

**Sampling Summary Report**  
**for**  
**Reconstruction of East 72<sup>nd</sup> Street and**  
**Replacement of Sanitary Sewers and Water Mains**  
**Brooklyn, New York**

DDC PROJECT NO. SEK002377 and HWK002377

WOL No. OEHS-20201409799-WOL-121

CONTRACT REGISTRATION NO. 20201409799

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## 1.0 INTRODUCTION

On behalf of the New York City (NYC) Department of Design and Construction (DDC), Louis Berger U.S., Inc., a WSP Company (Louis Berger) has prepared a Sampling Summary Report (SSR) for the SEK002377 and HWK002377 Corridor located in the Georgetown section of the Borough of Brooklyn, New York (hereinafter referred to as the “Corridor”). This SSR documents field sampling activities, including the advancement of soil borings, soil screening, sample collection, and analysis.

### 1.1 Project Description

The scope of work consists of infrastructure improvements, including roadway and pedestrian walkway improvements, the replacement of aging infrastructure to meet NYC Department of Environmental Protection (DEP) Standards to improve water quality and residual pressure in the project area, and upgrade of the current sanitary sewer system at the following street segments:

- East 72<sup>nd</sup> Street from 45 feet northwest of Avenue L to 205 feet northwest of Avenue N;
- Avenue M from East 70<sup>th</sup> Street to East 73<sup>rd</sup> Street;
- Bergen Court from East 72<sup>nd</sup> Street to 50 feet northeast of East 72<sup>nd</sup> Street;
- Royce Place from East 72<sup>nd</sup> Street to 50 feet northeast of East 72<sup>nd</sup> Street; and
- Avenue L from 25 feet southwest of East 72<sup>nd</sup> Street to 25 feet northeast of East 72<sup>nd</sup> Street.

The infrastructure improvements consisting of the reconstruction of East 72<sup>nd</sup> Street and the replacement of sanitary sewers and water mains, is anticipated to generate approximately 2,500 cubic yards (CY) of fill/soils. Fill/soils generated as part of this project will be managed in accordance with applicable New York State Department of Environmental Conservation (NYSDEC) Part 375 Restricted Use Soil Cleanup Objectives (SCOs) for Commercial Criteria and any additional specifications required by the DDC.

Based on information provided by the DDC, the depth of excavation proposed for the infrastructure improvements is estimated to range between 8 and 11 feet below grade (ftbg).

## **2.0 FIELD ACTIVITIES**

Louis Berger provided oversight for the advancement of seven soil borings and collected soil and groundwater samples during the field investigation conducted on September 27 and 28, 2021, in the vicinity of the planned construction. Drilling services for the advancement of the soil borings were provided by PAL Environmental Services (PAL).

### **2.1 Utility Mark-Outs**

Prior to the beginning of invasive field activities, PAL contacted the New York one-call center to mark-out utilities beneath the sidewalk at each boring location.

### **2.2 Soil Sampling and Analysis**

Soil borings for the proposed infrastructure improvements were advanced to a maximum of 15 ftbg. Soil samples were collected utilizing a 5-foot macrocore sampler fitted with a 2-inch diameter acetate liner. Upon retrieval from the macrocore, each liner was split length wise and screened along the vertical length of the soil column using a photoionization detector (PID) and visual/olfactory senses

One grab and one composite soil sample were collected from each boring for laboratory analysis. The grab soil samples were collected from either the 6-inch interval above the terminal depth of the proposed excavation (where recovery allowed) or the 6-inch interval above the groundwater table (when encountered). The composite soil sample was prepared by homogenizing the entire length of the soil column for each soil boring. Grab and composite samples were identified as SB01 through SB07.

Upon completion of the soil boring activities, all soil cuttings generated during were returned to the same borehole and patched.

The grab and composite sample were collected from the following intervals:

Boring ID/Sample ID	Proposed Utility	Depth of Proposed Excavation (ftbg)	Depth of Boring (ftg)	Grab Sample Interval (ftbg)	Composite Sample Interval (ftbg)
SB01/ TWP01	10" Sanitary Sewer	11	15.0*	6.4 - 6.9	0.0 - 6.9
SB02	10" Sanitary Sewer	11	10.0*	6.3 - 6.8	0.0 - 6.8
SB03	10" Sanitary Sewer	11	10.0*	5.5 - 6.0	0.0 - 6.0
SB04	10" Sanitary Sewer	8	7.0	6.0 - 6.5	0.0 - 6.5
SB05	10" Sanitary Sewer	8	2.0	1.5 - 2.0	0.0 - 2.0
SB06	12" Sanitary Sewer	8	10.0	7.0 - 7.5	0.0 - 7.5
SB07	10" Sanitary Sewer	8	4.3	3.8 - 4.3	0.0 - 4.3

\* Groundwater was encountered in soil borings SB01, SB02, and SB03 at depths of 10, 10, and 6 ftbg, respectively. Soil boring SB01 was advanced to install a temporary well point.

The soil samples were transferred into laboratory-supplied sample jars and properly labeled. The samples were stored with ice in a cooler to preserve the samples at approximately 4 degrees Celsius prior to and during shipment. A chain-of-custody was prepared prior to sample shipment. Soil samples were delivered to the lab at the completion of the field activities by Louis Berger. Laboratory analyses were provided by Hampton-Clarke, Inc. (HC) of Fairfield, New Jersey, which is a New York State Department of Health (NYSDOH) ELAP-certified analytical laboratory (No. 11408).

The grab soil samples SB01 through SB07 were analyzed for Target Compound List (TCL) VOCs using United States Environmental Protection Agency (USEPA) Method 8260C. The composite soil samples SB01 through SB07 were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270C, Total Petroleum Hydrocarbons-Diesel Range Organics/Gasoline Range Organics (TPH-DRO/GRO) by USEPA Method 8015B, polychlorinated biphenyls (PCBs) by USEPA Method 8082A/608, Toxicity Characteristic Leaching Procedure (TCLP) Metals (Resource Conservation and Recovery Act [RCRA] 8) by USEPA Method 1311/6010B, RCRA Characteristics, including ignitability, reactivity and corrosivity, by USEPA Methods 9012B/9034, 1030/1010A, and 9045C, respectively, as well as Paint Filter Test by USEPA Method 9095B, for waste classification purposes.

## 2.3 Analytical Results

Analytical laboratory results indicated several compounds exceeded the NYSDEC Part 375 Restricted Use SCOs for Commercial Criteria, and one soil sample, SB01, exceeded the RCRA Hazardous Waste Action Level for TCLP lead. The following table is a summary of exceedances.

Analyte	Commercial Use (Track 2) SCOs	RCRA Hazardous Waste Levels	SB01	SB02	SB03	SB04	SB05	SB06	SB07
Benzo[a]anthracene	5.6 mg/kg	NS	X					X	X
Benzo[a]pyrene	1 mg/kg	NS	X	X			X	X	X
Benzo[b]fluoranthene	5.6 mg/kg	NS	X				X	X	X
Dibenzo[a,h]anthracene	0.56 mg/kg	NS					X	X	X
Aroclor-1254	1 mg/kg	NS							X
Aroclor (Total)	1 mg/kg	NS							X
TCLP Lead	NS	5 mg/L	X						

NS – No Standard

### Comments:

- Summarized analytical results are presented in Table 2 through 6.
- TCLP lead exceeded the USEPA Hazardous Waste Limit of 5 milligrams per liter (mg/L) or parts per million (ppm) in soil sample SB01 at a concentration of 14 mg/L or ppm. The TCLP results are presented in Table 5.
- The following compounds exceeded NYSDEC Part 375 SCOs for Commercial Criteria:
  - Benzo[a]anthracene exceeded in samples SB01, SB06, and SB07.
  - Benzo[a]pyrene exceeded in samples SB01, SB02, SB05, SB06, and SB07.
  - Benzo[b]fluoranthene exceeded in samples SB01, SB05, SB06, and SB07.
  - Dibenzo[a,h]anthracene exceeded in samples SB05, SB06, and SB07.
- Aroclor-1254 and Aroclor (Total) exceeded in SB07.

### 3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following findings, conclusions, and recommendations are presented:

- The contract documents should identify provisions and a contingency for managing, handling, transporting and disposing of any hazardous contaminated soils. The Contractor should be required to submit a Material Handling Plan to identify the specific protocol and procedures that will be employed to manage the waste in accordance with applicable regulations;
- Laboratory analytical results indicated soil sample SB01 exhibited evidence of hazardous waste characteristics for toxicity as discussed above and identified in Table 5. Upon commencement of the infrastructure improvement activities, the material shall be properly disposed of at a USEPA approved RCRA-Part B TSDF facility. Moreover, lithology indicates the presence of fill material in all soil borings; therefore, the TCLP lead and barium detections may be attributed to contaminants related to fill material; and,
- The soil pre-characterization results should be presented to disposal facilities for classification and acceptance in accordance with the individual facility permit requirements and State and Federal regulations.

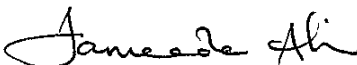
The data presented, and the opinions expressed in this report are qualified as stated in the attachment to this section of the report and is considered a draft report pending the receipt of the final laboratory analytical data

Report Prepared By:



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## STATEMENT OF LIMITATIONS

The data presented, and the opinions expressed in this report are qualified as follows:

The sole purpose of the investigation and of this report is to assess the physical characteristics of the Site with respect to the presence or absence in the environment of oil or hazardous materials and substances as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the Site.

Louis Berger derived the data in this report primarily from visual inspections, examination of records in the public domain, interviews with individuals with information about the Site, and a limited number of subsurface explorations made on the dates indicated. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.

In preparing this report, Louis Berger has relied upon and presumed accurate certain information (or the absence thereof) about the Site and adjacent properties provided by governmental officials and agencies, the Client, and others identified herein. Except as otherwise stated in the report, Louis Berger has not attempted to verify the accuracy or completeness of any such information.

The data reported, and the findings, observations, and conclusions expressed in the report are limited by the Scope of Services, including the extent of subsurface exploration and other tests. The Scope of Services was defined by the requests of the Client, the time and budgetary constraints imposed by the Client, and the availability of access to the Site.

Because of the limitations stated above, the findings, observations, and conclusions expressed by Louis Berger in this report are not, and should not be considered, an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or findings, observations, and conclusions expressed in this report. Further, such data, findings, observations, and conclusions are based solely upon site conditions in existence at the time of investigation.




This report has been prepared on behalf of and for the exclusive use of the Client and is subject to and issued in connection with the Agreement and the provisions thereof.



**FIGURE 1 – SOIL BORING LOCATION PLAN**



**Legend**

-  Soil Boring Location
-  Soil Boring Location/Temporary Well Point
-  Approximate Corridor Area



DDC PROJECT NO.: SEK002377/HWK002377 WOL NO.: OEHS-20201409799-WOL-121

**SOIL BORING LOCATION PLAN**  
PHASE II SUBSURFACE CORRIDOR INVESTIGATION  
FOR RECONSTRUCTION OF EAST 72<sup>ND</sup> STREET  
AND REPLACEMENT OF SANITARY SEWERS  
AND WATER MAINS,  
BROOKLYN, NEW YORK

SCALE: 1" = 200'

DATE: 10/19/2021

FIGURE: 1

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- TABLE 5 – SUMMARY OF WASTE CLASSIFICATION RESULTS IN SOIL**
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DEPARTMENT OF ENVIRONMENTAL PROTECTION LIMITATIONS FOR  
EFFLUENT TO SANITARY OR COMBINED SEWERS**

**Table 1. Summary of Environmental Boring Data**  
**Sampling Summary Report for Reconstruction of East 72nd Street and Replacement of Sanitary Sewers and Water Mains**  
**Brooklyn, NY**

Boring No.	Sample ID	High PID (ppm)	Sample Interval (ftbg)	Total VOCs (mg/kg)	Total PAHs (mg/kg)	TCLP Metals Exceed (Yes/No) <sup>1</sup>	Depth to Water (ftbg)	Total Depth (ftbg)	Other Comments
SB01/ TWP01	SB01	<1	6.4 - 6.9	0.286	-	YES	10	15.0	No visual or olfactory signs of contamination observed. Fill material was observed. Peat with roots was observed.
			0.0 - 6.9	-	82.07				
SB02	SB02	<1	6.3 - 6.8	0.0638	-	No	10	10.0	No visual or olfactory signs of contamination observed. Fill material (brick) was observed. Peat with roots was observed.
			0.0 - 6.8	-	18.58				
SB03	SB03	<1	5.5 - 6.0	0.085	-	No	6	10.0	No visual or olfactory signs of contamination observed. Fill material (wood, glass) was observed. Peat was observed.
			0.0 - 6.0	-	4.844				
SB04	SB04	<1	6.0 - 6.5	0.012	-	No	NE	7.0	No visual or olfactory signs of contamination observed. Fill material was observed. Refusal at 7 ftbg (concrete).
			0.0 - 6.5	-	8.468				
SB05	SB05	<1	1.5 - 2.0	0.0037	-	No	NE	2.0	No visual or olfactory signs of contamination observed. Fill material was observed. Refusal at 2 ftbg (cobble, roots).
			0.0 - 2.0	-	50.91				
SB06	SB06	<1	7.0 - 7.5	0.1241	-	No	NE	10.0	No visual or olfactory signs of contamination observed. Fill material was observed. Peat observed.
			0.0 - 7.5	-	106.9				
SB07	SB07	<1	3.8 - 4.3	0.0272	-	No	NE	4.3	No visual or olfactory signs of contamination observed. Fill material was observed. Refusal at 4.3 ftbg (cobble).
			0.0 - 4.3	-	68.37				

**Notes:**

<sup>1</sup> - TCLP metal(s) exceeds Resource Conservation and Recovery Act (RCRA) Hazardous Waste

All soil samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCBs), Toxicity Characteristic Leaching Procedure (TCLP) for Metals (RCRA 8), Total Petroleum Hydrocarbons, and RCRA Characteristics.

PID = Photoionization detector

ND = Not Detected

NE = Not Encountered

ftbg = feet below grade

**Table 2. Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Soil**  
**Sampling Summary Report for Reconstruction of East 72nd Street and Replacement of Sanitary Sewers and Water Mains**  
**Brooklyn, NY**

TCL VOCs	Commercial Use (Track 2) Soil Cleanup Objectives (SCOs)	Sample ID, Date Collected, and Depth						
		SB01	SB02	SB03	SB04	SB05	SB06	SB07
		9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021
		6.4 - 6.9	6.3 - 6.8	5.5 - 6.0	6.0 - 6.5	1.5 - 2.0	7.0 - 7.5	3.8 - 4.3
Acetone	500	ND	0.028	0.019	ND	ND	0.094	ND
2-Butanone	500	ND	0.0042	ND	ND	ND	0.018	ND
Methylene chloride	500	0.27	0.027	0.053	0.012	0.0037	0.0064	0.022
Tetrachloroethene	150	0.016	0.0046	0.013	ND	ND	ND	0.0052
Toluene	500	ND	ND	ND	ND	ND	0.0042	ND
m&p-Xylenes	500	ND	ND	ND	ND	ND	0.0015	ND
Xylenes (Total)	500	ND	ND	ND	ND	ND	0.0015	ND

**Notes:**

**All concentrations are in parts per million or milligrams per kilogram (ppm or mg/kg)**

ND = Compound not detected above method detection limit (see attached lab report for MDLs)

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

**Table 3. Summary of Polycyclic Aromatic Hydrocarbons (PAHs) Detected in Soil**  
**Sampling Summary Report for Reconstruction of East 72nd Street and Replacement of Sanitary Sewers and Water Mains**  
**Brooklyn, NY**

PAHs	Commercial Use (Track 2) Soil Cleanup Objectives (SCOs)	Sample ID, Date Collected, and Depth						
		SB01	SB02	SB03	SB04	SB05	SB06	SB07
		9/28/2021 0.0 - 6.9	9/28/2021 0.0 - 6.8	9/28/2021 0.0 - 6.0	9/28/2021 0.0 - 6.5	9/28/2021 0.0 - 2.0	9/28/2021 0.0 - 7.5	9/28/2021 0.0 - 4.3
Acenaphthene	500	ND	0.30	0.062	0.054	ND	ND	0.89
Acenaphthylene	500	ND	ND	ND	0.091	0.27	ND	ND
Anthracene	500	3.0	0.53	0.12	0.19	0.79	2.8	1.9
Benzo[a]anthracene	5.6	7.5	1.7	0.42	0.80	4.9	9.4	6.0
Benzo[a]pyrene	1	6.2	1.5	0.40	0.72	5.3	8.9	5.2
Benzo[b]fluoranthene	5.6	8.6	2.1	0.53	1.0	7.7	11	7.0
Benzo[g,h,i]perylene	500	3.1	0.75	0.26	0.40	3.2	6.0	3.1
Benzo[k]fluoranthene	56	2.7	0.58	0.18	0.35	2.6	4.0	2.5
Chrysene	56	7.2	1.5	0.39	0.69	4.6	9.5	5.4
Dibenzo[a,h]anthracene	0.56	ND	0.23	0.076	0.13	0.95	1.4	0.81
Fluoranthene	500	15	3.1	0.79	1.4	7.6	19	12
Fluorene	500	ND	0.22	0.049	0.052	ND	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	2.4	0.65	0.24	0.37	2.8	4.9	2.7
Naphthalene	500	0.37	0.12	0.017	0.021	ND	1.0	0.27
Phenanthrene	500	12	2.2	0.55	0.90	4.0	12	9.6
Pyrene	500	14	3.1	0.76	1.3	6.2	17	11

**Notes:**

**All concentrations are in parts per million or milligrams per kilogram (ppm or mg/kg)**

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

ND = Compound not detected above method detection limit (see attached lab report for MDLs)

Shading = Concentration exceeds Commercial Use (Track 2) Soil Cleanup Objectives

**Table 4. Summary of Polychlorinated Biphenyls (PCBs) Detected in Soil**  
**Sampling Summary Report for Reconstruction of East 72nd Street and Replacement of Sanitary Sewers and Water Mains**  
**Brooklyn, NY**

PCBs	Commercial Use (Track 2) Soil Cleanup Objectives (SCOs)	Sample ID, Date Collected, and Depth						
		SB01	SB02	SB03	SB04	SB05	SB06	SB07
		9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021
		0.0 - 6.9	0.0 - 6.8	0.0 - 6.0	0.0 - 6.5	0.0 - 2.0	0.0 - 7.5	0.0 - 4.3
Aroclor-1254	1	ND	ND	ND	ND	ND	0.29	1.5
Aroclor-1260	1	0.33	ND	ND	ND	ND	ND	ND
Aroclor-1262	1	ND	ND	0.092	0.048	0.073	0.072	ND
Aroclor (Total)	1	0.33	ND	0.092	0.048	0.073	0.36	1.5

**Notes:**

**All concentrations are in parts per million or milligrams per kilogram (ppm or mg/kg)**

\* Refers to the total concentration of PCBs in the sample

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

ND = Compound not detected above method detection limit (see attached lab report for MDLs)

Shading = Concentration exceeds Commercial Use (Track 2) Soil Cleanup Objectives

**Table 5. Summary of Waste Classification Results in Soil**  
**Sampling Summary Report for Reconstruction of East 72nd Street and Replacement of Sanitary Sewers and Water Mains**  
**Brooklyn, NY**

Analyte	Resource Conservation and Recovery Act (RCRA) Hazardous Waste Levels	Sample ID, Date Collected, and Depth						
		SB01	SB02	SB03	SB04	SB05	SB06	SB07
		9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021	9/28/2021
		0.0 - 6.8	0.0 - 6.8	0.0 - 6.0	0.0 - 6.5	0.0 - 2.0	0.0 - 7.5	0.0 - 4.3
<b>RCRA (Including TCLP Metals)</b>								
pH	2 - 12.5*	8	8.4	10	8.9	7.6	8	10
Ignitability	>140 °F**	NEG	NEG	NEG	NEG	NEG	NEG	NEG
Paint Filter Test	NS	NEG	NEG	NEG	NEG	NEG	NEG	NEG
Reactive Cyanide	NS	ND	ND	ND	ND	ND	ND	ND
Reactive Sulfide	NS	ND	ND	ND	ND	ND	ND	ND
Arsenic	5	ND	ND	ND	ND	ND	ND	ND
Barium	100	0.87	0.58	0.63	0.42	0.74	0.87	0.93
Cadmium	1	ND	ND	ND	ND	ND	ND	ND
Chromium	5	ND	ND	ND	ND	ND	ND	ND
Lead	5	14	1.4	0.14	ND	1.6	1.4	1.7
Mercury	0.2	ND	ND	ND	ND	ND	ND	ND
Nickel	NS	0.17	ND	ND	ND	ND	ND	ND
Selenium	1	ND	ND	ND	ND	ND	ND	ND
Silver	5	ND	ND	ND	ND	ND	ND	ND
<b>TPH DRO/GRO (mg/kg)</b>								
TPH - Diesel Range Organics	NS	2,900	740	390	410	2,200	3,100	1,400
TPH - Gasoline Range Organics	NS	ND	ND	ND	ND	ND	ND	ND

**Notes:**

**All concentrations are in parts per million, milligrams per kilogram, or milligrams per liter (ppm, mg/kg, or mg/L), unless otherwise noted**

TCLP = Toxicity Characteristic Leaching Procedure

NS = No Standard

\*A solid waste exhibits the characteristic of corrosivity if it has a pH less than or equal to 2 or greater than or equal to 12.5

\*\*A solid waste exhibits the characteristic of ignitability if it has flash point less than 140 °F

°F = Degrees Fahrenheit

NEG = Negative (flash point was not detected below 140 °F) or Negative (free liquids were not detected during Paint Filter Test)

ND = Compound not detected above method detection limit (see attached lab report for MDLs)

Shading = Concentration exceeds applicable RCRA Hazardous Waste Level



**Table 6. Groundwater Quality Compared to New York City Department of Environmental Protection Limitations for Effluent to Sanitary or Combined Sewers**  
**Sampling Summary Report for Reconstruction of East 72nd Street and Replacement of Sanitary Sewers and Water Mains**  
**Brooklyn, NY**

Parameter <sup>1</sup>	NYC DEP Limitations to Sanitary or Combined Sewers	Sample ID and Date Collected
		TWP01 9/28/2021
Non-Polar Material <sup>2</sup>	50 mg/L	ND
Flash Point - Liquid/Solid	>140 °F	>141°F
pH	≥5 and ≤12	8.2
Cadmium (Instantaneous or Composite)	2 or 0.69 mg/L	ND
Chromium Hexavalent (VI)	5 mg/L	ND
Copper	5 mg/L	0.1 mg/L
Lead	2 mg/L	0.25 mg/L
Mercury	0.05 mg/L	0.00041 mg/L
Nickel	3 mg/L	ND
Zinc	5 mg/L	0.18 mg/L
Benzene	134 ug/L	ND
Carbon tetrachloride	NS	ND
Chloroform	NS	ND
1,4-Dichlorobenzene	NS	ND
Ethylbenzene	380 ug/L	ND
MTBE (Methyl-Tert-Butyl-Ether)	50 ug/L	ND
Naphthalene	47 ug/L	ND
Phenol	NS	ND
Tetrachloroethene	20 ug/L	ND
Toluene	74 ug/L	ND
1,2,4-Trichlorobenzene	NS	ND
1,1,1-Trichloroethane	NS	ND
Xylenes (Total)	74 ug/L	ND
PCBs (Total) <sup>3</sup>	1 ug/L	ND
Total Suspended Solids <sup>4</sup>	350 mg/L	56 mg/L
CBOD <sup>5</sup>	NS	ND
Chloride <sup>5</sup>	NS	54 mg/L
Total Nitrogen	NS	1.6 mg/L
Total Solids <sup>5</sup>	NS	510 mg/L

**Notes:**

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for MDLs)

<sup>1</sup> All handling and preservation of collected samples and laboratory analyses of samples was performed in accordance with 40 CFR Part 136.

<sup>2</sup> Analysis for non-polar materials was performed by EPA method 1664.

<sup>3</sup> Analysis for polychlorinated biphenyls (PCBs) was performed according to EPA method 608 with method detection limit ≤ 65 parts per trillion.

Analysis for PCBs is required if discharge ≥ 10,000 gallons per day (gpd) and duration of discharge > 10 days.

<sup>4</sup> For discharge ≥ 10,000 gpd, the total suspended solids (TSS) limit is 350 mg/l. For discharge < 10,000 gpd, the limit is determined on a case by case basis.

<sup>5</sup> Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids, and Total Nitrogen are required if proposed discharge ≥ 10,000 gpd.

**APPENDIX A**  
**GEOLOGIC BORING LOGS**



# Drilling Log

Page 1 of 3

**BORING NO.:** SB01/TWP01

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 15

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** N/A

**Screen Length (ft.):** N/A

**NORTHING (ft):** 167369.2157

**Depth to Water (ft.):** 10

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008139.928

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground. Collected groundwater sample TWP01 from temporary well point.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
	0		FILL			<1	Grayish brown (5YR 3/2), coarse to fine SAND, little Silt, little coarse to fine Gravel, moist.	<b>Sand (Fill)</b>
	1							
	2		FILL			<1	Dusky brown (5YR 2/2), coarse to fine SAND, little Silt, and coarse to fine Gravel, moist.	<b>Gravelly Sand (Fill)</b>
	3							
	4							
	5		FILL			<1	Very pale orange (10YR 8/2), coarse to fine GRAVEL, some coarse Sand, moist.	<b>Sandy Gravel (Fill)</b>
	6							



# Drilling Log

Page 2 of 3

**BORING NO.:** SB01/TWP01

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 15

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** N/A

**Screen Length (ft.):** N/A

**NORTHING (ft):** 167369.2157

**Depth to Water (ft.):** 10

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008139.928

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.

Pre-cleared to 6 feet below ground. Collected groundwater sample TWP01 from temporary well point.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
▽	0		FILL			<1	Moderate red (5R 4/6) to blackish red (5R 2/2), coarse to medium GRAVEL, little Silt, little coarse to fine Sand, moist.	Gravel
	6.4 - 6.9		OL			<1	Grayish black (N2), PEAT, and fine Gravel, moist.	Gravelly Peat. Collected grab sample SB01 from 6.4 to 6.9 ftbg and composite sample SB01 from 0 to 6.9 ftbg.
▽	10		OL			<1	Dark gray (N3) to grayish black (N2), PEAT, some Silt (70% roots), wet.	Silty Peat with roots.



# Drilling Log

Page 3 of 3

**BORING NO.:** SB01/TWP01

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 15

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** N/A

**Screen Length (ft.):** N/A

**NORTHING (ft):** 167369.2157

**Depth to Water (ft.):** 10

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008139.928

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground. Collected groundwater sample TWP01 from temporary well point.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
	13		OL			<1	Dark gray (N3) to grayish black (N2), PEAT, some Silt (70% roots), wet.	Silty Peat with roots.
	14							
	15						Total Depth of Boring 15 feet.	
	16							
	17							
	18							



# Drilling Log

Page 1 of 2

**BORING NO.:** SB02

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 10

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** N/A

**Screen Length (ft.):** N/A

**NORTHING (ft):** 167251.6006

**Depth to Water (ft.):** 10

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008331.72

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
	0		TOPSOIL			<1	Grayish Brown (5YR3/2), coarse SAND, and coarse to fine Gravel, moist.	Gravelly Sand (Topsoil)
	1							
	2		FILL			<1	Grayish Brown (5YR3/2), coarse to fine SAND, and coarse to fine Gravel (50% fill material: bricks), moist.	Gravelly Sand (Fill)
	3							
	4							
	5							
	6							



# Drilling Log

Page 2 of 2

**BORING NO.:** SB02

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 10

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** N/A

**Screen Length (ft.):** N/A

**NORTHING (ft):** 167251.6006

**Depth to Water (ft.):** 10

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008331.72

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
			FILL			<1	Dusky red (5R 3/4), coarse to fine GRAVEL, trace Clayey SILT, some coarse to fine Sand (50% fill material: bricks), dry.	<b>Sandy Gravel (Fill)</b>
			PEAT			<1	Grayish black (N2), PEAT, wet.	<b>Peat. Collected grab sample SB02 from 6.3 to 6.8 ftbg and composite sample SB02 from 0 to 6.8 ftbg.</b>
	7							
	8							
	9							
	10						Total Depth of Boring 10 feet.	
	11							
	12							



# Drilling Log

Page 1 of 2

**BORING NO.:** SB03

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 10

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** N/A

**Screen Length (ft.):** N/A

**NORTHING (ft):** 167169.9211

**Depth to Water (ft.):** 6

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008438.955

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
	0		TOPSOIL			<1	Grayish brown (5YR 3/2), fine SAND, little Silt, trace coarse to fine Gravel, moist.	Sand (Topsoil)
	1		FILL			<1	Pale yellowish brown (10YR 6/2), coarse to fine SAND, little coarse to fine Gravel, moist.	Sand (Fill). Collected grab sample SB03 from 5.5 to 6 ftbg, and composite sample SB03 from 0 to 6 ftbg.
	2							
	3							
	4							
	5							
	6							





# Drilling Log

Page 2 of 2

**BORING NO.:** SB03

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 10

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** N/A

**Screen Length (ft.):** N/A

**NORTHING (ft):** 167169.9211

**Depth to Water (ft.):** 6

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008438.955

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
			FILL			<1	Olive black (5Y 2/1), coarse to fine SAND, trace Silt, little coarse to medium Gravel, wet.	Sand (Fill)
			FILL			<1	Olive black (5Y 2/1), SILT (95% fill material: wood and glass), wet.	Silt (Fill)
	7		PEAT			<1	Olive black (5Y 2/1), PEAT, wet.	Peat
			SP			<1	Olive black (5Y 2/1), coarse to fine SAND, trace Silt, wet.	Sand
	8							
	9							
	10						Total Depth of Boring 10 feet.	
	11							
	12							



# Drilling Log

Page 1 of 2

**BORING NO.:** SB04

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 7

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** 7

**Screen Length (ft.):** N/A

**NORTHING (ft):** 167080.8321

**Depth to Water (ft.):** N/A

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008707.502

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
						<1	Blueish white (5B 9/1), CONCRETE, dry.	Concrete
			FILL			<1	Very pale orange (10YR 8/2), coarse to fine SAND, trace coarse to fine Gravel, moist.	Sand (Fill)
	1		FILL			<1	Very pale orange (10YR 8/2), coarse to fine SAND, little coarse to fine Gravel, moist.	
	2							
	3							
	4							
	5							
	6							



# Drilling Log

Page 2 of 2

**BORING NO.:** SB04

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 7

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** 7

**Screen Length (ft.):** N/A

**NORTHING (ft):** 167080.8321

**Depth to Water (ft.):** N/A

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008707.502

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
	7		FILL			<1	Dark yellowish brown (10YR 4/2), coarse to fine SAND, trace coarse to fine Silt, little medium to fine Gravel, moist.	Concrete refusal at 7.0 ftbg. Collected grab sample SB04 from 6.0 to 6.5 ftbg and composite sample SB04 from 0 to 6.5 ftbg.
	7						Total Depth of Boring 7 feet. Refusal at 7 ftbg due to concrete	
	8							
	9							
	10							
	11							
	12							



# Drilling Log

Page 1 of 1

**BORING NO.:** SB05

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Airknife and Vactron

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 6

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 2

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** 2

**Screen Length (ft.):** N/A

**NORTHING (ft):** 166968.6226

**Depth to Water (ft.):** N/A

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008563.647

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
	0		TOPSOIL			<1	Moderate brown (5YR 3/4), coarse to fine SAND, little Silt, little coarse to fine Gravel, moist.	<b>Sand (Topsoil)</b>
	1		FILL			<1	Dusky yellowish brown (10YR 2/2), SILT, trace fine Sand, trace coarse to fine Gravel, moist.	<b>Silt (Fill)</b>
	2		FILL			<1	Moderate brown (5YR 4/4), coarse to fine SAND, some coarse to fine Gravel, moist.	<b>Gravelly Sand (Fill).</b>
	Total Depth of Boring 2 feet.							<b>Collected grab sample SB05 from 1.5 to 2.0 ftbg and composite sample SB05 from 0 to 2 ftbg.</b>
	2						Refusal at 2 ftbg due to roots and cobbles	
	3							
	4							
	5							
	6							



# Drilling Log

Page 1 of 2

**BORING NO.:** SB06

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 10

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** N/A

**Screen Length (ft.):** N/A

**NORTHING (ft):** 166810.1726

**Depth to Water (ft.):** N/A

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008796.564

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
	0		FILL			<1	Grayish orange (10YR 7/4), coarse to fine SAND, trace coarse to fine Gravel, moist.	<b>Sand (Fill)</b>
	1							
	2		FILL			<1	Dark gray (N3), Clayey SILT, and coarse to fine Gravel, moist.	<b>Gravelly Clayey Silt (Fill)</b>
	3		FILL			<1	Dusky brown (5YR 2/2), coarse to fine SAND, and coarse to fine Gravel, moist.	<b>Gravelly Sand (Fill)</b>
	4							
	5							
	6							



# Drilling Log

Page 2 of 2

**BORING NO.:** SB06

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Direct Push

**DATE STARTED:** 9/27/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 2.25

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 10

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** N/A

**Screen Length (ft.):** N/A

**NORTHING (ft):** 166810.1726

**Depth to Water (ft.):** N/A

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008796.564

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.  
Pre-cleared to 6 feet below ground.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
			GP			<1	Very Dusky Red (10R 2/2), medium to fine GRAVEL, little coarse to fine Sand, moist. Grayish brown (5YR 3/2), Organic SILT, moist. Moderate red (5R 4/6) to very Dusky Red (10R 2/2), PEAT, moist.	Gravel Organic Silt Peat. Collected grab sample SB06 from 7.0 to 7.5 ftbg and composite sample SB06 from 0 to 7.5 ftbg.
			OL			<1		
			PEAT			<1		
	7							
	8							
	9							
	10						Total Depth of Boring 10 feet.	
	11							
	12							



# Drilling Log

Page 1 of 1

**BORING NO.:** SB07

**LOCATION:** Brooklyn, NY

**CLIENT:** NYC Department of Design and Construction

**PROJECT NO.:** 31402661.091

**PROJECT:** Phase II SCI for Reconstruction of East 72nd Street, etc.

**FMS ID#:** SEK002377/HWK002377

**DRILLING CONTRACTOR:** PAL Environmental Services

**WOL #:** OEHS-20201409799-WOL-121

**DRILLING METHOD:** Airknife and Vactron

**DATE STARTED:** 9/28/2021

**BOREHOLE DATA**

**WELL DATA**

**DATE FINISHED:** 9/28/2021

**Diameter (in):** 6

**Well Diameter (in):** N/A

**DRILER:** T. Portillo

**Total Depth (ft.):** 4.3

**Total Depth (ft.):** N/A

**LBA INSPECTOR:** H. August

**Depth to Refusal (ft.):** 4.3

**Screen Length (ft.):** N/A

**NORTHING (ft):** 166635.5496

**Depth to Water (ft.):** N/A

**Depth to Water (ft.):** N/A

**EASTING (ft):** 1008962.234

**Depth to Rock (ft.):** N/A

**Slot Size (in):** N/A

**SURFACE ELEVATION (ft):** N/A

**NOTES:** Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart.

Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
	0	CONCRETE				<1	Bluish White (5B 9/1), CONCRETE, dry.	Concrete
	1	FILL				<1	Dark yellowish brown (10YR 4/2), coarse to fine SAND, trace Silt, and coarse to fine Gravel, moist.	Sand and Gravel (Fill)
	2	FILL				<1	Dark yellowish brown (10YR 4/2), coarse to fine SAND, trace Silt, and coarse to fine Gravel, moist.	
	4	FILL				<1	Dusky yellowish brown (10YR 2/2), coarse to fine SAND, and coarse to fine Gravel, moist.	
							Total Depth of Boring 4.3 feet.	Cobble refusal at 4.3 ftbg. Collected grab sample SB07 from 3.8 to 4.3 ftbg and composite sample SB07 from 0 to 4.3 ftbg.
	5						Refusal at 4.3 ftbg due to cobbles	
	6							

**APPENDIX B**  
**LABORATORY ANALYTICAL RESULTS**



# Hampton-Clarke Report Of Analysis

Client: WSP USA, Inc.

HC Project #: 1092905

Project: 72nd Street

Sample ID: SB-01 GRAB  
 Lab#: AD26292-001  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

## % Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		77

## Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.99	mg/kg	0.0026	ND
1,1,2,2-Tetrachloroethane	0.99	mg/kg	0.0026	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.99	mg/kg	0.0026	ND
1,1,2-Trichloroethane	0.99	mg/kg	0.0026	ND
1,1-Dichloroethane	0.99	mg/kg	0.0026	ND
1,1-Dichloroethene	0.99	mg/kg	0.0026	ND
1,2,3-Trichlorobenzene	0.99	mg/kg	0.0026	ND
1,2,4-Trichlorobenzene	0.99	mg/kg	0.0026	ND
1,2-Dibromo-3-chloropropane	0.99	mg/kg	0.0026	ND
1,2-Dibromoethane	0.99	mg/kg	0.00064	ND
1,2-Dichlorobenzene	0.99	mg/kg	0.0026	ND
1,2-Dichloroethane	0.99	mg/kg	0.0026	ND
1,2-Dichloropropane	0.99	mg/kg	0.0026	ND
1,3-Dichlorobenzene	0.99	mg/kg	0.0026	ND
1,4-Dichlorobenzene	0.99	mg/kg	0.0026	ND
1,4-Dioxane	0.99	mg/kg	0.13	ND
2-Butanone	0.99	mg/kg	0.0026	ND
2-Hexanone	0.99	mg/kg	0.0026	ND
4-Methyl-2-pentanone	0.99	mg/kg	0.0026	ND
Acetone	0.99	mg/kg	0.013	ND
Benzene	0.99	mg/kg	0.0013	ND
Bromochloromethane	0.99	mg/kg	0.0026	ND
Bromodichloromethane	0.99	mg/kg	0.0026	ND
Bromoform	0.99	mg/kg	0.0026	ND
Bromomethane	0.99	mg/kg	0.0026	ND
Carbon disulfide	0.99	mg/kg	0.0044	ND
Carbon tetrachloride	0.99	mg/kg	0.0026	ND
Chlorobenzene	0.99	mg/kg	0.0026	ND
Chloroethane	0.99	mg/kg	0.0026	ND
Chloroform	0.99	mg/kg	0.0026	ND
Chloromethane	0.99	mg/kg	0.0026	ND
cis-1,2-Dichloroethene	0.99	mg/kg	0.0026	ND
cis-1,3-Dichloropropene	0.99	mg/kg	0.0026	ND
Cyclohexane	0.99	mg/kg	0.0026	ND
Dibromochloromethane	0.99	mg/kg	0.0026	ND
Dichlorodifluoromethane	0.99	mg/kg	0.0026	ND
Ethylbenzene	0.99	mg/kg	0.0013	ND
Isopropylbenzene	0.99	mg/kg	0.0013	ND
m&p-Xylenes	0.99	mg/kg	0.0015	ND
Methyl Acetate	0.99	mg/kg	0.0026	ND
Methylcyclohexane	0.99	mg/kg	0.0026	ND
<b>Methylene chloride</b>	<b>0.99</b>	<b>mg/kg</b>	<b>0.0026</b>	<b>0.27</b>
Methyl-t-butyl ether	0.99	mg/kg	0.0013	ND
o-Xylene	0.99	mg/kg	0.0013	ND
Styrene	0.99	mg/kg	0.0026	ND
t-Butyl Alcohol	0.99	mg/kg	0.013	ND
<b>Tetrachloroethene</b>	<b>0.99</b>	<b>mg/kg</b>	<b>0.0026</b>	<b>0.016</b>
Toluene	0.99	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	0.99	mg/kg	0.0026	ND
trans-1,3-Dichloropropene	0.99	mg/kg	0.0026	ND
Trichloroethene	0.99	mg/kg	0.0026	ND
Trichlorofluoromethane	0.99	mg/kg	0.0026	ND
Vinyl chloride	0.99	mg/kg	0.0026	ND

**Sample ID: SB-01 GRAB**  
**Lab#: AD26292-001**  
**Matrix: Soil**

**Collection Date: 9/28/2021**  
**Receipt Date: 9/28/2021**

Xylenes (Total)

0.99

mg/kg

0.0013

ND

Sample ID: SB-01 COMP  
 Lab#: AD26292-002  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
%Solids	1	percent		82

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result		
Gasoline Range Organics	99.2	mg/kg	30	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	25.17	30	50	150	84	

**Ignitability (EPA 1030)**

Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1			NEG
Ignitability (POS/NEG)	1			NEG

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

**PAH Compounds 8270**

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	10	mg/kg	1.2	ND
Acenaphthene	10	mg/kg	1.2	ND
Acenaphthylene	10	mg/kg	1.2	ND
Anthracene	10	mg/kg	1.2	3.0
Benzo[a]anthracene	10	mg/kg	1.2	7.5
Benzo[a]pyrene	10	mg/kg	1.2	6.2
Benzo[b]fluoranthene	10	mg/kg	1.2	8.6
Benzo[g,h,i]perylene	10	mg/kg	1.2	3.1
Benzo[k]fluoranthene	10	mg/kg	1.2	2.7
Chrysene	10	mg/kg	1.2	7.2
Dibenzo[a,h]anthracene	10	mg/kg	1.2	ND
Fluoranthene	10	mg/kg	1.2	15
Fluorene	10	mg/kg	1.2	ND
Indeno[1,2,3-cd]pyrene	10	mg/kg	1.2	2.4
Naphthalene	10	mg/kg	0.35	0.37
Phenanthrene	10	mg/kg	1.2	12
Pyrene	10	mg/kg	1.2	14

**Paint Filter Test 9095B**

Analyte	DF	Units	RL	Result
Paint Filter Test	1			NEG

**PCB 8082**

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.030	0.33		
Aroclor-1016	1	mg/kg	0.030	ND		
Aroclor-1221	1	mg/kg	0.030	ND		
Aroclor-1232	1	mg/kg	0.030	ND		
Aroclor-1242	1	mg/kg	0.030	ND		
Aroclor-1248	1	mg/kg	0.030	ND		
Aroclor-1254	1	mg/kg	0.030	ND		
Aroclor-1260	1	mg/kg	0.030	0.33		
Aroclor-1262	1	mg/kg	0.030	ND		
Aroclor-1268	1	mg/kg	0.030	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	142.99	100	37	141	143	S8
TCMX-Surrogate	122.85	100	37	141	123	
DCB-Surrogate	82.19	100	34	146	82	
DCB-Surrogate	109.58	100	34	146	110	

**pH 9040C/9045D**

Analyte	DF	Units	RL	Result
pH	1	ph		8.0

**Sample ID: SB-01 COMP**  
**Lab#: AD26292-002**  
**Matrix: Soil**

**Collection Date: 9/28/2021**  
**Receipt Date: 9/28/2021**

Temperature	1	c	23.0			
<b>Reactive Cyanide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Cyanide (Reactive)	1	mg/kg	0.50	ND		
<b>Reactive Sulfide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Sulfide (Reactive)	1	mg/kg	100	ND		
<b>TCLP Metals 6010D</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Arsenic	1	mg/l	0.10	ND		
Barium	1	mg/l	0.25	0.87		
Cadmium	1	mg/l	0.050	ND		
Chromium	1	mg/l	0.10	ND		
Lead	2	mg/l	0.10	14		
Nickel	1	mg/l	0.10	0.17		
Selenium	1	mg/l	0.10	ND		
Silver	1	mg/l	0.050	ND		
<b>Total PetroleumHydrocarbons8015D(C8-C40)</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Total Petroleum Hydrocarbons	3	mg/kg	220	2900		
<b>Surrogate</b>	<b>Conc.</b>	<b>Spike</b>	<b>Low Limit</b>	<b>High Limit</b>	<b>Recovery</b>	<b>Flags</b>
O-Terphenyl	4.30	20	30	146	64	
Chlorobenzene	2.43	20	20	117	36	

Sample ID: SB-02 GRAB  
 Lab#: AD26292-003  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		78

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	mg/kg	0.0026	ND
1,1,2,2-Tetrachloroethane	1	mg/kg	0.0026	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	mg/kg	0.0026	ND
1,1,2-Trichloroethane	1	mg/kg	0.0026	ND
1,1-Dichloroethane	1	mg/kg	0.0026	ND
1,1-Dichloroethene	1	mg/kg	0.0026	ND
1,2,3-Trichlorobenzene	1	mg/kg	0.0026	ND
1,2,4-Trichlorobenzene	1	mg/kg	0.0026	ND
1,2-Dibromo-3-chloropropane	1	mg/kg	0.0026	ND
1,2-Dibromoethane	1	mg/kg	0.00064	ND
1,2-Dichlorobenzene	1	mg/kg	0.0026	ND
1,2-Dichloroethane	1	mg/kg	0.0026	ND
1,2-Dichloropropane	1	mg/kg	0.0026	ND
1,3-Dichlorobenzene	1	mg/kg	0.0026	ND
1,4-Dichlorobenzene	1	mg/kg	0.0026	ND
1,4-Dioxane	1	mg/kg	0.13	ND
<b>2-Butanone</b>	<b>1</b>	<b>mg/kg</b>	<b>0.0026</b>	<b>0.0042</b>
2-Hexanone	1	mg/kg	0.0026	ND
4-Methyl-2-pentanone	1	mg/kg	0.0026	ND
<b>Acetone</b>	<b>1</b>	<b>mg/kg</b>	<b>0.013</b>	<b>0.028</b>
Benzene	1	mg/kg	0.0013	ND
Bromochloromethane	1	mg/kg	0.0026	ND
Bromodichloromethane	1	mg/kg	0.0026	ND
Bromoform	1	mg/kg	0.0026	ND
Bromomethane	1	mg/kg	0.0026	ND
Carbon disulfide	1	mg/kg	0.0044	ND
Carbon tetrachloride	1	mg/kg	0.0026	ND
Chlorobenzene	1	mg/kg	0.0026	ND
Chloroethane	1	mg/kg	0.0026	ND
Chloroform	1	mg/kg	0.0026	ND
Chloromethane	1	mg/kg	0.0026	ND
cis-1,2-Dichloroethene	1	mg/kg	0.0026	ND
cis-1,3-Dichloropropene	1	mg/kg	0.0026	ND
Cyclohexane	1	mg/kg	0.0026	ND
Dibromochloromethane	1	mg/kg	0.0026	ND
Dichlorodifluoromethane	1	mg/kg	0.0026	ND
Ethylbenzene	1	mg/kg	0.0013	ND
Isopropylbenzene	1	mg/kg	0.0013	ND
m&p-Xylenes	1	mg/kg	0.0015	ND
Methyl Acetate	1	mg/kg	0.0026	ND
Methylcyclohexane	1	mg/kg	0.0026	ND
<b>Methylene chloride</b>	<b>1</b>	<b>mg/kg</b>	<b>0.0026</b>	<b>0.027</b>
Methyl-t-butyl ether	1	mg/kg	0.0013	ND
o-Xylene	1	mg/kg	0.0013	ND
Styrene	1	mg/kg	0.0026	ND
t-Butyl Alcohol	1	mg/kg	0.013	ND
<b>Tetrachloroethene</b>	<b>1</b>	<b>mg/kg</b>	<b>0.0026</b>	<b>0.0046</b>
Toluene	1	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	1	mg/kg	0.0026	ND
trans-1,3-Dichloropropene	1	mg/kg	0.0026	ND
Trichloroethene	1	mg/kg	0.0026	ND
Trichlorofluoromethane	1	mg/kg	0.0026	ND
Vinyl chloride	1	mg/kg	0.0026	ND
Xylenes (Total)	1	mg/kg	0.0013	ND

Sample ID: SB-02 COMP  
 Lab#: AD26292-004  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
%Solids	1	percent		92

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result		
Gasoline Range Organics	99.6	mg/kg	27	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	24.99	30	50	150	83	

**Ignitability (EPA 1030)**

Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1			NEG
Ignitability (POS/NEG)	1			NEG

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

**PAH Compounds 8270**

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	5	mg/kg	0.18	ND
Acenaphthene	5	mg/kg	0.18	0.30
Acenaphthylene	5	mg/kg	0.18	ND
Anthracene	5	mg/kg	0.18	0.53
Benzo[a]anthracene	5	mg/kg	0.18	1.7
Benzo[a]pyrene	5	mg/kg	0.18	1.5
Benzo[b]fluoranthene	5	mg/kg	0.18	2.1
Benzo[g,h,i]perylene	5	mg/kg	0.18	0.75
Benzo[k]fluoranthene	5	mg/kg	0.18	0.58
Chrysene	5	mg/kg	0.18	1.5
Dibenzo[a,h]anthracene	5	mg/kg	0.18	0.23
Fluoranthene	5	mg/kg	0.18	3.1
Fluorene	5	mg/kg	0.18	0.22
Indeno[1,2,3-cd]pyrene	5	mg/kg	0.18	0.65
Naphthalene	5	mg/kg	0.052	0.12
Phenanthrene	5	mg/kg	0.18	2.2
Pyrene	5	mg/kg	0.18	3.1

**Paint Filter Test 9095B**

Analyte	DF	Units	RL	Result
Paint Filter Test	1			NEG

**PCB 8082**

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.027	ND		
Aroclor-1016	1	mg/kg	0.027	ND		
Aroclor-1221	1	mg/kg	0.027	ND		
Aroclor-1232	1	mg/kg	0.027	ND		
Aroclor-1242	1	mg/kg	0.027	ND		
Aroclor-1248	1	mg/kg	0.027	ND		
Aroclor-1254	1	mg/kg	0.027	ND		
Aroclor-1260	1	mg/kg	0.027	ND		
Aroclor-1262	1	mg/kg	0.027	ND		
Aroclor-1268	1	mg/kg	0.027	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	178.49	100	37	141	178	S8
TCMX-Surrogate	152.23	100	37	141	152	S8
DCB-Surrogate	77.14	100	34	146	77	
DCB-Surrogate	87.48	100	34	146	87	

**pH 9040C/9045D**

Analyte	DF	Units	RL	Result
pH	1	ph		8.4

Sample ID: SB-02 COMP  
 Lab#: AD26292-004  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

Temperature	1	c	23.5			
<b>Reactive Cyanide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Cyanide (Reactive)	1	mg/kg	0.50	ND		
<b>Reactive Sulfide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Sulfide (Reactive)	1	mg/kg	100	ND		
<b>TCLP Metals 6010D</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Arsenic	2	mg/l	0.20	ND		
Barium	1	mg/l	0.25	0.58		
Cadmium	1	mg/l	0.050	ND		
Chromium	2	mg/l	0.20	ND		
Lead	2	mg/l	0.10	1.4		
Nickel	1	mg/l	0.10	ND		
Selenium	2	mg/l	0.20	ND		
Silver	2	mg/l	0.10	ND		
<b>Total PetroleumHydrocarbons8015D(C8-C40)</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Total Petroleum Hydrocarbons	1	mg/kg	65	740		
<b>Surrogate</b>	<b>Conc.</b>	<b>Spike</b>	<b>Low Limit</b>	<b>High Limit</b>	<b>Recovery</b>	<b>Flags</b>
O-Terphenyl	17.31	20	30	146	87	
Chlorobenzene	6.79	20	20	117	34	

Sample ID: SB-03 GRAB  
 Lab#: AD26292-005  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		83

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.994	mg/kg	0.0024	ND
1,1,2,2-Tetrachloroethane	0.994	mg/kg	0.0024	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.994	mg/kg	0.0024	ND
1,1,2-Trichloroethane	0.994	mg/kg	0.0024	ND
1,1-Dichloroethane	0.994	mg/kg	0.0024	ND
1,1-Dichloroethene	0.994	mg/kg	0.0024	ND
1,2,3-Trichlorobenzene	0.994	mg/kg	0.0024	ND
1,2,4-Trichlorobenzene	0.994	mg/kg	0.0024	ND
1,2-Dibromo-3-chloropropane	0.994	mg/kg	0.0024	ND
1,2-Dibromoethane	0.994	mg/kg	0.00060	ND
1,2-Dichlorobenzene	0.994	mg/kg	0.0024	ND
1,2-Dichloroethane	0.994	mg/kg	0.0024	ND
1,2-Dichloropropane	0.994	mg/kg	0.0024	ND
1,3-Dichlorobenzene	0.994	mg/kg	0.0024	ND
1,4-Dichlorobenzene	0.994	mg/kg	0.0024	ND
1,4-Dioxane	0.994	mg/kg	0.12	ND
2-Butanone	0.994	mg/kg	0.0024	ND
2-Hexanone	0.994	mg/kg	0.0024	ND
4-Methyl-2-pentanone	0.994	mg/kg	0.0024	ND
<b>Acetone</b>	<b>0.994</b>	<b>mg/kg</b>	<b>0.012</b>	<b>0.019</b>
Benzene	0.994	mg/kg	0.0012	ND
Bromochloromethane	0.994	mg/kg	0.0024	ND
Bromodichloromethane	0.994	mg/kg	0.0024	ND
Bromoform	0.994	mg/kg	0.0024	ND
Bromomethane	0.994	mg/kg	0.0024	ND
Carbon disulfide	0.994	mg/kg	0.0041	ND
Carbon tetrachloride	0.994	mg/kg	0.0024	ND
Chlorobenzene	0.994	mg/kg	0.0024	ND
Chloroethane	0.994	mg/kg	0.0024	ND
Chloroform	0.994	mg/kg	0.0024	ND
Chloromethane	0.994	mg/kg	0.0024	ND
cis-1,2-Dichloroethene	0.994	mg/kg	0.0024	ND
cis-1,3-Dichloropropene	0.994	mg/kg	0.0024	ND
Cyclohexane	0.994	mg/kg	0.0024	ND
Dibromochloromethane	0.994	mg/kg	0.0024	ND
Dichlorodifluoromethane	0.994	mg/kg	0.0024	ND
Ethylbenzene	0.994	mg/kg	0.0012	ND
Isopropylbenzene	0.994	mg/kg	0.0012	ND
m&p-Xylenes	0.994	mg/kg	0.0014	ND
Methyl Acetate	0.994	mg/kg	0.0024	ND
Methylcyclohexane	0.994	mg/kg	0.0024	ND
<b>Methylene chloride</b>	<b>0.994</b>	<b>mg/kg</b>	<b>0.0024</b>	<b>0.053</b>
Methyl-t-butyl ether	0.994	mg/kg	0.0012	ND
o-Xylene	0.994	mg/kg	0.0012	ND
Styrene	0.994	mg/kg	0.0024	ND
t-Butyl Alcohol	0.994	mg/kg	0.012	ND
<b>Tetrachloroethene</b>	<b>0.994</b>	<b>mg/kg</b>	<b>0.0024</b>	<b>0.013</b>
Toluene	0.994	mg/kg	0.0012	ND
trans-1,2-Dichloroethene	0.994	mg/kg	0.0024	ND
trans-1,3-Dichloropropene	0.994	mg/kg	0.0024	ND
Trichloroethene	0.994	mg/kg	0.0024	ND
Trichlorofluoromethane	0.994	mg/kg	0.0024	ND
Vinyl chloride	0.994	mg/kg	0.0024	ND
Xylenes (Total)	0.994	mg/kg	0.0012	ND



Sample ID: SB-03 COMP  
 Lab#: AD26292-006  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
%Solids	1	percent		87

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result		
Gasoline Range Organics	95.4	mg/kg	27	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	27.48	30	50	150	92	

**Ignitability (EPA 1030)**

Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1			NEG
Ignitability (POS/NEG)	1			NEG

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

**PAH Compounds 8270**

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.038	ND
Acenaphthene	1	mg/kg	0.038	0.062
Acenaphthylene	1	mg/kg	0.038	ND
Anthracene	1	mg/kg	0.038	0.12
Benzo[a]anthracene	1	mg/kg	0.038	0.42
Benzo[a]pyrene	1	mg/kg	0.038	0.40
Benzo[b]fluoranthene	1	mg/kg	0.038	0.53
Benzo[g,h,i]perylene	1	mg/kg	0.038	0.26
Benzo[k]fluoranthene	1	mg/kg	0.038	0.18
Chrysene	1	mg/kg	0.038	0.39
Dibenzo[a,h]anthracene	1	mg/kg	0.038	0.076
Fluoranthene	1	mg/kg	0.038	0.79
Fluorene	1	mg/kg	0.038	0.049
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.038	0.24
Naphthalene	1	mg/kg	0.011	0.017
Phenanthrene	1	mg/kg	0.038	0.55
Pyrene	1	mg/kg	0.038	0.76

**Paint Filter Test 9095B**

Analyte	DF	Units	RL	Result
Paint Filter Test	1			NEG

**PCB 8082**

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.029	0.092		
Aroclor-1016	1	mg/kg	0.029	ND		
Aroclor-1221	1	mg/kg	0.029	ND		
Aroclor-1232	1	mg/kg	0.029	ND		
Aroclor-1242	1	mg/kg	0.029	ND		
Aroclor-1248	1	mg/kg	0.029	ND		
Aroclor-1254	1	mg/kg	0.029	ND		
Aroclor-1260	1	mg/kg	0.029	ND		
Aroclor-1262	1	mg/kg	0.029	0.092		
Aroclor-1268	1	mg/kg	0.029	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	148.24	100	37	141	148	S8
TCMX-Surrogate	140.34	100	37	141	140	
DCB-Surrogate	111.79	100	34	146	112	
DCB-Surrogate	117.80	100	34	146	118	

**pH 9040C/9045D**

Analyte	DF	Units	RL	Result
pH	1	ph		10

Sample ID: SB-03 COMP  
 Lab#: AD26292-006  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

Temperature	1	c	22.7
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**Reactive Cyanide**

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

**Reactive Sulfide**

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

**TCLP Metals 6010D**

Analyte	DF	Units	RL	Result
Arsenic	2	mg/l	0.20	ND
Barium	1	mg/l	0.25	0.63
Cadmium	1	mg/l	0.050	ND
Chromium	2	mg/l	0.20	ND
Lead	2	mg/l	0.10	0.14
Nickel	1	mg/l	0.10	ND
Selenium	2	mg/l	0.20	ND
Silver	2	mg/l	0.10	ND

**Total PetroleumHydrocarbons8015D(C8-C40)**

Analyte	DF	Units	RL	Result		
Total Petroleum Hydrocarbons	1	mg/kg	69	390		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
O-Terphenyl	15.35	20	30	146	77	
Chlorobenzene	8.75	20	20	117	44	

Sample ID: SB-04 GRAB  
 Lab#: AD26292-007  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		92

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.992	mg/kg	0.0022	ND
1,1,2,2-Tetrachloroethane	0.992	mg/kg	0.0022	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.992	mg/kg	0.0022	ND
1,1,2-Trichloroethane	0.992	mg/kg	0.0022	ND
1,1-Dichloroethane	0.992	mg/kg	0.0022	ND
1,1-Dichloroethene	0.992	mg/kg	0.0022	ND
1,2,3-Trichlorobenzene	0.992	mg/kg	0.0022	ND
1,2,4-Trichlorobenzene	0.992	mg/kg	0.0022	ND
1,2-Dibromo-3-chloropropane	0.992	mg/kg	0.0022	ND
1,2-Dibromoethane	0.992	mg/kg	0.00054	ND
1,2-Dichlorobenzene	0.992	mg/kg	0.0022	ND
1,2-Dichloroethane	0.992	mg/kg	0.0022	ND
1,2-Dichloropropane	0.992	mg/kg	0.0022	ND
1,3-Dichlorobenzene	0.992	mg/kg	0.0022	ND
1,4-Dichlorobenzene	0.992	mg/kg	0.0022	ND
1,4-Dioxane	0.992	mg/kg	0.11	ND
2-Butanone	0.992	mg/kg	0.0022	ND
2-Hexanone	0.992	mg/kg	0.0022	ND
4-Methyl-2-pentanone	0.992	mg/kg	0.0022	ND
Acetone	0.992	mg/kg	0.011	ND
Benzene	0.992	mg/kg	0.0011	ND
Bromochloromethane	0.992	mg/kg	0.0022	ND
Bromodichloromethane	0.992	mg/kg	0.0022	ND
Bromoform	0.992	mg/kg	0.0022	ND
Bromomethane	0.992	mg/kg	0.0022	ND
Carbon disulfide	0.992	mg/kg	0.0037	ND
Carbon tetrachloride	0.992	mg/kg	0.0022	ND
Chlorobenzene	0.992	mg/kg	0.0022	ND
Chloroethane	0.992	mg/kg	0.0022	ND
Chloroform	0.992	mg/kg	0.0022	ND
Chloromethane	0.992	mg/kg	0.0022	ND
cis-1,2-Dichloroethene	0.992	mg/kg	0.0022	ND
cis-1,3-Dichloropropene	0.992	mg/kg	0.0022	ND
Cyclohexane	0.992	mg/kg	0.0022	ND
Dibromochloromethane	0.992	mg/kg	0.0022	ND
Dichlorodifluoromethane	0.992	mg/kg	0.0022	ND
Ethylbenzene	0.992	mg/kg	0.0011	ND
Isopropylbenzene	0.992	mg/kg	0.0011	ND
m&p-Xylenes	0.992	mg/kg	0.0013	ND
Methyl Acetate	0.992	mg/kg	0.0022	ND
Methylcyclohexane	0.992	mg/kg	0.0022	ND
<b>Methylene chloride</b>	<b>0.992</b>	<b>mg/kg</b>	<b>0.0022</b>	<b>0.012</b>
Methyl-t-butyl ether	0.992	mg/kg	0.0011	ND
o-Xylene	0.992	mg/kg	0.0011	ND
Styrene	0.992	mg/kg	0.0022	ND
t-Butyl Alcohol	0.992	mg/kg	0.011	ND
Tetrachloroethene	0.992	mg/kg	0.0022	ND
Toluene	0.992	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.992	mg/kg	0.0022	ND
trans-1,3-Dichloropropene	0.992	mg/kg	0.0022	ND
Trichloroethene	0.992	mg/kg	0.0022	ND
Trichlorofluoromethane	0.992	mg/kg	0.0022	ND
Vinyl chloride	0.992	mg/kg	0.0022	ND
Xylenes (Total)	0.992	mg/kg	0.0011	ND

Sample ID: SB-04 COMP  
 Lab#: AD26292-008  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
%Solids	1	percent		87

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result		
Gasoline Range Organics	97.5	mg/kg	28	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	23.55	30	50	150	78	

**Ignitability (EPA 1030)**

Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1			NEG
Ignitability (POS/NEG)	1			NEG

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

**PAH Compounds 8270**

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.038	ND
Acenaphthene	1	mg/kg	0.038	0.054
Acenaphthylene	1	mg/kg	0.038	0.091
Anthracene	1	mg/kg	0.038	0.19
Benzo[a]anthracene	1	mg/kg	0.038	0.80
Benzo[a]pyrene	1	mg/kg	0.038	0.72
Benzo[b]fluoranthene	1	mg/kg	0.038	1.0
Benzo[g,h,i]perylene	1	mg/kg	0.038	0.40
Benzo[k]fluoranthene	1	mg/kg	0.038	0.35
Chrysene	1	mg/kg	0.038	0.69
Dibenzo[a,h]anthracene	1	mg/kg	0.038	0.13
Fluoranthene	1	mg/kg	0.038	1.4
Fluorene	1	mg/kg	0.038	0.052
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.038	0.37
Naphthalene	1	mg/kg	0.011	0.021
Phenanthrene	1	mg/kg	0.038	0.90
Pyrene	1	mg/kg	0.038	1.3

**Paint Filter Test 9095B**

Analyte	DF	Units	RL	Result
Paint Filter Test	1			NEG

**PCB 8082**

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.029	0.048		
Aroclor-1016	1	mg/kg	0.029	ND		
Aroclor-1221	1	mg/kg	0.029	ND		
Aroclor-1232	1	mg/kg	0.029	ND		
Aroclor-1242	1	mg/kg	0.029	ND		
Aroclor-1248	1	mg/kg	0.029	ND		
Aroclor-1254	1	mg/kg	0.029	ND		
Aroclor-1260	1	mg/kg	0.029	ND		
Aroclor-1262	1	mg/kg	0.029	0.048		
Aroclor-1268	1	mg/kg	0.029	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	136.33	100	37	141	136	
TCMX-Surrogate	127.71	100	37	141	128	
DCB-Surrogate	99.58	100	34	146	100	
DCB-Surrogate	104.37	100	34	146	104	

**pH 9040C/9045D**

Analyte	DF	Units	RL	Result
pH	1	ph		8.9

**Sample ID: SB-04 COMP**  
**Lab#: AD26292-008**  
**Matrix: Soil**

**Collection Date: 9/28/2021**  
**Receipt Date: 9/28/2021**

Temperature	1	c	23.0			
<b>Reactive Cyanide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Cyanide (Reactive)	1	mg/kg	0.50	ND		
<b>Reactive Sulfide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Sulfide (Reactive)	1	mg/kg	100	ND		
<b>TCLP Metals 6010D</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Arsenic	2	mg/l	0.20	ND		
Barium	1	mg/l	0.25	0.42		
Cadmium	1	mg/l	0.050	ND		
Chromium	2	mg/l	0.20	ND		
Lead	2	mg/l	0.10	ND		
Nickel	1	mg/l	0.10	ND		
Selenium	2	mg/l	0.20	ND		
Silver	2	mg/l	0.10	ND		
<b>Total PetroleumHydrocarbons8015D(C8-C40)</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Total Petroleum Hydrocarbons	1	mg/kg	69	410		
<b>Surrogate</b>	<b>Conc.</b>	<b>Spike</b>	<b>Low Limit</b>	<b>High Limit</b>	<b>Recovery</b>	<b>Flags</b>
O-Terphenyl	15.49	20	30	146	77	
Chlorobenzene	6.45	20	20	117	32	

Sample ID: SB-05 GRAB  
 Lab#: AD26292-009  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		84

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.96	mg/kg	0.0023	ND
1,1,2,2-Tetrachloroethane	0.96	mg/kg	0.0023	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.96	mg/kg	0.0023	ND
1,1,2-Trichloroethane	0.96	mg/kg	0.0023	ND
1,1-Dichloroethane	0.96	mg/kg	0.0023	ND
1,1-Dichloroethene	0.96	mg/kg	0.0023	ND
1,2,3-Trichlorobenzene	0.96	mg/kg	0.0023	ND
1,2,4-Trichlorobenzene	0.96	mg/kg	0.0023	ND
1,2-Dibromo-3-chloropropane	0.96	mg/kg	0.0023	ND
1,2-Dibromoethane	0.96	mg/kg	0.00057	ND
1,2-Dichlorobenzene	0.96	mg/kg	0.0023	ND
1,2-Dichloroethane	0.96	mg/kg	0.0023	ND
1,2-Dichloropropane	0.96	mg/kg	0.0023	ND
1,3-Dichlorobenzene	0.96	mg/kg	0.0023	ND
1,4-Dichlorobenzene	0.96	mg/kg	0.0023	ND
1,4-Dioxane	0.96	mg/kg	0.11	ND
2-Butanone	0.96	mg/kg	0.0023	ND
2-Hexanone	0.96	mg/kg	0.0023	ND
4-Methyl-2-pentanone	0.96	mg/kg	0.0023	ND
Acetone	0.96	mg/kg	0.011	ND
Benzene	0.96	mg/kg	0.0011	ND
Bromochloromethane	0.96	mg/kg	0.0023	ND
Bromodichloromethane	0.96	mg/kg	0.0023	ND
Bromoform	0.96	mg/kg	0.0023	ND
Bromomethane	0.96	mg/kg	0.0023	ND
Carbon disulfide	0.96	mg/kg	0.0039	ND
Carbon tetrachloride	0.96	mg/kg	0.0023	ND
Chlorobenzene	0.96	mg/kg	0.0023	ND
Chloroethane	0.96	mg/kg	0.0023	ND
Chloroform	0.96	mg/kg	0.0023	ND
Chloromethane	0.96	mg/kg	0.0023	ND
cis-1,2-Dichloroethene	0.96	mg/kg	0.0023	ND
cis-1,3-Dichloropropene	0.96	mg/kg	0.0023	ND
Cyclohexane	0.96	mg/kg	0.0023	ND
Dibromochloromethane	0.96	mg/kg	0.0023	ND
Dichlorodifluoromethane	0.96	mg/kg	0.0023	ND
Ethylbenzene	0.96	mg/kg	0.0011	ND
Isopropylbenzene	0.96	mg/kg	0.0011	ND
m&p-Xylenes	0.96	mg/kg	0.0014	ND
Methyl Acetate	0.96	mg/kg	0.0023	ND
Methylcyclohexane	0.96	mg/kg	0.0023	ND
<b>Methylene chloride</b>	<b>0.96</b>	<b>mg/kg</b>	<b>0.0023</b>	<b>0.0037</b>
Methyl-t-butyl ether	0.96	mg/kg	0.0011	ND
o-Xylene	0.96	mg/kg	0.0011	ND
Styrene	0.96	mg/kg	0.0023	ND
t-Butyl Alcohol	0.96	mg/kg	0.011	ND
Tetrachloroethene	0.96	mg/kg	0.0023	ND
Toluene	0.96	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.96	mg/kg	0.0023	ND
trans-1,3-Dichloropropene	0.96	mg/kg	0.0023	ND
Trichloroethene	0.96	mg/kg	0.0023	ND
Trichlorofluoromethane	0.96	mg/kg	0.0023	ND
Vinyl chloride	0.96	mg/kg	0.0023	ND
Xylenes (Total)	0.96	mg/kg	0.0011	ND

Sample ID: SB-05 COMP  
 Lab#: AD26292-010  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
%Solids	1	percent		88

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result		
Gasoline Range Organics	99	mg/kg	28	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	25.48	30	50	150	85	

**Ignitability (EPA 1030)**

Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1			NEG
Ignitability (POS/NEG)	1			NEG

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

**PAH Compounds 8270**

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	5	mg/kg	0.19	ND
Acenaphthene	5	mg/kg	0.19	ND
Acenaphthylene	5	mg/kg	0.19	0.27
Anthracene	5	mg/kg	0.19	0.79
Benzo[a]anthracene	5	mg/kg	0.19	4.9
Benzo[a]pyrene	5	mg/kg	0.19	5.3
Benzo[b]fluoranthene	5	mg/kg	0.19	7.7
Benzo[g,h,i]perylene	5	mg/kg	0.19	3.2
Benzo[k]fluoranthene	5	mg/kg	0.19	2.6
Chrysene	5	mg/kg	0.19	4.6
Dibenzo[a,h]anthracene	5	mg/kg	0.19	0.95
Fluoranthene	5	mg/kg	0.19	7.6
Fluorene	5	mg/kg	0.19	ND
Indeno[1,2,3-cd]pyrene	5	mg/kg	0.19	2.8
Naphthalene	5	mg/kg	0.055	ND
Phenanthrene	5	mg/kg	0.19	4.0
Pyrene	5	mg/kg	0.19	6.2

**Paint Filter Test 9095B**

Analyte	DF	Units	RL	Result
Paint Filter Test	1			NEG

**PCB 8082**

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.028	0.073		
Aroclor-1016	1	mg/kg	0.028	ND		
Aroclor-1221	1	mg/kg	0.028	ND		
Aroclor-1232	1	mg/kg	0.028	ND		
Aroclor-1242	1	mg/kg	0.028	ND		
Aroclor-1248	1	mg/kg	0.028	ND		
Aroclor-1254	1	mg/kg	0.028	ND		
Aroclor-1260	1	mg/kg	0.028	ND		
Aroclor-1262	1	mg/kg	0.028	0.073		
Aroclor-1268	1	mg/kg	0.028	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	119.54	100	37	141	120	
TCMX-Surrogate	111.42	100	37	141	111	
DCB-Surrogate	100.13	100	34	146	100	
DCB-Surrogate	105.35	100	34	146	105	

**pH 9040C/9045D**

Analyte	DF	Units	RL	Result
pH	1	ph		7.6

**Sample ID: SB-05 COMP**  
**Lab#: AD26292-010**  
**Matrix: Soil**

**Collection Date: 9/28/2021**  
**Receipt Date: 9/28/2021**

Temperature	1	c	23.1			
<b>Reactive Cyanide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Cyanide (Reactive)	1	mg/kg	0.50	ND		
<b>Reactive Sulfide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Sulfide (Reactive)	1	mg/kg	100	ND		
<b>TCLP Metals 6010D</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Arsenic	2	mg/l	0.20	ND		
Barium	1	mg/l	0.25	0.74		
Cadmium	1	mg/l	0.050	ND		
Chromium	2	mg/l	0.20	ND		
Lead	2	mg/l	0.10	1.6		
Nickel	1	mg/l	0.10	ND		
Selenium	2	mg/l	0.20	ND		
Silver	2	mg/l	0.10	ND		
<b>Total PetroleumHydrocarbons8015D(C8-C40)</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Total Petroleum Hydrocarbons	1	mg/kg	68	2200		
<b>Surrogate</b>	<b>Conc.</b>	<b>Spike</b>	<b>Low Limit</b>	<b>High Limit</b>	<b>Recovery</b>	<b>Flags</b>
O-Terphenyl	19.38	20	30	146	97	
Chlorobenzene	9.48	20	20	117	47	



Sample ID: SB-06 GRAB  
 Lab#: AD26292-011  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
%Solids	1	percent		83

**Volatile Organics (no search) 8260**

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.99	mg/kg	0.0024	ND
1,1,2,2-Tetrachloroethane	0.99	mg/kg	0.0024	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.99	mg/kg	0.0024	ND
1,1,2-Trichloroethane	0.99	mg/kg	0.0024	ND
1,1-Dichloroethane	0.99	mg/kg	0.0024	ND
1,1-Dichloroethene	0.99	mg/kg	0.0024	ND
1,2,3-Trichlorobenzene	0.99	mg/kg	0.0024	ND
1,2,4-Trichlorobenzene	0.99	mg/kg	0.0024	ND
1,2-Dibromo-3-chloropropane	0.99	mg/kg	0.0024	ND
1,2-Dibromoethane	0.99	mg/kg	0.00060	ND
1,2-Dichlorobenzene	0.99	mg/kg	0.0024	ND
1,2-Dichloroethane	0.99	mg/kg	0.0024	ND
1,2-Dichloropropane	0.99	mg/kg	0.0024	ND
1,3-Dichlorobenzene	0.99	mg/kg	0.0024	ND
1,4-Dichlorobenzene	0.99	mg/kg	0.0024	ND
1,4-Dioxane	0.99	mg/kg	0.12	ND
<b>2-Butanone</b>	<b>0.99</b>	<b>mg/kg</b>	<b>0.0024</b>	<b>0.018</b>
2-Hexanone	0.99	mg/kg	0.0024	ND
4-Methyl-2-pentanone	0.99	mg/kg	0.0024	ND
<b>Acetone</b>	<b>0.99</b>	<b>mg/kg</b>	<b>0.012</b>	<b>0.094</b>
Benzene	0.99	mg/kg	0.0012	ND
Bromochloromethane	0.99	mg/kg	0.0024	ND
Bromodichloromethane	0.99	mg/kg	0.0024	ND
Bromoform	0.99	mg/kg	0.0024	ND
Bromomethane	0.99	mg/kg	0.0024	ND
Carbon disulfide	0.99	mg/kg	0.0041	ND
Carbon tetrachloride	0.99	mg/kg	0.0024	ND
Chlorobenzene	0.99	mg/kg	0.0024	ND
Chloroethane	0.99	mg/kg	0.0024	ND
Chloroform	0.99	mg/kg	0.0024	ND
Chloromethane	0.99	mg/kg	0.0024	ND
cis-1,2-Dichloroethene	0.99	mg/kg	0.0024	ND
cis-1,3-Dichloropropene	0.99	mg/kg	0.0024	ND
Cyclohexane	0.99	mg/kg	0.0024	ND
Dibromochloromethane	0.99	mg/kg	0.0024	ND
Dichlorodifluoromethane	0.99	mg/kg	0.0024	ND
Ethylbenzene	0.99	mg/kg	0.0012	ND
Isopropylbenzene	0.99	mg/kg	0.0012	ND
<b>m&amp;p-Xylenes</b>	<b>0.99</b>	<b>mg/kg</b>	<b>0.0014</b>	<b>0.0015</b>
Methyl Acetate	0.99	mg/kg	0.0024	ND
Methylcyclohexane	0.99	mg/kg	0.0024	ND
<b>Methylene chloride</b>	<b>0.99</b>	<b>mg/kg</b>	<b>0.0024</b>	<b>0.0064</b>
Methyl-t-butyl ether	0.99	mg/kg	0.0012	ND
o-Xylene	0.99	mg/kg	0.0012	ND
Styrene	0.99	mg/kg	0.0024	ND
t-Butyl Alcohol	0.99	mg/kg	0.012	ND
Tetrachloroethene	0.99	mg/kg	0.0024	ND
<b>Toluene</b>	<b>0.99</b>	<b>mg/kg</b>	<b>0.0012</b>	<b>0.0042</b>
trans-1,2-Dichloroethene	0.99	mg/kg	0.0024	ND
trans-1,3-Dichloropropene	0.99	mg/kg	0.0024	ND
Trichloroethene	0.99	mg/kg	0.0024	ND
Trichlorofluoromethane	0.99	mg/kg	0.0024	ND
Vinyl chloride	0.99	mg/kg	0.0024	ND
<b>Xylenes (Total)</b>	<b>0.99</b>	<b>mg/kg</b>	<b>0.0012</b>	<b>0.0015</b>

Sample ID: SB-06 COMP  
 Lab#: AD26292-012  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
%Solids	1	percent		85

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result		
Gasoline Range Organics	95.8	mg/kg	28	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	26.46	30	50	150	88	

**Ignitability (EPA 1030)**

Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1			NEG
Ignitability (POS/NEG)	1			NEG

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

**PAH Compounds 8270**

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	10	mg/kg	1.2	ND
Acenaphthene	10	mg/kg	1.2	ND
Acenaphthylene	10	mg/kg	1.2	ND
Anthracene	10	mg/kg	1.2	2.8
Benzo[a]anthracene	10	mg/kg	1.2	9.4
Benzo[a]pyrene	10	mg/kg	1.2	8.9
Benzo[b]fluoranthene	10	mg/kg	1.2	11
Benzo[g,h,i]perylene	10	mg/kg	1.2	6.0
Benzo[k]fluoranthene	10	mg/kg	1.2	4.0
Chrysene	10	mg/kg	1.2	9.5
Dibenzo[a,h]anthracene	10	mg/kg	1.2	1.4
Fluoranthene	10	mg/kg	1.2	19
Fluorene	10	mg/kg	1.2	ND
Indeno[1,2,3-cd]pyrene	10	mg/kg	1.2	4.9
Naphthalene	10	mg/kg	0.34	1.0
Phenanthrene	10	mg/kg	1.2	12
Pyrene	10	mg/kg	1.2	17

**Paint Filter Test 9095B**

Analyte	DF	Units	RL	Result
Paint Filter Test	1			NEG

**PCB 8082**

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.029	0.36		
Aroclor-1016	1	mg/kg	0.029	ND		
Aroclor-1221	1	mg/kg	0.029	ND		
Aroclor-1232	1	mg/kg	0.029	ND		
Aroclor-1242	1	mg/kg	0.029	ND		
Aroclor-1248	1	mg/kg	0.029	ND		
Aroclor-1254	1	mg/kg	0.029	0.29		
Aroclor-1260	1	mg/kg	0.029	ND		
Aroclor-1262	1	mg/kg	0.029	0.072		
Aroclor-1268	1	mg/kg	0.029	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	102.50	100	37	141	102	
TCMX-Surrogate	90.33	100	37	141	90	
DCB-Surrogate	66.28	100	34	146	66	
DCB-Surrogate	49.57	100	34	146	50	

**pH 9040C/9045D**

Analyte	DF	Units	RL	Result
pH	1	ph		8.0

**Sample ID: SB-06 COMP**  
**Lab#: AD26292-012**  
**Matrix: Soil**

**Collection Date: 9/28/2021**  
**Receipt Date: 9/28/2021**

Temperature	1	c	22.9			
<b>Reactive Cyanide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Cyanide (Reactive)	1	mg/kg	0.50	ND		
<b>Reactive Sulfide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Sulfide (Reactive)	1	mg/kg	100	ND		
<b>TCLP Metals 6010D</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Arsenic	1	mg/l	0.10	ND		
Barium	1	mg/l	0.25	0.87		
Cadmium	1	mg/l	0.050	ND		
Chromium	1	mg/l	0.10	ND		
Lead	1	mg/l	0.050	1.4		
Nickel	1	mg/l	0.10	ND		
Selenium	1	mg/l	0.10	ND		
Silver	1	mg/l	0.050	ND		
<b>Total PetroleumHydrocarbons8015D(C8-C40)</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Total Petroleum Hydrocarbons	5	mg/kg	350	3100		
<b>Surrogate</b>	<b>Conc.</b>	<b>Spike</b>	<b>Low Limit</b>	<b>High Limit</b>	<b>Recovery</b>	<b>Flags</b>
O-Terphenyl	4.04	20	30	146	101	
Chlorobenzene	1.82	20	20	117	46	

Sample ID: SB-07 GRAB  
 Lab#: AD26292-013  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	1	percent		87

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.956	mg/kg	0.0022	ND
1,1,2,2-Tetrachloroethane	0.956	mg/kg	0.0022	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.956	mg/kg	0.0022	ND
1,1,2-Trichloroethane	0.956	mg/kg	0.0022	ND
1,1-Dichloroethane	0.956	mg/kg	0.0022	ND
1,1-Dichloroethene	0.956	mg/kg	0.0022	ND
1,2,3-Trichlorobenzene	0.956	mg/kg	0.0022	ND
1,2,4-Trichlorobenzene	0.956	mg/kg	0.0022	ND
1,2-Dibromo-3-chloropropane	0.956	mg/kg	0.0022	ND
1,2-Dibromoethane	0.956	mg/kg	0.00055	ND
1,2-Dichlorobenzene	0.956	mg/kg	0.0022	ND
1,2-Dichloroethane	0.956	mg/kg	0.0022	ND
1,2-Dichloropropane	0.956	mg/kg	0.0022	ND
1,3-Dichlorobenzene	0.956	mg/kg	0.0022	ND
1,4-Dichlorobenzene	0.956	mg/kg	0.0022	ND
1,4-Dioxane	0.956	mg/kg	0.11	ND
2-Butanone	0.956	mg/kg	0.0022	ND
2-Hexanone	0.956	mg/kg	0.0022	ND
4-Methyl-2-pentanone	0.956	mg/kg	0.0022	ND
Acetone	0.956	mg/kg	0.011	ND
Benzene	0.956	mg/kg	0.0011	ND
Bromochloromethane	0.956	mg/kg	0.0022	ND
Bromodichloromethane	0.956	mg/kg	0.0022	ND
Bromoform	0.956	mg/kg	0.0022	ND
Bromomethane	0.956	mg/kg	0.0022	ND
Carbon disulfide	0.956	mg/kg	0.0037	ND
Carbon tetrachloride	0.956	mg/kg	0.0022	ND
Chlorobenzene	0.956	mg/kg	0.0022	ND
Chloroethane	0.956	mg/kg	0.0022	ND
Chloroform	0.956	mg/kg	0.0022	ND
Chloromethane	0.956	mg/kg	0.0022	ND
cis-1,2-Dichloroethene	0.956	mg/kg	0.0022	ND
cis-1,3-Dichloropropene	0.956	mg/kg	0.0022	ND
Cyclohexane	0.956	mg/kg	0.0022	ND
Dibromochloromethane	0.956	mg/kg	0.0022	ND
Dichlorodifluoromethane	0.956	mg/kg	0.0022	ND
Ethylbenzene	0.956	mg/kg	0.0011	ND
Isopropylbenzene	0.956	mg/kg	0.0011	ND
m&p-Xylenes	0.956	mg/kg	0.0013	ND
Methyl Acetate	0.956	mg/kg	0.0022	ND
Methylcyclohexane	0.956	mg/kg	0.0022	ND
<b>Methylene chloride</b>	<b>0.956</b>	<b>mg/kg</b>	<b>0.0022</b>	<b>0.022</b>
Methyl-t-butyl ether	0.956	mg/kg	0.0011	ND
o-Xylene	0.956	mg/kg	0.0011	ND
Styrene	0.956	mg/kg	0.0022	ND
t-Butyl Alcohol	0.956	mg/kg	0.011	ND
<b>Tetrachloroethene</b>	<b>0.956</b>	<b>mg/kg</b>	<b>0.0022</b>	<b>0.0052</b>
Toluene	0.956	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.956	mg/kg	0.0022	ND
trans-1,3-Dichloropropene	0.956	mg/kg	0.0022	ND
Trichloroethene	0.956	mg/kg	0.0022	ND
Trichlorofluoromethane	0.956	mg/kg	0.0022	ND
Vinyl chloride	0.956	mg/kg	0.0022	ND
Xylenes (Total)	0.956	mg/kg	0.0011	ND

Sample ID: SB-07 COMP  
 Lab#: AD26292-014  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
%Solids	1	percent		85

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result		
Gasoline Range Organics	98.6	mg/kg	29	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
1,4-Dichlorobenzene-d4	24.72	30	50	150	82	

**Ignitability (EPA 1030)**

Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1			NEG
Ignitability (POS/NEG)	1			NEG

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

**PAH Compounds 8270**

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	10	mg/kg	0.78	ND
Acenaphthene	10	mg/kg	0.78	0.89
Acenaphthylene	10	mg/kg	0.78	ND
Anthracene	10	mg/kg	0.78	1.9
Benzo[a]anthracene	10	mg/kg	0.78	6.0
Benzo[a]pyrene	10	mg/kg	0.78	5.2
Benzo[b]fluoranthene	10	mg/kg	0.78	7.0
Benzo[g,h,i]perylene	10	mg/kg	0.78	3.1
Benzo[k]fluoranthene	10	mg/kg	0.78	2.5
Chrysene	10	mg/kg	0.78	5.4
Dibenzo[a,h]anthracene	10	mg/kg	0.78	0.81
Fluoranthene	10	mg/kg	0.78	12
Fluorene	10	mg/kg	0.78	ND
Indeno[1,2,3-cd]pyrene	10	mg/kg	0.78	2.7
Naphthalene	10	mg/kg	0.23	0.27
Phenanthrene	10	mg/kg	0.78	9.6
Pyrene	10	mg/kg	0.78	11

**Paint Filter Test 9095B**

Analyte	DF	Units	RL	Result
Paint Filter Test	1			NEG

**PCB 8082**

Analyte	DF	Units	RL	Result		
Aroclor (Total)	1	mg/kg	0.029	1.5		
Aroclor-1016	1	mg/kg	0.029	ND		
Aroclor-1221	1	mg/kg	0.029	ND		
Aroclor-1232	1	mg/kg	0.029	ND		
Aroclor-1242	1	mg/kg	0.029	ND		
Aroclor-1248	1	mg/kg	0.029	ND		
Aroclor-1254	1	mg/kg	0.029	1.5		
Aroclor-1260	1	mg/kg	0.029	ND		
Aroclor-1262	1	mg/kg	0.029	ND		
Aroclor-1268	1	mg/kg	0.029	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	136.63	100	37	141	137	
TCMX-Surrogate	119.65	100	37	141	120	
DCB-Surrogate	70.15	100	34	146	70	
DCB-Surrogate	69.67	100	34	146	70	

**pH 9040C/9045D**

Analyte	DF	Units	RL	Result
pH	1	ph		10

Sample ID: SB-07 COMP  
 Lab#: AD26292-014  
 Matrix: Soil

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

Temperature	1	c	22.8			
<b>Reactive Cyanide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Cyanide (Reactive)	1	mg/kg	0.50	ND		
<b>Reactive Sulfide</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Sulfide (Reactive)	1	mg/kg	100	ND		
<b>TCLP Metals 6010D</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Arsenic	2	mg/l	0.20	ND		
Barium	1	mg/l	0.25	0.93		
Cadmium	1	mg/l	0.050	ND		
Chromium	2	mg/l	0.20	ND		
Lead	2	mg/l	0.10	1.7		
Nickel	1	mg/l	0.10	ND		
Selenium	2	mg/l	0.20	ND		
Silver	2	mg/l	0.10	ND		
<b>Total PetroleumHydrocarbons8015D(C8-C40)</b>						
<b>Analyte</b>	<b>DF</b>	<b>Units</b>	<b>RL</b>	<b>Result</b>		
Total Petroleum Hydrocarbons	1	mg/kg	71	1400		
<b>Surrogate</b>	<b>Conc.</b>	<b>Spike</b>	<b>Low Limit</b>	<b>High Limit</b>	<b>Recovery</b>	<b>Flags</b>
O-Terphenyl	15.15	20	30	146	76	
Chlorobenzene	9.50	20	20	117	48	

Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054  
 Ph (Service Center): 856-780-6057 Fax: 856-780-6056

NEACNJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

# HC

CHAIN OF CUSTODY  
 RECORD

Hampton-Clarke  
 A Women-Owned, Disadvantaged, Small Business Enterprise

Project# (Lab Use Only)  
 1092905

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3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ HazSite
1 Business Day (100%) *	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%) *	Reduced:	EnviroData
3 Business Days (50%) *	[ ] NJ [ ] NY	ECUS:
4 Business Days (35%) *	[ ] PA [ ] Other	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP Calif	[ ] NYDEC
8 Business Days (Stand.)	NY ASP Calif	[ ] Region 2 or 5
Other:		Other:

\* Expedited TAT Not Always Available. Please Check with Lab.

1a) Customer: LOUIS BERGES  
 Address: 46 MONTCH ST, RM F1  
NY, NY 10014  
 1b) Email/Call/Fax/Pr: Tanaguanz@wsp.com  
Tanaguanz@wsp.com  
 1c) Send Invoice to: Tanaguanz@wsp.com  
Jan Gagnz  
 1d) Send Report to: Jan Gagnz

2a) Project: 7 and St  
 Project Information  
 2b) Project Mgr: Jon Gagnz  
 2c) Project Location (City/State): Brooklyn, NY  
 2d) Quote/PO # (if Applicable): 31409661, 091

FOR LAB USE ONLY  
 Batch # ADZ6272  
 Matrix Codes: DW - Drinking Water, S - Soil, A - Air, GW - Ground Water, SL - Sludge, WW - Waste Water, OL - Oil, OT - Other (please specify under item 9, Comments)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample		Composite (C)	Grab (G)	7) Analysis (specify methods & parameter lists)	8) # of Bottles						9) Comments				
			Date	Time				None	MeOH	En Core	NaOH	HCl	H2SO4		HNO3	Other:		
001	SB01	S	9/28/21	1415	X	X	VO = NY PAHs (8220C) TPH DOC/CO/SOISB PCBs (80824/608) TCP Metals (RURAD) (BN/601B) PCRA Character Q012B/Q024B/Q036B Paint Pile-Test Q045B											
002	SB01	S	9/28/21	1415	X	X												
003	SB02	S	9/28/21	1322	X	X												
004	SB02	S	9/28/21	1320	X	X												
005	SB03	S	9/28/21	0820	X	X												
006	SB03	S	9/28/21	0800	X	X												
007	SB04	S	9/28/21	0845	X	X												
008	SB04	S	9/28/21	0845	X	X												
009	SB05	S	9/28/21	1050	X	X												
010	SB05	S	9/28/21	1050	X	X												

10) Relinquished by: Harry August Accepted by: \_\_\_\_\_ Date: 9/28/21 Time: 17:39

11) Sampler (print name): Harry August Date: 9/28/21

Additional Notes: Follow TAT's per analysis

Comments, Notes, Special Requirements, HAZARDS  
 Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):  
 BN or BNA (8270E SIM)  
 VOC (8260D SIM or 8011)  
 SPLP (BN, BNA, Metals)  
 1,4 Dioxane  
 Check if applicable:  
 Project-Specific Reporting Limits  
 High Contaminant Concentrations  
 NJ LSRP Project (also check boxes above/right)  
 NJ LSRP Project (also check boxes above/right)

For NJ LSRP projects, indicate which standards need to be met:  
 NUDEP GWQS  
 NUDEP SRS  
 NUDEP SPLP  
 Other (specify): \_\_\_\_\_

Cooler Temperature: 5.2

Please note NUMBERED items. If not completed your analytical work may be delayed.  
 A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP# \_\_\_\_\_

**Hampton-Clarke, Inc. (WBE/DBE/SBE)**

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004  
 Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458

Service Center: 137-D Gailher Drive, Mount Laurel, New Jersey 08054  
 Ph (Service Center): 856-780-6057 Fax: 856-780-5056



**CHAIN OF CUSTODY RECORD**

A Women-Owned, Disadvantaged, Small Business Enterprise

Project# (Lab Use Only)  
 1092905

Page 2 of 2

**3) Reporting Requirements (Please Circle)**

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ HazSite
1 Business Day (100%)*	Results + QC (Waste)	Excel Req. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NU [ ] NY	EQUIP:
4 Business Days (35%)*	[ ] PA [ ] Other	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		

\* Expedited TAT Not Always Available. Please Check with Lab.

**Customer Information**

1a) Customer: LOUIS BERGER  
 Address: 46 MORTON ST 8TH FL  
NY, NY, 10014  
 1b) Email/Cell/Fax/Ph: 516-942-0150  
516-942-0150  
 1c) Send Invoice to: Engineering w/procum  
Don Gantz  
 1d) Send Report to:

**Project Information**

2a) Project: 72nd St  
 2b) Project Mgr: Don Gantz  
 2c) Project Location (City/State): Brooklyn, NY  
 2d) Quote/PO # (If Applicable): 31403612091

**FOR LAB USE ONLY**

Batch # AS26292  
 Matrix Codes: S - Soil, A - Air, DW - Drinking Water, GW - Ground Water, WW - Waste Water, OL - Oil, OT - Other (please specify under item 9, Comments)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample		Composite (C)	Grab (G)	7) Analysis (specify methods & parameter lists)	8) # of Bottles						9) Comments				
			Date	Time				None	MeOH	En Core	NaOH	HCl	H2SO4		HNO3	Other:		
011	SB 06	S	9/28/09	1000	X	X	PAHs (8x70C) DRE/6AC/ TPH (8015B) PCB: (8081A/608) TEP Metals (CRCRAB, B11/601B) RCRA Character 9012B/C/D/E, P-20004 Paint Filter Test 9095B											
012	SB 06	S		1000	X	X												
013	SB 07	S		1135	X	X												
014	SB 07	S		1135	X	X												

10) Relinquished by: Harry August Accepted by: [Signature]

Date: 9/28/09 Time: 17:39

Comments, Notes, Special Requirements, HAZARDS  
 Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):  
 BN or BNA (8270E SIM)  
 VOC (8260D SIM or 8011)  
 SPLP (BN, BNA, Metals)  
 1,4 Dioxane  
 Check if applicable:  
 Project-Specific Reporting Limits  
 High Contaminant Concentrations  
 NJ LSRP Project (also check boxes above/right)  
 For NJ LSRP projects, indicate which standards need to be met:  
 NUDEP GWQS  
 NUDEP SRS  
 NUDEP SPLP  
 Other (specify):  
 Cooler Temperature: 3-2

11) Sampler (print name): Harry August Date: 9/28/09  
 Additional Notes: Follow TAT's per analysis  
 Internal use: sampling plan (check box) HCl [ ] or client [ ] FSP#



# Hampton-Clarke Report Of Analysis

Client: WSP USA, Inc.

HC Project #: 1092823

Project: 72nd Street

Sample ID: TWP01

Collection Date: 9/28/2021

Lab#: AD26286-001

Receipt Date: 9/28/2021

Matrix: Aqueous

## Carbonaceous BOD-5 Day (SM5210 B-11)

Analyte	DF	Units	RL	Result
Carbonaceous Bod, 5 Day	1	mg/l	2.0	ND

## Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	2	mg/l	4.0	54

## Cr (Hexavalent) 3500-Cr B11

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.020	ND

## Flash Point 1010A

Analyte	DF	Units	RL	Result
Flash Point	1	deg. f		>141

## Mercury (Water) 245.1

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.20	0.41

## Metals-Three 200.7

Analyte	DF	Units	RL	Result
Copper	1	ug/l	25	100
Nickel	1	ug/l	10	ND
Zinc	1	ug/l	25	180

## Metals-Two 200.8

Analyte	DF	Units	RL	Result
Cadmium	1	ug/l	1.0	ND
Lead	1	ug/l	0.75	250

## Nitrate-N (Water) 300.0

Analyte	DF	Units	RL	Result
Nitrate	1	mg/l	1.0	ND

## Nitrite-N (Aqueous) 300.0

Analyte	DF	Units	RL	Result
Nitrite	1	mg/l	1.0	ND

## PCB 608.3

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	ug/l	0.0500	ND
Aroclor-1016	1	ug/l	0.0500	ND
Aroclor-1221	1	ug/l	0.0500	ND
Aroclor-1232	1	ug/l	0.0500	ND
Aroclor-1242	1	ug/l	0.0500	ND
Aroclor-1248	1	ug/l	0.0500	ND
Aroclor-1254	1	ug/l	0.0500	ND
Aroclor-1260	1	ug/l	0.0500	ND
Aroclor-1262	1	ug/l	0.0500	ND
Aroclor-1268	1	ug/l	0.0500	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	42.80	100	39	132	43	
TCMX-Surrogate	33.03	100	39	132	33	S6
DCB-Surrogate	53.37	100	39	142	53	
DCB-Surrogate	46.71	100	39	142	47	

Sample ID: TWP01  
 Lab#: AD26286-001  
 Matrix: Aqueous

Collection Date: 9/28/2021  
 Receipt Date: 9/28/2021

pH (SM4500-H+ B-11)

Analyte	DF	Units	RL	Result
pH	1	ph		8.2
Temperature	1	c		21.4

Semivolatile Organics (no search) 625.1

Analyte	DF	Units	RL	Result		
1,2,4-Trichlorobenzene	1	ug/l	2.00	ND		
Naphthalene	1	ug/l	0.500	ND		
Phenol	1	ug/l	2.00	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	63.30	50	55	146	127	
Phenol-d5	41.61	100	27	115	42	
Nitrobenzene-d5	53.83	50	51	139	108	
2-Fluorophenol	63.26	100	29	113	63	
2-Fluorobiphenyl	54.60	50	53	129	109	
2,4,6-Tribromophenol	110.94	100	54	149	111	

SGT-HEM (Non-Polar Material) 1664B

Analyte	DF	Units	RL	Result
SGT-HEM (Non-Polar Material)	1	mg/l	6.1	ND

Total Solids (SM2540B-11)

Analyte	DF	Units	RL	Result
Total Solids @ 103-105 C	1	mg/l	40	510

Total Suspended Solids (SM2540D-11)

Analyte	DF	Units	RL	Result
Total Suspended Solids @ 103-105 C	1	mg/l	6.7	56

Volatile Organics (no search) 624.1

Analyte	DF	Units	RL	Result		
1,1,1-Trichloroethane	1	ug/l	1.00	ND		
1,4-Dichlorobenzene	1	ug/l	1.00	ND		
Benzene	1	ug/l	0.500	ND		
Carbon tetrachloride	1	ug/l	1.00	ND		
Chloroform	1	ug/l	1.96	ND		
Ethylbenzene	1	ug/l	1.00	ND		
m&p-Xylenes	1	ug/l	1.00	ND		
Methyl-t-butyl ether	1	ug/l	0.500	ND		
o-Xylene	1	ug/l	1.00	ND		
Tetrachloroethene	1	ug/l	1.00	ND		
Toluene	1	ug/l	1.00	ND		
Xylenes (Total)	1	ug/l	1.00	ND		
Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.17	30	79	111	101	
Dibromofluoromethane	28.82	30	73	131	96	
Bromofluorobenzene	29.65	30	82	112	99	
1,2-Dichloroethane-d4	29.48	30	78	128	98	

**Hampton-Clarke, Inc. (WBE/DBE/SBE)**

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004  
 Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458

Service Center: 137-D Gailher Drive, Mount Laurel, New Jersey 08054  
 Ph (Service Center): 856-780-6057 Fax: 856-780-6056

NELA/CNJ #07/071 | PA #68-00463 | NY #11408 | CT #H-0671 | KY #00124 | DE HSCA Approved



**CHAIN OF CUSTODY RECORD**

A Women-Owned, Disadvantaged, Small Business Enterprise

Project# (Lab Use Only)  
**1092823**

Page 1 of 1

**3) Reporting Requirements (Please Circle)**

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ HazSite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	<input type="checkbox"/> NU <input type="checkbox"/> NY	EQUS:
4 Business Days (35%)*	<input type="checkbox"/> PA <input type="checkbox"/> Other	<input type="checkbox"/> 4-File <input type="checkbox"/> EZ
5 Business Days (25%)*	NJ Fill / NY ASP CatB	<input type="checkbox"/> NYDEC
8 Business Days (Stand)	NY ASP CatA	<input type="checkbox"/> Region 2 or 5
Other:		Other:

\* Expedited TAT Not Always Available. Please Check with Lab.

**Customer Information**

1a) Customer: Louis Bangle's  
 Address: 36 Merton St, 5th Fl  
NY, NY, 10014  
 1b) Email/Cell/Fax/Ph: 509.909.2014  
509.909.2014  
 1c) Send Invoice to: 509.909.2014  
 1d) Send Report to: 509.909.2014

**Project Information**

2a) Project: 78nd St  
 2b) Project Mgr: Tom Gnanz  
 2c) Project Location (City/State): Brooklyn, NY  
 2d) Quoter/PO # (if Applicable): 31403661.091

**FOR LAB USE ONLY**

Batch # AD26296

Matrix Codes  
 DW - Drinking Water S - Soil A - Air  
 GW - Ground Water SL - Sludge  
 WW - Waste Water OL - Oil  
 OT - Other (please specify under item 9, Comments)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)
<u>001</u>	<u>TWPO1</u>	<u>GW</u>	<u>10/21/11</u>	<u>1:15</u>		<u>X</u>

**7) Analysis (specify methods & parameter lists)**

<u>NYCOEP</u>	<u>ETHANOL</u>	<u>PERMETH</u>
---------------	----------------	----------------

**<=== Check If Contingent <===**

None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:
<u>10</u>				<u>5</u>	<u>1</u>	<u>1</u>	

**8) # of Bottles**

**9) Comments**

10) Relinquished by:	Accepted by:	Date	Time
<u>Harry August</u>	<u>R2</u>	<u>9/28/11</u>	<u>17:39</u>

Comments, Notes, Special Requirements, HAZARDS  
 Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):  
 BN or BNA (8270E SIM)  
 VOC (8260D SIM or 8014)  
 SPLP (BN, BNA, Metals)  
 1,4 Dioxane  
 Check if applicable:  
 Project-Specific Reporting Limits  
 High Contaminant Concentrations  
 NJ LSRP Project (also check boxes above/right)

For NJ LSRP projects, indicate which standards need to be met:  
 NJDEP GWQS  
 NJDEP SRS  
 NJDEP SPLP  
 Other (specify):

Cooler Temperature  
2.0 F

11) Sampler (print name): Harry August Date: 9/28/11  
 Additional Notes: Follow TAT's per analysis

Please note NUMBERED items. If not completed your analytical work may be delayed.  
 A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.  
 Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

## Sample Summary

Hampton Clarke-Veritech

Job No: JD32535

Project # 1092823

Project No: Project#1092823 COCID#7438

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
JD32535-1	09/28/21	14:15	09/30/21	AQ Water	AD26286-001 TWP01

## Report of Analysis

<b>Client Sample ID:</b> AD26286-001 TWP01 <b>Lab Sample ID:</b> JD32535-1 <b>Matrix:</b> AQ - Water <b>Project:</b> Project # 1092823	<b>Date Sampled:</b> 09/28/21 <b>Date Received:</b> 09/30/21 <b>Percent Solids:</b> n/a
---	---

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Total Kjeldahl	1.6	0.20	mg/l	1	10/07/21 18:10	EB	EPA 351.2/LACHAT

---

RL = Reporting Limit

# CHAIN OF CUSTODY RECORD

ww

JD32535

Hampton-Clarke, Inc.  
175 US Hwy 46 West  
Fairfield, New Jersey, 07004  
Ph 800-426-9992 Fax 973-439-1458

**Report To:**

Hampton-Clarke, Inc.:  
Attn: Reporting  
175 Route 46 West  
Fairfield, New Jersey 07004

**Invoice To:**

Hampton-Clarke, Inc.:  
Attn: Accounting  
175 Route 46 West  
Fairfield, New Jersey 07004

**Project #:**



1092823

**CocID#:**



7438

**FINAL RESULTS TO: subresults@hcvlab.com**

**PRELIM/VERBAL RESULTS TO: subresults@hcvlab.com**

**EED: NEW JERSEY HAZRESULT OR EQUIS EZEDD REQUIRED FOR ALL DATA SUBMITTALS!**

**Turn Around Time: Standard**

**Preliminary Due Date: 10/14/2021**

**Report Type: NYDOH-CatA (STAND**

**Hard Copy Due Date: 10/21/2021**

**Sample**

**Number: Client ID**  
AD26286-001 TWP01

**Date Time**

**Matrix: Collected: Collected: Analysis Requested**  
Aqueous 9/28/2021 2:15:00 PM TKN Method: EPA 351

C2

CA  
9/29

**Relinquished By:**

**Accepted By:**

**Date:**

9/30/21

**Time:**

11:30

**Comments, Notes, Special Requirements, HAZARDS**

Incl. 4 vials extract MK-SB  
Label Verification \_\_\_\_\_

**Cooler Temp:** CIP ~~4~~ 1.1°

#6-4

HC Lab Use Only:

Subcontracted Lab Id and Contact: ACCUTEST SGS, Sample Receiving, (732) 329-0200, LabID: H, Fresh Ponds Corporate Village, Bldg. B, 2235 Route 130, Day

JD32535: Chain of Custody

Page 1 of 2

## SGS Sample Receipt Summary

Job Number: JD32535

Client: \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time Received: 9/30/2021 11:30:00 AM

Delivery Method: \_\_\_\_\_

Airbill #'s: \_\_\_\_\_

Cooler Temps (Raw Measured) °C: Cooler 1: (1.1);

Cooler Temps (Corrected) °C: Cooler 1: (1.1);

**Cooler Security**

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | _____                               |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |
| 4. No. Coolers:              | 1                                   |                          |

**Quality Control Preservation**

Y or N

N/A

- |                                 |                                     |                                     |                                     |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**Sample Integrity - Documentation**

Y or N

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

**Sample Integrity - Instructions**

Y or N N/A

- |   |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Test Strip Lot #s:      pH 1-12: 231619      pH 12+: 203117A      Other: (Specify) \_\_\_\_\_

Comments

SM089-03  
Rev. Date 12/7/17

**JD32535: Chain of Custody**

**Page 2 of 2**