrin aldehyde	ND		ug/kg	2.19	0.767	1	A
Endrin ketone	ND		ug/kg	1.75	0.452	1	A
Dieldrin	ND		ug/kg	1.10	0.548	1	A
4,4'-DDE	ND		ug/kg	1.75	0.406	1	A
4,4'-DDD	ND		ug/kg	1.75	0.625	1	A
4,4'-DDT	ND		ug/kg	3.29	1.41	1	A
Endosulfan I	ND		ug/kg	1.75	0.414	1	A
Endosulfan II	ND		ug/kg	1.75	0.586	1	A
Endosulfan sulfate	ND		ug/kg	0.731	0.348	1	A
Methoxychlor	ND		ug/kg	3.29	1.02	1	A
Toxaphene	ND		ug/kg	32.9	9.21	1	A
cis-Chlordane	ND		ug/kg	2.19	0.611	1	A
trans-Chlordane	ND		ug/kg	2.19	0.579	1	A
Chlordane	ND		ug/kg	14.2	5.81	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-02

Date Collected: 06/01/18 12:20

Client ID: SB06_14-16

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	67		30-150	B
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	70		30-150	A

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-02

Client ID: SB06_14-16

Sample Location: MANHATTAN

Date Collected: 06/01/18 12:20

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8151A

Analytical Date: 06/10/18 21:22

Analyst: SL

Percent Solids: 88%

Methylation Date: 06/09/18 21:38

Extraction Method: EPA 8151A

Extraction Date: 06/08/18 15:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	186	11.7	1	A
2,4,5-T	ND		ug/kg	186	5.77	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	115		30-150	A
DCAA	94		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-03

Client ID: SB04_1-3

Sample Location: MANHATTAN

Date Collected: 06/01/18 09:34

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8081B

Analytical Date: 06/07/18 15:49

Analyst: KB

Percent Solids: 91%

Extraction Method: EPA 3546

Extraction Date: 06/04/18 20:58

Cleanup Method: EPA 3620B

Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.333	1	A
Lindane	ND		ug/kg	0.709	0.317	1	A
Alpha-BHC	ND		ug/kg	0.709	0.201	1	A
Beta-BHC	ND		ug/kg	1.70	0.645	1	A
Heptachlor	ND		ug/kg	0.851	0.381	1	A
Aldrin	ND		ug/kg	1.70	0.599	1	A
Heptachlor epoxide	ND		ug/kg	3.19	0.957	1	A
Endrin	ND		ug/kg	0.709	0.291	1	A
Endrin aldehyde	ND		ug/kg	2.13	0.744	1	A
Endrin ketone	ND		ug/kg	1.70	0.438	1	A
Dieldrin	ND		ug/kg	1.06	0.532	1	A
4,4'-DDE	ND		ug/kg	1.70	0.393	1	A
4,4'-DDD	ND		ug/kg	1.70	0.607	1	A
4,4'-DDT	ND		ug/kg	3.19	1.37	1	A
Endosulfan I	ND		ug/kg	1.70	0.402	1	A
Endosulfan II	1.52	JPI	ug/kg	1.70	0.568	1	A
Endosulfan sulfate	ND		ug/kg	0.709	0.337	1	A
Methoxychlor	ND		ug/kg	3.19	0.992	1	A
Toxaphene	ND		ug/kg	31.9	8.93	1	A
cis-Chlordane	ND		ug/kg	2.13	0.593	1	A
trans-Chlordane	ND		ug/kg	2.13	0.561	1	A
Chlordane	ND		ug/kg	13.8	5.64	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-03

Date Collected: 06/01/18 09:34

Client ID: SB04_1-3

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	97		30-150	A

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-03
Client ID: SB04_1-3
Sample Location: MANHATTAN

Date Collected: 06/01/18 09:34
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/07/18 17:42
Analyst: SL
Percent Solids: 91%
Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A
Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	180	11.4	1	A
2,4,5-T	ND		ug/kg	180	5.60	1	A
2,4,5-TP (Silvex)	ND		ug/kg	180	4.80	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	39		30-150	A
DCAA	53		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-04**Client ID:** SB04_6-8**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 09:42**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8081B**Analytical Date:** 06/07/18 16:01**Analyst:** KB**Percent Solids:** 84%**Extraction Method:** EPA 3546**Extraction Date:** 06/04/18 20:58**Cleanup Method:** EPA 3620B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.88	0.369	1	A
Lindane	ND		ug/kg	0.786	0.351	1	A
Alpha-BHC	ND		ug/kg	0.786	0.223	1	A
Beta-BHC	ND		ug/kg	1.88	0.715	1	A
Heptachlor	ND		ug/kg	0.943	0.423	1	A
Aldrin	ND		ug/kg	1.88	0.664	1	A
Heptachlor epoxide	ND		ug/kg	3.54	1.06	1	A
Endrin	ND		ug/kg	0.786	0.322	1	A
Endrin aldehyde	ND		ug/kg	2.36	0.825	1	A
Endrin ketone	ND		ug/kg	1.88	0.486	1	A
Dieldrin	ND		ug/kg	1.18	0.589	1	A
4,4'-DDE	ND		ug/kg	1.88	0.436	1	A
4,4'-DDD	ND		ug/kg	1.88	0.673	1	A
4,4'-DDT	ND		ug/kg	3.54	1.52	1	A
Endosulfan I	ND		ug/kg	1.88	0.446	1	A
Endosulfan II	ND		ug/kg	1.88	0.630	1	A
Endosulfan sulfate	ND		ug/kg	0.786	0.374	1	A
Methoxychlor	ND		ug/kg	3.54	1.10	1	A
Toxaphene	ND		ug/kg	35.4	9.90	1	A
cis-Chlordane	ND		ug/kg	2.36	0.657	1	A
trans-Chlordane	ND		ug/kg	2.36	0.622	1	A
Chlordane	ND		ug/kg	15.3	6.25	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-04**Date Collected:** 06/01/18 09:42**Client ID:** SB04_6-8**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	54		30-150	A

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-04
Client ID: SB04_6-8
Sample Location: MANHATTAN

Date Collected: 06/01/18 09:42
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/07/18 18:01
Analyst: SL
Percent Solids: 84%
Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A
Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	197	12.4	1	A
2,4,5-T	ND		ug/kg	197	6.12	1	A
2,4,5-TP (Silvex)	ND		ug/kg	197	5.25	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	131		30-150	A
DCAA	107		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-05

Client ID: SB04_10-12

Sample Location: MANHATTAN

Date Collected: 06/01/18 09:55

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8081B

Analytical Date: 06/07/18 16:14

Analyst: KB

Percent Solids: 88%

Extraction Method: EPA 3546

Extraction Date: 06/04/18 20:58

Cleanup Method: EPA 3620B

Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.76	0.346	1	A
Lindane	ND		ug/kg	0.735	0.329	1	A
Alpha-BHC	ND		ug/kg	0.735	0.209	1	A
Beta-BHC	ND		ug/kg	1.76	0.669	1	A
Heptachlor	ND		ug/kg	0.882	0.396	1	A
Aldrin	ND		ug/kg	1.76	0.621	1	A
Heptachlor epoxide	ND		ug/kg	3.31	0.993	1	A
Endrin	ND		ug/kg	0.735	0.302	1	A
Endrin aldehyde	ND		ug/kg	2.21	0.772	1	A
Endrin ketone	ND		ug/kg	1.76	0.454	1	A
Dieldrin	ND		ug/kg	1.10	0.552	1	A
4,4'-DDE	ND		ug/kg	1.76	0.408	1	A
4,4'-DDD	ND		ug/kg	1.76	0.629	1	A
4,4'-DDT	ND		ug/kg	3.31	1.42	1	A
Endosulfan I	ND		ug/kg	1.76	0.417	1	A
Endosulfan II	ND		ug/kg	1.76	0.590	1	A
Endosulfan sulfate	ND		ug/kg	0.735	0.350	1	A
Methoxychlor	ND		ug/kg	3.31	1.03	1	A
Toxaphene	ND		ug/kg	33.1	9.26	1	A
cis-Chlordane	ND		ug/kg	2.21	0.615	1	A
trans-Chlordane	ND		ug/kg	2.21	0.582	1	A
Chlordane	ND		ug/kg	14.3	5.85	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-05

Date Collected: 06/01/18 09:55

Client ID: SB04_10-12

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	66		30-150	B
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	51		30-150	A

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-05
Client ID: SB04_10-12
Sample Location: MANHATTAN

Date Collected: 06/01/18 09:55
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/07/18 18:20
Analyst: SL
Percent Solids: 88%
Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A
Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	185	11.7	1	A
2,4,5-T	ND		ug/kg	185	5.74	1	A
2,4,5-TP (Silvex)	ND		ug/kg	185	4.93	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	127		30-150	A
DCAA	108		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-06

Client ID: SB05_0-2

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:30

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8081B

Analytical Date: 06/07/18 16:27

Analyst: KB

Percent Solids: 87%

Extraction Method: EPA 3546

Extraction Date: 06/04/18 20:58

Cleanup Method: EPA 3620B

Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.82	0.357	1	A
Lindane	ND		ug/kg	0.760	0.340	1	A
Alpha-BHC	ND		ug/kg	0.760	0.216	1	A
Beta-BHC	ND		ug/kg	1.82	0.691	1	A
Heptachlor	ND		ug/kg	0.912	0.409	1	A
Aldrin	ND		ug/kg	1.82	0.642	1	A
Heptachlor epoxide	ND		ug/kg	3.42	1.02	1	A
Endrin	ND		ug/kg	0.760	0.311	1	A
Endrin aldehyde	ND		ug/kg	2.28	0.798	1	A
Endrin ketone	ND		ug/kg	1.82	0.469	1	A
Dieldrin	ND		ug/kg	1.14	0.570	1	A
4,4'-DDE	ND		ug/kg	1.82	0.422	1	A
4,4'-DDD	ND		ug/kg	1.82	0.650	1	A
4,4'-DDT	ND		ug/kg	3.42	1.47	1	A
Endosulfan I	ND		ug/kg	1.82	0.431	1	A
Endosulfan II	ND		ug/kg	1.82	0.609	1	A
Endosulfan sulfate	ND		ug/kg	0.760	0.362	1	A
Methoxychlor	ND		ug/kg	3.42	1.06	1	A
Toxaphene	ND		ug/kg	34.2	9.57	1	A
cis-Chlordane	ND		ug/kg	2.28	0.635	1	A
trans-Chlordane	ND		ug/kg	2.28	0.602	1	A
Chlordane	ND		ug/kg	14.8	6.04	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-06

Date Collected: 06/01/18 10:30

Client ID: SB05_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	64		30-150	B
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	64		30-150	A

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-06
Client ID: SB05_0-2
Sample Location: MANHATTAN

Date Collected: 06/01/18 10:30
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/07/18 18:39
Analyst: SL
Percent Solids: 87%
Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A
Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	187	11.8	1	A
2,4,5-T	ND		ug/kg	187	5.79	1	A
2,4,5-TP (Silvex)	ND		ug/kg	187	4.97	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	119		30-150	A
DCAA	100		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-07

Client ID: SB05_7-8

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:40

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8081B

Analytical Date: 06/07/18 16:39

Analyst: KB

Percent Solids: 86%

Extraction Method: EPA 3546

Extraction Date: 06/04/18 20:58

Cleanup Method: EPA 3620B

Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.75	0.342	1	A
Lindane	ND		ug/kg	0.729	0.326	1	A
Alpha-BHC	ND		ug/kg	0.729	0.207	1	A
Beta-BHC	ND		ug/kg	1.75	0.663	1	A
Heptachlor	ND		ug/kg	0.875	0.392	1	A
Aldrin	ND		ug/kg	1.75	0.616	1	A
Heptachlor epoxide	ND		ug/kg	3.28	0.984	1	A
Endrin	ND		ug/kg	0.729	0.299	1	A
Endrin aldehyde	ND		ug/kg	2.19	0.765	1	A
Endrin ketone	ND		ug/kg	1.75	0.450	1	A
Dieldrin	ND		ug/kg	1.09	0.547	1	A
4,4'-DDE	ND		ug/kg	1.75	0.404	1	A
4,4'-DDD	ND		ug/kg	1.75	0.624	1	A
4,4'-DDT	ND		ug/kg	3.28	1.41	1	A
Endosulfan I	ND		ug/kg	1.75	0.413	1	A
Endosulfan II	ND		ug/kg	1.75	0.584	1	A
Endosulfan sulfate	ND		ug/kg	0.729	0.347	1	A
Methoxychlor	ND		ug/kg	3.28	1.02	1	A
Toxaphene	ND		ug/kg	32.8	9.18	1	A
cis-Chlordane	ND		ug/kg	2.19	0.609	1	A
trans-Chlordane	ND		ug/kg	2.19	0.577	1	A
Chlordane	ND		ug/kg	14.2	5.79	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-07

Date Collected: 06/01/18 10:40

Client ID: SB05_7-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	72		30-150	B
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	55		30-150	A

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-07
Client ID: SB05_7-8
Sample Location: MANHATTAN

Date Collected: 06/01/18 10:40
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/07/18 18:58
Analyst: SL
Percent Solids: 86%
Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A
Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	188	11.8	1	A
2,4,5-T	ND		ug/kg	188	5.83	1	A
2,4,5-TP (Silvex)	ND		ug/kg	188	5.01	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	121		30-150	A
DCAA	106		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-08

Client ID: SB05_11-12

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:56

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8081B

Analytical Date: 06/07/18 16:52

Analyst: KB

Percent Solids: 87%

Extraction Method: EPA 3546

Extraction Date: 06/04/18 20:58

Cleanup Method: EPA 3620B

Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.82	0.356	1	A
Lindane	ND		ug/kg	0.758	0.339	1	A
Alpha-BHC	ND		ug/kg	0.758	0.215	1	A
Beta-BHC	ND		ug/kg	1.82	0.690	1	A
Heptachlor	ND		ug/kg	0.910	0.408	1	A
Aldrin	ND		ug/kg	1.82	0.641	1	A
Heptachlor epoxide	ND		ug/kg	3.41	1.02	1	A
Endrin	ND		ug/kg	0.758	0.311	1	A
Endrin aldehyde	ND		ug/kg	2.28	0.796	1	A
Endrin ketone	ND		ug/kg	1.82	0.469	1	A
Dieldrin	ND		ug/kg	1.14	0.569	1	A
4,4'-DDE	ND		ug/kg	1.82	0.421	1	A
4,4'-DDD	ND		ug/kg	1.82	0.649	1	A
4,4'-DDT	ND		ug/kg	3.41	1.46	1	A
Endosulfan I	ND		ug/kg	1.82	0.430	1	A
Endosulfan II	ND		ug/kg	1.82	0.608	1	A
Endosulfan sulfate	ND		ug/kg	0.758	0.361	1	A
Methoxychlor	ND		ug/kg	3.41	1.06	1	A
Toxaphene	ND		ug/kg	34.1	9.56	1	A
cis-Chlordane	ND		ug/kg	2.28	0.634	1	A
trans-Chlordane	ND		ug/kg	2.28	0.601	1	A
Chlordane	ND		ug/kg	14.8	6.03	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-08

Date Collected: 06/01/18 10:56

Client ID: SB05_11-12

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	78		30-150	B
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	65		30-150	A

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-08

Client ID: SB05_11-12

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:56

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8151A

Analytical Date: 06/07/18 19:17

Analyst: SL

Percent Solids: 87%

Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A

Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	190	12.0	1	A
2,4,5-T	ND		ug/kg	190	5.90	1	A
2,4,5-TP (Silvex)	ND		ug/kg	190	5.06	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	128		30-150	A
DCAA	103		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-09

Client ID: SB06_0-2

Sample Location: MANHATTAN

Date Collected: 06/01/18 12:02

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8081B

Analytical Date: 06/07/18 17:05

Analyst: KB

Percent Solids: 91%

Extraction Method: EPA 3546

Extraction Date: 06/04/18 20:58

Cleanup Method: EPA 3620B

Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.341	1	A
Lindane	ND		ug/kg	0.726	0.324	1	A
Alpha-BHC	ND		ug/kg	0.726	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.660	1	A
Heptachlor	ND		ug/kg	0.871	0.390	1	A
Aldrin	ND		ug/kg	1.74	0.613	1	A
Heptachlor epoxide	ND		ug/kg	3.27	0.980	1	A
Endrin	ND		ug/kg	0.726	0.298	1	A
Endrin aldehyde	ND		ug/kg	2.18	0.762	1	A
Endrin ketone	ND		ug/kg	1.74	0.448	1	A
Dieldrin	ND		ug/kg	1.09	0.544	1	A
4,4'-DDE	ND		ug/kg	1.74	0.403	1	B
4,4'-DDD	ND		ug/kg	1.74	0.621	1	A
4,4'-DDT	ND		ug/kg	3.27	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.412	1	A
Endosulfan II	ND		ug/kg	1.74	0.582	1	A
Endosulfan sulfate	ND		ug/kg	0.726	0.345	1	A
Methoxychlor	ND		ug/kg	3.27	1.02	1	A
Toxaphene	ND		ug/kg	32.7	9.14	1	A
cis-Chlordane	ND		ug/kg	2.18	0.607	1	A
trans-Chlordane	ND		ug/kg	2.18	0.575	1	A
Chlordane	ND		ug/kg	14.2	5.77	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-09

Date Collected: 06/01/18 12:02

Client ID: SB06_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	87		30-150	B
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	69		30-150	A

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-09

Client ID: SB06_0-2

Sample Location: MANHATTAN

Date Collected: 06/01/18 12:02

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8151A

Analytical Date: 06/07/18 19:36

Analyst: SL

Percent Solids: 91%

Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A

Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.67	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	139		30-150	A
DCAA	113		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-10**Client ID:** SB06_6-8**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 12:08**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8081B**Analytical Date:** 06/07/18 17:17**Analyst:** KB**Percent Solids:** 92%**Extraction Method:** EPA 3546**Extraction Date:** 06/04/18 20:58**Cleanup Method:** EPA 3620B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.72	0.338	1	A
Lindane	ND		ug/kg	0.718	0.321	1	A
Alpha-BHC	ND		ug/kg	0.718	0.204	1	A
Beta-BHC	ND		ug/kg	1.72	0.654	1	A
Heptachlor	ND		ug/kg	0.862	0.386	1	A
Aldrin	ND		ug/kg	1.72	0.607	1	A
Heptachlor epoxide	ND		ug/kg	3.23	0.970	1	A
Endrin	ND		ug/kg	0.718	0.295	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.754	1	A
Endrin ketone	ND		ug/kg	1.72	0.444	1	A
Dieldrin	ND		ug/kg	1.08	0.539	1	A
4,4'-DDE	ND		ug/kg	1.72	0.399	1	A
4,4'-DDD	ND		ug/kg	1.72	0.615	1	A
4,4'-DDT	ND		ug/kg	3.23	1.39	1	A
Endosulfan I	ND		ug/kg	1.72	0.407	1	A
Endosulfan II	ND		ug/kg	1.72	0.576	1	A
Endosulfan sulfate	ND		ug/kg	0.718	0.342	1	A
Methoxychlor	ND		ug/kg	3.23	1.00	1	A
Toxaphene	ND		ug/kg	32.3	9.05	1	A
cis-Chlordane	ND		ug/kg	2.16	0.601	1	A
trans-Chlordane	ND		ug/kg	2.16	0.569	1	A
Chlordane	ND		ug/kg	14.0	5.71	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-10

Date Collected: 06/01/18 12:08

Client ID: SB06_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	74		30-150	B
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	58		30-150	A

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-10
Client ID: SB06_6-8
Sample Location: MANHATTAN

Date Collected: 06/01/18 12:08
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/07/18 20:13
Analyst: SL
Percent Solids: 92%
Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A
Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	179	11.3	1	A
2,4,5-T	ND		ug/kg	179	5.54	1	A
2,4,5-TP (Silvex)	ND		ug/kg	179	4.76	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	126		30-150	A
DCAA	103		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-11**Client ID:** SB06_12-14**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 12:15**Date Received:** 06/01/18**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil**Analytical Method:** 1,8081B**Analytical Date:** 06/07/18 17:30**Analyst:** KB**Percent Solids:** 85%**Extraction Method:** EPA 3546**Extraction Date:** 06/04/18 20:58**Cleanup Method:** EPA 3620B**Cleanup Date:** 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.347	1	A
Lindane	ND		ug/kg	0.738	0.330	1	A
Alpha-BHC	ND		ug/kg	0.738	0.209	1	A
Beta-BHC	ND		ug/kg	1.77	0.671	1	A
Heptachlor	ND		ug/kg	0.885	0.397	1	A
Aldrin	ND		ug/kg	1.77	0.623	1	A
Heptachlor epoxide	ND		ug/kg	3.32	0.996	1	A
Endrin	ND		ug/kg	0.738	0.302	1	A
Endrin aldehyde	ND		ug/kg	2.21	0.774	1	A
Endrin ketone	ND		ug/kg	1.77	0.456	1	A
Dieldrin	ND		ug/kg	1.11	0.553	1	A
4,4'-DDE	2.06		ug/kg	1.77	0.409	1	A
4,4'-DDD	ND		ug/kg	1.77	0.631	1	A
4,4'-DDT	ND		ug/kg	3.32	1.42	1	A
Endosulfan I	ND		ug/kg	1.77	0.418	1	A
Endosulfan II	ND		ug/kg	1.77	0.592	1	A
Endosulfan sulfate	ND		ug/kg	0.738	0.351	1	A
Methoxychlor	ND		ug/kg	3.32	1.03	1	A
Toxaphene	ND		ug/kg	33.2	9.29	1	A
cis-Chlordane	ND		ug/kg	2.21	0.617	1	A
trans-Chlordane	ND		ug/kg	2.21	0.584	1	A
Chlordane	ND		ug/kg	14.4	5.86	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-11**Date Collected:** 06/01/18 12:15**Client ID:** SB06_12-14**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	82		30-150	B
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	62		30-150	A

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-11

Client ID: SB06_12-14

Sample Location: MANHATTAN

Date Collected: 06/01/18 12:15

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8151A

Analytical Date: 06/07/18 20:32

Analyst: SL

Percent Solids: 85%

Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A

Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/kg	195	12.3	1	A
2,4,5-T	ND		ug/kg	195	6.06	1	A
2,4,5-TP (Silvex)	ND		ug/kg	195	5.20	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	134		30-150	A
DCAA	112		30-150	B

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-12
Client ID: SBDUP02_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 06/07/18 17:43
Analyst: KB
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 06/04/18 20:58
Cleanup Method: EPA 3620B
Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.339	1	A
Lindane	ND		ug/kg	0.722	0.323	1	A
Alpha-BHC	ND		ug/kg	0.722	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.657	1	A
Heptachlor	ND		ug/kg	0.866	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.610	1	A
Heptachlor epoxide	ND		ug/kg	3.25	0.975	1	A
Endrin	ND		ug/kg	0.722	0.296	1	A
Endrin aldehyde	ND		ug/kg	2.17	0.758	1	A
Endrin ketone	ND		ug/kg	1.73	0.446	1	A
Dieldrin	ND		ug/kg	1.08	0.542	1	A
4,4'-DDE	ND		ug/kg	1.73	0.401	1	A
4,4'-DDD	ND		ug/kg	1.73	0.618	1	A
4,4'-DDT	ND		ug/kg	3.25	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.409	1	A
Endosulfan II	ND		ug/kg	1.73	0.579	1	A
Endosulfan sulfate	ND		ug/kg	0.722	0.344	1	A
Methoxychlor	ND		ug/kg	3.25	1.01	1	A
Toxaphene	ND		ug/kg	32.5	9.10	1	A
cis-Chlordane	ND		ug/kg	2.17	0.604	1	A
trans-Chlordane	ND		ug/kg	2.17	0.572	1	A
Chlordane	ND		ug/kg	14.1	5.74	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-12**Date Collected:** 06/01/18 00:00**Client ID:** SBDUP02_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-12
Client ID: SBDUP02_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 06/07/18 20:51
Analyst: SL
Percent Solids: 87%
Methylation Date: 06/06/18 21:35

Extraction Method: EPA 8151A
Extraction Date: 06/05/18 06:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	187	11.8	1	A
2,4,5-T	ND		ug/kg	187	5.80	1	A
2,4,5-TP (Silvex)	ND		ug/kg	187	4.98	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	129		30-150	A
DCAA	109		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-13
 Client ID: TW03_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 11:30
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 06/09/18 23:49
 Analyst: KB

Extraction Method: EPA 3510C
 Extraction Date: 06/08/18 15:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-13

Date Collected: 06/01/18 11:30

Client ID: TW03_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	51		30-150	B

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-13
Client ID: TW03_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 11:30
Date Received: 06/01/18
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 06/06/18 17:53
Analyst: SL

Extraction Method: EPA 8151A
Extraction Date: 06/04/18 22:46

Methylation Date: 06/05/18 17:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	86		30-150	A
DCAA	89		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-14**Client ID:** TW05_060118**Sample Location:** MANHATTAN**Date Collected:** 06/01/18 13:30**Date Received:** 06/01/18**Field Prep:** Refer to COC**Sample Depth:****Matrix:** Water**Analytical Method:** 1,8081B**Analytical Date:** 06/10/18 00:02**Analyst:** KB**Extraction Method:** EPA 3510C**Extraction Date:** 06/08/18 15:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	0.063	P	ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-14

Date Collected: 06/01/18 13:30

Client ID: TW05_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-14
 Client ID: TW05_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 13:30
 Date Received: 06/01/18
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 06/06/18 18:12
 Analyst: SL

Extraction Method: EPA 8151A
 Extraction Date: 06/04/18 22:46

Methylation Date: 06/05/18 17:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column

Chlorinated Herbicides by GC - Westborough Lab

2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	105		30-150	A
DCAA	105		30-150	B

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-15
Client ID: TWDUP01_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 06/10/18 00:14
Analyst: KB

Extraction Method: EPA 3510C
Extraction Date: 06/08/18 15:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	0.025	J	ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS****Lab ID:** L1820339-15**Date Collected:** 06/01/18 00:00**Client ID:** TWDUP01_060118**Date Received:** 06/01/18**Sample Location:** MANHATTAN**Field Prep:** Refer to COC**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-15
Client ID: TWDUP01_060118
Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00
Date Received: 06/01/18
Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8151A

Analytical Date: 06/06/18 18:32

Analyst: SL

Extraction Method: EPA 8151A

Extraction Date: 06/04/18 22:46

Methylation Date: 06/05/18 17:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	100		30-150	A
DCAA	101		30-150	B

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/07/18 14:07
 Analyst: KEG

Extraction Method: EPA 3546
 Extraction Date: 06/04/18 20:58
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 03-12 Batch: WG1122350-1						
Delta-BHC	ND		ug/kg	1.58	0.310	A
Lindane	ND		ug/kg	0.659	0.294	A
Alpha-BHC	ND		ug/kg	0.659	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.599	A
Heptachlor	ND		ug/kg	0.790	0.354	A
Aldrin	ND		ug/kg	1.58	0.557	A
Heptachlor epoxide	ND		ug/kg	2.96	0.889	A
Endrin	ND		ug/kg	0.659	0.270	A
Endrin aldehyde	ND		ug/kg	1.98	0.692	A
Endrin ketone	ND		ug/kg	1.58	0.407	A
Dieldrin	ND		ug/kg	0.988	0.494	A
4,4'-DDE	ND		ug/kg	1.58	0.366	A
4,4'-DDD	ND		ug/kg	1.58	0.564	A
4,4'-DDT	ND		ug/kg	2.96	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.374	A
Endosulfan II	ND		ug/kg	1.58	0.528	A
Endosulfan sulfate	ND		ug/kg	0.659	0.314	A
Methoxychlor	ND		ug/kg	2.96	0.922	A
Toxaphene	ND		ug/kg	29.6	8.30	A
cis-Chlordane	ND		ug/kg	1.98	0.551	A
trans-Chlordane	ND		ug/kg	1.98	0.522	A
Chlordane	ND		ug/kg	12.8	5.24	A

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/07/18 14:07
 Analyst: KEG

Extraction Method: EPA 3546
 Extraction Date: 06/04/18 20:58
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/06/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 03-12 Batch: WG1122350-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	58		30-150	B
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	83		30-150	A

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 06/06/18 16:14
 Analyst: SL

Extraction Method: EPA 8151A
 Extraction Date: 06/04/18 22:46

Methylation Date: 06/05/18 17:08

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 13-15 Batch: WG1122364-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	96		30-150	A
DCAA	101		30-150	B

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 06/05/18 17:53
 Analyst: SL

Extraction Method: EPA 8151A
 Extraction Date: 06/05/18 01:32

Methylation Date: 06/05/18 14:14

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 03-12 Batch: WG1122400-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.02	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.30	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	97		30-150	B

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/09/18 20:54
 Analyst: KEG

Extraction Method: EPA 3546
 Extraction Date: 06/07/18 20:35
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/08/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1123696-1						
Delta-BHC	ND		ug/kg	1.52	0.298	A
Lindane	ND		ug/kg	0.633	0.283	A
Alpha-BHC	ND		ug/kg	0.633	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.576	A
Heptachlor	ND		ug/kg	0.760	0.341	A
Aldrin	ND		ug/kg	1.52	0.535	A
Heptachlor epoxide	ND		ug/kg	2.85	0.855	A
Endrin	ND		ug/kg	0.633	0.260	A
Endrin aldehyde	ND		ug/kg	1.90	0.665	A
Endrin ketone	ND		ug/kg	1.52	0.391	A
Dieldrin	ND		ug/kg	0.950	0.475	A
4,4'-DDE	ND		ug/kg	1.52	0.351	A
4,4'-DDD	ND		ug/kg	1.52	0.542	A
4,4'-DDT	ND		ug/kg	2.85	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.359	A
Endosulfan II	ND		ug/kg	1.52	0.508	A
Endosulfan sulfate	ND		ug/kg	0.633	0.301	A
Methoxychlor	ND		ug/kg	2.85	0.887	A
Toxaphene	ND		ug/kg	28.5	7.98	A
cis-Chlordane	ND		ug/kg	1.90	0.529	A
trans-Chlordane	ND		ug/kg	1.90	0.502	A
Chlordane	ND		ug/kg	12.3	5.03	A

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/09/18 20:54
 Analyst: KEG

Extraction Method: EPA 3546
 Extraction Date: 06/07/18 20:35
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/08/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1123696-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	61		30-150	B
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	62		30-150	A

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 06/09/18 22:25
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 06/08/18 09:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13-15 Batch: WG1123884-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**Method Blank Analysis**
Batch Quality ControlAnalytical Method: 1,8081B
Analytical Date: 06/09/18 22:25
Analyst: KEGExtraction Method: EPA 3510C
Extraction Date: 06/08/18 09:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13-15 Batch: WG1123884-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	49		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 06/10/18 20:26
 Analyst: SL

Extraction Method: EPA 8151A
 Extraction Date: 06/08/18 15:37

Methylation Date: 06/09/18 21:38

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 02 Batch: WG1124048-1						
2,4-D	ND		ug/kg	163	10.2	A
2,4,5-T	ND		ug/kg	163	5.04	A
2,4,5-TP (Silvex)	ND		ug/kg	163	4.33	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	124		30-150	A
DCAA	104		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 03-12 Batch: WG1122350-2 WG1122350-3									
Delta-BHC	97		102		30-150	5		30	A
Lindane	82		91		30-150	10		30	A
Alpha-BHC	89		97		30-150	9		30	A
Beta-BHC	84		89		30-150	6		30	A
Heptachlor	88		96		30-150	9		30	A
Aldrin	87		95		30-150	9		30	A
Heptachlor epoxide	72		77		30-150	7		30	A
Endrin	96		100		30-150	4		30	A
Endrin aldehyde	80		93		30-150	15		30	A
Endrin ketone	88		102		30-150	15		30	A
Dieldrin	97		104		30-150	7		30	A
4,4'-DDE	91		97		30-150	6		30	A
4,4'-DDD	92		99		30-150	7		30	A
4,4'-DDT	94		99		30-150	5		30	A
Endosulfan I	86		93		30-150	8		30	A
Endosulfan II	87		95		30-150	9		30	A
Endosulfan sulfate	85		101		30-150	17		30	A
Methoxychlor	83		90		30-150	8		30	A
cis-Chlordane	79		83		30-150	5		30	A
trans-Chlordane	67		76		30-150	13		30	A

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 03-12 Batch: WG1122350-2 WG1122350-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		76		30-150	B
Decachlorobiphenyl	95		97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	64		69		30-150	A
Decachlorobiphenyl	75		75		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 13-15 Batch: WG1122364-2 WG1122364-3									
2,4-D	115		115		30-150	0		25	A
2,4,5-T	127		124		30-150	2		25	A
2,4,5-TP (Silvex)	119		120		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	105		107		30-150	A
DCAA	117		119		30-150	B

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 03-12 Batch: WG1122400-2 WG1122400-3									
2,4-D	103		111		30-150	7		30	A
2,4,5-T	104		112		30-150	7		30	A
2,4,5-TP (Silvex)	101		107		30-150	6		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	86		96		30-150	A
DCAA	94		101		30-150	B

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1123696-2 WG1123696-3									
Delta-BHC	104		106		30-150	2		30	A
Lindane	101		106		30-150	5		30	A
Alpha-BHC	102		105		30-150	3		30	A
Beta-BHC	89		95		30-150	7		30	A
Heptachlor	108		111		30-150	3		30	A
Aldrin	99		104		30-150	5		30	A
Heptachlor epoxide	101		104		30-150	3		30	A
Endrin	122		127		30-150	4		30	A
Endrin aldehyde	87		91		30-150	4		30	A
Endrin ketone	107		111		30-150	4		30	A
Dieldrin	110		106		30-150	4		30	A
4,4'-DDE	96		100		30-150	4		30	A
4,4'-DDD	105		109		30-150	4		30	A
4,4'-DDT	120		123		30-150	2		30	A
Endosulfan I	95		100		30-150	5		30	A
Endosulfan II	98		100		30-150	2		30	A
Endosulfan sulfate	92		93		30-150	1		30	A
Methoxychlor	142		147		30-150	3		30	A
cis-Chlordane	85		89		30-150	5		30	A
trans-Chlordane	86		88		30-150	2		30	A

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1123696-2 WG1123696-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		63		30-150	B
Decachlorobiphenyl	61		65		30-150	B
2,4,5,6-Tetrachloro-m-xylene	71		71		30-150	A
Decachlorobiphenyl	66		67		30-150	A

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13-15 Batch: WG1123884-2 WG1123884-3									
Delta-BHC	84		62		30-150	30	Q	20	A
Lindane	68		56		30-150	18		20	A
Alpha-BHC	70		62		30-150	12		20	A
Beta-BHC	63		59		30-150	6		20	A
Heptachlor	64		52		30-150	21	Q	20	A
Aldrin	64		53		30-150	19		20	A
Heptachlor epoxide	68		56		30-150	18		20	A
Endrin	70		61		30-150	14		20	A
Endrin aldehyde	72		64		30-150	11		20	A
Endrin ketone	72		62		30-150	15		20	A
Dieldrin	73		60		30-150	19		20	A
4,4'-DDE	75		58		30-150	25	Q	20	A
4,4'-DDD	69		61		30-150	14		20	A
4,4'-DDT	68		61		30-150	12		20	A
Endosulfan I	72		57		30-150	23	Q	20	A
Endosulfan II	65		55		30-150	16		20	A
Endosulfan sulfate	75		62		30-150	19		20	A
Methoxychlor	67		65		30-150	3		20	A
cis-Chlordane	63		52		30-150	19		20	A
trans-Chlordane	67		56		30-150	17		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13-15 Batch: WG1123884-2 WG1123884-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		45		30-150	A
Decachlorobiphenyl	50		45		30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		46		30-150	B
Decachlorobiphenyl	55		54		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1124048-2 WG1124048-3									
2,4-D	150		166	Q	30-150	10		30	A
2,4,5-T	107		116		30-150	8		30	A
2,4,5-TP (Silvex)	132		144		30-150	9		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	116		138		30-150	A
DCAA	105		114		30-150	B

METALS

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-02

Date Collected: 06/01/18 12:20

Client ID: SB06_14-16

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3300		mg/kg	8.52	2.30	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.26	0.324	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Arsenic, Total	2.13		mg/kg	0.852	0.177	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Barium, Total	20.4		mg/kg	0.852	0.148	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Beryllium, Total	0.298	J	mg/kg	0.426	0.028	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Cadmium, Total	0.196	J	mg/kg	0.852	0.084	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Calcium, Total	653		mg/kg	8.52	2.98	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Chromium, Total	7.36		mg/kg	0.852	0.082	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Cobalt, Total	3.74		mg/kg	1.70	0.141	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Copper, Total	12.0		mg/kg	0.852	0.220	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Iron, Total	6970		mg/kg	4.26	0.770	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Lead, Total	4.17	J	mg/kg	4.26	0.228	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Magnesium, Total	1750		mg/kg	8.52	1.31	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Manganese, Total	87.5		mg/kg	0.852	0.135	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.078	0.016	1	06/08/18 16:02	06/08/18 17:50	EPA 7471B	1,7471B	EA
Nickel, Total	8.38		mg/kg	2.13	0.206	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Potassium, Total	470		mg/kg	213	12.3	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.70	0.220	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.852	0.241	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Sodium, Total	129	J	mg/kg	170	2.68	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.70	0.268	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Vanadium, Total	8.09		mg/kg	0.852	0.173	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB
Zinc, Total	14.6		mg/kg	4.26	0.250	2	06/07/18 19:36	06/08/18 17:30	EPA 3050B	1,6010C	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	7.4		mg/kg	0.91	0.91	1		06/09/18 00:05	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-03

Date Collected: 06/01/18 09:34

Client ID: SB04_1-3

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2010		mg/kg	8.36	2.26	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Antimony, Total	1.60	J	mg/kg	4.18	0.318	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Arsenic, Total	5.71		mg/kg	0.836	0.174	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Barium, Total	62.1		mg/kg	0.836	0.145	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Beryllium, Total	0.142	J	mg/kg	0.418	0.028	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Cadmium, Total	0.351	J	mg/kg	0.836	0.082	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Calcium, Total	16200		mg/kg	8.36	2.93	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Chromium, Total	7.20		mg/kg	0.836	0.080	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Cobalt, Total	3.74		mg/kg	1.67	0.139	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Copper, Total	66.7		mg/kg	0.836	0.216	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Iron, Total	6590		mg/kg	4.18	0.755	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Lead, Total	135		mg/kg	4.18	0.224	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Magnesium, Total	966		mg/kg	8.36	1.29	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Manganese, Total	63.4		mg/kg	0.836	0.133	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Mercury, Total	0.220		mg/kg	0.071	0.015	1	06/06/18 09:30	06/07/18 18:31	EPA 7471B	1,7471B	EA
Nickel, Total	10.8		mg/kg	2.09	0.202	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Potassium, Total	669		mg/kg	209	12.0	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.67	0.216	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.836	0.237	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Sodium, Total	1020		mg/kg	167	2.63	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.67	0.263	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Vanadium, Total	14.4		mg/kg	0.836	0.170	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
Zinc, Total	104		mg/kg	4.18	0.245	2	06/06/18 21:30	06/08/18 01:02	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.2		mg/kg	0.88	0.88	1		06/08/18 01:02	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-04

Date Collected: 06/01/18 09:42

Client ID: SB04_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5100		mg/kg	9.23	2.49	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Antimony, Total	0.544	J	mg/kg	4.61	0.351	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Arsenic, Total	5.08		mg/kg	0.923	0.192	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Barium, Total	98.9		mg/kg	0.923	0.160	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Beryllium, Total	0.286	J	mg/kg	0.461	0.030	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Cadmium, Total	0.304	J	mg/kg	0.923	0.090	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Calcium, Total	8010		mg/kg	9.23	3.23	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Chromium, Total	11.7		mg/kg	0.923	0.089	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Cobalt, Total	4.58		mg/kg	1.84	0.153	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Copper, Total	23.9		mg/kg	0.923	0.238	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Iron, Total	10700		mg/kg	4.61	0.833	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Lead, Total	322		mg/kg	4.61	0.247	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Magnesium, Total	2410		mg/kg	9.23	1.42	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Manganese, Total	330		mg/kg	0.923	0.147	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Mercury, Total	0.396		mg/kg	0.076	0.016	1	06/06/18 09:30	06/07/18 18:39	EPA 7471B	1,7471B	EA
Nickel, Total	10.5		mg/kg	2.31	0.223	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Potassium, Total	996		mg/kg	231	13.3	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.84	0.238	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.923	0.261	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Sodium, Total	316		mg/kg	184	2.91	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.84	0.291	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Vanadium, Total	14.0		mg/kg	0.923	0.187	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
Zinc, Total	78.2		mg/kg	4.61	0.270	2	06/06/18 21:30	06/08/18 01:20	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11	J	mg/kg	0.96	0.96	1		06/08/18 01:20	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-05

Date Collected: 06/01/18 09:55

Client ID: SB04_10-12

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5640		mg/kg	8.82	2.38	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.41	0.335	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Arsenic, Total	1.60		mg/kg	0.882	0.183	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Barium, Total	39.8		mg/kg	0.882	0.153	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Beryllium, Total	0.300	J	mg/kg	0.441	0.029	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Cadmium, Total	0.265	J	mg/kg	0.882	0.086	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Calcium, Total	2180		mg/kg	8.82	3.09	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Chromium, Total	13.4		mg/kg	0.882	0.085	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Cobalt, Total	5.10		mg/kg	1.76	0.146	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Copper, Total	13.1		mg/kg	0.882	0.228	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Iron, Total	11200		mg/kg	4.41	0.796	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Lead, Total	8.94		mg/kg	4.41	0.236	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Magnesium, Total	2650		mg/kg	8.82	1.36	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Manganese, Total	364		mg/kg	0.882	0.140	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Mercury, Total	0.021	J	mg/kg	0.072	0.015	1	06/06/18 09:30	06/07/18 18:40	EPA 7471B	1,7471B	EA
Nickel, Total	12.0		mg/kg	2.20	0.213	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Potassium, Total	871		mg/kg	220	12.7	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.76	0.228	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.882	0.250	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Sodium, Total	192		mg/kg	176	2.78	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Thallium, Total	0.291	J	mg/kg	1.76	0.278	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Vanadium, Total	16.5		mg/kg	0.882	0.179	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB
Zinc, Total	21.3		mg/kg	4.41	0.258	2	06/06/18 21:30	06/08/18 01:25	EPA 3050B	1,6010C	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	13		mg/kg	0.91	0.91	1		06/08/18 01:25	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-06

Date Collected: 06/01/18 10:30

Client ID: SB05_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2630		mg/kg	8.72	2.35	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Antimony, Total	0.436	J	mg/kg	4.36	0.331	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Arsenic, Total	3.96		mg/kg	0.872	0.181	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Barium, Total	47.6		mg/kg	0.872	0.152	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Beryllium, Total	0.139	J	mg/kg	0.436	0.029	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Cadmium, Total	0.235	J	mg/kg	0.872	0.085	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Calcium, Total	33000		mg/kg	8.72	3.05	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Chromium, Total	4.58		mg/kg	0.872	0.084	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Cobalt, Total	3.27		mg/kg	1.74	0.145	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Copper, Total	14.9		mg/kg	0.872	0.225	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Iron, Total	4300		mg/kg	4.36	0.787	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Lead, Total	150		mg/kg	4.36	0.234	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Magnesium, Total	2210		mg/kg	8.72	1.34	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Manganese, Total	113		mg/kg	0.872	0.139	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Mercury, Total	0.053	J	mg/kg	0.072	0.015	1	06/06/18 09:30	06/07/18 18:42	EPA 7471B	1,7471B	EA
Nickel, Total	8.55		mg/kg	2.18	0.211	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Potassium, Total	886		mg/kg	218	12.6	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.74	0.225	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.872	0.247	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Sodium, Total	841		mg/kg	174	2.75	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.74	0.275	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Vanadium, Total	8.13		mg/kg	0.872	0.177	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
Zinc, Total	76.5		mg/kg	4.36	0.255	2	06/06/18 21:30	06/08/18 01:29	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	4.6		mg/kg	0.92	0.92	1		06/08/18 01:29	NA	107,-	



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-07

Date Collected: 06/01/18 10:40

Client ID: SB05_7-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3530		mg/kg	8.90	2.40	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Antimony, Total	2.08	J	mg/kg	4.45	0.338	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Arsenic, Total	10.8		mg/kg	0.890	0.185	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Barium, Total	155		mg/kg	0.890	0.155	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Beryllium, Total	0.098	J	mg/kg	0.445	0.029	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Cadmium, Total	2.30		mg/kg	0.890	0.087	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Calcium, Total	95400		mg/kg	89.0	31.1	20	06/06/18 21:30	06/08/18 03:18	EPA 3050B	1,6010C	AB
Chromium, Total	22.9		mg/kg	0.890	0.085	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Cobalt, Total	3.01		mg/kg	1.78	0.148	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Copper, Total	24.8		mg/kg	0.890	0.230	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Iron, Total	11000		mg/kg	4.45	0.803	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Lead, Total	5650		mg/kg	4.45	0.238	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Magnesium, Total	3110		mg/kg	8.90	1.37	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Manganese, Total	156		mg/kg	0.890	0.141	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Mercury, Total	1.41		mg/kg	0.073	0.016	1	06/06/18 09:30	06/07/18 18:44	EPA 7471B	1,7471B	EA
Nickel, Total	12.0		mg/kg	2.22	0.215	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Potassium, Total	1010		mg/kg	222	12.8	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.78	0.230	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.890	0.252	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Sodium, Total	1040		mg/kg	178	2.80	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.78	0.280	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Vanadium, Total	11.3		mg/kg	0.890	0.180	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
Zinc, Total	3000		mg/kg	4.45	0.261	2	06/06/18 21:30	06/08/18 01:34	EPA 3050B	1,6010C	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	23		mg/kg	0.93	0.93	1		06/08/18 01:34	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-08

Date Collected: 06/01/18 10:56

Client ID: SB05_11-12

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5090		mg/kg	8.97	2.42	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.49	0.341	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Arsenic, Total	1.32		mg/kg	0.897	0.187	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Barium, Total	33.9		mg/kg	0.897	0.156	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Beryllium, Total	0.269	J	mg/kg	0.449	0.030	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Cadmium, Total	0.260	J	mg/kg	0.897	0.088	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Calcium, Total	2060		mg/kg	8.97	3.14	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Chromium, Total	9.98		mg/kg	0.897	0.086	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Cobalt, Total	5.29		mg/kg	1.79	0.149	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Copper, Total	19.8		mg/kg	0.897	0.232	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Iron, Total	10800		mg/kg	4.49	0.810	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Lead, Total	6.42		mg/kg	4.49	0.240	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Magnesium, Total	2600		mg/kg	8.97	1.38	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Manganese, Total	329		mg/kg	0.897	0.143	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.072	0.015	1	06/06/18 09:30	06/07/18 18:50	EPA 7471B	1,7471B	EA
Nickel, Total	12.9		mg/kg	2.24	0.217	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Potassium, Total	758		mg/kg	224	12.9	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.79	0.232	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.897	0.254	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Sodium, Total	187		mg/kg	179	2.83	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.79	0.283	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Vanadium, Total	13.8		mg/kg	0.897	0.182	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB
Zinc, Total	20.1		mg/kg	4.49	0.263	2	06/06/18 21:30	06/08/18 01:56	EPA 3050B	1,6010C	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	10		mg/kg	0.92	0.92	1		06/08/18 01:56	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-09

Date Collected: 06/01/18 12:02

Client ID: SB06_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6180		mg/kg	8.59	2.32	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Antimony, Total	0.558	J	mg/kg	4.30	0.326	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Arsenic, Total	4.18		mg/kg	0.859	0.179	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Barium, Total	78.9		mg/kg	0.859	0.150	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Beryllium, Total	0.335	J	mg/kg	0.430	0.028	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Cadmium, Total	0.309	J	mg/kg	0.859	0.084	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Calcium, Total	8750		mg/kg	8.59	3.01	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Chromium, Total	13.9		mg/kg	0.859	0.083	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Cobalt, Total	5.17		mg/kg	1.72	0.143	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Copper, Total	35.6		mg/kg	0.859	0.222	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Iron, Total	12000		mg/kg	4.30	0.776	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Lead, Total	334		mg/kg	4.30	0.230	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Magnesium, Total	2450		mg/kg	8.59	1.32	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Manganese, Total	270		mg/kg	0.859	0.137	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Mercury, Total	6.28		mg/kg	0.345	0.073	5	06/06/18 09:30	06/07/18 21:17	EPA 7471B	1,7471B	EA
Nickel, Total	11.4		mg/kg	2.15	0.208	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Potassium, Total	882		mg/kg	215	12.4	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.72	0.222	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.859	0.243	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Sodium, Total	142	J	mg/kg	172	2.71	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Thallium, Total	0.275	J	mg/kg	1.72	0.271	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Vanadium, Total	17.7		mg/kg	0.859	0.174	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB
Zinc, Total	62.6		mg/kg	4.30	0.252	2	06/06/18 21:30	06/08/18 02:01	EPA 3050B	1,6010C	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	14		mg/kg	0.88	0.88	1		06/08/18 02:01	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-10

Date Collected: 06/01/18 12:08

Client ID: SB06_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4690		mg/kg	8.38	2.26	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.19	0.318	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Arsenic, Total	4.21		mg/kg	0.838	0.174	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Barium, Total	90.2		mg/kg	0.838	0.146	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Beryllium, Total	0.209	J	mg/kg	0.419	0.028	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Cadmium, Total	0.235	J	mg/kg	0.838	0.082	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Calcium, Total	14200		mg/kg	8.38	2.93	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Chromium, Total	10.0		mg/kg	0.838	0.080	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Cobalt, Total	3.64		mg/kg	1.68	0.139	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Copper, Total	17.7		mg/kg	0.838	0.216	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Iron, Total	9870		mg/kg	4.19	0.757	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Lead, Total	458		mg/kg	4.19	0.224	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Magnesium, Total	1640		mg/kg	8.38	1.29	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Manganese, Total	275		mg/kg	0.838	0.133	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Mercury, Total	0.426		mg/kg	0.070	0.015	1	06/06/18 09:30	06/07/18 18:54	EPA 7471B	1,7471B	EA
Nickel, Total	8.37		mg/kg	2.09	0.203	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Potassium, Total	698		mg/kg	209	12.1	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.68	0.216	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.838	0.237	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Sodium, Total	180		mg/kg	168	2.64	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.68	0.264	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Vanadium, Total	16.2		mg/kg	0.838	0.170	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB
Zinc, Total	25.4		mg/kg	4.19	0.246	2	06/06/18 21:30	06/08/18 02:05	EPA 3050B	1,6010C	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	10		mg/kg	0.87	0.87	1		06/08/18 02:05	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-11

Date Collected: 06/01/18 12:15

Client ID: SB06_12-14

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3390		mg/kg	9.18	2.48	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.59	0.349	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Arsenic, Total	1.17		mg/kg	0.918	0.191	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Barium, Total	25.3		mg/kg	0.918	0.160	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Beryllium, Total	0.174	J	mg/kg	0.459	0.030	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Cadmium, Total	0.174	J	mg/kg	0.918	0.090	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Calcium, Total	7040		mg/kg	9.18	3.21	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Chromium, Total	6.92		mg/kg	0.918	0.088	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Cobalt, Total	3.36		mg/kg	1.84	0.152	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Copper, Total	12.7		mg/kg	0.918	0.237	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Iron, Total	8070		mg/kg	4.59	0.829	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Lead, Total	5.23		mg/kg	4.59	0.246	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Magnesium, Total	1760		mg/kg	9.18	1.41	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Manganese, Total	188		mg/kg	0.918	0.146	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.074	0.016	1	06/06/18 09:30	06/07/18 18:56	EPA 7471B	1,7471B	EA
Nickel, Total	6.68		mg/kg	2.30	0.222	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Potassium, Total	555		mg/kg	230	13.2	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.84	0.237	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.918	0.260	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Sodium, Total	187		mg/kg	184	2.89	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.84	0.289	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Vanadium, Total	14.6		mg/kg	0.918	0.186	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB
Zinc, Total	15.0		mg/kg	4.59	0.269	2	06/06/18 21:30	06/08/18 02:10	EPA 3050B	1,6010C	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	6.9		mg/kg	0.94	0.94	1		06/08/18 02:10	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-12

Date Collected: 06/01/18 00:00

Client ID: SBDUP02_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8240		mg/kg	9.00	2.43	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.50	0.342	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Arsenic, Total	2.68		mg/kg	0.900	0.187	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Barium, Total	39.9		mg/kg	0.900	0.157	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Beryllium, Total	0.351	J	mg/kg	0.450	0.030	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Cadmium, Total	0.324	J	mg/kg	0.900	0.088	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Calcium, Total	975		mg/kg	9.00	3.15	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Chromium, Total	11.8		mg/kg	0.900	0.086	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Cobalt, Total	6.19		mg/kg	1.80	0.149	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Copper, Total	14.2		mg/kg	0.900	0.232	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Iron, Total	14500		mg/kg	4.50	0.813	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Lead, Total	7.22		mg/kg	4.50	0.241	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Magnesium, Total	2830		mg/kg	9.00	1.39	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Manganese, Total	243		mg/kg	0.900	0.143	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.072	0.015	1	06/06/18 09:30	06/07/18 18:58	EPA 7471B	1,7471B	EA
Nickel, Total	14.2		mg/kg	2.25	0.218	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Potassium, Total	625		mg/kg	225	13.0	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.80	0.232	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.900	0.255	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Sodium, Total	187		mg/kg	180	2.84	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.80	0.284	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Vanadium, Total	15.3		mg/kg	0.900	0.183	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB
Zinc, Total	28.2		mg/kg	4.50	0.264	2	06/06/18 21:30	06/08/18 02:14	EPA 3050B	1,6010C	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	12		mg/kg	0.92	0.92	1		06/08/18 02:14	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-13

Date Collected: 06/01/18 11:30

Client ID: TW03_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4.67		mg/l	0.0100	0.00327	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Antimony, Total	0.00044	J	mg/l	0.00400	0.00042	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Arsenic, Total	0.01227		mg/l	0.00050	0.00016	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Barium, Total	0.2664		mg/l	0.00050	0.00017	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Beryllium, Total	0.00044	J	mg/l	0.00050	0.00010	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00010	J	mg/l	0.00020	0.00005	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Calcium, Total	37.4		mg/l	0.100	0.0394	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Chromium, Total	0.01117		mg/l	0.00100	0.00017	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00368		mg/l	0.00050	0.00016	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Copper, Total	0.03887		mg/l	0.00100	0.00038	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Iron, Total	22.6		mg/l	0.0500	0.0191	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Lead, Total	0.01369		mg/l	0.00100	0.00034	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Magnesium, Total	7.76		mg/l	0.0700	0.0242	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Manganese, Total	2.882		mg/l	0.00100	0.00044	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	06/04/18 10:40	06/04/18 19:32	EPA 7470A	1,7470A	EA
Nickel, Total	0.01022		mg/l	0.00200	0.00055	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Potassium, Total	4.40		mg/l	0.100	0.0309	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Sodium, Total	5.94		mg/l	0.100	0.0293	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Vanadium, Total	0.01407		mg/l	0.00500	0.00157	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM
Zinc, Total	0.01873		mg/l	0.01000	0.00341	1	06/06/18 14:00	06/07/18 13:45	EPA 3005A	1,6020A	AM

General Chemistry - Mansfield Lab

Chromium, Trivalent	0.011		mg/l	0.010	0.010	1		06/07/18 13:45	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-13

Date Collected: 06/01/18 11:30

Client ID: TW03_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0314		mg/l	0.0100	0.00327	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Antimony, Dissolved	0.00108	J	mg/l	0.00400	0.00042	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.01186		mg/l	0.00050	0.00016	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.1646		mg/l	0.00050	0.00017	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Calcium, Dissolved	38.2		mg/l	0.100	0.0394	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Chromium, Dissolved	0.00051	J	mg/l	0.00100	0.00017	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Cobalt, Dissolved	0.00020	J	mg/l	0.00050	0.00016	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Iron, Dissolved	14.8		mg/l	0.0500	0.0191	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Magnesium, Dissolved	5.84		mg/l	0.0700	0.0242	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Manganese, Dissolved	2.263		mg/l	0.00100	0.00044	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	06/05/18 11:19	06/05/18 20:19	EPA 7470A	1,7470A	EA
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Potassium, Dissolved	3.85		mg/l	0.100	0.0309	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Sodium, Dissolved	6.89		mg/l	0.100	0.0293	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	06/07/18 08:00	06/07/18 15:30	EPA 3005A	1,6020A	AM



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-14

Date Collected: 06/01/18 13:30

Client ID: TW05_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.552		mg/l	0.0100	0.00327	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Antimony, Total	0.00078	J	mg/l	0.00400	0.00042	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Arsenic, Total	0.1773		mg/l	0.00050	0.00016	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Barium, Total	0.5675		mg/l	0.00050	0.00017	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Calcium, Total	334.		mg/l	0.100	0.0394	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Chromium, Total	0.00328		mg/l	0.00100	0.00017	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00192		mg/l	0.00050	0.00016	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Copper, Total	0.00203		mg/l	0.00100	0.00038	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Iron, Total	4.86		mg/l	0.0500	0.0191	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Lead, Total	0.00937		mg/l	0.00100	0.00034	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Magnesium, Total	69.6		mg/l	0.0700	0.0242	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Manganese, Total	10.96		mg/l	0.05000	0.02200	50	06/06/18 14:00	06/08/18 10:02	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	06/04/18 10:40	06/04/18 19:34	EPA 7470A	1,7470A	EA
Nickel, Total	0.00468		mg/l	0.00200	0.00055	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Potassium, Total	59.3		mg/l	0.100	0.0309	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Sodium, Total	618.		mg/l	5.00	1.46	50	06/06/18 14:00	06/08/18 10:02	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Vanadium, Total	0.00219	J	mg/l	0.00500	0.00157	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
Zinc, Total	0.00498	J	mg/l	0.01000	0.00341	1	06/06/18 14:00	06/07/18 16:22	EPA 3005A	1,6020A	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		06/07/18 16:22	NA	107,-	



Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**SAMPLE RESULTS**

Lab ID: L1820339-14

Date Collected: 06/01/18 13:30

Client ID: TW05_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00442	J	mg/l	0.0100	0.00327	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Antimony, Dissolved	0.00077	J	mg/l	0.00400	0.00042	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.2210		mg/l	0.00050	0.00016	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.6510		mg/l	0.00050	0.00017	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Calcium, Dissolved	336.		mg/l	0.100	0.0394	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Chromium, Dissolved	0.00073	J	mg/l	0.00100	0.00017	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Cobalt, Dissolved	0.00114		mg/l	0.00050	0.00016	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00092	J	mg/l	0.00100	0.00038	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Iron, Dissolved	5.07		mg/l	0.0500	0.0191	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Lead, Dissolved	0.00051	J	mg/l	0.00100	0.00034	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Magnesium, Dissolved	70.8		mg/l	0.0700	0.0242	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Manganese, Dissolved	11.74		mg/l	0.05000	0.02200	50	06/07/18 08:00	06/07/18 19:41	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	06/05/18 11:19	06/05/18 20:28	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00260		mg/l	0.00200	0.00055	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Potassium, Dissolved	58.6		mg/l	0.100	0.0309	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Sodium, Dissolved	602.		mg/l	5.00	1.46	50	06/07/18 08:00	06/07/18 19:41	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	06/07/18 08:00	06/07/18 15:34	EPA 3005A	1,6020A	AM



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-15

Date Collected: 06/01/18 00:00

Client ID: TWDUP01_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.563		mg/l	0.0100	0.00327	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Antimony, Total	0.00087	J	mg/l	0.00400	0.00042	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Arsenic, Total	0.1830		mg/l	0.00050	0.00016	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Barium, Total	0.5740		mg/l	0.00050	0.00017	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Calcium, Total	341.		mg/l	0.100	0.0394	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Chromium, Total	0.00309		mg/l	0.00100	0.00017	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00210		mg/l	0.00050	0.00016	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Copper, Total	0.00242		mg/l	0.00100	0.00038	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Iron, Total	4.89		mg/l	0.0500	0.0191	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Lead, Total	0.01207		mg/l	0.00100	0.00034	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Magnesium, Total	71.4		mg/l	0.0700	0.0242	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Manganese, Total	10.77		mg/l	0.05000	0.02200	50	06/06/18 14:00	06/08/18 10:06	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	06/04/18 10:40	06/04/18 19:36	EPA 7470A	1,7470A	EA
Nickel, Total	0.00409		mg/l	0.00200	0.00055	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Potassium, Total	60.2		mg/l	0.100	0.0309	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Sodium, Total	600.		mg/l	5.00	1.46	50	06/06/18 14:00	06/08/18 10:06	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Vanadium, Total	0.00218	J	mg/l	0.00500	0.00157	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
Zinc, Total	0.00542	J	mg/l	0.01000	0.00341	1	06/06/18 14:00	06/07/18 16:46	EPA 3005A	1,6020A	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		06/07/18 16:46	NA	107,-	



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-15

Date Collected: 06/01/18 00:00

Client ID: TWDUP01_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00630	J	mg/l	0.0100	0.00327	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Antimony, Dissolved	0.00066	J	mg/l	0.00400	0.00042	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.1938		mg/l	0.00050	0.00016	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.5692		mg/l	0.00050	0.00017	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Calcium, Dissolved	342.		mg/l	0.100	0.0394	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Chromium, Dissolved	0.00144		mg/l	0.00100	0.00017	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Cobalt, Dissolved	0.00162		mg/l	0.00050	0.00016	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00038	J	mg/l	0.00100	0.00038	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Iron, Dissolved	4.37		mg/l	0.0500	0.0191	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Lead, Dissolved	0.00063	J	mg/l	0.00100	0.00034	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Magnesium, Dissolved	71.3		mg/l	0.0700	0.0242	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Manganese, Dissolved	10.87		mg/l	0.05000	0.02200	50	06/07/18 08:00	06/08/18 10:45	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	06/05/18 11:19	06/05/18 20:29	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00323		mg/l	0.00200	0.00055	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Potassium, Dissolved	60.0		mg/l	0.100	0.0309	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Sodium, Dissolved	591.		mg/l	5.00	1.46	50	06/07/18 08:00	06/08/18 10:45	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	06/07/18 08:00	06/07/18 16:26	EPA 3005A	1,6020A	AM



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 13-15 Batch: WG1122123-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	06/04/18 10:40	06/04/18 19:08	1,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 13-15 Batch: WG1122568-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	06/05/18 11:19	06/05/18 20:15	1,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03-12 Batch: WG1122868-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	06/06/18 09:30	06/07/18 18:27	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 - Mansfield Lab for sample(s): 13-15 Batch: WG1123102-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Antimony, Total	0.00138	J	mg/l	0.00400	0.00042	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Calcium, Total	0.0590	J	mg/l	0.100	0.0394	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Iron, Total	0.0298	J	mg/l	0.0500	0.0191	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Manganese, Total	0.00054	J	mg/l	0.00100	0.00044	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	06/06/18 14:00	06/07/18 16:42	1,6020A	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03-12 Batch: WG1123199-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Iron, Total	1.03	J	mg/kg	2.00	0.361	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Manganese, Total	0.092	J	mg/kg	0.400	0.064	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Potassium, Total	ND		mg/kg	100	5.76	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Sodium, Total	ND		mg/kg	80.0	1.26	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	06/06/18 21:30	06/08/18 00:49	1,6010C	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 13-15 Batch: WG1123373-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Antimony, Dissolved	0.00085	J	mg/l	0.00400	0.00042	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Iron, Dissolved	0.0218	J	mg/l	0.0500	0.0191	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Vanadium, Dissolved	ND	mg/l	0.00500	0.00157	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM
Zinc, Dissolved	ND	mg/l	0.01000	0.00341	1	06/07/18 08:00	06/07/18 15:06	1,6020A	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1123666-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Calcium, Total	1.87	J	mg/kg	4.00	1.40	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Iron, Total	ND		mg/kg	2.00	0.361	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Manganese, Total	ND		mg/kg	0.400	0.064	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Potassium, Total	ND		mg/kg	100	5.76	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Sodium, Total	ND		mg/kg	80.0	1.26	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	06/07/18 19:36	06/08/18 14:53	1,6010C	LC

Prep Information

Digestion Method: EPA 3050B



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1124043-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	06/08/18 16:02	06/08/18 17:47	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13-15 Batch: WG1122123-2								
Mercury, Total	101		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 13-15 Batch: WG1122568-2								
Mercury, Dissolved	101		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 03-12 Batch: WG1122868-2 SRM Lot Number: D098-540								
Mercury, Total	91		-		50-149	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13-15 Batch: WG1123102-2					
Aluminum, Total	101	-	80-120	-	
Antimony, Total	104	-	80-120	-	
Arsenic, Total	109	-	80-120	-	
Barium, Total	103	-	80-120	-	
Beryllium, Total	102	-	80-120	-	
Cadmium, Total	111	-	80-120	-	
Calcium, Total	90	-	80-120	-	
Chromium, Total	96	-	80-120	-	
Cobalt, Total	98	-	80-120	-	
Copper, Total	97	-	80-120	-	
Iron, Total	104	-	80-120	-	
Lead, Total	112	-	80-120	-	
Magnesium, Total	100	-	80-120	-	
Manganese, Total	96	-	80-120	-	
Nickel, Total	100	-	80-120	-	
Potassium, Total	96	-	80-120	-	
Selenium, Total	115	-	80-120	-	
Silver, Total	97	-	80-120	-	
Sodium, Total	99	-	80-120	-	
Thallium, Total	104	-	80-120	-	
Vanadium, Total	95	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control**Project Name:** 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13-15 Batch: WG1123102-2					
Zinc, Total	107	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-12 Batch: WG1123199-2 SRM Lot Number: D098-540					
Aluminum, Total	78	-	47-153	-	
Antimony, Total	166	-	6-194	-	
Arsenic, Total	109	-	83-117	-	
Barium, Total	102	-	82-118	-	
Beryllium, Total	104	-	83-117	-	
Cadmium, Total	108	-	82-117	-	
Calcium, Total	103	-	81-118	-	
Chromium, Total	106	-	83-119	-	
Cobalt, Total	106	-	84-116	-	
Copper, Total	106	-	84-116	-	
Iron, Total	108	-	60-140	-	
Lead, Total	104	-	82-117	-	
Magnesium, Total	94	-	76-124	-	
Manganese, Total	102	-	82-118	-	
Nickel, Total	104	-	82-117	-	
Potassium, Total	89	-	69-131	-	
Selenium, Total	108	-	78-121	-	
Silver, Total	110	-	80-120	-	
Sodium, Total	101	-	74-126	-	
Thallium, Total	107	-	80-119	-	
Vanadium, Total	107	-	79-121	-	

Lab Control Sample Analysis
Batch Quality Control**Project Name:** 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-12 Batch: WG1123199-2 SRM Lot Number: D098-540					
Zinc, Total	104	-	81-119	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 13-15 Batch: WG1123373-2					
Aluminum, Dissolved	104	-	80-120	-	
Antimony, Dissolved	97	-	80-120	-	
Arsenic, Dissolved	107	-	80-120	-	
Barium, Dissolved	101	-	80-120	-	
Beryllium, Dissolved	102	-	80-120	-	
Cadmium, Dissolved	108	-	80-120	-	
Calcium, Dissolved	91	-	80-120	-	
Chromium, Dissolved	97	-	80-120	-	
Cobalt, Dissolved	99	-	80-120	-	
Copper, Dissolved	100	-	80-120	-	
Iron, Dissolved	105	-	80-120	-	
Lead, Dissolved	110	-	80-120	-	
Magnesium, Dissolved	102	-	80-120	-	
Manganese, Dissolved	97	-	80-120	-	
Nickel, Dissolved	99	-	80-120	-	
Potassium, Dissolved	101	-	80-120	-	
Selenium, Dissolved	117	-	80-120	-	
Silver, Dissolved	97	-	80-120	-	
Sodium, Dissolved	100	-	80-120	-	
Thallium, Dissolved	102	-	80-120	-	
Vanadium, Dissolved	98	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control**Project Name:** 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 13-15 Batch: WG1123373-2					
Zinc, Dissolved	110	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1123666-2 SRM Lot Number: D098-540					
Aluminum, Total	69	-	47-153	-	
Antimony, Total	146	-	6-194	-	
Arsenic, Total	92	-	83-117	-	
Barium, Total	88	-	82-118	-	
Beryllium, Total	88	-	83-117	-	
Cadmium, Total	92	-	82-117	-	
Calcium, Total	93	-	81-118	-	
Chromium, Total	86	-	83-119	-	
Cobalt, Total	92	-	84-116	-	
Copper, Total	90	-	84-116	-	
Iron, Total	87	-	60-140	-	
Lead, Total	90	-	82-117	-	
Magnesium, Total	81	-	76-124	-	
Manganese, Total	91	-	82-118	-	
Nickel, Total	91	-	82-117	-	
Potassium, Total	80	-	69-131	-	
Selenium, Total	93	-	78-121	-	
Silver, Total	91	-	80-120	-	
Sodium, Total	87	-	74-126	-	
Thallium, Total	91	-	80-119	-	
Vanadium, Total	86	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1123666-2 SRM Lot Number: D098-540					
Zinc, Total	90	-	81-119	-	
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1124043-2 SRM Lot Number: D098-540					
Mercury, Total	113	-	50-149	-	

Matrix Spike Analysis Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13-15			QC Batch ID: WG1122123-3			QC Sample: L1820057-01			Client ID: MS Sample			
Mercury, Total	ND	0.005	0.00486	97		-	-		75-125	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 13-15			QC Batch ID: WG1122568-3			QC Sample: L1820339-13			Client ID: TW03_060118			
Mercury, Dissolved	ND	0.005	0.00466	93		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 03-12			QC Batch ID: WG1122868-3			QC Sample: L1820339-03			Client ID: SB04_1-3			
Mercury, Total	0.220	0.142	0.292	51	Q	-	-		80-120	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13-15 QC Batch ID: WG1123102-3 WG1123102-4 QC Sample: L1820286-01 Client ID: MS Sample									
Aluminum, Total	ND	2	1.99	100	2.01	100	75-125	1	20
Antimony, Total	0.0031J	0.5	0.6036	121	0.6037	121	75-125	0	20
Arsenic, Total	0.02173	0.12	0.1490	106	0.1518	108	75-125	2	20
Barium, Total	0.6890	2	2.663	99	2.705	101	75-125	2	20
Beryllium, Total	ND	0.05	0.05157	103	0.05183	104	75-125	1	20
Cadmium, Total	ND	0.051	0.05655	111	0.05621	110	75-125	1	20
Calcium, Total	158.	10	165	70	Q 171	130	Q 75-125	4	20
Chromium, Total	0.0002J	0.2	0.1888	94	0.1950	98	75-125	3	20
Cobalt, Total	0.0026	0.5	0.4899	97	0.5007	100	75-125	2	20
Copper, Total	ND	0.25	0.2491	100	0.2576	103	75-125	3	20
Iron, Total	6.63	1	7.64	101	7.83	120	75-125	2	20
Lead, Total	ND	0.51	0.5500	108	0.5612	110	75-125	2	20
Magnesium, Total	31.7	10	43.0	113	43.4	117	75-125	1	20
Manganese, Total	0.6827	0.5	1.154	94	1.186	101	75-125	3	20
Nickel, Total	0.0017J	0.5	0.4896	98	0.5018	100	75-125	2	20
Potassium, Total	9.06	10	18.2	91	19.0	99	75-125	4	20
Selenium, Total	ND	0.12	0.132	110	0.131	109	75-125	1	20
Silver, Total	ND	0.05	0.04732	95	0.04833	97	75-125	2	20
Sodium, Total	98.5	10	126	275	Q 129	305	Q 75-125	2	20
Thallium, Total	ND	0.12	0.1213	101	0.1221	102	75-125	1	20
Vanadium, Total	ND	0.5	0.4816	96	0.4838	97	75-125	0	20

Matrix Spike Analysis Batch Quality Control

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13-15 QC Batch ID: WG1123102-3 WG1123102-4 QC Sample: L1820286-01 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.5330	107	0.5391	108	75-125	1	20

Matrix Spike Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-12			QC Batch ID: WG1123199-3		QC Sample: L1820339-03		Client ID: SB04_1-3		
Aluminum, Total	2010	169	3080	634	Q	-	75-125	-	20
Antimony, Total	1.60J	42.2	38.1	90		-	75-125	-	20
Arsenic, Total	5.71	10.1	16.4	106		-	75-125	-	20
Barium, Total	62.1	169	276	127	Q	-	75-125	-	20
Beryllium, Total	0.142J	4.22	3.95	94		-	75-125	-	20
Cadmium, Total	0.351J	4.3	4.30	100		-	75-125	-	20
Calcium, Total	16200	844	23200	830	Q	-	75-125	-	20
Chromium, Total	7.20	16.9	23.4	96		-	75-125	-	20
Cobalt, Total	3.74	42.2	39.9	86		-	75-125	-	20
Copper, Total	66.7	21.1	97.6	146	Q	-	75-125	-	20
Iron, Total	6590	84.4	7460	1030	Q	-	75-125	-	20
Lead, Total	135.	43	380	569	Q	-	75-125	-	20
Magnesium, Total	966.	844	1980	120		-	75-125	-	20
Manganese, Total	63.4	42.2	118	129	Q	-	75-125	-	20
Nickel, Total	10.8	42.2	45.6	82		-	75-125	-	20
Potassium, Total	669.	844	1510	100		-	75-125	-	20
Selenium, Total	ND	10.1	9.42	93		-	75-125	-	20
Silver, Total	ND	25.3	24.5	97		-	75-125	-	20
Sodium, Total	1020	844	1850	98		-	75-125	-	20
Thallium, Total	ND	10.1	8.74	86		-	75-125	-	20
Vanadium, Total	14.4	42.2	54.8	96		-	75-125	-	20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-12 QC Batch ID: WG1123199-3 QC Sample: L1820339-03 Client ID: SB04_1-3									
Zinc, Total	104.	42.2	157	126	Q	-	-	75-125	- 20

Matrix Spike Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 13-15 QC Batch ID: WG1123373-3 QC Sample: L1820339-13 Client ID: TW03_060118									
Aluminum, Dissolved	0.0314	2	2.14	105	-	-	75-125	-	20
Antimony, Dissolved	0.00108J	0.5	0.5917	118	-	-	75-125	-	20
Arsenic, Dissolved	0.01186	0.12	0.1455	111	-	-	75-125	-	20
Barium, Dissolved	0.1646	2	2.242	104	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05225	104	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05519	108	-	-	75-125	-	20
Calcium, Dissolved	38.2	10	48.2	100	-	-	75-125	-	20
Chromium, Dissolved	0.00051J	0.2	0.1934	97	-	-	75-125	-	20
Cobalt, Dissolved	0.00020J	0.5	0.4957	99	-	-	75-125	-	20
Copper, Dissolved	ND	0.25	0.2407	96	-	-	75-125	-	20
Iron, Dissolved	14.8	1	16.1	130	Q	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5626	110	-	-	75-125	-	20
Magnesium, Dissolved	5.84	10	16.4	106	-	-	75-125	-	20
Manganese, Dissolved	2.263	0.5	2.806	109	-	-	75-125	-	20
Nickel, Dissolved	ND	0.5	0.4834	97	-	-	75-125	-	20
Potassium, Dissolved	3.85	10	13.9	100	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.136	113	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.04852	97	-	-	75-125	-	20
Sodium, Dissolved	6.89	10	16.8	99	-	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1231	102	-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.4949	99	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control**Project Name:** 538-540 W 29TH ST.**Project Number:** 170515401**Lab Number:** L1820339**Report Date:** 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 13-15 QC Batch ID: WG1123373-3 QC Sample: L1820339-13 Client ID: TW03_060118									
Zinc, Dissolved	ND	0.5	0.5504	110	-	-	75-125	-	20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1123666-3 QC Sample: L1815547-39 Client ID: MS Sample									
Aluminum, Total	7080	176	7270	108	-	-	75-125	-	20
Antimony, Total	0.789J	43.9	33.2	76	-	-	75-125	-	20
Arsenic, Total	3.82	10.5	12.0	78	-	-	75-125	-	20
Barium, Total	159.	176	288	73	Q	-	75-125	-	20
Beryllium, Total	0.173J	4.39	3.53	80	-	-	75-125	-	20
Cadmium, Total	0.649	4.48	4.10	77	-	-	75-125	-	20
Calcium, Total	22300	878	14400	0	Q	-	75-125	-	20
Chromium, Total	13.3	17.6	25.9	72	Q	-	75-125	-	20
Cobalt, Total	6.67	43.9	39.7	75	-	-	75-125	-	20
Copper, Total	27.8	22	41.9	64	Q	-	75-125	-	20
Iron, Total	11600	87.8	11400	0	Q	-	75-125	-	20
Lead, Total	493.	44.8	380	0	Q	-	75-125	-	20
Magnesium, Total	7460	878	6440	0	Q	-	75-125	-	20
Manganese, Total	281.	43.9	261	0	Q	-	75-125	-	20
Nickel, Total	12.7	43.9	44.8	73	Q	-	75-125	-	20
Potassium, Total	3530	878	4690	132	Q	-	75-125	-	20
Selenium, Total	ND	10.5	7.68	73	Q	-	75-125	-	20
Silver, Total	ND	26.4	22.1	84	-	-	75-125	-	20
Sodium, Total	303.	878	976	77	-	-	75-125	-	20
Thallium, Total	ND	10.5	7.24	69	Q	-	75-125	-	20
Vanadium, Total	27.9	43.9	60.0	73	Q	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1123666-3 QC Sample: L1815547-39 Client ID: MS Sample									
Zinc, Total	150.	43.9	166	36	Q	-	-	75-125	- 20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1124043-3 QC Sample: L1820339-02 Client ID: SB06_14-16									
Mercury, Total	ND	0.161	0.184	114	-	-	-	80-120	- 20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13-15 QC Batch ID: WG1122123-4 QC Sample: L1820057-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Dissolved Metals - Mansfield Lab Associated sample(s): 13-15 QC Batch ID: WG1122568-4 QC Sample: L1820339-13 Client ID: TW03_060118						
Mercury, Dissolved	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 03-12 QC Batch ID: WG1122868-4 QC Sample: L1820339-03 Client ID: SB04_1-3						
Mercury, Total	0.220	0.186	mg/kg	17		20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-12 QC Batch ID: WG1123199-4 QC Sample: L1820339-03 Client ID: SB04_1-3					
Aluminum, Total	2010	2060	mg/kg	2	20
Antimony, Total	1.60J	3.97J	mg/kg	NC	20
Arsenic, Total	5.71	5.96	mg/kg	4	20
Barium, Total	62.1	81.9	mg/kg	28	Q 20
Beryllium, Total	0.142J	0.180J	mg/kg	NC	20
Cadmium, Total	0.351J	0.609J	mg/kg	NC	20
Calcium, Total	16200	14200	mg/kg	13	20
Chromium, Total	7.20	8.65	mg/kg	18	20
Cobalt, Total	3.74	3.86	mg/kg	3	20
Copper, Total	66.7	114	mg/kg	52	Q 20
Iron, Total	6590	13000	mg/kg	65	Q 20
Lead, Total	135.	654	mg/kg	132	Q 20
Magnesium, Total	966.	831	mg/kg	15	20
Manganese, Total	63.4	85.1	mg/kg	29	Q 20
Nickel, Total	10.8	15.2	mg/kg	34	Q 20
Potassium, Total	669.	666	mg/kg	0	20
Selenium, Total	ND	ND	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	1020	885	mg/kg	14	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-12 QC Batch ID: WG1123199-4 QC Sample: L1820339-03 Client ID: SB04_1-3					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	14.4	10.6	mg/kg	30	Q 20
Zinc, Total	104.	154	mg/kg	39	Q 20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 13-15 QC Batch ID: WG1123373-4 QC Sample: L1820339-13 Client ID: TW03_060118					
Aluminum, Dissolved	0.0314	0.0284	mg/l	10	20
Antimony, Dissolved	0.00108J	0.00245J	mg/l	NC	20
Arsenic, Dissolved	0.01186	0.01242	mg/l	5	20
Barium, Dissolved	0.1646	0.1668	mg/l	1	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	38.2	39.2	mg/l	3	20
Chromium, Dissolved	0.00051J	0.00055J	mg/l	NC	20
Cobalt, Dissolved	0.00020J	ND	mg/l	NC	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Iron, Dissolved	14.8	15.1	mg/l	2	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	5.84	5.90	mg/l	1	20
Manganese, Dissolved	2.263	2.306	mg/l	2	20
Nickel, Dissolved	ND	ND	mg/l	NC	20
Potassium, Dissolved	3.85	3.96	mg/l	3	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	6.89	6.95	mg/l	1	20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 13-15 QC Batch ID: WG1123373-4 QC Sample: L1820339-13 Client ID: TW03_060118					
Thallium, Dissolved	ND	ND	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1123666-4 QC Sample: L1815547-39 Client ID: DUP Sample					
Lead, Total	493.	634	mg/kg	25 Q	20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1124043-4 QC Sample: L1820339-02 Client ID: SB06_14-16					
Mercury, Total	ND	ND	mg/kg	NC	20

INORGANICS & MISCELLANEOUS

Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-02

Date Collected: 06/01/18 12:20

Client ID: SB06_14-16

Date Received: 06/01/18

Sample Location: MANHATTAN

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	87.9		%	0.100	NA	1	-	06/08/18 05:24	121,2540G	FN
Cyanide, Total	ND		mg/kg	1.0	0.22	1	06/08/18 07:22	06/08/18 12:09	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.910	0.182	1	06/08/18 02:15	06/09/18 00:05	1,7196A	RM



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-03

Date Collected: 06/01/18 09:34

Client ID: SB04_1-3

Date Received: 06/01/18

Sample Location: MANHATTAN

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	90.6		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	06/05/18 15:30	06/06/18 11:33	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.883	0.177	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-04

Client ID: SB04_6-8

Sample Location: MANHATTAN

Date Collected: 06/01/18 09:42

Date Received: 06/01/18

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	83.5		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	0.28	J	mg/kg	1.1	0.24	1	06/05/18 15:30	06/06/18 11:37	1,9010C/9012B	LH
Chromium, Hexavalent	0.850	J	mg/kg	0.958	0.192	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-05

Date Collected: 06/01/18 09:55

Client ID: SB04_10-12

Date Received: 06/01/18

Sample Location: MANHATTAN

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	88.3		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	06/05/18 15:30	06/06/18 11:38	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.906	0.181	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-06

Date Collected: 06/01/18 10:30

Client ID: SB05_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

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	87.3		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	06/05/18 15:30	06/06/18 11:39	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.916	0.183	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-07

Client ID: SB05_7-8

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:40

Date Received: 06/01/18

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	86.4		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	0.54	J	mg/kg	1.1	0.23	1	06/05/18 15:30	06/06/18 11:40	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.926	0.185	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-08

Date Collected: 06/01/18 10:56

Client ID: SB05_11-12

Date Received: 06/01/18

Sample Location: MANHATTAN

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	87.2		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	06/05/18 15:30	06/06/18 11:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.917	0.183	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-09

Date Collected: 06/01/18 12:02

Client ID: SB06_0-2

Date Received: 06/01/18

Sample Location: MANHATTAN

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	90.7		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	06/05/18 15:30	06/06/18 11:42	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.882	0.176	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-10

Date Collected: 06/01/18 12:08

Client ID: SB06_6-8

Date Received: 06/01/18

Sample Location: MANHATTAN

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	91.8		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.22	1	06/05/18 15:30	06/06/18 11:45	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.871	0.174	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Lab Number: L1820339

Project Number: 170515401

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-11

Date Collected: 06/01/18 12:15

Client ID: SB06_12-14

Date Received: 06/01/18

Sample Location: MANHATTAN

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	85.0		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	06/05/18 15:30	06/06/18 11:46	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.941	0.188	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-12

Client ID: SBDUP02_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00

Date Received: 06/01/18

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	87.2		%	0.100	NA	1	-	06/05/18 16:27	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	06/05/18 15:30	06/06/18 11:47	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.917	0.183	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH



Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-13

Client ID: TW03_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 11:30

Date Received: 06/01/18

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	06/05/18 15:30	06/06/18 12:07	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	06/02/18 04:00	06/02/18 04:51	1,7196A	MA



Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-14

Client ID: TW05_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 13:30

Date Received: 06/01/18

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.003	J	mg/l	0.005	0.001	1	06/05/18 15:30	06/06/18 12:02	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	06/02/18 04:00	06/02/18 04:51	1,7196A	MA



Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

SAMPLE RESULTS

Lab ID: L1820339-15

Client ID: TWDUP01_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 00:00

Date Received: 06/01/18

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	06/05/18 15:30	06/06/18 12:03	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	06/02/18 04:00	06/02/18 05:04	1,7196A	MA



Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Lab Number: L1820339
Report Date: 06/11/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 13-15 Batch: WG1121763-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	06/02/18 04:00	06/02/18 04:46	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 13-15 Batch: WG1122629-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	06/05/18 15:30	06/06/18 11:48	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 03-12 Batch: WG1122634-1										
Cyanide, Total	ND		mg/kg	0.96	0.20	1	06/05/18 15:30	06/06/18 11:10	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 03-12 Batch: WG1122884-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	06/06/18 06:15	06/06/18 14:45	1,7196A	NH
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1123747-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	06/08/18 02:15	06/09/18 00:05	1,7196A	RM
General Chemistry - Westborough Lab for sample(s): 02 Batch: WG1123793-1										
Cyanide, Total	ND		mg/kg	0.83	0.18	1	06/08/18 07:22	06/08/18 11:20	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 13-15 Batch: WG1121763-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 13-15 Batch: WG1122629-2 WG1122629-3								
Cyanide, Total	103		100		85-115	3		20
General Chemistry - Westborough Lab Associated sample(s): 03-12 Batch: WG1122634-2 WG1122634-3								
Cyanide, Total	77	Q	69	Q	80-120	2		35
General Chemistry - Westborough Lab Associated sample(s): 03-12 Batch: WG1122884-2								
Chromium, Hexavalent	80		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1123747-2								
Chromium, Hexavalent	77	Q	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 Batch: WG1123793-2 WG1123793-3								
Cyanide, Total	32	Q	32	Q	80-120	1		35

Matrix Spike Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 13-15 QC Batch ID: WG1121763-4 QC Sample: L1820339-15 Client ID: TWDUP01_060118												
Chromium, Hexavalent	ND	0.1	0.095	95		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 13-15 QC Batch ID: WG1122629-4 WG1122629-5 QC Sample: L1820074-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.193	96		0.189	94		80-120	2		20
General Chemistry - Westborough Lab Associated sample(s): 03-12 QC Batch ID: WG1122634-4 WG1122634-5 QC Sample: L1820339-03 Client ID: SB04_1-3												
Cyanide, Total	ND	11	10	91		10	92		75-125	0		35
General Chemistry - Westborough Lab Associated sample(s): 03-12 QC Batch ID: WG1122884-4 QC Sample: L1820339-11 Client ID: SB06_12-14												
Chromium, Hexavalent	ND	850	730	86		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1123747-4 QC Sample: L1820339-02 Client ID: SB06_14-16												
Chromium, Hexavalent	ND	1310	1260	96		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1123793-4 WG1123793-5 QC Sample: L1820339-02 Client ID: SB06_14-16												
Cyanide, Total	ND	11	9.2	86		9.6	92		75-125	4		35

Lab Duplicate Analysis

Batch Quality Control

Project Name: 538-540 W 29TH ST.

Project Number: 170515401

Lab Number: L1820339

Report Date: 06/11/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 13-15 QC Batch ID: WG1121763-3 QC Sample: L1820339-14 Client ID: TW05_060118						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 03-12 QC Batch ID: WG1122700-1 QC Sample: L1820524-02 Client ID: DUP Sample						
Solids, Total	96.2	95.9	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 03-12 QC Batch ID: WG1122884-6 QC Sample: L1820339-11 Client ID: SB06_12-14						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1123747-6 QC Sample: L1820339-02 Client ID: SB06_14-16						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1123790-1 QC Sample: L1821308-01 Client ID: DUP Sample						
Solids, Total	91.3	91.0	%	0		20

Project Name: 538-540 W 29TH ST.**Lab Number:** L1820339**Project Number:** 170515401**Report Date:** 06/11/18**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler Custody Seal**

A	Absent
B	Absent
C	Absent
D	Absent
E	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820339-01A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1820339-01B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1820339-01C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1820339-01D	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1820339-02A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1820339-02B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-02C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-02D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-02E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1820339-02F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-02G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-03A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260H(14),NYTCL-8260HLW(14)
L1820339-03B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260H(14),NYTCL-8260HLW(14)
L1820339-03C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260H(14),NYTCL-8260HLW(14)
L1820339-03D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Serial_No:06111819:53
Lab Number: L1820339
Report Date: 06/11/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820339-03E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1820339-03F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-03G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-04A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1820339-04B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-04C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-04D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-04E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1820339-04F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-04G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-05A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1820339-05B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-05C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-05D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-05E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1820339-05F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-05G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-06A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1820339-06B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-06C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)

Project Name: 538-540 W 29TH ST.
Project Number: 170515401

Serial_No: 06111819:53
Lab Number: L1820339
Report Date: 06/11/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820339-06D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-06E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820339-06F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-06G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-07A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1820339-07B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-07C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-07D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-07E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820339-07F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-07G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-08A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1820339-08B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-08C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-08D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-08E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820339-08F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-08G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-09A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1820339-09B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820339-09C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-09D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-09E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820339-09F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-09G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-10A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1820339-10B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-10C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-10D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-10E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820339-10F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-10G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-11A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1820339-11B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-11C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-11D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-11E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-Ti(180),AS-Ti(180),BA-Ti(180),AG-Ti(180),AL-Ti(180),CR-Ti(180),NI-Ti(180),TL-Ti(180),CU-Ti(180),PB-Ti(180),SB-Ti(180),SE-Ti(180),ZN-Ti(180),CO-Ti(180),V-Ti(180),FE-Ti(180),HG-T(28),MG-Ti(180),MN-Ti(180),CA-Ti(180),CD-Ti(180),K-Ti(180),NA-Ti(180)
L1820339-11F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-11G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-12A	Vial MeOH preserved	B	NA		3.9	Y	Absent		NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days

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L1820339-12B	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-12C	Vial water preserved	B	NA		3.9	Y	Absent	02-JUN-18 03:25	NYTCL-8260HLW(14)
L1820339-12D	Plastic 2oz unpreserved for TS	B	NA		3.9	Y	Absent		TS(7)
L1820339-12E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1820339-12F	Glass 120ml/4oz unpreserved	B	NA		3.9	Y	Absent		TCN-9010(14),HEXCR-7196(30)
L1820339-12G	Glass 500ml/16oz unpreserved	B	NA		3.9	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1820339-13A	Vial HCl preserved	C	NA		4.4	Y	Absent		NYTCL-8260(14)
L1820339-13B	Vial HCl preserved	C	NA		4.4	Y	Absent		NYTCL-8260(14)
L1820339-13C	Vial HCl preserved	C	NA		4.4	Y	Absent		NYTCL-8260(14)
L1820339-13D	Plastic 250ml HNO3 preserved	C	<2	<2	4.4	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1820339-13E	Plastic 250ml HNO3 preserved	C	<2	<2	4.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1820339-13F	Plastic 250ml NaOH preserved	C	>12	>12	4.4	Y	Absent		TCN-9010(14)
L1820339-13G	Plastic 500ml unpreserved	C	7	7	4.4	Y	Absent		HEXCR-7196(1)
L1820339-13H	Amber 120ml unpreserved	C	7	7	4.4	Y	Absent		NYTCL-8081(7)
L1820339-13I	Amber 120ml unpreserved	C	7	7	4.4	Y	Absent		NYTCL-8081(7)
L1820339-13J	Amber 1000ml unpreserved	C	7	7	4.4	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1820339-13K	Amber 1000ml unpreserved	C	7	7	4.4	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1820339-13L	Amber 1000ml unpreserved	C	7	7	4.4	Y	Absent		HERB-APA(7)

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Container Information

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L1820339-13M	Amber 1000ml unpreserved	C	7	7	4.4	Y	Absent		HERB-APA(7)
L1820339-13N	Amber 1000ml unpreserved	C	7	7	4.4	Y	Absent		NYTCL-8082-1200ML(7)
L1820339-13O	Amber 1000ml unpreserved	C	7	7	4.4	Y	Absent		NYTCL-8082-1200ML(7)
L1820339-14A	Vial HCl preserved	D	NA		3.1	Y	Absent		NYTCL-8260(14)
L1820339-14B	Vial HCl preserved	D	NA		3.1	Y	Absent		NYTCL-8260(14)
L1820339-14C	Vial HCl preserved	D	NA		3.1	Y	Absent		NYTCL-8260(14)
L1820339-14D	Plastic 250ml HNO3 preserved	D	<2	<2	3.1	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1820339-14E	Plastic 250ml HNO3 preserved	D	<2	<2	3.1	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1820339-14F	Plastic 250ml NaOH preserved	D	>12	>12	3.1	Y	Absent		TCN-9010(14)
L1820339-14G	Plastic 500ml unpreserved	D	7	7	3.1	Y	Absent		HEXCR-7196(1)
L1820339-14H	Amber 120ml unpreserved	D	7	7	3.1	Y	Absent		NYTCL-8081(7)
L1820339-14I	Amber 120ml unpreserved	D	7	7	3.1	Y	Absent		NYTCL-8081(7)
L1820339-14J	Amber 1000ml unpreserved	D	7	7	3.1	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1820339-14K	Amber 1000ml unpreserved	D	7	7	3.1	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1820339-14L	Amber 1000ml unpreserved	D	7	7	3.1	Y	Absent		HERB-APA(7)
L1820339-14M	Amber 1000ml unpreserved	D	7	7	3.1	Y	Absent		HERB-APA(7)
L1820339-14N	Amber 1000ml unpreserved	D	7	7	3.1	Y	Absent		NYTCL-8082-1200ML(7)
L1820339-14O	Amber 1000ml unpreserved	D	7	7	3.1	Y	Absent		NYTCL-8082-1200ML(7)
L1820339-15A	Vial HCl preserved	E	NA		2.2	Y	Absent		NYTCL-8260(14)
L1820339-15B	Vial HCl preserved	E	NA		2.2	Y	Absent		NYTCL-8260(14)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820339-15C	Vial HCl preserved	E	NA		2.2	Y	Absent		NYTCL-8260(14)
L1820339-15D	Plastic 250ml HNO3 preserved	E	<2	<2	2.2	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1820339-15E	Plastic 250ml HNO3 preserved	E	<2	<2	2.2	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1820339-15F	Plastic 250ml NaOH preserved	E	>12	>12	2.2	Y	Absent		TCN-9010(14)
L1820339-15G	Plastic 500ml unpreserved	E	7	7	2.2	Y	Absent		HEXCR-7196(1)
L1820339-15H	Amber 120ml unpreserved	E	7	7	2.2	Y	Absent		NYTCL-8081(7)
L1820339-15I	Amber 120ml unpreserved	E	7	7	2.2	Y	Absent		NYTCL-8081(7)
L1820339-15J	Amber 1000ml unpreserved	E	7	7	2.2	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1820339-15K	Amber 1000ml unpreserved	E	7	7	2.2	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1820339-15L	Amber 1000ml unpreserved	E	7	7	2.2	Y	Absent		HERB-APA(7)
L1820339-15M	Amber 1000ml unpreserved	E	7	7	2.2	Y	Absent		HERB-APA(7)
L1820339-15N	Amber 1000ml unpreserved	E	7	7	2.2	Y	Absent		NYTCL-8082-1200ML(7)
L1820339-15O	Amber 1000ml unpreserved	E	7	7	2.2	Y	Absent		NYTCL-8082-1200ML(7)
L1820339-16A	Vial HCl preserved	E	NA		2.2	Y	Absent		NYTCL-8260(14)
L1820339-16B	Vial HCl preserved	E	NA		2.2	Y	Absent		NYTCL-8260(14)

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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.
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.
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.

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

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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.

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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 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: 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 300: DW: Bromide

EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 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, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, 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.

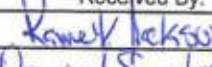
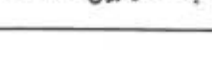
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

[illegible]

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		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 3 of 4		Date Rec'd in Lab 6/1/18		ALPHA Job # L1920339	
		Project Information Project Name: 538-540 W 29th St Project Location: Manhattan Project # 170515401 (Use Project name as Project #) ☐ Project Manager: Emily Sneed ALPHAQuote #: Turn-Around Time: Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:		Deliverables ☐ ASP-A ☒ ASP-B ☐ EQuIS (1 File) ☐ EQuIS (4 File) ☐ Other		Billing Information ☒ Same as Client Info PO #			
Client Information Client: Lanigan Address: 360 W 31st St Bklyn Phone: 212 479-5400 Fax: Email: esneed@lanigan.com		Regulatory Requirement ☐ NY TOGS ☒ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:					
These samples have been previously analyzed by Alpha ☐ Other project specific requirements/comments:						ANALYSIS		Sample Filtration ☐ Done ☐ Lab to do Preservation ☐ Lab to do (Please Specify below)	
Please specify Metals or TAL.						Part 375 Vol 1 SWQ, PC, P, Pest/Hab Total Metals (CN, Gr-Hex chn)		Total Bottles	
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix		Sampler's Initials	
20339-03		5804-1-3		6/1/18 09:34		S		KG	
-04		5804-6-8		6/1/18 09:42		S		KG	
-05		5804-10-12		6/1/18 09:55		S		KG	
-06		5805-0-2		6/1/18 10:30		S		KG	
-07		5805-7-8		6/1/18 10:40		S		KG	
-08		5805-11-12		6/1/18 10:56		S		KG	
-09		5806-0-2		6/1/18 12:02		S		KG	
-10		5806-6-8		6/1/18 12:08		S		KG	
-11		5806-12-14		6/1/18 12:15		S		KG	
-12		5806-12-14		6/1/18 00:00		S		KG	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative	
Relinquished By:		Date/Time		Received By:		Date/Time		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
		6/1/18 15:53				6/1/18 1553			
Donnie Santos AAL		6/1/18 2315				6/1/18 1830			
Donnie Santos AAL		6/1/18 2315				6/1/18 2315			

218 20339

Email: esnead@lawn.com

of Days:

☐ NYC Sewer Discharge☐ Other: _____

Please specify Metals or TAL.

Sample Specific Comments
1. The sample is a 100% pure substance, as indicated by the single sharp peak in the mass spectrum. 2. The molecular ion peak is observed at m/z 100, which is consistent with the molecular formula C₈H₈. 3. The base peak is at m/z 77, which is characteristic of the phenyl cation. 4. The fragmentation pattern is consistent with the structure of toluene.

Sample Specific Comments

[illegible]

[illegible]

Too Blank

Date	Time
6/1	1553
6/1/18	1830
6/1/18	2311

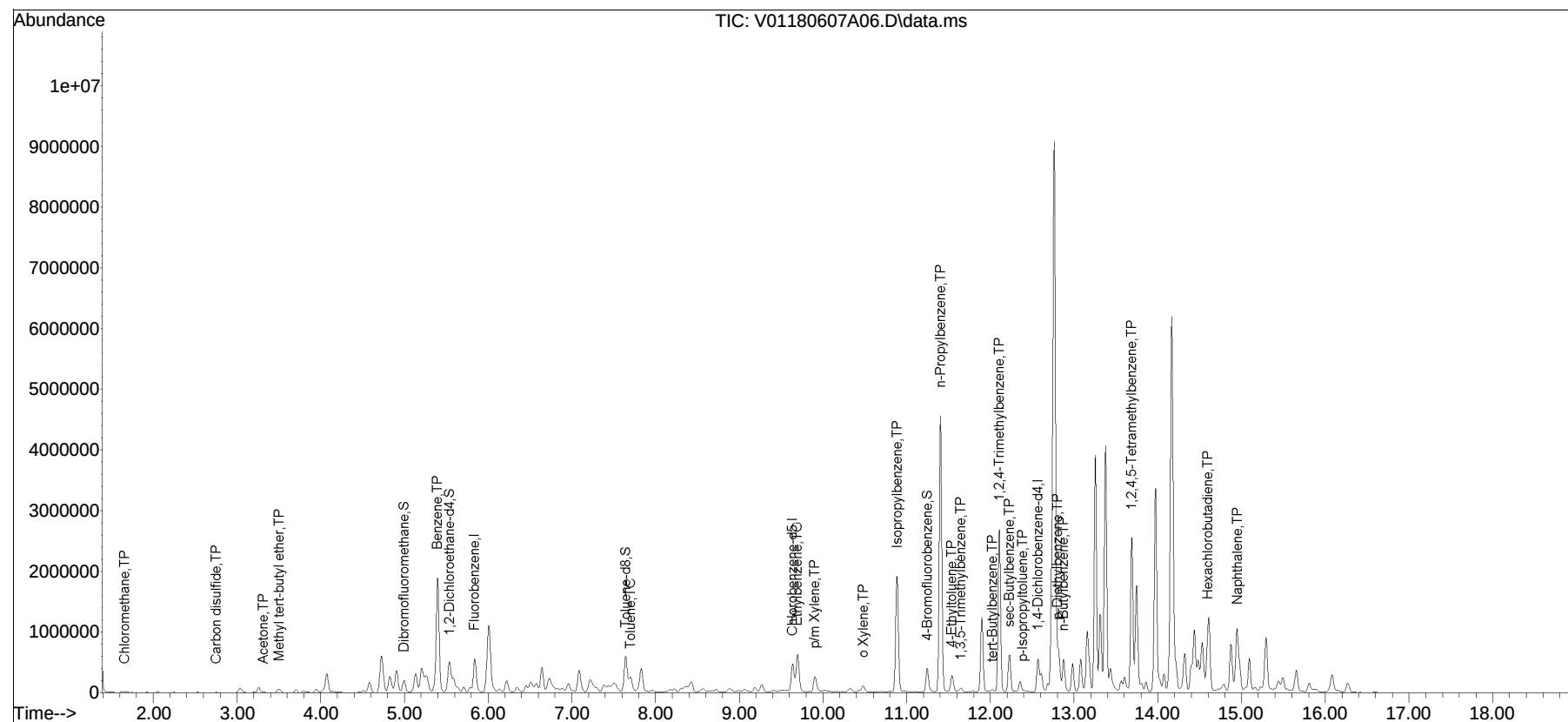
Page 334 of 335

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA101\2018\180607A\
 Data File : V01180607A06.D
 Acq On : 7 Jun 2018 11:57 am
 Operator : VOA101:PD
 Sample : l1820339-13,31,10,10,,c
 Misc : WG1123557,ICAL14549
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 07 13:05:09 2018
 Quant Method : I:\VOLATILES\VOA101\2018\180607A\V101_180315A_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Tue Mar 20 11:27:54 2018
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox80607A\V01180607A02.D•





ANALYTICAL REPORT

Lab Number:	L1820382
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Emily Snead
Phone:	(212) 479-5432
Project Name:	538-540 W29TH STREET
Project Number:	170515401
Report Date:	06/14/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: 538-540 W29TH STREET
Project Number: 170515401

Lab Number: L1820382
Report Date: 06/14/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1820382-01	SV01_060118	SOIL_VAPOR	MANHATTAN	06/01/18 14:02	06/01/18
L1820382-02	SV02_060118	SOIL_VAPOR	MANHATTAN	06/01/18 10:48	06/01/18
L1820382-03	SV03_060118	SOIL_VAPOR	MANHATTAN	06/01/18 14:00	06/01/18
L1820382-04	SV04_060118	SOIL_VAPOR	MANHATTAN	06/01/18 10:44	06/01/18
L1820382-05	SVAA_060118	AIR	MANHATTAN	06/01/18 14:49	06/01/18
L1820382-06	UNUSED CAN #2480	AIR	MANHATTAN		06/01/18

Project Name: 538-540 W29TH STREET
Project Number: 170515401

Lab Number: L1820382
Report Date: 06/14/18

Case Narrative

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

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

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

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

HOLD POLICY

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

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

Project Name: 538-540 W29TH STREET
Project Number: 170515401

Lab Number: L1820382
Report Date: 06/14/18

Case Narrative (continued)

Report Submission

This report replaces the one previously issued on June 8, 2018. The report has been revised to report the 7 NYS Decision Matrix Compounds by TO15 SIM at the request of the client.

Volatile Organics in Air

Canisters were released from the laboratory on May 31, 2018. The canister certification results are provided as an addendum.

L1820382-01, -02, -03 and -05 results for Acetone should be considered estimated due to co-elution with a non-target peak.

L1820382-01 results for 2-Hexanone should be considered estimated due to co-elution with a non-target peak.

L1820382-01, -02, -03 and -05 The presence of 2,2,4-Trimethylbenzene could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

L1820382-03 and -04: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

L1820382-03 and -04: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

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

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 06/14/18

AIR

Project Name: 538-540 W29TH STREET**Project Number:** 170515401**Lab Number:** L1820382**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-01

Client ID: SV01_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 14:02

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 06/08/18 04:17

Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.697	0.200	--	3.45	0.989	--		1
Chloromethane	0.653	0.200	--	1.35	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	0.544	0.200	--	1.39	0.511	--		1
1,3-Butadiene	1.26	0.200	--	2.79	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	1.15	0.200	--	3.03	0.528	--		1
Ethyl Alcohol	5.02	5.00	--	9.46	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	107	1.00	--	254	2.38	--		1
Trichlorofluoromethane	0.357	0.200	--	2.01	1.12	--		1
iso-Propyl Alcohol	2.21	0.500	--	5.43	1.23	--		1
1,1-Dichloroethene	0.237	0.200	--	0.940	0.793	--		1
tert-Butyl Alcohol	5.10	0.500	--	15.5	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	1.01	0.200	--	3.15	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	0.237	0.200	--	0.959	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	12.2	0.500	--	36.0	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-01

Date Collected: 06/01/18 14:02

Client ID: SV01_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.05	0.200	--	5.13	0.977	--		1
Tetrahydrofuran	2.62	0.500	--	7.73	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	5.42	0.200	--	19.1	0.705	--		1
1,1,1-Trichloroethane	0.337	0.200	--	1.84	1.09	--		1
Benzene	1.34	0.200	--	4.28	0.639	--		1
Carbon tetrachloride	0.297	0.200	--	1.87	1.26	--		1
Cyclohexane	6.64	0.200	--	22.9	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	4.68	0.200	--	19.2	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.37	0.500	--	5.61	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	29.8	0.200	--	112	0.754	--		1
2-Hexanone	1.13	0.200	--	4.63	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	2.30	0.200	--	15.6	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.98	0.200	--	8.60	0.869	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-01

Date Collected: 06/01/18 14:02

Client ID: SV01_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	7.29	0.400	--	31.7	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.725	0.200	--	3.09	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	2.74	0.200	--	11.9	0.869	--		1
4-Ethyltoluene	0.712	0.200	--	3.50	0.983	--		1
1,3,5-Trimethylbenzene	0.899	0.200	--	4.42	0.983	--		1
1,2,4-Trimethylbenzene	2.64	0.200	--	13.0	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	62		60-140
chlorobenzene-d5	89		60-140



Project Name: 538-540 W29TH STREET
Project Number: 170515401

Lab Number: L1820382
Report Date: 06/14/18

SAMPLE RESULTS

Lab ID: L1820382-02
 Client ID: SV02_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 10:48
 Date Received: 06/01/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 06/08/18 04:56
 Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.448	0.200	--	2.22	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	16.9	1.00	--	40.1	2.38	--		1
Trichlorofluoromethane	0.206	0.200	--	1.16	1.12	--		1
iso-Propyl Alcohol	0.795	0.500	--	1.95	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	0.533	0.500	--	1.62	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	1.76	0.200	--	5.48	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.87	0.500	--	8.46	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-02

Client ID: SV02_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:48

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.613	0.200	--	2.99	0.977	--		1
Tetrahydrofuran	5.11	0.500	--	15.1	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	26.4	0.200	--	93.0	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	3.17	0.200	--	10.1	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	16.5	0.200	--	56.8	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	10.8	0.200	--	44.3	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	17.3	0.200	--	65.2	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	5.62	0.200	--	38.1	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	3.76	0.200	--	16.3	0.869	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-02

Date Collected: 06/01/18 10:48

Client ID: SV02_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	8.24	0.400	--	35.8	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	1.95	0.200	--	8.30	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	3.64	0.200	--	15.8	0.869	--		1
4-Ethyltoluene	0.941	0.200	--	4.63	0.983	--		1
1,3,5-Trimethylbenzene	1.06	0.200	--	5.21	0.983	--		1
1,2,4-Trimethylbenzene	3.15	0.200	--	15.5	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	92		60-140



Project Name: 538-540 W29TH STREET**Project Number:** 170515401**Lab Number:** L1820382**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-03 D

Client ID: SV03_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 14:00

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 06/08/18 05:33

Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	2.17	1.00	--	4.80	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethyl Alcohol	ND	25.0	--	ND	47.1	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	44.2	5.00	--	105	11.9	--		5
Trichlorofluoromethane	2.70	1.00	--	15.2	5.62	--		5
iso-Propyl Alcohol	2.58	2.50	--	6.34	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
tert-Butyl Alcohol	4.32	2.50	--	13.1	7.58	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	4.05	1.00	--	12.6	3.11	--		5
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
2-Butanone	8.25	2.50	--	24.3	7.37	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-03 D

Client ID: SV03_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 14:00

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5
Chloroform	ND	1.00	--	ND	4.88	--		5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	194	1.00	--	684	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	2.73	1.00	--	8.72	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	419	1.00	--	1440	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	ND	1.00	--	ND	5.37	--		5
2,2,4-Trimethylpentane	ND	1.00	--	ND	4.67	--		5
Heptane	11.6	1.00	--	47.5	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	ND	2.50	--	ND	10.2	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	26.8	1.00	--	101	3.77	--		5
2-Hexanone	ND	1.00	--	ND	4.10	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	1.92	1.00	--	13.0	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	2.02	1.00	--	8.77	4.34	--		5



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-03 D

Client ID: SV03_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 14:00

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	6.60	2.00	--	28.7	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	2.60	1.00	--	11.3	4.34	--		5
4-Ethyltoluene	ND	1.00	--	ND	4.92	--		5
1,3,5-Trimethylbenzene	ND	1.00	--	ND	4.92	--		5
1,2,4-Trimethylbenzene	2.23	1.00	--	11.0	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	81		60-140
chlorobenzene-d5	90		60-140



Project Name: 538-540 W29TH STREET**Project Number:** 170515401**Lab Number:** L1820382**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-04 D

Client ID: SV04_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:44

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 06/08/18 07:30

Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	217.	--	ND	1070	--		1087
Chloromethane	ND	217.	--	ND	448	--		1087
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	217.	--	ND	1520	--		1087
Vinyl chloride	ND	217.	--	ND	555	--		1087
1,3-Butadiene	ND	217.	--	ND	480	--		1087
Bromomethane	ND	217.	--	ND	843	--		1087
Chloroethane	ND	217.	--	ND	573	--		1087
Ethyl Alcohol	ND	5440	--	ND	10300	--		1087
Vinyl bromide	ND	217.	--	ND	949	--		1087
Acetone	ND	1090	--	ND	2590	--		1087
Trichlorofluoromethane	ND	217.	--	ND	1220	--		1087
iso-Propyl Alcohol	ND	544.	--	ND	1340	--		1087
1,1-Dichloroethene	ND	217.	--	ND	860	--		1087
tert-Butyl Alcohol	ND	544	--	ND	1650	--		1087
Methylene chloride	ND	544.	--	ND	1890	--		1087
3-Chloropropene	ND	217.	--	ND	679	--		1087
Carbon disulfide	ND	217.	--	ND	676	--		1087
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	217.	--	ND	1660	--		1087
trans-1,2-Dichloroethene	ND	217.	--	ND	860	--		1087
1,1-Dichloroethane	ND	217.	--	ND	878	--		1087
Methyl tert butyl ether	2520	217	--	9090	782	--		1087
2-Butanone	ND	544	--	ND	1600	--		1087
cis-1,2-Dichloroethene	ND	217.	--	ND	860	--		1087



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-04 D

Client ID: SV04_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:44

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	544.	--	ND	1960	--		1087
Chloroform	ND	217.	--	ND	1060	--		1087
Tetrahydrofuran	ND	544.	--	ND	1600	--		1087
1,2-Dichloroethane	ND	217.	--	ND	878	--		1087
n-Hexane	9650	217	--	34000	765	--		1087
1,1,1-Trichloroethane	ND	217.	--	ND	1180	--		1087
Benzene	6300	217	--	20100	693	--		1087
Carbon tetrachloride	ND	217.	--	ND	1370	--		1087
Cyclohexane	18200	217	--	62600	747	--		1087
1,2-Dichloropropane	ND	217.	--	ND	1000	--		1087
Bromodichloromethane	ND	217.	--	ND	1450	--		1087
1,4-Dioxane	ND	217.	--	ND	782	--		1087
Trichloroethene	ND	217.	--	ND	1170	--		1087
2,2,4-Trimethylpentane	54700	217	--	255000	1010	--		1087
Heptane	30300	217	--	124000	889	--		1087
cis-1,3-Dichloropropene	ND	217.	--	ND	985	--		1087
4-Methyl-2-pentanone	ND	544.	--	ND	2230	--		1087
trans-1,3-Dichloropropene	ND	217.	--	ND	985	--		1087
1,1,2-Trichloroethane	ND	217.	--	ND	1180	--		1087
Toluene	2320	217	--	8740	818	--		1087
2-Hexanone	ND	217.	--	ND	889	--		1087
Dibromochloromethane	ND	217.	--	ND	1850	--		1087
1,2-Dibromoethane	ND	217.	--	ND	1670	--		1087
Tetrachloroethene	ND	217.	--	ND	1470	--		1087
Chlorobenzene	ND	217.	--	ND	999	--		1087
Ethylbenzene	582	217	--	2530	943	--		1087



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-04 D

Client ID: SV04_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:44

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	660	435	--	2870	1890	--		1087
Bromoform	ND	217.	--	ND	2240	--		1087
Styrene	ND	217.	--	ND	924	--		1087
1,1,2,2-Tetrachloroethane	ND	217.	--	ND	1490	--		1087
o-Xylene	ND	217.	--	ND	943	--		1087
4-Ethyltoluene	ND	217.	--	ND	1070	--		1087
1,3,5-Trimethylbenzene	ND	217.	--	ND	1070	--		1087
1,2,4-Trimethylbenzene	ND	217.	--	ND	1070	--		1087
Benzyl chloride	ND	217.	--	ND	1120	--		1087
1,3-Dichlorobenzene	ND	217.	--	ND	1300	--		1087
1,4-Dichlorobenzene	ND	217.	--	ND	1300	--		1087
1,2-Dichlorobenzene	ND	217.	--	ND	1300	--		1087
1,2,4-Trichlorobenzene	ND	217.	--	ND	1610	--		1087
Hexachlorobutadiene	ND	217.	--	ND	2310	--		1087

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	94		60-140



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-04 D

Client ID: SV04_060118

Sample Location: MANHATTAN

Date Collected: 06/01/18 10:44

Date Received: 06/01/18

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15-SIM

Analytical Date: 06/08/18 07:30

Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	21.7	--	ND	55.5	--		1087
1,1-Dichloroethene	ND	21.7	--	ND	86.0	--		1087
cis-1,2-Dichloroethene	ND	21.7	--	ND	86.0	--		1087
1,1,1-Trichloroethane	ND	21.7	--	ND	118	--		1087
Carbon tetrachloride	ND	21.7	--	ND	137	--		1087
Trichloroethene	ND	21.7	--	ND	117	--		1087
Tetrachloroethene	46.7	21.7	--	317	147	--		1087

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	98		60-140



Project Name: 538-540 W29TH STREET**Project Number:** 170515401**Lab Number:** L1820382**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-05
 Client ID: SVAA_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 14:49
 Date Received: 06/01/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 06/07/18 18:10
 Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.440	0.200	--	2.18	0.989	--		1
Chloromethane	0.547	0.200	--	1.13	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	12.7	5.00	--	23.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.68	1.00	--	20.6	2.38	--		1
Trichlorofluoromethane	0.217	0.200	--	1.22	1.12	--		1
iso-Propyl Alcohol	1.93	0.500	--	4.74	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.500	0.500	--	1.47	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-05

Date Collected: 06/01/18 14:49

Client ID: SVAA_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.330	0.200	--	1.16	0.705	--		1
Benzene	0.384	0.200	--	1.23	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	0.336	0.200	--	1.57	0.934	--		1
Heptane	0.226	0.200	--	0.926	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.03	0.200	--	3.88	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.599	0.400	--	2.60	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.228	0.200	--	0.990	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-05

Date Collected: 06/01/18 14:49

Client ID: SVAA_060118

Date Received: 06/01/18

Sample Location: MANHATTAN

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140



Project Name: 538-540 W29TH STREET**Project Number:** 170515401**Lab Number:** L1820382**Report Date:** 06/14/18**SAMPLE RESULTS**

Lab ID: L1820382-05
 Client ID: SVAA_060118
 Sample Location: MANHATTAN

Date Collected: 06/01/18 14:49
 Date Received: 06/01/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 06/07/18 18:10
 Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.064	0.020	--	0.403	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.100	0.020	--	0.678	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	98		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 06/07/18 15:13

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1123624-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 06/07/18 15:13

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1123624-4								
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: 538-540 W29TH STREET

Lab Number: L1820382

Project Number: 170515401

Report Date: 06/14/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 06/07/18 15:13

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1123624-4								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15**Analytical Date:** 06/07/18 15:13

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1123624-4								
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**Method Blank Analysis**
Batch Quality Control**Analytical Method:** 48,TO-15**Analytical Date:** 06/07/18 15:13

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1123624-4								
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 06/07/18 15:51

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 04-05 Batch: WG1123625-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 06/07/18 15:51

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 04-05 Batch: WG1123625-4								
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 06/07/18 15:51

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 04-05 Batch: WG1123625-4								
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**Method Blank Analysis**
Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 06/07/18 15:51

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 04-05 Batch: WG1123625-4								
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1123624-3								
Chlorodifluoromethane	77		-		70-130	-		
Propylene	91		-		70-130	-		
Dichlorodifluoromethane	94		-		70-130	-		
Chloromethane	82		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	93		-		70-130	-		
Methanol	73		-		70-130	-		
Vinyl chloride	89		-		70-130	-		
1,3-Butadiene	92		-		70-130	-		
Butane	80		-		70-130	-		
Bromomethane	93		-		70-130	-		
Chloroethane	84		-		70-130	-		
Ethyl Alcohol	78		-		70-130	-		
Dichlorofluoromethane	85		-		70-130	-		
Vinyl bromide	97		-		70-130	-		
Acrolein	78		-		70-130	-		
Acetone	75		-		70-130	-		
Acetonitrile	78		-		70-130	-		
Trichlorofluoromethane	98		-		70-130	-		
iso-Propyl Alcohol	74		-		70-130	-		
Acrylonitrile	84		-		70-130	-		
Pentane	82		-		70-130	-		
Ethyl ether	71		-		70-130	-		
1,1-Dichloroethene	90		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1123624-3								
tert-Butyl Alcohol	85		-		70-130	-		
Methylene chloride	90		-		70-130	-		
3-Chloropropene	93		-		70-130	-		
Carbon disulfide	90		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	101		-		70-130	-		
trans-1,2-Dichloroethene	103		-		70-130	-		
1,1-Dichloroethane	103		-		70-130	-		
Methyl tert butyl ether	103		-		70-130	-		
Vinyl acetate	107		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	99		-		70-130	-		
Ethyl Acetate	100		-		70-130	-		
Chloroform	104		-		70-130	-		
Tetrahydrofuran	95		-		70-130	-		
2,2-Dichloropropane	94		-		70-130	-		
1,2-Dichloroethane	102		-		70-130	-		
n-Hexane	91		-		70-130	-		
Isopropyl Ether	82		-		70-130	-		
Ethyl-Tert-Butyl-Ether	76		-		70-130	-		
1,1,1-Trichloroethane	97		-		70-130	-		
1,1-Dichloropropene	91		-		70-130	-		
Benzene	88		-		70-130	-		
Carbon tetrachloride	106		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1123624-3								
Cyclohexane	90		-		70-130	-		
Tertiary-Amyl Methyl Ether	80		-		70-130	-		
Dibromomethane	88		-		70-130	-		
1,2-Dichloropropane	88		-		70-130	-		
Bromodichloromethane	101		-		70-130	-		
1,4-Dioxane	99		-		70-130	-		
Trichloroethene	95		-		70-130	-		
2,2,4-Trimethylpentane	91		-		70-130	-		
Heptane	92		-		70-130	-		
cis-1,3-Dichloropropene	95		-		70-130	-		
4-Methyl-2-pentanone	98		-		70-130	-		
trans-1,3-Dichloropropene	83		-		70-130	-		
1,1,2-Trichloroethane	96		-		70-130	-		
Toluene	94		-		70-130	-		
1,3-Dichloropropane	89		-		70-130	-		
2-Hexanone	100		-		70-130	-		
Dibromochloromethane	115		-		70-130	-		
1,2-Dibromoethane	99		-		70-130	-		
Butyl Acetate	93		-		70-130	-		
Octane	86		-		70-130	-		
Tetrachloroethene	95		-		70-130	-		
1,1,1,2-Tetrachloroethane	97		-		70-130	-		
Chlorobenzene	96		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1123624-3								
Ethylbenzene	97		-		70-130	-		
p/m-Xylene	98		-		70-130	-		
Bromoform	112		-		70-130	-		
Styrene	94		-		70-130	-		
1,1,2,2-Tetrachloroethane	95		-		70-130	-		
o-Xylene	99		-		70-130	-		
1,2,3-Trichloropropane	88		-		70-130	-		
Nonane (C9)	84		-		70-130	-		
Isopropylbenzene	95		-		70-130	-		
Bromobenzene	88		-		70-130	-		
o-Chlorotoluene	92		-		70-130	-		
n-Propylbenzene	91		-		70-130	-		
p-Chlorotoluene	89		-		70-130	-		
4-Ethyltoluene	97		-		70-130	-		
1,3,5-Trimethylbenzene	108		-		70-130	-		
tert-Butylbenzene	93		-		70-130	-		
1,2,4-Trimethylbenzene	100		-		70-130	-		
Decane (C10)	86		-		70-130	-		
Benzyl chloride	106		-		70-130	-		
1,3-Dichlorobenzene	96		-		70-130	-		
1,4-Dichlorobenzene	98		-		70-130	-		
sec-Butylbenzene	92		-		70-130	-		
p-Isopropyltoluene	87		-		70-130	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1123624-3								
1,2-Dichlorobenzene	98		-		70-130	-		
n-Butylbenzene	97		-		70-130	-		
1,2-Dibromo-3-chloropropane	96		-		70-130	-		
Undecane	91		-		70-130	-		
Dodecane (C12)	102		-		70-130	-		
1,2,4-Trichlorobenzene	102		-		70-130	-		
Naphthalene	101		-		70-130	-		
1,2,3-Trichlorobenzene	100		-		70-130	-		
Hexachlorobutadiene	110		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05 Batch: WG1123625-3								
Propylene	89		-		70-130	-		25
Dichlorodifluoromethane	89		-		70-130	-		25
Chloromethane	82		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	88		-		70-130	-		25
Vinyl chloride	85		-		70-130	-		25
1,3-Butadiene	89		-		70-130	-		25
Bromomethane	90		-		70-130	-		25
Chloroethane	93		-		70-130	-		25
Ethyl Alcohol	78		-		70-130	-		25
Vinyl bromide	89		-		70-130	-		25
Acetone	76		-		70-130	-		25
Trichlorofluoromethane	97		-		70-130	-		25
iso-Propyl Alcohol	75		-		70-130	-		25
Acrylonitrile	83		-		70-130	-		25
1,1-Dichloroethene	89		-		70-130	-		25
tert-Butyl Alcohol ¹	74		-		70-130	-		25
Methylene chloride	89		-		70-130	-		25
3-Chloropropene	95		-		70-130	-		25
Carbon disulfide	87		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	94		-		70-130	-		25
trans-1,2-Dichloroethene	95		-		70-130	-		25
1,1-Dichloroethane	98		-		70-130	-		25
Methyl tert butyl ether	94		-		70-130	-		25

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05 Batch: WG1123625-3								
Vinyl acetate	107		-		70-130	-		25
2-Butanone	96		-		70-130	-		25
cis-1,2-Dichloroethene	92		-		70-130	-		25
Ethyl Acetate	96		-		70-130	-		25
Chloroform	98		-		70-130	-		25
Tetrahydrofuran	93		-		70-130	-		25
1,2-Dichloroethane	97		-		70-130	-		25
n-Hexane	88		-		70-130	-		25
1,1,1-Trichloroethane	96		-		70-130	-		25
Benzene	84		-		70-130	-		25
Carbon tetrachloride	100		-		70-130	-		25
Cyclohexane	86		-		70-130	-		25
Dibromomethane ¹	76		-		70-130	-		25
1,2-Dichloropropane	81		-		70-130	-		25
Bromodichloromethane	96		-		70-130	-		25
1,4-Dioxane	95		-		70-130	-		25
Trichloroethene	87		-		70-130	-		25
2,2,4-Trimethylpentane	89		-		70-130	-		25
cis-1,3-Dichloropropene	89		-		70-130	-		25
4-Methyl-2-pentanone	94		-		70-130	-		25
trans-1,3-Dichloropropene	79		-		70-130	-		25
1,1,2-Trichloroethane	89		-		70-130	-		25
Toluene	93		-		70-130	-		25

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05 Batch: WG1123625-3								
2-Hexanone	105		-		70-130	-		25
Dibromochloromethane	114		-		70-130	-		25
1,2-Dibromoethane	98		-		70-130	-		25
Tetrachloroethene	92		-		70-130	-		25
1,1,1,2-Tetrachloroethane	93		-		70-130	-		25
Chlorobenzene	93		-		70-130	-		25
Ethylbenzene	95		-		70-130	-		25
p/m-Xylene	96		-		70-130	-		25
Bromoform	108		-		70-130	-		25
Styrene	93		-		70-130	-		25
1,1,2,2-Tetrachloroethane	96		-		70-130	-		25
o-Xylene	97		-		70-130	-		25
1,2,3-Trichloropropane ¹	89		-		70-130	-		25
Isopropylbenzene	93		-		70-130	-		25
Bromobenzene ¹	87		-		70-130	-		25
4-Ethyltoluene	102		-		70-130	-		25
1,3,5-Trimethylbenzene	97		-		70-130	-		25
1,2,4-Trimethylbenzene	103		-		70-130	-		25
Benzyl chloride	117		-		70-130	-		25
1,3-Dichlorobenzene	99		-		70-130	-		25
1,4-Dichlorobenzene	100		-		70-130	-		25
sec-Butylbenzene	95		-		70-130	-		25
p-Isopropyltoluene	90		-		70-130	-		25

Lab Control Sample Analysis Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05 Batch: WG1123625-3								
1,2-Dichlorobenzene	103		-		70-130	-		25
n-Butylbenzene	104		-		70-130	-		25
1,2,4-Trichlorobenzene	105		-		70-130	-		25
Naphthalene	109		-		70-130	-		25
1,2,3-Trichlorobenzene	107		-		70-130	-		25
Hexachlorobutadiene	113		-		70-130	-		25

Lab Duplicate Analysis Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1123624-5 QC Sample: L1820352-02 Client ID: DUP Sample						
Vinyl chloride	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
Benzene	0.531	0.531	ppbV	0		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
Toluene	0.512	0.508	ppbV	1		25
Tetrachloroethene	0.293	0.309	ppbV	5		25
Ethylbenzene	ND	ND	ppbV	NC		25
p/m-Xylene	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.357	0.343	ppbV	4		25
1,2,3-Trimethylbenzene	ND	ND	ppbV	NC		25
Naphthalene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05 QC Batch ID: WG1123625-5 QC Sample: L1820512-02 Client ID: DUP Sample						
Chloromethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	0.237	0.250	ppbV	5		25
Benzene	0.376	0.385	ppbV	2		25
Carbon tetrachloride	0.038	0.031	ppbV	20		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Trichloroethene	0.182	0.191	ppbV	5		25
Toluene	1.81	1.83	ppbV	1		25
Tetrachloroethene	19.2	19.5	ppbV	2		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.693	0.695	ppbV	0		25
p/m-Xylene	3.30	3.35	ppbV	2		25
o-Xylene	1.12	1.14	ppbV	2		25

Lab Duplicate Analysis Batch Quality Control

Project Name: 538-540 W29TH STREET

Project Number: 170515401

Lab Number: L1820382

Report Date: 06/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05 QC Batch ID: WG1123625-5 QC Sample: L1820512-02 Client ID: DUP Sample						
1,3,5-Trimethylbenzene	0.672	0.580	ppbV	15		25
1,2,4-Trimethylbenzene	2.49	2.34	ppbV	6		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
Naphthalene	0.837	0.881	ppbV	5		25

Project Name: 538-540 W29TH STREET

Serial_No:06141816:45
Lab Number: L1820382

Project Number: 170515401

Report Date: 06/14/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1820382-01	SV01_060118	01006	Flow 3	05/31/18	266792		-	-	-	Pass	17.9	17.7	1
L1820382-01	SV01_060118	2184	2.7L Can	05/31/18	266792	L1819345-02	Pass	-29.9	-6.3	-	-	-	-
L1820382-02	SV02_060118	01029	Flow 4	05/31/18	266792		-	-	-	Pass	18.0	17.2	5
L1820382-02	SV02_060118	1745	2.7L Can	05/31/18	266792	L1819345-02	Pass	-29.8	-6.0	-	-	-	-
L1820382-03	SV03_060118	0745	#30 SV	05/31/18	266792		-	-	-	Pass	18.0	18.6	3
L1820382-03	SV03_060118	478	2.7L Can	05/31/18	266792	L1819345-02	Pass	-29.9	-5.7	-	-	-	-
L1820382-04	SV04_060118	0931	Flow 3	05/31/18	266792		-	-	-	Pass	18.0	17.8	1
L1820382-04	SV04_060118	2241	2.7L Can	05/31/18	266792	L1819345-01	Pass	-28.4	-4.7	-	-	-	-
L1820382-05	SVAA_060118	0809	Flow 4	05/31/18	266792		-	-	-	Pass	18.0	19.0	5
L1820382-05	SVAA_060118	553	2.7L Can	05/31/18	266792	L1819345-02	Pass	-29.8	-4.7	-	-	-	-
L1820382-06	UNUSED CAN #2480	0235	Flow 5	05/31/18	266792		-	-	-	Pass	17.9	17.9	0
L1820382-06	UNUSED CAN #2480	2480	2.7L Can	05/31/18	266792	L1819345-01	Pass	-29.7	-29.7	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-01
Client ID: CAN 522 SHELF 8
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 05/25/18 19:29
Analyst: GJ

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-01
Client ID: CAN 522 SHELF 8
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1819345**Project Number:** CANISTER QC BAT**Report Date:** 06/14/18**Air Canister Certification Results****Lab ID:** L1819345-01**Date Collected:** 05/24/18 16:00**Client ID:** CAN 522 SHELF 8**Date Received:** 05/25/18**Sample Location:****Field Prep:** Not Specified**Sample Depth:**

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-01
Client ID: CAN 522 SHELF 8
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1819345**Project Number:** CANISTER QC BAT**Report Date:** 06/14/18**Air Canister Certification Results**

Lab ID: L1819345-01

Date Collected: 05/24/18 16:00

Client ID: CAN 522 SHELF 8

Date Received: 05/25/18

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	79		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-01
Client ID: CAN 522 SHELF 8
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 05/25/18 19:29
Analyst: GJ

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-01
Client ID: CAN 522 SHELF 8
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-01
Client ID: CAN 522 SHELF 8
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	80		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	80		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-02
Client ID: CAN 561 SHELF 2
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 05/25/18 20:04
Analyst: GJ

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-02
Client ID: CAN 561 SHELF 2
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-02
Client ID: CAN 561 SHELF 2
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-02
Client ID: CAN 561 SHELF 2
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1819345**Project Number:** CANISTER QC BAT**Report Date:** 06/14/18**Air Canister Certification Results**

Lab ID: L1819345-02

Date Collected: 05/24/18 16:00

Client ID: CAN 561 SHELF 2

Date Received: 05/25/18

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	79		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	79		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-02
Client ID: CAN 561 SHELF 2
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 05/25/18 20:04
Analyst: GJ

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1819345
Report Date: 06/14/18

Air Canister Certification Results

Lab ID: L1819345-02
Client ID: CAN 561 SHELF 2
Sample Location:

Date Collected: 05/24/18 16:00
Date Received: 05/25/18
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1819345**Project Number:** CANISTER QC BAT**Report Date:** 06/14/18**Air Canister Certification Results**

Lab ID: L1819345-02

Date Collected: 05/24/18 16:00

Client ID: CAN 561 SHELF 2

Date Received: 05/25/18

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	79		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	78		60-140



Project Name: 538-540 W29TH STREET**Lab Number:** L1820382**Project Number:** 170515401**Report Date:** 06/14/18**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

N/A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1820382-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1820382-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1820382-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1820382-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1820382-05A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1820382-06A	Canister - 2.7 Liter	N/A	NA			Y	Absent		CLEAN-FEE()

Project Name: 538-540 W29TH STREET
Project Number: 170515401

Lab Number: L1820382
Report Date: 06/14/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
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.
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.

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

Report Format: Data Usability Report



Project Name: 538-540 W29TH STREET
Project Number: 170515401

Lab Number: L1820382
Report Date: 06/14/18

Data Qualifiers

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. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: 538-540 W29TH STREET
Project Number: 170515401

Lab Number: L1820382
Report Date: 06/14/18

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

EPA 624: 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 300: DW: Bromide

EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 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, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, 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, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

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



AIR ANALYSIS

CHAIN OF CUSTODY

PAGE _____ OF _____

Date Rec'd in Lab: 6/2/18

ALPHA Job #: 41820382

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Langan
Address: 360 W 31st St 8th Fl
NY, NY 10001

Phone: 212 479-5400

Fax:

Email: esnead@bahya.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 538-540 W 29th St

Project Location: Markethwaite

Project #: 170515401

Project Manager: Emily Sandoz

ALPHA Quote #:

Turn-Around Time

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

Date Due:

Time:

Report Information - Data Deliverables

☐ FAX
☐ ADE_x

Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)

Other Formats:

☐ EMAIL (standard pdf report)

☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☒ Same as Client info	PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

ANALYSIS

TO-15
TO-15 SIM
APH Substrate Non-petroleum HCs
Fixed Gases
Sulfides

All Columns Below Must Be Filled Out

[illegible]

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:

Date/Time

Received By:

Date/Time:

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.

APPENDIX I
COMPLETED FISH AND WILDLIFE RESOURCES IMPACT
ANALYSIS DECISION KEY

Appendix 3C Fish and Wildlife Resources Impact Analysis Decision Key		If YES Go to:	If NO Go to:
1.	Is the site or area of concern a discharge or spill event?	13	2
2.	Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13	3
3.	Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation?	4	9
4.	Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5
5.	Has the contamination gone off-site?	6	14
6.	Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7	14
7.	Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8
8.	Does contamination exist at concentrations that could exceed ecological impact SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14
9.	Does the site or any adjacent or downgradient property contain any of the following resources? i. Any endangered, threatened or special concern species or rare plants or their habitat ii. Any DEC designated significant habitats or rare NYS Ecological Communities iii. Tidal or freshwater wetlands iv. Stream, creek or river v. Pond, lake, lagoon vi. Drainage ditch or channel vii. Other surface water feature viii. Other marine or freshwater habitat ix. Forest x. Grassland or grassy field xi. Parkland or woodland xii. Shrubby area xiii. Urban wildlife habitat xiv. Other terrestrial habitat	11	10
10.	Is the lack of resources due to the contamination?	3.10.1	14
11.	Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14	12
12.	Does the site have widespread surface soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	12
13.	Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of potential resources. Contact DEC for information regarding endangered species.)	Section 3.10.1	14
14.	No Fish and Wildlife Resources Impact Analysis needed.		