175 Roger Avenue Commercial Development
Brownfield Cleanup Program Site No. C130164

Section 40; Block L: Lots 5, 55, 56, 59, 117, 2579, 2585
Inwood, Nassau County, New York

Supplemental Remedial Investigation Report

Prepared for

Inwood 175, LLC & AJM Capital II, LLC

Submitted to

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region One
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November 2020

Professional Engineer's Certification

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I, Arnold F. Fleming, P.E., certify that I am currently a Licensed Professional Engineer in New York State and Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this *Supplemental Remedial Investigation Report* was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved BCP (Site No. C130164) work plan and any DER-approved modifications.

11/24/20
Date

Arnold F. Fleming, P.E.
New York State Professional Engineer
License Number 050411

STATE OF NEW YORK · ARNOLD F. FLEMING · 050411 · LICENSED PROFESSIONAL ENGINEER

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

EXECUTIVE SUMMARY

This Supplemental Remedial Investigation Report (SRIR) was prepared by Fleming Engineering (FE) for Inwood 175, LLC and AJM Capital II, LLC (Volunteer) to investigate the property at 175 Roger Avenue, Hamlet of Inwood, Town of Hempstead, County of Nassau, State of New York (Site). The Site is known as 175 Roger Avenue, Brownfield Cleanup Program (BCP) Site No. C130164.

The Site is bound by Roger Avenue to the north, Lots 2577 and 2578 to the west, which are utilized for commercial trucking and freight operations, Gates Avenue to the east, and numerous small residential lots along Bayview Avenue to the south. All Site buildings were razed to grade by February 2019 and as of the date of this report the Site consists of concrete slab(s) covering roughly one-third of the Site and asphalt covering the remainder, with the exception of several thin strips of broken asphalt along the property margins. The Site is currently unoccupied, but historically, the principal activities were sheet metal fabrication, auto repair, and warehousing. Figure 1 shows the Site location. Figure 2 is a Site plan.

The current redevelopment plan contemplates a commercial warehouse on the Site. It is anticipated that construction will excavate approximately 20 percent of the soil within the planned building footprint to four to five feet below grade to accommodate footings. The data collected by ATC from 2005 through 2008, indicated that shallow soils on Site were essentially free of contamination from Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs) and metals.

The last known material environmental Site information was collected in June 2008 as a part of a New York State Department of Environmental Conservation (NYSDEC) BCP Remedial Investigation prepared by ATC Associates Inc. (ATC) in 2009. The 2008 ATC data included two locations where VOCs and metals exceeded the Commercial Use Soil Cleanup Objectives (CUSCOs), metals at 0.5 feet and VOCs at seven feet. SVOCs were all below the CUSCOs.

The primary environmental concern reflected in the 2008 ATC data was groundwater impacted by VOCs, principally Tetrachloroethene (PCE). Impacted groundwater occurred primarily in the northeast section of the Site, corresponding to the locations of the former xylene tanks, paint spraying booth and paint drying room. Because the ATC data were 12 or more years old, NYSDEC and FE concluded that the data needed updating to accurately represent current Site conditions and to fill data gaps at depth. This was completed as a Supplemental Remedial Investigation (SRI) performed by the Volunteer.

The SRI was completed in January – May 2020 and executed in two Phases. As described in the Supplemental Remedial Investigation Work Plan (SRIWP), ATC data were used to identify four areas of concern to focus the investigation: (1) Solvent Plume Area, (2) Chlorinated VOC Degradation, (3) Exposed Soil Area, and (4) General Site Area. Phase I included groundwater sampling of the existing monitoring wells, soil vapor sampling, and shallow soil sampling. The results of the Phase I groundwater sampling indicated that the areas of concern described in the SRIWP are no longer relevant. Therefore, the Phase II sampling focused on collecting

information from the following areas: (1) Exposed Soil Area, (2) UST Area in the northeast portion of the Site, (3) Drywell Area, and (4) Plant Area, as depicted on Figure 2.

Phase II included soil and temporary groundwater sampling at varying intervals to a depth of 35 feet below grade, the depth at which ATC's investigation inferred a site-wide clay stratum, and limited number of additional shallow soil samples to the water table. The number and locations of Phase II samples were modified slightly from those identified in the SRIWP, based on the results of the Phase I sampling. Correspondence describing these modifications and approval by NYSDEC before Phase II sampling began is included in Appendix A.

The 2020 Phase I SRI sampling results found VOC groundwater concentrations greatly reduced from the 2008 ATC results; the impacted areas were also significantly reduced compared with the results from 12 years ago. Elevated PCE in groundwater occurred in two locations on the eastern and southern Site property lines at concentrations more than an order-of-magnitude lower than in 2008. The other impacted area centered on the Underground Storage Tanks (USTs) in the northeast corner of the Site. All Phase I soil samples were below the CUSCOs and most were below the Restricted Residential Soil Cleanup Objectives (RRSCOs). Soil vapor VOC concentrations were at very low levels throughout most of the Site. Elevated PCE and Trichloroethene (TCE) soil vapor concentrations occurred in two locations on the eastern property boundary. These appear related to a localized surface spill rather than from deeper soil and groundwater sources.

The 2020 Phase II SRI found metals and VOCs above the Unrestricted Use Soil Cleanup Objectives (URSCOs) primarily in the UST Area in the northeast portion of the Site. Soils mostly met the RRSCOs, except for one shallow location with Semivolatile Organic Compounds (SVOCs) modestly above the RRSCOs, and one relatively shallow VOC location in the UST Area, and a few low level arsenic concentrations. Soils met the CUSCOs in nearly all instances except for a few low level arsenic concentrations that appear to be native soil background levels.

The only soil area where concentrations are materially above the URSCOs, RRSCOs, and CUSCOs are metals in the drywells on the western side of the Site. These structures acted as sinks and likely collected runoff from vehicles and materials storage where sludge with metals accumulated. We believe it is the sludge in the drywells that contains metals as opposed to soils.

Samples from the temporary sampling points indicate groundwater throughout the Site is impacted by PCE and its degradation daughter compounds TCE, cis-1,2-dichloroethene (DCE), and vinyl chloride (VC). The concentrations are greatest in the UST Area at 30 to 35 feet below grade, but PCE levels in the UST Area have decreased three-fold since 2008. Beyond the UST area, PCE levels decrease appreciably. On a Site-wide basis, PCE concentrations above 300 µg/L have decreased approximately 10 percent compared to 2008. Xylenes in groundwater are elevated in the UST Area.

A Remedial Action Work Plan (RAWP) will follow approval of this report by NYSDEC. It is anticipated that the RAWP will focus on removing source material and USTs in the UST Area in the northeastern portion of the Site and removal of the drywells on the western side of the

Site. Periodic groundwater monitoring to evaluate groundwater conditions subsequent to source removal should be incorporated into the RAWP.

1.0 INTRODUCTION

The Supplemental Remedial Investigation (SRI) described in this report focused on collecting data to update Site investigation information obtained in 2008 on the principal Contaminants of Concern (COCs), which are the VOC solvents formerly used in Site operations. The main COC is Tetrachloroethene (PCE) and to a lesser extent Trichlorethene (TCE), and the daughter breakdown products. Non-chlorinated solvents are locally important in the UST area in the northeast portion of the property. Metals are locally important in the drywells. For metals in groundwater, the emphasis is on filtered metals samples in order to eliminate the potential bias introduced by sediment in the samples.

The data obtained through Phase I and Phase II of the 2020 SRI updates prior Site information with current data, fills in data gaps by collecting more data throughout the soil profile to depth, sufficient to complete an exposure assessment, and to prepare a Remedial Action Work Plan. A copy of the SRI Work Plan, and correspondence with NYSDEC describing modifications to Phase II sampling and approval by NYSDEC are included as Appendix A.

2.0 SITE DESCRIPTION AND HISTORY

2.1 SITE LOCATION

The property is located at 175 Roger Avenue Hamlet of Inwood, Town of Hempstead, County of Nassau, State of New York (Site). The Site consists of eight irregular-shaped tax lots that occupy approximately 3.56 acres (Section 40; Block L; Lots 5, 55, 56, 57, 59, 117, 2579, and 2585 on the Nassau County Land & Tax Map). Roger Avenue borders the Site on the north, Gates Avenue fronts the east, residential buildings and Bayview Avenue lie to the south, and Expeditors Freight Service borders the Site on the west.

2.2 SITE DESCRIPTION

Nassau County began demolition of the existing buildings located on the Site in October 2018 and completed demolition in February 2019. The Site is currently vacant and an open space. The poured concrete floor of the former building occupies approximately one-third of the Site. The balance of the Site is covered with asphalt except for two small areas of broken asphalt in the northeast corner and south-central portion of the Site. The Site topography is flat. The average Site elevation is approximately 8.5 feet North American Vertical Datum 1988 (NAVD88). Site elevation ranges from 7 feet to 9 feet NAVD88.

2.3 HISTORIC SITE USE

FE performed a Phase I Environmental Site Assessment in November 2018. Historically, the Site was developed with a 155,000 square foot, one-story, warehouse building and a 2-story warehouse and office, which were constructed in several stages from 1954 to approximately 1967. The Site operated as a “Sheet Metal Fabrication” factory since at least 1961. Rockaway Metal Products occupied the Site from approximately 1971 to 1987, when they abandoned the Site and reportedly left hazardous waste material improperly stored and disposed of on-Site. In June 1992, the United States Environmental Protection Agency (EPA) conducted a Site inspection and discovered approximately two hundred forty 55-gallon deteriorated and/or leaking drums, a 5,000-gallon tanker trailer, underground storage tanks (USTs), and observed dry wells containing sludge materials. In order to address the hazardous condition, the EPA conducted an Emergency Removal Action beginning in August 1993. The drums, tanker trailer, one (1) 1,000-gallon heating oil UST, and UST piping were removed. The Site was then used largely as a warehouse by various tenants from 1990 to 2004 including an auto repair shop (Gunter Auto Shop) and Long Island Party Rentals. The Site was acquired by Nassau County in 1995 and has remained vacant since approximately 2004. The warehouse building on Site was damaged in a fire in February 2011, which damage ultimately led to Nassau County demolishing the buildings as discussed above. The Nassau County land records and deed registry is incomplete before 1990 but Site ownership varied over the years as follows:

Date	Owner
1954 - circa 1967	Sheet Metal Fabrication
1971 - 1987	Rockaway Metal Products
1993 - 1995	175 Roger Corp.
1995 - present	Nassau County

According to the environmental database review, the Site contained a number of USTs, which varies depending on source. There were discrepancies between the database and ATC reports on the number of USTs. Collectively, there appears to have been upwards of seven (7) USTs historically and potentially four (4) that currently remain abandoned in place. According to the database review, contents of all of the tanks reportedly included fuel oil, gasoline, xylene and naphthalene.

A Site Investigation conducted by ATC Associates Inc. in May 2005 included an electromagnetic ground penetrating radar (EM/GPR) survey that identified seven (7) underground anomalies thought to be USTs and/or buried drums. It is not clear if these tanks remain on the Site.

2.4 VICINITY CHARACTERISTICS AND NEARBY PUBLIC AREAS OF CONCERN

The use of the immediately adjoining properties is a mix of commercial and residential. An Eastern Shell Fuel Terminal formerly occupied the property to the northwest of the Site from 1942 through 1972. Given the proximity of the fuel terminal to the Site and the likelihood that groundwater flow in this area is influenced by tidal fluctuations, further investigation was needed in the northwest portion of the Site to determine if the former Eastern Shell terminal has impacted groundwater beneath the Site.

2.5 DESCRIPTION OF CONTEMPLATED USE

The Volunteer proposes to redevelop the property with a slab on grade structure for commercial uses, which shall include a combination of office and warehousing. Exact dimensions of proposed building are not known at this time.

2.6 SITE GEOLOGY, HYDROGEOLOGY, AND SUBSURFACE CHARACTERISTICS

2.6.1 Site Geology

The Site is located within the New England Physiographic Province, which is underlain by metamorphic and sedimentary rocks of the Cambrian and Ordovician period.

According to the Geologic Map of New York City (Brock & Brock 2001), the western end of Long Island is underlain by sedimentary layers that strike northeast and are inclined gently to the southeast. These layers appear at or near the surface in the vicinity of Long Island Sound, where differential erosion has left relatively young sands and clays at elevations of more than 60 feet above sea level.

Resting on top of these sands and clays and forming the highest elevation is a belt of glacially deposited debris composed of an unsorted, unstratified mixture of boulders, sand, silt, and clay. This debris was deposited in the interval between 75,000 and 17,000 years ago when the area was covered by a massive sheet of glacial ice. In the vicinity of New York, the ice was moving in a generally southerly direction, bringing with it a huge load of detached bedrock, sediment, and soil that it had scoured from more northerly regions. This rocky debris was dumped as the periphery of the glacier melted, forming a belt of hills known as a terminal moraine.

Sloping gently southeastward from the edge of the terminal moraine is generally an apron of sediment (outwash plain) that slopes very gently toward the Atlantic Ocean. This rests on the underlying inclined sedimentary layers, and was formed through the accumulation of sand, silt, and mud deposited by streams carrying away meltwaters from the glacial ice. The sharp edge between terminal moraine and outwash plain constitutes the major element of the northeast trend. Additionally, the Site's location in Jamaica Bay, a salt water body, indicates a high likelihood of the presence of a meadow mat due to historical wetland presence in the area.

2.6.2 Site Hydrogeology

Information regarding groundwater was obtained from the USGS Ground Water Atlas of the United States (1995). The principal aquifer in the Site area is the Northern Atlantic Coastal Plain aquifer system, which consists of the Magothy aquifer and the underlying Lloyd aquifer. Both aquifers consist primarily of sand and gravel. The Magothy aquifer provides most of the water for public supply in southeast Queens, Nassau, and western Suffolk Counties. The Lloyd aquifer provides most of the water for public supply for the northwest-shore area of Long Island.

The entire Magothy Formation forms the Magothy aquifer, which is a fine to medium sand with some clay and coarse sand and gravel. The Magothy aquifer is overlain by and hydraulically connected with the upper glacial aquifer. Yields of wells completed in the Magothy aquifer commonly range from 50 to 1,200 gallons per minute and might exceed 2,000 gallons per minute.

According to a Site Investigation conducted on Site in 2005 by ATC Associates (ATC) and subsequent reports available on the NYCDEC Environmental Site Remediation Database a groundwater divide runs through the center of the Site, with apparent groundwater flow towards both the northwest and southeast. Physiographically, the Site is on a peninsula that extends into Jamaica Bay where salt water surrounds the peninsula on three sides (refer to Sections 4.2, *Groundwater Flow* and 4.7, *Tidal Survey Results*, for the findings of this SRI).

2.7 NATURE & EXTENT OF CONTAMINATION

2.7.1 Previous Investigations

The Site was investigated in several previous environmental investigations and remedial documents beginning in 2005. The studies investigated soils, groundwater, soil vapor, Site history, and adjacent land use. These reports are provided in Appendix A. Previous investigations and relevant documents include the following:

1. Phase I Environmental Site Assessment of Long Island Party Rentals, 175 Roger Avenue, Inwood, New York 11096. ATC Associates Inc., June 19, 2005.
2. Site Investigation Report Long Island Party Rentals, 175 Roger Avenue, Inwood, New York 11096. ATC Associates Inc., June 27, 2005.
3. NYSDEC Brownfield Cleanup Program Remedial Investigation Work Plan, 175 Roger Avenue, Inwood, New York 11096. ATC Associates Inc., April 20, 2007.
4. NYSDEC Brownfield Cleanup Program Remedial Investigation Report, 175 Roger Avenue, Inwood, New York 11096. ATC Associates Inc., July 8, 2009.

5. NYSDEC Brownfield Cleanup Program Alternative Analysis Report Remedial Work Plan, 175 Roger Avenue, Inwood, New York 11096. ATC Associates Inc., April 20, 2010.

6. Draft Phase I Environmental Site Assessment, 175 Roger Avenue, Inwood, New York 11096. Fleming-Lee Shue, Inc., November 2018.

2.7.2 Summary of Pre-SRI Environmental Contamination

Subsequent to the initial 2005 investigation, ATC completed additional Site investigation work in 2007-2008 that was reported in the July 8, 2009 Remedial Investigation Report. The information provided in the 2009 report and the other historical ATC reports was used to develop the SRI sampling program. Analysis of the historical data was used to prepare the ensuing analytical summary sections, which summarize the Site's environmental status before the SRI. The analytical data from the ATC reports covered the period from 2005 through 2008.

There are several reasons why additional data needed to be collected to properly characterize the Site and to assess the need for remediation. First, the ATC data were old, the most recent samples date back to 2008. Thus, it has been 12 or more years since data have been collected on this Site. It is therefore very likely that concentrations have radically changed and that the location of contamination has also altered due to migration, degradation, and chemical transformation. Second, the ATC data collection was concentrated around the USTs in the northeast portion of the Site leaving the remainder of the Site with a reduced sampling density. Third, most of the ATC samples were collected in relatively shallow intervals, leaving information gaps at depth. For example, 62 percent of the (37) VOC soil samples collected were collected from grade to 7 feet and 84 percent of the samples were collected to a depth of 12 feet. Only 8 percent of the ATC samples were collected at 35 to 40 feet near the top of the clay layer. Consequently, there were data gaps about conditions at depth and in areas removed from the northeast portion of the Site and the available information was too old to reliably inform an understanding of current Site conditions. This made the ATC dataset only partially complete for adequately characterizing the Site refer to Section 4.1, Stratigraphy, for the results of this SRI.)

2.7.3 Soil Contamination

The data summaries describe Site soil conditions based on data collected by ATC from 2005 to 2008. Most soil samples were collected at shallow depths and comparatively few soil samples have been collected below 12 feet below grade. The results of the ATC investigation indicated that nearly all shallow soils met the Commercial Use Soil Cleanup Objectives (CUSCOs).

Volatile Organic Compounds

The primary soil contaminants were the chlorinated and non-chlorinated solvents likely associated with the historic on-Site degreasing, painting, USTs, drums, and general commercial and automotive operations. Table 1 summarizes the range of VOCs with elevated concentrations detected on Site by ATC.

Table 1 – Summary of Soil VOCs, 2005 – 2008, µg/kg (ATC)

VOC	N	Min	p25	p50	p75	Max
Acetone	55	nd	nd	43	69	150,013
n-Butylbenzene	38	nd	nd	nd	nd	5,000
1,2-Dichloropropane	40	nd	nd	nd	nd	34,100
Isopropylbenzene	38	nd	nd	nd	nd	83,000
p-isopropyltoluene	11	nd	nd	nd	nd	14,700
4-Methyl-2-pentanone	63	nd	nd	nd	nd	1,450,000
Methylene Chloride	44	nd	nd	nd	14.5	2,011
n-Propylbenzene	38	nd	nd	nd	nd	120,000
Toluene	34	nd	nd	nd	nd	11,000
1,2,4-Trimethylbenzene	59	nd	nd	nd	20	870,000
1,3,5-Trimethylbenzene	38	nd	nd	nd	17	390,000
Total Xylenes	49	nd	nd	nd	40	740,000

N – No. observations. Min. – minimum value, p25 – 25th percentile, p50 – 50th percentile, p75 – 75th percentile, Max – maximum value. nd - non-detect.

VOCs in soils were mostly below detection limits, and all VOCs except 1,2,4-Trimethylbenzene, 1,3,5-Trimenthybenzene, and Total Xylenes were below the CUSCOs. The three VOCs found above the CUSCOs are limited to one boring (SB-05) at a depth of seven feet near the underground storage tanks in the northern portion of the Site.

Semi-Volatile Organic Compounds

Most SVOC compounds were below detection limits and all SVOCs were below the CUSCOs. The detected SVOCs were primarily plasticizers, fuel-related, and combustion compounds. Table 2 summarizes the range of key SVOCs detected by ATC throughout the Site.

Table 2 – Summary Soil SVOCs, 2005 – 2008, µg/kg (ATC)

SVOC	N	Min	p25	p50	75	Max
Butyl Benzyl Phthalate	18	nd	nd	nd	nd	4,000
Di-n Butyl Phthalate	10	nd	nd	nd	nd	600
Bis-2-Ethylhexyl Phthalate	18	nd	nd	nd	430	4,000
Fluoranthene	18	nd	nd	nd	nd	44
2-Methylnaphthalene	17	nd	nd	nd	310	4,900
Naphthalene	55	nd	nd	nd	30	9,200
Phenanthrene	18	nd	nd	nd	nd	3,800
Pyrene	18	nd	nd	nd	nd	2,200

Metals

All but three metals were below the CUSCOs. Cadmium, lead, copper, and mercury were above the CUSCOs in one sample, DW-3, a drywell sample in the parking area near the southwest corner of the Site at a depth of 0.5 feet. Table 3 summarizes the range of key metals detected on Site by ATC.

Table 3 – Summary Soil Metals, 2005 – 2008, mg/kg (ATC)

Metal	N	Min	p25	p50	p75	Max
Antimony	18	nd	nd	nd	nd	nd
Arsenic	39	nd	nd	2.41	4.12	5.76
Beryllium	18	nd	nd	nd	nd	nd
Cadmium	18	nd	nd	nd	nd	15
Chromium	39	1.83	3.98	6.2	8.2	61
Lead	39	nd	nd	5.2	12.7	840
Mercury	39	nd	nd	nd	nd	4.1
Nickel	39	nd	nd	nd	5	37
Selenium	18	nd	nd	nd	nd	nd
Silver	18	nd	nd	nd	nd	3
Thallium	18	nd	nd	nd	nd	nd
Zinc	39	nd	6.1	12.7	32	520

Pesticides

Pesticides were not sampled in the previous investigations.

Polychlorinated Biphenyls (PCBs)

ATC collected one concrete chip sample from beneath two fluid-filled transformers with heavy staining on the concrete pad in 2005. Testing found Aroclor 1260 at a concentration of 227 µg/kg in the sample.

2.7.4 Groundwater Contamination

The below summaries describe historic Site groundwater conditions based on data collected by ATC from 2005 to 2008.

Volatile Organic Compounds

The principal VOC compounds found in Site groundwater by ATC are summarized in Table 4. The primary chlorinated VOC (CVOC) was PCE with concentrations reaching 15,000 µg/L. The concentrations of CVOCs appeared highest in the northeast corner of the Site near the USTs, former Paint Spraying Booth, and former Paint Drying Room. CVOC concentrations were also greatest in groundwater at 30 to 35 feet bgs, just above the clay layer. Conversely, the CVOC cis 1,2,-DCE had its highest concentrations near the center of the property. Non-chlorinated VOC concentrations were also greatest in the northeast portion of the Site, near the underground storage tanks and former paint spraying booth, although their concentrations generally did not increase with depth.

Table 4 – Summary of Groundwater VOCs, 2005 – 2008, µg/L (ATC)

VOC	N	Min	p25	p50	p75	Max
Tetrachloroethene (PCE)	144	nd	nd	8.5	52	15,000
cis-1,2-dichloroethene (DCE)	132	nd	nd	8.5	230	9,300
Trichloroethene (TCE)	132	nd	nd	nd	30	6,100
Vinyl Chloride	118	nd	nd	nd	13	900
Acetone	105	nd	nd	nd	nd	7,313
Ethylbenzene	131	nd	nd	1	14	16,000
1,2,4-Trimethylbenzene	139	nd	nd	0.5	17	94,000
1,3,5-Trimethylbenzene	139	nd	nd	nd	4	17,001
Isopropylbenzene	95	nd	nd	nd	2	4,700
n-Propylbenzene	139	nd	nd	nd	1	7,300
Toluene	126	nd	nd	1	8	42,000
Total Xylenes	126	nd	nd	2.5	52	107,000

Semi-volatile Organic Compounds

Table 5 summarizes the SVOCs found in Site groundwater by ATC. SVOCs occurred at very low levels throughout most of the Site. Naphthalene in concentrations above the Technical and Operational Guidance Series (TOGS) Ambient Water Quality Standards (AWQS) Class GA guideline of 10 µg/L occurred near the underground storage tanks in the northeast portion of the Site and west of the former paint spraying booth.

Table 5 – Summary of Groundwater SVOCs, 2005 – 2008, µg/L (ATC)

SVOC	N	Min	p25	p50	p75	Max
1,4-Dichlorobenzene	120	nd	nd	nd	nd	2
2,4-Dimethylphenol	46	nd	nd	nd	nd	43
Dinbutyl Phthalate	34	nd	nd	nd	nd	9.6
Bis 2 Ethylhexyl Phthalate	21	nd	nd	nd	nd	1
2-Methylnaphthalene	20	nd	nd	nd	nd	87.5
2-Methylphenol	34	nd	nd	nd	nd	7.8
3,4-Methylphenol	34	nd	nd	nd	nd	24.2
Naphthalene	83	nd	nd	nd	13	327

Metals

Table 6 presents a summary of total metals found in Site groundwater by ATC. Metal concentrations above TOGS included lead, selenium, and thallium. Lead was above its groundwater criterion in the north central portion of the Site and in the southwest portion near the drywells. Selenium and thallium were above their groundwater criteria in the north central portion of the Site.

Table 6 – Summary of Groundwater Total Metals, June 2008, µg/L (ATC)

Metal	N	Min	p25	p50	p75	Max
Arsenic	26	nd	nd	nd	nd	nd
Antimony	26	nd	nd	nd	nd	nd
Beryllium	26	nd	nd	nd	nd	2.64
Cadmium	26	nd	nd	nd	nd	2.12
Chromium	26	nd	nd	nd	12.1	39.1
Copper	26	nd	nd	2.7	8.6	30.1
Lead	26	nd	nd	nd	18.6	69
Mercury	26	nd	nd	nd	nd	nd
Nickel	26	nd	nd	nd	nd	42.9
Silver	26	nd	nd	nd	nd	nd
Selenium	26	nd	nd	nd	nd	21.3
Thallium	26	nd	nd	nd	27.5	52.4
Zinc	26	nd	nd	nd	nd	142

Emerging Contaminants

In September 2018, Nassau County sampled two wells (MW-9 and MW-15) for Polyfluoroalkyl Substances (PFAS), and 1,4-Dioxane under the recent NYSDEC sampling guidance for these compounds. The results found a non-detect result for 1,4-Dioxane. PFAS compounds ranged from non-detect to 47 nanograms/liter (ppt). The current USEPA Health Advisory level is 70 ppt for all PFAS and New York State has adopted a drinking water standard of 10 ppt for two PFAS: PFOA and PFOS.

PFOA results were higher in MW-1, near the eastern Site boundary, compared with the results from MW-9 and MW-15, which are further into the interior of the Site.

2.7.5 Sub-Slab Vapor, Soil Vapor and Indoor Air Findings

ATC collected sub-slab vapor, soil vapor, and indoor air samples on 6/8/2005, 8/30/2007, 8/28/2007, and 8/29/2007, respectively (all prior to demolition of the Site buildings in 2018/2019). Tables 7, 8, and 9 summarize the indoor air, sub-slab soil vapor, and soil vapor VOC results for the principal compounds impacting the Site.

Table 7 - Summary of 2007 Indoor Air VOCs, µg/m^3 (ATC)

VOC	N	Min	p25	p50	p75	Max	NYSDOH Air Guidance Value
Carbon Tetrachloride	2	0.43	0.43	0.44	0.45	0.45	
Trichloroethene (TCE)	2	nd	nd	0.21	0.43	0.43	2
Tetrachloroethene (PCE)	2	nd	nd	2.7	5.4	5.4	30
1,1,1-Trichloroethane	2	nd	nd	nd	nd	nd	
Methylene Chloride	2	3.8	3.8	5.2	6.6	6.6	60
Acetone	2	nd	nd	nd	nd	nd	
2-Butanone (MEK)	2	nd	nd	nd	nd	nd	
Chloroform	2	0.24	0.24	0.25	0.25	0.25	
4-Ethyl Toluene	2	0.59	0.59	0.9	1.2	1.2	
Ethylbenzene	2	0.83	0.83	0.97	1.1	1.1	
1,2,4-Trimethylbenzene	2	nd	nd	nd	nd	nd	
1,3,5-Trimethylbenzene	2	0.25	0.25	0.42	0.59	0.59	
mp-xylene	2	2.3	2.3	3	3.6	3.6	

Table 8 - Summary of 2007 Sub-slab Vapor VOCs, µg/m^3 (ATC)

VOC	N	Min	p25	p50	p75	Max
Carbon Tetrachloride	5	nd	nd	nd	nd	nd
Trichloroethene (TCE)	5	nd	nd	9.1	44	54
Tetrachloroethene (PCE)	5	8.8	420	1,200	4,100	4,300
1,1,1-Trichloroethane	5	nd	nd	nd	nd	nd
Methylene Chloride	5	nd	nd	nd	nd	nd
Acetone	5	nd	nd	nd	nd	360
2-Butanone (MEK)	5	nd	nd	18	120	240
Chloroform	5	nd	nd	nd	nd	nd
4-Ethyl Toluene	5	59	150	210	460	1,100
Ethylbenzene	5	3.5	15	20	29	370
1,2,4-Trimethylbenzene	5	140	270	450	1,200	1,300
1,3,5-Trimethylbenzene	5	54	120	170	470	590
mp-xylene	5	20	78	100	150	1,700

Table 9 - Summary of 2007-2008 Soil Vapor VOCs, µg/m^3 (ATC)

VOC	N	Min	p25	p50	p75	Max
Carbon Tetrachloride	13	nd	nd	nd	nd	nd
Trichloroethene (TCE)	13	nd	nd	nd	nd	1,200
Tetrachloroethene (PCE)	13	nd	nd	nd	260	490
1,1,1-Trichloroethane	13	nd	nd	nd	nd	nd
Methylene Chloride	13	nd	nd	nd	nd	nd
Acetone	13	nd	nd	24	150	1,400
2-Butanone (MEK)	9	nd	3.5	8.6	12	59
Chloroform	13	nd	nd	1.1	5.4	46
4-Ethyl Toluene	13	nd	nd	23	98	130
Ethylbenzene	13	nd	nd	2.7	28	30
1,2,4-Trimethylbenzene	13	nd	nd	nd	9.8	180
1,3,5-Trimethylbenzene	13	nd	nd	nd	nd	38
mp-xylene	13	nd	nd	nd	nd	140

FE reviewed the results of the ATC soil vapor investigations and found that combined, the sub-slab and soil vapor samples (collectively, soil vapor) show that the highest soil vapor concentrations of PCE, TCE, Xylenes, and BTEX compounds center near the underground storage tanks on the north side of the property and beneath the slab near the northwest corner of the former two-story warehouse/office area. The higher levels of soil vapor are from PCE. Xylene in soil vapor was highest near the former paint spraying booth and xylene tank. The most elevated sub-slab/soil vapor levels coincide with the PCE and cis-1,2 DCE groundwater plumes.

The Site buildings have been removed, the concrete slabs will be removed and the majority of surface soils will be removed as part of the planned redevelopment. Due to the changed conditions, to evaluate current soil vapor conditions and extend coverage in areas not previously sampled by ATC, additional soil vapor sampling was warranted.

2.7.6 Soils and Commercial Use Soil Cleanup Objectives

The Volunteer contemplates development of a commercial warehouse that will require remediation to meet, at a minimum, the NYCRR Part 375-6.8(b) Commercial Use Soil Cleanup Objectives (CUSCOs). At this time, the specific development plans are not finalized; however, it is anticipated that for construction purposes approximately 20 percent of the soil within the planned building footprint area will be excavated four to five feet below grade to accommodate footings. Except for two locations, SB-5 at seven feet bgs and DW-3 at 0.5 feet bgs, soils in all other sampled locations were below the CUSCOs. We anticipate that the soil in these two locations will be removed in the course of normal construction with limited further excavation of hot spots where contamination is deeper.

2.7.7 Data Summary and Initial Conceptual Model

FE's analysis of the 2008 ATC data led us to the conclusion that soils are minimally impacted and that soil contamination above the CUSCOs applicable to the anticipated Site use is limited to a few locations.

The main conclusion from the 2008 data is that groundwater with chlorinated solvents was the matrix that is most impacted. The data suggested a potential PCE DNAPL source area and groundwater plume in the northeast corner of the Site because of the PCE groundwater levels that exceed one percent of the pure phase PCE solubility and a cis-1,2-DCE groundwater plume nearer the center of the property where CVOC degradation appears to have contributed to a plume. CVOC groundwater concentrations were only partially characterized at depth.

Previous soil vapor levels were highest beneath the concrete slab but did not appear to have a material impact inside the former building.

3.0 SAMPLING METHODOLOGY

The SRI occurred in two phases in order to assess conditions after a 12-year period of inactivity and to develop a refined sampling approach after evaluation of the initial sampling results. Phase II sampling targeted the impacted areas identified in Phase I and was designed to characterize and delineate the impacted areas sufficiently to formulate a remediation plan. Figure 2 presents the SRI sampling locations. The approved Supplemental Remedial Investigation Work Plan (SRIWP), and correspondence describing modifications to the SRIWP groundwater sampling locations and number are included as Appendix A.

3.1 Phase I Sampling

Phase I sampling included a geophysical survey, groundwater sampling from existing monitoring wells, soil vapor sampling, ambient air sampling, collection of background air quality data for VOCs and particulates, shallow soil sampling, and a tidal survey. All monitoring wells were redeveloped following the 12-year period of inactivity before sampling. They were then purged prior to sampling.

3.1.1 Geophysical Survey

A Site-wide (3.56-acre) geophysical survey was undertaken to identify USTs, piping, and underground utilities. The survey employed ground penetrating radar, magnetometer, and electromagnetic pipe locator. The initial geophysical survey found no anomalies indicative of USTs, underground piping, or utilities. While it is possible that there are no USTs, there may have been interference due to the concrete slab or other soil factors. While drilling during Phase II, a second, limited geophysical survey focused on areas where USTs were reported earlier and found evidence of USTs in the northeast corner of the property (UST Area). As a result, FE believes there is a strong possibility that USTs remain on Site. A contingency for finding and removing USTs will be included in the RAWP.

3.1.2 Phase I Groundwater Sampling

FE sampled the following monitoring wells as part of Phase I. MW-21 and MW-23, originally slated for sampling, were not sampled because MW-23 could not be located and MW-21 did not provide sufficient water for sample collection, and was likely clogged. The following lists the 13 existing monitoring wells sampled as part of Phase I of the SRI:

Well	Depth	Well	Depth	Well	Depth
MW-1	20	MW-13	8	MW-22	18
MW-2	20	MW-14	15	MW-9	20
MW-3	20	MW-17	18	MW-15	14
MW-6	20	MW-18	18	--	--
MW-8	20	MW-20	18	--	--

FE sampled the existing wells for the following parameters:

- TCL VOCs and STARS List VOCs by EPA Method 8260
- TCL SVOCs by EPA Method 8270
- TAL metals by EPA Method 6010/7000 (filtered and unfiltered)
- Basic groundwater parameters: nitrate, sulfate, sulfide, chloride, alkalinity Fe II, methane, carbon dioxide, Total Organic Carbon, and Total Dissolved Solids
- Two wells, MW-2 and MW-9, were analyzed for TCL pesticides/herbicides and PCBs (Methods EPA Methods 8081/8082)

Emerging Contaminants

One sample in MW-1 was collected for PFAS and 1,4-Dioxane following the recent NYSDEC sampling guidance for these compounds. The purpose of this sampling was to assess whether the low levels of these compounds found in previous sampling at the Site are from an on-Site or off-Site source. The site lies atop a groundwater divide, so there is no upgradient area, per se. MW-1 is close to the eastern Site boundary and was selected for PFAS sampling as it is the Site well best positioned to gauge potential off-Site emerging contaminants.

3.1.3 Phase I Shallow Soil Sampling

Shallow Soil Sampling – Exposed Soil Area

Shallow soil sampling took place in the broken asphalt areas (Exposed Soil Area, Figure 2). The purpose of these samples was to characterize exposed soil, check for spills, and provide information for the exposure assessment. Eight soil samples were collected from one foot below the surface in the northeast portion of the Site and six soil samples were collected from the south central portion. Two shallow sample locations in each of the two areas extended to the water table. All samples were analyzed for the following parameters:

- NYSDEC ASP 2005 TCL volatile organic compounds (VOCs) and STARS List VOCs by EPA Method 8260. Samples for TCL VOCs were collected using an EnCore™ sampler, a volumetric storage chamber that can be filled completely with zero headspace to minimize loss of VOCs. Soil samples for VOC analysis were collected by obtaining 3, 5-gram aliquots of soil per 6-inch sample interval using the EnCore™ samplers. One 60-mL volume of soil will also be collected for each VOC sample for percent solids analysis.

- NYSDEC ASP 2005 TCL semi-volatile organic compounds (SVOCs) by EPA Method 8270.

NYSDEC ASP 2005 Target Analyte List (TAL) metals by EPA Methods 6010/7000.

3.1.4 Soil Vapor Sampling

A total of 17 sub-slab and soil vapor samples were collected throughout the BCP Site to assess potential subsurface vapor conditions. The soil vapor points concentrated in the areas where earlier sampling identified elevated VOCs, but also encompassed locations outside these areas so as to provide Site-wide coverage.

All soil vapor samples were analyzed using EPA Method TO-15. Four ambient air samples were also collected at the same time as the soil vapor sampling to identify potential interferences associated with infiltration of outdoor air into the sampling apparatus. All soil vapor, sub-slab soil vapor and outdoor air samples were collected in general accordance with the NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October, 2006)*.

Vapor Probe Installation

Soil Vapor

Soil vapor samples were collected from seven temporary soil vapor sample points (SVP-10 through SVP-16) installed approximately two feet below grade (ATC in its 2009 reported that groundwater ranges from approximately 4 to 6 feet below grade.) At each sample location, a 1/8 to 1/4-inch -diameter, retractable, decontaminated, stainless steel sampling probe were driven to the sampling interval. The borehole above the sampling probe was sealed with cement-bentonite or equivalent material to prevent ambient air from mixing with soil vapor.

Sub-slab Soil Vapor

Sub-slab soil vapor samples were collected at 10 temporary sample locations (SSV-6 through SSV-15) from beneath the existing concrete slab. An approximate 1-inch hole was drilled through the slab at each location. Inert, 1/4-inch tubing was installed through the slab not to extend more than two inches into the sub-slab material. The implants were sealed to the surface with putty or equivalent material.

Soil Vapor and Sub-slab Soil Vapor Sampling

Vapor samples were collected after the installation of the probes and tubing using laboratory certified 1-liter SUMMA canisters. Prior to collecting a sample, a closed-circuit sampling train was created by attaching the sampling canister via a steam-cleaned, stainless steel manifold. FE employed a tracer gas test (i.e. helium) to ensure quality assurance/quality control and verify the integrity of the probe seal. Once the sampling train passed the tracer gas test, it was connected to the probe tubing (typically 0.25-inch polyethylene tubing).

Using the same flow rate as were used during sampling, approximately one to three purge volumes were purged from the sample tubing before sampling begins. While sampling, the vacuum of the sample SUMMA canister was used to draw the soil vapor through the flow controller at 0.2 L/minute or less. After sampling, the SUMMA canisters were packaged and sent to a New York State ELAP-certified laboratory under chain-of-custody for TO-15 analysis.

3.1.5 Ambient Air Sampling

Three ambient air samples were collected to investigate Site air quality. The samples were collected in 8-hour SUMMA canisters on January 13 and 14, 2020.

3.1.6 Tidal Survey

FE conducted a tidal survey to gauge the extent of tidal fluctuation on groundwater levels and flow. Continuous water levels (In-Situ Level Troll 700) were recorded at 6-minute intervals for approximately one lunar cycle in monitoring wells MW-1 and MW-14, which lie on either side of the groundwater divide identified by ATC in their 2009 RIR. Tidal measurements were obtained from the USGS tidal measuring gauge in Inwood, New York.

3.1.7 Background Air Quality

A stationary monitoring point near the center of the Site measured background air quality for particulates and VOCs over a 24-hour period on January 8 and 9, 2020 (Phase I) before any invasive work began.

3.2 Phase II Sampling

Phase II sampling consisted of 14 soil borings extending to the putative clay confining layer at approximately 35 feet below grade and collection of soil samples and temporary groundwater samples at intermediate depths between grade and the putative clay confining layer.

In the original SRIWP, the Site was divided into four Areas of Concern (AOC) based on the groundwater results from 2007-2008 ATC sampling results and the physical layout. The Phase I groundwater sampling results found those AOCs to be no longer relevant. Instead, the Phase 2 sampling focused on collecting information from the areas with impacts identified in Phase I. Based on the results of the SRI Phase I, the Site was divided into four areas: (1) Exposed Soil Area, (2) the UST Area in the northeast portion of the Site, (3) Drywell Area, and (4) Plant Area (Figure 2).

3.2.1 Soil and Temporary Groundwater Sampling Investigation

On a Site-wide basis, a direct-push drill rig advanced the soil borings and collected soil and temporary groundwater samples. All soil borings were advanced to the top of the putative clay confining layer at approximately 35 feet below grade. Continuous soil cores in five-foot-long acetate sleeves were collected, inspected, and logged.

The Site was divided into 900 ft^2 grid cells superimposed over the Site. Borings were placed within the grid cells so as to ensure good coverage in the areas of concern. The actual boring position was based on random coordinates within the grid cells, although some locations are non-random for specific purposes highlighted below. This produces good coverage while introducing a random component that provides unbiased Site characterization. Table 10 presents the rationale for each soil boring/temporary groundwater sampling point.

Table 10 – Soil Boring/Temporary Well Rationale (FE)

Soil Boring/ Temp. Well	Rationale
SB/TMP-1	Characterize UST area, delineate VOC conc. at Site boundary and along depth profile, collect potential treatment data. Delineate impacted VOC boundary. Investigate potential UST impacts to the northwest identified in the Phase I Report.
SB/TMP-2	Characterize UST area, delineate vertical VOC conc. in UST area, collect potential treatment data. Delineate impacted VOC boundary.
SB-TMP-3	Characterize area near MW-1, evaluate vertical VOC conc., collect potential treatment data.
SB/TMP-4	Characterize area near MW-20, evaluate vertical VOC conc., collect potential treatment data
SB/TMP-5	Characterize UST area, evaluate VOC conc. in UST area and along depth profile, collect potential treatment data. Delineate impacted VOC boundary. Investigate potential tank farm impacts to the northwest identified in the Phase I Report.
SB/TMP-6	Collect data to characterize western Site area
SB/TMP-7	Characterize former impacted area, evaluate vertical VOC conc. Collect potential treatment data.
SB/TMP-8	Characterize former impacted area, evaluate vertical VOC conc., collect potential treatment data
SB/TMP-9	Characterize former impacted area, evaluate vertical VOC conc., collect potential treatment data
SB/TMP-10	Characterize area near MW-22, evaluate vertical VOC conc.
SB/TMP-11	Collect data to characterize soil and groundwater in unsampled/under-sampled area of Site
SB/TMP-12	Collect data to characterize soil and groundwater in AOC, assess potential impacts near receptor. Evaluate chlorinated impacts near border,
SB/TMP-13	Collect data to characterize soil and groundwater in UST area. Evaluate vertical VOC conc. Delineate impacted VOC boundary. Investigate potential tank farm impacts to the northwest identified in the Phase I Report.
SB/TMP-14	Collect data to characterize soil and groundwater in UST area. Delineate PCE Solvent boundary. Investigate potential tank farm impacts to the northwest identified in the Phase I Report.

Soil Screening – Site Wide

Soils were field screened using a Photoionization Detector (PID) and described generally using the Unified Soil Classification System along the vertical soil column of each boring. PID readings were recorded on the boring logs along with visual, olfactory, and lithology observations. The PID had a 10.6 eV lamp (TCE has an ionization potential of 9.45 eV and PCE has an ionization potential of 9.32) capable of registering chlorinated VOCs.

Soil Sampling and Analysis – Site Wide

It is contemplated that remediation of the BCP Site will remove, at a minimum, approximately 20 percent of the planned building footprint to prepare the Site for development. (This soil will be sampled separately for disposal purposes.) If warranted, deeper soil may be removed from existing grade to remove hot spots.

All in-ground sampling equipment was decontaminated by thoroughly washing with soap and water and rinsing with potable water before and between sample collection. All soil samples for VOC analysis were collected using EnCore™ samplers to prevent VOC loss during sampling. VOC samples were collected by taking three EnCore™ samples from the 1-foot section of sampled soil section. One 60-mL volume of soil was also collected for each VOC sample for percent solids analysis.

Each soil sample was labeled (e.g., name of boring and sample interval; B-1 (12.5'-13.5'), sealed, and placed in a chilled cooler for shipment to the laboratory. Soil samples were analyzed for NYSDEC ASP 2005 TCL Volatile Organic Compounds (VOCs) and STARS list compounds by EPA Method 8260. Target Analyte Metals were sampled in selected locations. In addition, the soil samples in two borings, SB-10 and SB-5, were analyzed for TCL pesticides/herbicides and PCBs (Methods EPA Methods 8081/8082).

Temporary Groundwater Well Sampling – Site Wide

Groundwater samples were collected from each boring, or a co-located soil boring to collect temporary groundwater samples at specified depths, if necessary, to obtain sufficient sample. The purpose of the temporary groundwater samples was to delineate the groundwater plume both horizontally and vertically.

The temporary groundwater samples were collected by drilling the rods to the desired depth, retracting the rods to expose a 5-foot-long stainless steel screen and collecting the sample using a peristaltic pump to withdraw the groundwater through dedicated high-density polyethylene (HDPE) tubing.

Each temporary groundwater sample was labeled (e.g., name of boring and sample interval; B-1-GW (12.5'-16'), sealed, and placed in a chilled cooler for shipment to the laboratory. Temporary groundwater samples were analyzed for NYSDEC ASP 2005 Target Compound

List (TCL) VOCs with STARS list compounds and naphthalene by EPA Method 8260 and Target Analyte List (TAL) metals. Both filtered and unfiltered samples were collected for metals analysis.

Soil Sampling – UST Area, Plant Area and Drywell Area

In the UST Area, Plant Area, and Drywell Area, from three to five soil samples per boring were collected. The samples were collected from 1-foot intervals in each soil boring at the following depths:

- One sample was collected from the shallow groundwater table, approximately four to five feet below grade to investigate shallow soil conditions where there is a possibility that solvent spills may have collected at the water table interface.
- A second sample was collected from a 1-foot interval immediately above the putative clay layer at approximately 35 feet below grade.
- The third through fifth samples were collected from random one-foot intervals. Random samples are necessary in order to properly identify the contaminated strata and identify intervals of high and low VOC concentrations. In the earlier work by ATC, temporary groundwater samples were collected at specific depth intervals (10 ft., 20 ft., 30 ft., and 35 ft.) but this left data gaps between these intervals and the level of contamination between them unknown. Therefore, random samples were collected at the following depth ranges: one, 1-foot long soil sample from the 7 through 15-ft interval; one, 1-foot sample from the 15 – 25-foot interval, and one, 1-foot sample from the 25 - 34-foot interval.
- If there was a location that exhibited a very high PID reading, then an additional VOC sample was collected from this interval.

In addition to VOCs, soil samples were analyzed for TAL metals (because of spray paint operations), Gasoline Range Organics (GRO) and Diesel Range Organics (DRO). Additional soil samples were collected for bulk density, Total Organic Carbon, Faction of Organic Carbon, and grain size analysis. These samples were collected at the field geologist's discretion.

Temporary Groundwater Sampling - UST Area, Plant Area, and Drywell Area

Temporary groundwater samples in the UST Area, Plant Area, and Drywell Area were collected in each soil boring (or a co-located boring). Up to four temporary groundwater samples were collected in each boring. One temporary groundwater sample was collected near the water table (4-6 feet bgs) and a second above the putative clay layer at 35 feet. The third and fourth samples were collected randomly from any of the seven intervening three-foot sections from approximately 10 feet to 31 feet.

3.2.2 Shallow Soil Sampling – Plant Area and Drywell Area

FE collected five shallow soils samples (designated (SSB) as part of Phase II (Figure 2). The purpose of these samples was to augment the shallow soil samples collected in Phase I, check for spills, and provide information for the exposure assessment. Five continuous soil cores were advanced to the water table in the locations identified on Figure 2. These samples were collected from the 0- to 12-inch interval from the surface or immediately below the paved and/or concrete slab and analyzed for the same parameters as the shallow soils in the Phase I sampling. In two of the borings (field determined), 1-foot soil samples were collected to the water table and analyzed for the same parameters. Two of the samples were analyzed for pesticides/herbicides and PCBs.

3.3 Quality Assurance/Quality Control

All drilling equipment was decontaminated between each soil boring location using a non-phosphate detergent solution. The decontamination process was performed prior to the installation of each soil boring to avoid cross contamination of samples. Duplicate and field blank samples were collected at the rates approved in the SRIWP. Dedicated tubing was used to sample each monitoring well, ensuring that no cross-contamination between the samples occurred.

3.3.1 Chain of Custody

A chain-of-custody was prepared for sample transmittal to the laboratory. The chain-of-custody form accompanied the sample throughout its trip to the laboratory. The chain-of-custody record included a request to the laboratory for sample analysis. On arrival at the laboratory, the sample custodian entered the sample in the laboratory's sample log book. The chain-of-custody is kept on file at the laboratory.

3.3.2 Laboratory Testing

SGS Laboratories, a New York State Environmental Laboratory Approval Program Contract Laboratory Protocol (ELAP CLP)-certified laboratory, was used for all laboratory analysis. The laboratory operates a Quality Assurance/Quality Control (QA/QC) program that consists of proper laboratory practices (including the required chain-of-custody), an internal quality control program, and external quality control audits by New York State.

3.3.3 Investigation Derived Waste

All aqueous investigation derived waste (IDW) was placed in DOT-approved 55-gallon steel drums for eventual waste classification testing and removal. In all, the SRI generated 16 drums of liquid waste for disposal. This consists of well re-development water, groundwater purge water, and equipment decontamination waste. The solid waste generated from the

SRI included soil cuttings and PPE: two drums of soil cuttings. Because records indicated that listed wastes (PCE, TCE) had been used at the Site, FE obtained a "Contained-in" determination from NYSDEC, authorizing management of IDW as non-hazardous waste. The drummed IDW will be removed during Site remediation.

3.3.4 Community Air Monitoring Program

Particulates and VOCs in air were measured while advancing soil borings during Phase II of the SRI. One Community Air Monitoring Program (CAMP) station was immediately downwind of the work area while the second monitored air quality at the perimeter nearest the closest residence. Continuous measurements were collected for particulates and VOCs using a Dust Trak Particulate monitor and MiniRae PID monitor.

4.0 FINDINGS

This section presents the findings of the 2020 SRI, and the results of soil, groundwater, and soil vapor sampling. It includes a description of the stratigraphy and groundwater flow direction and tidal influences.

The 2008 ATC investigation results of metals in soils and sludge have been combined with the 2020 SRI results because metals concentrations are not expected to change over time. This provides more data, better coverage, and incorporates the data from the drywells and soils that ATC sampled in 2008 and earlier. All other results are from the 2020 SRI only.

Figure 5 shows soil concentrations above the Part 375 Soil Cleanup Objectives. Figure 6 shows groundwater concentrations above TOGS GA AWQS. Figure 7 depicts PCE, TCE, vinyl chloride, and xylenes above TOGS GA AWQS in the temporary groundwater sampling points. Table 11 presents the soil analytical results for the SRI. Table 12 presents the groundwater analytical results for the SRI. All laboratory data deliverable reports are included as Appendix B. Boring logs are included as Appendix C. Groundwater purge logs are included as Appendix D.

Initially, in the SRIWP, the Site was divided into four areas for investigation based on the 2008 ATC results: (1) Solvent Plume Area, (2) Chlorinated VOC Degradation, (3) Exposed Soil Area, and (4) General Site Area. Given that conditions have substantially changed since then, the Site was divided into four areas that better reflect current Site conditions. Based on the SRI results, the Site has been sub-divided into four new logical or feature-based areas:

1. **Exposed Soil Area**—Consists of two non-contiguous areas of broken asphalt, one in the northeast corner of the Site and the other in the southern portion. These areas encompass the 14 shallow soil samples collected as part of Phase I of the SRI and extend from 1 to 4.5 feet below grade, and one ATC sample for metals at five feet below grade. There are no groundwater results for this area as it consists of shallow soils only.

2. **UST Area**—The area encompasses the underground storage tanks in the northeast corner of the Site and former spray painting/drying areas and includes soil borings/temporary groundwater samples from SB-1, SB-2, SB-5, SB-13, and SB-14. It includes monitoring wells MW-3, MW-6, and MW-2 and the 2008 ATC soil samples for metals.

3. **Drywell Area**—The area encompasses the drywells on the western portion of the Site. In includes the soil and sludge drywell samples collected by ATC in 2008, soil borings/temporary groundwater samples from SB-11 and SB-12, monitoring wells MW-8, MW-9, MW-13, MW-15, MW-15. It includes shallow soil borings SSB-1,

SSB-2, SSB-3, and SSB-4.

4. **Former Plant Area**—The area encompasses the space within the former plant building. It encompasses borings/temporary groundwater samples from SB-3, SB-4, SB-6, SB-7, SB-8, SB-9, and SB-10. It includes monitoring wells MW-1, MW-17, MW-18, MW-20, and MW-22, and includes shallow soil boring SSB-5. Includes ATC soil samples for metals.

4.1 Stratigraphy

Site soils generally follow a trend of normal to reverse grading with depth, meaning that from the ground surface to approximately 11 to 15 feet below grade, sediments gradually become coarser. From 11 to 15 feet below grade to 35 feet below grade, sediments gradually become finer. This change in grading occurs around 11 to 15 feet below grade. This grading is characterized by surface soils consisting of non-plastic, medium to fine sands that range from 5 to 10 feet thick (0 - 15 ft.), underlain by non-plastic, sub-rounded to rounded, pebble-sized gravels that range from 1 to 4 feet in thickness (11 - 16 ft.). These gravels occur in medium to coarse sand matrices. Below this layer of gravel, the soil texture changes to fine sands and silty/clayey sands with depth. Some finer and more plastic, silt- and clay-rich lenses occur variably across the Site, generally occurring above or below gravels and around 25 to 30 ft. below grade. In contrast to ATC, although soils generally become finer with depth, and there are silty and clayey strata at depth, FE did not observe a continuous clay layer at 35 ft. below grade. While there is no continuous clay stratum at depth, the larger percentage of clay and silt at depth and overlapping lenses of fine-textured soils make it less likely that flow will cross this layer.

Directionally, from north to south, clay and silt lenses alternate from north to south, from approximately 11 to 15 ft. and from 25 to 34 ft. These lenses show no continuity between borings, alluding to these lenses trending laterally in an east-west direction. From west to east, soil trends appear to be finer on the western side of the Site toward Jamaica Bay, with thicker clay and silty clay layers occurring from approximately 12 to 16 ft. and from 24 to 30 ft. The western side of the Site contains less gravel as well, with only a thin sheet of gravel (0.25 feet thick) observed in SB-11. Conversely the eastern side of the Site consists of coarser grained sediment layers with thicker bands of gravels (2 - 4 ft.) occurring in SB-7 and SB-8. Stratigraphic cross-sections are included in Figure 3.

4.2 Groundwater Flow

Regional groundwater flow in the water table aquifer is west towards the end of the peninsula on which the Site sits (USGS Water Supply Paper 2498, *Water-table configuration,* plate 3, 1999). Upon reaching the Site, groundwater diverges with a component flowing northwest towards Negro Bar Channel and a component flowing southeast towards Motts Basin.

On Site, a groundwater divide forms a west-southwest east-northeast oriented hydraulic feature along a line between MW-15 and MW-6 (Figure 4). Based on the wider contour intervals towards the south, less mechanical energy is required to move groundwater in this direction so the bulk of the groundwater flow is to the south. Hydraulic conductivity measurements made by ATC in 2007/2008 ranged from 4.2×10^{-5} cm/sec to 5.3×10^{-4} cm/sec and averaged 2.3×10^{-4} cm/sec in eight measurements.

4.3 Soil and Groundwater Analytical Results

The main Site contaminants of concern are chlorinated VOCs, non-chlorinated VOCs in a localized area, and metals to a much lesser extent in drywells. The results section focuses on these constituents. FE also conducted limited soil sampling for pesticides and PCBs in shallow soil borings (0 to 5 feet) SSB-2, SSB-4, SSB-5, and in deep boring SB-11. In total, 10 samples (including one duplicate sample) were collected for these compounds. Recall the Site is on a peninsula surrounded by salt water

4.3.1 Overall Site

Before discussing the four areas into which the Site has been divided, it is helpful to discuss the findings of the less important compounds.

PCBs were below detection limits in all 10 soil samples. All pesticides in 10 soil samples were below detection limits except for one result in SB-11 (18-19) at a concentration of 1.9 µg/kg, which is below Unrestricted Use Soil Cleanup Objective of 3.3 µg/kg.

Twenty one soil samples were collected for SVOCs at depths from zero to 4.5 feet below grade. Most SVOCs were below detection limits. SVOCs modestly above the URSCOs and RRSCOs included benzo(a)anthracene, benzo(b)fluoranthene, and 1,2,3-indeno(cd)pyrene in sample HA-9 (1-2 ft). All other SVOC sample results were below the URSCO soil criteria. All SVOCs were below the CUSCOs. Seven soil samples outside the Exposed Soil Area were analyzed for SVOCs: SSB1 (0-1), SSB2 (0-1), SSB2 (4-5), SSB3 (0-1), SSB4 (0-1), SSB4 (4-5), and SSB5 (0-1).

4.3.2 Exposed Soil Area

VOCs in the Exposed Soil Area were nearly all below detection limits. Detected concentrations included chloroform, methylene chloride, and PCE. All VOC concentrations were below the URSCOS.

Fourteen soil samples were collected for SVOCs at depths from zero to 4.5 feet below grade. Most SVOCs were below detection limits. SVOCs slightly above the URSCOs and RRSCOs included benzo(a)anthracene (1,070 µg/kg), benzo(b)fluoranthene (1,060 µg/kg), and 1,2,3-

indeno(cd)pyrene (584 µg/kg) in sample HA-9 (1-2 ft). All SVOCs were below the CUSCOs.

All metals samples were below the URSCOs except for lead in sample HA-9 (1-2) at a concentration of 112 mg/kg, which is above the URSCO of 63 mg/kg and below the RRSCO and CUSCO of 400 mg/kg, each, and zinc at 134 mg/kg in the same sample.

4.3.3 Drywell Area

The Drywell Area consists of the nine drywells on the western side of the Site.

4.3.3.1 Drywell Area Soils

Most VOCs compounds were below detection limits in the Drywell Area. In the 11 samples collected, detected VOCs included acetone; carbon disulfide; cis,1,2-DCE; n-propylbenzene; PCE, TCE, 135-trimethylbenzene, and xylenes. The results for these compounds ranged from <1 µg/kg to approximately 39 µg/kg, and all were below the URSCOs.

Table 13 presents a data breakdown for soil and sludge samples in the Drywell Area. Most metals results, 75 percent, are non-detect or close to their URSCOs, and the median concentrations are either non-detect or below 4 mg/kg. The highest concentrations occur in lead, copper, chromium, and zinc. Results above the URSCOs, RRSCOs, and CUSCOs are all sludge samples from drywells DW-1 through DW-9 at depths of 0.5 ft. or eight feet that were collected by ATC in 2009 and earlier. Drywells DW-1 through DW-9 each had one or more metals above the URSCOs; All drywells but DW-1, DW-4, and DW-5 had one or more metals above the RRSCOs; and for CUSCOs, DW-2, DW-3, DW-8, and DW-9 had one or more metals above the CUSCO. DW-3 had the most metals, followed by DW-2, DW-6, and DW-9. Lead most often exceeded the CUSCOs, followed by arsenic, cadmium, mercury, and chromium. Where soil and sludge samples were analyzed for the same metals (arsenic, mercury, cadmium, lead, chromium, and selenium), the median concentrations for all metals was higher in the sludge samples than in the soil samples.

Table 13 – Drywell Area Metals Summary, 2020, mg/kg (FE)

Metal	No. Obs.	Min	p25	p50	p75	Max	URSCO	RRSCO	CUSCO
Arsenic	30	nd	nd	2.8	4.5	17	13	16	16
Mercury	30	nd	nd	nd	0.21	4.1	0.18	0.81	2.8
Cadmium	18	nd	nd	1.5	4.1	29	2.5	4.3	9.3
Lead	30	nd	nd	2.2	327	1,730	63	400	1,000
Copper	13	nd	nd	nd	nd	370	50	270	270
Chromium	30	1.7	2.6	3.2	35	286	30	180	1,500
Nickel	13	nd	nd	nd	nd	37	30	310	310
Silver	9	nd	nd	nd	nd	3	2	180	1,500
Selenium	18	nd	nd	nd	nd	9.5	3.9	180	1,500
Zinc	13	nd	nd	nd	20	520	109	10,000	10,000

4.3.3.2 Drywell Area Groundwater

Groundwater in the Drywell Area was monitored in wells MW-8, MW-9, MW-13, and MW-14. VOCs in groundwater were all below detection limits in the samples from these wells.

The only filtered heavy metal detected in groundwater in this area was arsenic in MW-13 at a concentration of 5 µg/L, which is below the TOGS GA AWQS of 25 µg/L. Iron, manganese, and sodium were above their TOGS criteria, but these are considered as derived from natural sources and also influenced by the Site being on a peninsula that is surrounded by Jamaica Bay, a salt water body.

4.3.4 UST Area

The UST Area encompassed the cluster of USTs in the northeast portion of the Site and the surrounding area.

4.3.4.1 UST Area Soils

VOCs

Most soil VOCs were below detection limits in this area. Detected soil VOCs are either chlorinated or non-chlorinated solvent mixtures and the concentrations for most samples are less than 3,000 µg/kg. Table 14 summarizes the data breakdown for the principal detected VOCs.

Table 14 – UST Area VOCs Summary, 2020, µg/kg (FE)

VOC	No. Obs.	Min	p25	p50	p75	p95	Max	URSCO	RRSCO	CUSCO
Xylenes	26	nd	nd	nd	179	7,060	354,000	260	100,000	500,000
1,3,5-Trimethylbenzene	26	nd	nd	nd	37	632	37,500	8,400	52,000	109,000
n-propylbenzene	26	nd	nd	nd	51	1,930	34,100	3,900	100,000	500,000
Ethylbenzene	26	nd	nd	nd	58	1,370	72,000	1,000	41,000	390,000
Toluene	26	nd	nd	0.38	4.1	399	6,150	700	100,000	500,000
Tetrachloroethene	26	nd	nd	1.2	809	2,810	7,330	1,300	19,000	150,000
Trichloroethene	26	nd	nd	nd	100	581	892	470	21,000	200,000
cis 1,2-dichloroethene	26	nd	nd	3.6	44	101	264	250	100,000	500,000

The principal non-chlorinated VOCs above the URSCOs include ethylbenzene, n-propylbenzene, toluene, 1,3,5-trimethylbenzene, and xylenes at depths of 14 feet below grade or shallower. The only non-chlorinated VOCs above the RRSCOs were ethylbenzene (72,000 µg/kg) and xylenes (354,000 µg/kg), both from SB-5 at 7 feet below grade. All VOCs were below the CUSCOs.

The principal chlorinated VOCs above the URSCOs include PCE, and TCE at depths greater than 26 feet below grade. One cis,1,2-DCE soil result at 14 feet below grade exceeded the URSCO. All chlorinated VOCs in soils were below the RRSCOs and CUSCOs.

Metals

Metal soil concentrations in the UST Area, 75 percent, are below the URSCOs. Of the 28 soil samples collected in this area, arsenic, lead, chromium, and zinc exceeded the URSCOs. Only arsenic exceeded the RRSCO and CUSCO. Table 15 summarizes the metal concentrations for metals above the Part 357 SCOs. Most metal concentrations are below the URSCOs for each metal.

Table 15 – UST Area Metals Summary, 2008 & 2020, mg/kg (ATC & FE)

Metal	No. Obs.	Min	p25	p50	p75	p95	Max	URSCO	RRSCO	CUSCO
Arsenic	28	nd	3	6.7	9.6	16	19	13	16	16
Lead	28	nd	2.9	4.8	8.3	78	139	63	400	400
Chromium	28	3.5	8.3	13	21	38	46	30	180	1,500
Zinc	28	6.2	20	29	47	145	161	109	10,000	10,000

Arsenic exceeded the URSCO in three samples: SB-13 (28-29), 15.5 mg/kg; SB-14 (29-30, 15.1 mg/kg; and SB-5 (10-11), 18.5 mg/kg. Lead and zinc were above the URSCO at 5 feet in two samples (ATC sample B-7 and B-14). Chromium slightly exceeded the URSCO at depths from 26 to 30 feet in three samples: SB-1 (25-26), 38.4 mg/kg; SB-13 (28-29) 46.2 mg/kg; and SB-14 (29-30) 30.3 mg/kg; and zinc exceeded the URSCO in SB-14 (29-30), 145 mg/kg. Arsenic was above the RRSCO and CUSCO in one sample, SB-5 (10-11), 18.5

mg/kg.

Boring SB-5 was the only location in the UST Area where VOCs and metals exceeded the RRSCOs. These were in samples SB-5 (6-7) and SB-5 (10-11) for ethylbenzene, xylenes and arsenic.

4.3.4.2 UST Area Groundwater

Groundwater was sampled using existing monitoring wells and temporary groundwater sampling points at various depths. All have been combined in this description of groundwater conditions.

VOCs

Most of the principal contaminant VOCs in groundwater were above TOGS GA AWQS in the UST Area. Table 16 summarizes the data breakdown for the principal groundwater VOCs in the UST Area.

Table 16 – UST Area Groundwater VOCs Summary, 2020, µg/L (FE)

VOC	No. Obs.	Min	p25	p50	p75	p95	Max	TOGS GA AWQS
Xylenes	26	nd	nd	1,455	6,630	45,700	48,700	5
1,3,5-Trimethylbenzene	26	nd	nd	38	219	1,490	1,510	5*
n-propylbenzene	26	nd	nd	51	514	1,120	1,340	5*
Ethylbenzene	26	nd	1.8	267	1,830	7,920	9,470	5
Toluene	26	nd	nd	55	554	16,100	21,800	5
Tetrachloroethene (PCE)	26	nd	nd	9.4	93	3,050	7,610	5
Trichloroethene (TCE)	26	nd	nd	1.1	53	2,650	5,440	5
cis-1,2-DCE	26	nd	1.3	11	169	2,650	3,510	5
Vinyl chloride	26	nd	nd	nd	nd	73	107	2

* Guidance value

Xylenes ranged from non-detect to 48,700 µg/L. The highest xylene concentrations were typically at depths of 15 feet or less, predominantly in temporary wells TMP-13, TMP-5, and TMP-14. The median xylene concentration in this interval is 6,040 µg/L. Below 15 feet, the median concentration is 594 µg/L. Concentrations above one percent of the xylenes pure phase solubility (1,980 µg/L) suggest possible Non-aqueous Phase Liquid (NAPL). Most of these are at 15 feet or less, although at TMP-5 they extend to 20 feet.

The chlorinated solvents PCE and TCE ranged in concentration from non-detect to 7,610 µg/L and non-detect to 5,440 µg/L, respectively. PCE and TCE concentrations are almost exclusively in the single and double digits in the interval above 30 feet and increase abruptly between 30 to 35 feet where the highest concentrations occur (Figure 7). Only three samples had PCE concentrations above one percent pure phase solubility (2,000 µg/L) indicative of possible Dense Non-aqueous Phase Liquid (DNAPL). These include TMP-1 (30-35) 2,020 µg/L, TMP-2 (30-35) 3,050 µg/L, and TMP-13 (30-35) 7,610 µg/L. TCE follows a pattern similar to PCE, although the concentrations are lower and TCE levels do not approach the one percent solubility threshold for this compound.

There is evidence of natural degradation of chlorinated compounds. The VOCs cis 1,2-DCE and vinyl chloride occur in many samples and appear coincident with the highest PCE and TCE concentrations at 30 to 35 feet.

Metals

Of the 26 filtered metals samples in the UST Area, the only detected heavy metals were arsenic, lead and nickel. The maximum filtered concentrations for these metals were 8.2 µg/L, 8.9 µg/L, and 14.2 µg/L, respectively. All of these were below their TOGS GA AWQS. Unfiltered metals results are in Appendix B.

4.3.5 Former Plant Area

The former Plant Area includes the former plant/warehouse and adjacent areas.

4.3.5.1 Former Plant Area Soils

VOCs

The majority of soil VOCs were below detection limits in this area. Detected soil VOCs are chlorinated solvents and Toluene, and the concentrations for most samples are less than 150 µg/kg. Table 17 summarizes the data breakdown for the principal detected VOCs.

Table 17 – Former Plant Area Soils VOCs Summary, 2020, µg/kg (FE)

VOC	No. Obs.	Min	p25	p50	p75	p95	Max	URSCO	RRSCO	CUSCO
Xylenes	29	nd	nd	nd	nd	nd	nd	260	100,000	500,000
1,3,5-Trimethylbenzene	29	nd	nd	nd	nd	nd	nd	8,400	52,000	109,000
n-propylbenzene	29	nd	nd	nd	nd	nd	nd	3,900	100,000	500,000
Ethylbenzene	29	nd	nd	nd	nd	nd	nd	1,000	41,000	390,000
Toluene	29	nd	nd	nd	0.79	3.5	4.2	700	100,000	500,000
Tetrachloroethene (PCE)	29	nd	nd	nd	4.5	43	2250	1,300	19,000	150,000
Trichloroethene (TCE)	29	nd	nd	nd	2	62	140	470	21,000	200,000
cis-1,2-DCE	29	nd	nd	nd	7.8	107	122	250	100,000	500,000
Vinyl chloride	29	nd	nd	nd	nd	4.8	10	260	100,000	500,000

The results for most VOCs in soils in the Former Plant Area are below detection limits or are at very low concentrations. Of the VOCs, the only compound above the URSCO in the

Former Plant Area was PCE in SB-10 at 26 – 27 ft. bgs at 2,250 µg/kg. All other compounds were below the URSCOs, RRSCOs, and CUSCO.

Metals

Metal soil concentrations in the Former Plant Area are extremely low. Of the 30 soil samples collected in this area, arsenic and chromium exceeded the URSCOs. Only arsenic exceeded the RRSCO and CUSCO. Table 18 summarizes the metal concentrations for metals with concentrations above the Part 357 SCOs. Most metal concentrations are below the URSCOs for each metal.

Table 18 – Former Plant Area Soil Metals Summary, 2020, mg/kg (FE)

Metal	No. Obs.	Min	p25	p50	p75	p95	Max	URSCO	RRSCO	CUSCO
Arsenic	30	nd	2.4	4.4	8	17	17	13	16	16
Lead	30	nd	nd	3.8	7.4	13	16	63	400	400
Chromium	30	2.8	4.2	8.8	20	30	47	30	180	1,500
Zinc	30	nd	9.9	23	34	55	63	109	10,000	10,000

Arsenic exceeded the URSCO, RRSCO, and CUSCO in two samples, SB-3 (15-16) and SB-4 (34-35). Chromium exceed the URSCO twice at different depths in SB-7 at (13-14) and (34-35). No other metals exceeded the URSCOs, RRSCOs or CUSCO. Metals in shallow boring SSB-5 (0-1) were largely non-detect.

4.3.5.2 Former Plant Area Groundwater

Groundwater was sampled using existing monitoring wells and temporary groundwater sampling points at various depths. These media have been combined in the description of groundwater conditions.

VOCs

Contaminants that exceeded TOGS GA AWQS in the Former Plant Area were largely comprised of the chlorinated solvent PCE and its by-products TCE, cis-1,2-DCE and Vinyl Chloride. PCE, TCE, cis-1,2-DCE and Vinyl chloride concentrations ranged from non-detect to 376 µg/L, non-detect to 780 µg/L, non-detect to 4,750 µg/L, and non-detect to 461 µg/L, respectively. Approximately half of all samples from the Former Plant Area exceed the TOGS GA AWQS for TCE, cis-1,2-DCE and Vinyl chloride, most of which occur at a depth of 15 ft. bgs or lower. Approximately 35 percent of the PCE samples exceed the TOGS GA AWQS. The progressive increase in concentration of the cis-1,2-DCE and Vinyl chloride daughter products suggests that natural degradation is occurring on-Site.

The only non-chlorinated solvent to exceed the TOGS GA AQWS was Xylene, which ranged from non-detect to 11 µg/L. However, 95 percent of Xylene samples collected from the Former Plant area were non-detect. Table 19 summarizes the groundwater VOCs in the Former Plant Area.

Table 19 – Former Plant Area Groundwater VOCs Summary, 2020, µg/L (FE)

VOC	No. Obs.	Min	p25	p50	p75	p95	Max	TOGS GA AWQS
Xylenes	37	nd	nd	nd	nd	9	11	5
1,3,5-Trimethylbenzene	37	nd	nd	nd	nd	0.72	0.91	5*
n-propylbenzene	37	nd	nd	nd	nd	nd	nd	5*
Ethylbenzene	37	nd	nd	nd	nd	2	2.1	5
Toluene	37	nd	nd	nd	nd	nd	1	5
Tetrachloroethene (PCE)	37	nd	1.1	11	89	352	376	5
Trichloroethene (TCE)	37	nd	nd	11	95	619	780	5
cis-1,2-DCE	37	nd	0.94	6.6	269	1,970	4,570	5
Vinyl chloride	37	nd	nd	nd	33	132	461	2

Metals

Of the 36 filtered metals samples in the Former Plant Area, the only detected heavy metals were arsenic, chromium and zinc. The maximum filtered concentrations for these metals were 5.2 µg/L, 14 µg/L, and 27 µg/L, respectively. All of these were below their TOGS GA AWQS. Table 20 summarizes the filtered groundwater metals in the Former Plant Area.

Table 20 – Former Plant Area Filtered Metals Summary, 2020, µg/L (FE)

Metal	No. Obs	Min	p25	p50	p75	p95	Max	TOGS GA AWQS
Arsenic	36	nd	nd	nd	nd	nd	5.2	25
Lead	36	nd	nd	nd	nd	nd	nd	25
Chromium	36	nd	nd	nd	nd	10	14	50
Zinc	36	nd	nd	nd	nd	25	27	100

4.4 Soil Vapor Analytical Results

Seventeen soil vapor samples were collected throughout the entire Site footprint (there are no Site buildings). Of the 69 VOC compounds analyzed by TO-15, 49 percent (34/69) of all results were below detection limits. The breakdown of the soil vapor dataset for the chlorinated VOCs and their degradation by-products is summarized in Table 21. Figure 8 shows the PCE and TCE soil vapor concentrations. The complete soil vapor and ambient air results are included in Table 22.

Table 21 – Soil Vapor Results Summary, 2020, µg/m³ (FE)

Soil Vapor VOCs	No. Obs.	Min	p25	p50	p75	Max	NYSDOH Soil Vapor Guidance Value
Methylene Chloride	17	1.7	2.1	3.1	4.9	21	60
Tetrachloroethene (PCE)	17	nd	0.14	1.5	14	548	30
Trichloroethene (TCE)	17	nd	0.04	0.45	3.4	55.4	2
Carbon Tetrachloride	17	nd	nd	nd	nd	nd	
Chloroform	17	nd	nd	nd	nd	nd	
Chloromethane	17	nd	nd	nd	nd	0.91	
1,2-Dichloroethane	17	nd	nd	nd	nd	3.6	
1,1-Dichloroethene	17	nd	nd	nd	nd	nd	
1,1-Dichloroethane	17	nd	nd	nd	nd	nd	
cis-1,2-Dichloroethene	17	nd	nd	nd	nd	nd	
Vinyl Chloride	17	nd	nd	nd	nd	nd	
Acetone	17	7.1	42.3	54.6	73.9	375	
2-Butanone (MEK)	17	nd	1.4	2	2.6	10	

PCE and TCE data summaries computed using Regression on Order Statistics (ROS) to account for non-detects.

The results for most of the VOCs in Table 19 are below detection limits or are at very low concentrations. Of the detected compounds, the maximum methylene chloride soil vapor concentration is well below the NYSDOH soil vapor action guidance value of 60 µg/m³. For PCE, the VOC with the historic highest groundwater concentrations, all but three of the 17 sample locations had results below the NYSDOH soil vapor action guidance value of 30 µg/m³. The samples above this guideline were SSV-9 (43 µg/m³), SSV-13 (111 µg/m³), and SSV-10 (548 µg/m³). These are on the eastern side of the Site and the two highest values are near the Site's eastern boundary.

For TCE, five of the 17 soil vapor sample results were above the NYSDOH soil vapor action guidance value of 2 µg/m³. The samples were SSV-8 (6.4 µg/m³), SSV-12 (3.4 µg/m³), SSV-9 (12 µg/m³), SSV-13 (53.7 µg/m³), and SSV-10 (55.4 µg/m³). These are on the eastern side of the Site and the two highest values are near the eastern Site border and coincide with the highest PCE soil vapor concentrations. Other than these locations, the balance of the Site had PCE and TCE soil vapor concentrations below the NYSDOH soil vapor action threshold values (Figure 8). These low concentrations are likely due to natural degradation.

Acetone was detected in all soil vapor samples and 2-Butanone (Methyl Ethyl Ketone [MEK]) detected in all but one of the 17 soil vapor samples. Acetone concentrations ranged from approximately 7 µg/m³ to 375 µg/m³ and MEK ranged from non-detect to 10 µg/m³; but both compounds were below detection limits in all 13 (incl. duplicate) SRI Phase I monitoring well groundwater samples. MEK was non-detect in all 54 temporary groundwater samples and acetone was non-detect in more than 90 percent of these samples. They were also below detection limits in all 14 shallow soil samples above the water table. Their near complete absence in these media coupled with their near 100 percent detection in soil vapor samples suggests that natural degradation processes may be producing these compounds.

Fowler, Thompson and Mueller 2011 note that acetone and MEK can result from microbial degradation or abiotic degradation of organic compounds as metabolic intermediates. They note that many bacterial and yeast species can convert carbohydrates, volatile fatty acids, and alcohols into solvents such as acetone and MEK and have observed production of acetone and MEK on sites contaminated with chlorinated solvents.

From a statistical perspective, the soil vapor data show a moderately strong association between acetone and MEK (Kendall's tau = 0.5662) with strong statistical significance (p-value = 0.0016) in soil vapor.[1] There is a moderate correlation between acetone and PCE that is also statistically significant (Kendall's tau = 0.3603, p-value = 0.04087).[2] Since there is a relationship between acetone and MEK signifying probable natural degradation and since there is a significant association between acetone and PCE[3], then when combined with the absence of PCE in shallow soil and groundwater, this correlation seems to support the idea of natural degradation of PCE in soil vapor.

The two soil vapor points with the highest PCE and TCE concentrations (SSV-10 and SSV-13) on the extreme eastern side suggest a possible surface spill as the PCE and TCE soil vapor concentrations are markedly higher in these locations compared to anywhere else. Soil vapor concentrations for both compounds decrease with increasing distance from these soil vapor points exhibiting a characteristic halo effect associated with VOCs in soil vapor. This behavior also supports the idea of a localized surface release near these locations.

4.5 Ambient Air Analytical Results

Three ambient air samples were collected during the soil vapor sampling. These were co-located with soil vapor sampling locations at the same time. Of the 69 VOC compounds analyzed by TO-15, 65 percent (45/69) were all below detection limits. Of the detected compounds, the highest detected concentration was acetone at 11 µg/m^3. The data distribution among the chlorinated VOCs and their degradation by-products are summarized in Table 23.

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[1] Kendall's tau measures correlation, the degree of association, between parameters. The correlation value for Kendall's tau is approximately 0.2 less than Pearson's R. Thus, 0.0552 is more like 0.77 and 0.3603 is more like 0.56.
[2] This association does not hold for MEK and PCE.
[3] There is also a moderate Kendall's Tau correlation (Kendall's tau = 0.3824) between acetone and TCE that is statistically significant (p-value = 0.02297).

Table 23 – Ambient Air Results Summary, 2020, µg/m³ (FE)

Ambient Air VOCs	No. Obs.	Min	p25	p50	p75	Max
Methylene Chloride	3	0.45	0.45	0.63	0.73	0.73
Tetrachloroethene (PCE)	3	0.35	0.35	0.42	0.95	0.95
Trichloroethene (TCE)	3	nd	nd	0.11	0.14	0.14
Carbon Tetrachloride	3	0.41	0.41	0.41	0.43	0.43
Chloroform	3	nd	nd	nd	nd	nd
Chloromethane	3	0.97	0.97	1	1.1	1.1
1,2-Dichloroethane	3	nd	nd	nd	nd	nd
1,1-Dichloroethene	3	nd	nd	nd	nd	nd
1,1-Dichloroethane	3	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	3	nd	nd	nd	nd	nd
Vinyl Chloride	3	nd	nd	nd	nd	nd

The concentrations are below detection limits or are very low, less than 1.5 µg/m³. The maximum ambient air concentration for TCE (0.14 µg/m³), the VOC with the lowest NYSDOH action threshold, is well below its threshold guidance level of 2 µg/m³.

4.6 Geophysical Survey Results

The initial geophysical survey found no anomalies indicative of USTs, underground piping, or utilities. While it is possible that there are no USTs, there may have been interference due to the concrete slab or other soil factors. While drilling during Phase II, a second, limited geophysical survey focused on areas where USTs were reported earlier and found evidence of USTs in the northeast corner of the property (UST Area). As a result, FE believes there is a strong possibility that USTs remain on Site. A contingency for finding and removing USTs will be included in the RAWP.

4.7 Tidal Survey Results

The Site is located in the middle of a peninsula extending into Jamaica Bay from the east (Figure 1). North of the peninsula is an arm of Jamaica Bay referred to on the USGS topographic map as Negro Bar Channel. On the south side of the peninsula lies a second arm of Jamaica Bay known as Motts Basin. The surrounding water forms a groundwater divide that runs through the Site with a portion flowing northwest and a portion flowing southeast to the Jamaica Bay inlets on either side of the Site.

Cyclic groundwater level fluctuations were monitored using water-level loggers (In-Situ Level Troll 700) in MW-14 and MW-1 to evaluate tidal effects on groundwater levels. These wells were selected because they lie on either side of the groundwater divide (MW-14 on the north and MW-1 on the south). MW-14 is approximately 460 feet from Jamaica Bay on the north and MW-1 lies approximately 740 feet. Tidal fluctuations were gauged using the data from the USGS tidal monitoring station at Inwood, which measures water levels in Jamaica Bay near the Site. The USGS tidal gauge is approximately 750 feet north of the Site boundary. Negro Bar Channel is approximately 450 feet north of the Site and MW-14. Motts Basin lies approximately 730 feet to the south. The monitoring period covered one lunar cycle, from January 9, 2020 to February 10, 2020. Water levels were recorded in 6-minute intervals.

In coastal areas, groundwater levels respond to tidal fluctuations. As the tide rises or falls, a sinusoidal wave propagates through the water-bearing regime. The amplitude of each wave decreases and the time lag increases as the distance from the groundwater-surface water boundary increases (Gibbs & Hill, Inc. 1984, p. 43. Todd, 1980, p. 242).

Daily tidal water level differences between low and high tides measured at USGS Inwood Gauging Station ranged from 4.04 feet to 8.34 feet and averaged 6.35 feet. In MW-14, water level fluctuations ranged from 0.10 ft. to 0.86 ft. and averaged 0.20 ft. In MW-1, water levels ranged from 0.02 ft. to 0.34 ft. and averaged 0.08 ft.

Daily Minimum, Maximum, and Average Water Level Differences with Tidal Change, 2020, (ft.) (FE)

Location	No. Obs.	Min	Max	Average	Avg. Tidal Efficiency[1]
USGS Tidal Gauge	31	4.04	8.34	6.34	1.0
MW-14	30	0.10	0.86	0.20	0.03
MW-1	30	0.02	0.34	0.08	0.01

[1] Unitless

The range ratio or tidal efficiency, the ratio of the high-low water level range in a well compared to the water level range in the tide, measured 0.03 in MW-14 and 0.01 in MW-1. These values are consistent with the ranges observed by ATC in 2007 (0.06 and 0.19) and signify that although Site groundwater levels respond to tidal changes, the magnitude of the water level fluctuations is small. These changes are unlikely to have any material effect on groundwater movement or contaminant transport. Figure 9 compares the water level fluctuations in the tidal gauge to MW-1 and MW-14 during the monitoring period.

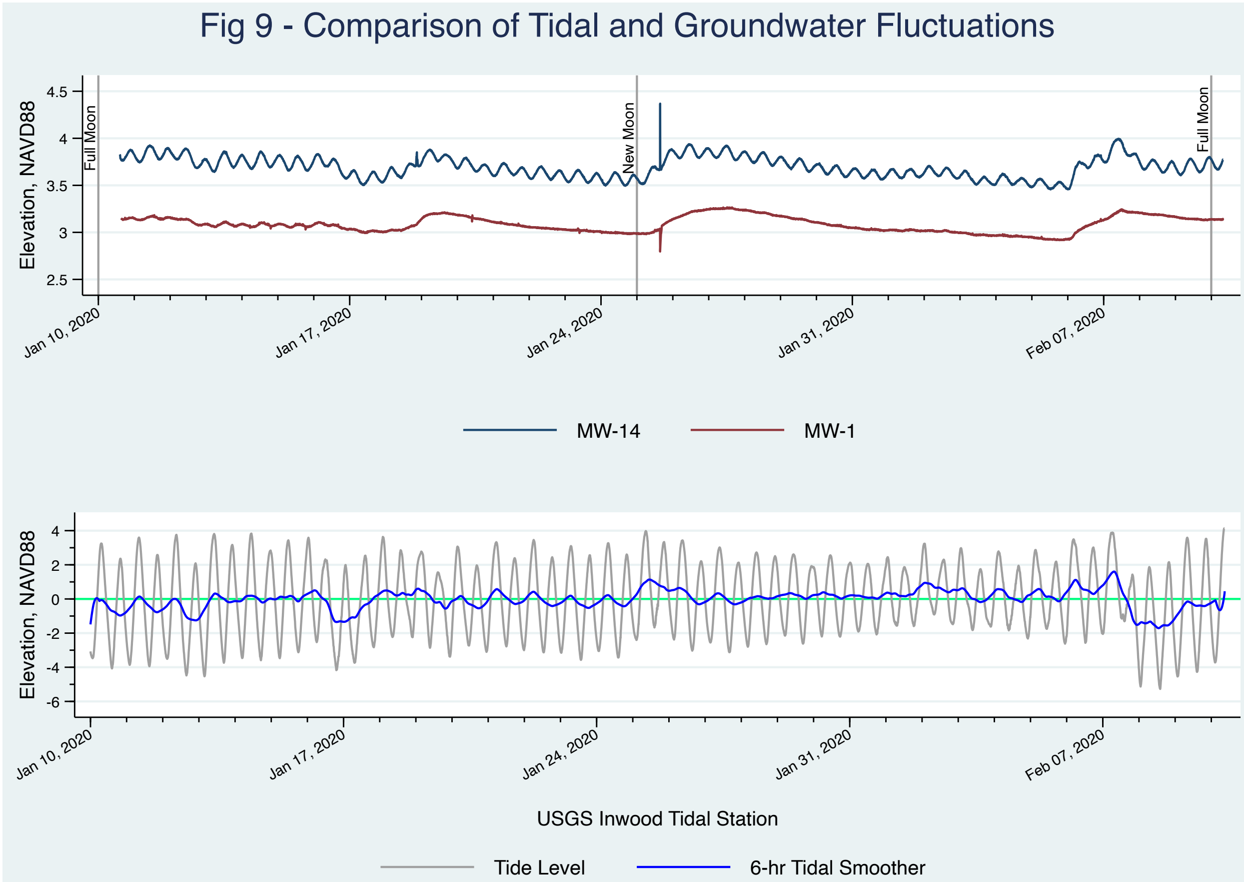


Figure 9 shows Site water levels responding to tidal changes, albeit at much smaller magnitudes (0.1 to 0.86 ft. in MW-14 and 0.02 to 0.34 ft. in MW-1). MW-1, approximately 280 feet further south from Jamaica Bay than MW-14, shows a smaller response, which is consistent with what is expected with increasing distance from the coastal water body. The Site wells show water levels apparently responding with the moon phase and mirroring one another, but at different amplitudes.

As noted, there is a time lag between tidal fluctuations and water level responses in groundwater at a distance from the surface water-groundwater contact (the coast). Based on equation 8.11 in Fetter 2001, the estimated time for a tidal water level changes to influence groundwater levels in the closest Site well is estimated from less than 35 hours to just under 110 hours, depending on the storativity of the unconfined water bearing regime. This is based on distance of 450 feet from the coast to MW-14, storativity values of 0.01 and 0.1 because the actual value is unknown, the average Transmissivity reported by ATC in its 2009 report (2.1 x 10^{-5} m^2/sec), and a tidal period (the time to go from one extreme to another) of 6 hours.[4] Ultimately, tidal fluctuations seem to have little or no material effect on Site groundwater movement and water levels. Given the small tidal influence and groundwater flow direction,

[4] Storativity range from 0.01 to 0.3 in unconfined water-bearing regimes according to Kruseman and deRitter, 2000, p. 23. The values of 0.01 and 0.1 were used to derive estimates of the time for tidal influences to reach the site as we considered this an acceptable range for this site. The tidal period can range from less than 6 hours to more than 6 hours. Six hours was selected because this is what is expected to be the typical time period.

it is unlikely that the Eastern Shell Fuel Terminal has had any material impact on the Site.

4.8 Community Air Monitoring Program Results

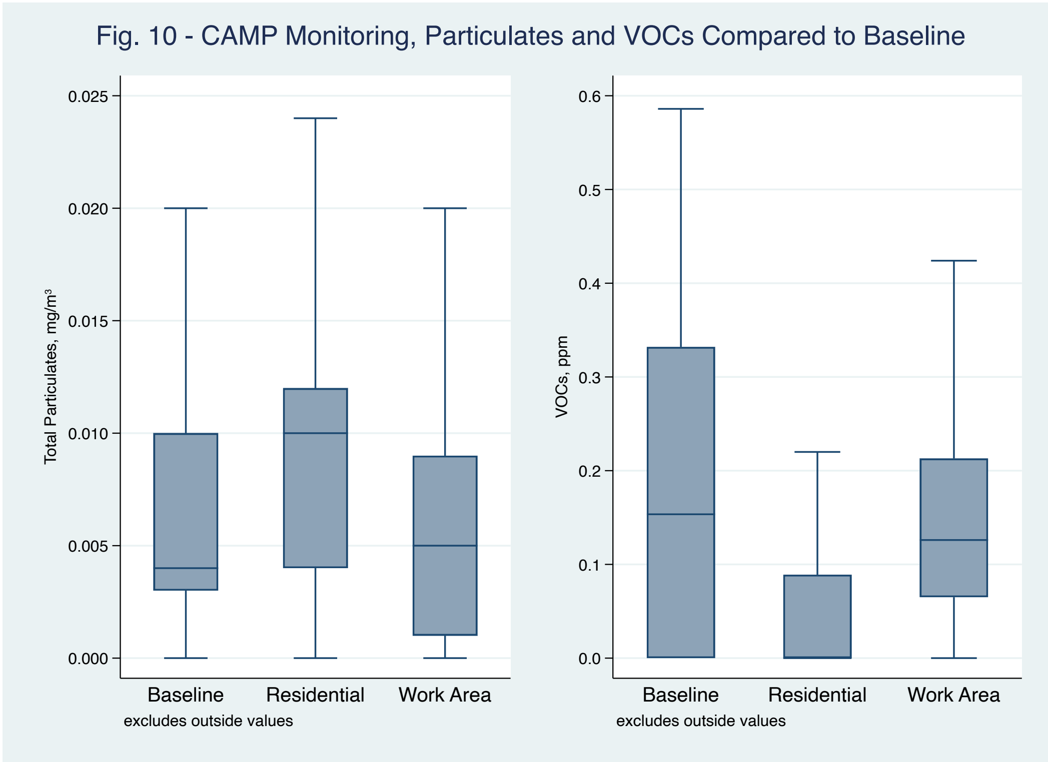
FE obtained Site background air quality data for VOCs and total particulates by measuring these parameters over a 24-hour period on January 9 and January 10, 2020. for each parameter.

FE measured Total Particulates and VOCs during Phase II ground intrusive work from May 20 through May 29, 2020 during working hours. FE placed one air Community Air Monitoring Program (CAMP) station downwind of the work area (Work Area) and placed the second CAMP unit downwind of the work area near the perimeter fence to by the nearest residence (Residential). Table 24 summarizes the VOC and Total Particulate air monitoring results and compares them the baseline values.

Table 24 – CAMP Monitoring, Comparison of Particulates (mg/m^3) and VOCs (ppm) to Baseline, 2020 (FE)

Location	No Obs.	Min	p25	p50	p75	p99	Max	Geometric Mean
Baseline								
Total Particulates	669	0	0.003	0.004	0.01	0.055	0.061	0.006
VOCs	610	0	0	0.153	0.332	0.541	0.586	0.194
Residential								
Total Particulates	2,595	0	0.004	0.01	0.012	0.027	0.221	0.008
VOCs	2,060	0	0	0	0.089	0.83	5.71	0.266
Work Area								
Total Particulates	2,209	0	0.001	0.005	0.009	0.052	0.117	0.006
VOCs	2,334	0	0.065	0.126	0.213	0.953	0.976	0.115

Figure 10 shows the results graphically. Transient spikes during CAMP setup are excluded.



As shown, there is no material difference between baseline and active drilling conditions. There is very little difference in the median concentrations (bar in the middle of the box) or in the range of concentrations themselves. VOC concentrations remained approximately an order of magnitude lower than the CAMP 5 ppm above background action level, and particulate levels remained well below the 100 µg/m^3 above background level action limit for this parameter. In all, drilling does not appear to have had any material effect of air quality.

4.9 Data Validation

As approved by NYSDEC, all data validation and generation of the Data Usability Summary Reports (DUSRs) was completed by the FE in-house data validator. Project DUSRs concluded that with the exception of select rejected data (as summarized below), all data are considered usable for project decisions with the understanding of potential biases in some estimated results, as highlighted in the DUSR text and validation action summary tables. All Data Usability Reports (DUSRs) are included in Appendix E. As mentioned, some SVOC results in select samples were rejected due to severe QC exceedance. Reject results are summarized below.

Sample ID	Analyte	Qualifier	Notes
SSB-4 (0-1) SSB-4 (4-5) SSB-3 (0-1) SSB-1 (0-1) SSB-2 (0-1) SSB-2 (4-5) SSB-5 (0-1)	2,4-Dinitrophenol Pentachlorophenol	R	Matrix Spike & Matrix Spike Duplicate percent recovery below 10%. Matrix interference (suppression) evident and samples biased low. All associated batch samples were non-detect and are therefore considered unusable.

5.0 DISCUSSION

This section discusses the salient factors affecting soil and groundwater identified during the SRI. Section 5 focuses on PCE, xylenes, and metals, namely arsenic, as these are the constituents driving the investigation and most relevant to cleanup.

5.1 Soils

Soil boring observations during the SRI found considerable variation in soil type with depth, with some coarser soils at depth and finer soils at shallower depth intervals. Nonetheless, the overall trend is finer soils become more prevalent with increasing depth. The lower soil depths had a high proportion of silt and clay variants, but a distinct, continuous clay layer at 35 feet was not evident in the stratigraphy (Figure 3).

Stratigraphy plays an important role in soil metals concentrations. Excluding the drywells, where sludge, not soil, contains elevated metals, all metals except for arsenic in three samples are below the RRSCOS. Their concentrations seem to stem from lithology, not contamination.

Iron and aluminum are two of the fundamental components of soil minerals. In Site soils, they are highly correlated with each other (0.99). Arsenic, the one metal above the CUSCO at two locations 16 feet and deeper, is also highly correlated with iron (0.83) and with aluminum (0.77). Therefore, it seems arsenic is moderately to strongly associated with the native alumino-silicate minerals comprising the sands, silts, and clays forming the Site stratigraphy.

The relationship between arsenic and iron can be measured in the ratios of the two metals. The arsenic-to-iron ratio *decreases* by approximately 80 percent from the surface to approximately 20 feet below grade, meaning the proportion of arsenic to iron is greater in shallower soils than deeper soils. In contrast, arsenic soil concentrations *increase* approximately six-fold with depth to approximately 22 feet below grade when levels remain relatively steady, meaning the arsenic concentration increases, but proportionally there is less arsenic to iron with depth. The soils with a higher clay/silt percentage (generally the deeper soils) also have higher median arsenic concentrations, linking arsenic to lithology. The data show that the odds of arsenic in clay/silt soils are four to more than 20 times greater than in sandy soils.[5] Zinc and nickel, and chromium for the most part, also have median soil concentrations that are higher in soils with a higher clay/silt percentage, further linking metals to lithology. Iron and aluminum have higher concentrations in soils with higher clay/silt content as well.

[5] Statistically significant odds ratios calculated by means or ordered logistic regression. In contrast, for PCE, the odds are roughly equal for PCE in fine sand, silty sand, and clayey silt.

Since the lithology generally becomes finer with depth, and arsenic concentrations increase modestly with depth, and there is proportionally less arsenic in the soil, and the arsenic at depth is much further from a source, the arsenic concentrations at depth appear to related to native conditions as opposed to a contaminant.

It is the drywells beneath the parking lot on the western part of the Site that contain elevated metals concentrations. The metals occur in sludge, not soil. It is probable that the drywells acted as sinks—their intended use—where runoff from vehicles and materials storage allowed sludge with metals to accumulate over time.

5.2 Groundwater

The major compound affecting groundwater is PCE where its impacts depend on depth. Xylenes affect groundwater to a much more limited extent. PCE in groundwater appears throughout the UST and Former Plant Areas at levels above TOGS. PCE concentrations in the UST Area to 30 feet (n=15) are relatively low and range from non-detect to 109 ug/L with a median concentration of 11.3 ug/L. PCE concentrations in the UST Area increase at the bottom 30 – 35-foot interval of the UST Area where they are the highest on Site and range (n=5) from 297 ug/L to 7,610 ug/L, with a median concentration of 2,020 ug/L.

Three locations within the UST Area had PCE groundwater concentrations suggesting possible DNAPL. These were all in the 30- to 35-foot interval and are scattered (TMP-1, TMP-2, and TMP-13) indicating that there is no discrete continuous body of DNAPL, only isolated locations where PCE levels appear to be decreasing.

PCE appears to be degrading via natural biodegradation as TCE, cis-1,2-DCE, and vinyl chloride, all degradation daughter compounds of PCE, appear coincident with PCE concentrations (Figure 7, cis not shown). The ratio of TCE to PCE increases with depth, meaning there is more TCE to PCE as depth increases, while PCE concentrations for the most part are greater than TCE. The three highest concentrations of carbon dioxide and methane in groundwater in the UST Area (MW-2, MW-3, and MW-6) are approximately two or more orders-of-magnitude greater than outside the UST Area, another line of evidence that natural degradation is occurring. PCE concentrations in the UST Area have decreased significantly since the previous ATC investigation and are approximately three-times lower compared to those in 2008.

PCE concentrations in groundwater decrease dramatically outside the UST Area on the remainder of the property at the 30 – 35-foot interval and ranged (n=8) from 0.93 ug/L to 376 ug/L and had a median concentration of 120.5 ug/L. Above 30 feet PCE concentrations are even lower, ranging (n=24) from non-detect to 353 ug/L, with a median concentration of 9.2 ug/L. On a Site-wide basis, PCE groundwater concentrations are approximately 10 percent lower compared to 2008 in concentrations above 300 ug/L.

Xylene groundwater concentrations occur exclusively in the UST Area, where they range from non-detect to 48,700 ug/L, with a median concentration of 977 ug/L. Xylene concentrations are highest from grade to 20 feet below grade and drop off significantly below 20 feet. All xylene concentrations below 20 feet are at concentrations below the threshold for potential NAPL. Elevated xylene concentrations above 20 feet are limited to a small area encompassed by borings SB-5, SB-13, and SB-14, close to the USTs. Comparing filtered and unfiltered groundwater metals samples collected from 14 Site monitoring wells (incl. dup) during Phase I of the SRI to a nearby USGS monitoring well (approximately 1,600 feet south of the Site across Motts Basin) screened in the Magothy Aquifer found Site groundwater concentrations for chromium, copper, iron, lead, manganese, mercury, selenium, silver, zinc, and cadmium less than their concentrations in the Magothy Aquifer drinking water source (USGS monitoring well number Q1930 sampled on 3/17/1981 and 6/23/1983 (Table 10, p. 99. USGS Water Supply Paper 2498). Arsenic in Site groundwater was below the Magothy Aquifer arsenic concentration of <5 mg/L in 20 out of 28 monitoring well samples (71 percent).

Filtered arsenic groundwater concentrations from the temporary groundwater sampling points (n=53) were below the TOGS GA AWQS of 25 ug/L. Likewise, all other heavy metals from filtered temporary groundwater samples were below their respective TOGS GA AWQS. The Site is in Inwood, NY and receives it water from a municipal water supply. The municipal water supply obtains water from a number of local aquifers. "New York American Water – Lynbrook Operations has wells in the Upper Glacial, Magothy, Jameco and Lloyd aquifers," retrieved 3/16/2020 from http://www.amwater.com/ccr/lynbrook.pdf. Article IV, Section 2 of the Nassau Co. Public Health Ordinance, 2014, prohibits the use of private wells where there is a public water supply. Consequently, regardless of the Site water quality, law prohibits the use of private wells on the property.

6.0 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT

This Qualitative Exposure Assessment was performed in accordance with Appendix 3B of DER-10. The following details the analysis of the parameters assessed and a summary of the recommendations. Table 25 summarizes the environmental media, exposure routes and human exposure assessment.

Table 25 – Exposure Assessment Summary

Environmental Media & Exposure Route	Human Exposure Assessment
Direct contact with surface soils (and incidental ingestion)	▪ The entire site is covered by asphalt or the concrete slab of the former on-site building. A small portion of the Site is covered with broken asphalt and exposed soil, but there are no appreciable areas of exposed soil and the exposed soil is largely vegetated. Consequently, there is no material route of exposure.
Direct contact with subsurface soils (and incidental ingestion)	▪ Exposure to subsurface soils can occur during ground intrusive work.
Ingestion of groundwater	▪ Contaminated groundwater is not being used for drinking water as the area is served by the public drinking water supply (New York American Water Co.). Nassau County prohibits the use of private wells where there is a public water supply (Article IV, Section 2, Nassau Co. Public Health Ordinance, 2014.
Direct contact with groundwater	▪ Contact with groundwater is possible if doing ground intrusive work
Inhalation of air (exposures related to soil vapor intrusion)	▪ The Site will have a waterproofing/vapor barrier around the foundation. Exposure to soil vapor is possible if doing intrusive work. It is recommended that a Soil Vapor Intrusion (SVI) evaluation be completed to evaluate the potential for exposure concerns.

The objective of the qualitative exposure assessment is to describe how human and environmental receptors may be exposed to site contaminants based upon the site-specific conditions and to assess whether there are any complete or potentially complete exposure pathways.

As discussed above, the contaminants of concern (COCs) at the Site include chlorinated and localized non-chlorinated VOCs and localized metals. These COCs were detected in soil and groundwater at concentrations exceeding their respective NYSDEC standards. The NYSDEC TOGS Class GA Groundwater Quality Standards were developed to be protective of public health based upon consideration of groundwater as a potential source of drinking water.

As specified in ECL 27-1415(2) and DER-10, the exposure assessment should consider the current conditions, as well as the reasonably anticipated future land use of the Site and the affected offsite areas, and the reasonably anticipated future groundwater use.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: (1) a contaminant source; (2) contaminant release and transport mechanisms; (3) a receptor population; (4) a point of exposure; and (5) a route of exposure. The following paragraphs provide an overview discussion of exposure pathways that may potentially exist associated with the Site.

6.1 Contaminant Source

The predominant contaminant source is chlorinated solvents and non-chlorinated solvents from past industrial use. Parent chlorinated compound concentrations are greatest in the UST Area in the northeast corner of the Site, where their concentrations are significantly more elevated below 20 feet. Elsewhere on Site, chlorinated solvent concentrations are also greater below 20 feet. Non-chlorinated compounds are greatest in the UST area at depths less than 20 feet.

Metals are a secondary localized source of contamination. Metal concentrations are greatest as sludge in drywells D-1 through DW-9.

6.2 Contaminant Release and Transport Mechanisms

There are few locations with concentrations indicative of free-phase NAPL, suggesting that most VOC groundwater impacts are in the dissolved phase. Dissolved phase concentrations move in the direction of groundwater flow direction. There is no outfall for groundwater on Site, so there is no point of contact unless invasive work occurs below the groundwater table at approximately five feet.

VOCs do not appear to release into ambient air above the Site. Any VOCs in soil vapor appear at relatively low concentrations that are covered by pavement.

Metals occur primarily in soils and in particular in the sludge found in the drywells. Metals are below grade and appear essentially immobile. There is no discernable release mechanism or exposure unless invasive work is being done.

6.3 Points and Routes of Exposure

There are no apparent material points of exposure on Site in its current state. There are areas of broken asphalt and exposed soil in two small Site areas, but these are small and are largely vegetated. Exposure can occur during construction when invasive work is underway and there is a potential for direct contact with contaminated media, although the overall level of contamination throughout most of the Site is comparatively low.

Soil vapor concentrations across the Site increase from west to east but are primarily non-detect or at comparatively low concentrations except for elevated PCE and TCE soil vapor levels in two locations (SSV-10 and SSV-13) on the extreme eastern side. There are no buildings on Site. Consequently, there is no potential for vapor intrusion at this time. A waterproofing/vapor barrier installed as part of construction will further mitigate the potential for vapor intrusion after construction.

Source removal as part of a remediation plan and installation of engineering controls during construction will ensure there will be neither a source or pathways for migration. Invasive work at depth where chlorinated solvent concentrations are highest is not contemplated at any time. During construction, site workers could be exposed to contaminants via the air inhalation route of exposure, which will be addressed in a Site Health & Safety Plan. Table 26 summarizes the media, human health exposure pathways, controls, and status of exposure pathways during the current, pre- and post-development phases.

Table 26 - Summary of Human Health Exposure Pathways by Media and Site Operation

Medium	Exposure Pathway	Current	Construction	Post Development
Surface Soil	Dermal Contact	Pathway incomplete: Site covered with asphalt and concrete slab. *de minimus* cracks and exposed soil areas in asphalt. Access restricted by fence.	Pathway complete but controlled by Health & Safety Plan procedures.	Pathway incomplete: Contaminated soil removed and residual soils covered by concrete slab or two feet of clean material.
	Inhalation	Pathway incomplete: No material source. Ambient SUMMA air measurements of VOCs all below 1 µg/m^3.	Pathway complete but controlled by Health & Safety Plan procedures.	Pathway incomplete: Contaminated soil removed and residual soils covered by concrete slab or two feet of clean material.
	Ingestion	Pathway incomplete: Site covered with asphalt and concrete slab. *de minimus* cracks and exposed soil areas in asphalt. Access restricted by fence.	Pathway complete but controlled by Health & Safety Plan procedures.	Pathway incomplete: All soils covered by concrete slab/pavement or clean material.
Subsurface Soil	Dermal Contact	Pathway incomplete: Site covered with concrete slab and *de minimus* cracks and	Pathway complete but controlled by Health & Safety Plan procedures.	Pathway incomplete: Contaminated soil removed and residual soils covered by

Table 26 - Summary of Human Health Exposure Pathways by Media and Site Operation

Medium	Exposure Pathway	Current	Construction	Post Development
		exposed soil areas in asphalt. Access restricted by fence.		concrete slab/pavement or two feet of clean material.
	Inhalation	Pathway incomplete: No material source. Site covered by pavement. Access restricted by fence.	Pathway complete but controlled by Health & Safety Plan procedures.	Pathway incomplete: Contaminated soil removed and residual soils covered by concrete slab/pavement or two feet of clean material.
	Ingestion	Pathway incomplete: Site covered with concrete slab and *de minimus* cracks and exposed soil areas in asphalt. Access restricted by fence.	Pathway complete but controlled by Health & Safety Plan procedures.	Pathway incomplete: All soils covered by concrete slab/pavement or clean material.
Soil Vapor	Dermal Contact	Not Applicable	Not Applicable	Not Applicable
	Inhalation	Pathway incomplete: No material source. Site covered with concrete slab and *de minimus* cracks and exposed soil areas in asphalt Ambient SUMMA air measurements of VOCs all below 1 µg/m^3.	Pathway complete but controlled by air monitoring.	Pathway incomplete: Contaminated soil removed and vapor barrier /waterproofing in place around and under foundation. Recommend that a SVI evaluation be completed to evaluate the potential for exposure concerns and assess the efficacy of the waterproofing/vapor barrier.
	Ingestion	Not Applicable	Not Applicable	Not Applicable
Groundwater	Dermal Contact	Pathway incomplete: Site covered by pavement. Groundwater approximately five (5) feet below grade.	Pathway complete but controlled by Health & Safety Plan procedures.	Pathway incomplete: Groundwater contact prevented by concrete slab and vapor barrier/waterproofing around and under foundation and prohibition on use of groundwater as an institutional control.
	Inhalation	Pathway incomplete: Site covered by pavement and contaminant at depth. Groundwater approximately five (5) feet below grade.	Pathway complete but controlled by air monitoring.	Site covered with concrete slab and *de minimus* cracks and exposed soil areas in asphalt Pathway incomplete: Vapor barrier/waterproofing in place around foundation. Recommend that a SVI evaluation be completed to evaluate the potential for exposure concerns and assess the efficacy of the waterproofing/vapor barrier.
	Ingestion	Pathway incomplete. Site	Pathway complete but	Pathway incomplete: Public

Table 26 - Summary of Human Health Exposure Pathways by Media and Site Operation

Medium	Exposure Pathway	Current	Construction	Post Development
		covered by pavement. Municipal water serves community.	controlled by Health & Safety Plan procedures.	water supply serves community.

6.4 Receptor Population

The receptor population includes occupants of the residences adjoining the property on the south, occupants of the adjacent commercial operations, and passersby. The Site is in an undisturbed condition appears to pose little risk to any of these populations as there have been no elevated vapor, particulate, or soil vapor measurements of any significance observed during sampling and drilling operations. The area is commercial/residential and few passersby were observed during any of the field work.

The principal receptor population is construction workers during remediation and building of the new facility. These will be protected by a Health & Safety Plan, construction control measures, and engineering and institutional controls.

After construction, potential receptors include future Site occupants. Future Site occupants could potentially be exposed to soil vapors, although these will be mitigated by means of a concrete slab and waterproofing/vapor barrier that will be evaluated by a SVI. The overall low level of soil vapors across the Site, soil removal and/or covering with approved fill as a cap, and new concrete slab make the potential for soil vapor intrusion extremely low even before mitigation measures are adopted.

There is a low potential for off-site soil vapor concerns. Soil vapor concentrations at the Site boundary are very low except for those on the extreme eastern side of the Site adjacent to Gates Avenue.

6.5 Conclusions

In conclusion, complete exposure pathways will exist during the remediation and construction phases. These pathways will be controlled by air monitoring and implementing the procedures in a Health & Safety Plan and Community Air Monitoring Plan. Following construction and development, all exposure pathways will be incomplete or eliminated. Source removal will remove the majority of the most severely impacted soil. Engineering controls in the form of the concrete slab, clean material cap, and vapor barrier will add an additional level of protection in that they ensure there are no complete human health exposure pathways. A SVI will be conducted after the building is complete to evaluate vapor intrusion. A Site-specific prohibition on groundwater use will eliminate this potential exposure pathway. Following remediation and development, there will be no complete human health exposure pathways.

7.0 SUMMARY and CONCLUSIONS

Section 7 focuses on the salient features affecting the Site and those that drive remediation and future use.

7.1 Soil

The only significant soil impacts are those associated with the sludge in the drywells. One area of shallow soils is modestly impacted by SVOCs marginally above the URSCOs and RRSCOs, but below the CUSCOs. Metals and VOCs exceed the URSCOs in a limited number of instances and these are almost exclusively within the UST Area. Outside the drywells, only arsenic exceeded the RRSCO and CUSCO in three instances. The arsenic concentrations are only modestly above the SCOs, are at depth, and appear due to native soil conditions, not contamination. Table 27 lists the compounds and metals above the URSCOs, RRSCOs, and CUSCOs

Table 27 – Soils Exceeding SCOS

Area	Boring	Depth	URSCO	RRSCO	CUSCO
Exposed Soil Area	HA-9	2	Benzo(a)anthracene; benzo(b)fluoranthene; Indeno, cd,123,pyrene	Benzo(a)anthracene; benzo(b)fluoranthene; Indeno, cd,123,pyrene	--
	HA-9	2	Pb, Zn	--	--
UST Area	B-14	5	Pb, Zn	--	--
	B-7	5	Pb, Zn	--	--
	SB-13	6	Xylenes	--	--
	SB-5	7	Ethylbenzene; n-propylbenzene; toluene; xylenes; 1,3,5-TMB	Xylenes, ethylbenzene	--
	SB-13	11	Xylenes	--	--
	SB-5	11	Xylenes, As	As	As
	SB-14	12	Ethylbenzene, xylenes	--	--
	SB-13	14	cis,1,2-DCE; ethylbenzene, xylenes	--	--
	SB-1	26	Acetone, PCE, TCE, Cr	--	--
	SB-10	27	PCE	--	--
	SB-13	29	As, Cr	--	--
	SB-1	29.5	PCE, TCE	--	--
	SB-14	30	PCE, As, Cr, Zn	--	--
	SB-2	30	PCE	--	--
Drywell Area	DW-1	8	Cd, Pb	--	--
	DW-2	8	Hg, Pb, Cr, Cd	Hg, Cd, Pb, Cr	Cd, Pb
	DW-3	8	As, Hg, Cd, Pb, Cu, Cr, Ni, Ag, Zn	As, Hg, Cd, Pb, Cu	As, Hg, Cd, Pb, Cu
	DW-4	8	Cd, Pb, Cr	--	--
	DW-5	8	Hg	--	--

Table 27 – Soils Exceeding SCOS

Area	Boring	Depth	URSCO	RRSCO	CUSCO
	DW-6	8	Hg, Pb, Cr	Cd, Pb	--
	DW-7	8	Hg, Pb, Cr	Pb	--
	DW-8	8	Hg, Pb, Cr	Pb	Pb
	DW-9	8	As, Pb, Cr, Se	As, Pb	As
Former Plant Area	SB-3	16	As	As	As
	SB-10	27	PCE	--	--
	SB-4	35	As	As	As
	SB-7	35	Cr		

7.2 Groundwater

PCE impacts to groundwater occur throughout the Site. These are most prevalent in the UST Area at the 30 to 35-foot depth. Elsewhere within the Site, PCE groundwater concentrations are also highest at the 30- to 35-foot depth. Daughter compounds from natural degradation of PCE (TCE, cis-1,2-DCE, and VC) also occur coincident with PCE. PCE groundwater concentrations within the UST Area exhibit a three-times decrease compared to 2008 concentrations. Across the Site as a whole, PCE levels have decreased approximately 10 percent for concentrations above 300 µg/L since 2008. Xylenes impact groundwater almost exclusively in a small area within the UST Area at depth above 20 feet below grade.

7.3 Soil Vapor

Almost one-half of all VOC compounds in the soil vapor samples were below detection limits. Detected concentrations of VOCs are mostly very low. There are no NYSDOH soil vapor guidelines, but all but a few soil vapor results are below NYSDOH ambient air action guidance values. For PCE, all but three sample locations had results below the NYSDOH ambient air guidance value of 30 $\mu g/m^3$. The samples above this guideline were SSV-9 (43 $\mu g/m^3$), SSV-13 (111 $\mu g/m^3$), and SSV-10 (548 $\mu g/m^3$). These are on the eastern side of the Site and the two highest values are near the Site's eastern boundary.

For TCE, five soil vapor sample results were above the NYSDOH ambient air action guidance value of 2 $\mu g/m^3$. The samples were SSV-8 (6.4 $\mu g/m^3$), SSV-12 (3.4 $\mu g/m^3$), SSV-9 (12 $\mu g/m^3$), SSV-13 (53.7 $\mu g/m^3$), and SSV-10 (55.4 $\mu g/m^3$). These are on the eastern side of the Site and the two highest values are near the eastern Site border and coincide with the highest PCE soil vapor concentrations. Other than these locations, the balance of the Site had PCE and TCE soil vapor concentrations below the NYSDOH soil vapor action threshold values.

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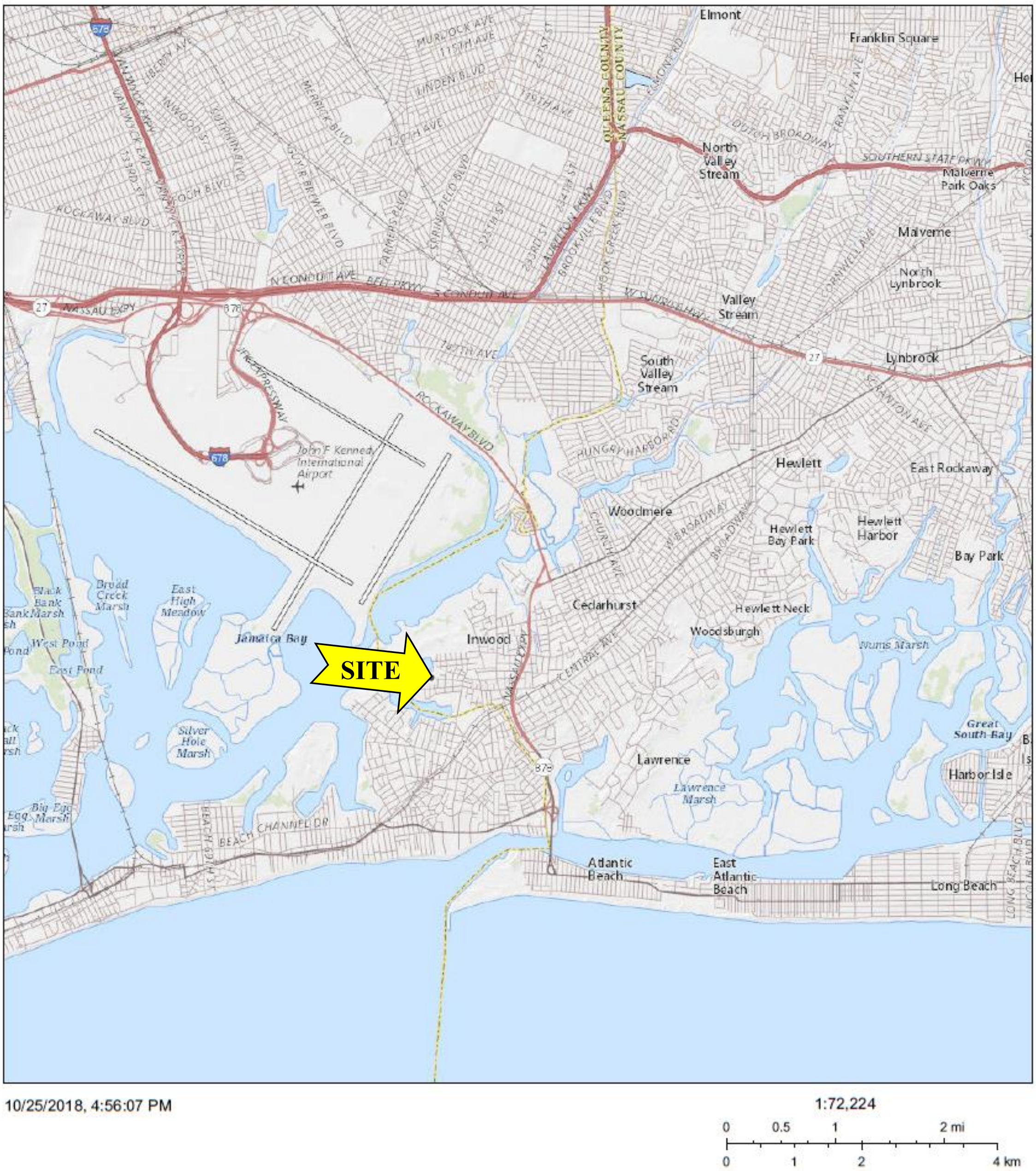
FIGURES

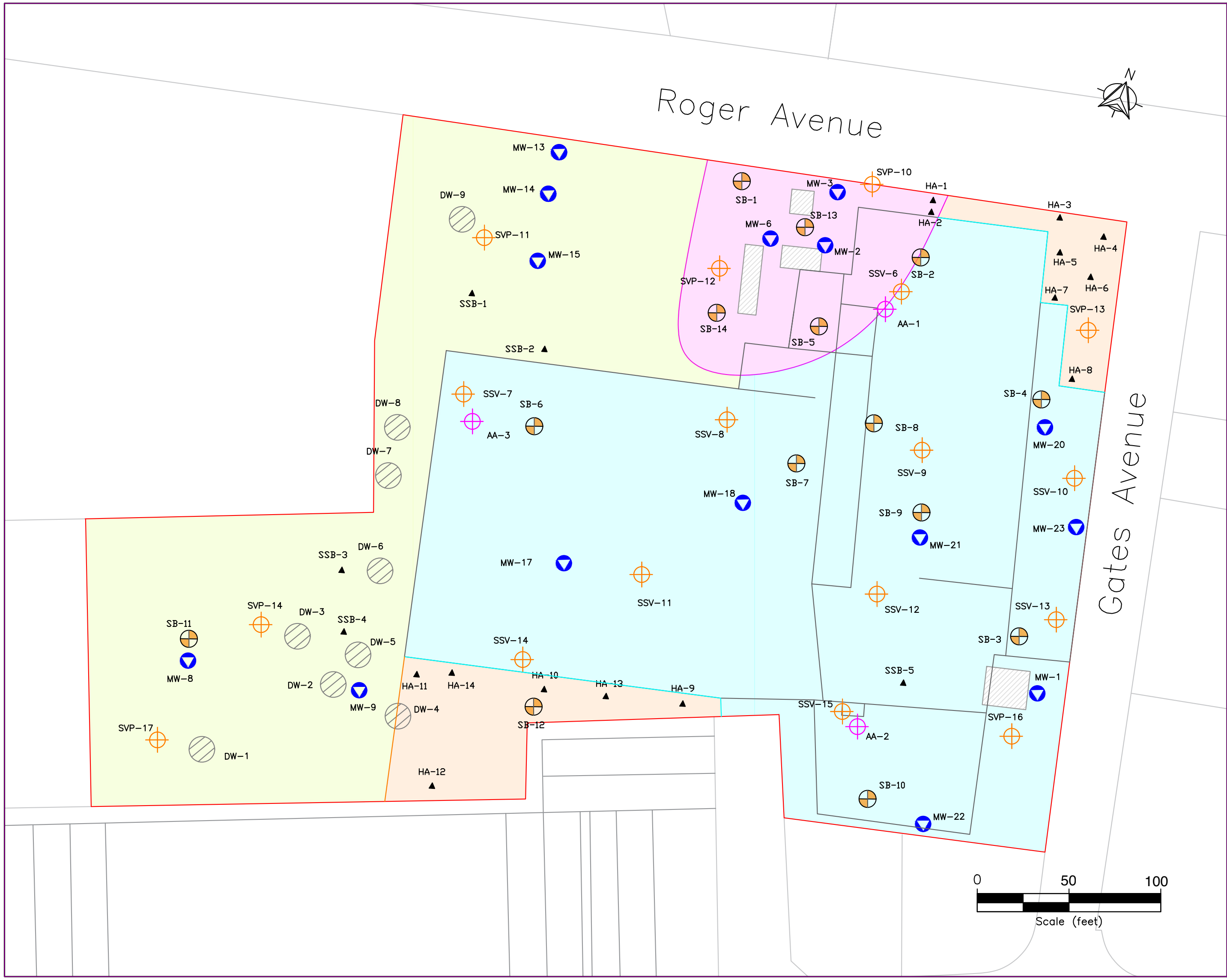


Quadrant 7.5 Minute Topographic Map, published by the USGS, and obtained from National Map Viewer ©2018

Fleming Lee Shue

FIGURE 1: SITE LOCATION MAP

SITE:	175 Rogers Ave Inwood, NY, 11096
CLIENT:	AJM Capital



Fleming Lee Shue

Environmental Management & Consulting

158 West 29th Street, 9th Fl.
New York, NY 10001

175 Roger Avenue
Inwood, NY 11096
BCP No. 130164

Figure 2

Site Plan and Sampling Locations

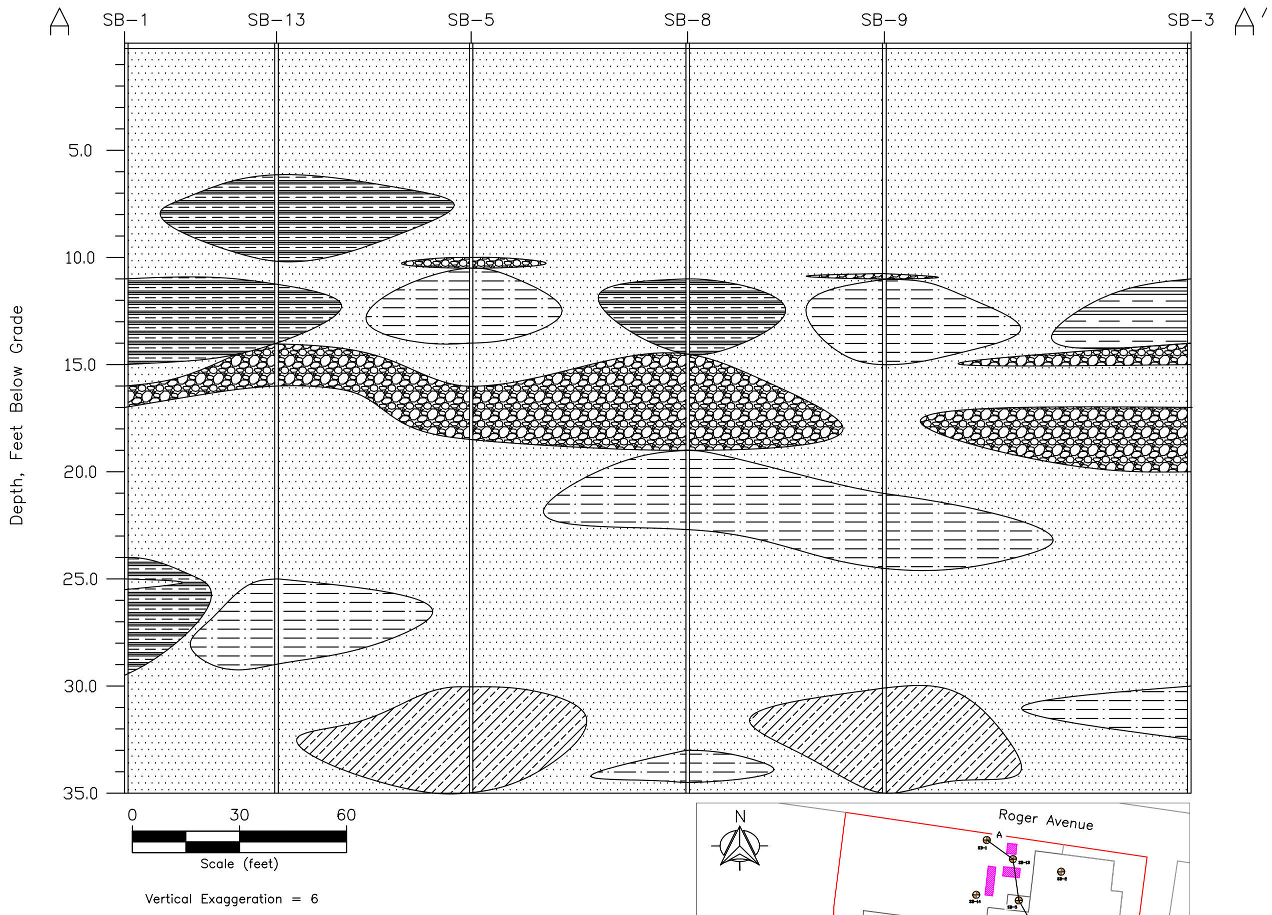
July 2020

Project Number
10188-017

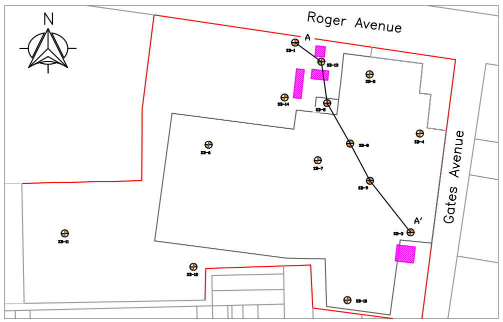
LEGEND

- Tax Lot Boundaries
- Former Warehouse Building and Room Outlines
- BCP Boundary
- Geophysical Anomalies
- Dry Well
- Existing Monitoring Well
- Soil Vapor Sample Location
- Ambient Air Sample Location
- Soil Boring Sample Location
- Shallow Soil Sample Location
- UST Area
- Former Plant Area
- Exposed Soil Area
- Drywell Area

FILE: /Users/shall/Desktop/Jordan/Figure 2 - Site Plan.dwg DATE: 7/29/2020



Notes:
Data collected from 5/20/2020 – 5/29/2020.
Where data and soil descriptions are missing, geology is inferred.



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BCP No. C130164

Figure 3A

Remedial Investigation Soil Cross-section A-A'

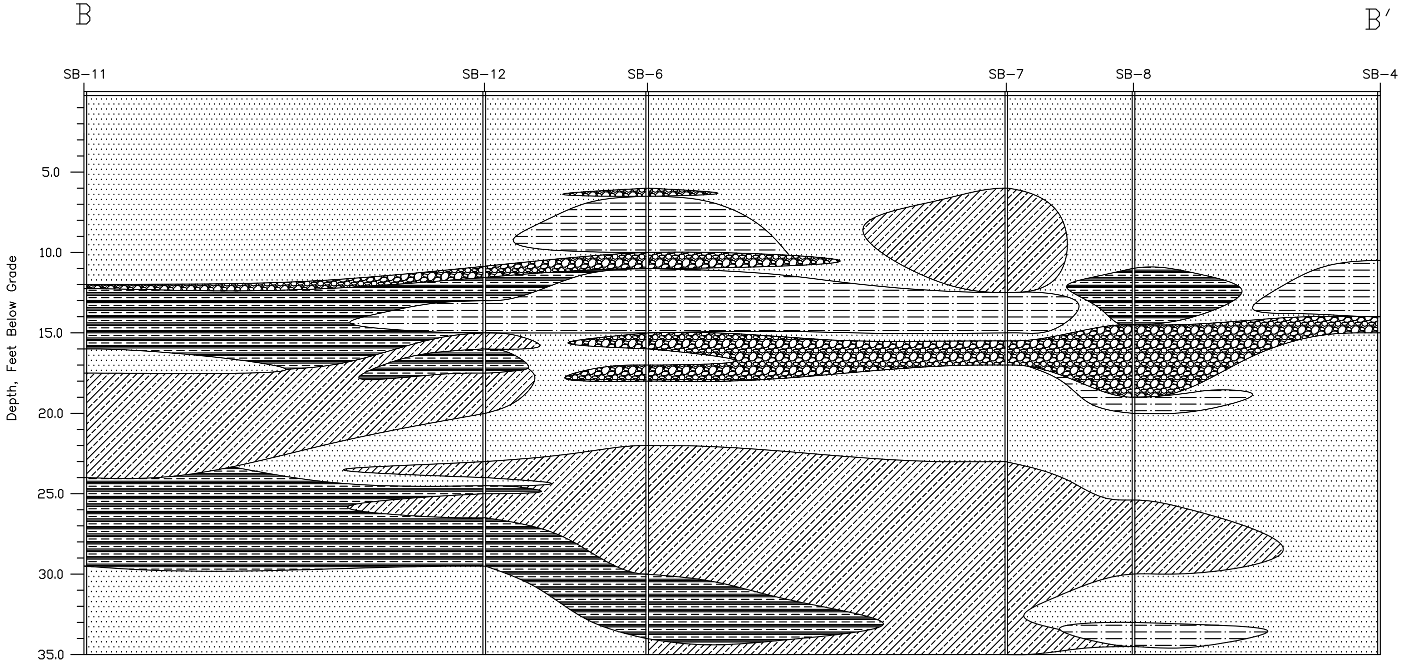
June 2020

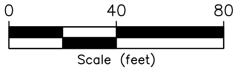
Project Number
10188-017

LEGEND

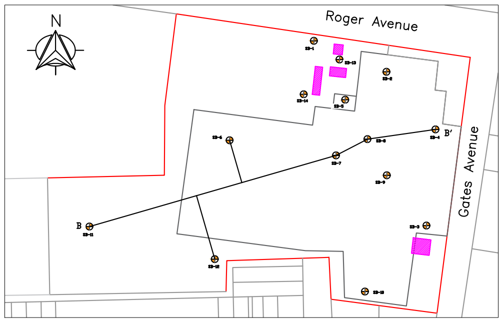
- Concrete
- Gravels
- Sand
- Silt
- Clay
- Clayey/Silty Sand

FILE: /Users/shall/Desktop/Jordan/Figure X Cross Section_jab-b'.dwg DATE: 7/22/2020





Vertical Exaggeration = 8



Notes:
Data collected from 5/20/2020 – 5/29/2020.
Where data and soil descriptions are missing, geology is inferred.

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BCP No. C130164

Figure 3B

Remedial Investigation Soil Cross-section B-B'

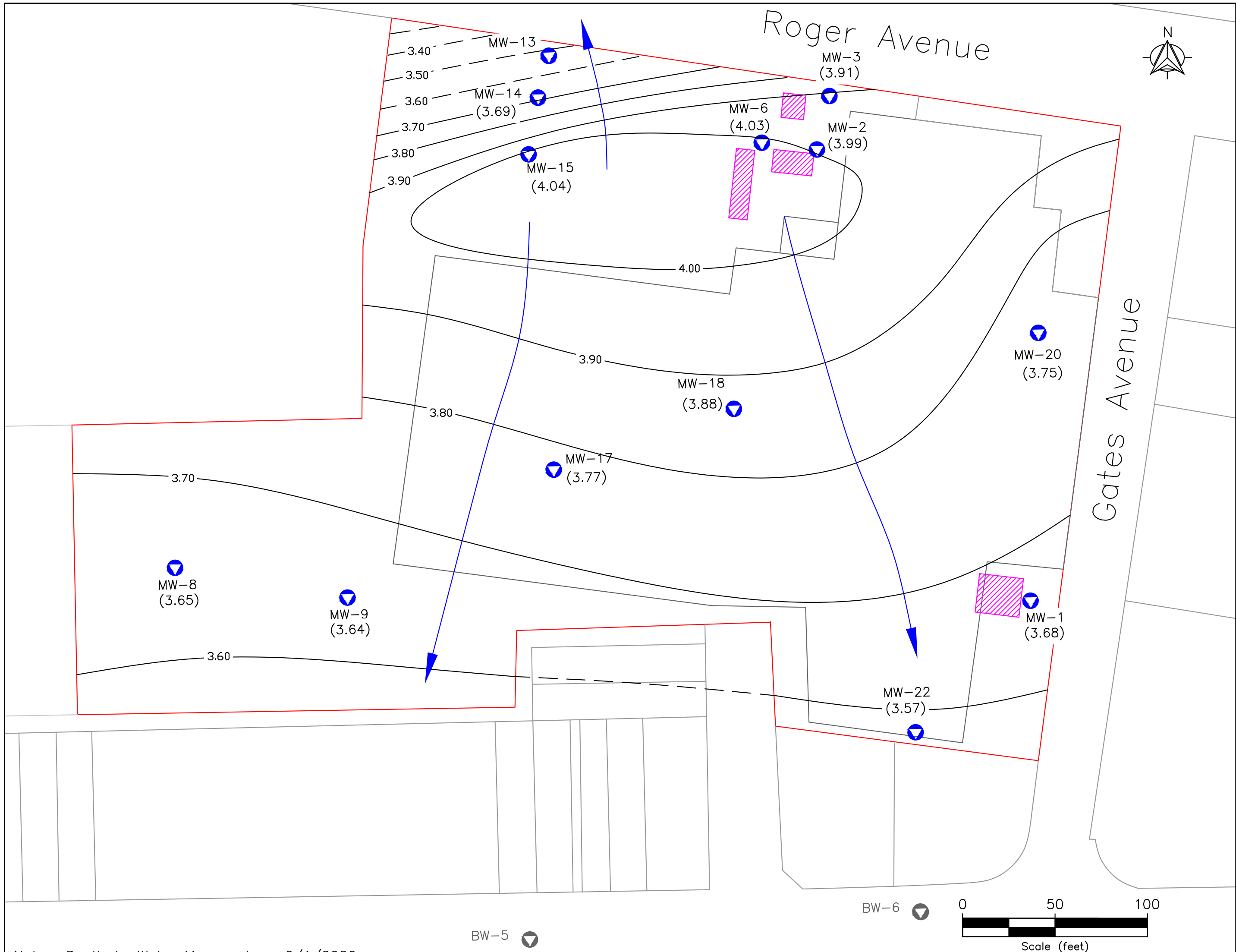
June 2020

Project Number
10188-017

LEGEND

- Concrete
- Gravels
- Sand
- Silt
- Clay
- Clayey/Silty Sand

FILE: /Users/shall/Desktop/Jordan/Figure X Cross Section_jab-b'.dwg DATE: 7/22/2020



Notes: Depth to Water Measured on 6/1/2020
Source: Fehringer Surveying, P.C. 6/1/2020

FILE: /Users/shall/Desktop/Jordan/Figure X Groundwater Contour_ja.dwg DATE: 7/22/2020

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Figure 4

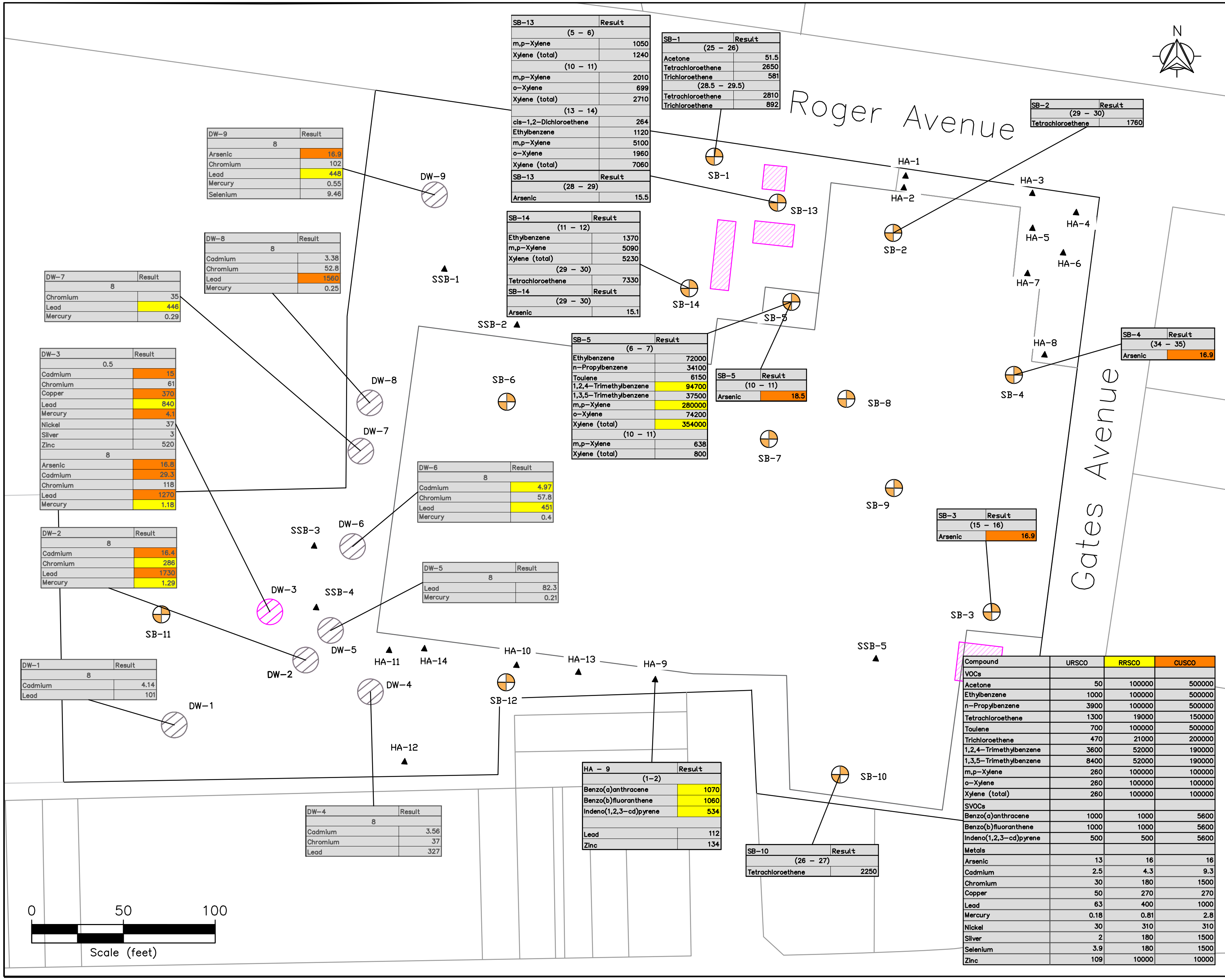
Groundwater Flow Direction

July 2020

Project Number
10188-017

LEGEND

- Former Warehouse Building Outline
- BCP Boundary
- Geophysical Anomalies
- 18' Existing Monitoring Well and GW Elevation
- Groundwater Contour (dashed where inferred)
- Groundwater Flow Direction



Compound	URSCO	RRSCO	CUSCO
VOCs			
Acetone	50	100000	500000
Ethylbenzene	1000	100000	500000
n–Propylbenzene	3900	100000	500000
Tetrachloroethene	1300	19000	150000
Toulene	700	100000	500000
Trichloroethene	470	21000	200000
1,2,4–Trimethylbenzene	3600	52000	190000
1,3,5–Trimethylbenzene	8400	52000	190000
m,p–Xylene	260	100000	100000
o–Xylene	260	100000	100000
Xylene (total)	260	100000	100000
SVOCs			
Benzo(a)anthracene	1000	1000	5600
Benzo(b)fluoranthene	1000	1000	5600
Indeno(1,2,3–cd)pyrene	500	500	5600
Metals			
Arsenic	13	16	16
Cadmium	2.5	4.3	9.3
Chromium	30	180	1500
Copper	50	270	270
Lead	63	400	1000
Mercury	0.18	0.81	2.8
Nickel	30	310	310
Silver	2	180	1500
Selenium	3.9	180	1500
Zinc	109	10000	10000

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Figure 5

Soil Results Above Soil Cleanup Objectives

July 2020

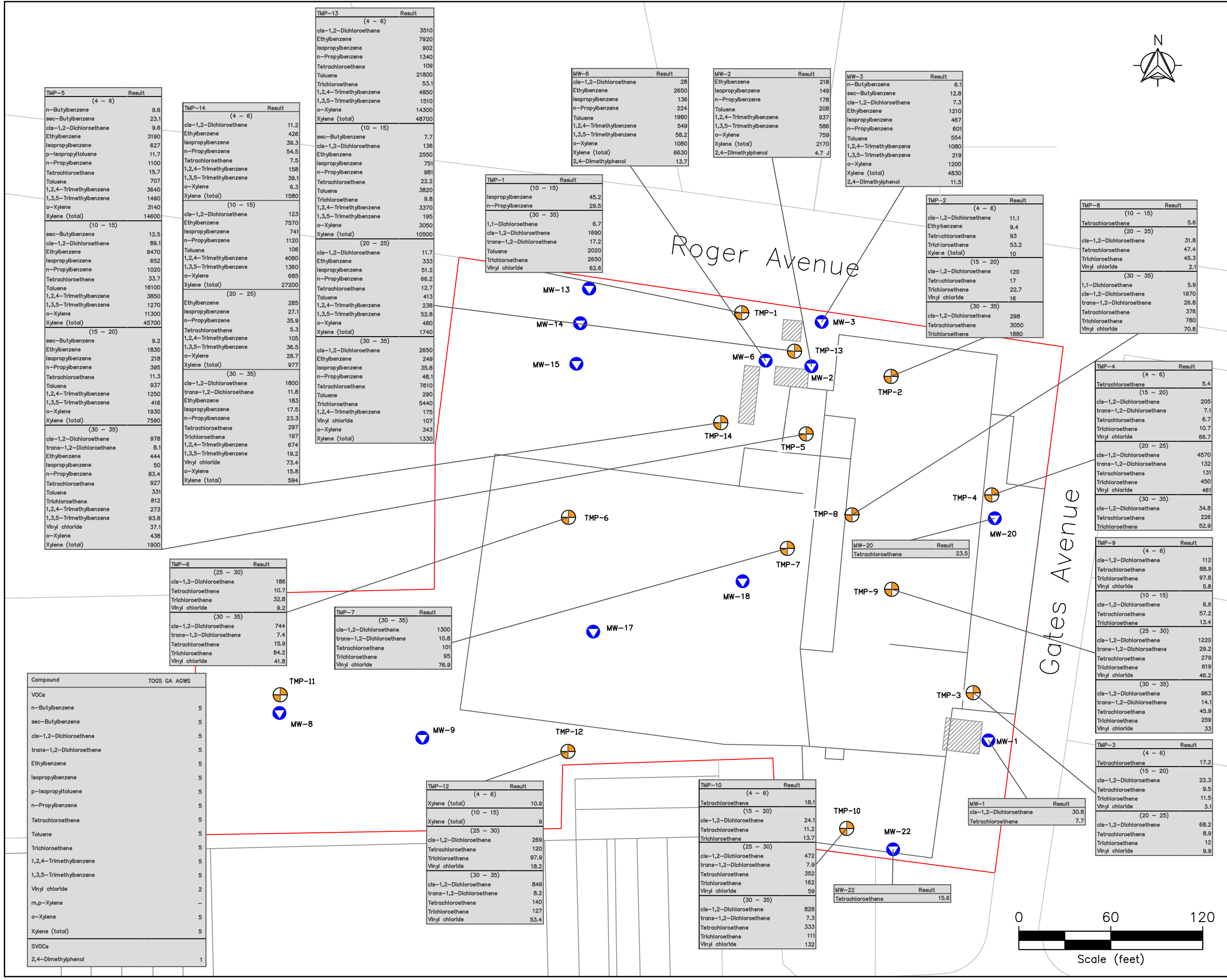
Project Number
10188-017

LEGEND

- Former Warehouse Building Outline
- BCP Boundary
- Soil Boring Location
- Shallow Soil Sample Location
- Drywell Sample Location
- Geophysical Anomalies

Notes:
Samples collected 5/21/20 – 5/29/20
VOC and SVOC data are reported in ug/kg
Metals data are reported in mg/kg
All sample depths are reported in feet below grade
URSCOs – Unrestricted Use Soil Cleanup Objectives
RRSCOs – Restricted Residential Soil Cleanup Objectives (Yellow)
CUSCOs – Commercial Use Soil Cleanup Objectives (Orange)
Drywell data taken from ATC 2009 RIR

FILE: /Users/shall/Desktop/Jordan/5 Soil Exceedance.dwg DATE: 8/24/2020



TMP-5	Result
(4 – 6)	
n–Butylbenzene	9.6
sec–Butylbenzene	23.1
cis–1,2–Dichloroethene	9.6
Ethylbenzene	3190
Isopropylbenzene	627
p–Isopropyltoluene	11.7
n–Propylbenzene	1100
Tetrachloroethene	15.7
Toluene	707
1,2,4–Trimethylbenzene	3640
1,3,5–Trimethylbenzene	1490
o–Xylene	3140
Xylene (total)	14600
(10 – 15)	
sec–Butylbenzene	12.5
cis–1,2–Dichloroethene	89.1
Ethylbenzene	9470
Isopropylbenzene	652
n–Propylbenzene	1020
Tetrachloroethene	33.7
Toluene	16100
1,2,4–Trimethylbenzene	3850
1,3,5–Trimethylbenzene	1270
o–Xylene	11300
Xylene (total)	45700
(15 – 20)	
sec–Butylbenzene	9.2
Ethylbenzene	1830
Isopropylbenzene	218
n–Propylbenzene	395
Tetrachloroethene	11.3
Toluene	937
1,2,4–Trimethylbenzene	1250
1,3,5–Trimethylbenzene	416
o–Xylene	1930
Xylene (total)	7590
(30 – 35)	
cis–1,2–Dichloroethene	978
trans–1,2–Dichloroethene	8.1
Ethylbenzene	444
Isopropylbenzene	50
n–Propylbenzene	83.4
Tetrachloroethene	927
Toluene	331
Trichloroethene	812
1,2,4–Trimethylbenzene	273
1,3,5–Trimethylbenzene	93.8
Vinyl chloride	37.1
o–Xylene	438
Xylene (total)	1900

TMP-14	Result
(4 – 6)	
cis–1,2–Dichloroethene	11.2
Ethylbenzene	426
Isopropylbenzene	39.3
n–Propylbenzene	54.5
Tetrachloroethene	7.5
1,2,4–Trimethylbenzene	158
1,3,5–Trimethylbenzene	39.1
o–Xylene	6.3
Xylene (total)	1580
(10 – 15)	
cis–1,2–Dichloroethene	123
Ethylbenzene	7570
Isopropylbenzene	741
n–Propylbenzene	1120
Toluene	106
1,2,4–Trimethylbenzene	4080
1,3,5–Trimethylbenzene	1360
o–Xylene	685
Xylene (total)	27200
(20 – 25)	
Ethylbenzene	285
Isopropylbenzene	27.1
n–Propylbenzene	35.9
Tetrachloroethene	5.3
1,2,4–Trimethylbenzene	105
1,3,5–Trimethylbenzene	36.5
o–Xylene	28.7
Xylene (total)	977
(30 – 35)	
cis–1,2–Dichloroethene	1800
trans–1,2–Dichloroethene	11.8
Ethylbenzene	183
Isopropylbenzene	17.5
n–Propylbenzene	23.3
Tetrachloroethene	297
Trichloroethene	197
1,2,4–Trimethylbenzene	674
1,3,5–Trimethylbenzene	19.2
Vinyl chloride	73.4
o–Xylene	15.8
Xylene (total)	594

TMP-13	Result
(4 – 6)	
cis–1,2–Dichloroethene	3510
Ethylbenzene	7920
Isopropylbenzene	902
n–Propylbenzene	1340
Tetrachloroethene	109
Toluene	21800
Trichloroethene	53.1
1,2,4–Trimethylbenzene	4850
1,3,5–Trimethylbenzene	1510
o–Xylene	14300
Xylene (total)	48700
(10 – 15)	
sec–Butylbenzene	7.7
cis–1,2–Dichloroethene	136
Ethylbenzene	2550
Isopropylbenzene	751
n–Propylbenzene	981
Tetrachloroethene	22.2
Toluene	3820
Trichloroethene	9.8
1,2,4–Trimethylbenzene	3370
1,3,5–Trimethylbenzene	195
o–Xylene	3050
Xylene (total)	10500
(20 – 25)	
cis–1,2–Dichloroethene	11.7
Ethylbenzene	333
Isopropylbenzene	51.2
n–Propylbenzene	66.2
Tetrachloroethene	12.7
Toluene	413
1,2,4–Trimethylbenzene	238
1,3,5–Trimethylbenzene	52.8
o–Xylene	480
Xylene (total)	1740
(30 – 35)	
cis–1,2–Dichloroethene	2650
Ethylbenzene	249
Isopropylbenzene	35.8
n–Propylbenzene	48.1
Tetrachloroethene	7610
Toluene	290
Trichloroethene	5440
1,2,4–Trimethylbenzene	175
Vinyl chloride	107
o–Xylene	343
Xylene (total)	1330

MW-6	Result
cis–1,2–Dichloroethene	28
Ethylbenzene	2650
Isopropylbenzene	136
n–Propylbenzene	224
Toluene	1980
1,2,4–Trimethylbenzene	549
1,3,5–Trimethylbenzene	58.2
o–Xylene	1080
Xylene (total)	6630
2,4–Dimethylphenol	13.7

MW-2	Result
Ethylbenzene	218
Isopropylbenzene	149
n–Propylbenzene	178
Toluene	208
1,2,4–Trimethylbenzene	937
1,3,5–Trimethylbenzene	586
o–Xylene	759
Xylene (total)	2170
2,4–Dimethylphenol	4.7 J

MW-3	Result
n–Butylbenzene	6.1
sec–Butylbenzene	12.8
cis–1,2–Dichloroethene	7.3
Ethylbenzene	1210
Isopropylbenzene	467
n–Propylbenzene	601
Toluene	554
1,2,4–Trimethylbenzene	1080
1,3,5–Trimethylbenzene	219
o–Xylene	1200
Xylene (total)	4830
2,4–Dimethylphenol	11.5

TMP-1	Result
(10 – 15)	
Isopropylbenzene	45.2
n–Propylbenzene	29.5
(30 – 35)	
1,1–Dichloroethene	6.7
cis–1,2–Dichloroethene	1690
trans–1,2–Dichloroethene	17.2
Toluene	2020
Trichloroethene	2650
Vinyl chloride	62.6

TMP-2	Result
(4 – 6)	
cis–1,2–Dichloroethene	11.1
Ethylbenzene	9.4
Tetrachloroethene	93
Trichloroethene	53.2
Xylene (total)	10
(15 – 20)	
cis–1,2–Dichloroethene	120
Tetrachloroethene	17
Trichloroethene	22.7
Vinyl chloride	16
(30 – 35)	
cis–1,2–Dichloroethene	298
Tetrachloroethene	3050
Trichloroethene	1880

TMP-8	Result
(10 – 15)	
Tetrachloroethene	5.6
(20 – 25)	
cis–1,2–Dichloroethene	31.8
Tetrachloroethene	47.4
Trichloroethene	45.3
Vinyl chloride	2.1
(30 – 35)	
1,1–Dichloroethene	5.9
cis–1,2–Dichloroethene	1970
trans–1,2–Dichloroethene	26.8
Tetrachloroethene	376
Trichloroethene	780
Vinyl chloride	70.8

TMP-4	Result
(4 – 6)	
Tetrachloroethene	5.4
(15 – 20)	
cis–1,2–Dichloroethene	205
trans–1,2–Dichloroethene	7.1
Tetrachloroethene	6.7
Trichloroethene	10.7
Vinyl chloride	66.7
(20 – 25)	
cis–1,2–Dichloroethene	4570
trans–1,2–Dichloroethene	132
Tetrachloroethene	131
Trichloroethene	450
Vinyl chloride	461
(30 – 35)	
cis–1,2–Dichloroethene	34.8
Tetrachloroethene	226
Trichloroethene	52.9

MW-20	Result
Tetrachloroethene	23.5

TMP-9	Result
(4 – 6)	
cis–1,2–Dichloroethene	112
Tetrachloroethene	88.9
Trichloroethene	97.8
Vinyl chloride	5.8
(10 – 15)	
cis–1,2–Dichloroethene	6.6
Tetrachloroethene	57.2
Trichloroethene	13.4
(25 – 30)	
cis–1,2–Dichloroethene	1220
trans–1,2–Dichloroethene	29.2
Tetrachloroethene	279
Trichloroethene	619
Vinyl chloride	46.2
(30 – 35)	
cis–1,2–Dichloroethene	963
trans–1,2–Dichloroethene	14.1
Tetrachloroethene	45.9
Trichloroethene	259
Vinyl chloride	33

TMP-3	Result
(4 – 6)	
Tetrachloroethene	17.2
(15 – 20)	
cis–1,2–Dichloroethene	22.3
Tetrachloroethene	9.5
Trichloroethene	11.5
Vinyl chloride	3.1
(20 – 25)	
cis–1,2–Dichloroethene	68.2
Tetrachloroethene	8.9
Trichloroethene	12
Vinyl chloride	9.9

MW-1	Result
cis–1,2–Dichloroethene	30.8
Tetrachloroethene	7.7

TMP-6	Result
(25 – 30)	
cis–1,2–Dichloroethene	186
Tetrachloroethene	10.7
Trichloroethene	32.8
Vinyl chloride	9.2
(30 – 35)	
cis–1,2–Dichloroethene	744
trans–1,2–Dichloroethene	7.4
Tetrachloroethene	15.9
Trichloroethene	84.2
Vinyl chloride	41.8

TMP-7	Result
(30 – 35)	
cis–1,2–Dichloroethene	1300
trans–1,2–Dichloroethene	10.8
Tetrachloroethene	101
Trichloroethene	95
Vinyl chloride	76.9

TMP-12	Result
(4 – 6)	
Xylene (total)	10.9
(10 – 15)	
Xylene (total)	9
(25 – 30)	
cis–1,2–Dichloroethene	269
Tetrachloroethene	120
Trichloroethene	97.9
Vinyl chloride	18.2
(30 – 35)	
cis–1,2–Dichloroethene	849
trans–1,2–Dichloroethene	8.2
Tetrachloroethene	140
Trichloroethene	127
Vinyl chloride	53.4

TMP-10	Result
(4 – 6)	
Tetrachloroethene	18.1
(15 – 20)	
cis–1,2–Dichloroethene	24.1
Tetrachloroethene	11.2
Trichloroethene	13.7
(25 – 30)	
cis–1,2–Dichloroethene	472
trans–1,2–Dichloroethene	7.9
Tetrachloroethene	352
Trichloroethene	162
Vinyl chloride	59
(30 – 35)	
cis–1,2–Dichloroethene	828
trans–1,2–Dichloroethene	7.3
Tetrachloroethene	333
Trichloroethene	111
Vinyl chloride	132

MW-22	Result
Tetrachloroethene	15.6

Compound	TOGS GA AGWS
VOCs	
n–Butylbenzene	5
sec–Butylbenzene	5
cis–1,2–Dichloroethene	5
trans–1,2–Dichloroethene	5
Ethylbenzene	5
Isopropylbenzene	5
p–Isopropyltoluene	5
n–Propylbenzene	5
Tetrachloroethene	5
Toluene	5
Trichloroethene	5
1,2,4–Trimethylbenzene	5
1,3,5–Trimethylbenzene	5
Vinyl chloride	2
m,p–Xylene	–
o–Xylene	5
Xylene (total)	5
SVOCs	
2,4–Dimethylphenol	1

FILE: /Users/shall/Desktop/Jordan/GW Exceedance.dwg DATE: 7/29/2020

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Figure 6

Groundwater Results (µg/L) above TOGS GA AWQS

July 2020

Project Number
10188-017

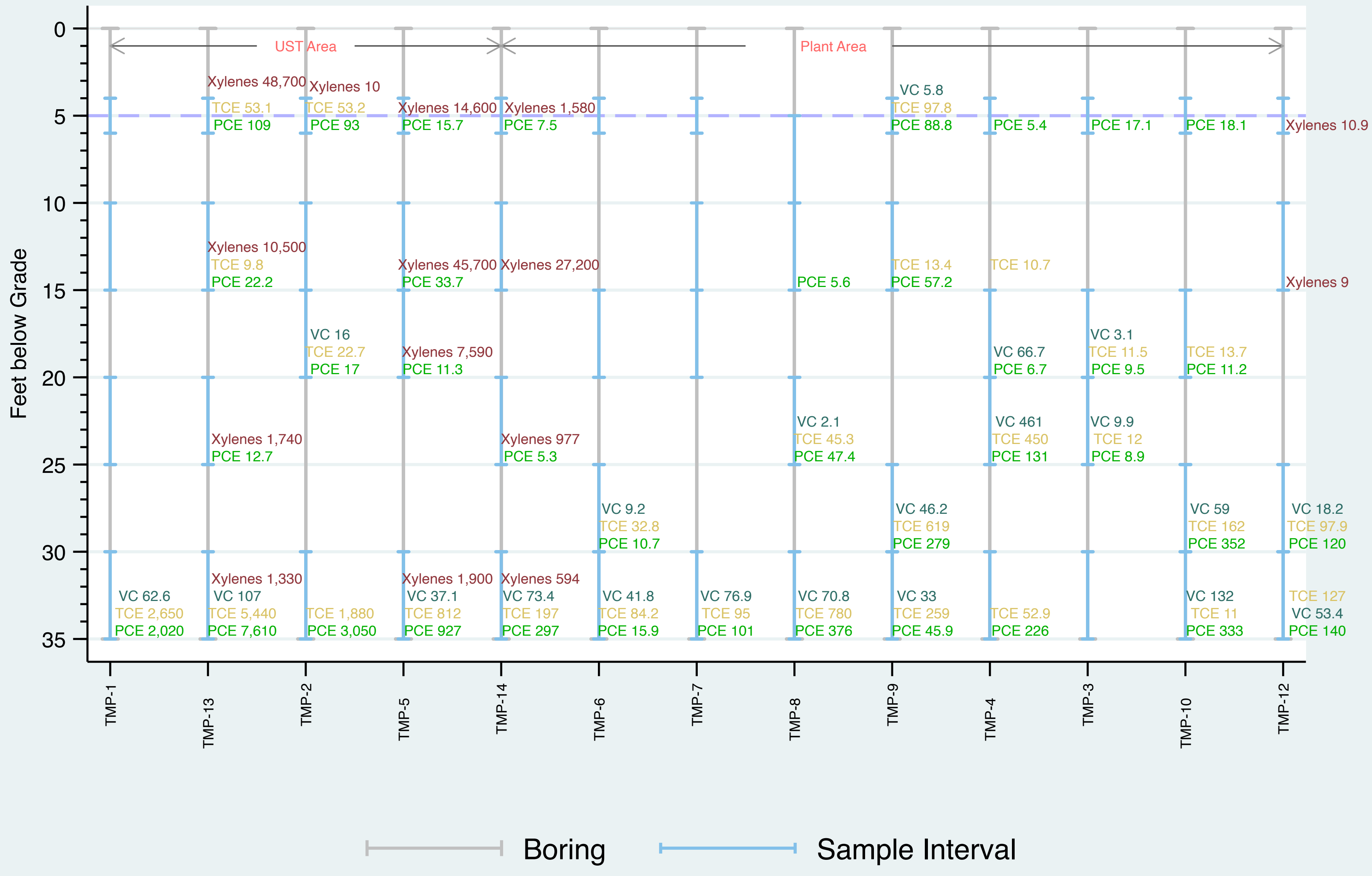
LEGEND

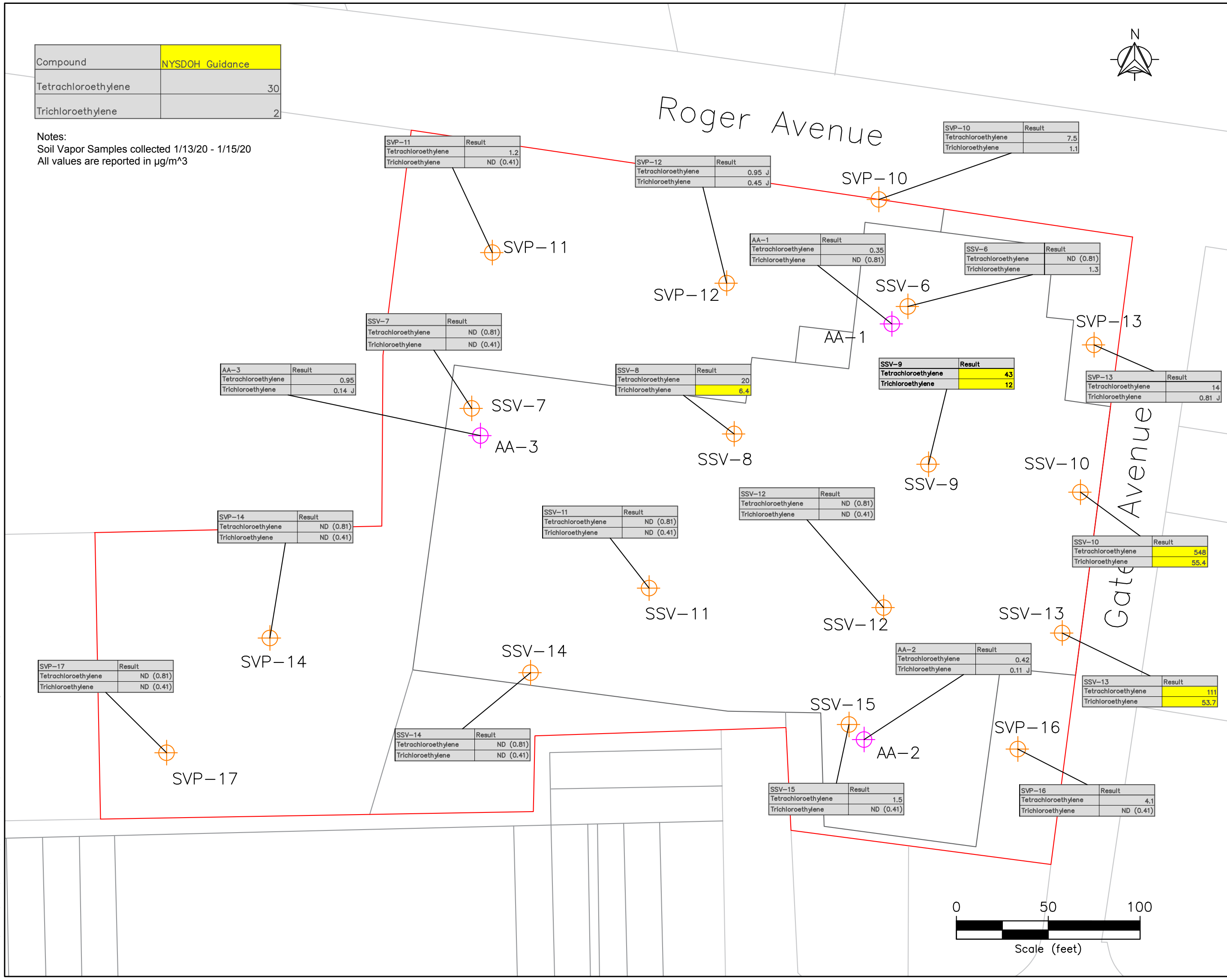
- Tax Lot Boundaries
- Former Warehouse Building and Room Outlines
- BCP Boundary
- Geophysical Anomalies
- Monitoring Well
- Temporary Monitoring Well
- (30 – 35) Sample Interval, ft. below grade

Notes:
All values are reported in µg/L
TOGS GA AWQS – Technical and Operational Guidance Series GA Ambient Water Quality Standards
All filtered metals belwo TOGS
Samples collected 1/9/20 – 1/10/20 and 5/21/20 – 5/29/20
Wells MW–8, MW–9, MW–13, MW–14, MW–15, MW–17 and MW–18 had no exceedances above TOGS GA AWQS
Where no specific TOGS criterion exists, the general guidance value was used.

Fig. 7 - Temp. Groundwater Sampling Intervals & Results above TOGS, µg/L

VOCs: PCE, TCE, Vinyl Chloride, & Xylenes





FILE: /Users/shall/Desktop/Jordan/soil vapor exceedance.dwg DATE: 7/29/2020

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Figure 8

Soil Vapor PCE and TCE Results (μg/m^3)

July 2020

Project Number
10188-017

LEGEND

- Tax Lot Boundaries
- Former warehouse Building Outline
- BCP Boundary
- Soil Vapor/Sub-slab Sampling Location
- Ambient Air Sampling Location

Notes:
ND – Non-Detect
J – Estimated Value
Samples collected 1/13/20 – 1/15/20
All values reported in μg/m^3

TABLES

Table 11 - Soil Analytical Results
175 Roger Avenue - BCP Site No. C130164
Volatile Organic Compounds in Soil

Client Sample ID:	NY SCO Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6	NY SCO - Commercial w/CP-51 (10/10) (6 NYCRR 375-6	HA-1 (1-2')	HA-2 (1-2')	HA-3 (1-2')	HA-4 (1-2')	HA-5(4-4.5)	HA-6 (1-2')	HA-7 (1-2')	HA-8 (1-2')	HA-9 (1-2')	HA-10 (1-2)	HA-11 (4-4.5')	HA-12 (1-2)	HA-13 (1-2)	HA-14 (1-2)
Lab Sample ID:				JD1592-1	JD1592-2	JD1592-3	JD1592-4	JD1645-1	JD1645-2	JD1645-3	JD1645-4	JD1645-5	JD1731-1	JD1731-2	JD1731-3	JD1731-4	JD1731-5
Date Sampled:				1/13/2020	1/13/2020	1/13/2020	1/13/2020	1/14/2020	1/14/2020	1/14/2020	1/14/2020	1/14/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
MS Volatiles (SW846 8260C) - values reported in ug/kg																	
Acetone	50	100000	500000	ND (3.4)	ND (5.4)	ND (4.0)	ND (3.8)	ND (4.1)	ND (3.9)	ND (4.2)	ND (4.0)	ND (4.1)	ND (4.8)	ND (4.7)	ND (4.5)	ND (4.4)	ND (4.4)
Benzene	60	4800	44000	ND (0.39)	ND (0.61)	ND (0.46)	ND (0.43)	ND (0.46)	ND (0.44)	ND (0.47)	ND (0.45)	ND (0.47)	ND (0.54)	ND (0.53)	ND (0.51)	ND (0.50)	ND (0.50)
Bromochloromethane	-	-	-	ND (0.48)	ND (0.75)	ND (0.56)	ND (0.53)	ND (0.57)	ND (0.54)	ND (0.58)	ND (0.55)	ND (0.58)	ND (0.66)	ND (0.66)	ND (0.63)	ND (0.62)	ND (0.61)
Bromodichloromethane	-	-	-	ND (0.38)	ND (0.59)	ND (0.44)	ND (0.42)	ND (0.45)	ND (0.43)	ND (0.46)	1.0 J	ND (0.46)	3.3	1.8 J	1.9 J	2.0 J	1.6 J
Bromoform	-	-	-	ND (0.49)	ND (0.77)	ND (0.58)	ND (0.55)	ND (0.58)	ND (0.56)	ND (0.60)	ND (0.57)	ND (0.59)	ND (0.69)	ND (0.68)	ND (0.65)	ND (0.64)	ND (0.63)
Bromomethane	-	-	-	ND (0.85)	ND (1.3)	ND (1.0)	ND (0.95)	ND (1.0)	ND (0.97)	ND (1.0)	ND (0.98)	ND (1.0)	ND (1.2)	ND (1.2)	ND (1.1)	ND (1.1)	ND (1.1)
2-Butanone (MEK)	120	100000	500000	ND (3.2)	ND (5.0)	ND (3.7)	ND (3.6)	ND (3.8)	ND (3.6)	ND (3.9)	ND (3.7)	ND (3.9)	ND (4.4)	ND (4.4)	ND (4.2)	ND (4.1)	ND (4.1)
n-Butylbenzene	12000	100000	500000	ND (0.35)	ND (0.55)	ND (0.41)	ND (0.39)	ND (0.41)	ND (0.40)	ND (0.42)	ND (0.40)	ND (0.42)	ND (0.48)	ND (0.48)	ND (0.46)	ND (0.45)	ND (0.44)
sec-Butylbenzene	11000	100000	500000	ND (0.37)	ND (0.57)	ND (0.43)	ND (0.41)	ND (0.43)	ND (0.42)	ND (0.45)	ND (0.42)	ND (0.44)	ND (0.51)	ND (0.50)	ND (0.48)	ND (0.47)	ND (0.47)
tert-Butylbenzene	5900	100000	500000	ND (0.43)	ND (0.67)	ND (0.50)	ND (0.48)	ND (0.51)	ND (0.49)	ND (0.52)	ND (0.49)	ND (0.51)	ND (0.59)	ND (0.59)	ND (0.57)	ND (0.55)	ND (0.54)
Carbon disulfide	-			ND (0.80)	ND (1.2)	ND (0.93)	ND (0.88)	ND (0.94)	ND (0.90)	ND (0.97)	ND (0.92)	ND (0.96)	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.0)	ND (1.0)
Carbon tetrachloride	760	2400	22000	ND (0.53)	ND (0.83)	ND (0.62)	ND (0.59)	ND (0.62)	ND (0.60)	ND (0.64)	ND (0.61)	ND (0.64)	ND (0.73)	ND (0.72)	ND (0.70)	ND (0.68)	ND (0.67)
Chlorobenzene	1100	100000	500000	ND (0.39)	ND (0.61)	ND (0.46)	ND (0.44)	ND (0.46)	ND (0.45)	ND (0.48)	ND (0.45)	ND (0.47)	ND (0.55)	ND (0.54)	ND (0.52)	ND (0.51)	ND (0.50)
Chloroethane	-			ND (0.51) [a]	ND (0.79) [a]	ND (0.59) [a]	ND (0.56) [a]	ND (0.60)	ND (0.57)	ND (0.61)	ND (0.58)	ND (0.61)	ND (0.70)	ND (0.69)	ND (0.67)	ND (0.65)	ND (0.64)
Chloroform	370	49000	350000	ND (0.42)	ND (0.66)	ND (0.49)	ND (0.47)	0.88 J	0.67 J	0.69 J	3.2	0.57 J	11.2	5	5.7	5.4	4.2
Chloromethane	-	-	-	ND (1.7)	ND (2.6)	ND (2.0)	ND (1.9)	ND (2.0)	ND (1.9)	ND (2.0)	ND (1.9)	ND (2.0)	ND (2.3)	ND (2.3)	ND (2.2)	ND (2.2)	ND (2.1)
Cyclohexane	-	-	-	ND (0.56)	ND (0.88)	ND (0.66)	ND (0.63)	ND (0.66)	ND (0.64)	ND (0.68)	ND (0.65)	ND (0.68)	ND (0.78)	ND (0.77)	ND (0.74)	ND (0.73)	ND (0.72)
1,2-Dibromo-3-	-	-	-	ND (0.72)	ND (1.1)	ND (0.84)	ND (0.80)	ND (0.84)	ND (0.81)	ND (0.87)	ND (0.82)	ND (0.86)	ND (0.99)	ND (0.98)	ND (0.95)	ND (0.92)	ND (0.91)
Dibromochloromethane	-			ND (0.48)	ND (0.75)	ND (0.56)	ND (0.53)	ND (0.57)	ND (0.54)	ND (0.58)	ND (0.55)	ND (0.58)	ND (0.66)	ND (0.66)	ND (0.63)	ND (0.62)	ND (0.61)
1,2-Dibromoethane	-	-	-	ND (0.36)	ND (0.56)	ND (0.42)	ND (0.40)	ND (0.43)	ND (0.41)	ND (0.44)	ND (0.41)	ND (0.43)	ND (0.50)	ND (0.49)	ND (0.48)	ND (0.47)	ND (0.46)
1,2-Dichlorobenzene	1100	100000	500000	ND (0.47)	ND (0.73)	ND (0.55)	ND (0.52)	ND (0.55)	ND (0.53)	ND (0.57)	ND (0.54)	ND (0.56)	ND (0.65)	ND (0.64)	ND (0.62)	ND (0.60)	ND (0.59)
1,3-Dichlorobenzene	2400	49000	280000	ND (0.42)	ND (0.66)	ND (0.50)	ND (0.47)	ND (0.50)	ND (0.48)	ND (0.52)	ND (0.49)	ND (0.51)	ND (0.59)	ND (0.58)	ND (0.56)	ND (0.55)	ND (0.54)
1,4-Dichlorobenzene	1800	13000	130000	ND (0.42)	ND (0.66)	ND (0.49)	ND (0.47)	ND (0.50)	ND (0.48)	ND (0.51)	ND (0.49)	ND (0.51)	ND (0.59)	ND (0.58)	ND (0.56)	ND (0.55)	ND (0.54)
Dichlorodifluoromethan	-	-	-	ND (0.62)	ND (0.97)	ND (0.73)	ND (0.69)	ND (0.73) [a]	ND (0.71) [a]	ND (0.76) [a]	ND (0.72)	ND (0.75)	ND (0.86)	ND (0.85)	ND (0.82)	ND (0.80)	ND (0.79)
1,1-Dichloroethane	270	26000	240000	ND (0.42)	ND (0.66)	ND (0.50)	ND (0.47)	ND (0.50)	ND (0.48)	ND (0.51)	ND (0.49)	ND (0.51)	ND (0.59)	ND (0.58)	ND (0.56)	ND (0.55)	ND (0.54)
1,2-Dichloroethane	20	3100	30000	ND (0.40)	ND (0.63)	ND (0.47)	ND (0.45)	ND (0.47)	ND (0.46)	ND (0.49)	ND (0.46)	ND (0.48)	ND (0.56)	ND (0.55)	ND (0.53)	ND (0.52)	ND (0.51)
1,1-Dichloroethene	330	100000	500000	ND (0.56)	ND (0.88)	ND (0.66)	ND (0.62)	ND (0.66)	ND (0.64)	ND (0.68)	ND (0.65)	ND (0.67)	ND (0.78)	ND (0.77)	ND (0.74)	ND (0.72)	ND (0.71)
cis-1,2-Dichloroethene	250	100000	500000	ND (0.72)	ND (1.1)	ND (0.84)	ND (0.80)	ND (0.85)	ND (0.82)	ND (0.87)	ND (0.83)	ND (0.86)	ND (1.0)	ND (0.98)	ND (0.95)	ND (0.93)	ND (0.92)
trans-1,2-Dichloroethene	190	100000	500000	ND (0.52)	ND (0.82)	ND (0.61)	ND (0.58)	ND (0.62)	ND (0.59)	ND (0.64)	ND (0.60)	ND (0.63)	ND (0.73)	ND (0.72)	ND (0.69)	ND (0.67)	ND (0.67)
1,2-Dichloropropane	-			ND (0.41)	ND (0.63)	ND (0.47)	ND (0.45)	ND (0.48)	ND (0.46)	ND (0.49)	ND (0.47)	ND (0.49)	ND (0.56)	ND (0.55)	ND (0.53)	ND (0.52)	ND (0.52)
cis-1,3-Dichloropropene	-	-	-	ND (0.41)	ND (0.64)	ND (0.48)	ND (0.45)	ND (0.48)	ND (0.46)	ND (0.49)	ND (0.47)	ND (0.49)	ND (0.56)	ND (0.56)	ND (0.54)	ND (0.52)	ND (0.52)
trans-1,3-	-	-	-	ND (0.39)	ND (0.61)	ND (0.46)	ND (0.44)	ND (0.46)	ND (0.44)	ND (0.48)	ND (0.45)	ND (0.47)	ND (0.54)	ND (0.54)	ND (0.52)	ND (0.50)	ND (0.50)
Ethylbenzene	1000	41000	390000	ND (0.47)	ND (0.74)	ND (0.55)	ND (0.53)	ND (0.56)	ND (0.54)	ND (0.57)	ND (0.54)	ND (0.57)	ND (0.66)	ND (0.65)	ND (0.62)	ND (0.61)	ND (0.60)
Freon 113	-			ND (0.87)	ND (1.4)	ND (1.0)	ND (0.96)	ND (1.0)	ND (0.98)	ND (1.1)	ND (1.0)	ND (1.0)	ND (1.2)	ND (1.2)	ND (1.1)	ND (1.1)	ND (1.1)
2-Hexanone	-	-	-	ND (1.8)	ND (2.8)	ND (2.1)	ND (2.0)	ND (2.1)	ND (2.1)	ND (2.2)	ND (2.1)	ND (2.2)	ND (2.5)	ND (2.5)	ND (2.4)	ND (2.3)	ND (2.3)
Isopropylbenzene	-			ND (0.60)	ND (0.93)	ND (0.70)	ND (0.66)	ND (0.70)	ND (0.68)	ND (0.72)	ND (0.69)	ND (0.72)	ND (0.83)	ND (0.82)	ND (0.79)	ND (0.77)	ND (0.76)
p-Isopropyltoluene	-			ND (0.34)	ND (0.53)	ND (0.40)	ND (0.38)	ND (0.40)	ND (0.38)	ND (0.41)	ND (0.39)	ND (0.41)	ND (0.47)	ND (0.46)	ND (0.45)	ND (0.44)	ND (0.43)
Methyl Acetate	-	-	-	ND (1.2)	ND (1.9)	ND (1.4)	ND (1.3)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.7) [c]	ND (1.6) [c]	ND (1.6)	ND (1.5)	ND (1.5)
Methylcyclohexane	-	-	-	ND (0.75)	ND (1.2)	ND (0.88)	ND (0.83)	ND (0.88)	ND (0.85)	ND (0.91)	ND (0.86)	ND (0.90)	ND (1.0)	ND (1.0)	ND (0.99)	ND (0.97)	ND (0.95)
Methyl Tert Butyl Ether	930	100000	500000	ND (0.40)	ND (0.63)	ND (0.47)	ND (0.45)	ND (0.47)	ND (0.46)	ND (0.49)	ND (0.46)	ND (0.48)	ND (0.56)	ND (0.55)	ND (0.53)	ND (0.52)	ND (0.51)
4-Methyl-2-	-			ND (1.9)	ND (3.0)	ND (2.3)	ND (2.2)	ND (2.3)	ND (2.2)	ND (2.4)	ND (2.2)	ND (2.3)	ND (2.7)	ND (2.7)	ND (2.6)	ND (2.5)	ND (2.5)
Methylene chloride	50	100000	500000	ND (2.1)	ND (3.3)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.6)	ND (2.5)	ND (2.6)	ND (3.0)	ND (2.9)	4.1 J	3.8 J	ND (2.7)
Naphthalene	12000	100000	500000	ND (2.1)	ND (3.3)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.6)	ND (2.5)	ND (2.6)	ND (3.0)	ND (2.9)	ND (2.8)	ND (2.8)	ND (2.7)
n-Propylbenzene	3900	100000	500000	ND (0.40)	ND (0.63)	ND (0.47)	ND (0.45)	ND (0.47)	ND (0.46)	ND (0.49)	ND (0.46)	ND (0.48)	ND (0.56)	ND (0.55)	ND (0.53)	ND (0.52)	ND (0.51)
Styrene	-			ND (0.49)	ND (0.77)	ND (0.58)	ND (0.55)	ND (0.58)	ND (0.56)	ND (0.60)	ND (0.57)	ND (0.59)	ND (0.68)	ND (0.67)	ND (0.65)	ND (0.64)	ND (0.63)
1,1,2,2-	-			ND (0.51)	ND (0.80)	ND (0.60)	ND (0.57)	ND (0.61)	ND (0.58)	ND (0.62)	ND (0.59)	ND (0.62)	ND (0.71)	ND (0.70)	ND (0.68)	ND (0.66)	ND (0.65)
Tetrachloroethene	1300	19000	150000	0.87 J	1.3 J	ND (0.58)	0.97 J	ND (0.59)	1.1 J	7.3	2.6	ND (0.60)	ND (0.69)	ND (0.68)	ND (0.66)	ND (0.64)	ND (0.63)
Toluene	700	100000	500000	ND (0.45)	ND (0.70)	ND (0.53)	ND (0.50)	ND (0.53)	ND (0.51)	ND (0.55)	ND (0.52)	ND (0.54)	ND (0.62)	ND (0.62)	ND (0.59)	ND (0.58)	ND (0.57)
1,2,3-Trichlorobenzene	-			ND (2.1)	ND (3.3)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.6)	ND (2.5)	ND (2.6)	ND (3.0)	ND (2.9)	ND (2.8)	ND (2.8)	ND (2.7)
1,2,4-Trichlorobenzene	-			ND (2.1)	ND (3.3)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.6)	ND (2.5)	ND (2.6)	ND (3.0)	ND (2.9)	ND (2.8)	ND (2.8)	ND (2.7)
1,1,1-Trichloroethane	680	100000	500000	ND (0.41)	ND (0.65)	ND (0.48)	ND (0.46)	ND (0.49)	ND (0.47)	ND (0.50)	ND (0.48)	ND (0.50)	ND (0.57)	ND (0.57)	ND (0.55)	ND (0.53)	ND (0.53)
1,1,2-Trichloroethane	-	-	-	ND (0.47)	ND (0.74)	ND (0.55)	ND (0.53)	ND (0.56)	ND (0.54)	ND (0.58)	ND (0.55)	ND (0.57)	ND (0.66)	ND (0.65)	ND (0.63)	ND (0.61)	ND (0.60)
Trichloroethene	470	21000	200000	ND (0.65)	ND (1.0)	ND (0.76)	ND (0.73)	ND (0.77)	ND (0.74)	ND (0.79)	ND (0.75)	ND (0.78)	ND (0.90)	ND (0.89)	ND (0.86)	ND (0.84)	ND (0.83)
Trichlorofluoromethane	-	-	-	ND (0.59)	ND (0.92)	ND (0.69)	ND (0.65)	ND (0.69)	ND (0.67)	ND (0.71)	ND (0.67)	ND (0.70)	ND (0.81)	ND (0.80)	ND (0.77)	ND (0.76)	ND (0.75)
1,2,4-Trimethylbenzene	3600	52000	190000	ND (0.54)	ND (0.85)	ND (0.64)	ND (0.60)	ND (0.64)	ND (0.62)	ND (0.66)	ND (0.63)	ND (0.65)	ND (0.75)	ND (0.74)	ND (0.72)	ND (0.70)	ND (0.69)
1,3,5-Trimethylbenzene	8400	52000	190000	ND (0.37)	ND (0.58)	ND (0.43)	ND (0.41)	ND (0.44)	ND (0.42)	ND (0.45)	ND (0.42)	ND (0.44)	ND (0.51)	ND (0.51)	ND (0.49)	ND (0.48)	ND (0.47)
Vinyl chloride	20	900	13000	ND (0.41)	ND (0.64)	ND (0.48)	ND (0.46)	ND (0.49)	ND (0.47)	ND (0.50)	ND (0.47)	ND (0.50)	ND (0.57)	ND (0.56)	ND (0.54)	ND (0.53)	ND (0.52)
m,p-Xylene	260	100000	500000	ND (0.77)	ND (1.2)	ND (0.90)	ND (0.85)	ND (0.91)	ND (0.87)	ND (0.93)	ND (0.88)	ND (0.92)	ND (1.1)	ND (1.1)	ND (1.0)	ND (0.99)	ND (0.98)
o-Xylene	260	100000	500000	ND (0.50)	ND (0.78)	ND (0.58)	ND (0.56)	ND (0.59)	ND (0.57)	ND (0.61)	ND (0.57)	ND (0.60)	ND (0.69)	ND (0.68)	ND (0.66)	ND (0.64)	ND (0.64)
Xylene (total)	260	100000	500000	ND (0.50)	ND (0.78)	ND (0.58)	ND (0.56)	ND (0.59)	ND (0.57)	ND (0.61)	ND (0.57)	ND (0.60)	ND (0.69)	ND (0.68)	ND (0.66)	ND (0.64)	ND (0.64)
Solids, Percent	%	%	%	89.8	79.4	94.2	90.5	83.9	91.8	87.4	90.6	93.4	95.7	92.7	96.1	96.3	95.6

Notes
ND - Non-Dectect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b This compound in blank spike is outside in house QC limits bias high.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Associated CCV outside of control limits low.
e Elevated detection limit due to dilution required for high interfering element.
f This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

Table 11 - Soil Analytical Results
175 Roger Avenue - BCP Site No. C130164
Volatile Organic Compounds in Soil

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY SCO Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	NY SCO - Commercial w/CP-51 (10/10) (6 NYCRR 375-6 (12/06)	SB-1 (4-5) JD7490-1 5/20/2020 Soil	SB-1 (11-12) JD7495-2 5/20/2020 Soil	SB-1 (25-26) JD7490-5 5/20/2020 Soil	SB-1 (28.5-29.5) JD7495-3 5/20/2020 Soil	SB-1 (34-35) JD7490-6 5/20/2020 Soil	SB-2 (4-5) JD7490-7 5/20/2020 Soil	SB-2 (7-8) JD7490-8 5/20/2020 Soil	SB-2 (18-19) JD7490-9 5/20/2020 Soil	SB-2 (29-30) JD7490-11 5/20/2020 Soil	SB-2 (34-35) JD7490-12 5/20/2020 Soil	SB-3 (5-6) JD7623-4 5/22/2020 Soil	SB-3 (15-16) JD7490-24 5/22/2020 Soil	SB-3 (15-16) DUP JD7490-25 5/22/2020 Soil	SB-3 (34-35) JD7623-5 5/22/2020 Soil	SB-4 (5-6) JD7490-13 5/21/2020 Soil	SB-4 (7-8) JD7490-14 5/21/2020 Soil	SB-4 (15-16) JD7490-16 5/21/2020 Soil	SB-4 (30-31) JD7490-17 5/21/2020 Soil	SB-4 (34-35) JD7490-18 5/21/2020 Soil
MS Volatiles (SW846 8260C) - values reported in ug/kg																						
Acetone	50	100000	500000	ND (3.8)	31.4	**51.5**	20.4	20.9	ND (3.8)	25.9	ND (3.8)	31.6	39.2	ND (4.1)	ND (3.8)	ND (3.7)	14.8	ND (3.8)	ND (4.1)	8.1 J	15.8	6.5 J
Benzene	60	4800	44000	ND (0.43)	ND (0.48)	ND (0.46)	ND (0.45)	ND (0.45)	ND (0.43)	ND (0.46)	ND (0.44)	ND (0.46)	ND (0.53)	ND (0.47)	ND (0.43)	ND (0.42)	ND (0.57)	ND (0.43)	ND (0.46)	ND (0.48)	ND (0.52)	ND (0.47)
Bromochloromethane	-	-	-	ND (0.52)	ND (0.59)	ND (0.57)	ND (0.55)	ND (0.55)	ND (0.53)	ND (0.56)	ND (0.54)	ND (0.57)	ND (0.65)	ND (0.57)	ND (0.53)	ND (0.52)	ND (0.70)	ND (0.53)	ND (0.57)	ND (0.59)	ND (0.65)	ND (0.58)
Bromodichloromethane	-	-	-	ND (0.41)	ND (0.47)	ND (0.45)	ND (0.44)	ND (0.44)	ND (0.42)	ND (0.45)	ND (0.42)	ND (0.45)	ND (0.52)	ND (0.45)	ND (0.42)	ND (0.41)	ND (0.55)	ND (0.42)	ND (0.45)	ND (0.47)	ND (0.51)	ND (0.46)
Bromoform	-	-	-	ND (0.54)	ND (0.61)	ND (0.59)	ND (0.57)	ND (0.57)	ND (0.55)	ND (0.58)	ND (0.55)	ND (0.58)	ND (0.67)	ND (0.59)	ND (0.55)	ND (0.53)	ND (0.72)	ND (0.55)	ND (0.59)	ND (0.61)	ND (0.67)	ND (0.60)
Bromomethane	-	-	-	ND (0.93) [c]	ND (1.0)	ND (1.0)	ND (0.98) [c]	ND (0.98) [c]	ND (0.95) [c]	ND (1.0) [c]	ND (0.95)	ND (1.0)	ND (1.2) [c]	ND (1.0) [c]	ND (0.94) [c]	ND (0.92) [c]	ND (1.2) [c]	ND (0.95)	ND (1.0)	ND (1.0)	ND (1.1)	ND (1.0)
2-Butanone (MEK)	120	100000	500000	ND (3.5)	ND (3.9)	ND (3.8)	ND (3.7)	ND (3.7)	ND (3.6)	ND (3.8)	ND (3.6)	10.1	ND (4.4)	ND (3.8)	ND (3.5)	ND (3.5)	ND (4.7)	ND (3.6)	ND (3.8)	ND (3.9)	ND (4.3)	ND (3.9)
n-Butylbenzene	12000	100000	500000	ND (0.38)	0.58 J	ND (0.41)	ND (0.40)	ND (0.40)	ND (0.39)	ND (0.41)	ND (0.39)	ND (0.41)	ND (0.48)	ND (0.42)	ND (0.39)	ND (0.38)	ND (0.51)	ND (0.39)	ND (0.41)	ND (0.43)	ND (0.47)	ND (0.42)
sec-Butylbenzene	11000	100000	500000	ND (0.40)	0.76 J	0.49 J	ND (0.42)	ND (0.42)	ND (0.41)	ND (0.43)	ND (0.41)	ND (0.43)	ND (0.50)	ND (0.44)	ND (0.41)	ND (0.40)	ND (0.53)	ND (0.41)	ND (0.43)	ND (0.45)	ND (0.49)	ND (0.44)
tert-Butylbenzene	5900	100000	500000	ND (0.47)	ND (0.53)	2.8	ND (0.49)	ND (0.49)	ND (0.48)	ND (0.50)	ND (0.48)	ND (0.51)	ND (0.58)	ND (0.51)	ND (0.47)	ND (0.46)	ND (0.62)	ND (0.48)	ND (0.51)	ND (0.53)	ND (0.58)	ND (0.52)
Carbon disulfide	-			ND (0.87)	ND (0.98)	23	5	2.5	ND (0.88)	ND (0.94)	ND (0.89)	3.3	2.5	ND (0.95)	ND (0.88)	ND (0.86)	4.3	ND (0.89) [d]	ND (0.94) [d]	ND (0.98)	ND (1.1)	1.4 J
Carbon tetrachloride	760	2400	22000	ND (0.58)	ND (0.65)	ND (0.63)	ND (0.61)	ND (0.61)	ND (0.59)	ND (0.62)	ND (0.59)	ND (0.63)	ND (0.72)	ND (0.63)	ND (0.58)	ND (0.57)	ND (0.77)	ND (0.59)	ND (0.63)	ND (0.65)	ND (0.71)	ND (0.64)
Chlorobenzene	1100	100000	500000	ND (0.43)	ND (0.48)	ND (0.47)	ND (0.45)	ND (0.45)	ND (0.44)	ND (0.46)	ND (0.44)	ND (0.47)	ND (0.54)	ND (0.47)	ND (0.43)	ND (0.43)	ND (0.57)	ND (0.44)	ND (0.47)	ND (0.48)	ND (0.53)	ND (0.48)
Chloroethane	-			ND (0.55)	ND (0.62)	ND (0.60)	ND (0.58)	ND (0.58)	ND (0.56)	ND (0.60)	ND (0.57)	ND (0.60)	ND (0.69)	ND (0.60)	ND (0.56)	ND (0.55)	ND (0.74)	ND (0.56)	ND (0.60)	ND (0.62)	ND (0.68)	ND (0.61)
Chloroform	370	49000	350000	ND (0.46)	ND (0.52)	ND (0.50)	ND (0.48)	ND (0.48)	ND (0.46)	ND (0.49)	ND (0.47)	ND (0.50)	ND (0.57)	ND (0.50)	ND (0.46)	ND (0.45)	ND (0.61)	ND (0.47)	ND (0.50)	ND (0.51)	ND (0.56)	ND (0.51)
Chloromethane	-	-	-	ND (1.8) [d]	ND (2.1)	ND (2.0)	ND (1.9) [d]	ND (1.9) [d]	ND (1.9) [d]	ND (2.0) [d]	ND (1.9)	ND (2.0)	ND (2.3) [d]	ND (2.0) [d]	ND (1.9) [d]	ND (1.8) [d]	ND (2.4) [d]	ND (1.9)	ND (2.0)	ND (2.1)	ND (2.3)	ND (2.0)
Cyclohexane	-	-	-	ND (0.61)	ND (0.69)	ND (0.67)	ND (0.65)	ND (0.65)	ND (0.62)	ND (0.66)	ND (0.63)	ND (0.67)	ND (0.77)	ND (0.67)	ND (0.62)	ND (0.61)	ND (0.82)	ND (0.63)	ND (0.67)	ND (0.69)	ND (0.76)	ND (0.68)
1,2-Dibromo-3-chloropropane	-	-	-	ND (0.78)	ND (0.88)	ND (0.85)	ND (0.82)	ND (0.83)	ND (0.79)	ND (0.84)	ND (0.80)	ND (0.85)	ND (0.98)	ND (0.85)	ND (0.79)	ND (0.77)	ND (1.0)	ND (0.80)	ND (0.85)	ND (0.88)	ND (0.96)	ND (0.87)
Dibromochloromethane	-			ND (0.52)	ND (0.59)	ND (0.57)	ND (0.55)	ND (0.55)	ND (0.53)	ND (0.56)	ND (0.54)	ND (0.57)	ND (0.65)	ND (0.57)	ND (0.53)	ND (0.52)	ND (0.70)	ND (0.53)	ND (0.57)	ND (0.59)	ND (0.65)	ND (0.58)
1,2-Dibromoethane	-	-	-	ND (0.39)	ND (0.44)	ND (0.43)	ND (0.42)	ND (0.42)	ND (0.40)	ND (0.42)	ND (0.40)	ND (0.43)	ND (0.49)	ND (0.43)	ND (0.40)	ND (0.39)	ND (0.53)	ND (0.40)	ND (0.43)	ND (0.44)	ND (0.49)	ND (0.44)
1,2-Dichlorobenzene	1100	100000	500000	ND (0.51)	ND (0.58)	ND (0.55)	ND (0.54)	ND (0.54)	ND (0.52)	ND (0.55)	ND (0.52)	ND (0.55)	ND (0.64)	ND (0.56)	ND (0.52)	ND (0.51)	ND (0.68)	ND (0.52)	ND (0.55)	ND (0.57)	ND (0.63)	ND (0.57)
1,3-Dichlorobenzene	2400	49000	280000	ND (0.46)	ND (0.52)	ND (0.50)	ND (0.49)	ND (0.49)	ND (0.47)	ND (0.50)	ND (0.47)	ND (0.50)	ND (0.58)	ND (0.51)	ND (0.47)	ND (0.46)	ND (0.62)	ND (0.47)	ND (0.50)	ND (0.52)	ND (0.57)	ND (0.51)
1,4-Dichlorobenzene	1800	13000	130000	ND (0.46)	ND (0.52)	ND (0.50)	ND (0.49)	ND (0.49)	ND (0.47)	ND (0.50)	ND (0.47)	ND (0.50)	ND (0.58)	ND (0.50)	ND (0.47)	ND (0.46)	ND (0.62)	ND (0.47)	ND (0.50)	ND (0.52)	ND (0.57)	ND (0.51)
Dichlorodifluoromethane	-	-	-	ND (0.68)	ND (0.77)	ND (0.74)	ND (0.72)	ND (0.72)	ND (0.69)	ND (0.73)	ND (0.70)	ND (0.74)	ND (0.85)	ND (0.74) [d]	ND (0.69) [d]	ND (0.67) [d]	ND (0.91) [d]	ND (0.69)	ND (0.74)	ND (0.77)	ND (0.84)	ND (0.75)
1,1-Dichloroethane	270	26000	240000	ND (0.46)	ND (0.52)	ND (0.50)	ND (0.49)	ND (0.49)	ND (0.47)	ND (0.50)	ND (0.47)	ND (0.50)	ND (0.58)	ND (0.51)	ND (0.47)	ND (0.46)	ND (0.62)	ND (0.47)	ND (0.50)	ND (0.52)	ND (0.57)	ND (0.51)
1,2-Dichloroethane	20	3100	30000	ND (0.44)	ND (0.50)	ND (0.48)	ND (0.46)	ND (0.46)	ND (0.45)	ND (0.47)	ND (0.45)	ND (0.48)	ND (0.55)	ND (0.48)	ND (0.44)	ND (0.44)	ND (0.59)	ND (0.45)	ND (0.48)	ND (0.49)	ND (0.54)	ND (0.49)
1,1-Dichloroethene	330	100000	500000	ND (0.61)	ND (0.69)	ND (0.66)	ND (0.65)	ND (0.65)	ND (0.62)	ND (0.66)	ND (0.63)	ND (0.66)	ND (0.77)	ND (0.67)	ND (0.62)	ND (0.61)	ND (0.82)	ND (0.63)	ND (0.66)	ND (0.69)	ND (0.75)	ND (0.68)
cis-1,2-Dichloroethene	250	100000	500000	ND (0.79)	ND (0.89)	53.6	75.5	101	ND (0.80)	ND (0.85)	3.4	43.5	22.2	ND (0.86)	ND (0.80)	ND (0.78)	13.1	ND (0.80)	ND (0.85)	107	3.9	ND (0.87)
trans-1,2-Dichloroethene	190	100000	500000	ND (0.57)	ND (0.64)	1.2	1.6	0.79 J	ND (0.58)	ND (0.62)	ND (0.58)	ND (0.62)	ND (0.71)	ND (0.62)	ND (0.58)	ND (0.57)	ND (0.76)	ND (0.58)	ND (0.62)	0.85 J	ND (0.70)	ND (0.63)
1,2-Dichloropropane	-			ND (0.44)	ND (0.50)	ND (0.48)	ND (0.47)	ND (0.47)	ND (0.45)	ND (0.48)	ND (0.45)	ND (0.48)	ND (0.55)	ND (0.48)	ND (0.45)	ND (0.44)	ND (0.59)	ND (0.45)	ND (0.48)	ND (0.50)	ND (0.55)	ND (0.49)
cis-1,3-Dichloropropene	-	-	-	ND (0.44)	ND (0.50)	ND (0.48)	ND (0.47)	ND (0.47)	ND (0.45)	ND (0.48)	ND (0.45)	ND (0.48)	ND (0.56)	ND (0.49)	ND (0.45)	ND (0.44)	ND (0.59)	ND (0.45)	ND (0.48)	ND (0.50)	ND (0.55)	ND (0.49)
trans-1,3-Dichloropropene	-	-	-	ND (0.43)	ND (0.48)	ND (0.46)	ND (0.45)	ND (0.45)	ND (0.43)	ND (0.46)	ND (0.44)	ND (0.46)	ND (0.53)	ND (0.47)	ND (0.43)	ND (0.42)	ND (0.57)	ND (0.44)	ND (0.46)	ND (0.48)	ND (0.53)	ND (0.47)
Ethylbenzene	1000	41000	390000	ND (0.52)	3.2	ND (0.56)	ND (0.54)	1	ND (0.52)	57.8	ND (0.53)	ND (0.56)	ND (0.65)	ND (0.56)	ND (0.52)	ND (0.51)	ND (0.69)	ND (0.53)	ND (0.56)	ND (0.58)	ND (0.64)	ND (0.57)
Freon 113	-			ND (0.95)	ND (1.1)	ND (1.0) [a]	ND (1.0)	ND (1.0)	ND (0.96)	ND (1.0)	ND (0.97)	ND (1.0)	ND (1.2)	ND (1.0)	ND (0.96)	ND (0.94)	ND (1.3)	ND (0.96)	ND (1.0)	ND (1.1) [a]	ND (1.2) [a]	ND (1.0) [a]
2-Hexanone	-	-	-	ND (2.0)	ND (2.2)	ND (2.2)	ND (2.1)	ND (2.1)	ND (2.0)	ND (2.1)	ND (2.0)	ND (2.1)	ND (2.5)	ND (2.2)	ND (2.0)	ND (2.0)	ND (2.6)	ND (2.0)	ND (2.2)	ND (2.2)	ND (2.4)	ND (2.2)
Isopropylbenzene	-			ND (0.65)	43.3	1.6 J	1.0 J	0.95 J	ND (0.66)	5.9	ND (0.67)	ND (0.71)	ND (0.81)	ND (0.71)	ND (0.66)	ND (0.65)	ND (0.87)	ND (0.67)	ND (0.71)	ND (0.73)	ND (0.80)	ND (0.72)
p-Isopropyltoluene	-			ND (0.37)	ND (0.42)	ND (0.40)	ND (0.39)	ND (0.39)	ND (0.38)	ND (0.40)	ND (0.38)	ND (0.40)	ND (0.46)	ND (0.40)	ND (0.37)	ND (0.37)	ND (0.49)	ND (0.38)	ND (0.40)	ND (0.42)	ND (0.46)	ND (0.41)
Methyl Acetate	-	-	-	ND (1.3)	ND (1.5)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.3)	ND (1.4)	ND (1.3)	ND (1.4)	ND (1.6)	ND (1.4)	ND (1.3)	ND (1.3)	ND (1.7)	ND (1.3)	ND (1.4)	ND (1.5)	ND (1.6)	ND (1.4)
Methylcyclohexane	-	-	-	ND (0.82)	ND (0.92)	ND (0.89)	ND (0.86)	ND (0.87)	ND (0.83)	ND (0.88)	ND (0.84)	ND (0.89)	ND (1.0)	ND (0.89)	ND (0.83)	ND (0.81)	ND (1.1)	ND (0.84)	ND (0.89)	ND (0.92)	ND (1.0)	ND (0.91)
Methyl Tert Butyl Ether	930	100000	500000	ND (0.44)	ND (0.49)	ND (0.48)	ND (0.46)	ND (0.46)	ND (0.45)	ND (0.47)	ND (0.45)	0.74 J	ND (0.55)	ND (0.48)	ND (0.44)	ND (0.43)	ND (0.59)	ND (0.45)	ND (0.48)	ND (0.49)	ND (0.54)	ND (0.49)
4-Methyl-2-pentanone(MIBK)	-			ND (2.1)	ND (2.4)	ND (2.3)	ND (2.2)	ND (2.2)	ND (2.2)	ND (2.3)	ND (2.2)	ND (2.3)	ND (2.7)	ND (2.3)	ND (2.1)	ND (2.1)	ND (2.8)	ND (2.2)	ND (2.3)	ND (2.4)	ND (2.6)	ND (2.4)
Methylene chloride	50	100000	500000	ND (2.3)	ND (2.6)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.9)	ND (2.6)	ND (2.4)	ND (2.3)	ND (3.1)	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.9)	ND (2.6)
Naphthalene	12000	100000	500000	ND (2.3)	2.6 J	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.9)	ND (2.6)	ND (2.4)	ND (2.3)	ND (3.1)	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.9)	ND (2.6)
n-Propylbenzene	3900	100000	500000	ND (0.44)	51.4	ND (0.48)	ND (0.46)	0.51 J	ND (0.45)	6.8	ND (0.45)	ND (0.48)	ND (0.55)	ND (0.48)	ND (0.44)	ND (0.44)	ND (0.59)	ND (0.45)	ND (0.48)	ND (0.49)	ND (0.54)	ND (0.49)
Styrene	-			ND (0.54)	ND (0.61)	ND (0.58)	ND (0.57)	ND (0.57)	ND (0.55)	ND (0.58)	ND (0.55)	ND (0.58)	ND (0.67)	ND (0.59)	ND (0.54)	ND (0.53)	ND (0.72)	ND (0.55)	ND (0.58)	ND (0.61)	ND (0.66)	ND (0.60)
1,1,2,2-Tetrachloroethane	-			ND (0.56)	ND (0.63)	ND (0.61)	ND (0.59)	ND (0.59)	ND (0.57)	ND (0.60)	ND (0.57)	ND (0.61)	ND (0.70)	ND (0.61)	ND (0.57)	ND (0.55)	ND (0.75)	ND (0.57)	ND (0.61)	ND (0.63)	ND (0.69)	ND (0.62)
Tetrachloroethene	1300	19000	150000	ND (0.54)	ND (0.61)	**2650**	**2810**	1080	1.3 J	ND (0.59)	ND (0.55)	**1760**	836	ND (0.59)	ND (0.55)	ND (0.54)	ND (0.72)	ND (0.55)	ND (0.59)	0.73 J	11.6	ND (0.60)
Toluene	700	100000	500000	2.2	4.1	ND (0.53)	2.6	3.9	5.2	2.9	0.77 J	6.2	ND (0.61)	ND (0.54)	ND (0.50)	ND (0.49)	ND (0.66)	0.91 J	3.2	ND (0.55)	3.4	0.79 J
1,2,3-Trichlorobenzene	-			ND (2.3)	ND (2.6)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.9)	ND (2.6)	ND (2.4)	ND (2.3)	ND (3.1)	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.9)	ND (2.6)
1,2,4-Trichlorobenzene	-			ND (2.3)	ND (2.6)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.5)	ND (2.9)	ND (2.6)	ND (2.4)	ND (2.3)	ND (3.1)	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.9)	ND (2.6)
1,1,1-Trichloroethane	680	100000	500000	ND (0.45)	ND (0.51)	ND (0.49)	ND (0.48)	ND (0.48)	ND (0.46)	ND (0.49)	ND (0.46)	ND (0.49)	ND (0.56)	ND (0.49)	ND (0.46)	ND (0.45)	ND (0.60)	ND (0.46)	ND (0.49)	ND (0.51)	ND (0.56)	ND (0.50)
1,1,2-Trichloroethane	-	-	-	ND (0.52)	ND (0.58)	ND (0.56)	ND (0.55)	ND (0.55)	ND (0.53)	ND (0.56)	ND (0.53)	ND (0.56)	ND (0.65)	ND (0.57)	ND (0.52)	ND (0.51)	ND (0.69)	ND (0.53)	ND (0.56)	ND (0.58)	ND (0.64)	ND (0.57)
Trichloroethene	470	21000	200000	ND (0.71)	ND (0.80)	**581**	**892**	299	ND (0.72)	ND (0.77)	ND (0.73)	157	198	0.80 J	ND (0.72)	ND (0.71)	ND (0.95)	ND (0.73)	ND (0.77)	2	2	ND (0.79)
Trichlorofluoromethane	-	-	-	ND (0.64)	ND (0.72)	ND (0.69)	ND (0.67)	ND (0.68)	ND (0.65)	ND (0.69)	ND (0.65)	ND (0.69)	ND (0.80)	ND (0.70)	ND (0.65)	ND (0.63)	ND (0.85)	ND (0.65)	ND (0.69)	ND (0.72)	ND (0.79)	ND (0.71)
1,2,4-Trimethylbenzene	3600	52000	190000	ND (0.59)	ND (0.67)	ND (0.64)	ND (0.63)	ND (0.63)	ND (0.60)	43.4	ND (0.61)	ND (0.64)	ND (0.74)	ND (0.65)	ND (0.60)	ND (0.59)	ND (0.79)	ND (0.61)	ND (0.64)	ND (0.67)	ND (0.73)	ND (0.66)
1,3,5-Trimethylbenzene	8400	52000	190000	ND (0.40)	ND (0.45)	ND (0.44)	ND (0.43)	ND (0.43)	ND (0.41)	2.9	ND (0.41)	ND (0.44)	ND (0.50)	ND (0.44)	ND (0.41)	ND (0.40)	ND (0.54)	ND (0.41)	ND (0.44)	ND (0.45)	ND (0.50)	ND (0.45)
Vinyl chloride	20	900	13000	ND (0.45)	ND (0.51)	0.83 J	1.1 J	1.8 J	ND (0.46)	ND (0.49)	ND (0.46)	1.7 J	0.64 J	ND (0.49)	ND (0.46)	ND (0.45)	1.2 J	ND (0.46)	ND (0.49)	4	ND (0.55)	ND (0.50)
m,p-Xylene	260	100000	500000	ND (0.84)	ND (0.94)	ND (0.91)	ND (0.88)	ND (0.89)	ND (0.85)	45.1	ND (0.86)	ND (0.91)	ND (1.0)	ND (0.92)	ND (0.85)	ND (0.83)	ND (1.1)	ND (0.86)	ND (0.91)	ND (0.94)	ND (1.0)	ND (0.93)
o-Xylene	260	100000	500000	ND (0.55)	ND (0.61)	ND (0.59)	0.58 J	ND (0.58)	ND (0.55)	1.9	ND (0.56)	ND (0.59)	ND (0.68)	ND (0.60)	ND (0.55)	ND (0.54)	ND (0.73)	ND (0.56)	ND (0.59)	ND (0.61)	ND (0.67)	ND (0.60)
Xylene (total)	260	100000	500000	ND (0.55)	ND (0.61)	ND (0.59)	0.58 J	ND (0.58)	ND (0.55)	47	ND (0.56)	ND (0.59)	ND (0.68)	ND (0.60)	ND (0.55)	ND (0.54)	ND (0.73)	ND (0.56)	ND (0.59)	ND (0.61)	ND (0.67)	ND (0.60)
Solids, Percent	%	%	%	87.6	76.5	79.2	80.8	85.7	92.3	84	81.7	83.6	80.7	75.6	85.2	85.7	82.9	85.8	83.5	81.9	72.3	81.7

Notes
ND - Non-Dectect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b This compound in blank spike is outside in house QC limits bias high.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Associated CCV outside of control limits low.
e Elevated detection limit due to dilution required for high interfering element.
f This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

Table 11 - Soil Analytical Results
175 Roger Avenue - BCP Site No. C130164
Volatile Organic Compounds in Soil

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY SCO Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	NY SCO - Commercial w/CP-51 (10/10) (6 NYCRR 375-6 (12/06)	SB-5 (6-7) JD7642-14 5/29/2020 Soil	SB-5 (10-11) JD7642-16 5/29/2020 Soil	SB-5 (18-19) JD7642-17 5/29/2020 Soil	SB-5 (29-30) JD7642-18 5/29/2020 Soil	SB-5 (34-35) JD7642-19 5/29/2020 Soil	SB-5 (34-35) DUP JD7642-20 5/29/2020 Soil
MS Volatiles (SW846 8260C) - values reported in ug/kg									
Acetone	50	100000	500000	ND (220)	11.9 J	ND (4.3)	ND (4.4)	9.8 J	11.4
Benzene	60	4800	44000	ND (25)	ND (0.52)	ND (0.49)	ND (0.50)	ND (0.49)	ND (0.46)
Bromochloromethane	-	-	-	ND (31)	ND (0.65)	ND (0.61)	ND (0.62)	ND (0.61)	ND (0.57)
Bromodichloromethane	-	-	-	ND (25)	ND (0.51)	ND (0.48)	ND (0.49)	ND (0.48)	ND (0.45)
Bromoform	-	-	-	ND (32)	ND (0.67)	ND (0.62)	ND (0.64)	ND (0.63)	ND (0.59)
Bromomethane	-	-	-	ND (55)	ND (1.1) [c]	ND (1.1) [c]	ND (1.1) [f]	ND (1.1) [c]	ND (1.0) [c]
2-Butanone (MEK)	120	100000	500000	ND (210)	ND (4.3)	ND (4.1)	ND (4.1)	ND (4.1)	ND (3.8)
n-Butylbenzene	12000	100000	500000	477	ND (0.47)	ND (0.44)	0.76 J	ND (0.44)	ND (0.41)
sec-Butylbenzene	11000	100000	500000	895	1.6 J	ND (0.46)	1.2 J	0.67 J	ND (0.43)
tert-Butylbenzene	5900	100000	500000	ND (28)	ND (0.58)	ND (0.54)	ND (0.55)	2.6	ND (0.51)
Carbon disulfide	-			ND (52)	ND (1.1)	ND (1.0)	ND (1.0)	5.4	4.2
Carbon tetrachloride	760	2400	22000	ND (34)	ND (0.71)	ND (0.67)	ND (0.69)	ND (0.67)	ND (0.63)
Chlorobenzene	1100	100000	500000	ND (25)	ND (0.53)	ND (0.50)	ND (0.51)	ND (0.50)	ND (0.47)
Chloroethane	-			ND (33)	ND (0.68)	ND (0.64)	ND (0.66)	ND (0.64)	ND (0.60)
Chloroform	370	49000	350000	ND (27)	ND (0.56)	ND (0.53)	ND (0.54)	ND (0.53)	ND (0.50)
Chloromethane	-	-	-	ND (110)	ND (2.3)	ND (2.1)	ND (2.2)	ND (2.1)	ND (2.0)
Cyclohexane	-	-	-	ND (36)	ND (0.76)	ND (0.71)	ND (0.73)	ND (0.71)	ND (0.67)
1,2-Dibromo-3-chloropropane	-	-	-	ND (46)	ND (0.96)	ND (0.91)	ND (0.93)	ND (0.91)	ND (0.85)
Dibromochloromethane	-			ND (31)	ND (0.65)	ND (0.61)	ND (0.62)	ND (0.61)	ND (0.57)
1,2-Dibromoethane	-	-	-	ND (23)	ND (0.49)	ND (0.46)	ND (0.47)	ND (0.46)	ND (0.43)
1,2-Dichlorobenzene	1100	100000	500000	ND (30)	ND (0.63)	ND (0.59)	ND (0.61)	ND (0.59)	ND (0.55)
1,3-Dichlorobenzene	2400	49000	280000	ND (27)	ND (0.57)	ND (0.54)	ND (0.55)	ND (0.54)	ND (0.50)
1,4-Dichlorobenzene	1800	13000	130000	ND (27)	ND (0.57)	ND (0.53)	ND (0.55)	ND (0.54)	ND (0.50)
Dichlorodifluoromethane	-	-	-	ND (40) [a]	ND (0.84)	ND (0.79)	ND (0.81)	ND (0.79)	ND (0.74)
1,1-Dichloroethane	270	26000	240000	ND (27)	ND (0.57)	ND (0.54)	ND (0.55)	ND (0.54)	ND (0.50)
1,2-Dichloroethane	20	3100	30000	ND (26)	ND (0.54)	ND (0.51)	ND (0.52)	ND (0.51)	ND (0.48)
1,1-Dichloroethene	330	100000	500000	ND (36)	ND (0.76)	ND (0.71)	ND (0.73)	ND (0.71)	ND (0.66)
cis-1,2-Dichloroethene	250	100000	500000	ND (47)	8.7	ND (0.91)	ND (0.93)	12	17.1
trans-1,2-Dichloroethene	190	100000	500000	ND (34)	ND (0.70)	ND (0.66)	ND (0.68)	ND (0.66)	ND (0.62)
1,2-Dichloropropane	-			ND (26)	ND (0.55)	ND (0.51)	ND (0.52)	ND (0.51)	ND (0.48)
cis-1,3-Dichloropropene	-	-	-	ND (26)	ND (0.55)	ND (0.51)	ND (0.53)	ND (0.52)	ND (0.48)
trans-1,3-Dichloropropene	-	-	-	ND (25)	ND (0.53)	ND (0.49)	ND (0.51)	ND (0.50)	ND (0.46)
Ethylbenzene	1000	41000	390000	**72000**	163	ND (0.60)	39.6	ND (0.60)	ND (0.56)
Freon 113	-			ND (56)	ND (1.2)	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.0)
2-Hexanone	-	-	-	ND (120)	ND (2.4)	ND (2.3)	ND (2.4)	ND (2.3)	ND (2.2)
Isopropylbenzene	-			14900	57.4	ND (0.75)	15.4	1.6 J	1.2 J
p-Isopropyltoluene	-			400	0.89 J	ND (0.43)	0.48 J	ND (0.43)	ND (0.40)
Methyl Acetate	-	-	-	ND (77)	ND (1.6)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.4)
Methylcyclohexane	-	-	-	144	ND (1.0)	ND (0.95)	ND (0.97)	ND (0.95)	ND (0.89)
Methyl Tert Butyl Ether	930	100000	500000	ND (26)	ND (0.54)	ND (0.51)	ND (0.52)	ND (0.51)	ND (0.48)
4-Methyl-2-pentanone(MIBK)	-			ND (130)	ND (2.6)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.3)
Methylene chloride	50	100000	500000	ND (140)	ND (2.9)	ND (2.7)	ND (2.8)	ND (2.7)	ND (2.5)
Naphthalene	12000	100000	500000	504	10.6	ND (2.7)	ND (2.8)	ND (2.7)	ND (2.5)
n-Propylbenzene	3900	100000	500000	**34100**	106	ND (0.51)	34	1.4 J	0.88 J
Styrene	-			ND (32)	ND (0.66)	ND (0.62)	ND (0.64)	ND (0.62)	ND (0.58)
1,1,2,2-Tetrachloroethane	-			ND (33)	ND (0.69)	ND (0.65)	ND (0.66)	ND (0.65)	ND (0.61)
Tetrachloroethene	1300	19000	150000	790	ND (0.67)	ND (0.63)	1.7 J	809	779
Toluene	700	100000	500000	**6150**	138	ND (0.57)	4.1	ND (0.57)	ND (0.53)
1,2,3-Trichlorobenzene	-			ND (140)	ND (2.9)	ND (2.7)	ND (2.8)	ND (2.7)	ND (2.5)
1,2,4-Trichlorobenzene	-			ND (140)	ND (2.9)	ND (2.7)	ND (2.8)	ND (2.7)	ND (2.5)
1,1,1-Trichloroethane	680	100000	500000	ND (27)	ND (0.56)	ND (0.52)	ND (0.54)	ND (0.52)	ND (0.49)
1,1,2-Trichloroethane	-	-	-	ND (31)	ND (0.64)	ND (0.60)	ND (0.61)	ND (0.60)	ND (0.56)
Trichloroethene	470	21000	200000	ND (42)	ND (0.88)	ND (0.83)	ND (0.85)	100	97.6
Trichlorofluoromethane	-	-	-	ND (38)	ND (0.79)	ND (0.74)	ND (0.76)	ND (0.74)	ND (0.69)
1,2,4-Trimethylbenzene	3600	52000	190000	**94700**	238	ND (0.69)	100	ND (0.69)	0.94 J
1,3,5-Trimethylbenzene	8400	52000	190000	**37500**	129	ND (0.47)	36.8	ND (0.47)	1.0 J
Vinyl chloride	20	900	13000	ND (27)	ND (0.55)	ND (0.52)	ND (0.53)	ND (0.52)	ND (0.49)
m,p-Xylene	260	100000	500000	**280000**	**638**	ND (0.97)	142	ND (0.97)	0.96 J
o-Xylene	260	100000	500000	**74200**	162	ND (0.63)	37	1.2	ND (0.59)
Xylene (total)	260	100000	500000	**354000**	**800**	ND (0.63)	179	1.2	0.96 J
Solids, Percent	%	%	%	83.9	73.5	81	76.4	76.7	78.2

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	SB-6 (5'-6') JD7642-1 5/27/2020 Soil	SB-6 (24'-25') JD7642-2 5/27/2020 Soil	SB-6 (34'-35') JD7642-3 5/27/2020 Soil	SB-7 (5-6) JD7623-6 5/26/2020 Soil	SB-7 (13-14) JD7623-7 5/26/2020 Soil	SB-7 (21-22) JD7623-9 5/26/2020 Soil	SB-7 (21-22) DUP JD7623-10 5/26/2020 Soil	SB-7 (23-24) JD7623-11 5/26/2020 Soil	SB-7 (34-35) JD7623-12 5/26/2020 Soil
MS Volatiles (SW846 8260C) - values reported in ug/kg									
Acetone	4.7 J	33.4	33.7	23.4	ND (5.0)	5.1 J	ND (4.2)	ND (4.6)	ND (4.4)
Benzene	ND (0.51)	ND (0.46)	ND (0.44)	ND (0.44)	ND (0.57)	ND (0.46)	ND (0.47)	ND (0.52)	ND (0.50)
Bromochloromethane	ND (0.63)	ND (0.57)	ND (0.54)	ND (0.55)	ND (0.71)	ND (0.57)	ND (0.58)	ND (0.64)	ND (0.62)
Bromodichloromethane	ND (0.50)	ND (0.45)	ND (0.43)	ND (0.43)	ND (0.56)	ND (0.45)	ND (0.46)	ND (0.50)	ND (0.49)
Bromoform	ND (0.65)	ND (0.59)	ND (0.56)	ND (0.56)	ND (0.73)	ND (0.59)	ND (0.60)	ND (0.65)	ND (0.64)
Bromomethane	ND (1.1)	ND (1.0)	ND (0.96)	ND (0.97) [c]	ND (1.3) [c]	ND (1.0) [c]	ND (1.0) [c]	ND (1.1) [c]	ND (1.1) [c]
2-Butanone (MEK)	ND (4.2)	ND (3.8)	ND (3.6)	ND (3.6)	ND (4.7)	ND (3.8)	ND (3.9)	ND (4.2)	ND (4.1)
n-Butylbenzene	ND (0.46)	ND (0.41)	ND (0.39)	ND (0.40)	ND (0.51)	ND (0.41)	ND (0.42)	ND (0.46)	ND (0.45)
sec-Butylbenzene	ND (0.48)	ND (0.43)	ND (0.41)	ND (0.42)	ND (0.54)	ND (0.44)	ND (0.45)	ND (0.49)	ND (0.47)
tert-Butylbenzene	ND (0.56)	ND (0.51)	ND (0.48)	ND (0.49)	ND (0.63)	ND (0.51)	ND (0.52)	ND (0.57)	ND (0.55)
Carbon disulfide	ND (1.0)	2	1.4 J	1.4 J	ND (1.2)	ND (0.95)	ND (0.97)	ND (1.1)	ND (1.0)
Carbon tetrachloride	ND (0.69)	ND (0.63)	ND (0.60)	ND (0.60)	ND (0.78)	ND (0.63)	ND (0.64)	ND (0.70)	ND (0.68)
Chlorobenzene	ND (0.52)	ND (0.47)	ND (0.44)	ND (0.45)	ND (0.58)	ND (0.47)	ND (0.48)	ND (0.52)	ND (0.51)
Chloroethane	ND (0.66)	ND (0.60)	ND (0.57)	ND (0.58)	ND (0.74)	ND (0.60)	ND (0.62)	ND (0.67)	ND (0.65)
Chloroform	ND (0.55)	ND (0.50)	ND (0.47)	ND (0.48)	ND (0.62)	ND (0.50)	ND (0.51)	ND (0.55)	ND (0.54)
Chloromethane	ND (2.2) [d]	ND (2.0) [d]	ND (1.9) [d]	ND (1.9) [d]	ND (2.5) [d]	ND (2.0) [d]	ND (2.0) [d]	ND (2.2) [d]	ND (2.2) [d]
Cyclohexane	ND (0.74) [d]	ND (0.67) [d]	ND (0.63) [d]	ND (0.64)	ND (0.83)	ND (0.67)	ND (0.68)	ND (0.75)	ND (0.73)
1,2-Dibromo-3-chloropropane	ND (0.94)	ND (0.85)	ND (0.81)	ND (0.81)	ND (1.1)	ND (0.85)	ND (0.87)	ND (0.95)	ND (0.92)
Dibromochloromethane	ND (0.63)	ND (0.57)	ND (0.54)	ND (0.55)	ND (0.71)	ND (0.57)	ND (0.58)	ND (0.64)	ND (0.62)
1,2-Dibromoethane	ND (0.47)	ND (0.43)	ND (0.41)	ND (0.41)	ND (0.53)	ND (0.43)	ND (0.44)	ND (0.48)	ND (0.46)
1,2-Dichlorobenzene	ND (0.61)	ND (0.55)	ND (0.53)	ND (0.53)	ND (0.69)	ND (0.56)	ND (0.57)	ND (0.62)	ND (0.60)
1,3-Dichlorobenzene	ND (0.56)	ND (0.50)	ND (0.48)	ND (0.48)	ND (0.62)	ND (0.50)	ND (0.52)	ND (0.56)	ND (0.55)
1,4-Dichlorobenzene	ND (0.55)	ND (0.50)	ND (0.48)	ND (0.48)	ND (0.62)	ND (0.50)	ND (0.51)	ND (0.56)	ND (0.55)
Dichlorodifluoromethane	ND (0.82)	ND (0.74)	ND (0.70)	ND (0.71)	ND (0.92)	ND (0.74)	ND (0.76)	ND (0.82)	ND (0.80)
1,1-Dichloroethane	ND (0.56)	ND (0.50)	ND (0.48)	ND (0.48)	ND (0.62)	ND (0.50)	ND (0.52)	ND (0.56)	ND (0.55)
1,2-Dichloroethane	ND (0.53)	ND (0.48)	ND (0.45)	ND (0.46)	ND (0.59)	ND (0.48)	ND (0.49)	ND (0.53)	ND (0.52)
1,1-Dichloroethene	ND (0.74)	ND (0.66)	ND (0.63)	ND (0.64)	ND (0.82)	ND (0.67)	ND (0.68)	ND (0.74)	ND (0.72)
cis-1,2-Dichloroethene	ND (0.94)	7.8	67.5	ND (0.82)	1.2 J	ND (0.85)	ND (0.88)	ND (0.95)	ND (0.93)
trans-1,2-Dichloroethene	ND (0.69)	ND (0.62)	1.1	ND (0.60)	ND (0.77)	ND (0.62)	ND (0.64)	ND (0.69)	ND (0.67)
1,2-Dichloropropane	ND (0.53)	ND (0.48)	ND (0.46)	ND (0.46)	ND (0.60)	ND (0.48)	ND (0.49)	ND (0.54)	ND (0.52)
cis-1,3-Dichloropropene	ND (0.53)	ND (0.48)	ND (0.46)	ND (0.46)	ND (0.60)	ND (0.48)	ND (0.50)	ND (0.54)	ND (0.52)
trans-1,3-Dichloropropene	ND (0.51)	ND (0.46)	ND (0.44)	ND (0.45)	ND (0.58)	ND (0.46)	ND (0.48)	ND (0.52)	ND (0.50)
Ethylbenzene	ND (0.62)	ND (0.56)	ND (0.53)	ND (0.54)	ND (0.70)	ND (0.56)	ND (0.58)	ND (0.63)	ND (0.61)
Freon 113	ND (1.1)	ND (1.0)	ND (0.97)	ND (0.98)	ND (1.3)	ND (1.0)	ND (1.1)	ND (1.1)	ND (1.1)
2-Hexanone	ND (2.4)	ND (2.2)	ND (2.0)	ND (2.1)	ND (2.7)	ND (2.2)	ND (2.2)	ND (2.4)	ND (2.3)
Isopropylbenzene	ND (0.78)	ND (0.71)	ND (0.67)	ND (0.68)	ND (0.88)	ND (0.71)	ND (0.73)	ND (0.79)	ND (0.77)
p-Isopropyltoluene	ND (0.44)	ND (0.40)	ND (0.38)	ND (0.38)	ND (0.50)	ND (0.40)	ND (0.41)	ND (0.45)	ND (0.44)
Methyl Acetate	ND (1.6)	ND (1.4)	ND (1.3)	ND (1.4)	ND (1.8)	ND (1.4)	ND (1.4)	ND (1.6)	ND (1.5)
Methylcyclohexane	ND (0.98)	ND (0.89)	ND (0.84)	ND (0.85)	ND (1.1)	ND (0.89)	ND (0.91)	ND (0.99)	ND (0.97)
Methyl Tert Butyl Ether	ND (0.53)	ND (0.48)	ND (0.45)	ND (0.46)	ND (0.59)	ND (0.48)	ND (0.49)	ND (0.53)	ND (0.52)
4-Methyl-2-pentanone(MIBK)	ND (2.5) [a]	ND (2.3) [a]	ND (2.2) [a]	ND (2.2)	ND (2.9)	ND (2.3)	ND (2.4)	ND (2.6)	ND (2.5)
Methylene chloride	ND (2.8)	ND (2.5)	ND (2.4)	ND (2.4)	ND (3.1)	ND (2.5)	ND (2.6)	ND (2.8)	ND (2.8)
Naphthalene	ND (2.8)	ND (2.5)	ND (2.4)	ND (2.4)	ND (3.1)	ND (2.5)	ND (2.6)	ND (2.8)	ND (2.8)
n-Propylbenzene	ND (0.53)	ND (0.48)	ND (0.45)	ND (0.46)	ND (0.59)	ND (0.48)	ND (0.49)	ND (0.53)	ND (0.52)
Styrene	ND (0.65)	ND (0.58)	ND (0.55)	ND (0.56)	ND (0.72)	ND (0.59)	ND (0.60)	ND (0.65)	ND (0.63)
1,1,2,2-Tetrachloroethane	ND (0.67)	ND (0.61)	ND (0.58)	ND (0.58)	ND (0.75)	ND (0.61)	ND (0.62)	ND (0.68)	ND (0.66)
Tetrachloroethene	ND (0.65)	ND (0.59)	21.9	ND (0.56)	ND (0.73)	ND (0.59)	ND (0.60)	0.67 J	3.8
Toluene	ND (0.59)	ND (0.53)	ND (0.51)	ND (0.51)	ND (0.66)	ND (0.53)	ND (0.55)	ND (0.60)	ND (0.58)
1,2,3-Trichlorobenzene	ND (2.8)	ND (2.5)	ND (2.4)	ND (2.4)	ND (3.1)	ND (2.5)	ND (2.6)	ND (2.8)	ND (2.8)
1,2,4-Trichlorobenzene	ND (2.8)	ND (2.5)	ND (2.4)	ND (2.4)	ND (3.1)	ND (2.5)	ND (2.6)	ND (2.8)	ND (2.8)
1,1,1-Trichloroethane	ND (0.54)	ND (0.49)	ND (0.47)	ND (0.47)	ND (0.61)	ND (0.49)	ND (0.50)	ND (0.55)	ND (0.53)
1,1,2-Trichloroethane	ND (0.62)	ND (0.56)	ND (0.53)	ND (0.54)	ND (0.70)	ND (0.56)	ND (0.58)	ND (0.63)	ND (0.61)
Trichloroethene	ND (0.86)	ND (0.77)	13.1	ND (0.74)	ND (0.96)	ND (0.78)	ND (0.79)	ND (0.86)	1.2
Trichlorofluoromethane	ND (0.77)	ND (0.69)	ND (0.66)	ND (0.67)	ND (0.86)	ND (0.70)	ND (0.71)	ND (0.78)	ND (0.75)
1,2,4-Trimethylbenzene	ND (0.71)	ND (0.64)	ND (0.61)	ND (0.62)	ND (0.80)	ND (0.65)	ND (0.66)	ND (0.72)	ND (0.70)
1,3,5-Trimethylbenzene	ND (0.48)	ND (0.44)	ND (0.42)	ND (0.42)	ND (0.54)	ND (0.44)	ND (0.45)	ND (0.49)	ND (0.48)
Vinyl chloride	ND (0.54)	ND (0.49)	1.8 J	ND (0.47)	ND (0.61)	ND (0.49)	ND (0.50)	ND (0.55)	ND (0.53)
m,p-Xylene	ND (1.0)	ND (0.91)	ND (0.86)	ND (0.87)	ND (1.1)	ND (0.91)	ND (0.93)	ND (1.0)	ND (0.99)
o-Xylene	ND (0.65)	ND (0.59)	ND (0.56)	ND (0.57)	ND (0.73)	ND (0.59)	ND (0.61)	ND (0.66)	ND (0.64)
Xylene (total)	ND (0.65)	ND (0.59)	ND (0.56)	ND (0.57)	ND (0.73)	ND (0.59)	ND (0.61)	ND (0.66)	ND (0.64)
Solids, Percent	81	79.5	85.1	82.8	70.9	81.9	82.7	77.3	75.5

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	SB-8 (5-6) JD7490-19 5/21/2020 Soil	SB-8 (10-11) JD7490-20 5/21/2020 Soil	SB-8 (11.5-12. JD7490-21 5/21/2020 Soil	SB-8 (18-19) JD7490-22 5/21/2020 Soil	SB-8 (34-35) JD7490-23 5/21/2020 Soil
MS Volatiles (SW846 8260C) - values reported in ug/kg					
Acetone	ND (4.2)	ND (3.9)	ND (5.4)	ND (3.8)	ND (3.9)
Benzene	ND (0.48)	ND (0.44)	ND (0.62)	ND (0.43)	ND (0.44)
Bromochloromethane	ND (0.59)	ND (0.54)	ND (0.76)	ND (0.54)	ND (0.54)
Bromodichloromethane	ND (0.46)	ND (0.43)	ND (0.60)	ND (0.42)	ND (0.43)
Bromoform	ND (0.60)	ND (0.56)	ND (0.78)	ND (0.55)	ND (0.56)
Bromomethane	ND (1.0)	ND (0.96)	ND (1.3)	ND (0.95)	ND (0.97)
2-Butanone (MEK)	ND (3.9)	ND (3.6)	ND (5.1)	ND (3.6)	ND (3.6)
n-Butylbenzene	ND (0.43)	ND (0.39)	ND (0.55)	ND (0.39)	ND (0.39)
sec-Butylbenzene	ND (0.45)	ND (0.41)	ND (0.58)	ND (0.41)	ND (0.42)
tert-Butylbenzene	ND (0.52)	ND (0.48)	ND (0.68)	ND (0.48)	ND (0.49)
Carbon disulfide	ND (0.97) [d]	ND (0.89) [d]	ND (1.3) [d]	ND (0.89)	ND (0.90)
Carbon tetrachloride	ND (0.65)	ND (0.59)	ND (0.84)	ND (0.59)	ND (0.60)
Chlorobenzene	ND (0.48)	ND (0.44)	ND (0.62)	ND (0.44)	ND (0.45)
Chloroethane	ND (0.62)	ND (0.57)	ND (0.80)	ND (0.56)	ND (0.57)
Chloroform	ND (0.51)	ND (0.47)	ND (0.66)	ND (0.47)	ND (0.47)
Chloromethane	ND (2.1)	ND (1.9)	ND (2.7)	ND (1.9)	ND (1.9)
Cyclohexane	ND (0.69)	ND (0.63)	ND (0.89)	ND (0.63)	ND (0.64)
1,2-Dibromo-3-chloropropane	ND (0.88)	ND (0.80)	ND (1.1)	ND (0.80)	ND (0.81)
Dibromochloromethane	ND (0.59)	ND (0.54)	ND (0.76)	ND (0.54)	ND (0.54)
1,2-Dibromoethane	ND (0.44)	ND (0.41)	ND (0.57)	ND (0.40)	ND (0.41)
1,2-Dichlorobenzene	ND (0.57)	ND (0.53)	ND (0.74)	ND (0.52)	ND (0.53)
1,3-Dichlorobenzene	ND (0.52)	ND (0.48)	ND (0.67)	ND (0.47)	ND (0.48)
1,4-Dichlorobenzene	ND (0.52)	ND (0.48)	ND (0.67)	ND (0.47)	ND (0.48)
Dichlorodifluoromethane	ND (0.76)	ND (0.70)	ND (0.98)	ND (0.69)	ND (0.71)
1,1-Dichloroethane	ND (0.52)	ND (0.48)	ND (0.67)	ND (0.47)	ND (0.48)
1,2-Dichloroethane	ND (0.49)	ND (0.45)	ND (0.64)	ND (0.45)	ND (0.46)
1,1-Dichloroethene	ND (0.69)	ND (0.63)	ND (0.89)	ND (0.63)	ND (0.64)
cis-1,2-Dichloroethene	ND (0.88)	ND (0.81)	ND (1.1)	ND (0.80)	7.7
trans-1,2-Dichloroethene	ND (0.64)	ND (0.59)	ND (0.83)	ND (0.58)	ND (0.59)
1,2-Dichloropropane	ND (0.50)	ND (0.46)	ND (0.64)	ND (0.45)	ND (0.46)
cis-1,3-Dichloropropene	ND (0.50)	ND (0.46)	ND (0.64)	ND (0.45)	ND (0.46)
trans-1,3-Dichloropropene	ND (0.48)	ND (0.44)	ND (0.62)	ND (0.44)	ND (0.44)
Ethylbenzene	ND (0.58)	ND (0.53)	ND (0.75)	ND (0.53)	ND (0.54)
Freon 113	ND (1.1)	ND (0.97)	ND (1.4)	ND (0.97) [a]	ND (0.98) [a]
2-Hexanone	ND (2.2)	ND (2.0)	ND (2.9)	ND (2.0)	ND (2.1)
Isopropylbenzene	ND (0.73)	ND (0.67)	ND (0.94)	ND (0.67)	ND (0.68)
p-Isopropyltoluene	ND (0.41)	ND (0.38)	ND (0.53)	ND (0.38)	ND (0.38)
Methyl Acetate	ND (1.5)	ND (1.3)	ND (1.9)	ND (1.3)	ND (1.3)
Methylcyclohexane	ND (0.92)	ND (0.84)	ND (1.2)	ND (0.84)	ND (0.85)
Methyl Tert Butyl Ether	ND (0.49)	ND (0.45)	ND (0.63)	ND (0.45)	ND (0.45)
4-Methyl-2-pentanone(MIBK)	ND (2.4)	ND (2.2)	ND (3.1)	ND (2.2)	ND (2.2)
Methylene chloride	ND (2.6)	ND (2.4)	ND (3.4)	ND (2.4)	ND (2.4)
Naphthalene	ND (2.6)	ND (2.4)	ND (3.4)	ND (2.4)	ND (2.4)
n-Propylbenzene	ND (0.49)	ND (0.45)	ND (0.64)	ND (0.45)	ND (0.46)
Styrene	ND (0.60)	ND (0.55)	ND (0.78)	ND (0.55)	ND (0.56)
1,1,2,2-Tetrachloroethane	ND (0.63)	ND (0.58)	ND (0.81)	ND (0.57)	ND (0.58)
Tetrachloroethene	ND (0.61)	2.1	4.5	ND (0.55)	28
Toluene	1.1	2	4.2	3.5	0.72 J
1,2,3-Trichlorobenzene	ND (2.6)	ND (2.4)	ND (3.4)	ND (2.4)	ND (2.4)
1,2,4-Trichlorobenzene	ND (2.6)	ND (2.4)	ND (3.4)	ND (2.4)	ND (2.4)
1,1,1-Trichloroethane	ND (0.51)	ND (0.46)	ND (0.65)	ND (0.46)	ND (0.47)
1,1,2-Trichloroethane	ND (0.58)	ND (0.53)	ND (0.75)	ND (0.53)	ND (0.54)
Trichloroethene	ND (0.80)	ND (0.73)	ND (1.0)	ND (0.73)	17.4
Trichlorofluoromethane	ND (0.72)	ND (0.66)	ND (0.93)	ND (0.65)	ND (0.66)
1,2,4-Trimethylbenzene	ND (0.67)	ND (0.61)	ND (0.86)	ND (0.61)	ND (0.62)
1,3,5-Trimethylbenzene	ND (0.45)	ND (0.41)	ND (0.58)	ND (0.41)	ND (0.42)
Vinyl chloride	ND (0.50)	ND (0.46)	ND (0.65)	ND (0.46)	ND (0.47)
m,p-Xylene	ND (0.94)	ND (0.86)	ND (1.2)	ND (0.86)	ND (0.87)
o-Xylene	ND (0.61)	ND (0.56)	ND (0.79)	ND (0.56)	ND (0.57)
Xylene (total)	ND (0.61)	ND (0.56)	ND (0.79)	ND (0.56)	ND (0.57)
Solids, Percent	82.3	82.5	71.1	84.4	79.3

Notes
ND - Non-Dectect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b This compound in blank spike is outside in house QC limits bias high.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in h
d Associated CCV outside of control limits low.
e Elevated detection limit due to dilution required for high interfering element.
f This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control lim

Table 11 - Soil Analytical Results
175 Roger Avenue - BCP Site No. C130164
Volatile Organic Compounds in Soil

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY SCO Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	NY SCO - Commercial w/CP-51 (10/10) (6 NYCRR 375-6 (12/06)	SB-9 (7-8) JD7623-1 5/22/2020 Soil	SB-9 (24-25) JD7623-2 5/22/2020 Soil	SB-9 (34-35) JD7623-3 5/22/2020 Soil	SB-10 (5-6) JD7623-14 5/26/2020 Soil	SB-10 (26-27) JD7623-16 5/26/2020 Soil	SB-10 (34-35) JD7623-17 5/26/2020 Soil	SB-11 (5-6) JD7642-21 5/29/2020 Soil	SB-11 (13-14) JD7642-22 5/29/2020 Soil	SB-12 (5-6) JD7642-11 5/28/2020 Soil	SB-12 (14-15) JD7642-12 5/28/2020 Soil	SB-12 (34-35) JD7642-13 5/28/2020 Soil	SB-13 (5-6) JD7642-4 5/28/2020 Soil	SB-13 (10-11) JD7642-5 5/28/2020 Soil	SB-13 (13'-14') JD7642-7 5/28/2020 Soil	SB-13 (21'-22') JD7642-9 5/28/2020 Soil	SB-13 (28'-29') JD7642-10 5/28/2020 Soil	SB-14 (6-7) JD7623-18 5/27/2020 Soil	SB-14 (11-12) JD7623-19 5/27/2020 Soil	SB-14 (22-23) JD7623-21 5/27/2020 Soil	SB-14 (29-30) JD7623-22 5/27/2020 Soil	SB-14 (34-35) JD7623-23 5/27/2020 Soil
MS Volatiles (SW846 8260C) - values reported in ug/kg																								
Acetone	50	100000	500000	ND (4.5)	ND (4.4)	18.3	ND (4.5)	25	21.1	ND (4.3)	ND (4.6)	5.4 J	8.7 J	18.2	ND (240)	ND (280)	ND (330)	5.6 J	8.6 J	44.5	ND (300)	5.3 J	40.8	31.8
Benzene	60	4800	44000	ND (0.51)	ND (0.50)	ND (0.47)	ND (0.51)	ND (0.48)	ND (0.43)	ND (0.48)	ND (0.52)	ND (0.48)	ND (0.52)	ND (0.46)	ND (28)	ND (32)	ND (37)	ND (0.46)	ND (0.48)	ND (0.49)	ND (34)	ND (0.46)	ND (0.42)	ND (0.49)
Bromochloromethane	-	-	-	ND (0.62)	ND (0.61)	ND (0.58)	ND (0.63)	ND (0.59)	ND (0.54)	ND (0.60)	ND (0.64)	ND (0.59)	ND (0.64)	ND (0.56)	ND (34)	ND (39)	ND (46)	ND (0.57)	ND (0.59)	ND (0.60)	ND (42)	ND (0.56)	ND (0.52)	ND (0.61)
Bromodichloromethane	-	-	-	ND (0.49)	ND (0.49)	ND (0.46)	ND (0.50)	ND (0.47)	ND (0.42)	ND (0.47)	ND (0.50)	ND (0.47)	ND (0.51)	ND (0.44)	ND (27)	ND (31)	ND (36)	ND (0.45)	ND (0.47)	ND (0.47)	ND (33)	ND (0.45)	ND (0.41)	ND (0.48)
Bromoform	-	-	-	ND (0.64)	ND (0.63)	ND (0.60)	ND (0.65)	ND (0.61)	ND (0.55)	ND (0.61)	ND (0.66)	ND (0.61)	ND (0.66)	ND (0.58)	ND (35)	ND (40)	ND (47)	ND (0.58)	ND (0.61)	ND (0.62)	ND (43)	ND (0.58)	ND (0.54)	ND (0.63)
Bromomethane	-	-	-	ND (1.1) [c]	ND (1.1) [c]	ND (1.0) [c]	ND (1.1) [c]	ND (1.0) [c]	ND (0.95) [c]	ND (1.1) [c]	ND (1.1) [c]	ND (1.1)	ND (1.1)	ND (1.0)	ND (60)	ND (70)	ND (81)	ND (1.0)	ND (1.1)	ND (1.1)	ND (75)	ND (1.0)	ND (0.93)	ND (1.1)
2-Butanone (MEK)	120	100000	500000	ND (4.2)	ND (4.1)	ND (3.9)	ND (4.2)	ND (3.9)	ND (3.6)	ND (4.0)	ND (4.2)	ND (3.9)	ND (4.3)	ND (3.7)	ND (230)	ND (260)	ND (300)	ND (3.8)	ND (4.0)	ND (4.0)	ND (280)	ND (3.8)	ND (3.5)	ND (4.1)
n-Butylbenzene	12000	100000	500000	ND (0.45)	ND (0.45)	ND (0.42)	ND (0.46)	ND (0.43)	ND (0.39)	ND (0.43)	ND (0.46)	ND (0.43)	ND (0.47)	ND (0.41)	135	33.5 J	ND (33)	ND (0.41)	ND (0.43)	ND (0.44)	ND (30)	ND (0.41)	ND (0.38)	ND (0.44)
sec-Butylbenzene	11000	100000	500000	ND (0.48)	ND (0.47)	ND (0.44)	ND (0.48)	ND (0.45)	ND (0.41)	ND (0.46)	ND (0.49)	ND (0.45)	ND (0.49)	ND (0.43)	112 J	30.4 J	ND (35)	ND (0.43)	ND (0.45)	ND (0.46)	ND (32)	ND (0.43)	ND (0.40)	ND (0.46)
tert-Butylbenzene	5900	100000	500000	ND (0.56)	ND (0.55)	ND (0.52)	ND (0.57)	ND (0.53)	ND (0.48)	ND (0.53)	ND (0.57)	ND (0.53)	ND (0.57)	ND (0.50)	ND (30)	ND (35)	ND (41)	ND (0.51)	0.85 J	ND (0.54)	ND (37)	ND (0.50)	0.58 J	ND (0.54)
Carbon disulfide	-			ND (1.0)	ND (1.0)	3.7	ND (1.1)	7.8	7.3	ND (0.99)	ND (1.1)	ND (0.98)	ND (1.1)	5.8	ND (56)	ND (65)	ND (76)	ND (0.94)	ND (0.98)	2.0 J	ND (70)	ND (0.93)	15.4	5.1
Carbon tetrachloride	760	2400	22000	ND (0.69)	ND (0.68)	ND (0.64)	ND (0.70)	ND (0.65)	ND (0.59)	ND (0.66)	ND (0.70)	ND (0.65)	ND (0.71)	ND (0.62)	ND (37)	ND (43)	ND (50)	ND (0.63)	ND (0.65)	ND (0.66)	ND (46)	ND (0.62)	ND (0.57)	ND (0.67)
Chlorobenzene	1100	100000	500000	ND (0.51)	ND (0.50)	ND (0.47)	ND (0.52)	ND (0.48)	ND (0.44)	ND (0.49)	ND (0.52)	ND (0.48)	ND (0.53)	ND (0.46)	ND (28)	ND (32)	ND (37)	ND (0.47)	ND (0.49)	ND (0.49)	ND (34)	ND (0.46)	ND (0.43)	ND (0.50)
Chloroethane	-			ND (0.66)	ND (0.65)	ND (0.61)	ND (0.67)	ND (0.62)	ND (0.56)	ND (0.63)	ND (0.67)	ND (0.62)	ND (0.68)	ND (0.59)	ND (36)	ND (41)	ND (48)	ND (0.60)	ND (0.63)	ND (0.63)	ND (44)	ND (0.59)	ND (0.55)	ND (0.64)
Chloroform	370	49000	350000	ND (0.55)	ND (0.54)	ND (0.50)	ND (0.55)	ND (0.52)	ND (0.47)	ND (0.52)	ND (0.56)	ND (0.52)	ND (0.56)	ND (0.49)	ND (30)	ND (34)	ND (40)	ND (0.50)	ND (0.52)	ND (0.52)	ND (37)	ND (0.49)	ND (0.45)	ND (0.53)
Chloromethane	-	-	-	ND (2.2) [d]	ND (2.1) [d]	ND (2.0) [d]	ND (2.2) [d]	ND (2.1) [d]	ND (1.9) [d]	ND (2.1)	ND (2.2)	ND (2.1) [d]	ND (2.2)	ND (2.0) [d]	ND (120)	ND (140)	ND (160)	ND (2.0) [d]	ND (2.1) [d]	ND (2.1)	ND (150)	ND (2.0)	ND (1.8)	ND (2.1)
Cyclohexane	-	-	-	ND (0.73)	ND (0.72)	ND (0.68)	ND (0.74)	ND (0.69)	ND (0.63)	ND (0.70)	ND (0.75)	ND (0.69) [d]	ND (0.75)	ND (0.66) [d]	ND (40)	ND (46)	ND (53)	ND (0.67) [d]	ND (0.70) [d]	ND (0.70)	ND (49)	ND (0.66)	ND (0.61)	ND (0.71)
1,2-Dibromo-3-chloropropane	-	-	-	ND (0.93)	ND (0.92)	ND (0.86)	ND (0.95)	ND (0.88)	ND (0.80)	ND (0.89)	ND (0.95)	ND (0.88)	ND (0.96)	ND (0.84)	ND (51)	ND (59)	ND (68)	ND (0.85)	ND (0.88)	ND (0.90)	ND (63)	ND (0.84)	ND (0.78)	ND (0.91)
Dibromochloromethane	-			ND (0.62)	ND (0.61)	ND (0.58)	ND (0.63)	ND (0.59)	ND (0.54)	ND (0.60)	ND (0.64)	ND (0.59)	ND (0.64)	ND (0.56)	ND (34)	ND (39)	ND (46)	ND (0.57)	ND (0.59)	ND (0.60)	ND (42)	ND (0.56)	ND (0.52)	ND (0.61)
1,2-Dibromoethane	-	-	-	ND (0.47)	ND (0.46)	ND (0.43)	ND (0.48)	ND (0.44)	ND (0.40)	ND (0.45)	ND (0.48)	ND (0.44)	ND (0.48) [b]	ND (0.42)	ND (25)	ND (30)	ND (34)	ND (0.43)	ND (0.45)	ND (0.45) [b]	ND (31)	ND (0.42) b	ND (0.39) b	ND (0.46) b
1,2-Dichlorobenzene	1100	100000	500000	ND (0.61)	ND (0.60)	ND (0.56)	ND (0.62)	ND (0.58)	ND (0.52)	ND (0.58)	ND (0.62)	ND (0.58)	ND (0.63)	ND (0.55)	ND (33)	ND (38)	ND (44)	ND (0.55)	ND (0.58)	ND (0.58)	ND (41)	ND (0.55)	ND (0.51)	ND (0.59)
1,3-Dichlorobenzene	2400	49000	280000	ND (0.55)	ND (0.54)	ND (0.51)	ND (0.56)	ND (0.52)	ND (0.47)	ND (0.53)	ND (0.56)	ND (0.52)	ND (0.57)	ND (0.50)	ND (30)	ND (35)	ND (40)	ND (0.50)	ND (0.52)	ND (0.53)	ND (37)	ND (0.50)	ND (0.46)	ND (0.54)
1,4-Dichlorobenzene	1800	13000	130000	ND (0.55)	ND (0.54)	ND (0.51)	ND (0.56)	ND (0.52)	ND (0.47)	ND (0.53)	ND (0.56)	ND (0.52)	ND (0.57)	ND (0.49)	ND (30)	ND (35)	ND (40)	ND (0.50)	ND (0.52)	ND (0.53)	ND (37)	ND (0.50)	ND (0.46)	ND (0.54)
Dichlorodifluoromethane	-	-	-	ND (0.81) [d]	ND (0.80) [d]	ND (0.75) [d]	ND (0.82)	ND (0.77)	ND (0.69)	ND (0.77)	ND (0.83)	ND (0.77)	ND (0.83)	ND (0.73)	ND (44)	ND (51)	ND (59)	ND (0.74)	ND (0.77)	ND (0.78)	ND (54)	ND (0.73)	ND (0.68)	ND (0.79)
1,1-Dichloroethane	270	26000	240000	ND (0.55)	ND (0.54)	ND (0.51)	ND (0.56)	ND (0.52)	ND (0.47)	ND (0.53)	ND (0.56)	ND (0.52)	ND (0.57)	ND (0.50)	ND (30)	ND (35)	ND (40)	ND (0.50)	ND (0.52)	ND (0.53)	ND (37)	ND (0.50)	ND (0.46)	ND (0.54)
1,2-Dichloroethane	20	3100	30000	ND (0.52)	ND (0.52)	ND (0.49)	ND (0.53)	ND (0.50)	ND (0.45)	ND (0.50)	ND (0.53)	ND (0.50)	ND (0.54)	ND (0.47)	ND (28)	ND (33)	ND (38)	ND (0.48)	ND (0.50)	ND (0.50)	ND (35)	ND (0.47)	ND (0.44)	ND (0.51)
1,1-Dichloroethene	330	100000	500000	ND (0.73)	ND (0.72)	ND (0.68)	ND (0.74)	ND (0.69)	ND (0.63)	ND (0.70)	ND (0.74)	ND (0.69)	ND (0.75)	ND (0.66)	ND (40)	ND (46)	ND (53)	ND (0.66)	ND (0.69)	ND (0.70)	ND (49)	ND (0.66)	ND (0.61)	ND (0.71)
cis-1,2-Dichloroethene	250	100000	500000	ND (0.94)	93	79.1	ND (0.95)	54.5	122	ND (0.89)	ND (0.95)	ND (0.89)	16.5	39.2	ND (51)	92.6	**264**	ND (0.85)	3.7	ND (0.90)	ND (63)	ND (0.84)	34.7	57.2
trans-1,2-Dichloroethene	190	100000	500000	ND (0.68)	0.88 J	6.1	ND (0.69)	1.7	1.2	ND (0.65)	ND (0.69)	ND (0.64)	ND (0.70)	ND (0.61)	ND (37)	ND (43)	ND (50)	ND (0.62)	ND (0.65)	ND (0.65)	ND (46)	ND (0.61)	1.4	ND (0.66)
1,2-Dichloropropane	-			ND (0.53)	ND (0.52)	ND (0.49)	ND (0.54)	ND (0.50)	ND (0.45)	ND (0.50)	ND (0.54)	ND (0.50)	ND (0.54)	ND (0.47)	ND (29)	ND (33)	ND (38)	ND (0.48)	ND (0.50)	ND (0.51)	ND (35)	ND (0.48)	ND (0.44)	ND (0.51)
cis-1,3-Dichloropropene	-	-	-	ND (0.53)	ND (0.52)	ND (0.49)	ND (0.54)	ND (0.50)	ND (0.45)	ND (0.51)	ND (0.54)	ND (0.50)	ND (0.54)	ND (0.48)	ND (29)	ND (33)	ND (39)	ND (0.48)	ND (0.50)	ND (0.51)	ND (36)	ND (0.48)	ND (0.44)	ND (0.51)
trans-1,3-Dichloropropene	-	-	-	ND (0.51)	ND (0.50)	ND (0.47)	ND (0.52)	ND (0.48)	ND (0.44)	ND (0.49)	ND (0.52)	ND (0.48)	ND (0.52)	ND (0.46)	ND (28)	ND (32)	ND (37)	ND (0.46)	ND (0.48)	ND (0.49)	ND (34)	ND (0.46)	ND (0.42)	ND (0.50)
Ethylbenzene	1000	41000	390000	ND (0.62)	ND (0.61)	ND (0.57)	ND (0.62)	ND (0.58)	ND (0.53)	ND (0.59)	ND (0.63)	ND (0.58)	ND (0.63)	ND (0.55)	547	506	**1120**	ND (0.56)	ND (0.58)	ND (0.59)	**1370**	ND (0.55)	ND (0.51)	1.4
Freon 113	-			ND (1.1)	ND (1.1)	ND (1.0)	ND (1.1)	ND (1.1)	ND (0.97)	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.2)	ND (1.0)	ND (61)	ND (71)	ND (82)	ND (1.0)	ND (1.1)	ND (1.1)	ND (76)	ND (1.0)	ND (0.94)	ND (1.1)
2-Hexanone	-	-	-	ND (2.4)	ND (2.3)	ND (2.2)	ND (2.4)	ND (2.2)	ND (2.0)	ND (2.3)	ND (2.4)	ND (2.2)	ND (2.4)	ND (2.1)	ND (130)	ND (150)	ND (170)	ND (2.1)	ND (2.2)	ND (2.3)	ND (160)	ND (2.1)	ND (2.0)	ND (2.3)
Isopropylbenzene	-			ND (0.78)	ND (0.76)	ND (0.72)	ND (0.79)	ND (0.73)	ND (0.67)	ND (0.74)	ND (0.79)	ND (0.74)	ND (0.80)	ND (0.70)	985	262	331	ND (0.71)	0.89 J	ND (0.75)	146 J	ND (0.70)	1.0 J	ND (0.76)
p-Isopropyltoluene	-			ND (0.44)	ND (0.43)	ND (0.41)	ND (0.45)	ND (0.42)	ND (0.38)	ND (0.42)	ND (0.45)	ND (0.42)	ND (0.45)	ND (0.40)	27.7 J	ND (28)	ND (32)	ND (0.40)	ND (0.42)	ND (0.42)	ND (30)	ND (0.40)	ND (0.37)	ND (0.43)
Methyl Acetate	-	-	-	ND (1.6)	ND (1.5)	ND (1.4)	ND (1.6)	ND (1.5)	ND (1.3)	ND (1.5)	ND (1.6)	ND (1.5)	ND (1.6)	ND (1.4)	ND (84)	ND (98)	ND (110)	ND (1.4)	ND (1.5)	ND (1.5)	ND (100)	ND (1.4)	ND (1.3)	ND (1.5)
Methylcyclohexane	-	-	-	ND (0.98)	ND (0.96)	ND (0.90)	ND (0.99)	ND (0.92)	ND (0.84)	ND (0.93)	ND (0.99)	ND (0.92)	ND (1.0)	ND (0.88)	ND (53)	ND (61)	ND (71)	ND (0.89)	ND (0.93)	ND (0.94)	ND (65)	ND (0.88)	ND (0.81)	ND (0.95)
Methyl Tert Butyl Ether	930	100000	500000	ND (0.52)	ND (0.51)	ND (0.48)	ND (0.53)	ND (0.49)	ND (0.45)	ND (0.50)	ND (0.53)	ND (0.49)	ND (0.54)	ND (0.47)	ND (28)	ND (33)	ND (38)	ND (0.48)	ND (0.50)	ND (0.50)	ND (35)	ND (0.47)	ND (0.44)	ND (0.51)
4-Methyl-2-pentanone(MIBK)	-			ND (2.5)	ND (2.5)	ND (2.3)	ND (2.6)	ND (2.4)	ND (2.2)	ND (2.4)	ND (2.6)	ND (2.4) [a]	ND (2.6) [a]	ND (2.3) [a]	ND (140)	ND (160)	ND (180)	ND (2.3) [a]	ND (2.4) [a]	ND (2.4) [a]	ND (170)	ND (2.3) a	ND (2.1) a	ND (2.5) a
Methylene chloride	50	100000	500000	ND (2.8)	ND (2.7)	ND (2.6)	ND (2.8)	ND (2.6)	ND (2.4)	ND (2.7)	ND (2.8)	ND (2.6)	ND (2.9)	ND (2.5)	ND (150)	ND (180)	ND (200)	ND (2.5)	ND (2.6)	ND (2.7)	ND (190)	ND (2.5)	ND (2.3)	ND (2.7)
Naphthalene	12000	100000	500000	ND (2.8)	ND (2.7)	ND (2.6)	ND (2.8)	ND (2.6)	ND (2.4)	ND (2.7)	ND (2.8)	ND (2.6)	ND (2.9)	ND (2.5)	ND (150)	ND (180)	ND (200)	ND (2.5)	ND (2.6)	ND (2.7)	ND (190)	ND (2.5)	ND (2.3)	ND (2.7)
n-Propylbenzene	3900	100000	500000	ND (0.52)	ND (0.52)	ND (0.49)	ND (0.53)	ND (0.50)	ND (0.45)	ND (0.50)	ND (0.53)	ND (0.50)	ND (0.54)	0.52 J	1930	588	513	ND (0.48)	ND (0.50)	ND (0.50)	238	ND (0.47)	ND (0.44)	ND (0.51)
Styrene	-			ND (0.64)	ND (0.63)	ND (0.59)	ND (0.65)	ND (0.61)	ND (0.55)	ND (0.61)	ND (0.65)	ND (0.61)	ND (0.66)	ND (0.58)	ND (35)	ND (40)	ND (47)	ND (0.58)	ND (0.61)	ND (0.62)	ND (43)	ND (0.58)	ND (0.53)	ND (0.62)
1,1,2,2-Tetrachloroethane	-			ND (0.67)	ND (0.66)	ND (0.62)	ND (0.68)	ND (0.63)	ND (0.57)	ND (0.64)	ND (0.68)	ND (0.63)	ND (0.69)	ND (0.60)	ND (36)	ND (42)	ND (49)	ND (0.61)	ND (0.63)	ND (0.64)	ND (45)	ND (0.60)	ND (0.56)	ND (0.65)
Tetrachloroethene	1300	19000	150000	3.4	23.1	42.5	ND (0.66)	**2250**	29.2	ND (0.62)	ND (0.66)	ND (0.61)	3.4	21	ND (35)	ND (41)	ND (47)	1.1 J	165	ND (0.62)	ND (43)	ND (0.58)	**7330**	215
Toluene	700	100000	500000	ND (0.59)	ND (0.58)	ND (0.54)	ND (0.59)	ND (0.55)	ND (0.50)	ND (0.56)	ND (0.60)	ND (0.55)	ND (0.60)	ND (0.53)	63.7	399	ND (43)	ND (0.53)	ND (0.56)	ND (0.56)	ND (39)	ND (0.53)	ND (0.49)	ND (0.57)
1,2,3-Trichlorobenzene	-			ND (2.8)	ND (2.7)	ND (2.6)	ND (2.8)	ND (2.6)	ND (2.4)	ND (2.7)	ND (2.8)	ND (2.6)	ND (2.9)	ND (2.5)	ND (150)	ND (180)	ND (200)	ND (2.5)	ND (2.6)	ND (2.7)	ND (190)	ND (2.5)	ND (2.3)	ND (2.7)
1,2,4-Trichlorobenzene	-			ND (2.8)	ND (2.7)	ND (2.6)	ND (2.8)	ND (2.6)	ND (2.4)	ND (2.7)	ND (2.8)	ND (2.6)	ND (2.9)	ND (2.5)	ND (150)	ND (180)	ND (200)	ND (2.5)	ND (2.6)	ND (2.7)	ND (190)	ND (2.5)	ND (2.3)	ND (2.7)
1,1,1-Trichloroethane	680	100000	500000	ND (0.54)	ND (0.53)	ND (0.50)	ND (0.55)	ND (0.51)	ND (0.46)	ND (0.51)	ND (0.55)	ND (0.51)	ND (0.55)	ND (0.48)	ND (29)	ND (34)	ND (39)	ND (0.49)	ND (0.51)	ND (0.52)	ND (36)	ND (0.49)	ND (0.45)	ND (0.52)
1,1,2-Trichloroethane	-	-	-	ND (0.62)	ND (0.61)	ND (0.57)	ND (0.63)	ND (0.58)	ND (0.53)	ND (0.59)	ND (0.63)	ND (0.58)	ND (0.63)	ND (0.55)	ND (34)	ND (39)	ND (45)	ND (0.56)	ND (0.59)	ND (0.59)	ND (41)	ND (0.56)	ND (0.51)	ND (0.60)
Trichloroethene	470	21000	200000	ND (0.85)	62	140	ND (0.86)	57.2	9.4	ND (0.81)	ND (0.87)	ND (0.80)	8.3	9.1	ND (46)	ND (53)	ND (62)	ND (0.77)	39.4	ND (0.82)	ND (57)	ND (0.77)	147	53.6
Trichlorofluoromethane	-	-	-	ND (0.76)	ND (0.75)	ND (0.71)	ND (0.77)	ND (0.72)	ND (0.65)	ND (0.73)	ND (0.78)	ND (0.72)	ND (0.78)	ND (0.69)	ND (41)	ND (48)	ND (56)	ND (0.69)	ND (0.72)	ND (0.73)	ND (51)	ND (0.69)	ND (0.64)	ND (0.74)
1,2,4-Trimethylbenzene	3600	52000	190000	ND (0.71)	ND (0.70)	ND (0.66)	ND (0.72)	ND (0.67)	ND (0.61)	ND (0.68)	ND (0.72)	ND (0.67)	ND (0.73)	2.1	2670	1590	1880	ND (0.64)	0.83 J	ND (0.68)	918	ND (0.64)	ND (0.59)	0.89 J
1,3,5-Trimethylbenzene	8400	52000	190000	ND (0.48)	ND (0.47)	ND (0.44)	ND (0.49)	ND (0.45)	ND (0.41)	ND (0.46)	ND (0.49)	ND (0.45)	ND (0.49)	0.68 J	546	499	632	ND (0.44)	ND (0.46)	ND (0.46)	297	ND (0.43)	ND (0.40)	ND (0.47)
Vinyl chloride	20	900	13000	ND (0.54)	3.9	4.8	ND (0.54)	1.1 J	10.4	ND (0.51)	ND (0.55)	ND (0.51)	ND (0.55)	ND (0.48)	ND (29)	ND (34)	ND (39)	ND (0.49)	ND (0.51)	ND (0.52)	ND (36)	ND (0.48)	ND (0.45)	0.86 J
m,p-Xylene	260	100000	500000	ND (1.0)	ND (0.98)	ND (0.92)	ND (1.0)	ND (0.94)	ND (0.86)	ND (0.95)	ND (1.0)	ND (0.95)	ND (1.0)	0.91 J	**1050**	**2010**	**5100**	ND (0.91)	ND (0.95)	ND (0.96)	**5090**	ND (0.90)	ND (0.83)	4.6
o-Xylene	260	100000	500000	ND (0.65)	ND (0.64)	ND (0.60)	ND (0.66)	ND (0.61)	ND (0.56)	ND (0.62)	ND (0.66)	ND (0.62)	ND (0.67)	ND (0.58)	186	**699**	**1960**	ND (0.59)	ND (0.62)	ND (0.62)	135	ND (0.59)	ND (0.54)	ND (0.63)
Xylene (total)	260	100000	500000	ND (0.65)	ND (0.64)	ND (0.60)	ND (0.66)	ND (0.61)	ND (0.56)	ND (0.62)	ND (0.66)	ND (0.62)	ND (0.67)	0.91 J	**1240**	**2710**	**7060**	ND (0.59)	ND (0.62)	ND (0.62)	**5230**	ND (0.59)	ND (0.54)	4.6
Solids, Percent	%	%	%	78.6	77.3	82.1	77.5	79.1	84.4	81	75.9	80.3	74	83.2	81.7	72.2	73.3	79.6	76.2	81.9	75.2	79	79.1	78.2

Notes
ND - Non-Dectect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b This compound in blank spike is outside in house QC limits bias high.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in h
d Associated CCV outside of control limits low.
e Elevated detection limit due to dilution required for high interfering element.
f This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control lim

Table 11 - Soil Analytical Results
175 Roger Avenue - BCP Site No. C130164
Semi-Volatile Organic Compounds in Soil

Client Sample ID:	NY SCO Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6	NY SCO - Commercial w/CP-51 (10/10) (6 NYCRR 375-6 (12/06)	HA-1 (1-2')	HA-2 (1-2')	HA-3 (1-2')	HA-4 (1-2')	HA-5(4-4.5)	HA-6 (1-2')	HA-7 (1-2')	HA-8 (1-2')	HA-9 (1-2')	HA-10 (1-2)	HA-11 (4-4.5')	HA-12 (1-2)	HA-13 (1-2)	HA-14 (1-2)
Lab Sample ID:				JD1592-1	JD1592-2	JD1592-3	JD1592-4	JD1645-1	JD1645-2	JD1645-3	JD1645-4	JD1645-5	JD1731-1	JD1731-2	JD1731-3	JD1731-4	JD1731-5
Date Sampled:				1/13/2020	1/13/2020	1/13/2020	1/13/2020	1/14/2020	1/14/2020	1/14/2020	1/14/2020	1/14/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
MS Semi-Volatiles (SW846 8270D - values reported in ug/kg																	
2-Chlorophenol	-			ND (18)	ND (20)	ND (17)	ND (18)	ND (19)	ND (18)	ND (18)	ND (18)	ND (18)	ND (17)	ND (18)	ND (17)	ND (16)	ND (17)
4-Chloro-3-methyl phenol	-	-	-	ND (22) [a]	ND (25) [a]	ND (22) [a]	ND (22) [a]	ND (24)	ND (22)	ND (23)	ND (22)	ND (22)	ND (21)	ND (22)	ND (21)	ND (20)	ND (21)
2,4-Dichlorophenol	-			ND (31)	ND (35)	ND (30)	ND (31)	ND (33)	ND (31)	ND (31)	ND (31)	ND (30)	ND (30)	ND (30)	ND (29)	ND (28)	ND (29)
2,4-Dimethylphenol	-	-	-	ND (64) [a]	ND (73) [a]	ND (63) [a]	ND (65) [a]	ND (69) [a]	ND (64) [a]	ND (65) [a]	ND (65) [a]	ND (63) [a]	ND (62) [a]	ND (64) [a]	ND (62) [a]	ND (58) [a]	ND (60) [a]
2,4-Dinitrophenol	-			ND (140)	ND (150)	ND (130)	ND (140)	ND (150)	ND (140)	ND (140)	ND (140)	ND (130)	ND (130)	ND (130)	ND (130)	ND (120)	ND (130)
4,6-Dinitro-o-cresol	-	-	-	ND (39)	ND (44)	ND (38)	ND (39)	ND (41)	ND (38)	ND (39)	ND (39)	ND (38)	ND (37)	ND (38)	ND (37)	ND (35)	ND (36)
2-Methylphenol	330	100000	500000	ND (23)	ND (26)	ND (22)	ND (23)	ND (25)	ND (23)	ND (24)	ND (23)	ND (23)	ND (22)	ND (23)	ND (22)	ND (21)	ND (22)
3&4-Methylphenol	-	-	-	ND (30)	ND (34)	ND (29) [a]	ND (30) [a]	ND (32)	ND (30)	ND (30)	ND (30)	ND (29)	ND (28)	ND (29)	ND (28)	ND (27)	ND (28)
2-Nitrophenol	-			ND (24)	ND (27)	ND (23)	ND (24)	ND (25)	ND (24)	ND (24)	ND (24)	ND (23)	ND (23)	ND (24)	ND (23)	ND (22)	ND (22)
4-Nitrophenol	-			ND (96)	ND (110)	ND (94)	ND (97)	ND (100)	ND (96)	ND (98)	ND (97)	ND (95)	ND (92) [a]	ND (95)	ND (92)	ND (88) [a]	ND (91) [a]
Pentachlorophenol	800	6700	6700	ND (34)	ND (39)	ND (33)	ND (34)	ND (36)	ND (34)	ND (35)	ND (34)	ND (33)	ND (32)	ND (34)	ND (32)	ND (31)	ND (32)
Phenol	330	100000	500000	ND (19)	ND (21)	ND (18)	ND (19)	ND (20)	ND (19)	ND (19)	ND (19)	ND (19)	ND (18)	ND (19)	ND (18)	ND (17)	ND (18)
2,3,4,6-Tetrachlorophenol	-	-	-	ND (24)	ND (27)	ND (23)	ND (24)	ND (26)	ND (24)	ND (24)	ND (24)	ND (23)	ND (23) [a]	ND (24)	ND (23)	ND (22) [a]	ND (22) [a]
2,4,5-Trichlorophenol	-			ND (27)	ND (31)	ND (26)	ND (27)	ND (29)	ND (27)	ND (28)	ND (27)	ND (27)	ND (26)	ND (27)	ND (26)	ND (25)	ND (25)
2,4,6-Trichlorophenol	-			ND (21)	ND (25)	ND (21)	ND (22)	ND (23)	ND (21)	ND (22)	ND (22)	ND (21)	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)
Acenaphthene	20000	100000	500000	ND (12)	ND (14)	ND (12)	ND (13)	ND (13)	ND (12)	ND (13)	ND (13)	15.9 J	ND (12)	ND (12)	ND (12)	ND (11)	ND (12)
Acenaphthylene	100000	100000	500000	ND (18)	ND (21)	ND (18)	ND (18)	ND (20)	ND (18)	ND (19)	ND (19)	40.7	ND (18)	ND (18)	ND (18)	ND (17)	ND (17)
Acetophenone	-	-	-	ND (7.7)	ND (8.8)	ND (7.6)	ND (7.8)	ND (8.3)	ND (7.7)	ND (7.9)	ND (7.8)	ND (7.6)	ND (7.4)	ND (7.7)	ND (7.4)	ND (7.1)	ND (7.3)
Anthracene	100000	100000	500000	ND (22)	ND (25)	ND (22)	ND (22)	ND (24)	ND (22)	ND (23)	ND (22)	135	ND (21)	ND (22)	ND (21)	ND (20)	ND (21)
Atrazine	-	-	-	ND (15)	ND (18)	ND (15)	ND (16)	ND (17)	ND (15)	ND (16)	ND (16)	ND (15)	ND (15)	ND (15)	ND (15)	ND (14)	ND (15)
Benzo(a)anthracene	1000	1000	5600	24.1 J	16.1 J	36.6	10.3 J	ND (11)	11.9 J	17.9 J	ND (10)	**1070**	ND (9.8)	ND (10)	ND (9.8)	25.2 J	ND (9.6)
Benzo(a)pyrene	1000	1000	1000	33.3 J	ND (19)	36.5	ND (17)	ND (18)	ND (16)	18.8 J	ND (17)	813	ND (16)	ND (16)	ND (16)	24.1 J	ND (15)
Benzo(b)fluoranthene	1000	1000	5600	38	19.5 J	47.7	ND (16)	ND (17)	ND (16)	26.2 J	ND (16)	**1060**	ND (15)	ND (16)	ND (15)	29.1 J	ND (15)
Benzo(g,h,i)perylene	100000	100000	500000	26.2 J	ND (21)	27.5 J	ND (18)	ND (19)	ND (18)	ND (18)	ND (18)	433	ND (17)	ND (18)	ND (17)	ND (16)	ND (17)
Benzo(k)fluoranthene	800	3900	56000	ND (17)	ND (19)	24.1 J	ND (17)	ND (18)	ND (17)	ND (17)	ND (17)	370	ND (16)	ND (17)	ND (16)	ND (15)	ND (16)
4-Bromophenyl phenyl ether	-	-	-	ND (14)	ND (16)	ND (14)	ND (14)	ND (15)	ND (14)	ND (14)	ND (14)	ND (14)	ND (13)	ND (14)	ND (13)	ND (13)	ND (13)
Butyl benzyl phthalate	-			ND (8.8)	ND (10)	ND (8.6)	ND (8.9)	ND (9.4)	ND (8.8)	ND (9.0)	ND (8.9)	ND (8.7)	ND (8.4)	ND (8.7)	ND (8.4)	ND (8.0)	ND (8.3)
1,1'-Biphenyl	-			ND (4.9)	ND (5.6)	ND (4.8)	ND (5.0)	ND (5.3)	ND (4.9)	ND (5.0)	ND (5.0)	5.0 J	ND (4.7)	ND (4.9)	ND (4.7)	ND (4.5)	ND (4.7)
Benzaldehyde	-	-	-	ND (8.9)	ND (10)	ND (8.7)	ND (9.0)	ND (9.6)	ND (8.9)	ND (9.1)	ND (9.0)	ND (8.8)	ND (8.6)	ND (8.9)	ND (8.6)	ND (8.1)	ND (8.4)
2-Chloronaphthalene	-	-	-	ND (8.6)	ND (9.8)	ND (8.4)	ND (8.7)	ND (9.2)	ND (8.6)	ND (8.8)	ND (8.7)	ND (8.4)	ND (8.2)	ND (8.5)	ND (8.2)	ND (7.8)	ND (8.1)
4-Chloroaniline	-			ND (13)	ND (15)	ND (13)	ND (13)	ND (14)	ND (13)	ND (13)	ND (13)	ND (13)	ND (12)	ND (13)	ND (12)	ND (12)	ND (12)
Carbazole	-	-	-	ND (5.2)	ND (6.0)	ND (5.1)	ND (5.3)	ND (5.6)	ND (5.2)	ND (5.3)	ND (5.3)	17.4 J	ND (5.0)	ND (5.2)	ND (5.0)	ND (4.8)	ND (4.9)
Caprolactam	-	-	-	ND (14)	ND (16)	ND (14)	ND (14)	ND (15)	ND (14)	ND (15)	ND (14)	ND (14)	ND (14)	ND (14)	ND (14)	ND (13)	ND (13)
Chrysene	1000	3900	56000	20.9 J	ND (13)	37.5	ND (11)	ND (12)	ND (11)	13.3 J	ND (11)	950	ND (11)	ND (11)	ND (11)	20.9 J	ND (11)
bis(2-Chloroethoxy)methane	-	-	-	ND (7.7)	ND (8.8)	ND (7.5)	ND (7.8)	ND (8.3)	ND (7.7)	ND (7.9)	ND (7.8)	ND (7.6)	ND (7.4)	ND (7.6)	ND (7.4)	ND (7.0)	ND (7.3)
bis(2-Chloroethyl)ether	-	-	-	ND (16)	ND (18)	ND (15)	ND (16)	ND (17)	ND (15)	ND (16)	ND (16)	ND (15)	ND (15)	ND (15)	ND (15)	ND (14)	ND (15)
2,2'-Oxybis(1-chloropropane)	-	-	-	ND (13)	ND (15)	ND (13)	ND (13)	ND (14)	ND (13)	ND (13)	ND (13)	ND (13)	ND (12)	ND (13)	ND (12)	ND (12)	ND (12)
4-Chlorophenyl phenyl ether	-	-	-	ND (12)	ND (13)	ND (11)	ND (12)	ND (12)	ND (12)	ND (12)	ND (12)	ND (11)	ND (11)	ND (12)	ND (11)	ND (11)	ND (11)
2,4-Dinitrotoluene	-	-	-	ND (11) [a]	ND (13) [a]	ND (11)	ND (11)	ND (12)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (10)	ND (11)
2,6-Dinitrotoluene	-			ND (18)	ND (21)	ND (18)	ND (18)	ND (19)	ND (18)	ND (18)	ND (18)	ND (18)	ND (17)	ND (18)	ND (17)	ND (16)	ND (17)
3,3'-Dichlorobenzidine	-	-	-	ND (30) [a]	ND (34) [a]	ND (29)	ND (30)	ND (32)	ND (30)	ND (31)	ND (30)	ND (30)	ND (29)	ND (30)	ND (29)	ND (27)	ND (28)
1,4-Dioxane	100	13000	130000	ND (24)	ND (27)	ND (23)	ND (24)	ND (25)	ND (24)	ND (24)	ND (24)	ND (23)	ND (23)	ND (24)	ND (23)	ND (22)	ND (22)
Dibenzo(a,h)anthracene	330	330	560	ND (16) [a]	ND (18) [a]	ND (16)	ND (16)	ND (17)	ND (16)	ND (16)	ND (16)	140	ND (15)	ND (16)	ND (15)	ND (15)	ND (15)
Dibenzofuran	7000	59000	350000	ND (15)	ND (17)	ND (14)	ND (15)	ND (16)	ND (15)	ND (15)	ND (15)	ND (14)	ND (14)	ND (15)	ND (14)	ND (13)	ND (14)
Di-n-butyl phthalate	-			ND (5.9)	ND (6.7)	ND (5.7)	ND (5.9)	ND (6.3)	ND (5.9)	ND (6.0)	ND (5.9)	ND (5.8)	ND (5.6)	ND (5.8)	ND (5.6)	ND (5.4)	ND (5.5)
Di-n-octyl phthalate	-			ND (9.0)	ND (10)	ND (8.8)	ND (9.1)	ND (9.6)	ND (9.0)	ND (9.2)	ND (9.1)	ND (8.8)	ND (8.6)	ND (8.9)	ND (8.6)	ND (8.2)	ND (8.5)
Diethyl phthalate	-			ND (7.7)	ND (8.8)	ND (7.5)	ND (7.7)	ND (8.2)	ND (7.7)	ND (7.8)	ND (7.8)	ND (7.6)	ND (7.4)	ND (7.6)	ND (7.4)	ND (7.0)	ND (7.2)
Dimethyl phthalate	-			ND (6.4)	ND (7.3)	ND (6.3)	ND (6.5)	ND (6.9)	ND (6.4)	ND (6.5)	ND (6.5)	ND (6.3)	ND (6.2)	ND (6.4)	ND (6.2)	ND (5.8)	ND (6.0)
bis(2-Ethylhexyl)phthalate	-			46.7 J	ND (9.6)	ND (8.2) [a]	ND (8.5) [a]	ND (9.0)	ND (8.4)	58.9 J	ND (8.5)	ND (8.3)	ND (8.1)	ND (8.4)	ND (8.1)	ND (7.7)	ND (7.9)
Fluoranthene	100000	100000	500000	40	21.6 J	55.7	ND (16)	ND (17)	ND (16)	24.5 J	ND (16)	1580	ND (15)	ND (16)	ND (15)	29.8 J	ND (15)
Fluorene	30000	100000	500000	ND (17)	ND (19)	ND (16)	ND (17)	ND (18)	ND (17)	ND (17)	ND (17)	ND (16)	ND (16)	ND (16)	ND (16)	ND (15)	ND (16)
Hexachlorobenzene	330	1200	6000	ND (9.1)	ND (10)	ND (8.9)	ND (9.2)	ND (9.8)	ND (9.1)	ND (9.3)	ND (9.2)	ND (9.0)	ND (8.8)	ND (9.0)	ND (8.7)	ND (8.3)	ND (8.6)
Hexachlorobutadiene	-	-	-	ND (14)	ND (17)	ND (14)	ND (15)	ND (16)	ND (14)	ND (15)	ND (15)	ND (14)	ND (14)	ND (14)	ND (14)	ND (13)	ND (14)
Hexachlorocyclopentadiene	-			ND (14)	ND (16)	ND (14)	ND (14)	ND (15)	ND (14)	ND (15)	ND (14)	ND (14)	ND (14)	ND (14)	ND (14)	ND (13)	ND (14)
Hexachloroethane	-	-	-	ND (18)	ND (20)	ND (17)	ND (18)	ND (19)	ND (18)	ND (18)	ND (18)	ND (18)	ND (17)	ND (18)	ND (17)	ND (16)	ND (17)
Indeno(1,2,3-cd)pyrene	500	500	5600	25.4 J	ND (19)	25.5 J [b]	ND (17) [a]	ND (18)	ND (17)	ND (17)	ND (17)	**534**	ND (16) [a]	ND (17)	ND (16)	15.7 J [b]	ND (16) [a]
Isophorone	-			ND (7.7)	ND (8.8)	ND (7.5)	ND (7.8)	ND (8.3)	ND (7.7)	ND (7.9)	ND (7.8)	ND (7.6)	ND (7.4)	ND (7.6)	ND (7.4)	ND (7.0)	ND (7.3)
2-Methylnaphthalene	-			ND (8.1)	ND (9.3)	ND (7.9)	ND (8.2)	ND (8.7)	ND (8.1)	ND (8.3)	ND (8.2)	ND (8.0)	ND (7.8)	ND (8.1)	ND (7.8)	ND (7.4)	ND (7.7)
2-Nitroaniline	-			ND (8.5)	ND (9.7)	ND (8.3)	ND (8.6)	ND (9.1)	ND (8.5)	ND (8.7)	ND (8.6)	ND (8.4)	ND (8.2)	ND (8.4)	ND (8.2)	ND (7.8)	ND (8.0)
3-Nitroaniline	-			ND (9.0) [a]	ND (10) [a]	ND (8.8)	ND (9.1)	ND (9.6)	ND (9.0)	ND (9.2)	ND (9.1)	ND (8.9)	ND (8.7)	ND (8.9)	ND (8.6)	ND (8.2)	ND (8.5)
4-Nitroaniline	-	-	-	ND (9.3)	ND (11)	ND (9.1)	ND (9.4)	ND (10)	ND (9.3)	ND (9.5)	ND (9.4)	ND (9.2)	ND (9.0)	ND (9.3)	ND (9.0)	ND (8.5)	ND (8.8)
Naphthalene	12000	100000	500000	ND (10)	ND (12)	ND (9.9)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (9.8)	ND (10)	ND (9.7)	ND (9.3)	ND (9.6)
Nitrobenzene	-	15000	69000	ND (14)	ND (16)	ND (14)	ND (14)	ND (15)	ND (14)	ND (14)	ND (14)	ND (14)	ND (13)	ND (14)	ND (13)	ND (13)	ND (13)
N-Nitroso-di-n-propylamine	-	-	-	ND (10)	ND (12)	ND (10)	ND (11)	ND (11)	ND (10)	ND (11)	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (9.5)	ND (9.8)
N-Nitrosodiphenylamine	-			ND (13)	ND (15)	ND (13)	ND (13)	ND (14)	ND (13)	ND (13)	ND (13)	ND (13)	ND (13)	ND (13)	ND (13)	ND (12)	ND (12)
Phenanthrene	100000	100000	500000	15.5 J	ND (14)	14.3 J	ND (12)	ND (13)	ND (12)	12.3 J	ND (12)	243	ND (12)	ND (12)	ND (12)	16.9 J	ND (11)
Pyrene	100000	100000	500000	36.4	20.2 J	52.3	ND (12)	ND (12)	ND (12)	20.3 J	ND (12)	1520	ND (11)	ND (11)	ND (11)	27.1 J	ND (11)
1,2,4,5-Tetrachlorobenzene	-	-	-	ND (9.2)	ND (10)	ND (8.9)	ND (9.2)	ND (9.8)	ND (9.1)	ND (9.3)	ND (9.3)	ND (9.0)	ND (8.8)	ND (9.1)	ND (8.8)	ND (8.3)	ND (8.6)

Notes
ND - Non-Dectect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b This compound in blank spike is outside in house QC limits bias high.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Associated CCV outside of control limits low.
e Elevated detection limit due to dilution required for high interfering element.
f This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

Table 11 - Soil Analytical Results
175 Roger Avenue - BCP Site No. C130164
Metals in Soils

Client Sample ID:	NY SCO Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6	NY SCO - Commercial w/CP-51 (10/10) (6 NYCRR 375-6 (12/06)	HA-1 (1-2')	HA-2 (1-2')	HA-3 (1-2')	HA-4 (1-2')	HA-5(4-4.5)	HA-6 (1-2')	HA-7 (1-2')	HA-8 (1-2')	HA-9 (1-2')	HA-10 (1-2)	HA-11 (4-4.5')	HA-12 (1-2)	HA-13 (1-2)	HA-14 (1-2)
Lab Sample ID:				JD1592-1	JD1592-2	JD1592-3	JD1592-4	JD1645-1	JD1645-2	JD1645-3	JD1645-4	JD1645-5	JD1731-1	JD1731-2	JD1731-3	JD1731-4	JD1731-5
Date Sampled:				1/13/2020	1/13/2020	1/13/2020	1/13/2020	1/14/2020	1/14/2020	1/14/2020	1/14/2020	1/14/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis - values reported in mg/kg																	
Aluminum	-			5940	8110	5030	5770	3600	4850	7940	7140	3200	1060	1480	1750	1880	1530
Antimony	-			<2.3	<2.4	<2.2	<2.3	<2.4	<2.2	<2.4	<2.2	<2.2	<2.0	<2.1	<2.1	<2.1	<2.2
Arsenic	13	16	16	3	5.5	3.1	2.9	3.2	2.9	5.7	3.2	4.1	<2.0	2.4	<2.1	2.3	<2.2
Barium	350	400	400	35.2	35.5	<22	<23	<24	<22	<24	<22	77.7	<20	<21	<21	<21	<22
Beryllium	7.2	72	590	<0.23	0.38	0.22	0.25	<0.24	0.24	0.42	0.36	<0.22	<0.20	<0.21	<0.21	<0.21	<0.22
Cadmium	2.5	4.3	9.3	<0.58	<0.61	<0.55	<0.57	<0.59	<0.54	<0.59	<0.56	0.65	<0.50	<0.52	<0.52	<0.52	<0.54
Calcium	-			8360	2420	1410	783	<590	591	1070	<560	2470	<500	<520	<520	<520	<540
Chromium	-	-	-	12.6	14.4	13.1	8.2	6.5	8.4	10	8.1	7.9	2.6	3.2	2.4	3.7	3.2
Cobalt	-			<5.8	<6.1	<5.5	<5.7	<5.9	<5.4	<5.9	<5.6	<5.4	<5.0	<5.2	<5.2	<5.2	<5.4
Copper	50	270	270	10.1	13.1	10.1	5.9	4.3	6.3	18.9	4.8	11.2	<2.5	<2.6	<2.6	3.8	2.7
Iron	-			7350	10900	9370	5950	6200	7030	8700	8270	5010	1610	1970	1870	2770	2200
Lead	63	400	1000	18.9	28.3	11.8	13.6	2.5	12.2	42.5	8.3	**112**	2.6	<2.1	<2.1	16.9	5.4
Magnesium	-	-	-	1550	1630	1630	654	<590	728	824	570	1140	<500	<520	<520	<520	<540
Manganese	1600	2000	10000	79.3	135	99.6	134	82.8	80.9	189	115	71.8	21.7	9	11	24.1	21.1
Mercury	0.18	0.81	2.8	0.054	0.06	<0.033	<0.035	<0.032	<0.035	0.16	<0.032	0.034	<0.034	<0.036	<0.032	<0.034	<0.030
Nickel	30	310	310	6.6	8.5	7.6	5.4	5.9	5.2	8.3	5.4	5.4	<4.0	<4.2	<4.2	<4.2	<4.3
Potassium	-	-	-	<1200	<1200	<1100	<1100	<1200	<1100	<1200	<1100	<1100	<1000	<1000	<1000	<1000	<1100
Selenium	3.9	180	1500	<2.3	<2.4	<2.2	<2.3	<2.4	<2.2	<2.4	<2.2	<2.2	<2.0	<2.1	<2.1	<2.1	<2.2
Silver	2	180	1500	<0.58	<0.61	<0.55	<0.57	<0.59	<0.54	<0.59	<0.56	<0.54	<0.50	<0.52	<0.52	<0.52	<0.54
Sodium	-	-	-	<1200	<1200	<1100	<1100	<1200	<1100	<1200	<1100	<1100	<1000	<1000	<1000	<1000	<1100
Thallium	-			<1.2	<1.2	<1.1	<1.1	<1.2	<1.1	<1.2	<1.1	<1.1	<1.0	<1.0	<1.0	<1.0	<1.1
Vanadium	-			15.6	23.3	18.5	10.7	9.3	12.1	15.8	12.9	10.1	<5.0	<5.2	<5.2	5.6	<5.4
Zinc	109	10000	10000	76.2	50.5	23.1	37.6	18.1	17.4	74	16.9	**134**	<5.0	<5.2	<5.2	15.5	9.4

Notes
ND - Non-Dectect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b This compound in blank spike is outside in house QC limits bias high.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Associated CCV outside of control limits low.
e Elevated detection limit due to dilution required for high interfering element.
f This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

Table 11 - Soil Analytical Results
175 Roger Avenue - BCP Site No. C130164
Metals in Soil

Client Sample ID:	NY SCO Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	NY SCO - Commercial w/CP-51 (10/10) (6 NYCRR 375-6 (12/06)	SB-1 (4-5)	SB-1 (11-12)	SB-1 (25-26)	SB-1 (28.5-29.5)	SB-1 (34-35)
Lab Sample ID:				JD7490-1	JD7495-2	JD7490-5	JD7495-3	JD7490-6
Date Sampled:				5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020
Matrix:				Soil	Soil	Soil	Soil	Soil
Metals Analysis - values reported in mg/kg								
Aluminum	-			11400	19500	8700	5540	2820
Antimony	-			<2.4	<5.4 [e]	<2.5	<2.5	<2.4
Arsenic	13	16	16	4.4	12.9 [e]	8.3	8.1	2.5
Barium	350	400	400	29.3	35.2	<25	<25	<24
Beryllium	7.2	72	590	<0.24	<0.27	<0.25	0.3	<0.24
Cadmium	2.5	4.3	9.3	<0.59	<1.4 [e]	<0.63	<0.62	<0.60
Calcium	-			1050	758	<630	<620	<600
Chromium	-	-	-	19.2	24.8	38.4	15.6	8.9
Cobalt	-			<5.9	<6.8	<6.3	9.3	<6.0
Copper	50	270	270	6.3	12.0 [e]	6.7	<3.1	<3.0
Iron	-			15500	30200 [e]	16800	10700	6110
Lead	63	400	1000	6.6	11.4 [e]	5.2	4.3	<2.4
Magnesium	-	-	-	1380	4010	1560	1260	691
Manganese	1600	2000	10000	120	247 [e]	74	38.3	48.4
Mercury	0.18	0.81	2.8	<0.030	<0.034	<0.031	<0.034	<0.029
Nickel	30	310	310	10.2	16.7	8.3	18.2	<4.8
Potassium	-	-	-	<1200	1700	1560	1760	<1200
Selenium	3.9	180	1500	<2.4	<5.4 [e]	<2.5	<2.5	<2.4
Silver	2	180	1500	<0.59	<1.4 [e]	<0.63	<0.62	<0.60
Sodium	-	-	-	<1200	<1400	<1300	<1200	<1200
Thallium	-			<1.2	<2.7 [e]	<1.3	<1.2	<1.2
Vanadium	-			23.6	39.8	22.2	23.4	7.3
Zinc	109	10000	10000	20.4	49.6	36.2	35	23.9

Client Sample ID:	SB-2 (4-5)	SB-2 (7-8)	SB-2 (18-19)	SB-2 (29-30)	SB-2 (34-35)	SB-3 (5-6)	SB-3 (15-16)	SB-3 (34-35)
Lab Sample ID:	JD7490-7	JD7490-8	JD7490-9	JD7490-11	JD7490-12	JD7623-4	JD7490-24	JD7623-5
Date Sampled:	5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/22/2020	5/22/2020	5/22/2020
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Aluminum	5000	2070	5690	3060	2840	1450	11200	2450
Antimony	<2.2	<2.5	<2.4	<2.5	<2.6	<2.3	<2.3	<2.7
Arsenic	3	<2.5	6.9	3.1	5	<2.3	**16.9**	5.5
Barium	<22	<25	<24	<25	<26	<23	27.7	<27
Beryllium	<0.22	<0.25	<0.24	0.41	0.29	<0.23	0.47	0.35
Cadmium	<0.56	<0.62	<0.61	<0.62	<0.64	<0.58	<0.58	<0.67
Calcium	3650	<620	<610	<620	<640	<580	<580	<670
Chromium	8.2	4.2	6.2	9.6	8.9	3.2	10	11.3
Cobalt	<5.6	<6.2	<6.1	7.6	<6.4	<5.8	7.5	<6.7
Copper	3.7	<3.1	<3.1	<3.1	<3.2	<2.9	5.1	<3.3
Iron	6590	2910	10600	4860	13100	1940	15100	6490
Lead	3.1	<2.5	3.6	<2.5	2.6	<2.3	7.7	2.7
Magnesium	601	<620	890	<620	1050	<580	1690	<670
Manganese	50.5	20.6	86.5	14.8	97.5	6.9	411	14.1
Mercury	<0.035	<0.033	<0.034	<0.038	<0.032	<0.036	<0.037	<0.043
Nickel	5	<5.0	<4.9	15.2	<5.1	<4.6	9.4	<5.3
Potassium	<1100	<1200	<1200	1210	1310	<1200	<1200	<1300
Selenium	<2.2	<2.5	<2.4	<2.5	<2.6	<2.3	<2.3	<2.7
Silver	<0.56	<0.62	<0.61	<0.62	<0.64	<0.58	<0.58	<0.67
Sodium	<1100	<1200	<1200	<1200	<1300	<1200	<1200	<1300
Thallium	<1.1	<1.2	<1.2	<1.2	<1.3	<1.2	<1.2	<1.3
Vanadium	11.8	<6.2	12.8	11.9	11	<5.8	36.5	12.5
Zinc	9.7	6.2	20.5	54	21.6	<5.8	31.3	11.5

Client Sample ID:	SB-4 (5-6)	SB-4 (7-8)	SB-4 (15-16)	SB-4 (30-31)	SB-4 (34-35)	SB-5 (6-7)	SB-5 (10-11)	SB-5 (18-19)	SB-5 (29-30)	SB-5 (34-35)	SB-5 (34-35) DUI
Lab Sample ID:	JD7490-13	JD7490-14	JD7490-16	JD7490-17	JD7490-18	JD7642-14	JD7642-16	JD7642-17	JD7642-18	JD7642-19	JD7642-20
Date Sampled:	5/21/2020	5/21/2020	5/21/2020	5/21/2020	5/21/2020	5/29/2020	5/29/2020	5/29/2020	5/29/2020	5/29/2020	5/29/2020
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Aluminum	1840	1180	5190	7950	8980	4040	15800	2520	2440	6530	5760
Antimony	<2.3	<2.5	<2.5	<2.9	<2.5	<2.4	<2.7	<2.4	<2.7	<2.7	<2.6
Arsenic	2.7	2.5	2.8	6.9 [e]	**16.9 [e]**	6.4	**18.5 [e]**	<2.4	<2.7	7.9	7.3
Barium	<23	<25	<25	<29	33.2	<24	38.1	<24	<27	<27	<26
Beryllium	<0.23	<0.25	0.3	0.74	0.85	<0.24	0.74	<0.24	<0.27	0.32	0.51
Cadmium	<0.57	<0.62	<0.62	<1.4 [e]	<1.3 [e]	<0.60	<1.3 [e]	<0.61	<0.67	<0.67	<0.65
Calcium	<570	<620	<620	5750	15600	<600	1740	<610	<670	<670	<650
Chromium	4.1	4.1	6.4	20	26.3	10.8	20.4	3.5	3.9	22	20
Cobalt	<5.7	<6.2	<6.2	<7.1	<6.3	<6.0	10.6	<6.1	<6.7	<6.7	<6.5
Copper	<2.9	<3.1	<3.1	<7.1 [e]	6.5 [e]	3	9.2 [e]	<3.1	<3.4	4.1	3.7
Iron	2710	2300	9900	31000	28100	9840	36200	5630	3890	10800	10700
Lead	<2.3	2.8	3.1	7.4 [e]	8.7 [e]	3	9.2 [e]	<2.4	<2.7	5.3	21.8
Magnesium	<570	<620	891	3770	4250	<600	3300	<610	<670	1250	1470
Manganese	14.1	8.1	114	265 [e]	295 [e]	22.4	878 [e]	117	29.3	36.9	55.6
Mercury	<0.032	<0.033	<0.030	<0.036	<0.039	<0.036	<0.032	<0.039	<0.033	<0.031	<0.029
Nickel	<4.6	<5.0	7.2	12.5	14.9	<4.8	15.1	<4.9	<5.4	6.7	10.4
Potassium	<1100	<1200	<1200	2260	2970	<1200	1550	<1200	<1300	1600	1600
Selenium	<2.3	<2.5	<2.5	<5.7 [e]	<5.0 [e]	<2.4	<5.4 [e]	<2.4	<2.7	<2.7	<2.6
Silver	<0.57	<0.62	<0.62	<1.4 [e]	<1.3 [e]	<0.60	<1.3 [e]	<0.61	<0.67	<0.67	<0.65
Sodium	<1100	<1200	<1200	<1400	<1300	<1200	<1300	<1200	<1300	<1300	<1300
Thallium	<1.1	<1.2	<1.2	<2.9 [e]	<2.5 [e]	<1.2	<2.7 [e]	<1.2	<1.3	<1.3	<1.3
Vanadium	5.9	<6.2	8.2	25.2	34.4	14.5	43.9	6.9	<6.7	21.4	20.8
Zinc	9.9	7.7	26	44.7	47	30.4	44.6	11.9	7.7	33.8	33.5

Notes
ND - Non-Dectect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b This compound in blank spike is outside in house QC limits bias high.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Associated CCV outside of control limits low.
e Elevated detection limit due to dilution required for high interfering element.
f This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

Table 11 - Soil Analytical Results
175 Roger Avenue - BCP Site No. C130164
Metals in Soil

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY SCO Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	NY SCO - Commercial w/CP-51 (10/10) (6 NYCRR 375-6 (12/06)	SB-7 (5-6) JD7623-6 5/26/2020 Soil	SB-7 (13-14) JD7623-7 5/26/2020 Soil	SB-7 (21-22) JD7623-9 5/26/2020 Soil	SB-7 (21-22) DU JD7623-10 5/26/2020 Soil	SB-7 (23-24) JD7623-11 5/26/2020 Soil	SB-7 (34-35) JD7623-12 5/26/2020 Soil
Metals Analysis - values reported in mg/kg									
Aluminum	-			10300	21900	3710	3630	11100	12900
Antimony	-			<2.5	<2.8	<2.5	<2.5	<2.6	<2.7
Arsenic	13	16	16	7.9	11.7	4.4	4.5	<2.6	12.9
Barium	350	400	400	<25	76.9	<25	<25	<26	<27
Beryllium	7.2	72	590	<0.25	0.59	<0.25	<0.25	<0.26	<0.27
Cadmium	2.5	4.3	9.3	<0.62	<0.71	<0.62	<0.62	<0.65	<0.67
Calcium	-			691	951	<620	<620	<650	<670
Chromium	-	-	-	17	29.9	4.2	4.5	10.7	47.4
Cobalt	-			<6.2	<7.1	<6.2	<6.2	<6.5	<6.7
Copper	50	270	270	7.2	15.7	<3.1	<3.1	6.1	8.2
Iron	-			12500	26600	6160	6070	14600	19800
Lead	63	400	1000	6.4	12.6	<2.5	<2.5	5.1	8.1
Magnesium	-	-	-	1930	5160	<620	<620	2590	2570
Manganese	1600	2000	10000	74.1	220	48.3	43.6	137	109
Mercury	0.18	0.81	2.8	<0.034	<0.040	<0.039	<0.038	<0.034	<0.030
Nickel	30	310	310	7.7	20	<4.9	<5.0	9.9	9.6
Potassium	-	-	-	<1200	2170	<1200	<1200	<1300	2610
Selenium	3.9	180	1500	<2.5	<2.8	<2.5	<2.5	<2.6	<2.7
Silver	2	180	1500	<0.62	<0.71	<0.62	<0.62	<0.65	<0.67
Sodium	-	-	-	<1200	<1400	<1200	<1200	<1300	<1300
Thallium	-			<1.2	<1.4	<1.2	<1.2	<1.3	<1.3
Vanadium	-			25.1	48.7	7.2	6.9	14.3	37.4
Zinc	109	10000	10000	20.7	55.2	13.2	14.1	31.4	42.5

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	SB-8 (5-6) JD7490-19 5/21/2020 Soil	SB-8 (10-11) JD7490-20 5/21/2020 Soil	SB-8 (11.5-12.5) JD7490-21 5/21/2020 Soil	SB-8 (18-19) JD7490-22 5/21/2020 Soil	SB-8 (34-35) JD7490-23 5/21/2020 Soil	SB-13 (5'-6') JD7642-4 5/28/2020 Soil	SB-13 (10'-11') JD7642-5 5/28/2020 Soil	SB-13 (13'-14') JD7642-7 5/28/2020 Soil	SB-13 (21'-22') JD7642-9 5/28/2020 Soil	SB-13 (28'-29') JD7642-10 5/28/2020 Soil
Metals Analysis - values reported in mg/kg										
Aluminum	891	8760	17800	6040	10500	9570	3930	19300	6020	11500
Antimony	<2.5	<2.5	<2.7	<2.4	<2.6	<2.4	<2.9	<2.7	<2.4	<2.6
Arsenic	<2.5	8	11.5	4.4	<2.6	9.7	6.2	9.6	<2.4	**15.5**
Barium	<25	<25	41.3	<24	<26	<24	<29	45.8	<24	<26
Beryllium	<0.25	0.27	0.62	0.33	0.45	0.26	<0.29	0.59	<0.24	0.5
Cadmium	<0.61	<0.62	<0.68	<0.59	<0.64	<0.61	<0.71	<0.68	<0.60	<0.64
Calcium	<610	1410	786	<590	<640	1350	<710	917	<600	<640
Chromium	4	21.6	22	8.6	20.9	18.4	14.2	25	6.2	46.2
Cobalt	<6.1	<6.2	<6.8	<5.9	<6.4	<6.1	<7.1	7.6	<6.0	<6.4
Copper	<3.1	7.9	11.5	3.5	6.4	7.7	3.7	13	4	7.2
Iron	2220	12700	22300	10200	10200	20700	10900	22300	9080	19800
Lead	<2.5	6.1	10.6	4.2	5.4	6.1	3.2	11.2	2.8	7.5
Magnesium	<610	1810	4230	1280	2080	1840	<710	4890	1130	2430
Manganese	10.5	85.8	161	83.8	80.4	151	76.3	190	71.5	78.4
Mercury	<0.038	<0.037	<0.030	<0.034	<0.039	<0.030	<0.032	<0.035	<0.030	<0.033
Nickel	<4.9	8.2	16.9	6.8	6.9	7.5	<5.7	19.9	<4.8	9.9
Potassium	<1200	<1200	1640	<1200	2260	<1200	<1400	1920	<1200	2700
Selenium	<2.5	<2.5	<2.7	<2.4	<2.6	<2.4	<2.9	<2.7	<2.4	<2.6
Silver	<0.61	<0.62	<0.68	<0.59	<0.64	0.64	<0.71	<0.68	<0.60	<0.64
Sodium	<1200	<1200	<1400	<1200	<1300	<1200	<1400	<1400	<1200	<1300
Thallium	<1.2	<1.2	<1.4	<1.2	<1.3	<1.2	<1.4	<1.4	<1.2	<1.3
Vanadium	<6.1	22.1	37	13.6	23.2	30	14.7	36.3	8.8	38.9
Zinc	<6.1	26.8	52.8	22.3	31.1	21.3	14	59.7	15.6	49.3

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	SB-14 (6-7) JD7623-18 5/27/2020 Soil	SB-14 (11-12) JD7623-19 5/27/2020 Soil	SB-14 (22-23) JD7623-21 5/27/2020 Soil	SB-14 (29-30) JD7623-22 5/27/2020 Soil	SB-14 (34-35) JD7623-23 5/27/2020 Soil
Metals Analysis - values reported in mg/kg					
Aluminum	10700	12900	7970	11500	4150
Antimony	<2.4	<2.6	<2.6	<2.5	<2.6
Arsenic	9.6	10	<2.6	**15.1**	7.7
Barium	25	<26	<26	<25	<26
Beryllium	0.29	<0.26	<0.26	<0.25	0.65
Cadmium	<0.60	<0.65	<0.65	<0.63	<0.65
Calcium	<600	745	<650	<630	<650
Chromium	18	25.3	8.3	30.3	12.6
Cobalt	<6.0	<6.5	<6.5	14	<6.5
Copper	8.8	8.3	4.4	7	<3.2
Iron	15600	23900	10200	19000	10400
Lead	6.8	8.3	3.3	8.3	3.4
Magnesium	2000	2730	1560	2240	1300
Manganese	78.5	148	102	68.3	51.7
Mercury	<0.030	<0.043	<0.033	<0.040	<0.030
Nickel	7.6	11.1	6.6	24.3	6.9
Potassium	<1200	<1300	<1300	2620	1750
Selenium	<2.4	<2.6	<2.6	<2.5	<2.6
Silver	<0.60	<0.65	<0.65	<0.63	<0.65
Sodium	<1200	<1300	<1300	<1300	<1300
Thallium	<1.2	<1.3	<1.3	<1.3	<1.3
Vanadium	28.8	32.8	11.3	39.7	16.1
Zinc	25.8	35	23.8	**145**	28.4

Notes
ND - Non-Dectect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b This compound in blank spike is outside in house QC limits bias high.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is ou
d Associated CCV outside of control limits low.
e Elevated detection limit due to dilution required for high interfering element.
f This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of co

Table 11 - Soil Analytical Results
175 Roger Avenue - BCP Site No. C130164
Gas/Diesel Range Organics, Pesticides, Herbicides and PCBs in Soil

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY SCO Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	NY SCO - Commercial w/CP-51 (10/10) (6 NYCRR 375-6 (12/06)	SB-1 (14-15) JD7490-3 5/20/2020 Soil	SB-2 (20.5-21.5) JD7490-10 5/20/2020 Soil	SB-4 (10-14) JD7490-15 5/21/2020 Soil	SB-5 (7-8) JD7642-15 5/29/2020 Soil	SB-5 (10-11) JD7642-16 5/29/2020 Soil	SB-5 (18-19) JD7642-17 5/29/2020 Soil	SB-5 (29-30) JD7642-18 5/29/2020 Soil	SB-5 (34-35) JD7642-19 5/29/2020 Soil	SB-5 (34-35) DUP JD7642-20 5/29/2020 Soil	SB-7 (15-20) JD7623-8 5/26/2020 Soil	SB-11 (5-6) JD7642-21 5/29/2020 Soil	SB-11 (13-14) JD7642-22 5/29/2020 Soil	SB-11 (25-30) JD7642-23 5/29/2020 Soil	SB-13 (6-7) JD7642-6 5/28/2020 Soil	SB-14 (12-13) JD7623-20 5/27/2020 Soil
GC Volatiles (SW846 8015D) - values reported in mg/kg																		
TPH-GRO (C6-C10)	-	-	-	ND (5.8)	ND (6.2)	-	51.5	-	-	-	-	-	-	-	-	-	-	27.7
GC/LC Semi-volatiles (SW846 8015D) - values reported in mg/kg																		
TPH-DRO (C10-C28)	-	-	-	ND (7.8)	ND (8.4)	-	ND (8.3)	-	-	-	-	-	-	-	-	-	ND (8.7)	ND (11)
GC/LC Semi-volatiles (SW846 8081D) - values reported in ug/kg																		
Aldrin	5	97	680	-	-	-	-	ND (0.68)	ND (0.65)	ND (0.71)	ND (0.71)	ND (0.68)	-	ND (0.67)	ND (0.69)	ND (0.67)	-	-
alpha-BHC	20	480	3400	-	-	-	-	ND (0.67)	ND (0.64)	ND (0.70)	ND (0.70)	ND (0.67)	-	ND (0.66)	ND (0.68)	ND (0.66)	-	-
beta-BHC	36	360	3000	-	-	-	-	ND (0.74)	ND (0.72)	ND (0.78)	ND (0.78)	ND (0.74)	-	ND (0.73)	ND (0.75)	ND (0.74)	-	-
delta-BHC	40	100000	500000	-	-	-	-	ND (0.79)	ND (0.76)	ND (0.83)	ND (0.82)	ND (0.79)	-	ND (0.78)	ND (0.80)	ND (0.78)	-	-
gamma-BHC (Lindane)	100	1300	9200	-	-	-	-	ND (0.60)	ND (0.58)	ND (0.63)	ND (0.63)	ND (0.60)	-	ND (0.60)	ND (0.61)	ND (0.60)	-	-
alpha-Chlordane	94	4200	24000	-	-	-	-	ND (0.66)	ND (0.64)	ND (0.69)	ND (0.69)	ND (0.66)	-	ND (0.66)	ND (0.67)	ND (0.66)	-	-
gamma-Chlordane	-			-	-	-	-	ND (0.37)	ND (0.36)	ND (0.39)	ND (0.39)	ND (0.37)	-	ND (0.37)	ND (0.38)	ND (0.37)	-	-
Dieldrin	5	200	1400	-	-	-	-	ND (0.56)	ND (0.54)	ND (0.59)	ND (0.59)	ND (0.56)	-	ND (0.56)	ND (0.57)	ND (0.56)	-	-
4,4'-DDD	3.3	13000	92000	-	-	-	-	ND (0.75)	ND (0.73)	ND (0.79)	ND (0.79)	ND (0.75)	-	ND (0.75)	ND (0.77)	ND (0.75)	-	-
4,4'-DDE	3.3	8900	62000	-	-	-	-	ND (0.72)	ND (0.69)	ND (0.76)	ND (0.75)	ND (0.72)	-	ND (0.71)	ND (0.73)	ND (0.71)	-	-
4,4'-DDT	3.3	7900	47000	-	-	-	-	ND (0.73)	1.9	ND (0.76)	ND (0.76)	ND (0.73)	-	ND (0.72)	ND (0.74)	ND (0.72)	-	-
Endrin	14	11000	89000	-	-	-	-	ND (0.64)	ND (0.61)	ND (0.67)	ND (0.67)	ND (0.64)	-	ND (0.63)	ND (0.65)	ND (0.63)	-	-
Endosulfan sulfate	2400	24000	200000	-	-	-	-	ND (0.64)	ND (0.62)	ND (0.67)	ND (0.67)	ND (0.64)	-	ND (0.63)	ND (0.65)	ND (0.64)	-	-
Endrin aldehyde	-	-	-	-	-	-	-	ND (0.46)	ND (0.45)	ND (0.49)	ND (0.49)	ND (0.46)	-	ND (0.46)	ND (0.47)	ND (0.46)	-	-
Endosulfan-I	2400	24000	200000	-	-	-	-	ND (0.47)	ND (0.46)	ND (0.50)	ND (0.49)	ND (0.47)	-	ND (0.47)	ND (0.48)	ND (0.47)	-	-
Endosulfan-II	2400	24000	200000	-	-	-	-	ND (0.51)	ND (0.49)	ND (0.54)	ND (0.54)	ND (0.51)	-	ND (0.51)	ND (0.52)	ND (0.51)	-	-
Heptachlor	42	2100	15000	-	-	-	-	ND (0.71)	ND (0.68)	ND (0.74)	ND (0.74)	ND (0.71)	-	ND (0.70)	ND (0.72)	ND (0.70)	-	-
Heptachlor epoxide	-			-	-	-	-	ND (0.57)	ND (0.55)	ND (0.60)	ND (0.60)	ND (0.57)	-	ND (0.57)	ND (0.58)	ND (0.57)	-	-
Methoxychlor	-			-	-	-	-	ND (0.65)	ND (0.63)	ND (0.68)	ND (0.68)	ND (0.65)	-	ND (0.65)	ND (0.66)	ND (0.65)	-	-
Endrin ketone	-	-	-	-	-	-	-	ND (0.59)	ND (0.57)	ND (0.62)	ND (0.62)	ND (0.59)	-	ND (0.59)	ND (0.60)	ND (0.59)	-	-
Toxaphene	-	-	-	-	-	-	-	ND (19)	ND (18)	ND (20)	ND (20)	ND (19)	-	ND (19)	ND (19)	ND (19)	-	-
GC/LC Semi-volatiles (SW846 8082A) - values reported in ug/kg																		
Aroclor 1016	100	1000	1000	-	-	-	-	ND (19)	ND (18)	ND (20)	ND (20)	ND (19)	-	ND (19)	ND (19)	ND (19)	-	-
Aroclor 1221	100	1000	1000	-	-	-	-	ND (25)	ND (25)	ND (27)	ND (27)	ND (25)	-	ND (25)	ND (26)	ND (25)	-	-
Aroclor 1232	100	1000	1000	-	-	-	-	ND (26)	ND (25)	ND (27)	ND (27)	ND (26)	-	ND (26)	ND (27)	ND (26)	-	-
Aroclor 1242	100	1000	1000	-	-	-	-	ND (17)	ND (16)	ND (18)	ND (18)	ND (17)	-	ND (17)	ND (17)	ND (17)	-	-
Aroclor 1248	100	1000	1000	-	-	-	-	ND (37)	ND (35)	ND (38)	ND (38)	ND (37)	-	ND (36)	ND (37)	ND (36)	-	-
Aroclor 1254	100	1000	1000	-	-	-	-	ND (22)	ND (21)	ND (23)	ND (23)	ND (22)	-	ND (22)	ND (22)	ND (22)	-	-
Aroclor 1260	100	1000	1000	-	-	-	-	ND (17)	ND (17) [a]	ND (18) [a]	ND (18) [a]	ND (17) [a]	-	ND (17) [a]	ND (18) [a]	ND (17) [a]	-	-
Aroclor 1268	100	1000	1000	-	-	-	-	ND (17)	ND (17)	ND (18)	ND (18)	ND (17)	-	ND (17)	ND (18)	ND (17)	-	-
Aroclor 1262	100	1000	1000	-	-	-	-	ND (27)	ND (26)	ND (28)	ND (28)	ND (27)	-	ND (27)	ND (27)	ND (27)	-	-
GC/LC Semi-volatiles (sw846 8151A) -	values reported in																	
2,4-D	-	-	-	-	-	-	-	ND (5.8)	ND (4.9)	ND (5.2)	ND (5.3)	ND (5.2)	-	ND (5.2)	ND (5.5)	-	-	-
2,4,5-TP (Silvex)	3800	100000	500000	-	-	-	-	ND (4.1)	ND (3.5)	ND (3.7)	ND (3.8)	ND (3.7)	-	ND (3.7)	ND (3.9)	-	-	-
2,4,5-T	-	-	-	-	-	-	-	ND (3.7)	ND (3.1)	ND (3.3)	ND (3.4)	ND (3.3)	-	ND (3.3)	ND (3.5)	-	-	-
General Chemistry																		
3 Inch Sieve	%	%	%	-	-	100	-	-	-	-	-	-	100	-	-	-	-	-
1.5 Inch Sieve	%	%	%	-	-	100	-	-	-	-	-	-	100	-	-	-	-	-
0.75 Inch Sieve	%	%	%	-	-	100	-	-	-	-	-	-	100	-	-	-	-	-
0.375 Inch Sieve	%	%	%	-	-	100	-	-	-	-	-	-	95.6	-	-	-	-	-
No.4 Sieve (4.75 mm)	%	%	%	-	-	95	-	-	-	-	-	-	84.1	-	-	-	-	-
No.8 Sieve (2.36 mm)	%	%	%	-	-	90.5	-	-	-	-	-	-	75.2	-	-	-	-	-
No.10 Sieve (2.00 mm)	%	%	%	-	-	89.5	-	-	-	-	-	-	74.2	-	-	-	-	-
No.16 Sieve (1.18 mm)	%	%	%	-	-	87.7	-	-	-	-	-	-	71.1	-	-	-	-	-
No.30 Sieve (0.60 mm)	%	%	%	-	-	85.7	-	-	-	-	-	-	68.1	-	-	-	-	-
No.50 Sieve (0.30 mm)	%	%	%	-	-	82.6	-	-	-	-	-	-	59.3	-	-	-	-	-
No.100 Sieve (0.15 mm)	%	%	%	-	-	76.1	-	-	-	-	-	-	22.8	-	-	-	-	-
No.200 Sieve (0.075 mm)	%	%	%	-	-	63.6	-	-	-	-	-	-	13.7	-	-	-	-	-
0.030 mm (Hydrometer)	%	%	%	-	-	47.8	-	-	-	-	-	-	9.1	-	-	-	-	-
0.005 mm (Hydrometer)	%	%	%	-	-	23.5	-	-	-	-	-	-	5.8	-	-	-	-	-
0.0015 mm (Hydrometer)	%	%	%	-	-	13.1	-	-	-	-	-	-	4.1	-	-	-	-	-
% Gravel	%	%	%	-	-	5	-	-	-	-	-	-	15.9	-	-	-	-	-
% Sand	%	%	%	-	-	31.4	-	-	-	-	-	-	70.3	-	-	-	-	-
% Silt, Clay, Colloids	%	%	%	-	-	63.6	-	-	-	-	-	-	13.7	-	-	-	-	-
Bulk Density (Dry Basis)	g/ml	g/ml	g/ml	-	-	1.3	-	-	-	-	-	-	1.4	-	-	1.6	1.5	-
Fraction Organic Carbon	kg/kg	kg/kg	kg/kg	0.000956	0.00042	-	0.000665	-	-	-	-	-	-	-	-	-	0.000819	0.0014
Solids, Percent	%	%	%	86.6	81	76.7	80.7	73.5	81	76.4	76.7	78.2	86.5	81	75.9	77.3	85.1	69
Total Organic Carbon	mg/kg	mg/kg	mg/kg	956	420	-	665	-	-	-	-	-	-	-	-	-	819	1400

Notes
ND - Non-Dectect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b This compound in blank spike is outside in house QC limits bias high.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Associated CCV outside of control limits low.
e Elevated detection limit due to dilution required for high interfering element.
f This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Volatile Organic Compounds in Groundwater (ug/L)

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	MW-1 JD1537-1 1/10/2020 Groundwater	MW-2 JD1455-1 1/9/2020 Groundwater	MW-3 JD1455-2 1/9/2020 Groundwater	MW-3 DUP JD1455-3 1/9/2020 Groundwater	MW-6 JD1537-2 1/10/2020 Groundwater	MW-8 JD1455-4 1/9/2020 Groundwater	MW-9 JD1455-5 1/9/2020 Groundwater	MW-13 JD1455-6 1/9/2020 Groundwater	MW-14 JD1537-3 1/10/2020 Groundwater	MW-15 JD1537-4 1/10/2020 Groundwater	MW-17 JD1537-5 1/10/2020 Groundwater	MW-18 JD1537-6 1/10/2020 Groundwater	MW-20 JD1537-7 1/10/2020 Groundwater	MW-22 JD1537-8 1/10/2020 Groundwater
MS Volatiles (SW846 8260C) - values reported in ug/L															
Acetone	-	9.1 J	23.6	ND (6.0)	ND (30)	7.9 J	ND (6.0)	ND (6.0)	ND (120)	ND (150)	ND (6.0)	ND (6.0)	ND (6.0)	ND (6.0)	7.9 J
Benzene	1	ND (0.43)	0.47 J	ND (0.43)	ND (2.1)	ND (0.43)	ND (0.43)	ND (0.43)	ND (8.5)	ND (11)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Bromochloromethane	5	ND (0.48)	ND (0.48)	ND (0.48)	ND (2.4)	ND (0.48)	ND (0.48)	ND (0.48)	ND (9.6)	ND (12)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)
Bromodichloromethane	-	ND (0.58)	ND (0.58)	ND (0.58)	ND (2.9)	ND (0.58)	ND (0.58)	ND (0.58)	ND (12)	ND (15)	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)
Bromoform	-	ND (0.63)	ND (0.63)	ND (0.63)	ND (3.2)	ND (0.63)	ND (0.63)	ND (0.63)	ND (13)	ND (16)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)
Bromomethane	5	ND (1.6) [a]	ND (1.6) [a]	ND (1.6) [a]	ND (8.2)	ND (1.6) [c]	ND (1.6) [a]	ND (1.6) [c]	ND (33) [c]	ND (41) [c]		ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6) [c]
2-Butanone (MEK)	-	ND (6.9)	ND (6.9)	ND (6.9)	ND (34)	ND (6.9)	ND (6.9)	ND (6.9)	ND (140)	ND (170)	ND (6.9)	ND (6.9)	ND (6.9)	ND (6.9)	ND (6.9)
n-Butylbenzene	5	ND (0.52)	ND (0.52)	ND (0.52)	ND (2.6)	ND (0.52)	ND (0.52)	ND (0.52)	ND (10)	ND (13)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)
sec-Butylbenzene	5	ND (0.62)	0.88 J	ND (0.62)	ND (3.1)	ND (0.62)	ND (0.62)	ND (0.62)	ND (12)	ND (16)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)
tert-Butylbenzene	5	ND (0.69)	ND (0.69)	ND (0.69)	ND (3.4)	ND (0.69)	ND (0.69)	ND (0.69)	ND (14)	ND (17)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)
Carbon disulfide	60	ND (0.95)	ND (0.95)	ND (0.95)	ND (4.8)	ND (0.95)	ND (0.95)	ND (0.95)	ND (19)	ND (24)	ND (0.95)	ND (0.95)	ND (0.95)	ND (0.95)	ND (0.95)
Carbon tetrachloride	5	ND (0.55)	ND (0.55)	ND (0.55)	ND (2.8)	ND (0.55)	ND (0.55)	ND (0.55)	ND (11)	ND (14)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)
Chlorobenzene	5	ND (0.56)	ND (0.56)	ND (0.56)	ND (2.8)	ND (0.56)	ND (0.56)	ND (0.56)	ND (11)	ND (14)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)
Chloroethane	5	ND (0.73) [a]	ND (0.73) [a]	ND (0.73) [a]	ND (3.6)	ND (0.73)	ND (0.73) [a]	ND (0.73)	ND (15)	ND (18)	ND (0.73) [a]	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)
Chloroform	7	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (10)	ND (13)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
Chloromethane	5	ND (0.76) [a]	ND (0.76) [a]	ND (0.76) [a]	ND (3.8)	ND (0.76)	ND (0.76) [a]	ND (0.76)	ND (15)	ND (19)	ND (0.76) [a]	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)
Cyclohexane	-	ND (0.78)	ND (0.78)	ND (0.78)	ND (3.9)	ND (0.78)	ND (0.78)	ND (0.78)	ND (16)	ND (20)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)
1,2-Dibromo-3-chloropropane	0.04	ND (1.2)	ND (1.2)	ND (1.2)	ND (6.0)	ND (1.2)	ND (1.2)	ND (1.2)	ND (24)	ND (30)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
Dibromochloromethane	-	ND (0.56)	ND (0.56)	ND (0.56)	ND (2.8)	ND (0.56)	ND (0.56)	ND (0.56)	ND (11)	ND (14)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)
1,2-Dibromoethane	0.0006	ND (0.48)	ND (0.48)	ND (0.48)	ND (2.4)	ND (0.48)	ND (0.48)	ND (0.48)	ND (9.5)	ND (12)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)
1,2-Dichlorobenzene	3	ND (0.53)	0.54 J	ND (0.53)	ND (2.7)	ND (0.53)	ND (0.53)	ND (0.53)	ND (11)	ND (13)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)
1,3-Dichlorobenzene	3	ND (0.54)	ND (0.54)	ND (0.54)	ND (2.7)	ND (0.54)	ND (0.54)	ND (0.54)	ND (11)	ND (14)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)
1,4-Dichlorobenzene	3	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.5)	ND (0.51)	ND (0.51)	ND (0.51)	ND (10)	ND (13)	ND (0.51)	0.62 J	0.71 J	ND (0.51)	ND (0.51)
Dichlorodifluoromethane	5	ND (1.4)	ND (1.4)	ND (1.4)	ND (6.8)	ND (1.4)	ND (1.4)	ND (1.4)	ND (27)	ND (34)	ND (1.4) [a]	ND (1.4)	ND (1.4)	1.5 J	ND (1.4)
1,1-Dichloroethane	5	ND (0.57)	ND (0.57)	ND (0.57)	ND (2.8)	ND (0.57)	ND (0.57)	ND (0.57)	ND (11)	ND (14)	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)
1,2-Dichloroethane	0.6	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (15)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
1,1-Dichloroethene	5	ND (0.59)	ND (0.59)	ND (0.59)	**6.7**	ND (0.59)	ND (0.59)	ND (0.59)	ND (12)	ND (15)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)
cis-1,2-Dichloroethene	5	0.56 J	ND (0.51)	1.2	**1690**	**11.1**	1.1	**120**	**298**	**276**	0.57 J	**22.3**	**68.2**	4.7	2.7
trans-1,2-Dichloroethene	5	ND (0.54)	ND (0.54)	ND (0.54)	**17.2**	ND (0.54)	ND (0.54)	2.2	ND (11)	ND (13)	ND (0.54)	ND (0.54)	1.2	ND (0.54)	ND (0.54)
1,2-Dichloropropane	1	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.5)	ND (0.51)	ND (0.51)	ND (0.51)	ND (10)	ND (13)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)
cis-1,3-Dichloropropene	-	ND (0.47)	ND (0.47)	ND (0.47)	ND (2.4)	ND (0.47)	ND (0.47)	ND (0.47)	ND (9.4)	ND (12)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)
trans-1,3-Dichloropropene	-	ND (0.43)	ND (0.43)	ND (0.43)	ND (2.2)	ND (0.43)	ND (0.43)	ND (0.43)	ND (8.6)	ND (11)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Ethylbenzene	5	ND (0.60)	3.7	ND (0.60)	ND (3.0)	**9.4**	2.6	0.63 J	ND (12)	ND (15)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
Freon 113	5	ND (1.9)	ND (1.9)	ND (1.9)	ND (9.7)	ND (1.9)	ND (1.9)	ND (1.9)	ND (39)	ND (49)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)
2-Hexanone	-	ND (2.0)	ND (2.0)	ND (2.0)	ND (10)	ND (2.0)	ND (2.0)	ND (2.0)	ND (41)	ND (51)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)
Isopropylbenzene	5	ND (0.65)	**45.2**	3.3	ND (3.2)	0.74 J	ND (0.65)	ND (0.65)	ND (13)	ND (16)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)
p-Isopropyltoluene	5	ND (0.66)	ND (0.66)	ND (0.66)	ND (3.3)	ND (0.66)	ND (0.66)	ND (0.66)	ND (13)	ND (16)	ND (0.66)	ND (0.66)	ND (0.66)	ND (0.66)	ND (0.66)
Methyl Acetate	-	ND (0.80)	ND (0.80)	ND (0.80)	ND (4.0)	ND (0.80)	ND (0.80)	ND (0.80)	ND (16)	ND (20)	ND (0.80) [e]	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.80)
Methylcyclohexane	-	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (15)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
Methyl Tert Butyl Ether	10	ND (0.51)	ND (0.51)	ND (0.51)	5.4	ND (0.51)	ND (0.51)	ND (0.51)	ND (10)	ND (13)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)
4-Methyl-2-pentanone(MIBK)	-	ND (1.9)	ND (1.9)	ND (1.9)	ND (9.3)	ND (1.9)	ND (1.9)	ND (1.9)	ND (37)	ND (46)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)
Methylene chloride	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (20)	ND (25)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Naphthalene	-	ND (2.5)	4.6 J	ND (2.5)	ND (13)	ND (2.5)	ND (2.5)	ND (2.5)	ND (50)	ND (63)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)
n-Propylbenzene	5	ND (0.60)	**29.5**	2.8	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (15)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
Styrene	5	ND (0.70)	ND (0.70)	ND (0.70)	ND (3.5)	ND (0.70)	ND (0.70)	ND (0.70)	ND (14)	ND (17)	ND (0.70)	ND (0.70)	ND (0.70)	ND (0.70)	ND (0.70)
1,1,2,2-Tetrachloroethane	5	ND (0.65)	ND (0.65)	ND (0.65)	ND (3.3)	ND (0.65)	ND (0.65)	ND (0.65)	ND (13)	ND (16)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)
Tetrachloroethene	5	ND (0.90)	ND (0.90)	3.2	**2020**	**93**	1.9	**17**	**3050**	**3220**	**17.2**	**9.5**	**8.9**	0.93 J	**5.4**
Toluene	5	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	ND (0.53)	ND (0.53)	ND (0.53)	ND (11)	ND (13)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)
1,2,3-Trichlorobenzene	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (10)	ND (13)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,2,4-Trichlorobenzene	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (10)	ND (13)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,1,1-Trichloroethane	5	ND (0.54)	ND (0.54)	ND (0.54)	ND (2.7)	ND (0.54)	ND (0.54)	ND (0.54)	ND (11)	ND (13)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)
1,1,2-Trichloroethane	1	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	ND (0.53)	ND (0.53)	ND (0.53)	ND (11)	ND (13)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)
Trichloroethene	5	ND (0.53)	ND (0.53)	1.3	**2650**	**53.2**	0.98 J	**22.7**	**1880**	**1940**	ND (0.53)	**11.5**	**12**	0.63 J	ND (0.53)
Trichlorofluoromethane	5	ND (0.84)	ND (0.84)	ND (0.84)	ND (4.2)	ND (0.84)	ND (0.84)	ND (0.84)	ND (17)	ND (21)	ND (0.84)	ND (0.84)	ND (0.84)	ND (0.84)	ND (0.84)
1,2,4-Trimethylbenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	2.3	1.7 J	ND (1.0)	ND (20)	ND (25)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,3,5-Trimethylbenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (20)	ND (25)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	2	ND (0.79) [a]	ND (0.79) [a]	ND (0.79) [a]	**62.6**	ND (0.79)	ND (0.79) [a]	**16**	ND (16)	ND (20)	ND (0.79) [f]	**3.1**	**9.9**	ND (0.79)	ND (0.79)
m,p-Xylene	-	ND (0.78)	ND (0.78)	ND (0.78)	ND (3.9)	10	ND (0.78)	ND (0.78)	ND (16)	ND (20)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)
o-Xylene	5	ND (0.59)	ND (0.59)	ND (0.59)	ND (3.0)	ND (0.59)	ND (0.59)	ND (0.59)	ND (12)	ND (15)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)
Xylene (total)	5	ND (0.59)	ND (0.59)	ND (0.59)	ND (3.0)	**10**	ND (0.59)	ND (0.59)	ND (12)	ND (15)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b Associated CCV outside of control limits low.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Elevated detection limit due to dilution required for high interfering element.
e Elevated sample detection limit due to difficult sample matrix.

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Volatile Organic Compounds in Groundwater (ug/L)

Client Sample ID:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	TMP-1 (4-6)	TMP-1 (10-15)	TMP-1 (20-25)	TMP-1 (30-35)	TMP-2 (4-6)	TMP-2 (10-15)	TMP-2 (15-20)	TMP-2 (30-35)	TMP-2 (30-35)DUP	TMP-3 (4-6)	TMP-3 (15-20)	TMP-3 (20-25)	TMP-3 (30-35)	TMP-4 (4-6)	TMP-4 (15-20)	TMP-4 (20-25)	TMP-4 (30-35)	TMP-5 (4-6)	TMP-5 (10-15)	TMP-5 (15-20)	TMP-5 (30-35)
Lab Sample ID:		JD7495-1	JD7495-2	JD7495-3	JD7495-4	JD7495-7	JD7495-6	JD7495-8	JD7495-9	JD7495-10	JD7627-1	JD7627-2	JD7627-3	JD7627-4	JD7495-11	JD7495-12	JD7495-13	JD7495-14	JD7643-11	JD7643-12	JD7643-13	JD7643-14
Date Sampled:		5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/21/2020	5/20/2020	5/21/2020	5/21/2020	5/21/2020	5/22/2020	5/22/2020	5/22/2020	5/22/2020	5/21/2020	5/21/2020	5/21/2020	5/21/2020	5/29/2020	5/29/2020	5/29/2020	5/29/2020
Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
MS Volatiles (SW846 8260C) - values reported in ug/L																						
Acetone	-	9.1 J	23.6	ND (6.0)	ND (30)	7.9 J	ND (6.0)	ND (6.0)	ND (120)	ND (150)	ND (6.0)	ND (6.0)	ND (6.0)	ND (6.0)	7.9 J	ND (6.0)	ND (120)	ND (6.0)	ND (60)	ND (120)	ND (60)	ND (15)
Benzene	1	ND (0.43)	0.47 J	ND (0.43)	ND (2.1)	ND (0.43)	ND (0.43)	ND (0.43)	ND (8.5)	ND (11)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (8.5)	ND (0.43)	ND (4.3)	ND (8.5)	ND (4.3)	ND (1.1)
Bromochloromethane	5	ND (0.48)	ND (0.48)	ND (0.48)	ND (2.4)	ND (0.48)	ND (0.48)	ND (0.48)	ND (9.6)	ND (12)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (9.6)	ND (0.48)	ND (4.8)	ND (9.6)	ND (4.8)	ND (1.2)
Bromodichloromethane	-	ND (0.58)	ND (0.58)	ND (0.58)	ND (2.9)	ND (0.58)	ND (0.58)	ND (0.58)	ND (12)	ND (15)	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)	ND (12)	ND (0.58)	ND (5.8)	ND (12)	ND (5.8)	ND (1.5)
Bromoform	-	ND (0.63)	ND (0.63)	ND (0.63)	ND (3.2)	ND (0.63)	ND (0.63)	ND (0.63)	ND (13)	ND (16)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (13)	ND (0.63)	ND (6.3)	ND (13)	ND (6.3)	ND (1.6)
Bromomethane	5	ND (1.6) [a]	ND (1.6) [a]	ND (1.6) [a]	ND (8.2)	ND (1.6) [c]	ND (1.6) [a]	ND (1.6) [c]	ND (33) [c]	ND (41) [c]	ND (1.6) [a]	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6) [c]	ND (1.6) [c]	ND (33)	ND (1.6) [c]	ND (16)	ND (33)	ND (16)	ND (4.1)
2-Butanone (MEK)	-	ND (6.9)	ND (6.9)	ND (6.9)	ND (34)	ND (6.9)	ND (6.9)	ND (6.9)	ND (140)	ND (170)	ND (6.9)	ND (6.9)	ND (6.9)	ND (6.9)	ND (6.9)	ND (6.9)	ND (140)	ND (6.9)	ND (69)	ND (140)	ND (69)	ND (17)
n-Butylbenzene	5	ND (0.52)	ND (0.52)	ND (0.52)	ND (2.6)	ND (0.52)	ND (0.52)	ND (0.52)	ND (10)	ND (13)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (10)	ND (0.52)	**9.6 J**	ND (10)	ND (5.2)	ND (1.3)
sec-Butylbenzene	5	ND (0.62)	0.88 J	ND (0.62)	ND (3.1)	ND (0.62)	ND (0.62)	ND (0.62)	ND (12)	ND (16)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	0.68 J	ND (12)	ND (0.62)	**23.1**	**12.5 J**	**9.2 J**	1.6 J
tert-Butylbenzene	5	ND (0.69)	ND (0.69)	ND (0.69)	ND (3.4)	ND (0.69)	ND (0.69)	ND (0.69)	ND (14)	ND (17)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	4.1	ND (14)	ND (0.69)	ND (6.9)	ND (14)	ND (6.9)	ND (1.7)
Carbon disulfide	60	ND (0.95)	ND (0.95)	ND (0.95)	ND (4.8)	ND (0.95)	ND (0.95)	ND (0.95)	ND (19)	ND (24)	ND (0.95)	ND (0.95)	ND (0.95)	ND (0.95)	ND (0.95)	ND (0.95)	ND (19)	ND (0.95)	ND (9.5)	ND (19)	ND (9.5)	ND (2.4)
Carbon tetrachloride	5	ND (0.55)	ND (0.55)	ND (0.55)	ND (2.8)	ND (0.55)	ND (0.55)	ND (0.55)	ND (11)	ND (14)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (11)	ND (0.55)	ND (5.5)	ND (11)	ND (5.5)	ND (1.4)
Chlorobenzene	5	ND (0.56)	ND (0.56)	ND (0.56)	ND (2.8)	ND (0.56)	ND (0.56)	ND (0.56)	ND (11)	ND (14)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (11)	ND (0.56)	ND (5.6)	ND (11)	ND (5.6)	ND (1.4)
Chloroethane	5	ND (0.73) [a]	ND (0.73) [a]	ND (0.73) [a]	ND (3.6)	ND (0.73)	ND (0.73) [a]	ND (0.73)	ND (15)	ND (18)	ND (0.73) [a]	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	1.6	ND (15)	ND (0.73)	ND (7.3)	ND (15)	ND (7.3)	ND (1.8)
Chloroform	7	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (10)	ND (13)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (10)	ND (0.50)	ND (5.0)	ND (10)	ND (5.0)	ND (1.3)
Chloromethane	5	ND (0.76) [a]	ND (0.76) [a]	ND (0.76) [a]	ND (3.8)	ND (0.76)	ND (0.76) [a]	ND (0.76)	ND (15)	ND (19)	ND (0.76) [a]	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (15)	ND (0.76)	ND (7.6)	ND (15)	ND (7.6)	ND (1.9)
Cyclohexane	-	ND (0.78)	ND (0.78)	ND (0.78)	ND (3.9)	ND (0.78)	ND (0.78)	ND (0.78)	ND (16)	ND (20)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (16)	ND (0.78)	ND (7.8)	ND (16)	ND (7.8)	ND (2.0)
1,2-Dibromo-3-chloropropane	0.04	ND (1.2)	ND (1.2)	ND (1.2)	ND (6.0)	ND (1.2)	ND (1.2)	ND (1.2)	ND (24)	ND (30)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (24)	ND (1.2)	ND (12)	ND (24)	ND (12)	ND (3.0)
Dibromochloromethane	-	ND (0.56)	ND (0.56)	ND (0.56)	ND (2.8)	ND (0.56)	ND (0.56)	ND (0.56)	ND (11)	ND (14)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (11)	ND (0.56)	ND (5.6)	ND (11)	ND (5.6)	ND (1.4)
1,2-Dibromoethane	0.0006	ND (0.48)	ND (0.48)	ND (0.48)	ND (2.4)	ND (0.48)	ND (0.48)	ND (0.48)	ND (9.5)	ND (12)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (9.5)	ND (0.48)	ND (4.8)	ND (9.5)	ND (4.8)	ND (1.2)
1,2-Dichlorobenzene	3	ND (0.53)	0.54 J	ND (0.53)	ND (2.7)	ND (0.53)	ND (0.53)	ND (0.53)	ND (11)	ND (13)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (11)	ND (0.53)	ND (5.3)	ND (11)	ND (5.3)	ND (1.3)
1,3-Dichlorobenzene	3	ND (0.54)	ND (0.54)	ND (0.54)	ND (2.7)	ND (0.54)	ND (0.54)	ND (0.54)	ND (11)	ND (14)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (11)	ND (0.54)	ND (5.4)	ND (11)	ND (5.4)	ND (1.4)
1,4-Dichlorobenzene	3	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.5)	ND (0.51)	ND (0.51)	ND (0.51)	ND (10)	ND (13)	ND (0.51)	0.62 J	0.71 J	ND (0.51)	ND (0.51)	ND (0.51)	ND (10)	ND (0.51)	ND (5.1)	ND (10)	ND (5.1)	ND (1.3)
Dichlorodifluoromethane	5	ND (1.4)	ND (1.4)	ND (1.4)	ND (6.8)	ND (1.4)	ND (1.4)	ND (1.4)	ND (27)	ND (34)	ND (1.4) [a]	ND (1.4)	ND (1.4)	1.5 J	ND (1.4)	ND (1.4)	ND (27)	ND (1.4)	ND (14)	ND (27)	ND (14)	ND (3.4)
1,1-Dichloroethane	5	ND (0.57)	ND (0.57)	ND (0.57)	ND (2.8)	ND (0.57)	ND (0.57)	ND (0.57)	ND (11)	ND (14)	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)	ND (11)	ND (0.57)	ND (5.7)	ND (11)	ND (5.7)	ND (1.4)
1,2-Dichloroethane	0.6	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (15)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (0.60)	ND (6.0)	ND (12)	ND (6.0)	ND (1.5)
1,1-Dichloroethene	5	ND (0.59)	ND (0.59)	ND (0.59)	**6.7**	ND (0.59)	ND (0.59)	ND (0.59)	ND (12)	ND (15)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (12)	ND (0.59)	ND (5.9)	ND (12)	ND (5.9)	2.4 J
cis-1,2-Dichloroethene	5	0.56 J	ND (0.51)	1.2	**1690**	**11.1**	1.1	**120**	**298**	**276**	0.57 J	**22.3**	**68.2**	4.7	2.7	**205**	**4570**	**34.8**	**9.6 J**	**89.1**	ND (5.1)	**978**
trans-1,2-Dichloroethene	5	ND (0.54)	ND (0.54)	ND (0.54)	**17.2**	ND (0.54)	ND (0.54)	2.2	ND (11)	ND (13)	ND (0.54)	ND (0.54)	1.2	ND (0.54)	ND (0.54)	**7.1**	**132**	0.83 J	ND (5.4)	ND (11)	ND (5.4)	**8.1**
1,2-Dichloropropane	1	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.5)	ND (0.51)	ND (0.51)	ND (0.51)	ND (10)	ND (13)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (10)	ND (0.51)	ND (5.1)	ND (10)	ND (5.1)	ND (1.3)
cis-1,3-Dichloropropene	-	ND (0.47)	ND (0.47)	ND (0.47)	ND (2.4)	ND (0.47)	ND (0.47)	ND (0.47)	ND (9.4)	ND (12)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (9.4)	ND (0.47)	ND (4.7)	ND (9.4)	ND (4.7)	ND (1.2)
trans-1,3-Dichloropropene	-	ND (0.43)	ND (0.43)	ND (0.43)	ND (2.2)	ND (0.43)	ND (0.43)	ND (0.43)	ND (8.6)	ND (11)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (8.6)	ND (0.43)	ND (4.3)	ND (8.6)	ND (4.3)	ND (1.1)
Ethylbenzene	5	ND (0.60)	3.7	ND (0.60)	ND (3.0)	**9.4**	2.6	0.63 J	ND (12)	ND (15)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (0.60)	**3190**	**9470**	**1830**	**444**
Freon 113	5	ND (1.9)	ND (1.9)	ND (1.9)	ND (9.7)	ND (1.9)	ND (1.9)	ND (1.9)	ND (39)	ND (49)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (39)	ND (1.9)	ND (19)	ND (39)	ND (19)	ND (4.9)
2-Hexanone	-	ND (2.0)	ND (2.0)	ND (2.0)	ND (10)	ND (2.0)	ND (2.0)	ND (2.0)	ND (41)	ND (51)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (41)	ND (2.0)	ND (20)	ND (41)	ND (20)	ND (5.1)
Isopropylbenzene	5	ND (0.65)	**45.2**	3.3	ND (3.2)	0.74 J	ND (0.65)	ND (0.65)	ND (13)	ND (16)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (13)	ND (0.65)	**627**	**652**	**218**	**50**
p-Isopropyltoluene	5	ND (0.66)	ND (0.66)	ND (0.66)	ND (3.3)	ND (0.66)	ND (0.66)	ND (0.66)	ND (13)	ND (16)	ND (0.66)	ND (0.66)	ND (0.66)	ND (0.66)	ND (0.66)	ND (0.66)	ND (13)	ND (0.66)	**11.7 J**	ND (13)	ND (6.6)	ND (1.6)
Methyl Acetate	-	ND (0.80)	ND (0.80)	ND (0.80)	ND (4.0)	ND (0.80)	ND (0.80)	ND (0.80)	ND (16)	ND (20)	ND (0.80) [e]	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.80)	ND (16)	ND (0.80)	ND (8.0)	ND (16)	ND (8.0)	ND (2.0)
Methylcyclohexane	-	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (15)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (0.60)	ND (6.0)	ND (12)	ND (6.0)	ND (1.5)
Methyl Tert Butyl Ether	10	ND (0.51)	ND (0.51)	ND (0.51)	5.4	ND (0.51)	ND (0.51)	ND (0.51)	ND (10)	ND (13)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (10)	1.9	ND (5.1)	ND (10)	ND (5.1)	ND (1.3)
4-Methyl-2-pentanone(MIBK)	-	ND (1.9)	ND (1.9)	ND (1.9)	ND (9.3)	ND (1.9)	ND (1.9)	ND (1.9)	ND (37)	ND (46)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (37)	ND (1.9)	ND (19)	ND (37)	ND (19)	ND (4.6)
Methylene chloride	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (20)	ND (25)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (20)	ND (1.0)	ND (10)	ND (20)	ND (10)	ND (2.5)
Naphthalene	-	ND (2.5)	4.6 J	ND (2.5)	ND (13)	ND (2.5)	ND (2.5)	ND (2.5)	ND (50)	ND (63)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (50)	ND (2.5)	35.9 J	ND (50)	ND (25)	ND (6.3)
n-Propylbenzene	5	ND (0.60)	**29.5**	2.8	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (15)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (12)	ND (0.60)	**1100**	**1020**	**395**	**83.4**
Styrene	5	ND (0.70)	ND (0.70)	ND (0.70)	ND (3.5)	ND (0.70)	ND (0.70)	ND (0.70)	ND (14)	ND (17)	ND (0.70)	ND (0.70)	ND (0.70)	ND (0.70)	ND (0.70)	ND (0.70)	ND (14)	ND (0.70)	ND (7.0)	ND (14)	ND (7.0)	ND (1.7)
1,1,2,2-Tetrachloroethane	5	ND (0.65)	ND (0.65)	ND (0.65)	ND (3.3)	ND (0.65)	ND (0.65)	ND (0.65)	ND (13)	ND (16)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (13)	ND (0.65)	ND (6.5)	ND (13)	ND (6.5)	ND (1.6)
Tetrachloroethene	5	ND (0.90)	ND (0.90)	3.2	**2020**	**93**	1.9	**17**	**3050**	**3220**	**17.2**	**9.5**	**8.9**	0.93 J	**5.4**	**6.7**	**131**	**226**	**15.7**	**33.7**	**11.3**	**927**
Toluene	5	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	ND (0.53)	ND (0.53)	ND (0.53)	ND (11)	ND (13)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (11)	ND (0.53)	**707**	**16100**	**937**	**331**
1,2,3-Trichlorobenzene	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (10)	ND (13)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (10)	ND (0.50)	ND (5.0)	ND (10)	ND (5.0)	ND (1.3)
1,2,4-Trichlorobenzene	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (10)	ND (13)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (10)	ND (0.50)	ND (5.0)	ND (10)	ND (5.0)	ND (1.3)
1,1,1-Trichloroethane	5	ND (0.54)	ND (0.54)	ND (0.54)	ND (2.7)	ND (0.54)	ND (0.54)	ND (0.54)	ND (11)	ND (13)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (11)	ND (0.54)	ND (5.4)	ND (11)	ND (5.4)	ND (1.3)
1,1,2-Trichloroethane	1	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	ND (0.53)	ND (0.53)	ND (0.53)	ND (11)	ND (13)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (11)	ND (0.53)	ND (5.3)	ND (11)	ND (5.3)	ND (1.3)
Trichloroethene	5	ND (0.53)	ND (0.53)	1.3	**2650**	**53.2**	0.98 J	**22.7**	**1880**	**1940**	ND (0.53)	**11.5**	**12**	0.63 J	ND (0.53)	**10.7**	**450**	**52.9**	ND (5.3)	ND (11)	ND (5.3)	**812**
Trichlorofluoromethane	5	ND (0.84)	ND (0.84)	ND (0.84)	ND (4.2)	ND (0.84)	ND (0.84)	ND (0.84)	ND (17)	ND (21)	ND (0.84)	ND (0.84)	ND (0.84)	ND (0.84)	ND (0.84)	ND (0.84)	ND (17)	ND (0.84)	ND (8.4)	ND (17)	ND (8.4)	ND (2.1)
1,2,4-Trimethylbenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	2.3	1.7 J	ND (1.0)	ND (20)	ND (25)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (20)	ND (1.0)	**3640**	**3850**	**1250**	**273**
1,3,5-Trimethylbenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (20)	ND (25)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (20)	ND (1.0)	**1490**	**1270**	**416**	**93.8**
Vinyl chloride	2	ND (0.79) [a]	ND (0.79) [a]	ND (0.79) [a]	**62.6**	ND (0.79)	ND (0.79) [a]	**16**	ND (16)	ND (20)	ND (0.79) [f]	**3.1**	**9.9**	ND (0.79)	ND (0.79)	**66.7**	**461**	1.6	ND (7.9)	ND (16)	ND (7.9)	**37.1**
m,p-Xylene	-	ND (0.78)	ND (0.78)	ND (0.78)	ND (3.9)	10	ND (0.78)	ND (0.78)	ND (16)	ND (20)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (16)	ND (0.78)	11500	34400	5660	1460
o-Xylene	5	ND (0.59)	ND (0.59)	ND (0.59)	ND (3.0)	ND (0.59)	ND (0.59)	ND (0.59)	ND (12)	ND (15)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (12)	ND (0.59)	**3140**	**11300**	**1930**	**438**
Xylene (total)	5	ND (0.59)	ND (0.59)	ND (0.59)	ND (3.0)	**10**	ND (0.59)	ND (0.59)	ND (12)	ND (15)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (12)	ND (0.59)	**14600**	**45700**	**7590**	**1900**

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b Associated CCV outside of control limits low.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Elevated detection limit due to dilution required for high interfering element.
e Elevated sample detection limit due to difficult sample matrix.

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Volatile Organic Compounds in Groundwater (ug/L)

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	TMP-6 (4-6) JD7627-19 5/27/2020 Groundwater	TMP-6 (15-20) JD7627-20 5/27/2020 Groundwater	TMP-6 (25-30) JD7627-21 5/27/2020 Groundwater	TMP-6 (30-35) JD7627-23 5/27/2020 Groundwater	TMP-7 (4-6) JD7627-5 5/26/2020 Groundwater	TMP-7 (4-6) DUP JD7627-6 5/26/2020 Groundwater	TMP-7 (10-15) JD7627-7 5/26/2020 Groundwater	TMP-7 (15-20) JD7627-8 5/26/2020 Groundwater	TMP-7 (30-35) JD7627-9 5/26/2020 Groundwater	TMP-8 (5-10) JD7495-17 5/21/2020 Groundwater	TMP-8 (10-15) JD7495-16 5/21/2020 Groundwater	TMP-8 (20-25) JD7495-18 5/21/2020 Groundwater	TMP-8 (30-35) JD7495-19 5/21/2020 Groundwater	TMP-9 (4-6) JD7495-20 5/22/2020 Groundwater	TMP-9 (10-15) JD7495-21 5/22/2020 Groundwater	TMP-9 (25-30) JD7495-22 5/22/2020 Groundwater	TMP-9 (30-35) JD7495-23 5/22/2020 Groundwater	TMP-10 (4-6) JD7627-10 5/26/2020 Groundwater	TMP-10 (15-20) JD7627-11 5/26/2020 Groundwater	TMP-10 (25-30) JD7627-12 5/26/2020 Groundwater	TMP-10 (30-35) JD7627-14 5/26/2020 Groundwater
MS Volatiles (SW846 8260C) - values reported in ug/L																						
Acetone	-	6.7 J	ND (6.0)	ND (6.0)	ND (30)	ND (6.0)	ND (6.0)	ND (6.0)	ND (6.0)	ND (60)	ND (6.0)	ND (6.0)	ND (6.0)	ND (60)	ND (6.0)	ND (6.0)	ND (60)	ND (30)	ND (6.0)	ND (6.0)	ND (15)	ND (12)
Benzene	1	ND (0.43)	ND (0.43)	ND (0.43)	ND (2.1)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (4.3)	ND (0.43)	ND (0.43)	ND (0.43)	ND (4.3)	ND (0.43)	ND (0.43)	ND (4.3)	ND (2.1)	ND (0.43)	ND (0.43)	ND (1.1)	ND (0.85)
Bromochloromethane	5	ND (0.48)	ND (0.48)	ND (0.48)	ND (2.4)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (4.8)	ND (0.48)	ND (0.48)	ND (0.48)	ND (4.8)	ND (0.48)	ND (0.48)	ND (4.8)	ND (2.4)	ND (0.48)	ND (0.48)	ND (1.2)	ND (0.96)
Bromodichloromethane	-	ND (0.58)	ND (0.58)	ND (0.58)	ND (2.9)	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)	ND (5.8)	ND (0.58)	ND (0.58)	ND (0.58)	ND (5.8)	ND (0.58)	ND (0.58)	ND (5.8)	ND (2.9)	ND (0.58)	ND (0.58)	ND (1.5)	ND (1.2)
Bromoform	-	ND (0.63)	ND (0.63)	ND (0.63) [a]	ND (3.2)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (6.3)	ND (0.63)	ND (0.63)	ND (0.63)	ND (6.3)	ND (0.63)	ND (0.63)	ND (6.3)	ND (3.2)	ND (0.63)	ND (0.63)	ND (1.6)	ND (1.3)
Bromomethane	5	ND (1.6)	ND (1.6)	ND (1.6)	ND (8.2)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)	ND (16)	ND (1.6) [c]	ND (1.6) [c]	ND (1.6) [c]	ND (16) [c]	ND (1.6) [c]	ND (1.6) [c]	ND (16) [a]	ND (8.2) [a]	ND (1.6)	ND (1.6)	ND (4.1)	ND (3.3)
2-Butanone (MEK)	-	ND (6.9)	ND (6.9)	ND (6.9)	ND (34)	ND (6.9)	ND (6.9)	ND (6.9)	ND (6.9)	ND (69)	ND (6.9)	ND (6.9)	ND (6.9)	ND (69)	ND (6.9)	ND (6.9)	ND (69)	ND (34)	ND (6.9)	ND (6.9)	ND (17)	ND (14)
n-Butylbenzene	5	ND (0.52)	ND (0.52)	ND (0.52)	ND (2.6)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (5.2)	ND (0.52)	ND (0.52)	ND (0.52)	ND (5.2)	ND (0.52)	ND (0.52)	ND (5.2)	ND (2.6)	ND (0.52)	ND (0.52)	ND (1.3)	ND (1.0)
sec-Butylbenzene	5	ND (0.62)	ND (0.62)	ND (0.62)	ND (3.1)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (6.2)	ND (0.62)	ND (0.62)	ND (0.62)	ND (6.2)	ND (0.62)	ND (0.62)	ND (6.2)	ND (3.1)	ND (0.62)	ND (0.62)	ND (1.6)	ND (1.2)
tert-Butylbenzene	5	ND (0.69)	ND (0.69)	ND (0.69)	ND (3.4)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (6.9)	ND (0.69)	ND (0.69)	ND (0.69)	ND (6.9)	ND (0.69)	ND (0.69)	ND (6.9)	ND (3.4)	ND (0.69)	ND (0.69)	ND (1.7)	ND (1.4)
Carbon disulfide	60	ND (0.95)	ND (0.95)	ND (0.95)	ND (4.8)	ND (0.95)	ND (0.95)	ND (0.95)	ND (0.95)	ND (9.5)	ND (0.95)	ND (0.95)	ND (0.95)	ND (9.5)	ND (0.95)	ND (0.95)	ND (9.5)	ND (4.8)	ND (0.95)	ND (0.95)	ND (2.4)	ND (1.9)
Carbon tetrachloride	5	ND (0.55)	ND (0.55)	ND (0.55)	ND (2.8)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (5.5)	ND (0.55)	ND (0.55)	ND (0.55)	ND (5.5)	ND (0.55)	ND (0.55)	ND (5.5)	ND (2.8)	ND (0.55)	ND (0.55)	ND (1.4)	ND (1.1)
Chlorobenzene	5	ND (0.56)	ND (0.56)	ND (0.56)	ND (2.8)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (5.6)	ND (0.56)	ND (0.56)	ND (0.56)	ND (5.6)	ND (0.56)	ND (0.56)	ND (5.6)	ND (2.8)	ND (0.56)	ND (0.56)	ND (1.4)	ND (1.1)
Chloroethane	5	ND (0.73)	ND (0.73)	ND (0.73)	ND (3.6)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (7.3)	ND (0.73)	ND (0.73)	ND (0.73)	ND (7.3)	ND (0.73)	ND (0.73)	ND (7.3)	ND (3.6)	ND (0.73)	ND (0.73)	ND (1.8)	ND (1.5)
Chloroform	7	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (5.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (5.0)	ND (0.50)	ND (0.50)	ND (5.0)	ND (2.5)	ND (0.50)	ND (0.50)	ND (1.3)	ND (1.0)
Chloromethane	5	ND (0.76)	ND (0.76)	ND (0.76)	ND (3.8)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (7.6)	ND (0.76)	ND (0.76)	ND (0.76)	ND (7.6)	ND (0.76)	ND (0.76)	ND (7.6)	ND (3.8)	ND (0.76)	ND (0.76)	ND (1.9)	ND (1.5)
Cyclohexane	-	ND (0.78) [e]	ND (0.78)	ND (0.78)	ND (3.9)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (7.8)	ND (0.78)	ND (0.78)	ND (0.78)	ND (7.8)	ND (0.78)	ND (0.78)	ND (7.8)	ND (3.9)	ND (0.78)	ND (0.78)	ND (2.0)	ND (1.6)
1,2-Dibromo-3-chloropropane	0.04	ND (1.2)	ND (1.2)	ND (1.2) [a]	ND (6.0)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (12)	ND (1.2)	ND (1.2)	ND (1.2)	ND (12)	ND (1.2)	ND (1.2)	ND (12)	ND (6.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (2.4)
Dibromochloromethane	-	ND (0.56)	ND (0.56)	ND (0.56) [a]	ND (2.8)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (5.6)	ND (0.56)	ND (0.56)	ND (0.56)	ND (5.6)	ND (0.56)	ND (0.56)	ND (5.6)	ND (2.8)	ND (0.56)	ND (0.56)	ND (1.4)	ND (1.1)
1,2-Dibromoethane	0.0006	ND (0.48) [f]	ND (0.48) [f]	ND (0.48) [f]	ND (2.4) [f]	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (4.8)	ND (0.48)	ND (0.48)	ND (0.48)	ND (4.8)	ND (0.48)	ND (0.48)	ND (4.8)	ND (2.4)	ND (0.48)	ND (0.48)	ND (1.2)	ND (0.95)
1,2-Dichlorobenzene	3	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (5.3)	ND (0.53)	ND (0.53)	ND (0.53)	ND (5.3)	ND (0.53)	ND (0.53)	ND (5.3)	ND (2.7)	ND (0.53)	ND (0.53)	ND (1.3)	ND (1.1)
1,3-Dichlorobenzene	3	ND (0.54)	ND (0.54)	ND (0.54)	ND (2.7)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (5.4)	ND (0.54)	ND (0.54)	ND (0.54)	ND (5.4)	ND (0.54)	ND (0.54)	ND (5.4)	ND (2.7)	ND (0.54)	ND (0.54)	ND (1.4)	ND (1.1)
1,4-Dichlorobenzene	3	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.5)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (5.1)	ND (0.51)	ND (0.51)	ND (0.51)	ND (5.1)	ND (0.51)	ND (0.51)	ND (5.1)	ND (2.5)	ND (0.51)	ND (0.51)	ND (1.3)	ND (1.0)
Dichlorodifluoromethane	5	ND (1.4)	ND (1.4)	ND (1.4)	ND (6.8)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (14)	ND (1.4)	ND (1.4)	ND (1.4)	ND (14)	ND (1.4)	ND (1.4)	ND (14)	ND (6.8)	ND (1.4)	ND (1.4)	ND (3.4)	ND (2.7) [e]
1,1-Dichloroethane	5	ND (0.57)	ND (0.57)	ND (0.57)	ND (2.8)	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)	ND (5.7)	ND (0.57)	ND (0.57)	ND (0.57)	ND (5.7)	ND (0.57)	ND (0.57)	ND (5.7)	ND (2.8)	ND (0.57)	ND (0.57)	ND (1.4)	ND (1.1)
1,2-Dichloroethane	0.6	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (6.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (6.0)	ND (0.60)	ND (0.60)	ND (6.0)	ND (3.0)	ND (0.60)	ND (0.60)	ND (1.5)	ND (1.2)
1,1-Dichloroethene	5	ND (0.59)	ND (0.59)	ND (0.59) [a]	ND (3.0)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (5.9)	ND (0.59)	ND (0.59)	ND (0.59)	**5.9 J**	ND (0.59)	ND (0.59)	ND (5.9)	ND (3.0)	ND (0.59)	ND (0.59)	ND (1.5)	2.5
cis-1,2-Dichloroethene	5	2.6	ND (0.51)	**186**	**744**	ND (0.51)	ND (0.51)	1.1	1.3	**1300**	ND (0.51)	ND (0.51)	**31.8**	**1970**	**112**	**6.6**	**1220**	**963**	2.1	**24.1**	**472**	**828**
trans-1,2-Dichloroethene	5	ND (0.54)	ND (0.54)	3.6	**7.4**	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	**10.8**	ND (0.54)	ND (0.54)	0.83 J	**26.8**	3.2	ND (0.54)	**29.2**	**14.1**	ND (0.54)	ND (0.54)	**7.9**	**7.3**
1,2-Dichloropropane	1	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.5)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (5.1)	ND (0.51)	ND (0.51)	ND (0.51)	ND (5.1)	ND (0.51)	ND (0.51)	ND (5.1)	ND (2.5)	ND (0.51)	ND (0.51)	ND (1.3)	ND (1.0)
cis-1,3-Dichloropropene	-	ND (0.47)	ND (0.47)	ND (0.47)	ND (2.4)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (4.7)	ND (0.47)	ND (0.47)	ND (0.47)	ND (4.7)	ND (0.47)	ND (0.47)	ND (4.7)	ND (2.4)	ND (0.47)	ND (0.47)	ND (1.2)	ND (0.94)
trans-1,3-Dichloropropene	-	ND (0.43)	ND (0.43)	ND (0.43)	ND (2.2)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (4.3)	ND (0.43)	ND (0.43)	ND (0.43)	ND (4.3)	ND (0.43)	ND (0.43)	ND (4.3)	ND (2.2)	ND (0.43)	ND (0.43)	ND (1.1)	ND (0.86)
Ethylbenzene	5	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (6.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (6.0)	ND (0.60)	ND (0.60)	ND (6.0)	ND (3.0)	ND (0.60)	ND (0.60)	ND (1.5)	ND (1.2)
Freon 113	5	ND (1.9)	ND (1.9)	ND (1.9)	ND (9.7)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (19)	ND (1.9)	ND (1.9)	ND (1.9)	ND (19)	ND (1.9)	ND (1.9)	ND (19)	ND (9.7)	ND (1.9)	ND (1.9)	ND (4.9)	ND (3.9)
2-Hexanone	-	ND (2.0)	ND (2.0)	ND (2.0)	ND (10)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (20)	ND (2.0)	ND (2.0)	ND (2.0)	ND (20)	ND (2.0)	ND (2.0)	ND (20)	ND (10)	ND (2.0)	ND (2.0)	ND (5.1)	ND (4.1)
Isopropylbenzene	5	ND (0.65)	ND (0.65)	ND (0.65)	ND (3.2)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (6.5)	ND (0.65)	ND (0.65)	ND (0.65)	ND (6.5)	ND (0.65)	ND (0.65)	ND (6.5)	ND (3.2)	ND (0.65)	ND (0.65)	ND (1.6)	ND (1.3)
p-Isopropyltoluene	5	ND (0.66)	ND (0.66)	ND (0.66)	ND (3.3)	ND (0.66)	ND (0.66)	ND (0.66)	ND (0.66)	ND (6.6)	ND (0.66)	ND (0.66)	ND (0.66)	ND (6.6)	ND (0.66)	ND (0.66)	ND (6.6)	ND (3.3)	ND (0.66)	ND (0.66)	ND (1.6)	ND (1.3)
Methyl Acetate	-	ND (0.80)	ND (0.80)	ND (0.80)	ND (4.0)	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.80)	ND (8.0)	ND (0.80)	ND (0.80)	ND (0.80)	ND (8.0)	ND (0.80)	ND (0.80)	ND (8.0)	ND (4.0)	ND (0.80)	ND (0.80)	ND (2.0)	ND (1.6)
Methylcyclohexane	-	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (6.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (6.0)	ND (0.60)	ND (0.60)	ND (6.0)	ND (3.0)	ND (0.60)	ND (0.60)	ND (1.5)	ND (1.2)
Methyl Tert Butyl Ether	10	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.5)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (5.1)	ND (0.51)	ND (0.51)	ND (0.51)	5.2 J	ND (0.51)	ND (0.51)	ND (5.1)	ND (2.5)	ND (0.51)	ND (0.51)	ND (1.3)	1.7 J
4-Methyl-2-pentanone(MIBK)	-	ND (1.9)	ND (1.9)	ND (1.9)	ND (9.3)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (19)	ND (1.9)	ND (1.9)	ND (1.9)	ND (19)	ND (1.9)	ND (1.9)	ND (19)	ND (9.3)	ND (1.9)	ND (1.9)	ND (4.6)	ND (3.7)
Methylene chloride	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (10)	ND (5.0)	ND (1.0)	ND (1.0)	ND (2.5)	ND (2.0)
Naphthalene	-	ND (2.5)	ND (2.5)	ND (2.5)	ND (13)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (25)	ND (2.5)	ND (2.5)	ND (2.5)	ND (25)	ND (2.5)	ND (2.5)	ND (25)	ND (13)	ND (2.5)	ND (2.5)	ND (6.3)	ND (5.0)
n-Propylbenzene	5	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (6.0)	ND (0.60)	ND (0.60)	ND (0.60)	ND (6.0)	ND (0.60)	ND (0.60)	ND (6.0)	ND (3.0)	ND (0.60)	ND (0.60)	ND (1.5)	ND (1.2)
Styrene	5	ND (0.70)	ND (0.70)	ND (0.70)	ND (3.5)	ND (0.70)	ND (0.70)	ND (0.70)	ND (0.70)	ND (7.0)	ND (0.70)	ND (0.70)	ND (0.70)	ND (7.0)	ND (0.70)	ND (0.70)	ND (7.0)	ND (3.5)	ND (0.70)	ND (0.70)	ND (1.7)	ND (1.4)
1,1,2,2-Tetrachloroethane	5	ND (0.65)	ND (0.65)	ND (0.65)	ND (3.3)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (6.5)	ND (0.65)	ND (0.65)	ND (0.65)	ND (6.5)	ND (0.65)	ND (0.65)	ND (6.5)	ND (3.3)	ND (0.65)	ND (0.65)	ND (1.6)	ND (1.3)
Tetrachloroethene	5	ND (0.90)	ND (0.90)	**10.7**	**15.9**	1.1	1.1	ND (0.90)	ND (0.90)	**101**	4.4	**5.6**	**47.4**	**376**	**88.9**	**57.2**	**279**	**45.9**	**18.1**	**11.2**	**352**	**333**
Toluene	5	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (5.3)	ND (0.53)	ND (0.53)	ND (0.53)	ND (5.3)	ND (0.53)	ND (0.53)	ND (5.3)	ND (2.7)	ND (0.53)	ND (0.53)	ND (1.3)	ND (1.1)
1,2,3-Trichlorobenzene	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (5.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (5.0)	ND (0.50)	ND (0.50)	ND (5.0)	ND (2.5)	ND (0.50)	ND (0.50)	ND (1.3)	ND (1.0)
1,2,4-Trichlorobenzene	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (5.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (5.0)	ND (0.50)	ND (0.50)	ND (5.0)	ND (2.5)	ND (0.50)	ND (0.50)	ND (1.3)	ND (1.0)
1,1,1-Trichloroethane	5	ND (0.54)	ND (0.54)	ND (0.54)	ND (2.7)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (5.4)	ND (0.54)	ND (0.54)	ND (0.54)	ND (5.4)	ND (0.54)	ND (0.54)	ND (5.4)	ND (2.7)	ND (0.54)	ND (0.54)	ND (1.3)	ND (1.1)
1,1,2-Trichloroethane	1	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (5.3)	ND (0.53)	ND (0.53)	ND (0.53)	ND (5.3)	ND (0.53)	ND (0.53)	ND (5.3)	ND (2.7)	ND (0.53)	ND (0.53)	ND (1.3)	ND (1.1)
Trichloroethene	5	ND (0.53)	ND (0.53)	**32.8**	**84.2**	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	**95**	ND (0.53)	ND (0.53)	**45.3**	**780**	**97.8**	**13.4**	**619**	**259**	0.84 J	**13.7**	**162**	**111**
Trichlorofluoromethane	5	ND (0.84)	ND (0.84)	ND (0.84)	ND (4.2)	ND (0.84)	ND (0.84)	ND (0.84)	ND (0.84)	ND (8.4)	ND (0.84)	ND (0.84)	ND (0.84)	ND (8.4)	ND (0.84)	ND (0.84)	ND (8.4)	ND (4.2)	ND (0.84)	ND (0.84)	ND (2.1)	ND (1.7)
1,2,4-Trimethylbenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (10)	ND (5.0)	ND (1.0)	ND (1.0)	ND (2.5)	ND (2.0)
1,3,5-Trimethylbenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (10)	ND (5.0)	ND (1.0)	ND (1.0)	ND (2.5)	ND (2.0)
Vinyl chloride	2	ND (0.79) [e]	ND (0.79)	**9.2**	**41.8**	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	**76.9**	ND (0.79)	ND (0.79)	**2.1**	**70.8**	**5.8**	ND (0.79)	**46.2**	**33**	ND (0.79)	1	**59**	**132**
m,p-Xylene	-	ND (0.78)	ND (0.78)	ND (0.78)	ND (3.9)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (7.8)	ND (0.78)	ND (0.78)	ND (0.78)	ND (7.8)	ND (0.78)	ND (0.78)	ND (7.8)	ND (3.9)	ND (0.78)	ND (0.78)	ND (2.0)	ND (1.6)
o-Xylene	5	ND (0.59)	ND (0.59)	ND (0.59)	ND (3.0)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (5.9)	ND (0.59)	ND (0.59)	ND (0.59)	ND (5.9)	ND (0.59)	ND (0.59)	ND (5.9)	ND (3.0)	ND (0.59)	ND (0.59)	ND (1.5)	ND (1.2)
Xylene (total)	5	ND (0.59)	ND (0.59)	ND (0.59)	ND (3.0)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (5.9)	ND (0.59)	ND (0.59)	ND (0.59)	ND (5.9)	ND (0.59)	ND (0.59)	ND (5.9)	ND (3.0)	ND (0.59)	ND (0.59)	ND (1.5)	ND (1.2)

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of control limits high, sampl
b Associated CCV outside of control limits low.
c Associated CCV outside of control limits high, sampl
d Elevated detection limit due to dilution required for
e Elevated sample detection limit due to difficult sam

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Volatile Organic Compounds in Groundwater (ug/L)

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	TMP-12 (4-6) JD7643-5 5/28/2020 Groundwater	TMP-12 (4-6) DUP JD7643-6 5/28/2020 Groundwater	TMP-12 (10-15) JD7643-7 5/28/2020 Groundwater	TMP-12 (25-30) JD7643-8 5/28/2020 Groundwater	TMP-12 (30-35) JD7643-9 5/28/2020 Groundwater	TMP-13 (4-6) JD7643-1 5/28/2020 Groundwater	TMP-13 (10-15) JD7643-2 5/28/2020 Groundwater	TMP-13 (20-25) JD7643-3 5/28/2020 Groundwater	TMP-13 (30-35) JD7643-4 5/28/2020 Groundwater	TMP-14 (4-6) JD7627-15 5/27/2020 Groundwater	TMP-14 (10-15) JD7627-16 5/27/2020 Groundwater	TMP-14 (20-25) JD7627-17 5/27/2020 Groundwater	TMP-14 (30-35) JD7627-18 5/27/2020 Groundwater
MS Volatiles (SW846 8260C) - values reported in ug/L														
Acetone	-	ND (6.0)	ND (6.0)	ND (6.0)	ND (6.0)	ND (30)	ND (300)	ND (60)	ND (30)	ND (300)	ND (15)	ND (600)	ND (15)	ND (30)
Benzene	1	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (2.1)	ND (21)	ND (4.3)	ND (2.1)	ND (21)	ND (1.1)	ND (43)	ND (1.1)	ND (2.1)
Bromochloromethane	5	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (2.4)	ND (24)	ND (4.8)	ND (2.4)	ND (24)	ND (1.2)	ND (48)	ND (1.2)	ND (2.4)
Bromodichloromethane	-	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)	ND (2.9)	ND (29)	ND (5.8)	ND (2.9)	ND (29)	ND (1.5)	ND (58)	ND (1.5)	ND (2.9)
Bromoform	-	ND (0.63) [a]	ND (0.63) [a]	ND (0.63) [a]	ND (0.63) [a]	ND (3.2) [a]	ND (32) [a]	ND (6.3) [a]	ND (3.2) [a]	ND (32) [a]	ND (1.6)	ND (63)	ND (1.6)	ND (3.2) [a]
Bromomethane	5	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)	ND (8.2)	ND (82)	ND (16)	ND (8.2)	ND (82)	ND (4.1)	ND (160)	ND (4.1)	ND (8.2)
2-Butanone (MEK)	-	ND (6.9)	ND (6.9)	ND (6.9)	ND (6.9)	ND (34)	ND (340)	ND (69)	ND (34)	ND (340)	ND (17)	ND (690)	ND (17)	ND (34)
n-Butylbenzene	5	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (2.6)	ND (26)	ND (5.2)	ND (2.6)	ND (26)	ND (1.3)	ND (52)	ND (1.3)	ND (2.6)
sec-Butylbenzene	5	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (3.1)	ND (31)	**7.7 J**	ND (3.1)	ND (31)	ND (1.6)	ND (62)	ND (1.6)	ND (3.1)
tert-Butylbenzene	5	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (3.4)	ND (34)	ND (6.9)	ND (3.4)	ND (34)	ND (1.7)	ND (69)	ND (1.7)	ND (3.4)
Carbon disulfide	60	ND (0.95)	ND (0.95)	ND (0.95)	ND (0.95)	ND (4.8)	ND (48)	ND (9.5)	ND (4.8)	ND (48)	ND (2.4)	ND (95)	ND (2.4)	ND (4.8)
Carbon tetrachloride	5	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (2.8)	ND (28)	ND (5.5)	ND (2.8)	ND (28)	ND (1.4)	ND (55)	ND (1.4)	ND (2.8)
Chlorobenzene	5	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (2.8)	ND (28)	ND (5.6)	ND (2.8)	ND (28)	ND (1.4)	ND (56)	ND (1.4)	ND (2.8)
Chloroethane	5	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (3.6)	ND (36)	ND (7.3)	ND (3.6)	ND (36)	ND (1.8)	ND (73)	ND (1.8)	ND (3.6)
Chloroform	7	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (25)	ND (5.0)	ND (2.5)	ND (25)	ND (1.3)	ND (50)	ND (1.3)	ND (2.5)
Chloromethane	5	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (3.8)	ND (38)	ND (7.6)	ND (3.8)	ND (38)	ND (1.9)	ND (76)	ND (1.9)	ND (3.8)
Cyclohexane	-	ND (0.78) [e]	ND (0.78) [e]	ND (0.78) [e]	ND (0.78) [e]	ND (3.9) [e]	ND (39) [e]	ND (7.8) [e]	ND (3.9) [e]	ND (39) [e]	ND (2.0) [e]	ND (78)	ND (2.0) [e]	ND (3.9)
1,2-Dibromo-3-chloropropane	0.04	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (6.0)	ND (60)	ND (12)	ND (6.0)	ND (60)	ND (3.0)	ND (120)	ND (3.0)	ND (6.0) [a]
Dibromochloromethane	-	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (2.8)	ND (28) [a]	ND (5.6) [a]	ND (2.8)	ND (28)	ND (1.4)	ND (56)	ND (1.4)	ND (2.8) [a]
1,2-Dibromoethane	0.0006	ND (0.48) [g]	ND (0.48) [g]	ND (0.48) [g]	ND (0.48) [f]	ND (2.4) [g]	ND (24) [f]	ND (4.8) [f]	ND (2.4) [g]	ND (24) [g]	ND (1.2) [f]	ND (48) [f]	ND (1.2) [f]	ND (2.4) [f]
1,2-Dichlorobenzene	3	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	ND (27)	ND (5.3)	ND (2.7)	ND (27)	ND (1.3)	ND (53)	ND (1.3)	ND (2.7)
1,3-Dichlorobenzene	3	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (2.7)	ND (27)	ND (5.4)	ND (2.7)	ND (27)	ND (1.4)	ND (54)	ND (1.4)	ND (2.7)
1,4-Dichlorobenzene	3	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.5)	ND (25)	ND (5.1)	ND (2.5)	ND (25)	ND (1.3)	ND (51)	ND (1.3)	ND (2.5)
Dichlorodifluoromethane	5	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (6.8)	ND (68) [e]	ND (14) [e]	ND (6.8)	ND (68)	ND (3.4)	ND (140)	ND (3.4)	ND (6.8)
1,1-Dichloroethane	5	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)	ND (2.8)	ND (28)	ND (5.7)	ND (2.8)	ND (28)	ND (1.4)	ND (57)	ND (1.4)	ND (2.8)
1,2-Dichloroethane	0.6	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (30)	ND (6.0)	ND (3.0)	ND (30)	ND (1.5)	ND (60)	ND (1.5)	ND (3.0)
1,1-Dichloroethene	5	ND (0.59)	ND (0.59)	ND (0.59)	1	ND (3.0)	ND (30)	ND (5.9)	ND (3.0)	ND (30)	ND (1.5)	ND (59)	ND (1.5)	ND (3.0) [a]
cis-1,2-Dichloroethene	5	0.94 J	1.3	1.4	**269**	**849**	**3510**	**169**	**11.7**	**2650**	**11.2**	**123**	2.3 J	**1800**
trans-1,2-Dichloroethene	5	ND (0.54)	ND (0.54)	ND (0.54)	3.5	**8.2**	ND (27)	ND (5.4)	ND (2.7)	ND (27)	ND (1.3)	ND (54)	ND (1.3)	**11.8**
1,2-Dichloropropane	1	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (2.5)	ND (25)	ND (5.1)	ND (2.5)	ND (25)	ND (1.3)	ND (51)	ND (1.3)	ND (2.5)
cis-1,3-Dichloropropene	-	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (2.4)	ND (24)	ND (4.7)	ND (2.4)	ND (24)	ND (1.2)	ND (47)	ND (1.2)	ND (2.4)
trans-1,3-Dichloropropene	-	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (2.2)	ND (22)	ND (4.3)	ND (2.2)	ND (22)	ND (1.1)	ND (43)	ND (1.1)	ND (2.2)
Ethylbenzene	5	2.1	1.8	2	ND (0.60)	ND (3.0)	**7920**	**2550**	**333**	**249**	**426**	**7570**	**285**	**183**
Freon 113	5	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (9.7)	ND (97)	ND (19)	ND (9.7)	ND (97)	ND (4.9)	ND (190)	ND (4.9)	ND (9.7)
2-Hexanone	-	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (10)	ND (100)	ND (20)	ND (10)	ND (100)	ND (5.1)	ND (200)	ND (5.1)	ND (10)
Isopropylbenzene	5	0.72 J	ND (0.65)	0.91 J	ND (0.65)	ND (3.2)	**902**	**751**	**51.2**	**35.8 J**	**39.3**	**741**	**27.1**	**17.5**
p-Isopropyltoluene	5	ND (0.66)	ND (0.66)	ND (0.66)	ND (0.66)	ND (3.3)	ND (33)	ND (6.6)	ND (3.3)	ND (33)	ND (1.6)	ND (66)	ND (1.6)	ND (3.3)
Methyl Acetate	-	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.80)	ND (4.0)	ND (40)	ND (8.0)	ND (4.0)	ND (40)	ND (2.0)	ND (80)	ND (2.0)	ND (4.0)
Methylcyclohexane	-	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (3.0)	ND (30)	ND (6.0)	ND (3.0)	ND (30)	ND (1.5)	ND (60)	ND (1.5)	ND (3.0)
Methyl Tert Butyl Ether	10	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	2.8 J	ND (25)	ND (5.1)	ND (2.5)	ND (25)	ND (1.3)	ND (51)	ND (1.3)	2.6 J
4-Methyl-2-pentanone(MIBK)	-	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (9.3)	ND (93)	ND (19)	ND (9.3)	ND (93)	ND (4.6)	ND (190)	ND (4.6)	ND (9.3)
Methylene chloride	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (50)	ND (10)	ND (5.0)	ND (50)	ND (2.5)	ND (100)	ND (2.5)	ND (5.0)
Naphthalene	-	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (13)	ND (130)	33.3 J	ND (13)	ND (130)	ND (6.3)	ND (250)	ND (6.3)	ND (13)
n-Propylbenzene	5	1.8 J	1.7 J	2.1	ND (0.60)	ND (3.0)	**1340**	**981**	**66.2**	**48.1 J**	**54.5**	**1120**	**35.9**	**23.3**
Styrene	5	ND (0.70)	ND (0.70)	ND (0.70)	ND (0.70)	ND (3.5)	ND (35)	ND (7.0)	ND (3.5)	ND (35)	ND (1.7)	ND (70)	ND (1.7)	ND (3.5)
1,1,2,2-Tetrachloroethane	5	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (3.3)	ND (33)	ND (6.5)	ND (3.3)	ND (33)	ND (1.6)	ND (65)	ND (1.6)	ND (3.3)
Tetrachloroethene	5	ND (0.90)	ND (0.90)	ND (0.90)	**120**	**140**	**109**	**22.2**	**12.7**	**7610**	**7.5**	ND (90)	**5.3**	**297**
Toluene	5	1	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	**21800**	**3820**	**413**	**290**	2.3 J	**106**	3.6	ND (2.7)
1,2,3-Trichlorobenzene	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (25)	ND (5.0)	ND (2.5)	ND (25)	ND (1.3)	ND (50)	ND (1.3)	ND (2.5)
1,2,4-Trichlorobenzene	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (2.5)	ND (25)	ND (5.0)	ND (2.5)	ND (25)	ND (1.3)	ND (50)	ND (1.3)	ND (2.5)
1,1,1-Trichloroethane	5	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (2.7)	ND (27)	ND (5.4)	ND (2.7)	ND (27)	ND (1.3)	ND (54)	ND (1.3)	ND (2.7)
1,1,2-Trichloroethane	1	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (2.7)	ND (27)	ND (5.3)	ND (2.7)	ND (27)	ND (1.3)	ND (53)	ND (1.3)	ND (2.7)
Trichloroethene	5	ND (0.53)	ND (0.53)	ND (0.53)	**97.9**	**127**	**53.1**	**9.8 J**	4.6 J	**5440**	3	ND (53)	1.9 J	**197**
Trichlorofluoromethane	5	ND (0.84)	ND (0.84)	ND (0.84)	ND (0.84)	ND (4.2)	ND (42)	ND (8.4)	ND (4.2)	ND (42)	ND (2.1)	ND (84)	ND (2.1)	ND (4.2)
1,2,4-Trimethylbenzene	5	2.7	3	2.6	ND (1.0)	ND (5.0)	**4850**	**3370**	**238**	**175**	**158**	**4080**	**105**	**67.4**
1,3,5-Trimethylbenzene	5	ND (1.0)	1.0 J	ND (1.0)	ND (1.0)	ND (5.0)	**1510**	**195**	**52.8**	ND (50)	**39.1**	**1360**	**36.5**	**19.2**
Vinyl chloride	2	ND (0.79)	ND (0.79)	ND (0.79)	**18.2**	**53.4**	ND (39) [e]	ND (7.9) [e]	ND (3.9)	**107**	ND (2.0) [e]	ND (79)	ND (2.0) [e]	**73.4**
m,p-Xylene	-	8.2	7.3	6.7	0.89 J	ND (3.9)	34400	7420	1260	989	1570	26500	948	578
o-Xylene	5	2.7	2.2	2.3	ND (0.59)	ND (3.0)	**14300**	**3050**	**480**	**343**	**6.3**	**685**	**28.7**	**15.8**
Xylene (total)	5	**10.9**	**9.5**	**9**	0.89 J	ND (3.0)	**48700**	**10500**	**1740**	**1330**	**1580**	**27200**	**977**	**594**

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of control limits high, sampl
b Associated CCV outside of control limits low.
c Associated CCV outside of control limits high, sampl
d Elevated detection limit due to dilution required for
e Elevated sample detection limit due to difficult sam

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Semi-Volatile Organic Compounds in Groundwater (ug/L)

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	MW-1 JD1537-1 1/10/2020 Groundwater	MW-2 JD1455-1 1/9/2020 Groundwater	MW-3 JD1455-2 1/9/2020 Groundwater	MW-3 DUP JD1455-3 1/9/2020 Groundwater	MW-6 JD1537-2 1/10/2020 Groundwater	MW-8 JD1455-4 1/9/2020 Groundwater	MW-9 JD1455-5 1/9/2020 Groundwater	MW-13 JD1455-6 1/9/2020 Groundwater	MW-14 JD1537-3 1/10/2020 Groundwater	MW-15 JD1537-4 1/10/2020 Groundwater	MW-17 JD1537-5 1/10/2020 Groundwater	MW-18 JD1537-6 1/10/2020 Groundwater	MW-20 JD1537-7 1/10/2020 Groundwater	MW-22 JD1537-8 1/10/2020 Groundwater
MS Semi-volatiles (SW846 8270D) - values reported in ug/L															
2-Chlorophenol	-	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.91)	ND (0.78)	ND (0.80)	ND (0.78)	ND (0.78)
4-Chloro-3-methyl phenol	-	ND (0.85)	ND (0.85)	ND (0.85)	ND (0.85)	ND (0.85)	ND (0.85)	ND (0.85)	ND (0.85)	ND (0.85)	ND (0.99)	ND (0.85)	ND (0.87)	ND (0.85)	ND (0.85)
2,4-Dichlorophenol	1	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.4)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
2,4-Dimethylphenol	1	ND (2.3)	**4.7 J**	**11.5**	**9.9**	**13.7**	ND (2.3)	ND (2.3)	ND (2.3)	ND (2.3)	ND (2.7)	ND (2.3)	ND (2.4)	ND (2.3)	ND (2.3)
2,4-Dinitrophenol	1	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.7)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)
4,6-Dinitro-o-cresol	-	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.4)	ND (1.2)	ND (1.3)	ND (1.2)	ND (1.2)
2-Methylphenol	-	ND (0.85)	1.0 J	1.3 J	1.3 J	2.7	ND (0.85)	ND (0.85)	ND (0.85)	ND (0.85)	ND (0.99)	ND (0.85)	ND (0.87)	ND (0.85)	ND (0.85)
3&4-Methylphenol	-	ND (0.84)	4.6	3.6	3.4	5.6	ND (0.84)	ND (0.84)	ND (0.84)	ND (0.84)	ND (0.98)	ND (0.84)	ND (0.86)	ND (0.84)	ND (0.84)
2-Nitrophenol	-	ND (0.91)	ND (0.91)	ND (0.91)	ND (0.91)	ND (0.91)	ND (0.91)	ND (0.91)	ND (0.91)	ND (0.91)	ND (1.1)	ND (0.91)	ND (0.94)	ND (0.91)	ND (0.91)
4-Nitrophenol	-	ND (1.1)[b]	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.1)[b]	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.1)[b]	ND (1.3)[b]	ND (1.1)[b]	ND (1.1)[b]	ND (1.1)[b]	ND (1.1)[b]
Pentachlorophenol	1	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.5)	ND (1.3)	ND (1.4)	ND (1.3)	ND (1.3)
Phenol	1	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.44)	ND (0.37)	ND (0.38)	ND (0.37)	ND (0.37)
2,3,4,6-Tetrachlorophenol	-	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.6)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.4)
2,4,5-Trichlorophenol	-	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.5)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)
2,4,6-Trichlorophenol	-	ND (0.88)	ND (0.88)	ND (0.88)	ND (0.88)	ND (0.88)	ND (0.88)	ND (0.88)	ND (0.88)	ND (0.88)	ND (1.0)	ND (0.88)	ND (0.91)	ND (0.88)	ND (0.88)
Acenaphthene	-	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	0.32 J	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.21)	ND (0.18)	ND (0.19)	ND (0.18)	ND (0.18)
Acenaphthylene	-	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.15)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)
Acetophenone	-	ND (0.20)	ND (0.20)	6	5.4	5.1	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Anthracene	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.23)	ND (0.20)	ND (0.21)	ND (0.20)	ND (0.20)
Atrazine	7.5	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.50)	ND (0.43)	ND (0.44)	ND (0.43)	ND (0.43)
Benzaldehyde	-	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.32)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)
Benzo(a)anthracene	-	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	0.20 J	ND (0.19)	ND (0.23)	ND (0.19)	0.20 J	ND (0.19)	ND (0.19)
Benzo(a)pyrene	ND	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.24)	ND (0.20)	ND (0.21)	ND (0.20)	ND (0.20)
Benzo(b)fluoranthene	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Benzo(g,h,i)perylene	-	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.38)	ND (0.32)	0.51 J	ND (0.32)	ND (0.32)
Benzo(k)fluoranthene	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.23)	ND (0.20)	0.39 J	ND (0.20)	ND (0.20)
4-Bromophenyl phenyl ether	-	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.45)	ND (0.38)	ND (0.40)	ND (0.38)	ND (0.38)
Butyl benzyl phthalate	-	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.51)	ND (0.44)	ND (0.45)	ND (0.44)	ND (0.44)
1,1'-Biphenyl	5	ND (0.20)	0.61 J	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.24)	ND (0.20)	ND (0.21)	ND (0.20)	ND (0.20)
2-Chloronaphthalene	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.26)	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.22)
4-Chloroaniline	5	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.38)	ND (0.32)	ND (0.33)	ND (0.32)	ND (0.32)
Carbazole	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
Caprolactam	-	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.72)	ND (0.62)	ND (0.64)	ND (0.62)	ND (0.62)
Chrysene	-	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.20)	ND (0.17)	0.25 J	ND (0.17)	ND (0.17)
bis(2-Chloroethoxy)methane	5	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.31)	ND (0.26)	ND (0.27)	ND (0.26)	ND (0.26)
bis(2-Chloroethyl)ether	1	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.28)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
2,2'-Oxybis(1-chloropropane)	5	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.45)	ND (0.38)	ND (0.40)	ND (0.38)	ND (0.38)
4-Chlorophenyl phenyl ether	-	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.41)	ND (0.35)	ND (0.36)	ND (0.35)	ND (0.35)
2,4-Dinitrotoluene	5	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.61)	ND (0.53)	ND (0.54)	ND (0.53)	ND (0.53)
2,6-Dinitrotoluene	5	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.53)	ND (0.45)	ND (0.47)	ND (0.45)	ND (0.45)
3,3'-Dichlorobenzidine	5	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.56)	ND (0.48)	ND (0.50)	ND (0.48)	ND (0.48)
1,4-Dioxane	-	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.73)	ND (0.63)	ND (0.64)	ND (0.63)	ND (0.63)
Dibenzo(a,h)anthracene	-	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.37)	ND (0.32)	0.56 J	ND (0.32)	ND (0.32)
Dibenzofuran	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	0.24 J	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.24)	ND (0.21)	ND (0.22)	ND (0.21)	ND (0.21)
Di-n-butyl phthalate	50	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.55)	ND (0.47)	ND (0.49)	ND (0.47)	ND (0.47)
Di-n-octyl phthalate	-	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.26)	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.22)
Diethyl phthalate	-	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.29)	ND (0.25)	ND (0.26)	ND (0.25)	ND (0.25)
Dimethyl phthalate	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.24)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
bis(2-Ethylhexyl)phthalate	5	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.8)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)
Fluoranthene	-	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	0.20 J	ND (0.16)	ND (0.19)	ND (0.16)	ND (0.17)	ND (0.16)	ND (0.16)
Fluorene	-	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	0.38 J	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.19)	ND (0.16)	ND (0.17)	ND (0.16)	ND (0.16)
Hexachlorobenzene	0.04	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.36)	ND (0.31)	ND (0.32)	ND (0.31)	ND (0.31)
Hexachlorobutadiene	0.5	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.55)	ND (0.47)	ND (0.48)	ND (0.47)	ND (0.47)
Hexachlorocyclopentadiene	5	ND (2.6)	ND (2.6)	ND (2.6)	ND (2.6)	ND (2.6)	ND (2.6)	ND (2.6)	ND (2.6)	ND (2.6)	ND (3.1)	ND (2.6)	ND (2.7)	ND (2.6)	ND (2.6)
Hexachloroethane	5	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.43)	ND (0.37)	ND (0.38)	ND (0.37)	ND (0.37)
Indeno(1,2,3-cd)pyrene	-	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.37)	ND (0.32)	ND (0.33)	ND (0.32)	ND (0.32)
Isophorone	-	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.31)	ND (0.26)	ND (0.27)	ND (0.26)	ND (0.26)
2-Methylnaphthalene	-	ND (0.20)	ND (0.20)	0.57 J	0.56 J	3	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	0.30 J	ND (0.20)	ND (0.21)	ND (0.20)	ND (0.20)
2-Nitroaniline	5	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.31)	ND (0.26)	ND (0.27)	ND (0.26)	ND (0.26)
3-Nitroaniline	5	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.43)	ND (0.37)	ND (0.38)	ND (0.37)	ND (0.37)
4-Nitroaniline	5	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.49)	ND (0.42)	ND (0.43)	ND (0.42)	ND (0.42)
Naphthalene	-	ND (0.22)	3.7	12	11.5	14.5	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.26)	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.22)
Nitrobenzene	0.4	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.71)	ND (0.61)	ND (0.63)	ND (0.61)	ND (0.61)
N-Nitroso-di-n-propylamine	-	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.53)	ND (0.46)	ND (0.47)	ND (0.46)	ND (0.46)
N-Nitrosodiphenylamine	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.25)	ND (0.21)	ND (0.22)	ND (0.21)	ND (0.21)
Phenanthrene	-	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	0.23 J	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)
Pyrene	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.24)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
1,2,4,5-Tetrachlorobenzene	5	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.41)	ND (0.35)	ND (0.36)	ND (0.35)	ND (0.35)

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b Associated CCV outside of control limits low.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Elevated detection limit due to dilution required for high interfering element.
e Elevated sample detection limit due to difficult sample matrix.

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Lab Filtered Metals in Groundwater (ug/L)

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	MW-1 JD1537-1F 1/10/2020 Groundwater	MW-2 JD1455-1 1/9/2020 Groundwater	MW-3 JD1455-2 1/9/2020 Groundwater	MW-3 DUP JD1455-3 1/9/2020 Groundwater	MW-6 JD1537-2F 1/10/2020 Groundwater	MW-8 JD1455-4 1/9/2020 Groundwater	MW-9 JD1455-5 1/9/2020 Groundwater	MW-13 JD1455-6 1/9/2020 Groundwater	MW-14 JD1537-3F 1/10/2020 Groundwater	MW-15 JD1537-4F 1/10/2020 Groundwater	MW-17 JD1537-5F 1/10/2020 Groundwater	MW-18 JD1537-6F 1/10/2020 Groundwater	MW-20 JD1537-7F 1/10/2020 Groundwater	MW-22 JD1537-8F 1/10/2020 Groundwater
Metals (Lab Filtered) Analysis - values reported in ug/L															
Aluminum	-	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Antimony	3	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	**8.7**	<6.0	<6.0	<6.0
Arsenic	25	<3.0	<3.0	6.9	6.8	<3.0	<3.0	<3.0	5	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Barium	1000	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Beryllium	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	5	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Calcium	-	69200	35800	114000	118000	136000	39200	27800	78200	35300	50700	22300	57500	66900	71300
Chromium	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cobalt	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Copper	200	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Iron	300	**1250**	**857**	**10700**	**11800**	**7070**	<100	<100	**4330**	**688**	<100	<100	<100	<100	<100
Lead	25	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	-	8390	10600	14100	14900	9960	9020	11500	16400	10600	16000	<5000	8440	<5000	11300
Manganese	300	**620**	116	**589**	**599**	**665**	<15	146	**855**	**325**	<15	<15	<15	<15	62.2
Mercury	0.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Potassium	-	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	12800
Selenium	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Silver	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sodium	20000	**62100**	12700	**46700**	**49000**	16900	**56800**	12000	**29300**	**46900**	13100	<10000	**31400**	**21000**	**60500**
Thallium	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Vanadium	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Zinc	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b Associated CCV outside of control limits low.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Elevated detection limit due to dilution required for high interfering element.
e Elevated sample detection limit due to difficult sample matrix.

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Lab Filtered Metals in Groundwater (ug/L)

Client Sample ID:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	TMP-1 (4-6)	TMP-1 (10-15)	TMP-1 (20-25)	TMP-1 (30-35)	TMP-2 (4-6)	TMP-2 (10-15)	TMP-2 (15-20)	TMP-2 (30-35)	TMP-2 (30-35)DUP	TMP-3 (4-6)	TMP-3 (15-20)	TMP-3 (20-25)	TMP-3 (30-35)	TMP-4 (4-6)	TMP-4 (15-20)	TMP-4 (20-25)	TMP-4 (30-35)
Lab Sample ID:		JD7495-1F	JD7495-2F	JD7495-3F	JD7495-4F	JD7495-7F	JD7495-6F	JD7495-8F	JD7495-9F	JD7495-10F	JD7627-1F	JD7627-2F	JD7627-3F	JD7627-4F	JD7495-11F	JD7495-12F	JD7495-13F	JD7495-14F
Date Sampled:		5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/21/2020	5/20/2020	5/21/2020	5/21/2020	5/21/2020	5/22/2020	5/22/2020	5/22/2020	5/22/2020	5/21/2020	5/21/2020	5/21/2020	5/21/2020
Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Metals (Lab Filtered) Analysis - values reported in ug/L																		
Aluminum	-	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Antimony	3	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
Arsenic	25	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Barium	1000	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Beryllium	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	5	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Calcium	-	43000	44900	44900	68200	63500	48000	52100	59400	60200	56600	40400	60200	17300	55300	31900	33600	51700
Chromium	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cobalt	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Copper	200	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Iron	300	114	288	**1930**	<100	121	209	171	**352**	**805**	<100	**2150**	**3330**	**7680**	<100	<100	**1670**	<100
Lead	25	<3.0	<3.0	8.9	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	-	13200	7460	8640	9010	7850	18000	6600	9710	9470	7920	8490	17000	8150	8200	5000	7180	7980
Manganese	300	<15	153	**5050**	**999**	**866**	**1430**	**914**	**315**	275	46.8	**1800**	**1710**	248	46.5	**610**	**792**	**493**
Mercury	0.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	100	<10	<10	<10	<10	<10	<10	14.2	<10	<10	<10	<10	<10	<10	<10	<10	11.2	<10
Potassium	-	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	13100	<10000	<10000	<10000	15700	<10000	<10000	<10000
Selenium	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Silver	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sodium	20000	<10000	**94500**	**84900**	**29600**	**44900**	**179000**	**152000**	**24400**	**20100**	**81300**	**183000**	**151000**	**21100**	**30700**	**62800**	**148000**	19300
Thallium	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Vanadium	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Zinc	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b Associated CCV outside of control limits low.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Elevated detection limit due to dilution required for high interfering element.
e Elevated sample detection limit due to difficult sample matrix.

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Lab Filtered Metals in Groundwater (ug/L)

Client Sample ID:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	TMP-5 (4-6)	TMP-5 (10-15)	TMP-5 (15-20)	TMP-5 (30-35)	TMP-6 (4-6)	TMP-6 (15-20)	TMP-6 (25-30)	TMP-6 (30-35)	TMP-7 (4-6)	TMP-7 (4-6) DUF	TMP-7 (10-15)	TMP-7 (15-20)	TMP-7 (30-35)	TMP-8 (5-10)	TMP-8 (10-15)	TMP-8 (20-25)	TMP-8 (30-35)
Lab Sample ID:		JD7643-11F	JD7643-12F	JD7643-13F	JD7643-14F	JD7627-19F	JD7627-20F	JD7627-21F	JD7627-23F	JD7627-5F	JD7627-6F	JD7627-7F	JD7627-8F	JD7627-9F	JD7495-17F	JD7495-16F	JD7495-18F	JD7495-19F
Date Sampled:		5/29/2020	5/29/2020	5/29/2020	5/29/2020	5/27/2020	5/27/2020	5/27/2020	5/27/2020	5/26/2020	5/26/2020	5/26/2020	5/26/2020	5/26/2020	5/21/2020	5/21/2020	5/21/2020	5/21/2020
Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Metals (Lab Filtered) Analysis - valu																		
Aluminum	-	<200	<200	<200	<200	2170	<200	<200	<200	<200	320	-	<200	<200	<200	<200	<200	<200
Antimony	3	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	-	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
Arsenic	25	<3.0	4.2	<3.0	<3.0	5.2	<3.0	<3.0	<3.0	<3.0	<3.0	-	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Barium	1000	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	-	<200	<200	<200	<200	<200	<200
Beryllium	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	5	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	-	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Calcium	-	62700	41500	14600	65900	46600	39800	7820	6970	65100	53100	-	18500	38000	39000	72100	65600	34600
Chromium	50	<10	<10	<10	<10	<10	<10	<10	<10	13.7	10.3	-	<10	<10	<10	<10	<10	<10
Cobalt	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
Copper	200	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10
Iron	300	131	124	<100	**13900**	<100	**1070**	**659**	<100	<100	<100	-	120	**2710**	115	161	<100	**6530**
Lead	25	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	-	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	-	6970	6880	<5000	41500	<5000	13500	5660	<5000	<5000	5580	-	<5000	10400	15400	27400	8860	25800
Manganese	300	147	117	**606**	**739**	<15	**2670**	145	105	<15	<15	-	**420**	**425**	43.9	62.8	**833**	**521**
Mercury	0.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	100	<10	<10	<10	<10	<10	14.3	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	11.9
Potassium	-	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	-	<10000	<10000	<10000	13900	<10000	<10000
Selenium	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10
Silver	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10
Sodium	20000	**39300**	19200	**96000**	**67300**	**20400**	**211000**	**88200**	**71800**	**70100**	**63200**	-	**117000**	**26400**	**65600**	**181000**	**150000**	**32900**
Thallium	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10
Vanadium	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
Zinc	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	-	<20	<20	<20	<20	<20	<20

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of contro
b Associated CCV outside of contro
c Associated CCV outside of contro
d Elevated detection limit due to d
e Elevated sample detection limit c

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Lab Filtered Metals in Groundwater (ug/L)

Client Sample ID:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	TMP-9 (4-6)	TMP-9 (10-15)	TMP-9 (25-30)	TMP-9 (30-35)	TMP-10 (4-6)	TMP-10 (15-20)	TMP-10 (25-30)	TMP-10 (30-35)	TMP-12 (4-6)	TMP-12 (4-6) DL	TMP-12 (10-15)	TMP-12 (25-30)	TMP-12 (30-35)	TMP-13 (4-6)	TMP-13 (10-15)	TMP-13 (20-25)	TMP-13 (30-35)
Lab Sample ID:		JD7495-20F	JD7495-21F	JD7495-22F	JD7495-23F	JD7627-10F	JD7627-11F	JD7627-12F	JD7627-14F	JD7643-5F	JD7643-6F	JD7643-7F	JD7643-8F	JD7643-9F	JD7643-1F	JD7643-2F	JD7643-3F	JD7643-4F
Date Sampled:		5/22/2020	5/22/2020	5/22/2020	5/22/2020	5/26/2020	5/26/2020	5/26/2020	5/26/2020	5/28/2020	5/28/2020	5/28/2020	5/28/2020	5/28/2020	5/28/2020	5/28/2020	5/28/2020	5/28/2020
Matrix:		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Metals (Lab Filtered) Analysis - valu																		
Aluminum	-	<200	<200	<200	<200	<200	<200	<200	<200	<200	209	<200	<200	<200	<200	<200	<200	<200
Antimony	3	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
Arsenic	25	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	8.2	<3.0	<3.0	<3.0
Barium	1000	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Beryllium	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	5	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Calcium	-	111000	178000	43700	26500	81800	65200	51600	26000	21500	18500	24500	18900	18800	66000	135000	126000	65500
Chromium	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cobalt	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Copper	200	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Iron	300	<100	<100	**6180**	**2410**	<100	**1420**	**5560**	**6270**	196	214	<100	**7270**	**5450**	**612**	**849**	**1600**	**710**
Lead	25	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	-	8290	16200	23400	11200	8250	13800	33000	17000	<5000	<5000	9210	15300	11000	8160	19600	21500	9240
Manganese	300	**649**	**654**	**800**	**425**	266	**1710**	**987**	**422**	69.9	50.6	228	294	280	226	**1890**	**4860**	**641**
Mercury	0.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	100	<10	13.6	17.8	15.4	<10	15.2	15.3	11.6	<10	<10	<10	<10	<10	<10	<10	<10	<10
Potassium	-	<10000	<10000	<10000	<10000	11300	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000
Selenium	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Silver	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sodium	20000	**23400**	**32200**	**55100**	**25000**	**43600**	**141000**	**54900**	**22900**	<10000	<10000	17600	**85700**	**54200**	**96900**	**120000**	**249000**	**26000**
Thallium	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Vanadium	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Zinc	-	<20	27.1	24.6	<20	<20	20.9	22.8	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of contro
b Associated CCV outside of contro
c Associated CCV outside of contro
d Elevated detection limit due to d
e Elevated sample detection limit c

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Lab Filtered Metals in Groundwater (ug/L)

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	TMP-14 (4-6) JD7627-15F 5/27/2020 Groundwater	TMP-14 (10-15) JD7627-16F 5/27/2020 Groundwater	TMP-14 (20-25) JD7627-17F 5/27/2020 Groundwater	TMP-14 (30-35) JD7627-18F 5/27/2020 Groundwater
Metals (Lab Filtered) Analysis - valu					
Aluminum	-	<200	<200	<200	<200
Antimony	3	<6.0	<6.0	<6.0	<6.0
Arsenic	25	<3.0	<3.0	<3.0	<3.0
Barium	1000	<200	<200	<200	<200
Beryllium	-	<1.0	<1.0	<1.0	<1.0
Cadmium	5	<3.0	<3.0	<3.0	<3.0
Calcium	-	112000	71800	78600	55400
Chromium	50	<10	<10	<10	<10
Cobalt	-	<50	<50	<50	<50
Copper	200	<10	<10	<10	<10
Iron	300	<100	204	**3550**	**304**
Lead	25	<3.0	<3.0	<3.0	<3.0
Magnesium	-	14700	19600	22800	11200
Manganese	300	175	158	**1820**	**623**
Mercury	0.7	<0.20	<0.20	<0.20	<0.20
Nickel	100	<10	<10	11.7	<10
Potassium	-	<10000	<10000	<10000	<10000
Selenium	10	<10	<10	<10	<10
Silver	50	<10	<10	<10	<10
Sodium	20000	**21800**	**39200**	**194000**	**29300**
Thallium	-	<10	<10	<10	<10
Vanadium	-	<50	<50	<50	<50
Zinc	-	<20	<20	<20	<20

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of contro
b Associated CCV outside of contro
c Associated CCV outside of contro
d Elevated detection limit due to d
e Elevated sample detection limit c

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
General Chemistry Organic Compounds in Groundwater

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)	MW-1 JD1537-1 1/10/2020 Groundwater	MW-2 JD1455-1 1/9/2020 Groundwater	MW-3 JD1455-2 1/9/2020 Groundwater	MW-3 DUP JD1455-3 1/9/2020 Groundwater	MW-6 JD1537-2 1/10/2020 Groundwater	MW-8 JD1455-4 1/9/2020 Groundwater	MW-9 JD1455-5 1/9/2020 Groundwater	MW-13 JD1455-6 1/9/2020 Groundwater	MW-14 JD1537-3 1/10/2020 Groundwater	MW-15 JD1537-4 1/10/2020 Groundwater	MW-17 JD1537-5 1/10/2020 Groundwater	MW-18 JD1537-6 1/10/2020 Groundwater	MW-20 JD1537-7 1/10/2020 Groundwater	MW-22 JD1537-8 1/10/2020 Groundwater
GC Volatiles (RSK-175) - values reported in ug/L															
Methane	-	11	63	6950	5060	0.74	11.1	-	ND (0.060)	-	ND (0.060)	0.13	ND (0.060)	0.28	0.28
Carbon Dioxide	-	3920	18200	17600	19900	1920	1610	-	3840	-	1840	5900	2680	4510	4510
General Chemistry - values reported in mg/L															
Alkalinity, Total as CaCO3	-	80.0 [c]	78.0 [c]	360 [c]	212 [c]	118 [c]	91.0 [c]	-	42.0 [c]	-	47.0 [c]	94.0 [c]	80.0 [c]	94.0 [c]	94.0 [c]
Chloride	250	53.9	5.9	15.6	12.4	65.2	18.8	-	58.5	-	6.4	14.1	16.3	49.4	49.4
Iron, Ferrous	-	<0.20 [d]	<0.20 [d]	<0.20 [d]	0.68 [d]	<0.20 [d]	<0.20 [d]	-	<0.20 [d]	-	<0.20 [d]	<0.20 [d]	<0.20 [d]	<0.20 [d]	<0.20 [d]
Nitrogen, Nitrate	10	0.69 [e]	0.23 [e]	<0.11 [e]	0.35 [e]	0.76 [e]	0.18 [e]	-	<0.11 [e]	-	0.74 [e]	2.2 [e]	5.3 [e]	**10.5 [e]**	**10.5 [e]**
Nitrogen, Nitrate + Nitrite	10	0.69	0.24	<0.10	0.35	0.78	0.18	-	<0.10	-	0.74	2.2	5.3	**10.5**	**10.5**
Nitrogen, Nitrite	1	<0.010	0.015	<0.010	<0.010	0.025	<0.010	-	<0.010	-	<0.010	0.031	<0.010	0.037	0.037
Solids, Total Dissolved	500	430	196	470	458	284	185	-	277	-	125	292	272	455	455
Sulfate	250	90.1	11.9	19.6	21.4	21.7	18.1	-	71.2	-	18.7	46.8	56.3	-	-
Sulfide	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-	<2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0
Total Organic Carbon	-	6	10.3	10.8	7.6	3.4	3.2	-	3	-	2.9	2.9	3.1	3.6	3.6

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b Associated CCV outside of control limits low.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Elevated detection limit due to dilution required for high interfering element.
e Elevated sample detection limit due to difficult sample matrix.

Table 12 - Groundwater Analytical Results
175 Roger Avenue - BCP Site No. C130164
Low-Level VOCs (ug/L) and PFAS/PFOS Compounds (ng/L) in Groundwater

Client Sample ID: Lab Sample ID: Date Sampled: Matrix:	NY TOGS Class GA GW Standards (NYSDEC 6/2004)[1]	MW-1 JD1553-1 1/10/2020 Groundwater	MW-1 DUP JD1553-2 1/10/2020 Groundwater
MS Semi-volatiles (SW846 8270D BY SIM) - values reported in ug/L			
1,4-Dioxane	-	ND (0.048)	ND (0.048)
MS Semi-volatiles (EPA 537M BY ID) - values reported in ng/L			
Perfluorobutanoic acid	-	24	22.6
Perfluoropentanoic acid	-	18	17
Perfluorohexanoic acid	-	15.7	15.7
Perfluoroheptanoic acid	-	17.7	16.5
Perfluorooctanoic acid	-	46.6	43.7
Perfluorononanoic acid	-	2.59	2.43
Perfluorodecanoic acid	-	ND (0.89)	ND (0.89)
Perfluoroundecanoic acid	-	ND (0.89)	ND (0.89)
Perfluorododecanoic acid	-	ND (1.3)	ND (13)
Perfluorotridecanoic acid	-	ND (0.89)	ND (8.9) [a]
Perfluorotetradecanoic acid	-	ND (0.89)	ND (8.9) [a]
Perfluorobutanesulfonic acid	-	3.19	3.46
Perfluorohexanesulfonic acid	-	9.83	9.15
Perfluoroheptanesulfonic acid	-	ND (0.89)	0.940 J
Perfluorooctanesulfonic acid	-	16.4	15.5
Perfluorodecanesulfonic acid	-	ND (0.89)	ND (0.89)
PFOSA	-	ND (0.89)	ND (8.9)
MeFOSAA	-	ND (3.6)	ND (3.6)
EtFOSAA	-	ND (3.6)	ND (3.6)
6:2 Fluorotelomer sulfonate	-	ND (1.8)	ND (1.8)
8:2 Fluorotelomer sulfonate	-	ND (1.8)	ND (1.8)

Notes:
ND - Non-Detect
J - Estimated Value
a Associated CCV outside of control limits high, sample was ND.
b Associated CCV outside of control limits low.
c Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
d Elevated detection limit due to dilution required for high interfering element.
e Elevated sample detection limit due to difficult sample matrix.