Phase II Environmental Site Investigation

47th Street Site 57-00, 57-05, 57-57, and 58-20 47th Street Maspeth, Queens, New York

Prepared for:

Prologis, L.P. Pier 1, Bay 1 San Francisco, California

Prepared by:

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 21 Penn Plaza 360 West 31st Street, 8th Floor New York, New York

Melsen

Rebekah Diehl Senior Staff Scientist

Alan R. Arico, LSRP Senior Project Manager

MART

Robert (Rory) S. Johnston, PE Sr. Vice President

F: 973,560,4901

December 22, 2021 100965501

www.langan.com



300 Kimball Drive

Parsippany, NJ 07054 T: 97

T: 973.560.4900

New Jersey • New York • Connecticut • Pennsylvania • Washington, DC • Virginia • West Virginia • Ohio • Florida • Texas • Arizona • California Abu Dhabi • Athens • Doha • Dubai • London • Panama

LANGAN

Technical Excellence Practical Experience Client Responsiveness

22 December 2021

Mr. Brett Richer Prologis, L.P. Director, Global Environmental and Engineering Pier 1, Bay 1 San Francisco, CA 94111

Subject: Phase II Environmental Site Investigation 47th Street Site Maspeth, Queens, New York Langan Project No. 100965501

Dear Mr. Richer:

Langan Engineering and Environmental Services, Inc. (Langan) is submitting the enclosed *Phase II* Environmental Site Investigation (ESI) for the 47th Street Site, Maspeth, Queens, New York. Our scope of services for this project consisted of a geophysical survey and the collection and analysis of soil and groundwater samples.

We appreciate the opportunity to assist you with this project. If you have questions or need information clarified, please call Mr. Andrew Kerr at 510-333-9051 or Mr. Rory Johnston at (973) 560-4978.

Sincerely,

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.

put

Andrew Kerr, P.G. (Calif) Associate

MARA

Robert (Rory) S. Johnston, P.E. Sr. Principal/ Sr. Vice President

Miami Lakes, FL 33016 T: 786.264.7200

F: 786.264.7201

www.langan.com

New Jersey • New York • Connecticut • Massachusetts • Pennsylvania • Washington, DC • Ohio • Florida • Texas • Colorado • Arizona • Washington • California Athens • Calgary • Dubai • London • Panama

TABLE OF CONTENTS

1.0	INTR	ODUCTION	1
2.0	BAC	KGROUND	1
	2.1	Phase I Environmental Site Assessment	1
	2.2	Prior Assessments	6
3.0	PHA	SE II EVALUATION	8
	3.1	Scope and Timing	8
	3.2	Field Investigation Methods	8
		3.2.1 Pre-Investigative Tasks	8
		3.2.2 Geophysical Survey	8
		3.2.3 Exploratory Borings and Soil Sampling	9
		3.2.4 Temporary Well Installation & Groundwater Sampling	
4.0	RES	ULTS	11
	4.1	Observed Subsurface Conditions	
	4.2	Soil and Groundwater Quality	11
		4.2.1 Soil Evaluation	
		4.2.2 Groundwater Evaluation	12
5.0	FIND	DINGS	13

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Soil Sampling Location and Results Plan
Figure 3	Groundwater Sampling Location and Results Plan
LIST OF TABLES	
Table 1	Soil Analytical Results Summary Table
Table 2	Groundwater Analytical Results Summary Table
LIST OF APPENDICE	S
Appendix A	Geophysical Report - NOVA

Appendix B	Soil Boring Logs
Appendix C	Laboratory Analytical Reports
Appendix D	Previous Reports (Reduced)

PHASE II ENVIRONMENTAL SITE INVESTIGATION 47th Street Site 57-00, 57-05, 57-57, and 58-20 47th Street Maspeth, Queens, New York

1.0 INTRODUCTION

This Phase II Environmental Site Investigation (ESI) was performed for the properties located at 57-00, 57-05, 57-57, and 58-20 47th Street in Maspeth, Queens, New York, herein referred to as 'the 47th Street Site'. This Site is 3.8 acres in area and consists of four parcels of land with distinct uses. A site location map is provided as **Figure 1**.

The Site is currently vacant. The 57-00 47th Street parcel consists of a vacant former vehicle maintenance garage building with office space on the eastern end. The 58-20 47th Street parcel adjoins the 57-00 47th parcel and currently is vacant with a recycled concrete aggregate (RCA) surface and no permanent structures. The 57-05 47th Street parcel is developed with a vacant building that was recently used by a vehicle maintenance shop on the eastern end and as office space on the western end. The 57-57 47th Street parcel is developed with a vacant commercial building which was recently used as a delicatessen. The different portions of the Site will be referred to as the 57-00, 58-20, 57-05, and 57-57 parcels, consecutively.

The implemented scope of services included a geophysical survey and the completion of ten exploratory soil borings, eight of which were converted to temporary monitoring wells. Ten soil samples were collected from the ten borings and nine were analyzed. A groundwater sample was collected from each of the eight temporary monitoring wells and all eight were analyzed. Site configuration and sampling locations are included as **Figures 2 and 3**.

This summary report describes the scope of services conducted and the results of the investigation. Background information is presented below.

2.0 BACKGROUND

2.1 Phase I Environmental Site Assessment

Langan conducted a Phase I Environmental Site Assessment (ESA) for the Site in December 2021 (Langan, December 2021). Relevant information from this report is included as **Appendix D**. The

Phase I ESA identified the following Recognized Environmental Conditions (RECs), Historical REC (HREC), and Business Environmental Risks (BERs) in association with the Site:

REC 1 – Historical Site Use

Industrial/commercial operations at the Site date back to the 1800s and include an oil depot with petroleum bulk storage (circa 1914 to 1936), fertilizer/glue manufacturing (circa 1897 to 1914), and vehicle maintenance (circa 1982 to 2006). Various petroleum underground storage tanks (USTs have historically been located on three of the four parcels (UST records were not available for review for 58-20). UST-related leaks have been reported on two of the four parcels (on Parcels 57-00 and 57-57). Although these leaks are closed with the NYSDEC, closure reports were not available from NYSDEC for all of the reported incidents.

More recently, the 57-00 and 58-20 parcels formerly operated as a concrete recycling facility; the facility also accepted other demolition debris (circa 2004 and 2021). Additionally, a concrete laboratory historically operated on the 57-00 parcel (circa 2004 and 2021). Concrete testing laboratories historically have included chlorinated solvents in the operations..

REC 2 – Newtown Creek Superfund

The Newtown Creek is adjacent to the 57-00 and 58-20 parcel western property lines. The creek was added to the USEPA National Priority List in 2010 and remains as such. Former heavy industrial operations in the vicinity of Newtown Creek dating back to the 1800s have impacted the sediments and groundwater in the Creek. A remedial investigation is currently underway for the Creek. Additionally, a focused feasibility study is currently being prepared regarding a combined sewer outfall long term control plan.

Newtown Creek has the potential to impact on-site soil and groundwater through tidal fluctuations and sediment deposition along the bank of the Creek.

REC 3 – On-Site Storm Water Vault & Oil/Water Separator

The geophysical survey associated with a Phase II Environmental Site Investigation prepared by Langan and dated July 2021 (the Langan July 2021 Phase II ESI) identified a potential oil/water separator and piping suggesting that the trench drains discharged to an on-site storm water vault on the southwestern end of the 57-00 parcel. Concrete slabs cover the storm water vault and



piping, therefore the presence of both the discharge piping and the vault could not a be field verified during the site reconnaissance.

REC 4 – Methyl Tert-Butyl Ether (MTBE) in Groundwater

During the Langan July 2021 Phase II ESI, methyl tert-butyl ether (MTBE) was detected in a groundwater sample collected from the northeastern corner of Parcel 57-05. MTBE is a gasoline additive (used since the 1980s) to aid in increasing octane and oxygen levels in gasoline to lower pollution emissions.

HREC 1- Closed Petroleum Spills

The Site has six NYSDEC reported spills which were all administratively closed. A summary of information provided in the Spills section of the EDR report is included below:

- NYSDEC Spill No. 94-11004 was reported November 17, 1994 due to the release of an unknown volume of gasoline. The spill was administratively closed on November 17, 1994. This incident occurred at the 57-00 parcel.
- NYSDEC Spill No. 97-09690 was reported November 20, 1997 after the release of an unknown volume of diesel fuel on soil. No further information regarding the spill was provided. The spill was administratively closed on January 8, 1998. This incident occurred at the 57-00 parcel.
- NYSDEC Spill No. 98-12248 was reported on January 4, 1999 after petroleum impacted soil was identified during the removal of a UST. Petroleum impacted soil was removed and endpoint samples were collected. The spill was remediated to NYSDEC satisfaction and was administratively closed on July 12, 2006. The incident occurred at the 57-57 parcel while under the Boro Lumber Company occupancy.
- NYSDEC Spill No. 07-09978 was reported after a UST failed a tank tightness test on December 18, 2007. The tank lines were re-tested and it was determined that the vent line failed due to a loose fitting. According to a NYSDEC obtained report, evidence of petroleum impacts to the subsurface were not identified by Larry E. Tyree Co., Inc. (the contracted environmental services provider of the Site occupant). The spill was administratively closed on December 28, 2007 following report submission by Larry E. Tyree Co. This incident occurred at the 57-00 parcel.
- NYSDEC Spill No. 08-08170 was reported October 21, 2008 after the report of an active release of petroleum substances and illegal storage and refueling of vehicles. A limited subsurface investigation was reportedly completed in 2009 that identified petroleum impacts in soils from surface grade to about eight feet below grade surface. About 381.04



tons of petroleum impacted soil was reportedly excavated and disposed of in 2010. Documentation of soil and groundwater samples collected post remediation reportedly confirmed that the spill was remediated to the satisfaction of the NYSDEC. The spill was administratively closed on October 27, 2012. This incident occurred at the 57-00 parcel.

 NYSDEC Spill No. 13-06438 was reported on September 19, 2013 after diesel impacted soil and pea gravel was identified in a tank vault during the removal of a 4,000-gallon UST. A closure report summarizing the remedial work and analytical data was reportedly prepared for NYSDEC. The spill was remediated to the satisfaction of the NYSDEC and the spill was administratively closed February 12, 2014. This incident occurred at the 57-00 parcel.

BER 1- Historic Fill

Previous report submittals contain reported field conditions identifying the presence of fill material on the Site. Field conditions identified historic fill material (i.e. brick, gravel, concrete, and wood) in soil borings completed as part of the Langan July 2021 Phase II ESI. Historic fill was also identified during other previous environmental investigations reviewed for this Phase I ESA. Laboratory results from soil and groundwater samples collected on the Site indicate the presence of typical historic fill constituents (i.e. polycyclic aromatic hydrocarbons [PAHs] and Metals).

Historical topographic maps indicate historic fill was deposited within the region sometime prior to the 1900s. Historical aerials depict a dark fill material spread onto lighter underlying soils on the 57-00 and 58-20 parcels in the early 1950s. Elevated PAHs and Metals pose a potential BER if future grading is planned, likely requiring a Soil Management Plan (SMP).

BER 2- Trench Drains & Oil/Water Separator

Trench drains were identified within the 57-00 and 57-05 parcel maintenance garage bays.

 Within the 57-00 parcel garage, trench drains were identified running along the northern and southern ends of the building. Metal plate-covered boxes were also identified near the trench drains on the northern and southern ends of the building. The representative for the property owner stated these boxes were associated with receiving liquids from the trench drains, however piping was not identified within these boxes during site reconnaissance. An oil/water separator was also observed near the trench drain along the southern side of the building. According to a geophysical report prepared as part of the Langan July 2021 Phase II ESI, the northern and southern trench drains appear to connect to a nearby storm drain in the southern parking area. This storm drain discharges to the on-site storm water vault.



• A trench drain connected to a slop sink was identified within a garage bay in the northern part of the building on the 57-05 parcel. The discharge location of this trench drain is unknown.

BER 3 - RCA Pile

During Langan's site reconnaissance on November 2, 2021, an approximate 1,000 cubic yard stockpile of recycled concrete aggregate (RCA) was observed on the northeastern portion of the 58-20 parcel. The stockpiled material appears related to the former concrete processing/recycling operations at the Site. The RCA pile is considered a BER since the source and environmental conditions of this material is unknown and it will need to be characterized and removed prior to Site redevelopment.

BER 4 - Administrative Consent Order

In April 2021, the NYSDEC imposed an administrative consent order (ACO) on the property. The ACO was imposed due to a tidal wetlands buffer requirement along Newtown Creek, which is western and adjacent to the 57-00 parcel. The ACO was filed with the property deed, and included provisions that structures cannot be erected on this area of Parcels 57-00 and 58-20. Additionally, a tidal wetland buffer vegetated area must be maintained by current and future occupants.

BER 5 – Asbestos Containing Materials (ACM), Lead-in-Paint and Mold

Asbestos and lead-in paint surveys were completed by Langan at the Site in November 2021, which identified confirmed and/or presumed ACM associated with the on-site buildings. Lead-in-paint was also identified red paint on the metal columns by the shutter doors on Parcel 57-00. A description of the asbestos and lead-in-paint survey results are presented in the *Hazardous Materials Survey Report* dated December 2021.

Langan observed indicators of mold during the Phase I ESA site reconnaissance on November 2, 2021. Potential mold was identified within buildings with damaged roofs on Parcels 57-00 and 57-05.

2.2 Prior Assessments

Phase I Environmental Site Assessment Report- July 21, 2021

Based on information provided by Prologis, a Phase I ESA was prepared by Langan on behalf of a party previously interested in the Site. Below is a summary of the RECs HRECs and de minimis condition identified during the July 21, 2021 Phase I ESA:

Two (2) Recognized Environmental Conditions (RECs) were identified on the Site.

- REC 1- Historical Use of Subject Property
- REC 2- Western-Adjoining Superfund Site (Newtown Creek)

One (1) Historical Recognized Environmental Conditions (HREC) was identified on the Site.

• HREC 1- Closed Spills on the Subject Property

One de minimis condition was identified during the site reconnaissance. The condition consisted of oil like staining identified throughout Lot 6 (Parcel 57-00). De minimis staining was identified in the interior warehouse space, near mechanic pits, in the vicinity of former ASTs, throughout the concrete paved parking area (south, east, and west of the building), beneath a parked excavator. This de minimis staining was also identified on Parcel 57-05 interior space, truck access bays, and exterior concrete paved parking areas. Surficial concrete cracks, joints, or exposed soil were not identified within stained areas.

Phase II Environmental Site Investigation Report- July 26, 2021

Based on information provided by Prologis, a Phase II ESI was prepared by Langan on behalf of a party previously interested in the Site. Below is a summation of the findings from the above referenced report. Relevant information from this report is included as **Appendix D**.

- A geophysical survey was conducted across the Site to clear soil borings/temporary well points; determine locations of underground utilities; and to attempt to identify subsurface anomalies, including those consistent with USTs.
 - 57-00 and 58-20 Parcels: Two UST graves were identified on the southeastern end of the parcel. Various underground utility lines, and drains were identified throughout the



parcels along with associated underground piping. A potential oil/water separator was identified within the southern end of the maintenance garage. The potential oil/water separator appears to be connected to piping leading to a nearby storm water drain which discharged to the on-site storm water vault.

- 57-05 Parcel: Underground utility lines and underground storm sewer lines were identified throughout the parcel.
- 57-57 Parcel: A water and sewer underground utility line was identified on this parcel.
- Eleven soil borings were completed on the Site. Four of these borings were converted to temporary groundwater monitoring wells. Soil and/or groundwater samples were collected from each sample location.
- Subsurface observations: Fill material consisting of fine-grained sand with varying amounts
 of fine gravel, silt, brick, wood, and concrete were identified at depths of four to sixteen feet
 below grade surface (bgs) on the Site. Petroleum-like odor and staining was identified within
 three locations (SB01, SB02, and SB04). Impacts were generally identified at or below the
 groundwater table; however, petroleum-related volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) were not detected above the Title 6 New York Codes,
 Rules and Regulations (6NYCRR) Part 375 Commercial Use (CU) and Industrial Use (IU) Soil
 Cleanup Objectives (SCOs) in the soil samples collected from these borings.
- Soil analytical results identified polycyclic aromatic hydrocarbons (PAHs), arsenic, lead, and mercury greater than their respective CU and IU SCOs.
- Groundwater analytical results identified VOCs, PAHs, and dissolved Metals (antimony, arsenic, iron, lead, magnesium, manganese, and sodium) above the NYSDEC Division of Water Technical and Operation Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (SGVs) for Class GA water (drinking water).
 - PAHs and Metals (i.e. anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, and ideno(1,2,3-cd)pyrene) were identified in groundwater at concentrations greater than their respective SGV.
 - o Petroleum-related VOCs (i.e. 1,2-dichloropropane, isopropylbenzene, n-

LANGAN

propylbenzene) and MTBE were detected in groundwater at concentrations above their respective TOGS SGVs. MTBE was identified groundwater throughout the Site..

3.0 PHASE II EVALUATION

3.1 Scope and Timing

Langan completed the following scope of services:

- Further investigated the presence of potential subsurface utilities, USTs and/or subsurface structures and to clear proposed boring locations.
- Collected ten soil samples from ten exploratory soil borings advanced to a maximum depth of 18 feet bgs; and
- Collected eight groundwater samples from eight temporary wells.

The investigations were completed on 11 and 12 of November 2021. A summary of the analysis performed on soil and groundwater samples is presented in **Table 1** and **Table 2** respectively, and the location of the completed investigation points is shown on **Figures 2** and **3**.

3.2 Field Investigation Methods

The field investigation methods used to complete the Phase II ESI are summarized below. The activities are described in the general order of completion.

3.2.1 Pre-Investigative Tasks

The soil and groundwater sampling was completed after the following pre-investigative tasks:

- Lakewood Environmental Services, Corp. (Lakewood) submitted a New York State One Call ticket prior to the initiation of drilling activities. Utility mark outs were limited to public property (i.e. the street and sidewalk).
- Boreholes were marked out prior to drilling, for the purpose of utility clearance.

3.2.2 Geophysical Survey

Nova Geophysical Engineering Services (Nova) of Queens, New York conducted a geophysical survey on 11 November 2021, prior to the initiation of intrusive drilling activities. The survey was observed by Langan field staff and included the use of a Noggin 250 MHz ground penetrating radar (GPR) and



Radio Detection RD7100 electromagnetic (EM) utility locator. These instruments were utilized to attempt to locate potential subsurface utilities, USTs and/or subsurface structures and to clear proposed boring locations. Borings were relocated as necessary to avoid buried structures. The geophysical report prepared by Nova is included in **Appendix A**, with findings described below:

- 57-00 and 58-20 Parcels: Various underground utility lines, and drains with associated piping were identified throughout the parcels. A potential oil/water separator was identified within the southern end of the maintenance garage. The identified feature had piping connected to a nearby storm water drain, which connects to the on-site storm water vault.
- 57-05 Parcel: Two potential USTs were identified within the northeastern and northwestern portions of the parcel. A potential underground injection control (UIC) unit was also identified on the northern portion of the parcel. Underground utility and storm sewer lines were identified throughout the parcel.
- 57-57 Parcel: Water and sewer underground utility lines were identified on this parcel.

3.2.3 Exploratory Borings and Soil Sampling

The ten exploratory borings were drilled on 11 and 12 November 2021. Borings were advanced by Lakewood using a portable track-mounted Geoprobe 6610 DT direct push drill rig. The boreholes were advanced by hydraulically pushing a 2.0-inch diameter stainless steel sampler containing a 4 to 5-foot-long acetate macrocore sleeve into the subsurface. The boreholes were advanced to a depth between 15 and 18 feet bgs.

Soils were logged based on a modified Burmeister and Unified Soil Classification System (USCS) system. Completed logs for each soil boring are included in **Appendix B**. Soils retrieved from the acetate liners were screened for the presence of VOCs using a photo-ionization detector (PID) with a 10.6 eV bulb and calibrated with 100 parts per million (ppm) isobutylene reference gas. Elevated PID readings (ranging from 97 ppm to >500 ppm) in five of the ten soil borings (LB-4, LB-5, LB-6, LB-9, and LB-10), contained with the highest PID readings detected at or below groundwater.

Samples were collected by removing the soil in the acetate liner from the chosen sample depth and placing the soil into laboratory-provided containers. Sample jars were sealed and stored in a cooler with ice for transport to the analytical laboratory. Ten soil samples were collected at the Site, including:

LANGAN

- Four soil samples from borings on Parcel 57-00 (LB-1 to LB-4) that were analyzed for VOCs, SVOCs, Metals, and polychlorinated biphenyls (PCBs).
- Three soil samples from the interior of the structure on Parcel 57-00 (LB-5, LB-6, and LB 10) that were analyzed for VOCs, SVOCs, Metals, and PCBs.
 - The sample from boring LB-5 was placed on hold at the laboratory for all analyses and not analyzed considering soil boring LB-6 was located closer to the oil/water separator.
- Two soil samples from soil borings LB-7 and LB-8, completed on Parcel 57-05 in the estimated downgradient direction from the previously encountered MTBE area on Parcel 57-05; these samples were analyzed for VOC analysis. The soil sample from the soil boring (LB-9) located adjacent to and in an inferred downgradient from the UIC unit on Parcel 57-05, was also analyzed for VOC and SVOCs.
- One soil sample from soil boring LB-9 completed adjacent to a possible UST detected during the geophysical investigation on Parcel 57-05; the sample was analyzed for VOCs, SVOCs, Metals, and PCBs.

3.2.4 Temporary Well Installation & Groundwater Sampling

Eight borings were converted to temporary monitoring wells by installing 1-inch or 2-inch diameter poly-vinyl chloride (PVC) casing into select soil boreholes. The annular space around the temporary well was filled with No. 2 sand. The temporary well points were purged and groundwater samples were collected from each using dedicated, disposable 1.5-inch and 0.75-inch diameter weighted Teflon bailers and were collected into laboratory-supplied sample jars. Sample jars were secured in laboratory-provided, protective pouches, and stored in a cooler with ice for transport to the analytical laboratory.

The groundwater samples were collected at the Site on 12 November 2021, and analyzed for VOCs, SVOCs, and Metals. Since sample turbidity is generally high from groundwater collected from temporary well points; all groundwater samples were laboratory filtered, and analyzed for total and dissolved Metals. Exceptions included the samples from temporary well points LB-7 and LB-8, which were analyzed for VOCs only, and the sample from temporary well point LB-9, which was analyzed for VOCs and SVOCs.

4.0 RESULTS

4.1 Observed Subsurface Conditions

Subsurface soils consisted of sand, soil, and fill material (i.e. brick, concrete, gravel, and sand); bedrock was not encountered during this ESI. Groundwater was encountered between about 8.5 to 11 feet bgs. Odors, staining, and/or elevated PID readings were identified in soil borings LB-5, LB-6, LB-8, LB 9, and LB-10 at depths ranging from 6 to 18 feet bgs. However, petroleum-related VOCs and SVOCs were not detected above CU and/or IU SCOs in soil samples collected from these borings.

4.2 Soil and Groundwater Quality

Laboratory results are summarize by media in **Tables 1 and 2**, with results above the regulatory criteria depicted in Figures 2 and 3. Evaluation and discussions of the collected data are presented below. The laboratory analytical reports are included for reference in **Appendix C**.

4.2.1 Soil Evaluation

Langan evaluated the soil analytical results relative to 6NYCRR Part 375 CU and IU SCOs. Compounds and Metals exceeding the CU and/or IU SCOs are summarized below. SCOs are listed in parentheses. Exceedances of IU SCOs are in **bold**.

VOCs

VOCs were not detected at concentrations above CU or IU SCOs.

<u>SVOCs</u> – SVOCs were detected in LB-1, LB-2 and LB-3 above the CU and/or IU SCOs as summarized below:

- Benzo(a)pyrene 4.8 mg/kg in LB-1; 1.3 mg/kg in LB-2; 3.6 mg/kg in LB-3 (CU SCO: 1 mg/kg; IU SCO: 1.1 mg/kg)
- Benzo(b)fluoranthene 5.7 mg/kg in LB-1 (CU SCO: 5.6 mg/kg; IU SCO: 11 mg/kg)
- Dibenzo(a,h)anthracene 0.92 mg/kg in LB-1; 0.67 mg/kg in LB-3 (CU SCO: 0.56 mg/kg; IU SCO: 1.1 mg/kg)

<u>PCBs</u> - PCBs were not detected at concentrations above CU and/or IU SCOs.

LANGAN

<u>Metals</u> – Metals were detected in LB-1, LB-2, LB-3, and LB-10 above their respective CU and/or IU SCOs as summarized below:

- Arsenic 83 mg/kg in LB-3; 1,900 mg/kg in LB-10 (CU/IU SCO: 16 mg/kg)
- Barium 1,400 mg/kg in LB-2 (CU SCO: 400 mg/kg; IU SCO:10,000 mg/kg)
- Copper 580 mg/kg in LB-2 (CU SCO: 270 mg/kg; IU SCO: 10,000 mg/kg)
- Cyanide 140 mg/kg in LB-10 (CU SCO: 27 mg/kg; 54 SCO: 10,000 mg/kg
- Lead 1,800 mg/kg in LB-1 and LB-10 (CU SCO: 1,000 mg/kg)
- Mercury 3.6 mg/kg in LB-2; 6.5 mg/kg in LB-10 (CU SCO: 2.8 mg/kg)

4.2.2 Groundwater Evaluation

Langan evaluated the groundwater analytical results relative to the NYSDEC's TOGS SGVs for Class GA (drinking water).

<u>VOCs</u> - VOCs were detected in samples TW-1, TW-8, and TW-9 at concentrations above the NYSDEC TOGS SGVs and are summarized below. SGVs are listed in parentheses:

- Ethylbenzene 8.6 micrograms per liter (μg/L) in TW-1 (SGV: 5 μg/L)
- Isopropylbenzene 24 μg/L in TW-9 (SGV: 5 μg/L)
- Toluene 60 µg/L in TW-8 (SGV: 5 µg/L)

<u>SVOCs</u> - SVOCs were detected in samples TW-1 and TW-2 at concentrations above the NYSDEC TOGS SGVs and are summarized below. SGVs are listed in parentheses:

- Acenaphthene- 53 µg/L in TW-1 (SGV: 20 µg/L)
- Anthracene- 73 µg/L in TW-1 (SGV: 50 µg/L)
- Benzo(a)anthracene 63 μg/L in TW-1; 6.9 μg/L in TW-2 (SGV: 0.002 μg/L)
- Benzo(a)pyrene 43 μg/L in TW-1; 6.2 μg/L in TW-2 (SVG: 0 μg/L)
- Benzo(b)fluoranthene 44 μg/L in TW-1; 7.3 μg/L in TW-2 (SGV: 0.002 μg/L)
- Benzo(k)fluoranthene 10 μg/L in TW-1; 2.2 μg/L in TW-2 (SGV: 0.002 μg/L)
- Chrysene 60 μg/L in TW-1; 5.2 μg/L in TW-2 (SGV: 0.002 μg/L)
- Fluoranthene 110 µg/L in TW-1 (SGV: 50 µg/L)
- Fluorene 55 µg/L in TW-1 (SGV: 50 µg/L)
- Indeno(1,2,3-cd)pyrene 15 μg/L in TW-1; 3.2 μg/L in TW-2 (SGV: 0.002 μg/L)
- Naphthalene 17 μg/L in TW-1 (SGV: 10 μg/L)
- Phenanthrene 220 μg/L in TW-1 (SGV: 50 μg/L)

• Pyrene – 170 μg/L in TW-1 (SGV: 50 μg/L)

<u>Total Metals</u> – One or more of the following Metals were detected at concentrations above the NYSDEC TOGS SGVs in the unfiltered groundwater samples across the site:

• Antimony

Lead

•

•

Magnesium

Mercury

Nickel

Selenium

Sodium

Manganese

- ArsenicBarium
- Beryllium
- Cadmium
- Chromium
- Copper

Iron

•

• Zinc

<u>Dissolved Metals</u> - Dissolved Metals were detected in filtered samples TW-1 through TW-4 and TW-6 at concentrations above the SGVs and are summarized below. SGVs are listed in parenthesis:

- Antimony 3.3 μg/L in TW-4 to 8.3 μg/L in TW-6 (SGV: 3 μg/L)
- Arsenic 45 µg/L was detected in in TW-3 (SGV: 3 µg/L)
- Iron 650 μg/L in TW-1 (SGV: 300 μg/L)
- Manganese 640 µg/L in TW-2 (SGV: 300 µg/L)
- Sodium 25,000 μg/L in TW-6 to 310,000 μg/L in TW-4 (SGV: 20,000 μg/L);

5.0 FINDINGS

The following is a summary of Phase ESI II findings:

- Anomalies indicative of an UIC point and two USTs were identified during the geophysical survey on the northern, northeastern, and northwestern portions of Parcel 57-05, respectively. In addition, an OWS, storm and sanitary lines, and a storm water vault were detected on Parcel 57-00.
- Odors, staining, and/or elevated PID readings were identified in soil borings LB-5, LB-6, LB-8, LB-9, and LB-10 at depths ranging from 6 to 18 feet bgs. These observations were generally identified in soils at or below the groundwater table. However, petroleum-related VOCs and SVOCs were not detected above CU and/or IU SCOs in soil samples collected from these borings.



SOIL:

- VOCs were not measured in soil samples at concentrations greater than their respective CU or IU SCOs.
- SVOCs and Metals were detected in soil samples at a concentrations greater than their respective CU and/or IU SCOs.

GROUNDWATER:

- VOCs and SVOCs were detected in Site groundwater at concentrations greater than their respective NYSDEC TOGS SGVs. VOCs and select SVOCs detected above the NYSDEC TOGS SGVs are petroleum-related.
- Ethylbenzene and naphthalene were identified in temporary well point TW-1, installed along the southwestern portion of Parcel 57-00 at concentrations greater than their respective NYSDEC TOGS SGVs.
- Gasoline VOC related constituents MTBE, toluene, and isopropylbenzene were identified in groundwater on Parcel 57-05.
- Barium, beryllium, cadmium, total chromium, copper, lead, magnesium, mercury, nickel, selenium, and zinc were detected in total concentrations above the NYSDEC TOGS SGVs in the unfiltered samples and can be attributed to the suspended solids in the groundwater samples. These results correlate with high field-reported turbidity levels at each of the sample locations.
- Antimony, iron, manganese and sodium were detected at dissolved concentrations in filtered samples. These Metals are naturally-occurring and the detected concentrations are not indicative of groundwater contamination. Arsenic was identified in filtered temporary well sample TW-3 at concentrations exceeding the NYSDEC TOGS SGVs.

TABLES

Table 1Soil Analytical Results Summary TableProject # 100965501 - 47th Street Site, Maspeth, NY

AnalyteNaVolatile Organic Compounds1,1,1-Trichloroethane1,1-Dichloroethane71,1-Dichloroethane71,2-A-Trimethylbenzene91,2-Dichloroethane1,2-Dichlorobenzene91,2-Dichloroethane1,3,5-Trimethylbenzene1,3-Dichlorobenzene1,4-Dichlorobenzene1,4-Dichlorobenzene1,4-Dichlorobenzene1,4-Dioxane (P-Dioxane)12Acetone6Benzene7Carbon Tetrachloride	CAS Jumber 71-55-6 75-34-3 75-35-4 95-63-6 95-50-1 07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	375 Restricted Use Commercial SCOs 500 240 500 190 500 30 190 280 130 130	375 Restricted Use Industrial SCOs 1000 480 1000 380 1000 60 380 560 250	Unit mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	LB-1 (7.5-8.0) 11/11/2021 7.5-8 Result <0.0026 U <0.0026 U <0.0026 U <0.0013 U <0.0026 U <0.0026 U <0.0026 U	LB-2 (10.5-11.0) 11/11/2021 10.5-11 Result <0.0035 U <0.0035 U <0.0035 U <0.0035 U <0.0017 U <0.0035 U	LB-3 (6.0-6.5) 11/11/2021 6-6.5 Result <0.003 U <0.003 U <0.003 U	LB-4 (1.5-2.0) 11/11/2021 1.5-2 Result <0.0019 U <0.0019 U	LB-6 (16.5-17.0) 11/12/2021 16.5-17 Result <0.091 UD	-B-7b-3W (8.5-9.0 11/12/2021 8.5-9 Result	LB-8 (7.5-8.0) 11/12/2021 7.5-8 Result	B-9b-2N (10.0-10. 11/12/2021 10-10.5 Result	LB-10 (6.5-7.0) 11/12/2021 6.5-7 Result
AnalyteNaVolatile Organic Compounds1,1,1-Trichloroethane1,1-Dichloroethane71,1-Dichloroethane71,2-Dichloroethane91,2-Dichlorobenzene91,2-Dichloroethane1,3,5-Trimethylbenzene (Mesitylen)1,3-Dichlorobenzene541,4-Dichlorobenzene1,4-Dichlorobenzene1,4-Dichlorobenzene1,4-Dichlorobenzene1,2-Dichlorobenzene1,4-Dichlorobenzene1,2-Dichlorobenzene1,2-Dichlorobenzene1,3-Dichlorobenzene1,4-Dichlorobenzene1,4-Dichlorobenzene1,4-Dichlorobenzene1,4-Dioxane (P-Dioxane)1,2Acetone6Benzene7Carbon Tetrachloride	lumber 71-55-6 75-34-3 75-35-4 95-63-6 95-50-1 07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	Commercial SCOs 500 240 500 190 500 30 190 280 130	Use Industrial SCOs 1000 480 1000 380 1000 60 380 560	Sample Depth Unit mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	7.5-8 Result <0.0026 U <0.0026 U <0.0026 U <0.0013 U <0.0013 U <0.0026 U	10.5-11 Result <0.0035 U <0.0035 U <0.0035 U <0.0035 U <0.0035 U <0.0035 U	6-6.5 Result <0.003 U <0.003 U <0.003 U	1.5-2 Result <0.0019 U	16.5-17 Result	8.5-9 Result	7.5-8	10-10.5	6.5-7
Volatile Organic Compounds1,1,1-Trichloroethane71,1-Dichloroethane71,1-Dichloroethene71,2,4-Trimethylbenzene91,2-Dichlorobenzene91,2-Dichloroethane101,3,5-Trimethylbenzene (Mesitylen)101,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dioxane (P-Dioxane)12Acetone6Benzene7Carbon Tetrachloride54	71-55-6 75-34-3 75-35-4 95-63-6 95-50-1 07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	SCOs 500 240 500 190 500 30 190 280 130	SCOs 1000 480 1000 380 1000 60 380 560	Unit mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Result <0.0026 U <0.0026 U <0.0026 U <0.0026 U <0.0013 U <0.0026 U	Result <0.0035 U <0.0035 U <0.0035 U <0.0035 U <0.0017 U	Result <0.003 U <0.003 U <0.003 U	Result	Result	Result			
1,1,1-Trichloroethane71,1-Dichloroethane71,1-Dichloroethene71,2-Dichloroethene91,2-Dichlorobenzene91,2-Dichlorobenzene101,3,5-Trimethylbenzene (Mesitylen101,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dichlorobenzene12Acetone6Benzene7Carbon Tetrachloride5	75-34-3 75-35-4 95-63-6 95-50-1 07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	500 240 500 190 500 30 190 280 130	1000 480 1000 380 1000 60 380 560	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	<0.0026 U <0.0026 U <0.0026 U <0.0013 U <0.0026 U	<0.0035 U <0.0035 U <0.0035 U <0.0017 U	<0.003 U <0.003 U <0.003 U	<0.0019 U			Result	Result	Result
1,1,1-Trichloroethane71,1-Dichloroethane71,1-Dichloroethane71,1-Dichloroethene71,2,4-Trimethylbenzene91,2-Dichlorobenzene91,2-Dichloroethane101,3,5-Trimethylbenzene (Mesitylen101,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dichlorobenzene12Acetone6Benzene7Carbon Tetrachloride5	75-34-3 75-35-4 95-63-6 95-50-1 07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	240 500 190 500 30 190 280 130	480 1000 380 1000 60 380 560	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	<0.0026 U <0.0026 U <0.0013 U <0.0026 U	<0.0035 U <0.0035 U <0.0017 U	<0.003 U <0.003 U		<0.091 UD	<0.0016 []			
1,1-Dichloroethane71,1-Dichloroethene71,2,4-Trimethylbenzene91,2-Dichlorobenzene91,2-Dichloroethane101,3,5-Trimethylbenzene (Mesitylen101,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dichlorobenzene12Acetone6Benzene7Carbon Tetrachloride54	75-34-3 75-35-4 95-63-6 95-50-1 07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	240 500 190 500 30 190 280 130	480 1000 380 1000 60 380 560	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	<0.0026 U <0.0026 U <0.0013 U <0.0026 U	<0.0035 U <0.0035 U <0.0017 U	<0.003 U <0.003 U		<0.091 UD	<0.0016 U			
1,1-Dichloroethene71,2,4-Trimethylbenzene91,2-Dichlorobenzene91,2-Dichloroethane101,3,5-Trimethylbenzene (Mesitylen101,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dichlorobenzene12Acetone6Benzene7Carbon Tetrachloride54	75-35-4 95-63-6 95-50-1 07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	500 190 500 30 190 280 130	1000 380 1000 60 380 560	mg/kg mg/kg mg/kg mg/kg mg/kg	<0.0026 U <0.0013 U <0.0026 U	<0.0035 U <0.0017 U	<0.003 U	<0 001011			<0.0017 U	<1.3 UD	<2 UD
1,2,4-Trimethylbenzene91,2-Dichlorobenzene91,2-Dichloroethane101,3,5-Trimethylbenzene (Mesitylen101,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dioxane (P-Dioxane)12Acetone6Benzene7Carbon Tetrachloride5	95-63-6 95-50-1 07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	190 500 30 190 280 130	380 1000 60 380 560	mg/kg mg/kg mg/kg mg/kg	<0.0013 U <0.0026 U	<0.0017 U		<0.0013 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
1,2-Dichlorobenzene91,2-Dichloroethane101,3,5-Trimethylbenzene (Mesitylen)101,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dioxane (P-Dioxane)12Acetone6Benzene7Carbon Tetrachloride54	95-50-1 07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	500 30 190 280 130	1000 60 380 560	mg/kg mg/kg mg/kg	<0.0026 U			<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
1,2-Dichloroethane101,3,5-Trimethylbenzene (Mesitylen101,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dioxane (P-Dioxane)12Acetone6Benzene7Carbon Tetrachloride54	07-06-2 08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	30 190 280 130	60 380 560	mg/kg mg/kg		<0.003511	<0.0015 U	0.0019	<0.091 UD	<0.0008 U	0.19	<1.3 UD	33 D
1,3,5-Trimethylbenzene (Mesitylen101,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dioxane (P-Dioxane)12Acetone6Benzene7Carbon Tetrachloride5	08-67-8 41-73-1 06-46-7 23-91-1 57-64-1	190 280 130	380 560	mg/kg	<0.002611		<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
1,3-Dichlorobenzene541,4-Dichlorobenzene101,4-Dioxane (P-Dioxane)12Acetone6Benzene7Carbon Tetrachloride5	41-73-1 06-46-7 23-91-1 67-64-1	280 130	560			<0.0035 U	<0.003 U	<0.0019 U	<0.058 UD	<0.0016 U	<0.0017 U	<0.85 UD	<1.3 UD
1,4-Dichlorobenzene101,4-Dioxane (P-Dioxane)12Acetone6Benzene7Carbon Tetrachloride5	06-46-7 23-91-1 67-64-1	130			<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.091 UD	<0.0008 U	0.18	1.8 D	21 D
1,4-Dioxane (P-Dioxane)12Acetone6Benzene7Carbon Tetrachloride5	23-91-1 67-64-1		250	mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
Acetone6Benzene7Carbon Tetrachloride5	67-64-1	130		mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
Benzene7Carbon Tetrachloride5			250	mg/kg	<0.13 U	<0.17 U	<0.15 U	<0.097 U	<4.6 UD	<0.08 U	<0.085 U	<66 UD	<100 UD
Carbon Tetrachloride 5	74 40 0	500	1000	mg/kg	0.038	0.35	0.16	0.06	<0.46 UD	<0.008 U	0.05	17 D	35 D
	71-43-2	44	89	mg/kg	<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.046 UD	<0.0008 U	<0.00085 U	<0.66 UD	<1 UD
Chlorobenzene 10	56-23-5	22	44	mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
	08-90-7	500	1000	mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
	67-66-3	350	700	mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.18 UD	<0.0016 U	<0.0017 U	<2.6 UD	<3.9 UD
	56-59-2	500	1000	mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
Ethylbenzene 10	00-41-4	390	780	mg/kg	<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.091 UD	<0.0008 U	<0.00085 U	2.5 D	14 D
M,P-Xylene 179	9601-23-1	NS	NS	mg/kg	<0.0016 U	<0.0021 U	<0.0018 U	<0.0012 U	<0.091 UD	<0.00096 U	0.0014	<1.3 UD	75 D
Methyl Ethyl Ketone (2-Butanone) 7	78-93-3	500	1000	mg/kg	0.0068	0.11	0.012	0.0061	<0.091 UD	<0.0016 U	0.011	<1.3 UD	<2 UD
Methylene Chloride 7	75-09-2	500	1000	mg/kg	0.0066	0.005	<0.003 U	0.0042	<0.091 UD	<0.0016 U	0.0028	<1.3 UD	<2 UD
n-Butylbenzene 10	04-51-8	500	1000	mg/kg	<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.091 UD	<0.0008 U	0.044	<1.3 UD	13 D
n-Propylbenzene 10	03-65-1	500	1000	mg/kg	<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.091 UD	<0.0008 U	<0.00085 U	1.9 D	11 D
o-Xylene (1,2-Dimethylbenzene) 9	95-47-6	NS	NS	mg/kg	<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.091 UD	<0.0008 U	0.0011	<1.3 UD	12 D
Sec-Butylbenzene 13	35-98-8	500	1000	mg/kg	<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.091 UD	<0.0008 U	0.08	<1.3 UD	<2 UD
T-Butylbenzene 9	98-06-6	500	1000	mg/kg	<0.0013 U	0.0062	<0.0015 U	<0.00097 U	<0.091 UD	<0.0008 U	<0.00085 U	<1.3 UD	<2 UD
Tert-Butyl Methyl Ether 16	534-04-4	500	1000	mg/kg	<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.046 UD	<0.0008 U	<0.00085 U	<0.66 UD	<1 UD
Tetrachloroethene (PCE) 12	27-18-4	150	300	mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
Toluene 10	08-88-3	500	1000	mg/kg	<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.091 UD	<0.0008 U	0.026	<1.3 UD	<2 UD
Total Xylenes 13	330-20-7	500	1000	mg/kg	<0.0013 U	<0.0017 U	<0.0015 U	<0.00097 U	<0.091 UD	<0.0008 U	0.0025	<1.3 UD	87 D
Trans-1,2-Dichloroethene 15	56-60-5	500	1000	mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
Trichloroethene (TCE) 7	79-01-6	200	400	mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
Vinyl Chloride 7	75-01-4	13	27	mg/kg	<0.0026 U	<0.0035 U	<0.003 U	<0.0019 U	<0.091 UD	<0.0016 U	<0.0017 U	<1.3 UD	<2 UD
Semi-Volatile Organic Compounds													
2-Methylphenol (o-Cresol) 9	95-48-7	500	1000	mg/kg	<0.053 UD	<0.014 U	<0.058 UD	<0.011 U	<0.012 U	NA	NA	<0.011 U	51 D
4-Methylphenol (P-Cresol) 10	06-44-5	500	1000	mg/kg	<0.054 UD	0.017	0.064 D	<0.011 U	<0.012 U	NA	NA	<0.011 U	180 D
Acenaphthene 8	33-32-9	500	1000	mg/kg	1.3 D	0.066	0.49 D	0.071	0.16	NA	NA	<0.037 U	15 D
Acenaphthylene 20	08-96-8	500	1000	mg/kg	1.6 D	<0.048 U	0.21 D	<0.038 U	<0.04 U	NA	NA	<0.037 U	<10 UD
Anthracene 12	20-12-7	500	1000	mg/kg	2.4 D	0.26	1.4 D	0.13	<0.04 U	NA	NA	<0.037 U	19 D
Benzo(a)anthracene 5	56-55-3	5.6	11	mg/kg	4.8 D	1.4	4.2 D	0.37	<0.04 U	NA	NA	<0.037 U	<10 UD
	50-32-8	1	1.1	mg/kg	4.8 D	1.3	3.6 D	0.31	<0.04 U	NA	NA	<0.037 U	<10 UD
Benzo(b)fluoranthene 20	05-99-2	5.6	11	mg/kg	5.7 D	1.8	4.8 D	0.42	<0.04 U	NA	NA	<0.037 U	<10 UD
Benzo(g,h,i)Perylene 19	91-24-2	500	1000	mg/kg	3.1 D	0.94	2.3 D	0.2	<0.04 U	NA	NA	<0.037 U	<10 UD
Benzo(k)fluoranthene 20	07-08-9	56	110	mg/kg	1.3 D	0.42	1.2 D	0.15	<0.04 U	NA	NA	<0.037 U	<10 UD
	18-01-9	56	110	mg/kg	4.3 D	1.2	4.4 D	0.35	<0.04 U	NA	NA	<0.037 U	15 D
	53-70-3	0.56	1.1	mg/kg	0.92 D	0.22	0.67 D	0.049	<0.04 U	NA	NA	<0.037 U	<10 UD
	32-64-9	350	1000	mg/kg	0.43 D	0.044	0.32 D	0.036	0.023	NA	NA	<0.0093 U	4.8 D
	06-44-0	500	1000	mg/kg	7.7 D	2.2	8 D	0.77	<0.04 U	NA	NA	<0.037 U	22 D
	36-73-7	500	1000	mg/kg	1.1 D	0.062	0.55 D	0.057	<0.04 U	NA	NA	<0.037 U	40 D
	18-74-1	6	12	mg/kg	<0.19 UD	<0.048 U	<0.2 UD	<0.038 U	<0.04 U	NA	NA	<0.037 U	<10 UD
	93-39-5	5.6	11	mg/kg	2.7 D	0.79	2 D	0.18	<0.04 U	NA	NA	<0.037 U	<10 UD
	91-20-3	500	1000	mg/kg	0.59 D	0.086	0.3 D	0.034	<0.012 U	NA	NA	<0.011 U	140 D
•	37-86-5	6.7	55	mg/kg	<0.93 UD	<0.24 U	<1 UD	<0.19 U	<0.2 U	NA	NA	<0.18 U	<52 UD
	35-01-8	500	1000	mg/kg	9.4 D	1	7.2 D	0.56	<0.04 U	NA	NA	<0.037 U	79 D
	08-95-2	500	1000	mg/kg	<0.19 UD	<0.048 U	0.23 D	<0.038 U	<0.04 U	NA	NA	<0.037 U	<10 UD
	29-00-0	500	1000	mg/kg	10 D	2.2	8.9 D	0.66	0.11	NA	NA	<0.037 U	<10 UD

Table 1Soil Analytical Results Summary TableProject # 100965501 - 47th Street Site, Maspeth, NY

		NYSDEC Part	NYSDEC Part	Location	LB-1	LB-2	LB-3	LB-4	LB-6	LB-7B-3W	LB-8	LB-9B-2N	LB-10
	CAS	375 Restricted	375	Sample Name	LB-1 (7.5-8.0)	LB-2 (10.5-11.0)	LB-3 (6.0-6.5)	LB-4 (1.5-2.0)	LB-6 (16.5-17.0)	_B-7b-3W (8.5-9.0	LB-8 (7.5-8.0)	B-9b-2N (10.0-10.	LB-10 (6.5-7.0)
Analyte		Use	Restricted	Sample Date	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021
	Number	Commercial	Use Industrial	Sample Depth	7.5-8	10.5-11	6-6.5	1.5-2	16.5-17	8.5-9	7.5-8	10-10.5	6.5-7
		SCOs	SCOs	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result
Polychlorinated Biphenyl													
PCB-1016 (Aroclor 1016)	12674-11-2	NS	NS	mg/kg	<0.028 U	<0.036 U	<0.03 U	<0.028 U	<0.03 U	NA	NA	<0.027 U	<0.18 UD
PCB-1221 (Aroclor 1221)	11104-28-2	NS	NS	mg/kg	<0.028 U	<0.036 U	<0.03 U	<0.028 U	<0.03 U	NA	NA	<0.027 U	<0.18 UD
PCB-1232 (Aroclor 1232)	11141-16-5	NS	NS	mg/kg	<0.028 U	<0.036 U	<0.03 U	<0.028 U	<0.03 U	NA	NA	<0.027 U	<0.18 UD
PCB-1242 (Aroclor 1242)	53469-21-9	NS	NS	mg/kg	<0.028 U	<0.036 U	<0.03 U	<0.028 U	<0.03 U	NA	NA	<0.027 U	<0.18 UD
PCB-1248 (Aroclor 1248)	12672-29-6	NS	NS	mg/kg	<0.028 U	<0.036 U	<0.03 U	<0.028 U	<0.03 U	NA	NA	<0.027 U	<0.18 UD
PCB-1254 (Aroclor 1254)	11097-69-1	NS	NS	mg/kg	<0.028 U	<0.036 U	<0.03 U	0.12	<0.03 U	NA	NA	<0.027 U	<0.18 UD
PCB-1260 (Aroclor 1260)	11096-82-5	NS	NS	mg/kg	<0.028 U	<0.036 U	<0.03 U	<0.028 U	<0.03 U	NA	NA	<0.027 U	<0.18 UD
PCB-1262 (Aroclor 1262)	37324-23-5	NS	NS	mg/kg	<0.028 U	<0.036 U	<0.03 U	<0.028 U	<0.03 U	NA	NA	<0.027 U	<0.18 UD
PCB-1268 (Aroclor 1268)	11100-14-4	NS	NS	mg/kg	<0.028 U	<0.036 U	<0.03 U	<0.028 U	<0.03 U	NA	NA	<0.027 U	<0.18 UD
Total PCBs	1336-36-3	1	25	mg/kg	<0.028 U	<0.036 U	<0.03 U	0.12	<0.03 U	NA	NA	<0.027 U	<0.18 UD
Metals													
Arsenic	7440-38-2	16	16	mg/kg	5.4	9.3	83	4.6	0.95	NA	NA	7.5	1,900 D
Barium	7440-39-3	400	10000	mg/kg	190	1,400	160	90	20	NA	NA	52	30
Beryllium	7440-41-7	590	2700	mg/kg	0.31	1.2	0.27	0.35	<0.24 U	NA	NA	0.42	<0.29 U
Cadmium	7440-43-9	9.3	60	mg/kg	<0.44 ∪	1.7	<0.49 U	<0.45 U	<0.48 U	NA	NA	<0.44 U	4.7
Chromium, Hexavalent	18540-29-9	400	800	mg/kg	<0.89 U	<1.2 U	<0.98 U	<0.91 U	<0.96 U	NA	NA	<0.88 U	<1.1 U
Chromium, Total	7440-47-3	NS	NS	mg/kg	13	34	11	15	8.9	NA	NA	22	<7.1 U
Chromium, Trivalent	16065-83-1	1500	6800	mg/kg	13	34	11	15	8.9	NA	NA	22	<7.1 U
Copper	7440-50-8	270	10000	mg/kg	69	580	84	21	8.2	NA	NA	23	140
Cyanide	57-12-5	27	10000	mg/kg	0.36	<0.35 U	<0.29 U	0.65	0.36	NA	NA	<0.26 U	140 D
Lead	7439-92-1	1000	3900	mg/kg	270	1,800 D	770	71	<6 U	NA	NA	16	1,800 D
Manganese	7439-96-5	10000	10000	mg/kg	240	180	230	200	210	NA	NA	2,000 D	27
Mercury	7439-97-6	2.8	5.7	mg/kg	0.98	3.6	1.4	0.2	<0.1 U	NA	NA	<0.092 U	6.5 D
Nickel	7440-02-0	310	10000	mg/kg	16	43	11	11	9.1	NA	NA	16	<7.1 U
Selenium	7782-49-2	1500	6800	mg/kg	<2.2 U	6.1	7.2	<2.3 U	<2.4 U	NA	NA	<2.2 U	67
Silver	7440-22-4	1500	6800	mg/kg	<0.22 U	0.72	0.78	<0.23 U	<0.24 U	NA	NA	<0.22 U	0.46
Zinc	7440-66-6	10000	10000	mg/kg	210	1,700 D	70	84	20	NA	NA	33	120
General Chemistry													
Oxidation-Reduction Potential	ORP	NS	NS	mV	180	190	-59	-24	60	NA	NA	61	130
Ph	PH	NS	NS	pH UNITS	8.6	7.3	11	12	8	NA	NA	7	4.1
Solids, Percent	SOLID	NS	NS	Percent	90	69	82	88	83	92	93	91	70
Temperature	TEMP	NS	NS	deg C	22	22	22	22	22	NA	NA	22	22

Notes:

CAS - Chemical Abstract Service NS - No standard mg/kg - milligram per kilogram NA - Not analyzed RL - Reporting limit <RL - Not detected

Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Restricted Use Commercial, and Restricted Criterion comparisons for 3- & 4-methylphenol (m&p cresol) are provided for reference. Promulgated SCOs are for 3-methylphenol (p-cresol) and 4-methylphenol (p-cresol).

Qualifiers:

D - The concentration reported is a result of a diluted sample.

J - The analyte was detected above the method detection limit (MDL), but below the reporting limit (RL); therefore, the result is an estimated concentration.

U - The analyte was analyzed for, but was not detected at a level greater than or equal to the RL; the value shown in the table is the RL.

Exceedance Summary:

- 10 Result exceeds Restricted Use Commercial SCOs
- 10 Result exceeds Restricted Use Industrial SCOs

Table 2 Groundwater Analytical Results Summary Table Project # 100965501 - 47th Street Site, Maspeth, NY

			Location	TW-1	TW-1	TW-2	TW-2	TW-3	TW-3	TW-4	TW-4	TW-6	TW-6	TW-7	TW-8	TW-9
Analyte	CAS	NYSDEC		LB-1\TW-1 F	LB-1\TW-1 U	LB-2\TW-2 F	LB-2\TW-2 U	LB-3\TW-3 F	LB-3\TW-3 U	LB-4\TW-4 F	LB-4\TW-4 U	LB-6\TW-6 F	LB-6\TW-6 U	LB-7\TW-7	LB-8\TW-8	LB-9\TW-9
Analyte	Number	SGVs	Sample Date	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021
			Unit	Result	Result	Result	Result	Result								
Volatile Organic Compounds																
1,1,1-Trichloroethane	71-55-6	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,1,2,2-Tetrachloroethane	79-34-5	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,1,2-Trichloroethane	79-00-5	1	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,1-Dichloroethane	75-34-3	5	ug/l	NA	<1 U	NA	<1 U	NA	<1 U		<1 U	NA	<1 U	<1 U	<1 U	<10 UD
1,1-Dichloroethene 1,2,3-Trichlorobenzene	75-35-4	5 5	ug/l	NA NA	<1 U <1 U	<1 U <1 U	<1 U	<10 UD <10 UD								
1,2,4-Trichlorobenzene	87-61-6 120-82-1	5 5	ug/l	NA	<1 U	NA	<1 U <1 U	NA	<1 U	NA	<1 U <1 U	NA	<1 U	<1 U	<1 U <1 U	<10 UD
1,2-Dibromo-3-Chloropropane	96-12-8	0.04	ug/l ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0006	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,2-Dichlorobenzene	95-50-1	3	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,2-Dichloroethane	107-06-2	0.6	ug/l	NA	<0.64 U	<0.64 U	<0.64 U	<6.4 UD								
1,2-Dichloropropane	78-87-5	1	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,3-Dichlorobenzene	541-73-1	3	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,4-Dichlorobenzene	106-46-7	3	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
1,4-Dioxane (P-Dioxane)	123-91-1	NS	ug/l	NA	<50 U	<50 U	<50 U	<500 UD								
2-Hexanone (MBK)	591-78-6	50	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Acetone	67-64-1	50	ug/l	NA	<5 U	NA	12	5.3	12	<50 UD						
Benzene	71-43-2	1	ug/l	NA	0.95	NA	<0.5 U	<0.5 U	<0.5 U	<5 UD						
Bromochloromethane	74-97-5	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Bromodichloromethane	75-27-4	50	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Bromoform	75-25-2	50	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Bromomethane	74-83-9	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Carbon Disulfide	75-15-0	60	ug/l	NA	1.5	NA	<1 U	NA	<1 U	NA	<1 U	NA	1.5	<1 U	1.6	<10 UD
Carbon Tetrachloride	56-23-5	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Chlorobenzene	108-90-7	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Chloroethane	75-00-3	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Chloroform	67-66-3	7	ug/l	NA	<2 U	<2 U	<2 U	<20 UD								
Chloromethane	74-87-3	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Cis-1,2-Dichloroethene	156-59-2	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
	10061-01-5	0.4	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Cyclohexane	110-82-7	NS	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Dibromochloromethane	124-48-1	50	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Dichlorodifluoromethane	75-71-8	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Ethylbenzene	100-41-4	5	ug/l	NA	8.6	NA	<1 U	<1 U	<1 U	<10 UD						
Isopropylbenzene (Cumene)	98-82-8	5	ug/l	NA	<1 U	<1 U	<1 U	24 D								
	179601-23-1	5	ug/l	NA	<1 U	NA	<1 U	NA	<1 U		<1 U	NA	<1 U	<1 U	<1 U	<10 UD
Methyl Acetate	79-20-9	NS	ug/l	NA NA	<1 U	NA	<1 U	NA NA	<1 U	NA	<1 U	NA	<1 U	<1 U	<1 U	<10 UD
Methyl Ethyl Ketone (2-Butanone) Methyl Isobutyl Ketone (4-Methyl-2-Pentanon	78-93-3 108-10-1	50 NS	ug/l	NA	<1 U <1 U	NA NA	<1 U <1 U	NA	<1 U <1 U	NA NA	<1 U <1 U	NA NA	<1 U <1 U	<1 U <1 U	1.6 <1 ∪	<10 UD <10 UD
Methylcyclohexane	108-87-2	NS	ug/l ug/l	NA	<1 U	<1 U	3	2,900 D								
Methylene Chloride	75-09-2	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
o-Xylene (1,2-Dimethylbenzene)	95-47-6	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Styrene	95-47-0 100-42-5	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Tert-Butyl Methyl Ether	1634-04-4	10	ug/l	NA	5.9	NA	2.4	NA	4.4	NA	0.55	NA	<0.5 U	1.4	<0.5 U	<5 UD
Tetrachloroethene (PCE)	127-18-4	5	ug/l	NA	<1 U	NA	<1 U	NA	4.4 <1 U	NA	<1 U	NA	<1 U	<1 U	<0.5 0	<10 UD
Toluene	108-88-3	5	ug/l	NA	<1 U	<1 U	60	<10 UD								
Total Xylenes	1330-20-7	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Trans-1,2-Dichloroethene	156-60-5	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
	10061-02-6	0.4	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Trichloroethene (TCE)	79-01-6	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Trichlorofluoromethane	75-69-4	5	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								
Vinyl Chloride	75-01-4	2	ug/l	NA	<1 U	<1 U	<1 U	<10 UD								

			Location	TW-1	TW-1	TW-2	TW-2	TW-3	TW-3	TW-4	TW-4	TW-6	TW-6	TW-7	TW-8	TW-9
Analyte	CAS	NYSDEC	-								LB-4\TW-4 U			LB-7\TW-7	LB-8\TW-8	LB-9\TW-9
	Number	SGVs	Sample Date	11/12/2021 Result												
Semi-Volatile Organic Compounds				nesut	nesun	nesun	nesun	Nesun	nesut	nesun	nesut	nesuit	Nesur	nesun	nesuit	nesun
1,2,4,5-Tetrachlorobenzene	95-94-3	5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
1,4-Dioxane (P-Dioxane)	123-91-1	NS	ug/l	NA	<0.5 U	NA	<0.56 U	NA	<0.5 U	NA	<0.5 U	NA	<0.5 U	NA	NA	<0.56 U
2,3,4,6-Tetrachlorophenol	58-90-2	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
2,4,5-Trichlorophenol	95-95-4	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
2,4,6-Trichlorophenol	88-06-2	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
2,4-Dichlorophenol	120-83-2	1	ug/l	NA	<0.5 U	NA	<0.56 U	NA	<0.5 U	NA	<0.5 U	NA	<0.5 U	NA	NA	<0.56 U
2,4-Dimethylphenol	105-67-9	1	ug/l	NA	<0.55 U	NA	<0.61 U	NA	<0.55 U	NA	<0.55 U	NA	<0.55 U	NA	NA	<0.61 U
2,4-Dinitrophenol	51-28-5	1	ug/l	NA	<10 U	NA	<11 U	NA	<10 U	NA	<10 U	NA	<10 U	NA	NA	<11 U
2,4-Dinitrotoluene	121-14-2	5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
2,6-Dinitrotoluene	606-20-2	5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
2-Chloronaphthalene	91-58-7	10	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
2-Chlorophenol	95-57-8	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
2-Methylnaphthalene	91-57-6	NS	ug/l	NA	20	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
2-Methylphenol (o-Cresol)	95-48-7	NS	ug/l	NA	<0.5 U	NA	<0.56 U	NA	<0.5 U	NA	<0.5 U	NA	<0.5 U	NA	NA	<0.56 U
2-Nitroaniline	88-74-4	5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
2-Nitrophenol	88-75-5	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
3,3'-Dichlorobenzidine	91-94-1	5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
3-Nitroaniline	99-09-2	5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
4,6-Dinitro-2-Methylphenol	534-52-1	NS	ug/l	NA	<10 U	NA	<11 U	NA	<10 U	NA	<10 U	NA	<10 U	NA	NA	<11 U
4-Bromophenyl Phenyl Ether	101-55-3	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
4-Chloro-3-Methylphenol	59-50-7	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
4-Chloroaniline	106-47-8	5	ug/l	NA	<0.5 U	NA	<0.56 U	NA	<0.5 U	NA	<0.5 U	NA	<0.5 U	NA	NA	<0.56 U
4-Chlorophenyl Phenyl Ether	7005-72-3	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
4-Methylphenol (P-Cresol)	106-44-5	NS	ug/l	NA	<0.5 U	NA	<0.56 U	NA	<0.5 U	NA	<0.5 U	NA	<0.5 U	NA	NA	<0.56 U
4-Nitroaniline	100-01-6	5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
4-Nitrophenol	100-02-7	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Acenaphthene	83-32-9	20	ug/l	NA	53	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	3.5	NA	NA	<2.2 U
Acenaphthylene	208-96-8	NS	ug/l	NA	19	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Acetophenone	98-86-2	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Anthracene	120-12-7	50	ug/l	NA	73	NA	3	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Atrazine	1912-24-9	7.5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Benzaldehyde	100-52-7	NS	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Benzo(a)anthracene	56-55-3	0.002	ug/l	NA	63	NA	6.9	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Benzo(a)pyrene	50-32-8	0	ug/l	NA	43	NA	6.2	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Benzo(b)fluoranthene	205-99-2	0.002	ug/l	NA	44	NA	7.3	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Benzo(g,h,i)Perylene	191-24-2	NS	ug/l	NA	18	NA	4.3	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Benzo(k)fluoranthene	207-08-9	0.002	ug/l	NA	10	NA	2.2	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Benzyl Butyl Phthalate	85-68-7	50	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U		NA	<2.2 U
Biphenyl (Diphenyl)	92-52-4	5	ug/l	NA NA	3.7 <2 ∪	NA NA	<2.2 U	NA	<2 U	NA NA	<2 U	NA	<2 U	NA NA	NA NA	<2.2 U
Bis(2-chloroethoxy) methane	111-91-1 111-44-4	5	ug/l	NA	<2.0 <0.5 U	NA	<2.2 U <0.56 U	NA NA	<2 U <0.5 U	NA	<2 U <0.5 U	NA NA	<2 U <0.5 U		NA	<2.2 U <0.56 U
Bis(2-chloroethyl) ether (2-chloroethyl ether)		I E	ug/l	NA		NA		NA	<0.5 U <2 U	NA		NA		NA NA	NA	
Bis(2-chloroisopropyl) ether	108-60-1 117-81-7	5	ug/l	NA	<2 U <2 U	NA	<2.2 U <2.2 U		<2 U <2 U		<2 U <2 U	NA	<2 U <2 U	NA	NA	<2.2 ∪
Bis(2-ethylhexyl) phthalate		5	ug/l	NA	<2 U <2 U			NA		NA		NA				2.6
Caprolactam Carbazolo	105-60-2 86-74-8	NS NS	ug/l	NA	<2 0 2.6	NA NA	13 <2.2 ∪	NA NA	13 <2 ∪	NA NA	<2 U <2 U	NA	25 <2 ∪	NA NA	NA NA	<2.2 U <2.2 U
Carbazole Chrysene	86-74-8 218-01-9	0.002	ug/l	NA	2.0 60	NA	<2.2 0 5.2	NA	<2 U <2 U	NA	<2 U <2 U	NA	<2 U <2 U	NA	NA	<2.2 U <2.2 U
Dibenz(a,h)anthracene	53-70-3	0.002 NS	ug/l	NA	5.5	NA	3.2 <2.2 U	NA	<2 U <2 U	NA	<2 U <2 U	NA	<2 U <2 U	NA	NA	<2.2 U
Dibenzofuran	53-70-3 132-64-9	NS	ug/l	NA	5.5 4.8	NA	<2.2 U <0.76 U	NA	<2 U <0.68 U	NA	<2.0 <0.68 U	NA	<2 U <0.68 U	NA	NA	<2.2 U <0.76 U
Dibutyl phthalate	84-74-2	50	ug/l	NA	4.8 <1.1 U	NA	<0.76 U <1.2 U	NA	<0.68 0 <1.1 U	NA	<0.68 0 <1.1 U	NA	<0.68 0 <1.1 U	NA	NA	<0.76 U <1.2 U
Diethyl phthalate	84-74-2 84-66-2	50 50	ug/l	NA	<1.10 <2 U	NA	<1.2 U <2.2 U	NA	<1.10 <2 U	NA	< 1.1 U <2 U	NA	<1.10 <2 U	NA	NA	<1.2 U <2.2 U
Directly phthalate	84-00-2 131-11-3	50 50	ug/l	NA	<2 U <2 U	NA	<2.2 U <2.2 U	NA	<2 U <2 U	NA	<2 U <2 U	NA	<2 U <2 U	NA	NA	<2.2 U <2.2 U
Dioctyl phthalate	131-11-3 117-84-0	50 50	ug/l	NA	<2 U <2 U	NA	<2.2 U <2.2 U	NA	<2 U <2 U	NA	<2 U <2 U	NA	<2 U <2 U	NA	NA	<2.2 U <2.2 U
Fluoranthene	206-44-0	50 50	ug/l ug/l	NA	<2 0 110	NA	<2.2 U 12	NA	<2 U <2 U	NA	<2 U <2 U	NA	<2 U <2 U	NA	NA	<2.2 U <2.2 U
	200-44-0	50	ug/I	INA	110	INA	١Z	NA	<2 U	INA	<2 U	INA	<2 U	INA	INA	< Z.Z U

			Location	TW-1	TW-1	TW-2	TW-2	TW-3	TW-3	TW-4	TW-4	TW-6	TW-6	TW-7	TW-8	TW-9
	CAS	NYSDEC							LB-3\TW-3 U						LB-8\TW-8	LB-9\TW-9
Analyte	Number	SGVs	Sample Date		11/12/2021	11/12/2021	11/12/2021				11/12/2021		11/12/2021	11/12/2021	11/12/2021	11/12/2021
			Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Fluorene	86-73-7	50	ug/l	NA	55	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Hexachlorobenzene	118-74-1	0.04	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Hexachlorobutadiene	87-68-3	0.5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Hexachlorocyclopentadiene	77-47-4	5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Hexachloroethane	67-72-1	5	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	ug/l	NA	15	NA	3.3	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Isophorone	78-59-1	50	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Naphthalene	91-20-3	10	ug/l	NA	17	NA	1.3	NA	<0.5 U	NA	<0.5 U	NA	0.66	NA	NA	1.7
Nitrobenzene	98-95-3	0.4	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
n-Nitrosodi-N-Propylamine	621-64-7	NS	ug/l	NA	<0.64 U	NA	<0.71 U	NA	<0.64 U	NA	<0.64 U	NA	<0.64 U	NA	NA	<0.71 U
n-Nitrosodiphenylamine	86-30-6	50	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Pentachlorophenol	87-86-5	1	ug/l	NA	<10 U	NA	<11 U	NA	<10 U	NA	<10 U	NA	<10 U	NA	NA	<11 U
Phenanthrene	85-01-8	50	ug/l	NA	220 D	NA	10	NA	<2 U	NA	<2 U	NA	2	NA	NA	<2.2 U
Phenol	108-95-2	1	ug/l	NA	<2 U	NA	<2.2 U	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Pyrene	129-00-0	50	ug/l	NA	170	NA	13	NA	<2 U	NA	<2 U	NA	<2 U	NA	NA	<2.2 U
Metals																
Aluminum	7429-90-5	NS	ug/l	<200 U	14,000	<200 U	37,000	<200 U	35,000	<200 U	55,000	<200 U	56,000	NA	NA	NA
Antimony	7440-36-0	3	ug/l	5.2	7	4	15	5.9	22	3.3	6.3	8.3	5.5	NA	NA	NA
Arsenic	7440-38-2	25	ug/l	24	72	4.2	81	45	340	5.3	54	3.3	26	NA	NA	NA
Barium	7440-39-3	1000	ug/l	<50 U	460	74	1,000	85	2,300	58	1,000	<50 U	730	NA	NA	NA
Beryllium	7440-41-7	3	ug/l	<1 U	<1 U	<1 U	4.3 D	<1 U	<5 UD	<1 U	<4 UD	<1 U	5.1 D	NA	NA	NA
Cadmium	7440-43-9	5	ug/l	<2 U	2.4	<2 U	10	<2 U	2.8	<2 U	<2 U	<2 U	<2 U	NA	NA	NA
Calcium	7440-70-2	NS	ug/l	56,000	92,000	270,000	630,000 D	290,000	1,100,000 D	160,000	780,000 D	76,000	190,000	NA	NA	NA
Chromium, Total	7440-47-3	50	ug/l	<50 U	100	<50 U	190	<50 U	190	<50 U	210	<50 U	320	NA	NA	NA
Cobalt	7440-48-4	NS	ug/l	<2 U	11	2.4	94	<2 U	33	<2 U	33	<2 U	59	NA	NA	NA
Copper	7440-50-8	200	ug/l	<50 U	240	<50 U	940 D	<50 U	1,300 D	<50 U	460 D	<50 U	100	NA	NA	NA
Iron	7439-89-6	300	ug/l	<300 U	54,000	650	130,000	<300 U	120,000	<300 U	140,000	<300 U	210,000	NA	NA	NA
Lead	7439-92-1	25	ug/l	<3 U	420	<3 U	4,400 D	<3 U	6,600 D	<3 U	1,100	<3 U	560	NA	NA	NA
Magnesium	7439-95-4	35000	ug/l	9,600	17,000	21,000	63,000	<5,000 U	55,000	15,000	46,000	<5,000 U	24,000	NA	NA	NA
Manganese	7439-96-5	300	ug/l	<40 ∪	400	640	2,600	<40 U	1,500	81	3,600	<40 U	4,300	NA	NA	NA
Mercury	7439-97-6	0.7	ug/l	<0.5 U	1.2	<0.5 U	320 D	<0.5 U	19	<0.5 U	4.5	<0.5 U	<0.5 U	NA	NA	NA
Nickel	7440-02-0	100	ug/l	<50 U	<50 U	<50 U	150	<50 U	94	<50 U	89	<50 U	110	NA	NA	NA
Potassium	7440-09-7	NS	ug/l	21,000	23,000	18,000	23,000	72,000	79,000	74,000	84,000	14,000	21,000	NA	NA	NA
Selenium	7782-49-2	10	ug/l	<10 U	<10 U	<10 U	15	<10 U	28	<10 U	<10 U	<10 U	18	NA	NA	NA
Silver	7440-22-4	50	ug/l	<1 U	<1 U	<1 U	1.9	<1 U	4.4	<1 U	<1 U	<1 U	<1 U	NA	NA	NA
Sodium	7440-23-5	20000	ug/l	93,000	94,000	95,000	100,000	160,000	160,000	310,000	310,000	25,000	27,000	NA	NA	NA
Thallium	7440-28-0	0.5	ug/l	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	NA	NA	NA
Vanadium	7440-62-2	NS	ug/l	<50 U	<50 U	<50 U	150	<50 U	120	<50 U	160	<50 U	310	NA	NA	NA
Zinc	7440-66-6	2000	ug/l	<50 U	830	<50 U	4,900	<50 U	840	<50 U	880	<50 U	650	NA	NA	NA

Notes:

CAS - Chemical Abstract Service NS - No standard ug/I - microgram per liter NA - Not analyzed RL - Reporting limit

<RL - Not detected

Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 703.5 and the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values for Class GA Water (herein collectively referenced as "NYSDEC SGVs").

<u>Qualifiers:</u>

D - The concentration reported is a result of

a diluted sample.

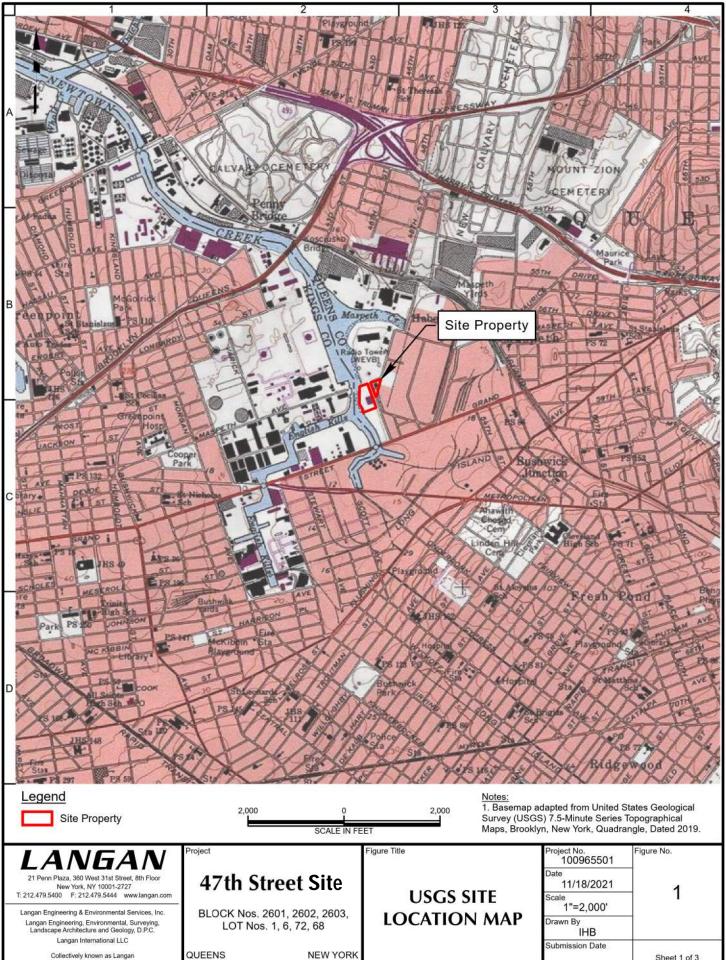
U - The analyte was analyzed for, but was

not detected at a level greater than or equal to the RL; the value shown in the table is the

Exceedance Summary:

10 - Result exceeds NYSDEC SGVs

FIGURES



Path: \\langan.com\data\NYC\data7\170686701\Project Data\ArcGIS\APRX\170686701\170686701\aprx Date: 11/18/2021 User: ibaker Time: 2:35 PM

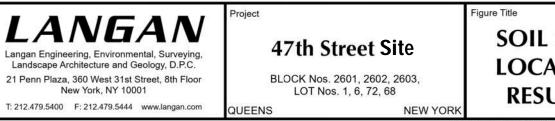
2021 Lan

	3 4 5	6	7 8
Location LB-4			Legend
Location LB-4 Sample Name LB-4 (1.5-2.0)		Location LB-9B-2N Sample Name LB-9b-2N (10.0-10.5)	Legend
Sample Date 11/11/2021		Sample Date 11/12/2021	Subject Property
Sample Depth 1.5-2 SVOCs		Sample Depth 10-10.5 SVOCs	Tax Parcels
A Benzo(a)pyrene 0.31	SB04/MW04	Benzo(a)pyrene <0.037 U	 Previous Soil Boring Location (July 2021)
Benzo(b)fluoranthene 0.42	LB-8/TW-8	Benzo(b)fluoranthene <0.037 U	Previous Soil Boring/ Temporary Monitoring Well
Location LB-3 Dibenz(a,h)anthracene 0.049 Sample Name LB-3 (6.0-6.5) Metals	- V 2602	Dibenz(a,h)anthracene <0.037 U Metals	Location (July 2021)
Sample Date 11/11/2021 Arsenic 4.6	LB-9/TW-9 BLOCK 72 05	Arsenic 7.5	Soil Boring Location (November 2021)
Sample Depth 6-6.5 Barium 90	ADDRESS STREET	Barium 52	Soil Boring / Temporary Well Point Location
SVOCs Copper 21 Benzo(a)pyrene 3.6 D Cyanide 0.65	SB07	Copper 23 Cyanide <0.26 U	(November 2021)
Benzo(b)fluoranthene 4.8 D Lead 71	LB-4/TW-4	Lead 16	Potential Underground Injection Control Unit
Dibenz(a,h)anthracene 0.67 D Mercury 0.2	SB05 LB-7/TW-7	Mercury <0.092 U	Concrete stockpile
Metals Arsenic 83	BULOT '88-20 DDRESS STREET		
Barium 160	L'ATTIME	Location LB-10	Pits and Sumps
B Copper 84		Sample Name LB-10 (6.5-7.0)	Stormwater infiltration basins
Cyanide <0.29 U Lead 770	SB03/MW03	Sample Date 11/12/2021	AST Room
Mercury 1.4	SB08 BUDGK 7602	Sample Depth 6.5-7 SVOCs	Floor Trenches and Pits
10 10 10 10 10 10	ADDRESS STREET	Benzo(a)pyrene <10 UD	Oil Water Separator
Location LB-2 Sample Name LB-2 (10.5-11.0)		Benzo(b)fluoranthene <10 UD	UST Grave
Sample Date 11/11/2021	LB-3/TW-3	Dibenz(a,h)anthracene <10 UD	
Sample Depth 10.5-11	The state of the s	Arsenic 1,900 D	Potential UST Location
SVOCs Benzo(a)pyrene 1.3	Land Land Land Land Land Land Land Land	Barium 30	E.
Benzo(b)fluoranthene 1.8	LB-10	Copper 140 Cyanide 140 D	
Dibenz(a,h)anthracene 0.22	SB02/MW02	Lead 1,800 D	
C Arsenic 9.3		Mercury 6.5 D	
Barium 1,400	SB11 LB-6/TW-6		-
Copper 580	LB-2/TW-2 LB-5	Location LB-6 Sample Name LB-6 (16.5-17.0)	
Cyanide <0.35 U Lead 1,800 D		Sample Date 11/12/2021	
Mercury 3.6	SB01/MW01	Sample Depth 16.5-17	Exceedance Summary:
	SB10	SVOCs Benzo(a)pyrene <0.04 U	10 - Result exceeds Restricted Use Commercial SCOs 10 - Result exceeds Restricted Use Industrial SCOs
Location LB-1 Sample Name LB-1 (7.5-8.0)		Benzo(b)fluoranthene <0.04 U	
Sample Date 11/11/2021		Dibenz(a,h)anthracene <0.04 U	NYSDEC Part 375 NYSDEC Part 375
Sample Depth 7.5-8	SB09	Arsenic 0.95	Analyte Restricted Use Restricted Use Commercial SCOs Industrial SCOs
SVOCs Benzo(a)pyrene 4.8 D	LB-1/TW-1	Barium 20	
D Benzo(b)fluoranthene 5.7 D		Copper 8.2	SVOCs
Dibenz(a,h)anthracene 0.92 D		Cyanide 0.36 Lead <6 U	Benzo(a)pyrene11.1Benzo(b)fluoranthene5.611
Metals Arsenic 5.4		Mercury <0.1 U	Dibenz(a,h)anthracene 0.56 1.1
Barium 190			Metals
Copper 69			Arsenic 16 16
Cyanide 0.36 Lead 270		New York State, Maxar, Microsoft	Barium 400 10000
Mercury 0.98		New Tork State, Maxar, Microsoft	Copper 270 10000 Cyanide 27 10000
			Lead 1000 3900
			Mercury 2.8 5.7
	Project	Figure Title	Project No. Figure No.



F

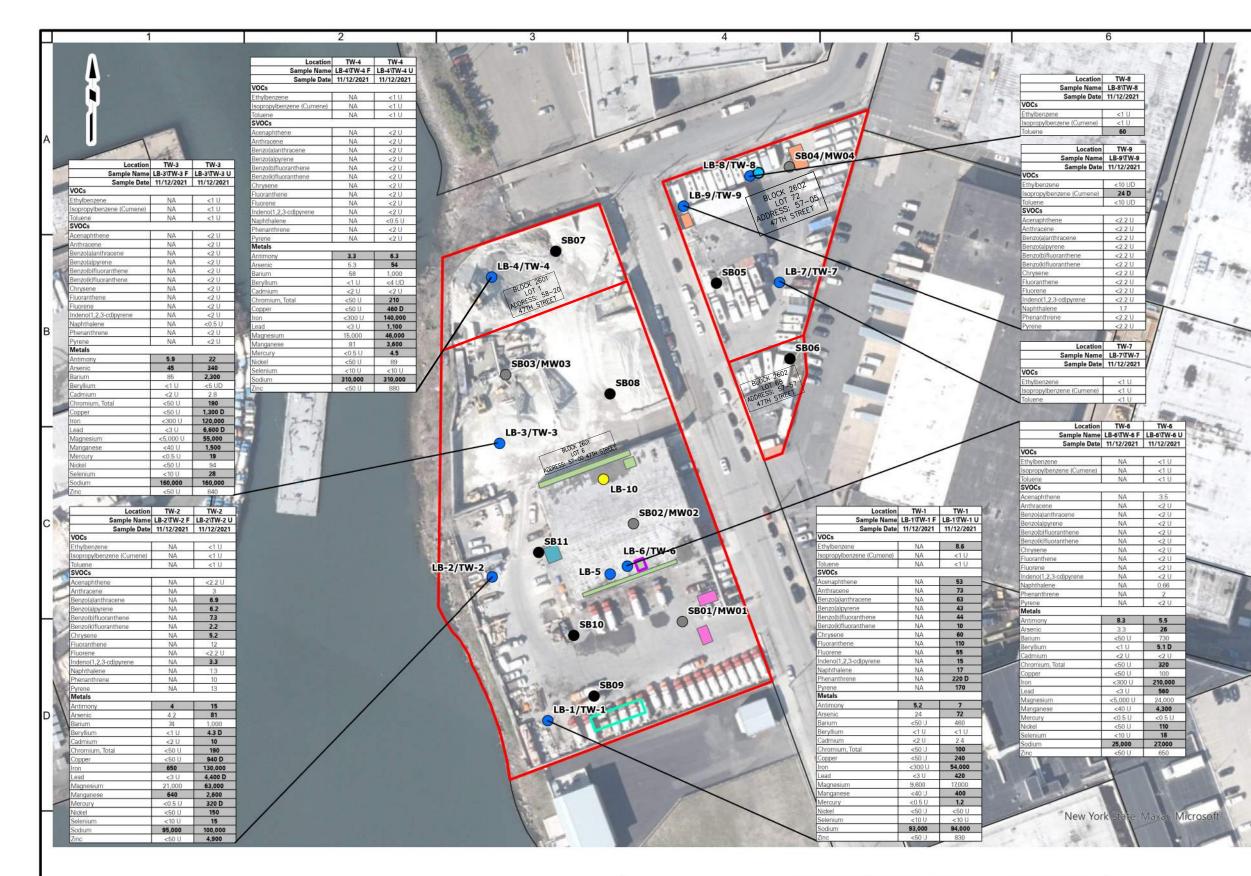
100	0	100
-		
i.	SCALE IN FEET	

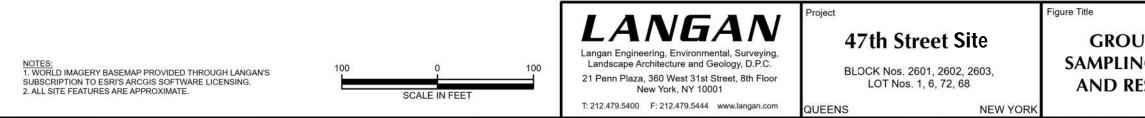


SOIL SAMPLING **LOCATION AND RESULTS PLAN**

Project No. 100965501	Figure No.	
Date 12/1/2021	2	
Scale 1"=100'	7 -	
Drawn By IHB	Sheet 1 of 1	1

Path: \langan.com\data\NYC\data7\170686701\Project Data\ArcGIS\APRX\170686701\170686701.aprx Date: 12/1/2021 User: ibaker Time: 12:32 PM





ed	en	C
3	•	_

.

- Subject Property
- Tax Parcels
- Stormwater infiltration basins
- AST Room
- Floor Trenches and Pits
- **Oil Water Separator**
- UST Grave
- Potential UST Location
- Previous Soil Boring Location (July 2021)
- Previous Soil Boring/ Temporary Monitoring Well 0 Location (July 2021)
- Soil Boring Location (November 2021)
- Soil Boring / Temporary Well Point Location (November 2021)
- 0 Potential Underground Injection Control Unit

Analyte	NYSDEC SGVs			
VOCs				
Ethylbenzene	5			
Isopropylbenzene (Cumene)	5			
Toluene	5			
SVOCs				
Acenaphthene	20			
Anthracene	50			
Benzo(a)anthracene	0.002			
Benzo(a)pyrene	0			
Benzo(b)fluoranthene	0.002			
Benzo(k)fluoranthene	0.002			
Chrysene	0.002			
Fluoranthene	50			
Fluorene	50			
Indeno(1,2,3-cd)pyrene	0.002			
Naphthalene	10			
Phenanthrene	50			
Pyrene	50			
Metals				
Antimony	3			
Arsenic	25			
Barium	1000			
Beryllium	3			
Cadmium	5			
Chromium, Total	50			
Copper	200			
Iron	300			
Lead	25			
Magnesium	35000			
Manganese	300			
Mercury	0.7			
Nickel	100			
Selenium	10			
Sodium	20000			
Zinc	2000			

Exceedance Summary:

10 - Result exceeds NYSDEC SGVs

GROUNDWATER SAMPLING LOCATION AND RESULTS PLAN

Project No. 100965501	Figure No.
Date 12/1/2021	3
Scale 1"=100'	
Drawn By IHB	Sheet 1 of 1

Path: \langan.com\data\NYC\data7\170686701\Project Data\ArcGIS\APRX\170686701\170686701.aprx Date: 12/1/2021 User: ibaker Time: 12:22 PM

APPENDIX A

Geophysical Report - NOVA

LANGAN

GEOPHYSICAL ENGINEERING SURVEY REPORT

Industrial Properties 58-20 47th Street, Maspeth, Queens 11378

NOVA PROJECT NUMBER: 21-2455

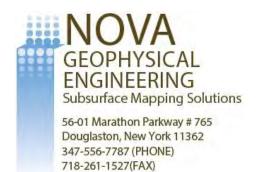
DATED: November 16, 2021

PREPARED FOR:



Phone: 973.560.4900 Fax: 973.560.4901 300 Kimball Drive, 4th Floor Parsippany, NJ 07054-2172 www.langan.com

PREPARED BY:



www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS 56-01 Marathon Parkway #765, Douglaston, New York 11362 Ph. 347-556-7787 Fax. 718-261-1527 www.novagsi.com

November 16, 2021

Alan Arico Senior Project Manager LANGAN Phone: 973.560.4900 Fax: 973.560.4901 300 Kimball Drive, 4th Floor Parsippany, NJ 07054-2172 Direct: 973.560.4613 Mobile: 973.524.8124 Email: aarico@langan.com

Re: Geophysical Engineering Survey (GES) Report Industrial Site 58-20 47th Street, Maspeth, Queens 11378

Dear Mr. Arico.

Nova Geophysical Services (NOVA) is pleased to provide the findings of the geophysical engineering survey (GES) at the above referenced project site: 58-20 47th Street, Maspeth, Queens 11378 (the "Site").

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a geophysical engineering survey (GES) consisting of a Ground Penetrating Radar (GPR) and Electromagnetic (EM) survey at the site. The purpose of this survey is to locate and identify utilities, underground storage tanks and other substructures on November 9th, 2021. This report and attachments also include findings from a previous survey that was performed at the site on July 7th, 2021.

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

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

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

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

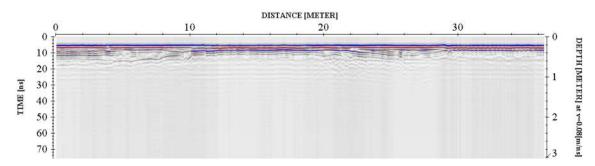
GEOPHYSICAL METHODS

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

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

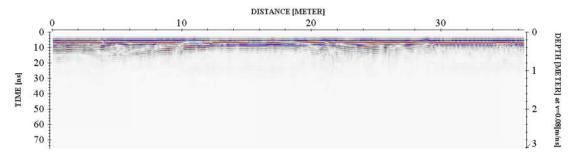
DATA PROCESSING

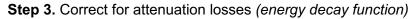
To improve the quality of the results and to better identify anomalies NOVA processed the collected data. The processing workflow is briefly described in this section.

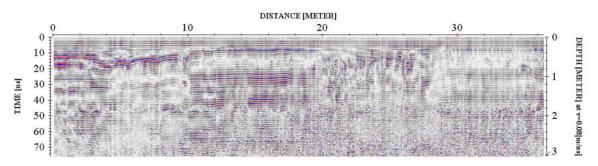


Step 1. Import Raw RAMAC data to standard processing format

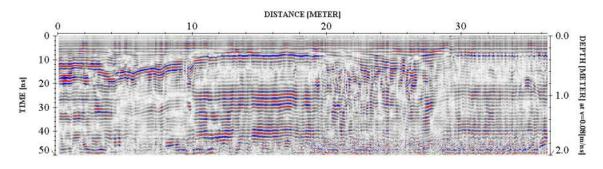




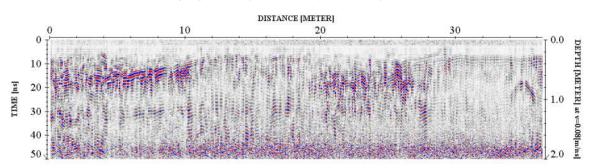




Step 4. Remove static from bottom of profile (time cut)



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



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

PHYSICAL SETTINGS

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

Weather: Clear

Temperature: 55° F

Surface: Concrete, Gravel,

Survey Parameters: A GPR grid scan was conducted within the survey areas as shown on the survey plan. The approximate line spacing of the grid survey was approximately 6'. Additional GPR data was collected over features of interest and in the vicinity of proposed boring locations. An EM utility locator was used in conjunction with the GPR throughout the surveyed areas.

Limitations: The geophysical noise level at the site was high due to being in an urban environment, reinforced concrete within the surveyed areas and the presence of gravel.

RESULTS

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

- Anomalies resembling potential subsurface utilities (such as sewer, water, electric, drainage, telecom, and gas) along with related structures (such as an oil water separator and drains) were identified during the GES. The approximate locations are shown in the survey plan.
- NOVA identified a suspected aboveground storage tank (AST) vault (AST removed prior to GES). A second AST was also identified within the survey area. Two additional sets of vent pipe and fill port were identified and are suspected to be related to two previously removed ASTs. Shown in the survey plan.
- Two large geophysical anomalies resembling potential underground storage tank (UST) graves along with associated lines were identified. Two more large geophysical anomalies resembling potential existing USTs were also identified. Shown in the survey plan.
- All cleared boring locations are shown in the survey plan.

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

Sincerely,

NOVA Geophysical Services

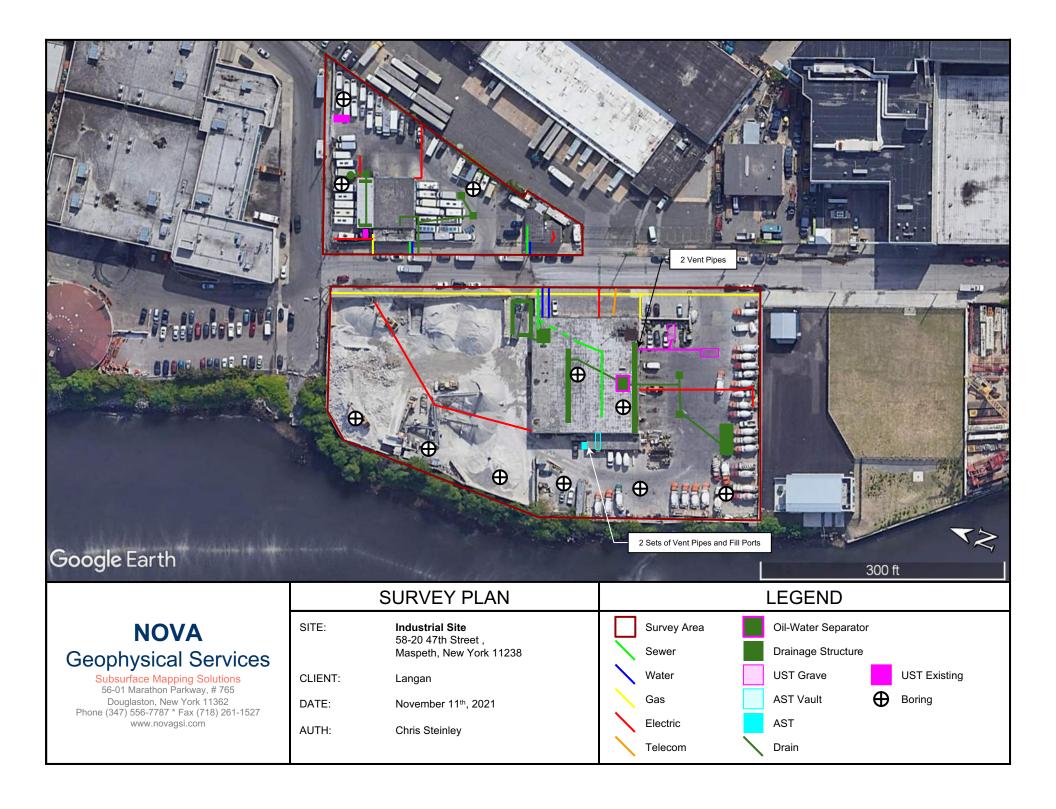
Sweet Call

Levent Eskicakit, P.G., E.P. Project Engineer

Attachments:

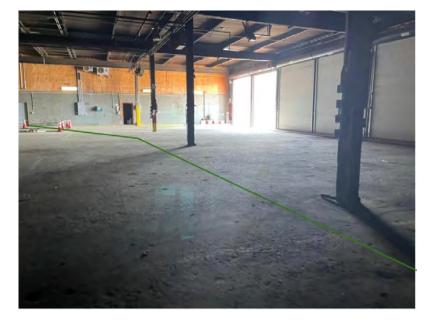
Location Map Survey Plan Geophysical Images

<image/> <section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header>	SITE:	And as the transmission of transmission	LEC	GEND





















































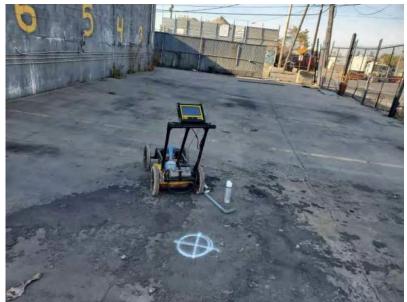




































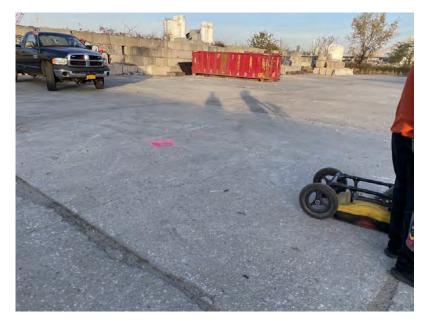


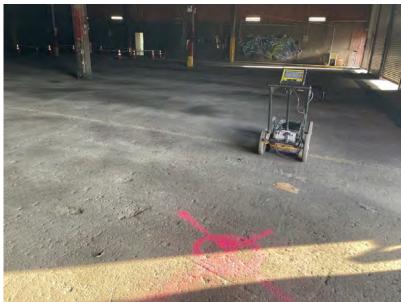


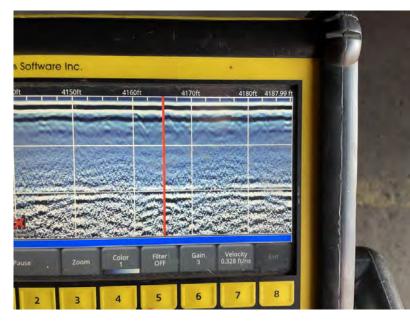


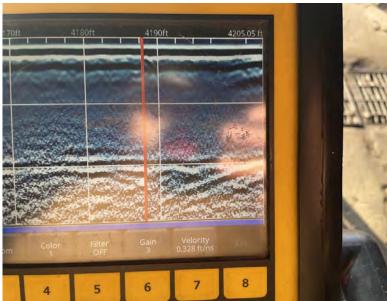




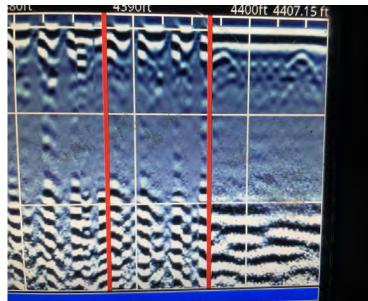


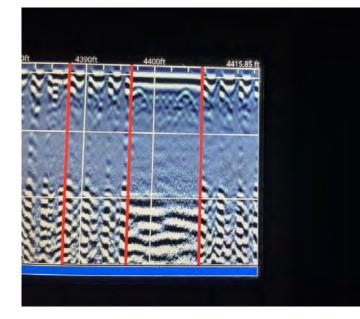


















GEOPHYSICAL IMAGES

Industrial Site 58-20 47th Street, Maspeth, New York 11238 November 11th, 2021







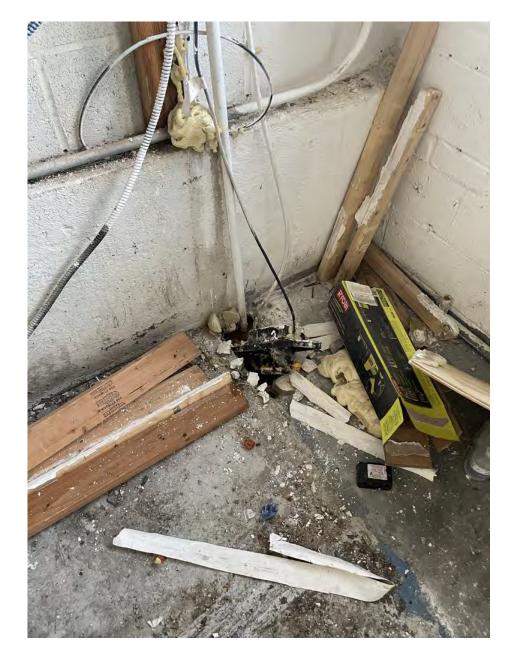








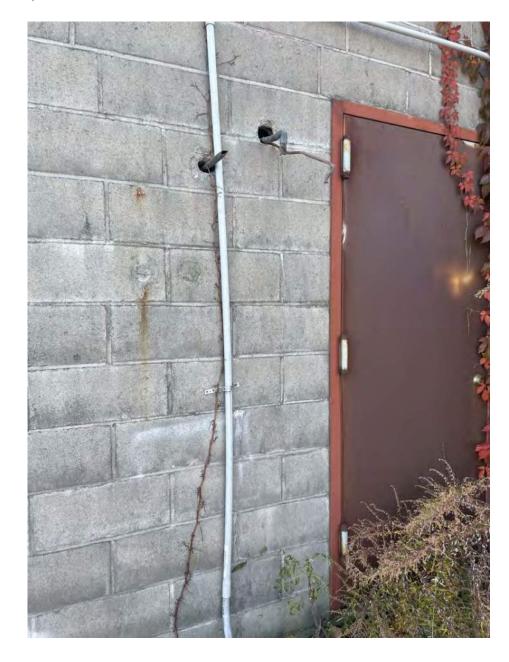








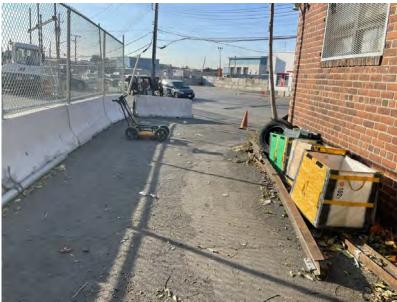




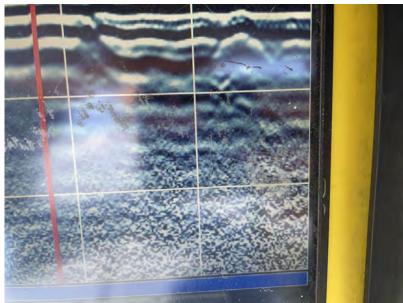




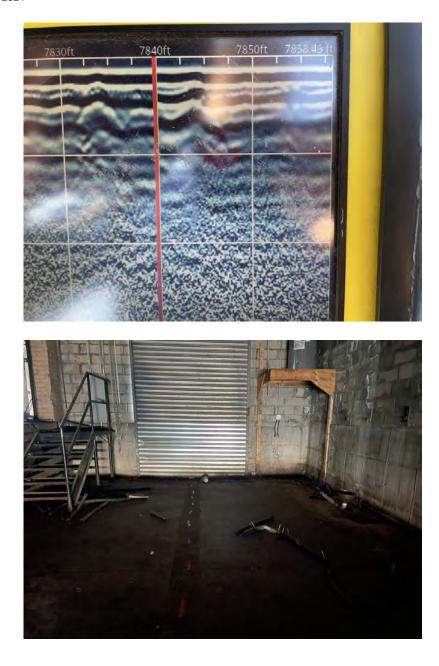


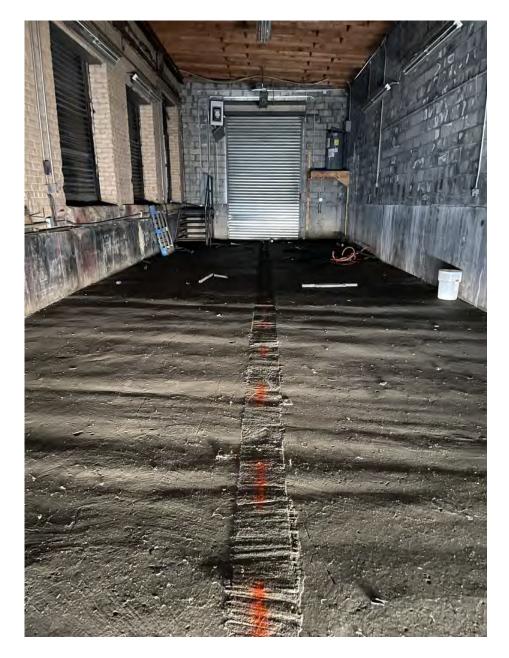
























GEOPHYSICAL IMAGES

Industrial Site 58-20 47th Street, Maspeth, New York 11238 November 11th, 2021



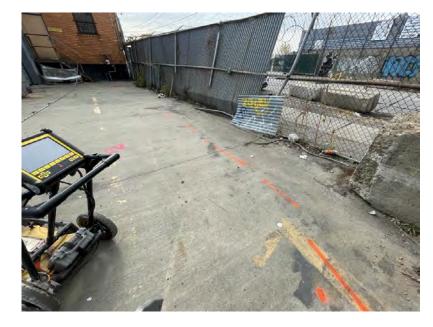














APPENDIX B

Soil Boring Logs

LANGAN

	L	ANG	A N		Log	of E	Boring	l		LE	8-1			Sheet	1	of	1
	Project					Pro	oject No	Э.									
ŀ	Location	57-00 47th Street M	laspeth			Ele	evation	and Da	tum	100	96550 ⁻	1					
		Maspeth, NY								NA							
	Drilling C		aantal Cardiaaa			Da	te Starl	ted		11	11101	[Date F	Finished	11/11	/04	
	Drilling E	Lakewood Environn	nental Services			Co	mpletio	n Dept	h	11/	/11/21	1	Rock	Depth	11/11	/21	
		Geoprobe 6610 DT									16 ft					NA	
	Size and	Type of Bit 2" Direct Push				Nu	mber o	f Samp	les	Distu	urbed	NA	Un	disturbed NA	Co		NA
		Diameter (in) NA	_	Ca	asing Depth (ft) NA		ater Lev	• • •		First			Co	mpletion	24 	HR.	
- F		^{lammer} NA	Weight (lbs)	NA	Drop (in) NA	Dri	lling Fo	reman	^	dom	Llutab	incon					
IGAN	Sampler	4' Macrocore 2" dia			1	Fie	ld Engi	ineer	A	uam	Hutch	inson					
-LA	Sampler	Hammer NA	Weight (lbs)	NA	Drop (in) NA				S		tore D'			1			
: Log	RIAL 30L						Depti	h to			mple Da	ata PIC	<u> </u>		mark		
Report: Log - LANGAN	MATERIAL SYMBOL		Sample Descrip	tion			Scale	Number 4	Type	Recov (in)	Penetr. resist BL/6in	Readi (ppn	ing	(Drilling Fluid Fluid Loss, Dri			
- 1		CONCRETE Aprox. 4-i Light brown medium S		aravol (dr								0		Started Dri	lling a	t 11/11	/2021
11/29/2021 12:56:18 PM			AND, Some line	giavei (ui	א)נו ובבן		- 1	-				0		8:05 AM			
12:5							_	-	core			0					
/2021							- 2		Macrocore	20		0					
11/29							- 3					0					
												0					
E.G		White fine-medium SA	ND some fine a	ravel (drv		· — ·	4					0					
PRIS					/[==]		-					0					
NTER							- 5		0			0					
01 <u> </u>							- 6	A	Macrocore	14		0					
9655		Dark brown medium-fir	ne SAND, trace b	orick, trac	e silt (dry)[FILL]				Maci	``		0					
S\100							- 7	-				0					
LOG								_м-2В				0		8:40 AM -			
GINT		Dark brown medium-fir	ne SAND, trace b	orick, trac	e silt (dry)[FILL]		- 8	-				0 0		sample fro	m 7.5'	-8.0'	
UTAL/							- 9	_				0					
NH NH							-	-	ore			0					
/IROI							- 10		Macrocor	33		0					
EN/							- 11	=	Σ			0					
PLIN		Dark brown to black SI	LT, trace clay, tra	ace organ	nics (wet)[Pt]		- 11 -	-				0 0		Bottom of 11/11/2021			
DISCI	<u>, , , , ,</u> <u>, , , , , ,</u>	Dark brown to black SI					- 12	M-3B				0		2" Tempor Screen ins	ary we	ell insta	lled
₹ I	<u> </u>		LT, trace clay, th	ace organ			_					0		Riser from		1011 5	-15
ЧDА	<u> </u>						- 13					0		Once the t	empor	arv we	ll was
OJEC							- 14	M-4A	Macrocore	33		0 0		sampled th	e PV0	C piping	g was
1/PR(Brown SILT, some san	nd (wet)[ML]						Macr	ო		0		removed, t backfilled v			
6550							- 15	-				0		drill cutting finished wi			ı hiah
1009							È	М-4В				0		strength co	ncrete	e to ma	
ATA5		+					- 16	1						the existing pavement.	j conc	rete	
AR\D,							- 17	1									
TA\P,							Ē										
M/DA							- 18	-									
VLANGAN.COMIDATA/PARIDATA5/100965501/PROJECT DATAI_DISCIPLINE/ENVIRONMENTAL/GINTLOGS/100965501_ENTERPRISE.GPJ																	
NGA							- 19										
₽Į							E 20	1									

	L	ANGAN	Log of	f Boring			LB	8-2		Sheet	t 1	of	1
Pr	oject			Project No.									
Lo	cation	57-00 47th Street Maspeth		Elevation an	nd Da		1009	96550 ⁻	1				
		Maspeth, NY					NA						
Dr	illing C	Company Lakewood Environmental Services		Date Started	d		11	/11/21	Da	ate Finished	11	/11/21	
Dr	illing E	quipment		Completion	Dept	n	11/	11/21	R	ock Depth		/ 1 / 2 1	
Si	ze and	Geoprobe 6610 DT Type of Bit					Dist	16 ft urbed		Undisturbe		NA Core	
		2" Direct Push		Number of S	Samp	les			NA		NA	I	NA
		Diameter (in) Casing Dep	NA	Water Level	• •		First ∑			Completion	NA	24 HR. 	
		lammer _{NA} Weight (lbs)NA	^{ı)} NA	Drilling Fore	man	۸.	dom	Hutch	incon				
NGAN	ampler	4' Macrocore 2" diameter		Field Engine	er	A	uam	HULCH	IIISOII				
N Sa		Hammer NA Weight (lbs) NA Drop (ir	^{I)} NA	-		Sa		ore D'a					
Report: Log - LANGAN	MATERIAL SYMBOL	Sample Description		Depth Scale	Number	Type		Penetr. resist BL/6in	PID Reading (ppm)	g (Dri Fluid I	Rema Iling Fluid, De Loss, Drilling	pth of Casing	g, etc.)
- K.X.		Gray medium-fine SAND, trace silt, trace fine gravel (dry)[FILL]						0		ted Drilling	g at 11/11	/2021
12:56:25 PM		Brown to red medium-fine SAND, some brick (moist)[FIL	<u></u> -	1 -	M-1A				0	9:04	AM		
112:5			-		M-1B	core	10		0				
11/29/2021		Brown to black medium-fine SAND, some brick (moist)[F				Macrocore	35		0 0				
11/2				3 -					0				
ЗŘ					M-1C				0				
ENTERPRISE.GPJ		Brown to black medium-fine SAND, some brick, some sil (moist)[FILL]	t	4 -					0				
				- 5 -	1				0				
					M-2A	core			0				
		Brown to black medium-fine SAND, trace brick, trace silt (moist)[FILL]		- 6 -		Macrocore	44		0				
		Brown medium SAND (moist)[SP]		- 7 -	M-2B				0				
, LOG					м-2С				0				
- GIN		Brown medium SAND (moist)[SP]		8 -					0 0				
NTAL				- 9 -	1				0				
ONME				10	M-3A	ocore	28		0				
NVIR		Black to dark brown silty fine SAND, glass fragments, Bu wood (moist)[FILL]	irned	- 10 -		Macrocore	2		0 0	0.30	AM - Col	lect arab	
	ΓŢ	Brown to grayish brown silty coarse-fine SAND (wet)[SM	; — — — -	11 -	M-3B				0.3		ple from 1		
SCIPL			-	12 -	м-зс				0.1 0				
		Brown to grayish brown silty coarse-fine SAND (wet)[SM]						0				
TDAT				- 13 -					0				
OTEC				- 14 -		Macrocore	21		0 0				
II/PR					M-4A	Macr	~		0				
9655(- 15 -					0		om of bori		
2100		Dark gray CLAY (moist)[CH]			м-4в				0		1/2021 10 emporary		lled
\DAT/											en installe		-15'
A/PAR				- 17 -						Rise	r from 0'-{	5'	
NDAT/				- 18 -						Once	e the temp pled the F	porary we	ll was
.com										remo	oved, the later the structure of the str	boring wa	S
WLANGAN.COMIDATAIPARIDATA511009655011PROJECT DATA_DISCIPLINEIENVIRONMENTALIGINTLOGS/100965501				- 19 -							cuttings to		annny
//TA				<u></u>	1								

L	4NG/	AN		Log	of E	Boring			LE	8-3			Sheet	1	of	1
Project	57-00 47th Street M	aspoth			Pr	oject No.			100	96550 [.]	1					
Location	57-00 47th Sheet M	aspein			Ele	evation ar	id Da		100	90550	1					
Drilling Co	Maspeth, NY				Da	ate Starteo	ł		NA		[Date F	Finished			
	Lakewood Environm	ental Services					<u> </u>		11	/11/21				11/1	1/21	
Drilling Eq	Geoprobe 6610 DT					ompletion	Deptr	ſ		16 ft		KOCK I	Depth		NA	
Size and 1	Type of Bit 2" Direct Push				NL	umber of S	Sampl	les	Dist	urbed	NA	Uno	disturbed NA		ore	NA
Casing Dia	ameter (in) NA		C	asing Depth (ft) NA	w	ater Level	(ft.)		First	:		Cor	mpletion L NA	24	4 HR. V	
Casing Ha		Weight (lbs)	NA	Drop (in) NA	Dr	illing Fore	man						<u> </u>	• •	<u>+</u>	
Z Sampler	4' Macrocore 2" diar				Fie	eld Engine	er	A	dam	Hutch	inson					
Sampler H	Hammer NA	Weight (lbs)	NA	Drop (in) NA		1		S		tore D'. mple Da			r			
Ambler Langart Log - Langart Log - Langart Raport - Log - Langart Raterial - Symbol - Langart Rapid - Langart	S	ample Descrij	otion			Depth Scale	Number	Type		Penetr. resist BL/6in	PID Readi (ppm	ng	R (Drilling Flu Fluid Loss, D	emar uid, Dept rilling Re		ing, e, etc.)
	Reddish brown to brow (dry)[FILL]	n coarse-mediu	m SAND,	some brick		E 0 -					0		Started D		at 11/1	1/2021
						- 1 -					0		10:31 AM			
-KXXXXA						- 2 -		Macrocore	35		0 0					
							M-1A	Maci			0					
4 4 4	CONCRETE Aprox. 2-f	eet thick				- 3 -	-				0.4 0.2					
						4 -	M-1B				0.2					
KPKIC							M-2A				0					
	Dark brown to black silt (moist)[FILL]	ty medium-fine	SAND, so	me gravel	'	5 -		ore			0.1 0					
						6 -	M-2B	acroco	34		0		10:50 AM			ab
						- 7 -	M-2B	Z			0 0		sample fr	om 6.0)'-6.5'	
	Dark brown to black silt (wet)[FILL]	ty medium-fine	SAND, wo	ood fragments			M-2C				0					
	Dark brown to black me fragments (wet)[FILL]	edium-fine SAN	D, trace s	ilt, wood		- 8 -					0					
						9 -					0					
						- 10 -	M-3	ocore	20		0 0					
							Σ	Macrocore	N		0					
						- 11 -					0					
	Dark brown to black me	dium-fine SAN			(- 12 -					0					
	fragments (wet)[FILL]		D, 11400 3	int, wood												
						- 13 -		e								
						- 14 -	M-4A	Macrocore	30							
	Dark gray CLAY, trace	organics (moist	:)[CH]			- 15 -		N.			0.3 0.3		Dettern of	horin	a ot	
							M-4B				0.2		Bottom of 11/11/202 2" Tempo	21 11:2	22 AM	halled
						- 16 -							to Screen in	-		
NPAKI						- 17 -							Riser fron			0 10
						- 18 -							Once the sampled t	tempo	orary w	ell was
NO.													removed, backfilled	the bo	oring w	/as
NLANGAN.COMIDATAPAKIDATA						- 19 -							drill cuttin	gs to g	grade.	naming
						E 20 -	1									

L	4 <i>NG/</i>	A N		Log	of E	Boring			LE	3-4		Sł	neet	1	of	1
Project						oject No.										
Location	57-00 47th Street Ma	aspeth			Ele	evation a	nd Da	itum		96550	1					
	Maspeth, NY								NA							
Drilling Co	ompany Lakewood Environm	ontal Sanvisoo			Da	te Starte	b		11	/11/21	Da	ate Finis	shed	11/11/	/01	
Drilling Ec		ental Services			Co	mpletion	Dept	h	11	/11/21	Ro	ock Dep	oth	11/11/	/21	
Size and	Geoprobe 6610 DT Type of Bit								Diet	16 ft		Lindiat	unbed		NA	
	2" Direct Push				Nu	mber of \$	Samp	les		urbed	NA	Undist	NA	Core	I	NA
	iameter (in) NA		C	Casing Depth (ft) NA	Wa	ater Leve	l (ft.)		First	t -		Compl	letion NA	24 F		
Casing Ha	^{ammer} NA	Weight (lbs)	NA	Drop (in) NA	Dri	illing Fore	man									
Sampler	4' Macrocore 2" dian				Fie	eld Engine	er	A	dam	Hutch	inson					
Sampler I	Hammer NA	Weight (lbs)	NA	Drop (in) NA				S		tore D'						
RATERIAL SYMBOL	0					Depth	Ē	0		mple Da	ata PID			emarks		
Sampler - LANGAN MATERIAL - Sambler	5	ample Descrip	otion			Scale	Number	Type	(in)	Penetr. resist BL/6in	Reading (ppm)	J F	(Drilling Fluid Fluid Loss, Dril	d, Depth o lling Resis	of Casing stance, e	g, etc.)
	Dark brown to brownish		ne SAND	, trace silt, brick		— 0 — -					0		Started Dri	lling at	11/11	/2021
	fragments (moist)[FILL]					- 1 -	1				0 0		12:25 PM			
							_	ore			0.1		1:00 PM - (
						- 2 -	Ę	Macrocor	36		0.1	5	sample fro	m 1.5'-	-2.0'	
						- 3 -	1	2			0.1 0					
											0					
	Dark brown to brownish	red medium-fir	e SAND	, some fine	· — ·	- 4 -					0.2					
¥ 🕅 🕅	gravel, trace glass, trac	e silt, brick frag	ments (m	noist)[FILL]		- 5 -	1				0.2 0.2					
							1	ore			0.2					
5 XXX						- 6 -	M-2	Macrocore	46		0.2					
						- 7 -		Ë			0.2					
											0.2 0.2					
	Dark brown to brownish	red medium-fir			· — ·	8 -	-				0.2					
	gravel, trace glass, trac						1				0.2					
	Dark brown fine SAND,	trace silt (wet)	SPI – –		· — ·	- 9 -	M-3A				0.2 0.2					
	Built brown line of the,		01]			- 10 -		Macrocore	46		0.2					
							1	Ma			0.2					
						- 11 -	м-зв				0.2					
						- 12 -	1				0.2 0.1					
	Dark brown fine SAND,	trace siit (wet)[5P]								0.1					
						- 13 -		0			0.1					
						- - 14 -		lacrocore	46		0.1 0.1					
¥								Maci	4		0.1					
						- 15 -					0.1					
	Dark brown to black find	e SAND, trace s	ilt (wet)[SP]	· — ·	- 16 -	M-4B				97					
							1						Bottom of I 11/11/2021			
AAA						- 17 -	1					2	2" Tempora Screen ins	ary wel	ll insta	
							1						Riser from			10
COMIT						- 18 -										
						- 19 -										
TANG																
-						<u> </u>	1	1	1							

	L	ANL			Log	of E	Boring			LB	8-5			Sheet	1	of	1
[Project					Pr	oject No.										
	Location	57-00 47th Stree	et Maspeth				evation an			1009	96550	1					
	Location					EI	evation an	u Da									
ł	Drilling C	Maspeth, NY				Da	ate Started			NA		[Date	Finished			
	Ū		ronmental Services							11/	/11/21				1	1/12/21	
ľ	Drilling E	quipment				Co	mpletion [Deptl	n			I	Rock	Depth			
		Geoprobe 6610	DT								16 ft					NA	
	Size and	Type of Bit 2" Direct Push				Nu	umber of S	amp	les	Distu	urbed	NA	U	ndisturbed	NA	Core	NA
ł	Casing D	Diameter (in)		0	Casing Depth (ft)		ater Level	(#)		First		IN/A	C	ompletion	INA	24 HR.	11/1
		NA			NA			• •		$\overline{\Delta}$				Ţ	NA	<u> </u>	
- F		^{lammer} NA	Weight (lbs)	NA	Drop (in) NA		illing Forer	nan	۸.	طمعم	Llutab	incon					
GAN	Sampler	4' Macrocore 2"	diameter			Fie	eld Engine	er	A	uam	Hutch	inson					
LAN	Sampler	Hammer NA	Weight (lbs)	NA	Drop (in) NA		5		Sa	alvat	ore D'	Alia					
Report: Log - LANGAN	노노		<u>-</u>								mple Da				Dam		
ц.	MATERIAL SYMBOL		Sample Descrip	otion			Depth Scale	Number	Type		Penetr. resist BL/6in	PID Read		(Drillin		arks Depth of Cas	ing,
Rep	SYS							Nun	Ļ	(j	Per BL res	(ppn				g Resistance	
		CONCRETE Aprox						M-1A M-1B				0		Starte	d Drillir	ng at 11/1	1/2021
11/29/2021 12:56:34 PM			ium-fine GRAVEL (d y fine-medium SAND			_/	E 1 E					0		1:20 F	M	0	
2:56:		(moist)[FILL]	/ IIne-mealum SANL	D, DRICK IF	agments				e			0.1					
21 12							2 -		Macrocore	38		0.4 0.4					
9/20:									Macı			0.4					
11/2							- 3 -	M-1C				23					
					.							0.6					
ц Ц			edium SAND, brick (vn fine-medium SAN	- / -	-	:	- 4 -	M-1D				0.2					
RIS		(moist)[FILL]	WI IIIe-medium SAN	D, liace	DITCK, LIACE SIL		= =					0.6 0.2					
ERF							5 -					0.2					
Ξ								~	ore			0.2	2				
501							6 -	M-2	Macrocore	30		0.2	2				
<u> 965</u>									Ма			0.2	2				
S/10							- 7 -					0.2	2				
00												0.2	2				
EN!			wn silty fine-medium	SAND, t	race brick	1	E 8 -					0					
AL/O		(moist)[FILL]										0					
ENT							- 9 -					0					
NNC								က္	ocore	~		0					
I∕IR(- 10 -	M-3	Macrocon	41		0					
Ξ							- 11 -		~			0 0					
PLIN							E '' =					0					
SCI						(- 12 -					0.4	L				
۲ ۲		Gray to dark gray n	medium-fine SAND, 1	trace slit	(wet)[SP]							1					
DAT							- 13 -					1					
ü									ore			1.6	6				
ŝ							- 14 -	Μ-4	Macrocore	46		2.7	7				
01/PI								-	Ma			26					
655(- 15 -					500	C	2:00 F	M - Co	llect grat	2
1005												500	C			15'-15.5'	
TA5							- 16 -									ring at	
R/DA							E _ =							11/12/	2021 7	:38 AM	
\\PA							- 17 -									eted the b	
JAT /																d with an Il cuttings	
OM/L							- 18 -									with fast	
N.O.							- 19 -									concrete	
VLANGAN.COMIDATAIPARIDATA5/100965501/PROJECT DATA_DISCIPLINE/ENVIRONMENTAL/GINTLOGS/100965501_ENTERPRISE.GPJ														paver		isting cor	lorele
Ž							E ₂₀ –										

.

 - - /

Frigeti Lossion Frigeti S-0.04 //m Stream Masperh Frigeti Na 1000565501 Magneth, NY Evention and DBUN NA Dating Group row Lakewood Environmental Services 11/12/21 Date Finished Dating Formany Geograde 6610 DT 11/12/21 Stam of Types of Na Geograde 6610 DT 18 ft NA Stam of Types of Na Geograde 6610 DT 16 ft NA Stam of Types of Na Geograde 6610 DT NA Date States Caraing Lamma (not CP lush) Caraing Carain (not NA Date States Mainter of States State (not CP lush) Caraing Statement (not CP lush) Caraing Lamma (not NA Vester Lovel (not NA State (not NA Wast Lovel (not not States) State Control (not NA States) State (not not States) States) States (not NA States) States) States (not NA States) States) States (not NA States) States) States) States) States (not NA States) States) States) States) States) States) States) States) States) States) States) States) States) States) States) States) States) States) <th></th> <th>L</th> <th>ANGAN</th> <th>Log c</th> <th>of E</th> <th>Boring</th> <th></th> <th></th> <th>LE</th> <th>8-6</th> <th></th> <th>S</th> <th>Sheet 1</th> <th>of</th> <th>1</th>		L	ANGAN	Log c	of E	Boring			LE	8-6		S	Sheet 1	of	1
Location Magenth, NY NA Drifting Gorgramy Laktwood Environmental Sorvices 11/1221 Bale Finished Composition Type / Bit Composition Depth 16 ft NA Comp Description 2 Direct Push Composition Depth 16 ft NA Comp Description 2 Direct Push Composition Type / Bit NA Composition Type / Bit NA Same of Type / Bit NA Comp Description NA Composition Type / Bit NA Composition Type / Bit NA Sample Description NA Composition Type / Bit Sample Description Sample Data Permit Sample Type / Bit P	F	Project			Pro	oject No.									
Diffing Correlation Date Statistic Date Statistic Date Final Index Construction Construction Construction 11/1/221 11/1/221 Construction Construction Construction NA NA Construction Construction NA Construction NA Server Low NA Construction NA Construction Server Low NA Construction NA Construction Server Low NA Construction Server Low NA Server Low Construction Server Low Server Low Server Low Server Low Construction Server Low Server Low Server Low Server Low Construction Server Low Server Low Server Low Server Low Construction Server Low Server Low Server Low Server Low Construction Server Low Server Low Server Low Server Low Construction Server Low Server	ī	ocation	57-00 47th Street Maspeth		Ele	evation ar	nd Da	tum	100	96550	1				
Lakewood Environmental Services 11/12/21 11/12/21 11/12/21 Cengrobe 6010 DT Completion Davin 18 ft NA NA Star an Type of Did Push Namber of Samples Initial Starket Initial Starket NA NA Camp Hamme NA Weigt (Ne) NA Drag (N) Adam Hutchinson Completion NA Original Starket Sample Description	Ļ	Vrilling C			Da	to Startor	4		NA			ato Fir	nishod		
Geograde 6610 DT 18 ft NA Bins and Type of Push Nameer of Sample Distribution NA Core NA Geing Durindt, NA Consing During (N) Water Level (t) First Supervision Core NA Core NA Geing Durindt, NA Water Level (t) Provide Mark Core Core Core NA Core NA Core NA Being Finance, NA Weight (Re) NA Drop (m) NA Core Core Core NA Core Core Core Core <td>ľ</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>11</td> <td>/12/21</td> <td></td> <td></td> <td></td> <td>/12/21</td> <td></td>	ľ						1		11	/12/21				/12/21	
Jose Are Jane of Binder Push Casing Darreter (iii) Casing Darreter (iii) Casing Darreter (iii) Casing Darreter (iii) Casing Harmen, M Weight (be) NA Drow (iii), M Weight (be) NA Drow (iii), M Casing Harmen, M Casing Harmen, M Casing Harmen, M Media Casing Harmen, M Casing Harmen, M Drow (iii), M Pedi Engineer Adam Hutchinson Sampler S-Macrocove 2: diameter Pedi Engineer Salvatoro D'Alia Correct Age of the Casing Ag	ſ	Drilling Ed			Co	mpletion	Dept	n				ock De	epth		
Dating Disense 2 Differ (Pigt) Casing Depth (ft) Water Level (t) Pist Pist Pist NA 34 HE NA Coning Hammen _{NA} Weight (fts) NA Drop (in) NA Drop (in) NA Sample Sample 5' Macrocore 2' diameter Figt Engineer Salvatore D'Alia Coning Depth (in) NA Salvatore D'Alia Sample Sample Description Figt Engineer Salvatore D'Alia Congretion Figt Engineer Sample Description Salvatore D'Alia Salvatore D'Alia Congretion Figt Engineer Salvatore D'Alia Salvatore D'Alia Salvatore D'Alia Salvatore D'Alia	S	Size and	Type of Bit		Nu	mber of S	Samp	les	Dist	-		Undis		Core	
Care Hammen, A Weight (Bo) NA Drop (m) NA Drilling Foreman Bampler 5 Macroscore 2* diameter Free Engineer Bampler Hammen NA Wreight (Be) NA Drop (m) NA Bampler Hammen NA Wreight (Be) NA Drop (m) NA Bampler Hammen NA Wreight (Be) NA Drop (m) NA Bampler Hammen NA Wreight (Be) NA Drop (m) NA Bampler Hammen NA Wreight (Be) NA Drop (m) NA Bampler Hammen Sample Description Desch Bampler Hammen Sample Description Dark gray to black SAND, trace sitt (moist)[FIL1] 1	C	Casing D	liameter (in) Casing Dep		-				First		NA	Com	pletion	24 HR.	NA
Simpler 5: Macrocore 2' diameter Barnpier Hammer NA Wagin (bb) NA Diop (m) Addem Hutchinson Barnpier Hammer NA Wagin (bb) NA Diop (m) Addem Hutchinson Barnpier Hammer Sample Description Deeth Barnot Sample Data Proping Part Doth Torray, Proper Part Part Doth Torray, Pr	0	Casing H		2)			• •		<u> </u>			Ţ	NA	<u> </u>	
Convertient and a state of the second state of the provide state of the	_ E				Fic	d Engine	or	A	dam	Hutch	inson				
Convertient and a state of the second state of the provide state of the	FANG	Sampler I	Weight (lbs) Drop (ir	ⁿ⁾ NA				s							
Convertient and a state of the second state of the provide state of the	- Go	RIAL				Denth	er.								
Convertient and a state of the second state of the provide state of the	Report:	MATEF SYMB	Sample Description			Scale	Numbe	Type	Recov (in)	Peneti resist BL/6ir	Readin		(Drilling Fluid, De Fluid Loss, Drilling	epth of Casing Resistance, e	l, tc.)
White fine-coarse SAND, concrete (dry)[FILL] 4 4 4 4 6 Brown fine-coarse SAND, brick (dry)[FILL] 5 4 6 0 0 Grayish brown silty SAND (moist)[SP] 5 6 0 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 0 Wet)[SP] 0 0 0 0 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 0 0 Wet)[SP] 0 0 0 0 0 0 0 0 Wety[SP] 0 11 0 <td>- 12</td> <td></td> <td>•</td> <td></td> <td></td> <td>- 0 -</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>g at 11/12/</td> <td>/2021</td>	- 12		•			- 0 -								g at 11/12/	/2021
White fine-coarse SAND, concrete (dry)[FILL] 4 4 4 4 6 Brown fine-coarse SAND, brick (dry)[FILL] 5 4 6 0 0 Grayish brown silty SAND (moist)[SP] 5 6 0 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 0 Wet)[SP] 0 0 0 0 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 0 0 Wet)[SP] 0 0 0 0 0 0 0 0 Wety[SP] 0 11 0 <td>6:37 F</td> <td></td> <td></td> <td></td> <td></td> <td>- 1 -</td> <td>M-1B</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>7:39 AM</td> <td></td> <td></td>	6:37 F					- 1 -	M-1B						7:39 AM		
White fine-coarse SAND, concrete (dry)[FILL] 4 4 4 4 6 Brown fine-coarse SAND, brick (dry)[FILL] 5 4 6 0 0 Grayish brown silty SAND (moist)[SP] 5 6 0 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 0 Wet)[SP] 0 0 0 0 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 0 0 Wet)[SP] 0 0 0 0 0 0 0 0 Wety[SP] 0 11 0 <td>1 12:5 XXX</td> <td></td>	1 12:5 XXX														
White fine-coarse SAND, concrete (dry)[FILL] 4 4 4 4 6 Brown fine-coarse SAND, brick (dry)[FILL] 5 4 6 0 0 Grayish brown silty SAND (moist)[SP] 5 6 0 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 0 Wet)[SP] 0 0 0 0 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 0 0 Wet)[SP] 0 0 0 0 0 0 0 0 Wety[SP] 0 11 0 <td>9/202 X X X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>rocore</td> <td>36</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	9/202 X X X							rocore	36						
Brown fine-coarse SAND, brick (dy)[FIL] 4 4 4 0 Brown fine-coarse SAND, brick (dy)[FIL] 5 4 0 0 Grayish brown silty SAND (moist)[SP] 5 4 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 0 Wett[SP] 11 11 0 0 0 0 Dark gray medium-fine SAND, trace silt, light odor and stains 11 0 0 0 0 12 FW 8 0 0 0 0 0 0 13 FW 8 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>3 -</td> <td>M-1C</td> <td>Mac</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						3 -	M-1C	Mac							
Brown fine-coarse SAND, brick (dry)[FILL] Grayish brown silty SAND (moist)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP]	GPJ.						M-1D								
Grayish brown silty SAND (moist)[SP] 5 Grayish brown silty SAND (moist)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 5 Dark gray medium-fine SAND, trace sitter (wet)[SP] 5 Dark gray medium-fine SAND, trace sit	RISE		Brown fine-coarse SAND, brick (dry)[FILL]				M 1E								
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt (wet)[SP] Dark gray medium-fine SAND, trace silt (wet)[SP] Dark gray medium-fine SAND, trace silt (wet)[SP]	LTER!		Grayish brown silty SAND (moist)[SP]			5 -									
The second se	<u>е</u>					- 6 -									
Dark gray medium-fine SAND, trace silt, light odor and stains 10 0 0 11 0 0 0 0 12 Wety[SP] 0 0 0 13 0 0 0 0 14 0 0 0 0 11 0 0 0 0 14 0 0 0 0 13 0 0 0 0 14 0 0 0 0 111/12/2021 RAD ADM. 2" Temporary well installed from 8-18" Riser from 0-8" Once the temporary well was sample from 0-8" Dark gray medium-fine SAND, trace silt, light odor and stains 15 57 Once the temporary well was sample the PVC piping was removed, the boring was backfilded with any remaining drill cutting, and then finished with fast setting high strength concrete to match the existing concrete pavement.	09655														
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, tr	3S/10(- 7 -	N	ocore	G						
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] (we	NTL0					- 8 -	Σ	Macro	ñ						
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light od	AL/GI										0				
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 10 0 0 11 0 0 0 0 12 r 0 0 0 13 0 11 0 0 13 0 11/1/12/2021 8:40 AM. 2" Temporary well installed Screen installed from 8:18' 14 0 14 0 Screen installed from 8:18' (wet)[SP] 16 4 500 0 14 17 500 0 Screen installed from 8:18' (wet)[SP] 16 4 500 0 Screen installed from 8:18' 17 4 500 500 500 0 Screen installed from 8:18' 17 4 500 500 500 500 500 500 18 17 500 500 500 500 500 500 18 19 19 10 10 10 10 10 19 19 19 10 10 10 10 10 10 <td>MENT</td> <td></td> <td></td> <td></td> <td></td> <td>- 9 -</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	MENT					- 9 -									
(wet)[SP] (we)[SP] (IRON	+	Dark gray medium-fine SAND trace silt light odor and st	tains		10 -									
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine															
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 13 12 r r 0 8:10 AM - Collect grab sample from 16.5-17.0' Bottom of boring at 11/12/2021 8:40 AM. Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 15 57 Once the temporary well installed Screen installed from 8'-18' Riser from 0'-8' Dark gray medium-fine SAND, trace silt, light odor and stains 16 F 500 Once the temporary well was sampled the PVC piping was removed, the boring was backfilled with any remaining drill cuttings, and then finished with fast setting high strength cut correte pavement.	IPLIN														
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 16 14 15 57 Once the temporary well was sampled the PVC piping was backfilled with any remaining drill cuttings, and then finished with fast setting high strength concrete to match the existing concrete pavement.	DISC					- 12 -	с С	core			0				
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Da	DATA					- 13 -	Σ	Macro	50				Bottom of bor	ng at	
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] 16 17 16 17 18 10 17 18 10 17 18 10 17 18 10 17 18 10 10 17 10 10 10 10 10 10 10 10 10 10	ECT												2" Temporary	well instal	led
Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, trace silt, light odor and stains (wet)[SP] Dark gray medium-fine SAND, tr	PRO					- 14 -									-18'
bark gray medium-interstands, trace sitt, light odor and stains (wet)[SP] 16 17 18 19 20 10 19 20 10 10 10 10 10 10 10	35501		Dark gray modium fine SAND trace sitt light oder and a	<u></u>		- 15 -							Once the tem	oorarv wel	lwas
16 16 500 backfilled with any remaining drill cuttings, and then finished with fast setting high strength concrete to match the existing concrete pavement.	/10096			lains							500		sampled the F	VC piping	was
17 - 17 - 17 - 18 - 17 - 18 - 19 - 19 - 19 - 19 - 19 - 19 - 19	ATA5					- 16 -	4	ocore	17				backfilled with	any rema	ining
17 strength concrete to match the existing concrete pavement.	PAR/C					- 17 -	_≥	Mac	V				finished with f	ast setting	
	ATA/				_	10					17		the existing co		
	COMI												pavement.		
	GAN.C					- 19 -									
	//LAN					E 20 -									

L	ANGA	\mathbf{N}	Log	of E	Boring			LB-7a			Sheet	1	of	1
Proje				Pr	oject No.									
Locat	57-00 47th Street Ma	ispeth		Ele	evation a	nd Datur		10096550	1					
	Maspeth, NY						١	NA						
Drillin	g Company	antal Canviaca		Da	ate Starte	d		11/10/01		Date F	inished	11/10	101	
Drillin	Lakewood Environme g Equipment	ental Services		Co	ompletion	Depth		11/12/21		Rock [Depth	11/12/	21	
0.	Geoprobe 6610 DT							7 ft					NA	
	and Type of Bit 2" Direct Push			Nu	umber of	Samples	s l	Disturbed	NA	Uno	disturbed NA	Core		IA
Casin	g Diameter (in) NA		Casing Depth (ft) NA	w	ater Leve	l (ft.)	F	First ☑		Cor	mpletion L NA	24 F		
Casin	^{g Hammer} NA	Weight (lbs) NA	Drop (in) NA	Dr	illing Fore	eman		<u> </u>					-	
					eld Engin		Ad	am Hutch	ninson					
Samp	ler Hammer NA	Weight (lbs) NA	Drop (in) NA	"			Sa	lvatore D'	Alia					
					Danth		_	Sample Da	ata		Re	emarks	\$	
Keport: Log - LANGAN MATERIAL du BS SYMBOL		ample Description			Depth Scale	Number	Type	Recov. (in) Penetr. resist BL/6in	PII Read (ppr	ling n)	(Drilling Fluid Fluid Loss, Dril			c.)
	CONCRETE Aprox. 8-in				Ē	M-1A			0		Started Dri	lling at	11/12/	2021
12:56:41 PM	Brown gravelly SAND, ti	race brick, trace concre	ete (dry)[FILL]		<u>-</u> 1-		I		0		8:40 AM			
<u></u>	×				Ē				0					
	×				- 2 -	M-1B Macrocore		33	0					
11/29/202	×				- 3 -	Macr			0					
⊒	Brown medium SAND, s	some silt (moist)[FILL]			E		I		0					
ENTERPRISE.GPJ	\bigotimes				- 4 -		I		0.4					
	×				- 5 -	M-1C			0					
	Brown medium SAND, s	some silt (moist)[FILL]			Ē	e e	2		0					
	Brown to gray coarse-fir	ne SAND (moist)[FILL]			- 6 -	M-2A Wacroco		8	0					
Ï						 ≦			0					
Cest					+ 7 - E						Bottom of I 11/12/2021	boring a	at AM.	
NTLO					- 8 -						Refusal en Possibly m	counte		7.0ft.
AL/GI					E							Clai		
					- 9 -						Once com	oleted t	the bori	ing
					- 10 -						was backfil remaining			and
ENVI					Ē						then finishe	ed with	fast se	etting
					E 11 -						high streng match the	itn con existing	crete to g concr	ete
SCIP					- 12 -						pavement.			
DAT					- 13 -									
JECT														
0H4					- 14 -	1								
35501					- 15 -									
1009					E									
41A5					- 16 -									
AR(D,					- 17 -									
TAIP					Ē	1								
∀ D\W					- 18 -	1								
					E 10									
ANGA					- 19 -									
					E 20 -									

L		of E	Boring		L	.B-7	b-w3		Sheet 1 of	1
Project	5		oject No.							
Location	57-00 47th Street Maspeth	Fle	evation ar	nd Da	itum		96550	1		
Loodion	Maspeth, NY				litaini	NA				
Drilling C		Da	ite Starte	d			14.0.10.4	Da	ate Finished	
Drilling E	Lakewood Environmental Services	Co	mpletion	Dept	h	11	/12/21	Ro	11/12/21 ock Depth	
0.	Geoprobe 6610 DT						18 ft		NA	
	Type of Bit 2" Direct Push	Nu	mber of S	Samp	les	Dist	urbed	NA		A
Casing E	Viameter (in) Casing Depth (ft) NA NA	Wa	ater Leve	l (ft.)		First	t		Completion 24 HR.	
Casing H	lammer _{NA} Weight (lbs) NA Drop (in) NA	Dri	illing Fore	eman						
Z Sampler	5' Macrocore 2" diameter	Fie	eld Engine	er	A	dam	Hutch	iinson		
Sampler	Hammer NA Weight (lbs) NA Drop (in) NA		-		S		tore D'			
Report: Log - LANGAN MATERIAL SYMBOL SYMBOL	Sample Description		Depth Scale	Number	Type		Penetr. resist BL/6in	ata PID Reading (ppm)	(Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, et	, tc.)
	CONCRETE Aprox. 8-inchs thick			M-1A				0	Started Drilling at 11/12/	2021
11/29/2021 12:56:44 PM	Brown gravelly SAND, trace brick (moist)[FILL]		- 1 -					0 0	8:46 AM	
								0		
			- 2 -	1	Macrocore	35		0 0		
Ē			- 3 -	M-1B	Macr	(7)		0		
	Brown gravelly coarse-fine SAND, trace silt (moist)[FILL]			╞				0		
			- 4 -	1				0		
	Brown gravelly coarse-fine SAND, trace silt (moist)[FILL]		5 -	M-1C				0		
								0		
			- 6 -	1				0		
			- 7 -	M-2A	ore			0		
	Gray medium-fine angular GRAVEL (dry)[FILL]			╞	Macrocore	27		0		
			- 8 -		Σ			0	10:00 AM Collect met	
Z XXX			- 9 -					0	10:00 AM - Collect grab sample from 8.5'-9.0'	
ž 🗱				- M-2B				0	~ 6" above saturated soi	ils.
ž XXX	Gray to dark fine GRAVEL, some coarse sand (wet)[FILL]		- 10 -	-				0		
			- 11 -	1				0		
			- 12 -		0			0		
				M-3	Macrocore	19		0		
≤			- 13 -	2	Mac			0	Bottom of boring at	
								0	11/12/2021 10:08 AM. 2" Temporary well install	led
Ĭ			- 14 -					0	Screen installed from 8'- Riser from 0'-8'	18'
	Gray to dark gray fine GRAVEL, some coarse sand (wet)[FILL]		15 -	1	\vdash			0		lues
			- 16 -		d)	Í		0	Once the temporary well sampled the PVC piping	was
\leq				Α-4	Macrocore	26		0	removed, the boring was backfilled with any remain	
			- 17 -		Мас			0	drill cuttings, and then finished with fast setting	high
			- 18 -					0	strength concrete to mat	tch
COM		-							pavement.	
			- 19 -							
			E 20 -							
			20							

L) of E	Boring			LB	-8			Sheet 1 of 1
Project		Pr	oject No.							
Location	57-00 47th Street Maspeth	Ele	evation an	d Da	tum	1009	965501	1		
	Maspeth, NY					NA				
Drilling C		Da	ate Started	ł				[Date F	Finished
Drilling E	Lakewood Environmental Services	Cc	mpletion I	Dept	n	11/	12/21	1	Rock [11/12/21 Depth
g _	Geoprobe 6610 DT						15 ft			NA
Size and	Type of Bit 2" Direct Push	Nu	Imber of S	Samp	les	Distu	urbed	NA	Uno	disturbed Core NA NA
	Viameter (in) Casing Depth (ft) NA NA	W	ater Level	(ft.)		First			Cor	mpletion 24 HR. L NA L
Casing H	lammer _{NA} Weight (lbs) NA Drop (in) NA	Dr	illing Fore	man						
Z Sampler	5' Macrocore 2" diameter	Fie	eld Engine	er	A	dam	Hutch	inson		
Sampler	Hammer NA Weight (lbs) NA Drop (in) NA		0		S	alvat	ore D'/	Alia		
- Log - OL			Donth	<u>ب</u>			mple Da			Remarks
Sampler NATERIAL SYMBOL SYMBOL	Sample Description		Depth Scale	Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Readi (ppn	ing	(Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
	CONCRETE Aprox. 6-inchs thick White fine-medium GRAVEL, some sand, rca (dry)[FILL]			M-1A M-1B				0		Started Drilling at 11/12/2021
Ì	Gravish brown coarse-fine SAND (moist)[FILL]		- 1 -					0		10:09 AM
<u> </u>								0		
			2 -		core			0		
			- 3 -		Macrocore	30		0		
					-			0		
			- 4 -	M-1C				0		
Í			È 3					0		
	Grayish brown medium-fine SAND, odor mild (moist)[FILL]		5 -					0		
			6 -					0		
								0		
Í XXX			- 7 -		ore			0		
30000				M-2A	Macrocore	39		57		10:30 AM - Collect grab
z 🗱			- 8 -		Ma			12		sample from 7.5'-8.0' ~ 6" above groundwater.
	Grayish brown coarse-fine SAND, trace brick, concrete lenses, odor mild (moist)[FILL]		Ē					5.7		
			- 9 -	M-2B				4.8 4.2		
₹ XXXX	Grayish brown coarse-fine SAND, odor mild (moist)[FILL]		E 10 -					4.2 0.5		
	Grayish brown coarse-line SAND, odor mild (moist)[FILL]		=					0.5		
			- 11 -					0.4	Ļ	
				1				0.4		
			- 12 -	<u></u> -3	Macrocore	37		0.4 0.4		
			- 13 -	l≥	Macr	(r)		0.4		
			=	1				0.4		
₹₩₩			- 14 -	1				0.4	Ļ	Bottom of boring at
			E	1				5		11/12/2021 10:44 AM 2" Temporary well installed
			- 15 -							Screen installed from 5'-15'
01/64			- 16 -	1						Riser from 0'-5'
			Ę	1						Once the temporary well was sampled the PVC piping was
HAR			- 17 -	1						removed, the boring was
			ŧ =	1						backfilled with any remaining drill cuttings, and then
			- 18 -	1						finished with fast setting high
			- 19 -							strength concrete to match the existing concrete
ANGA										pavement.
			E_ 20 _	1						

LA	NGA	A N		Log	of E	Boring			LB	-9a			Sheet	1	of	1
Project					Pr	oject No.			1000		4					
Location	57-00 47th Street Ma	aspein			Ele	evation ar	nd Dat	tum	1005	96550 ⁻	1					
Drilling Com	Maspeth, NY				Da	ate Starte	4		NA			Date F	Finished			
	Lakewood Environm	ental Services							11/	12/21				11/12	2/21	
Drilling Equip	Geoprobe 6610 DT				Co	mpletion	Depth	I		11.5 ft		Rock	Depth		NA	
Size and Typ	pe of Bit 2" Direct Push				NL	Imber of S	Sampl	es		urbed		Un	disturbed	Co		
Casing Diam	eter (in)		C	Casing Depth (ft)	w	ater Leve	(ft.)		First		NA	Co	mpletion		HR.	NA
Casing Ham	NA ^{mer} NA	Weight (lbs)	NA	Drop (in) NA		illing Fore			$ \underline{\nabla}$				L NA			
	5' Macrocore 2" dian	neter			- Fié	eld Engine	or	A	dam	Hutch	inson					
Sampler Har		Weight (lbs)	NA	Drop (in) NA				S		ore D'						
Sampler Sampler Har SAMBOL SAMBOL SAMBOL	Sa	ample Descrip	tion			Depth Scale	Number	Type		Penetr. resist BL/6in	ata PID Readi (ppn	ng	(Drilling Fluid Fluid Loss, Dri	emark d, Depth lling Res		ng, etc.)
P 5 4 P	CONCRETE Aprox. 8-ii	nchs thick				<u> </u>			ш. 		(ppri	. <u>,</u>	Started Dri			
	Gray fine-medium angu	ilar GRAVEL, so	me m-f	sand, rca		 1 -	M-1A M-1B						10:51 AM	5		
×	(dry)[FILL] Reddish brown silty SA	ND, some fine g	ravel, rc	a (moist)[FILL]	Г											
						- 2 -		Macrocore	22							
						- 3 -		Mac								
s XXXX						- 4 -	M-1C									
	Reddish brown silty SA	ND, some fine g	ravel, br	ick lenses, rca		5 -					0					
	(moist)[FILL]					6 -					0 0					
											0					
							M-2A	Macrocore	36		0 0					
						- 8 -		Mac			0					
	Light gray medium-fine	angular GRAVE	L (dry)[F			- 9 -	М-2В				0					
	Light grayish brown silty trace brick (moist)[FILL	y medium-fine S]	AND, so	me f-m gravel,			M-2C				7.4					
	Light grayish brown silty (moist)[FILL]	y medium-fine S	AND, so	me f-m gravel		- 10 -		core			0 0					
-	Light grayish brown me	dium-fine angula	ar GRAV	EL. some f-m		- 11 -	M-3A	Macrocore	18		0					
	gravel (moist)[FILL]			·	_/	- 12 -	<u>M-3B</u>				0		Bottom of 11/12/2022			
													Refusal en 11.5ft			t
						- 13 -							Once com	nlatad	the h	oring
SOLEC						- 14 -							was backfi remaining	lled wi	ith any	,
201/14													then finishe	ed with	h fast	setting
00965						- 15 -							high streng match the			
(1A5/1						- 16 -							pavement.			
ARIDA						- 17 -										
						Ē										
(TIMO						- 18 -										
SAN.C						- 19 -										

LANGA	1N	Log	of E	Boring		L	B-9b-n2		Sheet	t 1	of	2
Project			Pro	oject No.								
57-00 47th Street Ma	aspeth		Ele	evation a	nd Dat		10096550	1				
Maspeth, NY							NA					
Drilling Company	antal Candooa		Da	te Starte	d		11/10/01	D	ate Finished	1	1/10/01	
Lakewood Environm Drilling Equipment	ental Services		Co	mpletion	Depth	1	11/12/21	R	ock Depth	I	1/12/21	
Geoprobe 6610 DT							18 ft				NA	
Size and Type of Bit 2" Direct Push			Nu	mber of	Sampl	es	Disturbed	NA	Undisturbed	d NA	Core	NA
Casing Diameter (in) NA		Casing Depth (ft) NA	Wa	ater Leve	el (ft.)		First ∑		Completion	NA	24 HR.	
Casing Hammer _{NA}	Weight (lbs) NA	Drop (in) NA	Dri	lling Fore	eman		<u>-</u>		<u> </u>		<u> </u>	
a	1			ld Engin	oor	A	dam Hutch	inson				
Sampler 5' Macrocore 2" dian Sampler Hammer NA	Weight (lbs) NA	Drop (in) NA		iu Engin	eei	Sa	alvatore D'	Alia				
			-				Sample Da			Rom	narks	
- Mo	ample Description			Depth Scale	Number	Type	Recov. (in) Penetr. resist BL/6in	PID Readin (ppm)	g (Dril Fluid L	illing Fluid, D Loss, Drilling		ising, ce, etc.)
CONCRETE Aprox. 8-ii	nchs thick			— 0 - E				0		ted Drillir	ng at 11/	/12/2021
Gray medium-fine angu (dry)[FILL]	lar GRAVEL, some m-	f sand, rcq		- 1 -	- M-1B			0	11:24	4 AM		
Reddish brown silty SA	ND, trace fine gravel (r	moist)[FILL]]	_				0				
				- 2 -		Macrocore	33	0				
				- 3 -	-	Macr	ς,	0 0				
				-				0				
				- 4 -				0				
Reddish brown silty SA				- 5 -	-			0				
Reddish brown silty SA	ND, trace fine gravel (r	noist)[FILL]			-			1.4 1.3				
				- 6 -				0.4				
				_				0.4				
				- 7 - -		ocore	41	0.3				
				- 8 -	- M-2A	Macr	4	0.3 0.3				
				-	-			0.3				
Gray medium-coarse a	ngular GRAVEL (dry)[F	<u></u>		- 9 -	 			1.4				
Mottled grayish brown s	5	D (moist)[FILL]		_ 10 -	M-2D			34				
Gray SAND, some fine					A			500 500				
Brown medium-fine SA		·ILLJ		- 11 -	M-3B			500				
Brown silty medium-fine	e SAND, some fine gra				- <u>M-3C</u>			183				
fragments (moist)[FILL]]			- 12 -		ocore	57	22 13				
				- - 13 -] [Macr	ω	13 9				
				E	M-3D			10				
Brown silty medium-fine	∋ SAND (moist)[SM]			- 14 -				8.2		0 AM - C		
				- 15 -	M-3E			6.5	Botto	ple from om of bo	ring at	1.5'
Brown to black silty me (wet)[SM]	dium-fine SAND, trace	fine gravel		- 13 -				290	11/1:	2/2021 2 emporary	2:08 PM	stalled
Gray to black CLAY (we				- 16 -	_M-4A	ore		130	Scre	en instal	lled from	1 4'-14'
						acroc	19	10		r from 0'		
				- 17 -	M-4B	Σ		10 10		e the terr pled the		
Dark brown medium SA	ND [SP]			- 18 -	M-4C			10	remo	oved, the	boring	was
									drill d	filled wit cuttings,	and the	n
				- 19 -					finish	hed with	fast sett	ing high
				E 20 -	-					existing c		

	NA
Location Elevation and Datum Maspeth, NY Date Started NA Drilling Company Date Started Date Finished Lakewood Environmental Services 11/12/21 Rock Depth Size and Type of Bit Completion Depth Rock Depth Casing Diameter (in) Casing Depth (ft) NA NA Weight (lbs) NA Casing Hammer_NA Weight (lbs) NA Sampler 4: Macrocore 2" diameter First Completion Sampler Hammer NA Weight (lbs) NA Sampler Hammer NA Weight (lbs) NA Mage Sample Description Sample Description Sample Deta Mage CONCRETE Aprox. 13-inchs thick 0 0 Muster Level (ft) 1 0 0 Sample Terman Sample Description Sample Deta Completion Sample Terman 0 0 Started Drilling Resistance Sample Terman 0 0 Started Drilling Resistance Sample Description 0 0 0 Started Drilling at 11/1 Sample Terman 0 0 0 0 0 Sample Description 0 0 0 0	
Drilling Company Date Started Date Finished Lakewood Environmental Services 11/12/21 11/12/21 Drilling Equipment Completion Depth 15 ft NA Geoprobe 6610 DT 15 ft NA Undisturbed Core 2" Direct Push NA Values of Samples Disturbed NA 24 HR. Casing Diameter (in) Casing Depth (ft) NA Drop (in) NA Values of Samples First Completion Depth Sampler 4' Macrocore 2" diameter Sampler (lbs) NA Drop (in) NA Drop (in) NA Sampler A Macrocore 2" diameter Field Engineer Salvatore D'Alia Core Remarks Sampler Sample Description Depth Salvatore D'Alia Remarks Sampler CONCRETE Aprox. 13-inchs thick 0 0 Salvated Drilling at 11/1 Sampler Brown silty SAND, trace brick (moist)[FiLL] 4 0.8 0.9 Brown silty SAND, trace brick (moist)[FiLL] 5 4 0.8 0.9	
Drilling Equipment Completion Depth Rock Depth Size and Type of Bit 2" Direct Push Namber of Samples Disturbed Undisturbed NA Core Casing Diameter (in) NA Weight (lbs) NA Drop (in) NA Prilling Foreman Adam Hutchinson 24 HR. Sampler 4' Macrocore 2" diameter Field Engineer Field Engineer Field Engineer Field Engineer Field Engineer Field Engineer Core in the field Engineer Sample Description Sample Description Sample Description Sample Description Sample Description Sample Description Sample Reading (ppm) Remarks (ppm) Core in the field Engineer Field Engineer Field Engineer Field Engineer Sample Detata Remarks (ppm) Core in the field Engineer Sample Detata Sample Reading (ppm) Started Drilling at 11/1 Started Drilling at 11/1 Score in the field Engineer Started Drilling at 11/1 Score in the field Engineer Score	
Geoprobe 6610 DT 15 ft NA Size and Type of Bit 2" Direct Push Number of Samples Disturbed NA Undisturbed NA Core Casing Diameter (in) NA NA Orop (in) NA Water Level (ft.) First V Completion 24 HR. Casing Hammer NA Weight (lbs) Sampler A Drop (in) NA Drop (in) NA Drop (in) NA Adam Hutchinson Sampler Hammer Sampler Hammer NA Weight (lbs) NA NA Drop (in) NA NA Sample Description Sample Data V Reading V Pilo Reading (ppm) Coring Fluid Loss, Drilling Resistance Mumber Sampler Hammer Sample Description Depth Scale Depth Scale Depth Scale Diverse Reading (ppm) Coring Fluid Depth of Case Fluid Loss, Drilling Resistance White to black fine-medium SAND, some fine gravel (moist)[FILL] -	
Size and Type of Bit Number of Samples Disturbed NA Core Casing Diameter (in) NA Casing Depth (ft) NA Water Level (ft.) First Completion 24 HR. Casing Hammer/NA Weight (lbs) NA Drop (in) NA Adam Hutchinson Y NA Y Sampler 4' Macrocore 2'' diameter Field Engineer Salvatore D'Alia Completion Y Y NA Completion Y Y NA Pilling Fluid. Depth of Casing Paint Field Engineer Sample Deta Remarks Conting Fluid. Depth of Casing Paint Remarks Conting Fluid. Depth of Casing Paint Pilling Fluid. Depth of Casing Paint Sample Deta Remarks Conting Fluid. Depth of Casing Paint Pilling Fluid. Depth of Casing Paint Remarks Conting Fluid. Depth of Casing Paint Pilling Fluid. Depth of Casing Paint Sample Description 0 - 1 -	
Casing Diameter (in) NA Casing Depth (ft) NA Water Level (ft.) First L Completion 24 HR. Casing Hammer _{NA} Weight (lbs) Sampler NA Drop (in) NA Drop (in) NA Drop (in) NA Drop (in) NA Drop (in) NA Drop (in) NA Adam Hutchinson Adam Hutchinson Sampler 4' Macrocore 2'' diameter Field Engineer Sample Description Sample Description Sample Description Remarks Field Engineer Multiple Sample Description CONCRETE Aprox. 13-inchs thick 0 Remarks fuid Loss, Drilling Resistance Started Drilling at 11/1 2:09 PM White to black fine-medium SAND, some fine gravel (moist)[FILL] - <td></td>	
Casing HammerNA Weight (lbs) NA Drop (in) NA Drop (in) NA Sampler 4' Macrocore 2'' diameter Field Engineer Salvatore D'Alia Sampler Hammer NA Weight (lbs) NA Drop (in) NA Sampler Hammer NA Weight (lbs) NA Drop (in) NA Salvatore D'Alia Sampler Hammer NA Weight (lbs) NA Drop (in) NA Salvatore D'Alia Sampler Hammer NA Weight (lbs) NA Drop (in) NA Salvatore D'Alia Sample Description Depth Scale Sample Detatore Sample Detatore Remarks White to black fine-medium SAND, some fine gravel (moist)[FILL] 0 0 Sample Detatore 0 Brown silty SAND, trace brick (moist)[FILL] 5 Min C 0 0 0 Brown silty SAND, trace brick (moist)[FILL] 5 Min C 0 0 0 Max Brown silty SAND, trace brick (moist)[FILL] 5 Min C 0 0	
Sampler 4' Macrocore 2" diameter Adam Hutchinson Sampler Hammer NA Weight (lbs) NA Drop (in) NA Sampler Hammer NA Weight (lbs) NA Drop (in) NA Sampler Hammer NA Weight (lbs) NA Drop (in) NA Sampler Hammer NA Weight (lbs) NA Drop (in) NA Sampler Hammer NA Sample Description Salvatore D'Alia Sample Description Sample Description Sample Description Sample Description Weight (lbs) NA Drop (in) NA Depth Scale Salvatore D'Alia Weight (lbs) Sample Description Sample Description Sample Description Sample Description Sample Description Weight (lbs) NA Drop (in) NA Depth Scale Depth Scale Display White to black fine-medium SAND, some fine gravel (moist)[FILL] 0 0 0 Brown silty SAND, trace brick (moist)[FILL] 4 0.8 0.9 Brown silty SAND, trace brick (moist)[FILL] 5 1	
CONCRETE Aprox. 13-inchs thick 0 Started Drilling at 11/1 White to black fine-medium SAND, some fine gravel (moist)[FILL] 0 0 Brown silty SAND, trace brick (moist)[FILL] 0 0 Brown silty SAND, trace brick (moist)[FILL] 5 M-10 Brown silty SAND, trace brick (moist)[FILL] 1 1.2	
CONCRETE Aprox. 13-inchs thick 0 Started Drilling at 11/1 White to black fine-medium SAND, some fine gravel (moist)[FILL] 0 0 Brown silty SAND, trace brick (moist)[FILL] 0 0 Brown silty SAND, trace brick (moist)[FILL] 5 M-10 Brown silty SAND, trace brick (moist)[FILL] 1 0.9 1.2 1.2	
CONCRETE Aprox. 13-inchs thick 0 Started Drilling at 11/1 White to black fine-medium SAND, some fine gravel (moist)[FILL] 0 0 Brown silty SAND, trace brick (moist)[FILL] 0 0 Brown silty SAND, trace brick (moist)[FILL] 5 M-10 Brown silty SAND, trace brick (moist)[FILL] 1 0.9 1.2 1.2	, etc.)
Brown silty SAND, trace brick (moist)[FILL] 5 0 Brown silty SAND, trace brick (moist)[FILL] 1	2/2021
Brown silty SAND, trace brick (moist)[FILL] 5 0 Brown silty SAND, trace brick (moist)[FILL] 1	
Brown silty SAND, trace brick (moist)[FILL] 5 M-1C 0.8 Brown silty SAND, trace brick (moist)[FILL] 1 1.2	
Brown silty SAND, trace brick (moist)[FILL] 4 0.8 Brown silty SAND, trace brick (moist)[FILL] 5 1 Brown silty SAND, trace brick (moist)[FILL] 1 1.2 Black silty SAND, trace brick, burning odor, burned wood 6 1.3	
Brown silty SAND, trace brick (moist)[FILL] Brown silty SAND, trace brick (moist)[FILL] Brown silty SAND, trace brick (moist)[FILL] 1 1 1.2	
	1
Brown medium SAND, banding (moist)[SP]	
Brown medium SAND, banding (moist)[SP]	
Gray to black medium SAND, Same as Ib6 (wet)[SP]	
$\begin{bmatrix} -12 \\ -9 \\ -9 \\ -13 $	
Bottom of boring at	
	oring
Once completed the b was backfilled with an	y
Image: Arrow of the second seco	setting
high strength concrete 18 - 18 - match the existing cor	
O pavement. E	crete
Gray to black medium SAND, Same as lb6 (wet)[SP] 10 7.3 Gray to black medium SAND, Same as lb6 (wet)[SP] 5.4 11 1.9 12 5.4 13 0.9 13 0.9 14 13.3 500 500 15 16 16 17 17 10 18 11 19 12 10 10 13 500 10 10 11 12 12 12 13 500 14 13.3 500 500 16 0.9 17 10 18 10 19 19 19 19 20 20	icrete