

BT Red Hook, LLC

Additional Soil Borings Work Plan

**Red Hook 3 Site No. C224213
68 and 100 Ferris Street/242 and 300 Coffey Street
Borough of Brooklyn, Kings County, New York**

December 2025

Additional Soil Borings Work Plan

Red Hook 3 Site No. C224213
68 and 100 Ferris Street/242 and 300 Coffey Street
Borough of Brooklyn, Kings County, New York

December 2025

Prepared By:

Arcadis of New York, Inc.
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Syracuse, New York 13202
Phone: 315 446 9120
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Prepared For:

BT Red Hook, LLC

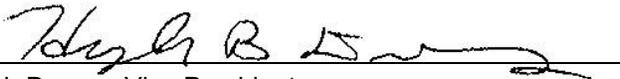
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Certification

I, Hugh Devery, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Additional Soil Borings Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).

A handwritten signature in black ink, appearing to read "Hugh B. Devery", is written over a horizontal line.

Hugh Devery, Vice President
Project Manager

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Acronyms and Abbreviations

AESI	Atlantic Environmental Solutions, Inc.
Arcadis	Arcadis of New York, Inc.
BCP	Brownfield Cleanup Program
bgs	below ground surface
BT Red Hook	BT Red Hook, LLC
DER-10	Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation
DNAPL	dense non-aqueous phase liquid
IRM	interim remedial measure
Langan	Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
NAPL	non-aqueous phase liquid
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
RH3/Site	Red Hook 3 Brownfield Site (NYSDEC Brownfield Site No. C224213)
Work Plan	Additional Soil Borings Work Plan

1 Introduction

On behalf of BT Red Hook, LLC (BT Red Hook), Arcadis of New York, Inc. (Arcadis) has prepared this Additional Soil Borings Work Plan (Work Plan) for the Red Hook 3 Brownfield Site (Site Number C224213), hereafter referred to as “RH3” or the “Site,” located at 68 and 100 Ferris Street, 242 and 300 Coffey Street, Brooklyn, New York. As discussed during a July 24, 2025 meeting between representatives of the New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), BT Red Hook, and Arcadis, updated geologic cross sections were prepared by Arcadis and transmitted to NYSDEC with Arcadis’ letter dated October 1, 2025 (Arcadis 2025; copy included in **Attachment 1**). NYSDEC subsequently identified eleven step-out soil boring locations in their letter dated November 18, 2025 (NYSDEC 2025a; **Attachment 1**) for further delineation of the extent of non-aqueous phase liquid (NAPL) on RH3. Arcadis requested clarification during a conference call with NYSDEC on November 21, 2025 (NYSDEC 2025b) wherein the number of soil borings was reduced to ten.

As substantial historical investigation and remediation activities have been summarized in documents previously submitted to and approved by NYSDEC, discussion of prior work in this Work Plan will be limited to investigative work associated with advancement of soil borings.

2 Site Background and Description

RH3 is an approximately 9.1-acre, irregularly L-shaped parcel located within a mixed industrial, commercial, and residential area in an urban setting (**Figure 1**). Previous NYSDEC/NYSDOH-approved activities for this Site conducted under the Brownfield Cleanup Program (BCP) and pertinent to soil investigations included:

- A Remedial Investigation Work Plan submitted by Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan; 2016);
- A Remedial Investigation conducted by Langan in February 2017, which included soil borings and sampling (results reported by Atlantic Environmental Solutions, Inc. [AESI], see below);
- Continuation of the remedial investigation conducted by AESI in May and June 2017, which included additional soil borings and sampling;
- A Remedial Investigation Report prepared by AESI (AESI 2017) (included work performed by Langan);
- A Human Health Exposure Assessment – Red Hook 3 (Arcadis 2018a);
- A Supplemental Remedial Investigation Work Plan – Red Hook 3 (Arcadis 2018b);
- A Supplemental Remedial Investigation Report – Red Hook 3 Revised (Arcadis 2019a);
- A letter report detailing the results of the NYSDEC-requested Pre-Design Confirmation Soil Borings Program (Arcadis 2019b [**Attachment 1**]), conducted by Arcadis to confirm the absence of non-aqueous phase liquid (NAPL) saturated source material along the proposed Interim Remedial Measure (IRM) excavation limits and drill step-out confirmation soil borings as necessary (Arcadis 2022);
- An IRM conducted by Arcadis in 2020; and
- A Construction Completion Report (Arcadis 2022) approved by NYSDEC in a letter dated February 11, 2022.

Elevation across RH3 ranges from approximately 8 feet above mean sea level at the extreme eastern corner, near the intersection of Ferris and Wolcott Streets, to 11 feet above mean sea level along the retaining wall at the

western/northwestern boundary along Buttermilk Channel. Groundwater can be found at depths ranging from approximately 4 to 8 feet below ground surface (bgs) across the Site. Ground cover at RH3 is composed of the cap stone placed during the IRM and crushed concrete/brick placed by BT Red Hook from the demolition of buildings at RH3 as part of property redevelopment. RH3 is surrounded by an 8-foot construction fence with access from Wolcott Street.

Previous soil boring and monitoring well locations (work conducted by Arcadis and others) proximate to the IRM excavation areas are shown on **Figure 2**. The NAPL on RH3 is a dense non-aqueous phase liquid (DNAPL).

3 Field Work Scope Summary

As required by NYSDEC, the extent of DNAPL on RH3 will be further delineated by advancing 10 soil borings at locations shown on **Figure 2**. This Work Plan details the sample locations and field protocols.

Field activities will include the advancement and logging of ten soil borings to minimum terminal depths of 30 feet bgs. Prior to ground-intrusive work, a U-Dig NY call will be placed. Coordinates and elevations of the NYSDEC-identified soil boring locations will be established by a New York State licensed land surveyor and then scanned by a private utility locator utilizing Ground Penetrating Radar and electromagnetic techniques.

As per the NYSDOH's Generic Community Air Monitoring Plan within the NYSDEC's Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10), continuous air monitoring will be conducted during all ground intrusive activities.

3.1 Soil Boring Advancement, Logging and Abandonment

Soil borings and evaluation will be conducted according to applicable provisions of the NYSDEC-approved Supplemental Remedial Investigation Work Plan – Red Hook 3 (Arcadis 2018b). Ten soil borings will be advanced to a minimum terminal depth of 30 feet bgs as identified in the NYSDEC letter to BT Red Hook dated November 18, 2025. The depth of 30 feet extends beyond previously identified maximum remaining DNAPL depth of 27 feet bgs. If DNAPL blebs or saturation are encountered in the soil core interval terminating at 30 feet bgs, then the boring will be continued to one foot beyond the termination of DNAPL blebs or saturation. If direct-push tooling cannot advance borings to the appropriate depth, hollow-stem augers will be used to advance borings. Each boring location will be pre-cleared to 5 feet bgs using soft-dig techniques. The advancement of soil borings will be performed by direct-push techniques. Soil cores will be obtained in acetate liners over the entire depth interval of each boring and logged by an Arcadis geologist with experience logging soils at sites with DNAPL impacts.

Soil cores will be scanned for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID) equipped with a 10.6 electron-volt (eV) lamp and visually characterized for the presence of DNAPL impacts. Consistent with previous work, observation of discrete, discontinuous droplets of DNAPL will be recorded as “blebs” and soil pore spaces observed to be principally occupied by DNAPL will constitute “saturation”. The presence of visible staining and obvious odors will also be noted, consistent with previous work. Soil samples will be collected for laboratory analyses for waste characterization purposes, as identified in Section 3.4. Upon completion of each soil boring, the borehole will be backfilled with bentonite.

3.2 Field Documentation

Field documentation will include boring logs and photographs of soil cores over the entire depth of each soil boring.

3.3 Community Air Monitoring

As identified in the introduction to Section 3, community air monitoring will be conducted in accordance with the NYSDOH's Generic Community Air Monitoring Plan within DER-10. Specifically, Arcadis will conduct real-time monitoring for VOCs and particulate matter less than 10 micrometers in diameter (PM₁₀) during ground intrusive activities using one upwind and a minimum of one downwind air monitoring stations. Fifteen-minute average air monitoring readings will be recorded and will be available to the NYSDEC upon request. The community air monitoring data will be summarized in the report to be submitted to the NYSDEC as identified in Section 4.

3.4 Management of Investigation-Derived Waste

Drill cuttings, miscellaneous investigation-derived waste (e.g., plastic sheeting) and personal protective equipment will be stored on-site in steel, 55-gallon drums pending laboratory analyses for waste characterization. Once characterized, the waste will be profiled and arrangements made for pick up and transportation by a licensed waste hauler to an appropriately permitted disposal facility.

4 Reporting

A report detailing the soil boring advancement and logging and community air monitoring will be prepared by Arcadis and submitted to the NYSDEC. The report will consist of a summary of the field activities and observations, soil boring logs, a photolog for each soil boring, a figure showing the surveyed soil boring locations, community air monitoring data and a discussion of the results with particular focus on the nature and extent (horizontal and vertical) of DNAPL impacts.

5 Schedule

BT Red Hook is prepared to implement the above-described work at RH3 within 30 days (subject to driller availability) of NYSDEC approval of this Work Plan. A minimum of 7 days' notice will be provided to the NYSDEC prior to beginning fieldwork. The report will be provided to the NYSDEC within 6 weeks of completion of the fieldwork.

6 References

AESI. 2017. Remedial Investigation Report, Red Hook 3, 68 Ferris Street (Block 573, Lot 100), 100 Ferris Street (Block 573, Lot 1), 242-300 Coffey Street (Block 595, Lot 70), NYSDEC BCP Site C224213. October.

Arcadis. 2018a. Human Health Exposure Assessment – Red Hook 3, Site No. C224213, 68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, Kings County, New York. October.

Additional Soil Borings Work Plan

Arcadis. 2018b. Supplemental Remedial Investigation Work Plan – Red Hook 3, Site No. C224213, 68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, Kings County, New York. July.

Arcadis. 2019a. Supplemental Remedial Investigation Report – Red Hook 3 Revised, Site No. C224213, 68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, Kings County, New York. March.

Arcadis. 2019b. Confirmation Soil Borings letter. Red Hook 3 Site No. C224213, 68 and 100 Ferris Street, 242/300 Coffey Street, Borough of Brooklyn, Kings County, New York. June.

Arcadis 2022. Construction Completion Report. Red Hook 3 Site No. C224213, 68 and 100 Ferris Street, 242/300 Coffey Street, Borough of Brooklyn, Kings County, New York. February.

Arcadis. 2025. Letter from T. Young (Arcadis) to R. Bellotti (NYSDEC). re: Response/Actions to Address Remedial Action Work Plan Comments, Red Hook 3 Properties Site; #C224213, 68 and 100 Ferris Street/242 and 300 Coffey Street, Borough of Brooklyn, Kings County, New York. October 1.

Langan. 2016. Remedial Investigation Work Plan for Red Hook 3 Properties, 68 and 100 Ferris Street, 242 and 300 Coffey Street, Brooklyn, New York, Block 573, Lots 1, 80 and 100, Block 595, Lot 70, NYSDEC BCP Site No. C224213. August 23.

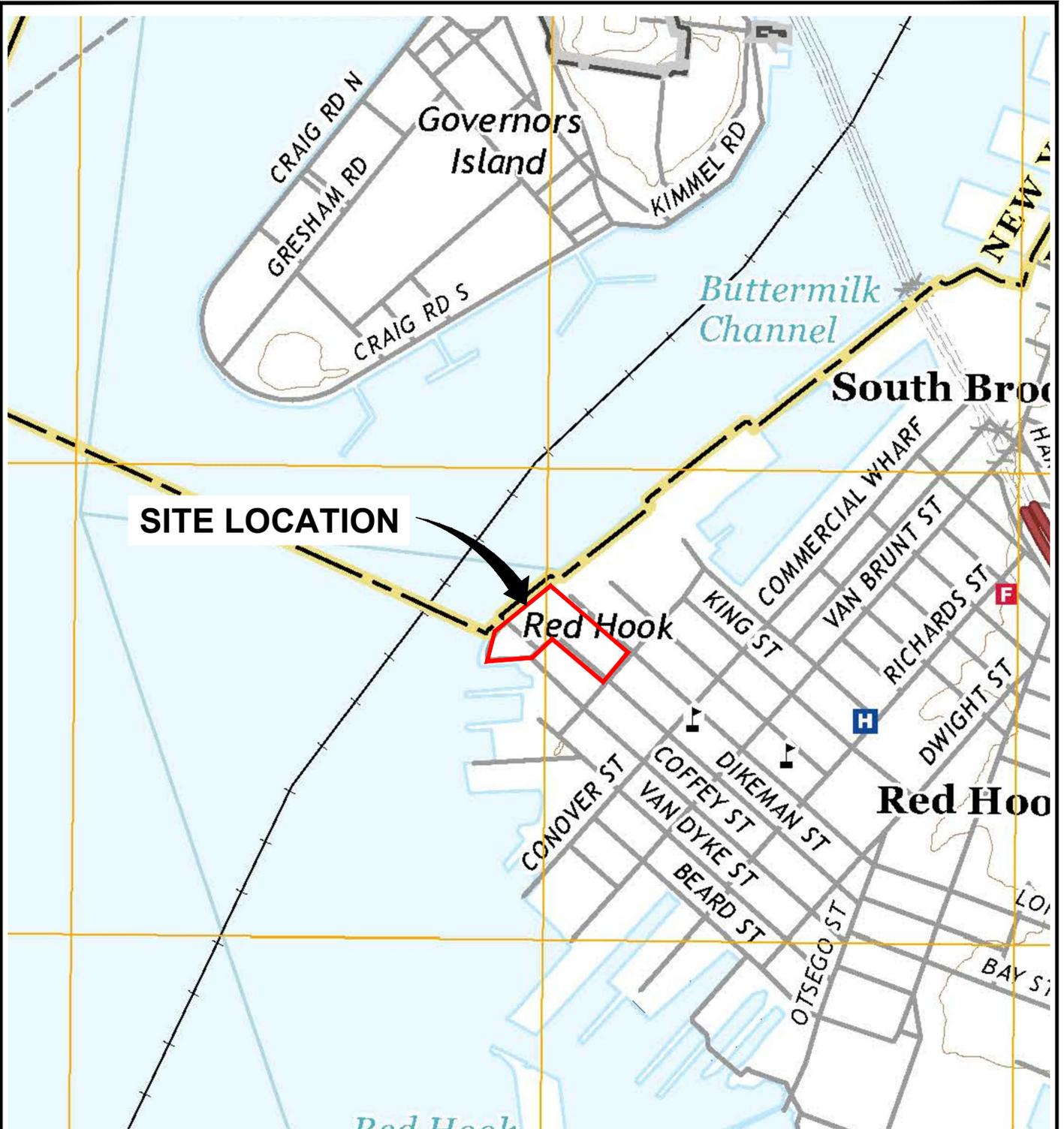
NYSDEC. 2010. DER-10 Technical Guidance for Site Investigation and Remediation. May 3. Errata Sheet last revised 04/09/2019. Available online at: <http://www.dec.ny.gov/regulations/67386.html>.

NYSDEC. 2025a. Letter from R. Bellotti (NYSDEC) to A. Briggs (BT Red Hook). re: Additional Soil Borings, NYSDEC Brownfield Site #C224213; Red Hook 3 Properties, 68 and 100 Ferris Street, 242 and 300 Coffey St., Brooklyn, Kings County, New York. November 18.

NYSDEC. 2025b. Conference Call with representatives from NYSDEC, NYSDOH, BT Red Hook and Arcadis, re: Red Hook 3 (C224213). November 21.

Figures

C:\Users\bdclercq\ArcGIS\Projects\New York\Project Files\2021\01-In Progress\01-DWG\RRH3-CCR-Fig 1-Site Location Map.dwg SAVED: 7/8/2021 1:38 PM BY: DECLERCQ, BRIAN



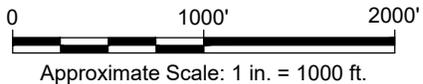
SITE LOCATION

Red Hook

South Broo

Red Hoo

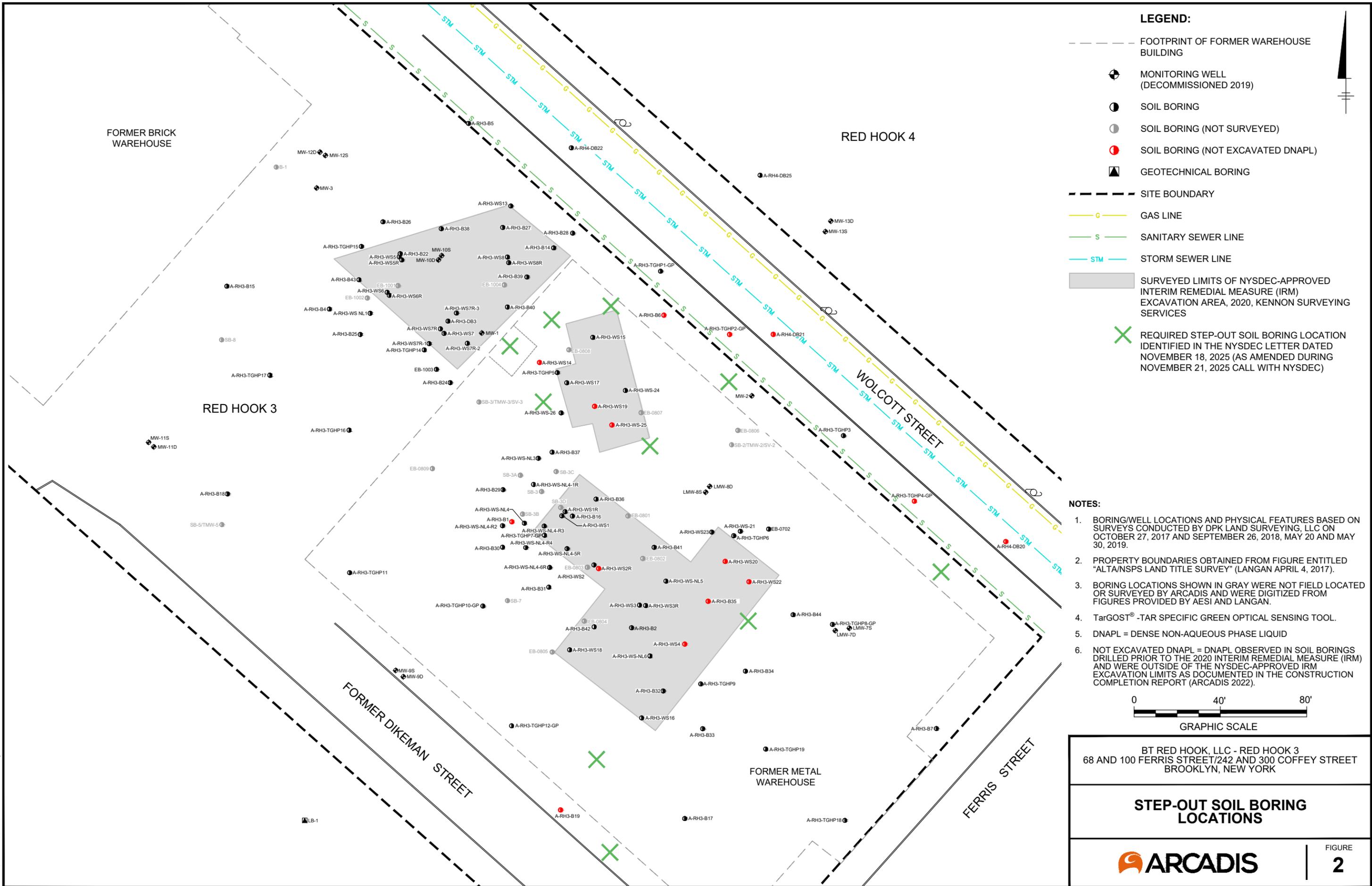
REFERENCE: BASE MAP USGS 7.5 MIN. TOPO. QUADS., JERSEY CITY, NJ-NY, 2016



BT RED HOOK, LLC - RED HOOK 3
68 AND 100 FERRIS STREET / 242 AND 300 COFFEY STREET
BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK

SITE LOCATION MAP

	FIGURE 1
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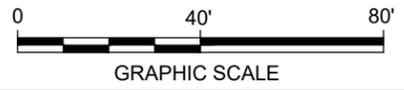


LEGEND:

- FOOTPRINT OF FORMER WAREHOUSE BUILDING
- ⊕ MONITORING WELL (DECOMMISSIONED 2019)
- SOIL BORING
- SOIL BORING (NOT SURVEYED)
- SOIL BORING (NOT EXCAVATED DNAPL)
- ▲ GEOTECHNICAL BORING
- - - SITE BOUNDARY
- G GAS LINE
- S SANITARY SEWER LINE
- STM STORM SEWER LINE
- ▭ SURVEYED LIMITS OF NYSDEC-APPROVED INTERIM REMEDIAL MEASURE (IRM) EXCAVATION AREA, 2020, KENNON SURVEYING SERVICES
- X REQUIRED STEP-OUT SOIL BORING LOCATION IDENTIFIED IN THE NYSDEC LETTER DATED NOVEMBER 18, 2025 (AS AMENDED DURING NOVEMBER 21, 2025 CALL WITH NYSDEC)

NOTES:

1. BORING/WELL LOCATIONS AND PHYSICAL FEATURES BASED ON SURVEYS CONDUCTED BY DPK LAND SURVEYING, LLC ON OCTOBER 27, 2017 AND SEPTEMBER 26, 2018, MAY 20 AND MAY 30, 2019.
2. PROPERTY BOUNDARIES OBTAINED FROM FIGURE ENTITLED "ALTA/NSPS LAND TITLE SURVEY" (LANGAN APRIL 4, 2017).
3. BORING LOCATIONS SHOWN IN GRAY WERE NOT FIELD LOCATED OR SURVEYED BY ARCADIS AND WERE DIGITIZED FROM FIGURES PROVIDED BY AESI AND LANGAN.
4. TarGOST® -TAR SPECIFIC GREEN OPTICAL SENSING TOOL.
5. DNAPL = DENSE NON-AQUEOUS PHASE LIQUID
6. NOT EXCAVATED DNAPL = DNAPL OBSERVED IN SOIL BORINGS DRILLED PRIOR TO THE 2020 INTERIM REMEDIAL MEASURE (IRM) AND WERE OUTSIDE OF THE NYSDEC-APPROVED IRM EXCAVATION LIMITS AS DOCUMENTED IN THE CONSTRUCTION COMPLETION REPORT (ARCADIS 2022).



BT RED HOOK, LLC - RED HOOK 3
 68 AND 100 FERRIS STREET/242 AND 300 COFFEY STREET
 BROOKLYN, NEW YORK

STEP-OUT SOIL BORING LOCATIONS

Attachment 1

Project Correspondence

Confirmation Soil Borings Letter, Arcadis, June 2019

Mr. Chris Heller
Project Manager
New York State Department of Environmental Conservation
Remedial Bureau A
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7015

Arcadis of New York, Inc.
One Lincoln Center
110 West Fayette Street
Suite 300
Syracuse
New York 13202
Tel 315 446 9120
Fax 315 449 0017
www.arcadis.com

Subject:
Confirmation Soil Borings
Red Hook 3 – NYSDEC Brownfield Site #C224213
68 and 100 Ferris Street, 242 and 300 Coffey Street
Brooklyn, Kings County, New York 11231

ENVIRONMENT

Date:
June 28, 2019

Dear Mr. Heller:

Contact:
Catherine Geraci

Pursuant to our meeting on April 25, 2019 and as identified in the Draft Interim Remedial Measure (IRM) Design Work Plan (Work Plan; June 2019) prepared by Arcadis of New York, Inc. (Arcadis), this letter documents the confirmation soil boring program recently completed at the above-reference site. The objective of the program was to confirm the proposed IRM excavation limits identified in the Work Plan by determining the absence/presence of non-aqueous phase liquid (NAPL) saturated source material along the proposed limits.

Phone:
315.671.9567

Email:
Catherine.Geraci@arcadis.com

Our ref:
B0038994.0003

Horizontal excavation limits for Red Hook 3 were confirmed based on visual observations made from borings (confirmation and previously drilled borings) located approximately 30 feet on center, except where installation of borings and/or horizontal excavation advancement did not occur because of the site boundary parallel to Wolcott Street and the proximate gas line. The terminal depth for the confirmation soil borings was 30 feet below ground surface (bgs), which is 10 to 15 feet deeper than the proposed excavation depths per the New York State Department of Environmental Conservation's (NYSDEC's) request (NYSDEC April 29, 2019 email to Arcadis).

Drilling for the pre-design confirmation soil boring program was completed on May 23, 2019 and the surveyed locations are shown on the figure provided in Attachment 1. As shown on the figure, step-out confirmation soil borings were drilled, as necessary, based on observations of NAPL-saturated source material along some of the proposed excavation limits. The soil boring and photograph

Mr. Chris Heller
New York State Department of Environmental Conservation
June 28, 2019

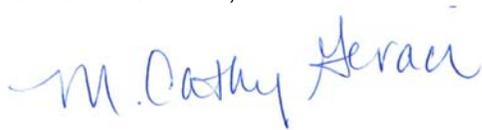
logs for the confirmation soil boring program are provided in Attachments 2 and 3, respectively.

Accordingly, and as discussed during conference call amongst representatives from NYSDEC, the New York State Department of Health and Arcadis, modifications to the Red Hook 3 excavation limits identified in the Work Plan are necessary. Under separate cover, additional information (e.g., figure with Red Hook 3 NAPL intervals identified and geologic cross-sections spanning both Red Hook 3 and Red Hook 4) will be provided to NYSDEC to assist in determining the modified Red Hook 3 IRM excavation boundaries and facilitate our conference call scheduled for July 2, 2019.

BT Red Hook, LLC and Arcadis appreciate the NYSDEC's continued attention to this project and look forward to our conference call. In the interim, if you have any questions, please contact me at (315) 671-9567 or at catherine.geraci@arcadis.com.

Sincerely,

Arcadis of New York, Inc.



Cathy Geraci
Principal Environmental Engineer

Copies:

Moniqua Williams, BT Red Hook, LLC
Eric Obrecht, NYSDEC
Terry Young, PE, Arcadis
Hugh Devery, Arcadis
Andrew Korik, Arcadis

Enclosures:

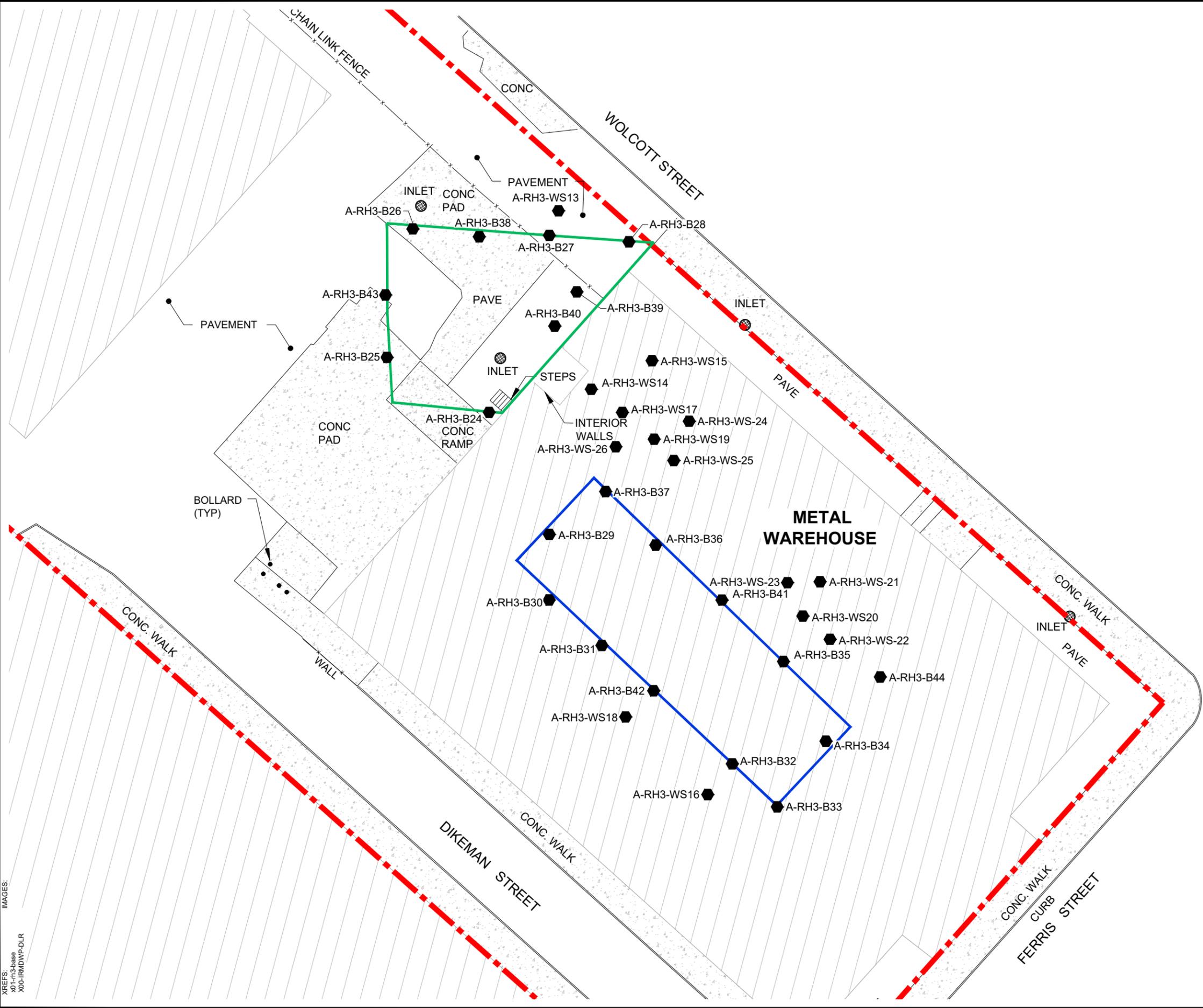
Attachments

- 1 Confirmation Soil Boring Locations Figure (from Arcadis' June 2019 Draft IRM Design Work Plan)
- 2 Confirmation Soil Boring Logs
- 3 Confirmation Soil Boring Photolog

ATTACHMENT 1

Confirmation Soil Boring Locations Figure
(from Arcadis' June 2019 Draft IRM Design Work Plan)





LEGEND:

- CONFIRMATION SOIL BORING LOCATION
- PROPOSED 15-FOOT EXCAVATION (SEE NOTE 3)
- PROPOSED 20-FOOT EXCAVATION

- NOTES:**
1. FIGURE IS BASED ON A SURVEY PREPARED BY DPK LAND SURVEYING, LLC ON 11/2/2017. CONFIRMATION SOIL BORING LOCATIONS WERE SURVEYED BY DPK IN MAY 2019.
 2. PROPERTY BOUNDARIES OBTAINED FROM FIGURE ENTITLED "ALTA/NSPS LAND TITLE SURVEY" (LANGAN APRIL 4, 2017).
 3. ACTUAL EXCAVATION LIMITS WILL BE DETERMINED DURING THE DESIGN WHICH WILL INCLUDE, BUT NOT BE LIMITED TO, COMPLETION OF THE NYSDEC-REQUIRED PRE-DESIGN CONFIRMATION SOIL BORING PROGRAM AND REVIEW OF EXISTING UTILITIES.



DRAFT

BT RED HOOK, LLC - RED HOOK 3
 44 AND 62 FERRIS STREET / 219 SULLIVAN STREET
 BROOKLYN, NEW YORK
INTERIM REMEDIAL MEASURE DESIGN WORK PLAN

**PRE-DESIGN CONFIRMATION
 SOIL BORING LOCATIONS**



ATTACHMENT 2

Confirmation Soil Boring Logs



Date Start/Finish: 4/30/19 - 5/3/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186838.91
Easting: 979591.30
Casing Elevation: NA
Surface Elevation: 9.28' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B24
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
10									
0								Hand-cleared from 0-5' bgs. ASPHALT.	
					10.2			Brown fine to coarse SAND, some subangular to subrounded Gravel and Pebbles, trace Silt and Concrete fragments, poorly sorted, loose, moist. Subrounded Gravel, odor.	
		NA	0-5	NA	69.5				
					983.2				
					1,045				
5					4,496				
					0.0			Little fine to coarse angular Gravel and Brick.	
					2.3				
		1	5-10	1.2	162.0				
					139.9				
0					24.2			Dark gray SILT, some fine Sand, trace fine angular Gravel, soft, wet, slight odor, slight iridescent sheen.	
					145.8				
		2	10-15	3.3	52.5				
					4.4			Red brown very fine to medium SAND, some Clay, trace fine to coarse subangular Gravel, low plasticity, moist.	
					0.0				
-5					0.0			Red brown fine to medium SAND, trace Silt, well sorted, moist, slight odor.	
					0.0				
15					2,714				

Boring backfilled to grade with bentonite pellets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
		3	15-20	5.0	173.0			Red brown fine to medium SAND, trace Silt, well sorted, moist, slight odor, slight iridescent sheen from 16-19' bgs.	 <p>Boring backfilled to grade with bentonite pellets</p>
					44.5				
					31.1				
-10					3.4				
20					333.3			Wet.	
					392.7				
		4	20-25	5.0	490.7			Red brown very fine to fine SAND, well sorted, wet, odor.	
					41.9				
-15					160.9				
25					133.9			Slight odor, slight iridescent sheen from 25-27' bgs.	
					45.5				
		5	25-30	5.0	30.4				
					4.4				
-20					7.2				
30								End of boring at 30' bgs.	
-25									
35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 4/30/19 - 5/9/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186861.23
Easting: 979549.74
Casing Elevation: NA
Surface Elevation: 7.58' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B25
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
10									
0					0.0		Hand-cleared from 0-5' bgs. CONCRETE.		
					0.0		Weathered CONCRETE, BRICK, and GRAVEL.		
					0.0		Gray fine to coarse SAND, some fine to coarse subangular Gravel, Brick, and Concrete, dry.		
5		NA	0-5	NA	0.0		Red brown fine to coarse SAND, some Brick and Slag, little fine to coarse subangular Gravel, moist.		
					0.0		Fine to medium SAND, trace Silt, well sorted, moderately dense, odor.		
					0.0		Wet at 7' bgs; staining from 7-12' bgs.		
0		1	5-10	3.0	49.6				
					92.3				
					299.8				
10					85.6				
					6.3				
-5		2	10-15	3.5	92.0				
					21.1				
					2.6				
15					0.0				
		3	15-20	5.0	0.0		Brown very fine to medium SAND, well sorted, dense, wet, iridescent sheen from 15-17' bgs.		

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-10		3	15-20	5.0	0.0			Brown very fine to medium SAND, well sorted, dense, wet, iridescent sheen from 15-17' bgs.	 Boring backfilled to grade with bentonite pellets
-20					0.0			Brown fine to coarse SAND, poorly sorted, wet.	
-15		4	20-25	5.0	0.0			Brown very fine to fine SAND, well sorted, wet.	
-20		5	25-30	NA	0.0				
-30								End of boring at 30' bgs.	

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 4/30/19 - 5/3/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186913.36
Easting: 979560.23
Casing Elevation: NA
Surface Elevation: 6.90' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B26
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
5		NA	0-5	NA	20.2			Dark gray brown fine to coarse SAND, little fine to coarse subangular Gravel, trace Silt, moist.	
5					9.2			Some Gravel, Brick, Slag, and Ash.	
5					10.2			Brown SILT, some fine to coarse SAND, soft, moist.	
0		1	5-10	2.8	112.1			Dark gray fine to coarse SAND, some Silt, Brick, and Ash, poorly sorted, moist.	
10					142.5			Dark gray brown very fine to fine Silty SAND, soft, wet, slight iridescent sheen, slight odor.	
10					462.5				
10					30.1				
-5		2	10-15	5.0	7.5				Boring backfilled to grade with bentonite pellets
-5					8.1				
-5					3.9				
-5					2.5				
-15					3.5				
-15		3	15-20	4.6	0.0			Gray brown fine to coarse SAND, poorly sorted, wet.	
-15								Red brown fine to medium SAND, well sorted, wet.	

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-10		3	15-20	4.6	0.0			Red brown fine to medium SAND, well sorted, wet.	 Boring backfilled to grade with bentonite pellets
					0.0			Gray brown fine to coarse SAND, trace fine angular Gravel, poorly sorted, wet.	
					2.0			Grayish red brown fine to coarse SAND, well sorted, wet.	
-20					1.0			Grayish red brown fine to coarse SAND, well sorted, wet.	
-15		4	20-25	4.6	0.0			Grayish red brown fine to coarse SAND, well sorted, wet.	 Boring backfilled to grade with bentonite pellets
					0.0			Grayish red brown fine to coarse SAND, well sorted, wet.	
					0.0			Grayish red brown fine to coarse SAND, well sorted, wet.	
-25					0.0			Grayish red brown fine to coarse SAND, well sorted, wet.	
-20		5	25-30	5.0	0.0			Grayish red brown very fine to fine SAND, well sorted, wet.	 Boring backfilled to grade with bentonite pellets
					0.0			Grayish red brown very fine to fine SAND, well sorted, wet.	
					0.0			Grayish red brown very fine to fine SAND, well sorted, wet.	
-30					0.0			Grayish red brown very fine to fine SAND, well sorted, wet.	
								End of boring at 30' bgs.	
-25									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 4/30/19 - 5/3/19	Northing: 186907.31	Well/Boring ID: A-RH3-B27
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979615.84	Client: BT Red Hook, LLC
Driller's Name: Chris Iodice	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 8.19' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 30' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
1.0									
0					10.8			Hand-cleared from 0-5' bgs. ASPHALT.	
		NA	0-5	NA	6.1			Brown very fine to coarse SAND, some subangular Gravel and Pebbles, extensive Brick fragments throughout, moist.	
5					2.2				
					27.8				
5					7.8				
					51.1			Fine to coarse SAND, some fine to coarse subangular Gravel, Brick, and Slag, trace Silt, moist, slight odor.	
		1	5-10	3.0	93.3				
					810.4			Dark gray brown fine to medium SAND, well sorted, wet, slight odor, some iridescent sheen.	
0					267.5				
					346.8				
10					184.4			Dark gray brown very fine to fine SAND, trace Silt, saturated with golden NAPL, wet.	
		2	10-15	5.0	150.7				
					103.7				
-5					32.1			Dark gray SILT, little fine SAND, soft, wet.	
					45.5				
15					203.0			Brown CLAY, little fine Sand, high plasticity, wet, some golden NAPL.	
		3	15-20	3.2					

Boring backfilled to grade with bentonite pellets



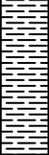
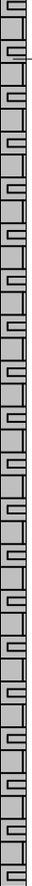
Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.

Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-10		3	15-20	3.2	44.9			Brown CLAY, little fine Sand, high plasticity, wet, some golden NAPL.	
					66.9			Brown fine to coarse SAND, trace Clay, poorly sorted, wet.	
-20		4	20-25	NA	43.7		Gray brown fine to medium SAND, trace coarse rounded Gravel, well sorted, wet.		
					54.4				
					58.7				
					98.5				
-25		5	25-30	NA	228.3		Brown very fine to fine SAND, well sorted, wet, slight iridescent sheen from 25-27' bgs.		
					152.5				
					96.8				
					332.9				
-30					261.1				
					34.9				
					22.5				
					43.8				
							End of boring at 30' bgs.		

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 4/30/19 - 5/6/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186908.12
Easting: 979648.21
Casing Elevation: NA
Surface Elevation: 9.00' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B28
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
10									
0					0.0			Hand cleared from 0-5' bgs. Dark gray brown fine to coarse SAND, some fine to coarse subangular Gravel, trace Silt, Brick, and Ash, moist.	
		NA	0-5	NA	0.0				
					2.1			Little Gravel, no Ash.	
5					17.8				
					394.3				
5					8.5			Brown fine to coarse SAND, trace fine to coarse Gravel and Brick, poorly sorted, moist.	
					284.8				
		1	5-10	3.2	57.5			Black very fine to fine SAND, well sorted, staining, wet.	
					231.0				
10					169.9				
					94.5			Black and dark gray very fine to fine SAND, some Silt, wet, odor, slight sheen, black staining.	
					251.1				
		2	10-15	NA	469.1				
					69.9				
-5					103.1			Gray brown fine to medium SAND, well sorted, wet.	
15					451.2			Very fine to fine SAND, little Silt, well sorted, saturated, black staining, slight sheen.	
		2	15-20	NA					

Boring backfilled to grade with bentonite pellets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-10	-	3	15-20	5.0	536.9			Very fine to fine SAND, little Silt, well sorted, saturated, black staining, slight sheen.	
					151.6		Gray brown CLAY, trace fine Sand, high plasticity, moderately stiff, moist.		
					51.7				
					56.7				
-20	-	4	20-25	5.0	0.0			Trace fine angular Gravel.	
					0.0				
					0.0				
					0.0				
-25	-	5	25-30	5.0	0.0			Gray brown very fine to medium SAND, well sorted, wet.	
					0.0				
					0.0				
					0.0				
-30	-				0.0			Gray brown very fine to fine SAND, trace Silt, well sorted, wet.	
					0.0				
					0.0				
					0.0				
-35	-				0.0			End of boring at 30' bgs.	
					0.0				
					0.0				
					0.0				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/7/19	Northing: 186789.36	Well/Boring ID: A-RH3-B29
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979615.77	Client: BT Red Hook, LLC
Driller's Name: Chris Iodice	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 11.50' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 30' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Dark brown to very dark gray very fine to coarse SAND, some fine to medium subangular to rounded Gravel and Pebbles, trace Granules, Silt, and Brick fragments, poorly sorted, loose, dry.	
5					0.0				
5		1	5-10	3.5	0.0			Dark grayish brown very fine to coarse SAND, trace Silt and Granules, poorly sorted, Brick from 7-8' bgs.	
10					0.0				
0					0.4				
0		2	10-15	2.5	0.0			SILT, some Clay, trace very fine Sand, medium to high plasticity, well sorted, dense, wet.	
15					0.0				
15		3	15-20	4.6	0.0			Very dark brown to very dark gray very fine to medium SAND, trace Silt, well sorted, medium dense, wet.	

Boring backfilled to grade with bentonite pellets

	Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million;
	No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.

Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	4.6	0.0			Very dark brown to very dark gray very fine to medium SAND, trace Silt, well sorted, medium dense, wet. Odor from 18-30' bgs. Slight stain at 25.5' bgs.	 Boring backfilled to grade with bentonite pellets
					0.0				
					0.0				
					8.2				
-20					57.2				
					56.7				
-10		4	20-25	4.6	4.9				
					1.1				
					1.7				
-25					5.8				
					671.7				
-15		5	25-30	4.6	276.0				
					278.9				
					41.7				
-30								End of boring at 30' bgs.	
-20									
-35									



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Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million;

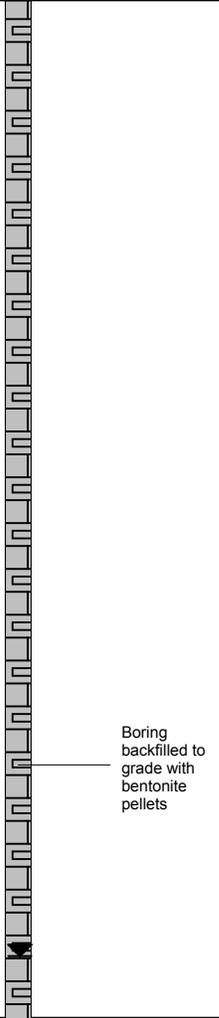
No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.

Date Start/Finish: 5/2/19 - 5/6/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186762.74
Easting: 979615.72
Casing Elevation: NA
Surface Elevation: 11.53' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B30
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Dark red brown fine to coarse SAND, some fine to coarse subrounded Gravel, poorly sorted, dry.	
5					0.0			Light brown to gray SILT and very fine SAND, trace Granules, poorly sorted, dense, moist.	
5		1	5-10	2.5	0.1				
10					1.7			Reddish brown SILT, some Clay, medium plasticity, well sorted, very dense, moist.	
10		2	10-15	4.5	0.0				
15					0.0			Dark gray very fine to coarse SAND, trace Silt, medium dense, well sorted, wet, strong odor.	
15		3	15-20	4.0	1.0				



Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	4.0	8.7 173.2 1,972 >15,000			Dark gray very fine to coarse SAND, trace Silt, medium dense, well sorted, wet, strong odor.	 <p>Boring backfilled to grade with bentonite pellets</p>
-20					>15,000		Staining on liner from 20-28' bgs.		
-10		4	20-25	5.0	>15,000 769.1 616.0				
-25					>15,000				
-15		5	25-30	5.0	2,392 565.6 590.3 616.6		Gray very fine SAND and SILT, well sorted, dense, moist, strong odor.		
-30								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/6/19 - 5/8/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186744.26
Easting: 979637.19
Casing Elevation: NA
Surface Elevation: 11.53' AMSL
Borehole Depth: 20' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B31
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0								Hand-cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Very fine to coarse SAND, some fine to coarse subangular Gravel, Brick, and Ash, dry.	
5								Black fine to coarse SAND, some Slag and Ash, trace fine Gravel, dry.	
5		1	5-10	4.2	0.4			Red brown Clayey fine SAND, low plasticity, moist.	
10								Red brown CLAY, trace fine Sand, high plasticity, moist.	
0		2	10-15	5.0	0.4			Red brown SILT, some fine to coarse Sand, trace fine angular Gravel, soft, wet.	
15		3	15-20	5.0	0.4				Boring backfilled to grade with bentonite pellets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 20' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5					0.4			Red brown SILT, some fine to coarse Sand, trace fine angular Gravel, soft, wet.	 <p>Boring backfilled to grade with bentonite pellets</p>
		3	15-20	5.0	0.4			Red brown CLAY, trace fine SAND, high plasticity, wet.	
					0.4			Dark red brown very fine to fine SAND, well sorted, wet.	
20					0.6			Refusal; end of boring at 20' bgs.	
-10									
-25									
-15									
-30									
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/6/19 - 5/8/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186696.21
Easting: 979690.24
Casing Elevation: NA
Surface Elevation: 11.55' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B32
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Dark brown very fine to coarse SAND, some fine to medium subangular to subrounded Gravel and Pebbles, trace Silt, poorly sorted, loose, dry.	
5					0.0			Trace Brick and Coal fragments from 5-7' bgs.	
5		1	5-10	3.8	0.0			Grayish brown very fine to medium SAND, well sorted, moderately loose, strong odor.	
10					0.0				
0					2,308				
					691.0				
2		2	10-15	3.8	654.4			Wet at 12' bgs.	
					4,631				
					12,595				
15								Staining and small amount of NAPL from 15-20' bgs.	
		3	15-20	4.6	15,000				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	4.6	15,000			Grayish brown very fine to medium SAND, well sorted, moderately loose, strong odor, staining and small amount of NAPL from 15-20' bgs. Trace to little Silt from 23-25' bgs.	 Boring backfilled to grade with bentonite pellets
					15,000				
					15,000				
					7,185				
-20					1,667				
					724.5				
-10		4	20-25	4.6	637.4				
					342.3				
					230.9				
-25					297.5				
					268.5				
-15		5	25-30	4.2	138.4				
					82.1				
					233.5				
-30								End of boring at 30' bgs.	
-20									
-35									

	<p>Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.</p> <p>No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.</p>
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Date Start/Finish: 5/6/19 - 5/8/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186678.75
Easting: 979708.56
Casing Elevation: NA
Surface Elevation: 11.52' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B33
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0								Hand-cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	NA			Very dark brown very fine to coarse SAND, some fine to medium subangular to subrounded Gravel and Pebbles, trace Silt and Brick fragments, poorly sorted, loose, dry.	
5									
5		1	5-10	2.5	NA			Brown to grayish brown very fine to medium SAND, well sorted, medium dense, slight odor.	
10									
0		2	10-15	3.3	NA				
15									
15		3	15-20	4.6	NA			Wet at 15' bgs.	

Boring backfilled to grade with bentonite pellets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing. The PID malfunctioned during drilling at this boring.



Date Start/Finish: 5/6/19 - 5/8/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186705.39
Easting: 979728.39
Casing Elevation: NA
Surface Elevation: 11.52' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B34
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Very dark brown very fine to coarse SAND, some fine to medium subangular to subrounded Gravel and Pebbles, trace Silt, poorly sorted, loose, dry.	
5					0.0				
5					18.3				
5		1	5-10	4.2	16.6				
					16.8			Brown to gray very fine to medium SAND, well sorted, medium dense.	
					20.0				
10					20.3				
					24.2				
					41.9				
		2	10-15	5.0	40.6				
					74.6				
					67.1				
15									
		3	15-20	5.0	84.3			Wet at 15' bgs.	

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	5.0	114.0			Brown to gray very fine to medium SAND, well sorted, medium dense.	
					344.8				
					359.0				
					105.9				
-20					251.1				
					NA				
		4	20-25	4.8	109.8				
					64.9				
					172.7				
-25					69.7				
					86.7				
		5	25-30	5.0	91.9				
					112.4				
					105.8				
-30									
								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/6/19 - 5/13/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186737.73
Easting: 979711.09
Casing Elevation: NA
Surface Elevation: 11.72' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B35
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
1.0		NA	0-5	NA	0.0			Brown fine to coarse SAND, some fine to coarse angular Gravel, Slag, and Brick, trace Silt, poorly sorted, dry.	
5					0.0			Dark brown to black fine to coarse SAND, some Slag and Ash, trace fine angular Gravel, poorly sorted, dry.	
5		1	5-10	3.2	13.3				
					21.5				
					92.3				
10					47.2				
					123.6				
					74.1			Brown very fine to medium SAND, trace Silt, well sorted, wet, slight staining.	
0		2	10-15	3.5	70.2				
					>15,000				
					>15,000				
15								Brown very fine to medium SAND, well sorted, wet, heavy staining.	
		3	15-20	5.0	128.8				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/8/19	Northing: 186785.02	Well/Boring ID: A-RH3-B36
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979659.10	Client: BT Red Hook, LLC
Driller's Name: Chris Iodice	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 11.65' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 30' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
1.0		NA	0-5	NA	0.0			Dark brown fine to coarse SAND, some fine to coarse angular Gravel, Concrete, Slag, and Brick, dry. [FILL]	
5					0.0				
5					0.9			Black fine to coarse SAND, some Silt, trace fine Gravel, soft, moist, slight odor.	
5		1	5-10	2.8	48.2				
10					73.3				
10					65.5				
10					3.3			Black fine to coarse SAND, trace fine angular Gravel, Concrete, Brick, and Slag, moist, slight odor.	
0		2	10-15	3.5	5.1				Boring backfilled to grade with bentonite pellets
0					12.5				
15					23.3				
15					1.7				
15		3	15-20	5.0	121.9			Dark gray brown fine to coarse SAND, well sorted, wet, odor.	

 ARCADIS Design & Consultancy for natural and built assets	Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.
	No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.

Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	5.0	84.4 380.3 239.6 93.6			Dark gray brown fine to coarse SAND, well sorted, wet, odor.	 Boring backfilled to grade with bentonite pellets
-20					93.1 192.6		Red brown very fine to fine SAND, well sorted, wet, golden brown staining on liner.		
-10		4	20-25	5.0	286.1 95.6 31.0				
-25					25.5 53.9				
-15		5	25-30	5.0	6.9 55.6 46.3				
-30								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/6/19 - 5/10/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186806.75
Easting: 979638.71
Casing Elevation: NA
Surface Elevation: 11.57' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B37
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Dark brown very fine to coarse SAND, some fine to medium angular Gravel and Pebbles, trace Silt, poorly sorted, loose, moist.	
5					0.0			Very fine to fine SAND, poorly sorted, moderately loose, moist, strong odor.	
5		1	5-10	2.3	120.4			Some crushed Stone at 7' bgs.	
					117.5			Some Gravel at 8' bgs.	
10					741.2				
					4,497				
					1,697				
10		2	10-15	4.2	89.7			Dark gray very fine to fine SAND, well sorted, moderately dense, wet, strong odor.	
					1,075				
					168.8				
					743.2				
15		3	15-20	4.2	857.2			Staining and sheen from 15-17.5' bgs	
					357.2				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	4.2	1,030			Dark gray very fine to fine SAND, well sorted, moderately dense, wet, strong odor, staining and sheen from 15-17.5' bgs.	
					1,287				
					1,287				
					1,238				
-20					2,491				
					654.9				
-10		4	20-25	4.2	3,805				
					659.9				
					362.0				
-25					382.3				
					720.7				
-15		5	25-30	2.3	277.3				
					193.6				
					360.6				
-30									
-20									
-35									

End of boring at 30' bgs.

Boring backfilled to grade with bentonite pellets

Design & Consultancy
for natural and built assets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.

Date Start/Finish: 5/9/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186910.20
Easting: 979587.28
Casing Elevation: NA
Surface Elevation: 7.54' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B38
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
10									
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
5		NA	0-5	NA	0.0			Brown very fine to medium SAND, some fine to medium angular to subrounded Gravel and Pebbles, trace Silt, poorly sorted, loose, moist.	
5					0.0			Dark brown fine to medium SAND, some angular to subangular Gravel, trace Silt, poorly sorted, loose, moist. [FILL]	
0		1	5-10	1.0	0.0				
10					0.6				
					0.0			Gray very fine to fine SAND, some Silt, well sorted, moderately dense, wet, slight odor.	
-5		2	10-15	3.5	125.6				
					0.0				Boring backfilled to grade with bentonite pellets
15		3	15-20	3.2	0.0				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-10		3	15-20	3.2	0.0			Gray very fine to fine SAND, some Silt, well sorted, moderately dense, wet, slight odor.	Boring backfilled to grade with bentonite pellets
-20					0.0			Grayish brown very fine to medium SAND, well sorted, moderately dense, moist, slight odor.	
-15		4	20-25	5.0	0.0				
-25					0.0				
-20		5	25-30	3.0	0.0				
-30					0.0				
-35								End of boring at 30' bgs.	

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/7/19 - 5/8/19	Northing: 186887.82	Well/Boring ID: A-RH3-B39
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979627.01	Client: BT Red Hook, LLC
Driller's Name: Chris Iodice	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 9.58' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 30' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
10									
0					0.0			Hand-cleared from 0-5' bgs. ASPHALT.	
		NA	0-5	NA	0.0			Dark brown very fine to medium SAND, some fine to medium subangular to subrounded Gravel and Pebbles, loose, dry, slight odor.	
5					0.0			Dark gray very fine to medium SAND, trace Silt, well sorted, moderately loose, strong odor.	
		1	5-10	2.1	584			Wet at 7' bgs. Iridescence and staining from 7-15' bgs.	
					649.0				
					629.5				
10					522.7				
					719.1				
		2	10-15	2.5	169.2				
					2,064				
					2,565				
15					386.1			Gray SILT, some Clay, medium to high plasticity, dense, moist, odor.	
		3	15-20	1.7					

Boring backfilled to grade with bentonite pellets

 ARCADIS Design & Consultancy for natural and built assets	Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
	No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.

Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					166.6			Gray SILT, some Clay, medium to high plasticity, dense, moist, odor.	<p>Boring backfilled to grade with bentonite pellets</p>
3		3	15-20	1.7	101.7				
7.06					70.6			Grayish brown to dark gray very fine to medium SAND, trace Silt, well sorted, moderately loose, wet, odor.	
10					61.2			NAPL from 20-23' bgs.	
15		4	20-25	4.2	>15,000				
20					>15,000				
25					4,062				
25					373				
25					399.1				
25					700.2				
25					284.3				
25		5	25-30	4.6	126.1				
25					195.1				
25					45.5				
30								End of boring at 30' bgs.	
35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/7/19 - 5/8/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186873.93
Easting: 979617.98
Casing Elevation: NA
Surface Elevation: 9.22' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B40
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
10									
0					0.0			Hand-cleared from 0-5' bgs. ASPHALT.	
		NA	0-5	NA	0.0			Dark brown very fine to coarse SAND, some fine to medium subangular to subrounded Gravel and Pebbles, loose, dry, slight odor. [FILL]	
5					0.0				
		1	5-10	2.1	464.1			Dark gray very fine to medium SAND, little Silt, well sorted, medium dense, strong odor, tar-like substance from 5-6' bgs.	
					349.1				
					890.2			Wet at 7' bgs; sheen from 7-19' bgs.	
					756.4				
0					427.9				
					3,720				
					1,420				
		2	10-15	2.9	1,682				
					486.2				
-5					244.6				
					197.5				
-15		3	15-20	4.6					

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
		3	15-20	4.6	134.1 61.3 1,657			Dark gray very fine to medium SAND, little Silt, well sorted, medium dense, wet, strong odor, sheen from 7-19' bgs.	 <p>Boring backfilled to grade with bentonite pellets</p>
-10					738.5			Dark gray very fine to medium SAND, well sorted, medium dense, wet, staining from 19-28' bgs.	
-20		4	20-25	3.3	3,161 >15,000 3,501 974.0 1,956				
-25		5	25-30	NA	494.1 365.2 171.6 162.9 41.3				
-30								End of boring at 30' bgs.	
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.

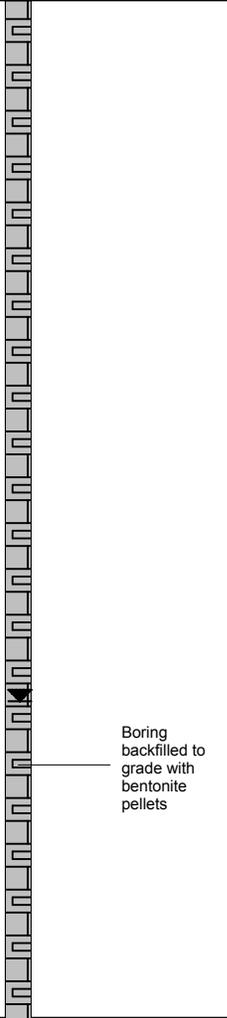


Date Start/Finish: 5/13/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186762.70
Easting: 979686.04
Casing Elevation: NA
Surface Elevation: 11.65' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B41
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
1.0		NA	0-5	NA	0.0			Brown fine to coarse SAND, some fine to coarse subangular Gravel, Slag, and Brick, poorly sorted, dry.	
5					0.0				
5.5		1	5-10	3.0	6.3			Dark brown and black fine to coarse SAND, some fine to coarse angular Gravel, Slag, Ash, and Brick, poorly sorted, dry.	
6.2					40.0				
10					82.9			Black SILT, trace fine Sand, soft, wet.	
10.5		2	10-15	3.0	48.2			Gray brown fine to coarse SAND, trace Silt, well sorted, moist.	
15					20.3			Red brown and dark gray SILT, some fine Sand, soft, moist.	
15.4					15.4				
15.7		3	15-20	5.0	50.7				



Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/10/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186725.88
Easting: 979658.25
Casing Elevation: NA
Surface Elevation: 11.53' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B42
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Dark brown very fine to coarse SAND, some fine to medium angular Gravel and Pebbles, trace Silt, poorly sorted, loose, moist. [FILL]	
5					0.0				
5					33.6				
5					121.8				
10		1	5-10	3.5	44.5			Reddish brown SILT and CLAY, medium to high plasticity, well sorted, dense, moist, slight odor.	
10					11.6				
10					8.2				
0					161.1				
15		2	10-15	5.0	74.5				Boring backfilled to grade with bentonite pellets
15					379.9				
15					190.1				
15		3	15-20	5.0	>15,000			Dark gray very fine to medium SAND, well sorted, moderately loose, wet, strong odor, heavy staining from 15-23' bgs, NAPL saturation from 15-18' bgs.	

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	5.0	>15,000			Dark gray very fine to medium SAND, well sorted, moderately loose, wet, strong odor, heavy staining from 15-23' bgs, NAPL saturation from 15-18' bgs.	 <p>Boring backfilled to grade with bentonite pellets</p>
					>15,000				
					>15,000				
					>15,000				
-20					>15,000				
					>15,000				
					>15,000				
		4	20-25	4.6	>15,000				
					3,657				
					1,082				
-25					731.6				
					1,679				
		5	25-30	NA	3,569				
					2,336				
					890.4				
-30								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/9/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186886.53
Easting: 979549.14
Casing Elevation: NA
Surface Elevation: 7.20' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-B43
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
1.0									
0					0.0		X X X X X X X X X	Hand-cleared from 0-5' bgs. ASPHALT and GRAVEL.	
5		NA	0-5	NA	0.0			Brown very fine to medium SAND, some fine to medium angular to subangular Gravel and Pebbles, trace Silt, loose, moist.	
5					0.0			Dark gray very fine SAND and SILT, well sorted, wet, odor, heavy staining.	
0		1	5-10	0.5	0.0				
10					78.2				
-5		2	10-15	5.0	0.0			Grayish brown very fine to medium SAND, well sorted, moderately dense, wet.	
15		3	15-20	4.2	0.0				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

 No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-10		3	15-20	4.2	0.0			Grayish brown very fine to medium SAND, well sorted, moderately dense, wet.	 <p>Boring backfilled to grade with bentonite pellets</p>
-20					0.0				
-15		4	20-25	4.2	0.0				
-25					0.0			End of boring at 30' bgs.	
-20		5	25-30	5.0	0.0				
-30					0.0				
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/23/19	Northing: 186731.49	Well/Boring ID: A-RH3-B44
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979750.49	Client: BT Red Hook, LLC
Driller's Name: Chris Iodice	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 11.50' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 25' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand-cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Dark red brown fine to coarse SAND, trace fine angular Gravel, Slag, and Brick, poorly sorted, dry.	
5					0.0				
5		1	5-10	3.0	1.2			Red brown fine to coarse SAND, trace Silt, well sorted, moist.	
10					0.9				
10					4.1				
0		2	10-15	3.5	3.9			SILT, some fine Sand, soft, wet.	
					7.5				
					15.0				
					4.3				
15		3	15-20	5.0	88.4			Very fine to fine SAND, trace Silt, well sorted, wet, staining.	
					101.5				

Boring backfilled to grade with bentonite pellets

 ARCADIS Design & Consultancy for natural and built assets	Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.
	No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.

Site Location:

Borehole Depth: 25' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	5.0	133.7			Very fine to fine SAND, trace Silt, well sorted, wet, staining.	 Boring backfilled to grade with bentonite pellets
					75.5				
					41.2				
					15.6				
-20					90.2				
					49.0				
		4	20-25	5.0	12.2				
					11.2				
					6.0				
-25								Refusal; end of boring at 25' bgs.	
-15									
-30									
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

No analytical samples collected. Soil descriptions from 0-5' bgs from observation during hand clearing.



Date Start/Finish: 5/7/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186920.71
Easting: 979619.54
Casing Elevation: NA
Surface Elevation: 8.09' AMSL
Borehole Depth: 28.5' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-WS13
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
10									
0					0.0	X X X X		Hand cleared from 0-5' bgs. ASPHALT and GRAVEL.	
					0.0	X X X X		Brown very fine to coarse SAND, some fine to medium subangular to subrounded Gravel and Pebbles, trace Silt, poorly sorted, loose, dry.	
5		NA	0-5	NA	0.0				
					0.0				
5					0.0				
					26.0			Fine to medium SAND, trace Silt, well sorted, moderately dense, odors.	
					NA	X			
		1	5-10	2.1	102.4			Wet at 7' bgs.	
					186.9				
10					234.0	X			
								Significant staining at 10' bgs.	
		2	10-15	0.4	141.1				
-5									
15		3	15-20	4.6	20.3				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 9-10' bgs, and 20-21' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-28.5' bgs) composite samples were collected for analysis of waste disposal parameters.



Site Location:

Borehole Depth: 28.5' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-10	3	15-20	4.6	6.1				Fine to medium SAND, trace Silt, well sorted, moderately dense, odors.	Boring backfilled to grade with bentonite pellets
				1.9				Light to grayish brown SILT and very fine SAND, well sorted, medium to low plasticity, dense, moist, odors.	
				0.9					
				1.0					
-20				0.0		X		Light grayish brown fine to medium SAND, well sorted, moderately dense, moist.	
-15	4	20-25	4.2	0.0					
				0.0					
				0.0					
-25				0.0					
	5	25-28.5	3.0	NA					
				NA					
				NA					
-20									
30								Refusal; end of boring at 28.5' bgs.	
-25									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 9-10' bgs, and 20-21' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-28.5' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/8/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186848.27
Easting: 979632.88
Casing Elevation: NA
Surface Elevation: 11.64' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-WS14
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
1.0		NA	0-5	NA	0.0			Dark gray brown fine to coarse SAND, some fine to coarse subangular Gravel, Concrete, Slag, and Brick, dry. [FILL]	
5					>15,000			Gray very fine to medium SAND, trace Pebbles, poorly sorted, dry, slight odor.	
5.5		1	5-10	5.0	956				
6.5					1,640				
7.5					3,706			Brown very fine SAND and SILT, well sorted, dense, moist, odor.	
10					345.0				
10.5					155.6			Dark gray very fine to coarse, SAND, some fine to coarse subangular Gravel, poorly sorted, moist.	
11.5		2	10-15	4.2	2,693				
12.5					2,509				
13.5					>15,000				
14.5					10,499				
15		3	15-20	1.8	1,433			Brown very fine to fine SAND, well sorted, moderately dense, wet, strong odor, staining.	

Boring backfilled to grade with bentonite pellets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
 Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 5-6' bgs, 19-20' bgs, and 24-25' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/14/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186859.87
Easting: 979657.59
Casing Elevation: NA
Surface Elevation: 11.50' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-WS15
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
1.0					0.0			Gray coarse angular GRAVEL, some Concrete, loose, dry.	
5.0		NA	0-5	NA	0.0			Dark brown fine to coarse SAND, some fine to medium Gravel and Pebbles, poorly sorted, loose, moist.	
5.0					0.0				
5.0					0.0				
5.0					82.0			Dark gray fine to medium SAND, little Silt, well sorted, moderately dense, wet, odor.	
5.0					123.1				
7.0		1	5-10	0.5	70.6				
8.0					52.6				
10.0					383.8				
10.0					482.3				
10.0					1,908				
12.0		2	10-15	2.5	825.5				
13.0					687.5				
15.0					360.9			Dark gray SILT, some fine Sand, well sorted, dense, wet, odor.	
15.0		3	15-20	2.5	324.5				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 16-17' bgs, and 28-29' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Site Location:

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Borehole Depth: 30' bgs

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	2.5	13,176	X		Dark gray SILT, some fine Sand, well sorted, dense, wet, odor.	
	1,850				NAPL from 16-19' bgs.				
	713.8								
-20		4	20-25	4.5	477.6		Dark gray fine to medium SAND, trace Silt, well sorted, moderately dense, wet.		
	1,332								
	513.2				NAPL from 23-24' bgs.				
	865.8				Staining from 25-30' bgs.				
-25		5	25-30	5.0	773.6				
	6,180								
	1,260								
	893.6								
-30					512.9	X			
					1,664				
					621.8				
-30							End of boring at 30' bgs.		
-20									
-35									

Boring backfilled to grade with bentonite pellets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 16-17' bgs, and 28-29' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/13/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186683.75
Easting: 979680.26
Casing Elevation: NA
Surface Elevation: 11.51' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-WS16
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Dark brown very fine to coarse SAND, some fine to coarse angular Gravel, trace Silt, poorly sorted, moist.	
5					0.0			Dark brown to black fine to coarse SAND, some Slag and Ash, trace fine angular Gravel, dry.	
5		1	5-10	4.2	0.0			Gray brown very fine to medium SAND, trace Silt, well sorted, moist.	
10					0.0			Fine to coarse SAND, trace Silt, well sorted, moist to wet.	
0		2	10-15	3.8	0.0				Boring backfilled to grade with bentonite pellets
15					7.6				
15		3	15-20	5.0	0.2			Dark brown very fine to fine SAND, some Silt, well sorted, wet, slight staining, odor. Wet at 15' bgs.	

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

Soil descriptions from 0-5' bgs from analysis during hand clearing. Samples collected from 5-6' bgs, 19-20' bgs, and 20-21' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	5.0	9.4			Dark brown very fine to fine SAND, some Silt, well sorted, wet, slight staining, odor.	
	31.7								
	52.1								
	238.5								
-20		4	20-25	5.0	6.802			Dark brown very fine to fine SAND, some Silt, well sorted, wet, heavy staining, amber color in saturated pore space.	
	1,618								
	1,295								
	771.1								
-25		5	25-30	5.0	1,143			Dark brown very fine to fine SAND, trace Silt, well sorted, wet, strong odor, slight staining from 25-27' bgs.	
	168.1								
	255.5								
	214.6								
-30					152.9				
					447.0				
-30								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 5-6' bgs, 19-20' bgs, and 20-21' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/10/19 - 5/13/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186838.85
Easting: 979645.52
Casing Elevation: NA
Surface Elevation: 11.65' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-WS17
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
1.0		NA	0-5	NA	0.0			Very dark brown fine to coarse SAND, some fine to medium Gravel and Pebbles, poorly sorted, loose, moist, slight odor.	
5					63.7				
					157.8				
5		1	5-10	2.5	193.5			Dark brown fine to coarse SAND, some fine to coarse subangular Gravel, trace Slag, Brick, and Silt, dry, slight odor.	Boring backfilled to grade with bentonite pellets
					79.2				
					77.7				
					235.7				
10					339.3				
					140.2				
0		2	10-15	2.5	174.1			Dark gray brown fine to coarse SAND, trace fine to coarse angular Gravel and Silt, wet, slight staining.	
					177.6				
					166.5				
					162.4				
15		3	15-20	2.6	66.7				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 19-20' bgs, and 24-25' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Site Location:

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Borehole Depth: 30' bgs

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	2.6	252.8			Dark gray brown fine to coarse SAND, trace fine to coarse angular Gravel and Silt, wet, slight staining.	
	251.6								
	193.3								
-20	194.1								
		4	20-25	5.0	34.4			Dark brown very fine to medium SAND, well sorted, wet, NAPL from 20-23' bgs.	
-10	40.2								
	458.2								
	551.9								
		5	25-30	5.0	619.7			Staining from 25-27' bgs.	
-25	214.8								
-15	178.0								
	298.7								
					366.7				
					326.6				
-30								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 19-20' bgs, and 24-25' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/14/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Jimmy McGill
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186715.25
Easting: 979646.87
Casing Elevation: NA
Surface Elevation: 11.57' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-WS18
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Dark brown fine to coarse SAND, some fine to coarse angular Gravel, Slag, and Brick, poorly sorted, dry.	
5					0.0			Black fine to coarse SAND, some Slag, poorly sorted, dry.	
5					0.0			Red brown CLAY, some fine Sand, low plasticity, stiff, moist.	
10		1	5-10	3.0	0.0				
0					0.0			Red brown very fine to medium SAND, trace Sand, well sorted, wet.	
15		2	10-15	4.2	0.0				
					0.0				
		3	15-20	5.0	0.0				

Boring backfilled to grade with bentonite pellets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

 Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 18-19' bgs, and 23-24' for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Site Location:

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Borehole Depth: 30' bgs

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	5.0	0.0 >15,000 >15,000 >15,000			Red brown very fine to medium SAND, trace Sand, well sorted, wet. Staining from 17-19' bgs.	 <p>Boring backfilled to grade with bentonite pellets</p>
-20					1,002 7,668 >15,000 >15,000 >15,000			Gray very fine to medium SAND, trace Silt, well sorted, wet, odor, staining from 20-27' bgs.	
-25		4	20-25	5.0	>15,000 >15,000 >15,000				
-15		5	25-30	5.0	10,727 1,572 2,056 881.2 1,018				
-30								End of boring at 30' bgs.	

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 18-19' bgs, and 23-24' for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/14/19	Northing: 186827.98	Well/Boring ID: A-RH3-WS19
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979658.44	Client: BT Red Hook, LLC
Driller's Name: Jimmy McGill	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 11.65' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 30' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
1.0		NA	0-5	NA	0.0			Brown fine to coarse SAND, some fine to coarse angular Gravel and Brick, poorly sorted, dry.	
5					0.0			Red BRICK, some fine to coarse SAND and Gravel, poorly sorted, dry. [FILL]	
5		1	5-10	4.0	0.0			Dark gray brown fine to coarse SAND, some Slag, Concrete, and Ash, trace angular Gravel, moist.	
10					70.24				
10					>15,000				
0		2	10-15	3.2	9,135			Dark brown fine to coarse SAND, some Silt, poorly sorted, wet, staining.	
					>15,000				
					>15,000				
15		3	15-20	4.2	>15,000			Gray brown fine to coarse SAND, trace Silt, wet, staining from 15-17' bgs.	
					3,075				

Boring backfilled to grade with bentonite pellets

 ARCADIS Design & Consultancy for natural and built assets	Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
	Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 14-15' bgs, and 22-23' for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.

Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	4.2	4,579 3,879 >15,000 >15,000			Gray brown fine to coarse SAND, trace Silt, wet, staining from 15-17' bgs. NAPL from 19-20' bgs.	<p>Boring backfilled to grade with bentonite pellets</p>
-20		4	20-25	5.0	4,808 >15,000 >15,000 6,735 5,039			Dark gray brown very fine to fine SAND, trace Silt, well sorted, staining from 20-29' bgs.	
-25		5	25-30	5.0	790.7 674.9 566.9 602.9 565.1				
-30								End of boring at 30' bgs.	

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 14-15' bgs, and 22-23' for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/14/19	Northing: 186756.19	Well/Boring ID: A-RH3-WS20
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979719.01	Client: BT Red Hook, LLC
Driller's Name: Jimmy McGill	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 11.64' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 30' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
1.0		NA	0-5	NA	0.0			Brown to black fine to coarse SAND, some Ash, Slag, Brick, trace fine Gravel and Silt, dry.	
5					0.0				
5					0.0				
10		1	5-10	3.2	45.4				
					180.4				
					0.0				
0					4.3			Brown SILT, soft, trace fine SAND, moist.	
					33.8				
2		2	10-15	3.0	43.4			Dark brown Silty fine SAND, trace fine to coarse Gravel, moist.	
					386.6			Slight staining from 14-15' bgs.	
					4,092				
15								Dark brown very fine to medium SAND, trace Silt, well sorted, wet, heavy staining, NAPL from 15-16' bgs.	
		3	15-20	5.0	1,388				Boring backfilled to grade with bentonite pellets

 ARCADIS Design & Consultancy for natural and built assets	Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
	Soil descriptions from 0-5' bgs from observation during hand clearing. Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 17-18' bgs, and 23-24' for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.

Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	5.0	5,916 >15,000 4,559 >15,000	X		Very fine to medium SAND, trace Silt, well sorted, wet.	 Boring backfilled to grade with bentonite pellets
-20		4	20-25	5.0	8,229 >15,000 >15,000	X		Heavy staining and NAPL from 22-27' bgs	
-25		5	25-30	5.0	2,810 7,077 2,885 540.9 1,736 823.9				
-15									
-30									
-20								End of boring at 30' bgs.	
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 6-7' bgs, 17-18' bgs, and 23-24' for analysis of volatile organic compounds. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/21/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186770.14
Easting: 979726.01
Casing Elevation: NA
Surface Elevation: 11.57' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-WS21
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Brown and black fine to coarse SAND, some fine to coarse angular Gravel, some Slag, Brick, Ash, and Asphalt, poorly sorted, dry.	
5					0.0				
5		1	5-10	3.2	0.0				
10					0.8				
10					6.7				
0					20.2				
0		2	10-15	4.0	14.8			Dark brown very fine to fine SAND, some Silt, poorly sorted, wet.	
15					27.0				
					52.4				
					503.3				
		3	15-20	4.3	204.4			Dark brown fine to coarse SAND, trace Silt, poorly sorted, wet, slight odor.	

Boring backfilled to grade with bentonite pellets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

 Soil descriptions from 0-5' bgs from observation during hand clearing. Sample collected from 17-17.5' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs) and deep (7-20' bgs) composite samples were collected for analysis of waste disposal parameters.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5					188.7			Dark brown fine to coarse SAND, trace Silt, poorly sorted, wet, slight odor.	<p>Boring backfilled to grade with bentonite pellets</p>
		3	15-20	4.3	1,161	X		Brown very fine to fine SAND, well sorted, wet, some staining.	
					722.5				
					539.2				
-20					1,611			Trace Silt, heavy staining from 20-23' bgs.	
		4	20-25	5.0	244.8				
					239.9				
					248.5				
-25					247.5			Heavy staining from 25-28' bgs.	
		5	25-30	5.0	283.2				
					766.5				
					306.5				
					271.1				
-30								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million.

Soil descriptions from 0-5' bgs from observation during hand clearing. Sample collected from 17-17.5' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs) and deep (7-20' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/21/19	Northing: 186746.77	Well/Boring ID: A-RH3-WS22
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979730.07	Client: BT Red Hook, LLC
Driller's Name: Chris Iodice	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 11.63' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 22' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0								Hand cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Brown and black fine to coarse SAND, some Slag, Brick, and Ash, trace fine to coarse angular Gravel, poorly sorted, dry.	
5									
5		1	5-10	3.5	0.0			Brown very fine to fine SAND, trace Silt, well sorted, dry.	
10									
0									
2		2	10-15	3.5	4.5			Brown SILT, some fine to medium SAND, wet.	
					130.2			Dark brown very fine to coarse SAND, trace Silt, well sorted, moist.	
					106.8				
15									
		3	15-20	5.0	2,506			Dark brown very fine to fine SAND, little Silt, well sorted, wet, heavy staining from 15-18' bgs.	

Boring backfilled to grade with bentonite pellets

 ARCADIS Design & Consultancy for natural and built assets	Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
	Soil descriptions from 0-5' bgs from observation during hand clearing. Sample collected from 16-16.5' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs) and deep (7-20' bgs) composite samples were collected for analysis of waste disposal parameters.

Site Location:

Borehole Depth: 22' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5					2,539	X		Dark brown very fine to fine SAND, little silt, well sorted, wet, heavy staining from 15-18' bgs.	 Boring backfilled to grade with bentonite pellets
		3	15-20	5.0	1,232				
					907				
					1,863				
-20					902.5			NAPL from 20-21' bgs.	
-10		4	20-22	2.7	1,211				
								Refusal; end of boring at 22' bgs.	
-25									
-15									
-30									
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Sample collected from 16-16.5' bgs for analysis of volatile organic compounds. Shallow (1-7' bgs) and deep (7-20' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/21/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186769.76
Easting: 979712.75
Casing Elevation: NA
Surface Elevation: 11.56' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-WS23
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Gray brown fine to coarse SAND, some Brick, Ash, Concrete, and Slag, trace fine angular Gravel, poorly sorted, dry.	
5					0.0				
5		1	5-10	3.5	110.4			Odor from 8-11' bgs.	
10					378.2				
10					59.7				
0					850.6				
0		2	10-15	3.2	523.0			Gray brown fine to coarse SAND, some Silt, well sorted, wet, odor.	
15					469.9				
15					674.4				
15		3	15-20	5.0	60.5			Dark brown fine to medium SAND, some Silt, well sorted, wet, heavy staining, blebs from 15-16.5' bgs.	
					534.5				

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Sample collected from 18-19' bgs for analysis of volatile organic compounds. A deep (7-20' bgs) composite sample was collected for analysis of waste disposal parameters.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	5.0	1,311	X		Dark brown fine to medium SAND, some Silt, well sorted, wet, heavy staining, blebs from 15-16.5' bgs.	
	1,300								
	2,831								
	945.6								
-20		4	20-25	5.0	450.7			Very fine to fine SAND, trace Silt, well sorted, liner stained (no staining in soil), wet.	
-10	821.7								
	300.3								
	229.5								
-25		5	25-30	5.0	324.8				
	145.3								
-15	89.1								
	69.0								
-30					83.9				
					331.0				
-30								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Sample collected from 18-19' bgs for analysis of volatile organic compounds. A deep (7-20' bgs) composite sample was collected for analysis of waste disposal parameters.

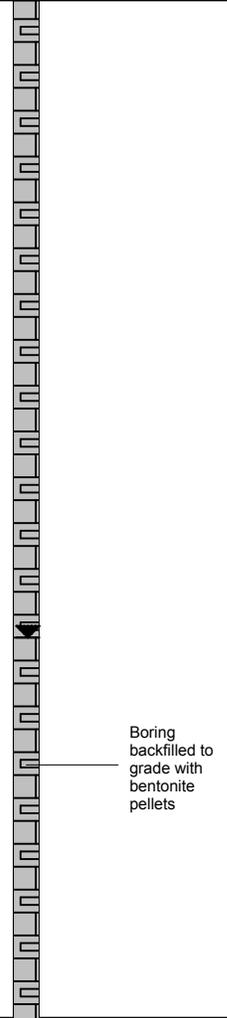


Date Start/Finish: 5/22/19
Drilling Company: Aquifer Drilling & Testing, Inc.
Driller's Name: Chris Iodice
Drilling Method: Direct Push
Sampling Method: 2-inch x 5-foot Macro-core
Rig Type: Geoprobe 6610

Northing: 186835.30
Easting: 979672.72
Casing Elevation: NA
Surface Elevation: 11.44' AMSL
Borehole Depth: 30' bgs
Descriptions By: N. Comrie, C. Goldsmith

Well/Boring ID: A-RH3-WS24
Client: BT Red Hook, LLC
Location: 68 and 100 Ferris Street/
 242 and 300 Coffey Street
 Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
1.0		NA	0-5	NA	0.0			Brown fine to coarse SAND, some fine to coarse angular Gravel, trace Brick and Slag, poorly sorted, dry.	
5					0.0				
5.5		1	5-10	1.2	5.7				
6.1					248.1				
10					399.1			Dark brown SILT, some fine to coarse Sand, soft, wet, odor, staining, NAPL from 10-11' bgs.	
10.5		2	10-15	1.2	252.6				
10.8					28.8				
11.2					33.2				
15		3	15-20	4.0	56.5			Dark brown fine to coarse SAND, some Silt, well sorted, wet, some staining.	



Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 10-11' bgs and 21-22' bgs for analysis of volatile organic compounds. Intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5					105.1			Dark brown fine to coarse SAND, some Silt, well sorted, wet, some staining.	<p>Boring backfilled to grade with bentonite pellets</p>
		3	15-20	4.0	61.5			White fine to coarse angular GRAVEL (crushed quartz), poorly sorted, dry.	
					11.3			Dark brown very fine to medium SAND, trace Silt, well sorted, wet, slight staining.	
					87.8				
-20					344.9			Very fine to fine SAND, trace Silt, well sorted, wet, slight odor and staining.	
					371.1				
-10		4	20-25	5.0	118.9				
					34.6				
					266.1				
-25					54.1				
					218.3				
-15		5	25-30	5.0	80.9				
					170.6				
					154.7				
-30								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 10-11' bgs and 21-22' bgs for analysis of volatile organic compounds. Intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/23/19	Northing: 186819.32	Well/Boring ID: A-RH3-WS25
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979666.45	Client: BT Red Hook, LLC
Driller's Name: Chris Iodice	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 11.58' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 30' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
10		NA	0-5	NA	0.0			Brown fine to coarse SAND, some fine to coarse subangular Gravel, trace Brick and Concrete, poorly sorted, dry.	
5					0.0				
5		1	5-10	3.7	8.8				
					49.6				
					129.0				
					40.4				
10					32.5				
					101.7			Very fine to medium SAND, some Silt, well sorted, wet, heavy staining.	
0		2	10-15	3.5	52.3				
					51.7				
					138.9				
					239.7				
15		3	15-20	5.0	129.5			Dark brown fine to coarse SAND, some Silt, poorly sorted, wet, heavy staining, NAPL from 15-17.5' bgs.	

Boring backfilled to grade with bentonite pellets

 ARCADIS Design & Consultancy for natural and built assets	Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
	Soil descriptions from 0-5' bgs from observation during hand clearing. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.

Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5					69.9			Dark brown fine to coarse SAND, some Silt, poorly sorted, wet, heavy staining, NAPL from 15-17.5' bgs.	<p>Boring backfilled to grade with bentonite pellets</p>
		3	15-20	5.0	124.9			Dark brown very fine to fine SAND, trace Silt, well sorted, wet, some staining.	
					398.0				
					395.6				
-20					186.4				
					313.6				
		4	20-25	5.0	41.4				
					49.7				
					71.8				
-25					78.9				
					90.8				
		5	25-30	5.0	87.0				
					96.7				
					55.3				
-30								End of boring at 30' bgs.	
-20									
-35									

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Shallow (1-7' bgs), intermediate (7-20' bgs), and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



Date Start/Finish: 5/22/19	Northing: 186824.92	Well/Boring ID: A-RH3-WS26
Drilling Company: Aquifer Drilling & Testing, Inc.	Easting: 979642.89	Client: BT Red Hook, LLC
Driller's Name: Chris Iodice	Casing Elevation: NA	Location: 68 and 100 Ferris Street/ 242 and 300 Coffey Street Brooklyn, NY
Drilling Method: Direct Push	Surface Elevation: 11.66' AMSL	
Sampling Method: 2-inch x 5-foot Macro-core	Borehole Depth: 30' bgs	
Rig Type: Geoprobe 6610	Descriptions By: N. Comrie, C. Goldsmith	

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0					0.0			Hand cleared from 0-5' bgs. CONCRETE.	
1.0		NA	0-5	NA	0.0			Gray brown fine to coarse SAND, some fine to coarse angular Gravel, some Brick, Slag, and Concrete, trace Silt, poorly sorted, dry.	
5					0.0				
5					45.0				
		1	5-10	1.5	168.1				
					83.9				
					125.3				
10					133.6				
					167.3				
		2	10-15	1.8	192.5				
					70.0				
					96.4				
15					70.7				
		3	15-20	4.0	396.7			Gray brown CLAY, some fine Sand, low plasticity, moist, slight odor.	Boring backfilled to grade with bentonite pellets

 ARCADIS Design & Consultancy for natural and built assets	Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.
	Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 18-19' bgs and 20-21' bgs for analysis of volatile organic compounds. Intermediate (7-20' bgs) and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.

Site Location:

Borehole Depth: 30' bgs

68 and 100 Ferris Street/
242 and 300 Coffey Street
Brooklyn, NY

Depth (feet bgs)	Elevation (feet AMSL)	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
-5		3	15-20	4.0	194.9			Gray brown CLAY, some fine Sand, low plasticity, moist, slight odor.	
	182.1								
	318.7								
	481.8			Dark gray brown fine to medium SAND, trace Silt, well sorted, wet, staining from 19-25' bgs.					
-20		4	20-25	5.0	228.2			Dark gray brown very fine to fine SAND, trace Silt, well sorted, wet.	
	41.9								
-10	33.8								
	61.7								
	22.7							Blebs from 25-28' bgs; slight odor from 25-30' bgs.	
-25	473.5								
	207.2								
-15	465.2								
	44.5								
	56.2								
-30								End of boring at 30' bgs.	
-20									
-35									

Boring backfilled to grade with bentonite pellets

Remarks: bgs = below ground surface; NA = not applicable/available; AMSL = above mean sea level; PID = photoionization detector; ppm = parts per million; NAPL = non-aqueous phase liquid.

Soil descriptions from 0-5' bgs from observation during hand clearing. Samples collected from 18-19' bgs and 20-21' bgs for analysis of volatile organic compounds. Intermediate (7-20' bgs) and deep (20-30' bgs) composite samples were collected for analysis of waste disposal parameters.



ATTACHMENT 3

Confirmation Soil Boring Photolog



BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



Hand-Cleared Upper 5 Feet (Typical)



A-RH3-B24: 5- to 30-Foot Soil Cores

**BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**

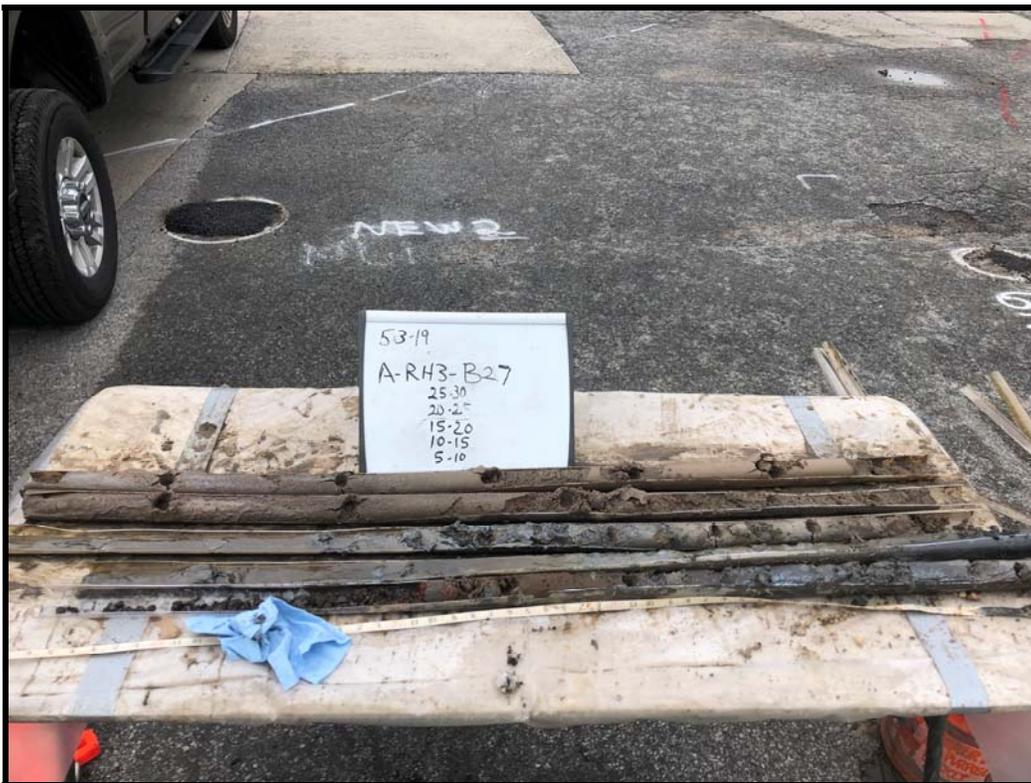


A-RH3-B25: Staining at 7 to 12 Feet

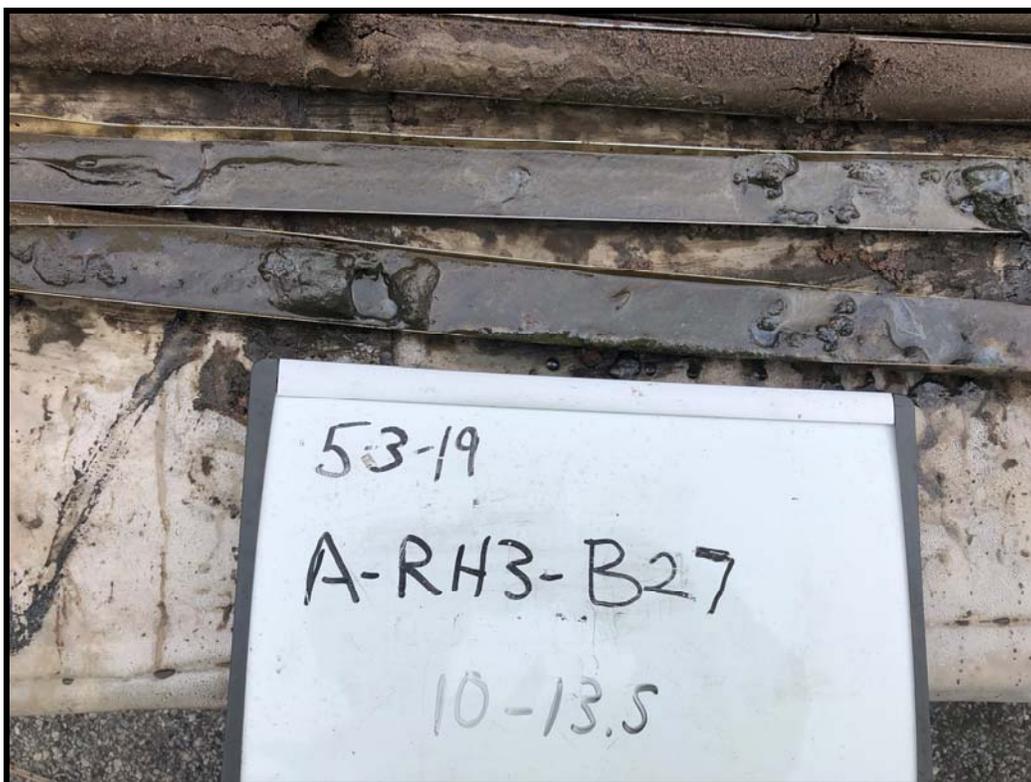


A-RH3-B26: 5- to 30-Foot Soil Cores

BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-B27: 5- to 30-Foot Soil Cores



A-RH3-B27: NAPL at 10 to 13.5 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
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A-RH3-B27: NAPL at 15 to 18.5 Feet



A-RH3-B28: 5- to 30-Foot Soil Cores

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-B28: Staining and Slight Sheen at 10 to 14 Feet and 15 to 17 Feet

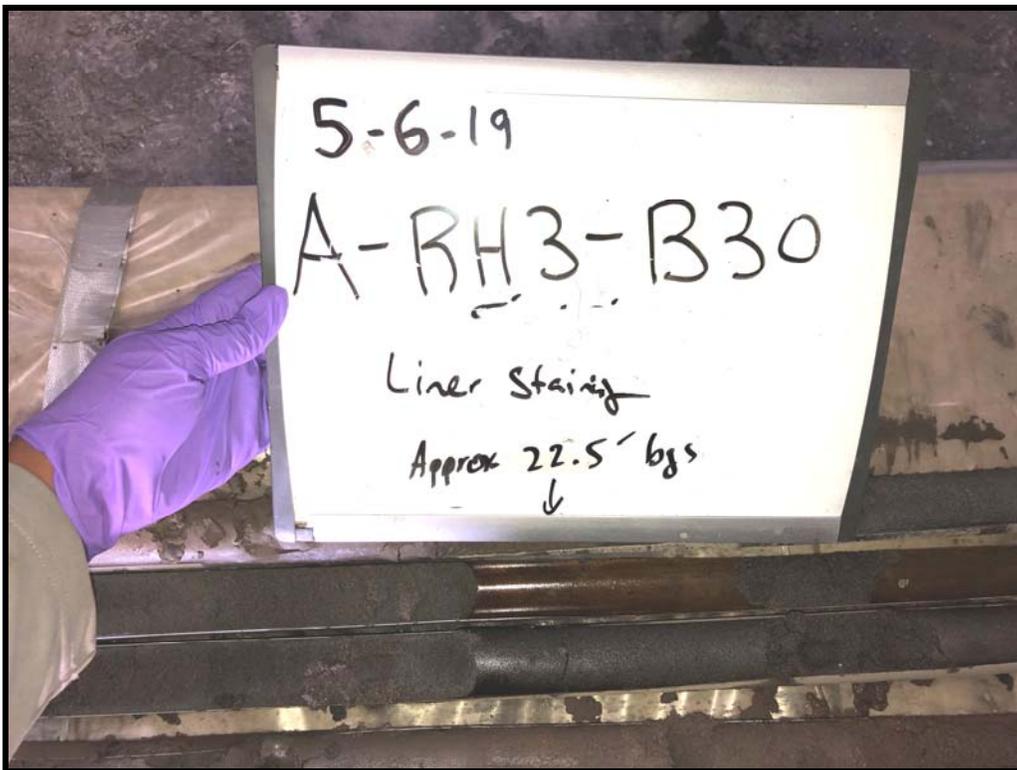


A-RH3-B29: 5- to 30-Foot Soil Cores

BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-B30: 5- to 30-Foot Soil Cores



A-RH3-B30: Staining in Liner at 22.5 Feet

**BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-B31: 5- to 20-Foot Soil Cores (Refusal at 20 Feet)



A-RH3-B32: 5- to 30-Foot Soil Cores

**BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-B32: Close-up of Staining and Small Amount of NAPL in 15- to 20-Foot Interval

BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-B33: 5- to 30-Foot Soil Cores



A-RH3-B34: 5- to 30-Foot Soil Cores

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-B35: 5- to 30-Foot Soil Cores



A-RH3-B35: Close-up of Golden Brown NAPL at 16 to 16.5 Feet

**BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**

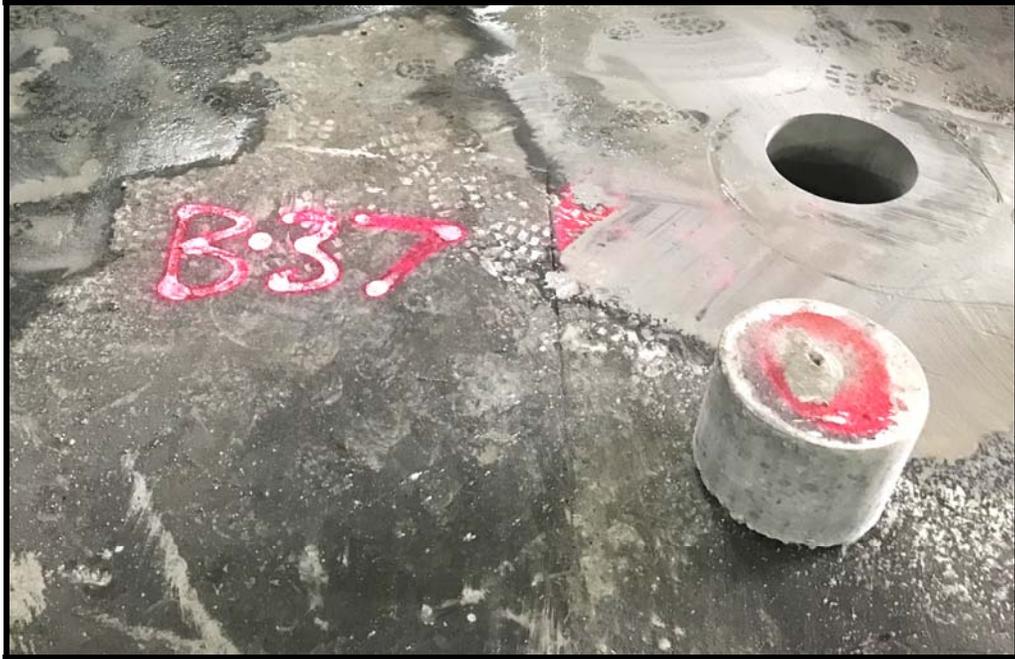


A-RH3-B36: 5- to 30-Foot Soil Cores



A-RH3-B36: Close-up of Staining from 20 to 30 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
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A-RH3-B37: Concrete Core – Typical of Locations Inside Warehouse



A-RH3-B37: 5- to 30-Foot Soil Cores

BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

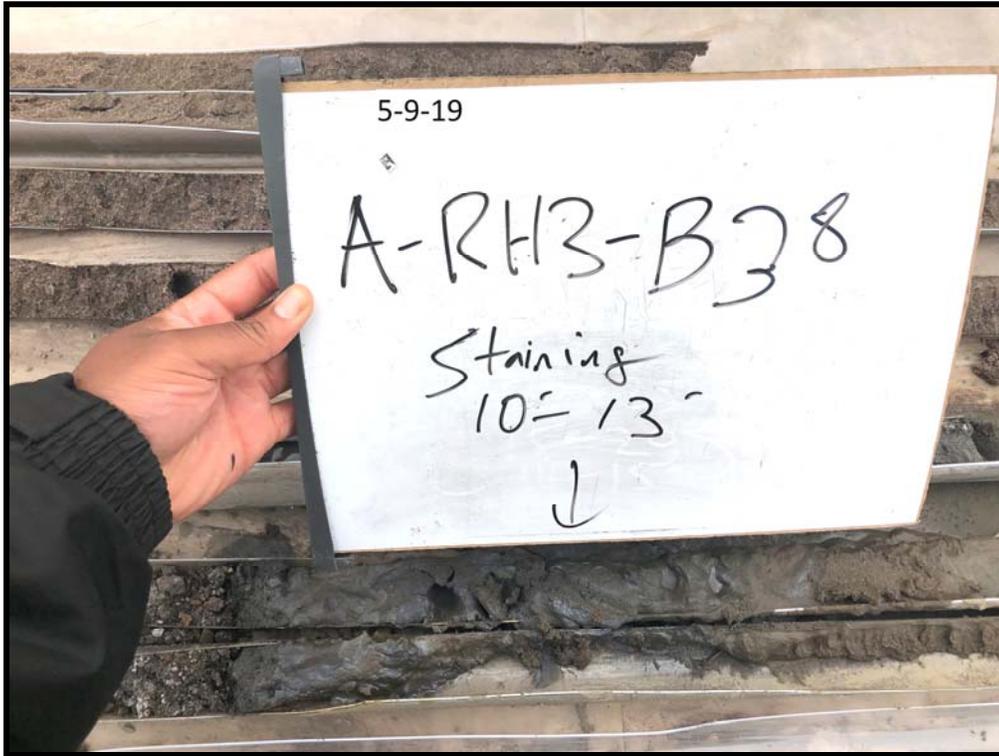


A-RH3-B37: Close-up of Sheen and Staining at 15 to 17.5 Feet



A-RH3-B38: 5- to 30-Foot Soil Cores

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-B38: Staining at 10 to 13 Feet



A-RH3-B39: 5- to 30-Foot Soil Cores with Iridescence and Staining at 7 to 15 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-B39: Close-up of NAPL in 20- to 23-Foot Interval



A-RH3-B40: 5- to 30-Foot Soil Cores with Sheen 7 to 19 Feet and Staining 19 to 28 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-B41: 5- to 30-Foot Soil Cores



A-RH3-B41: Staining at 20 to 21 Feet

**BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-B42: NAPL at 15 to 18 Feet

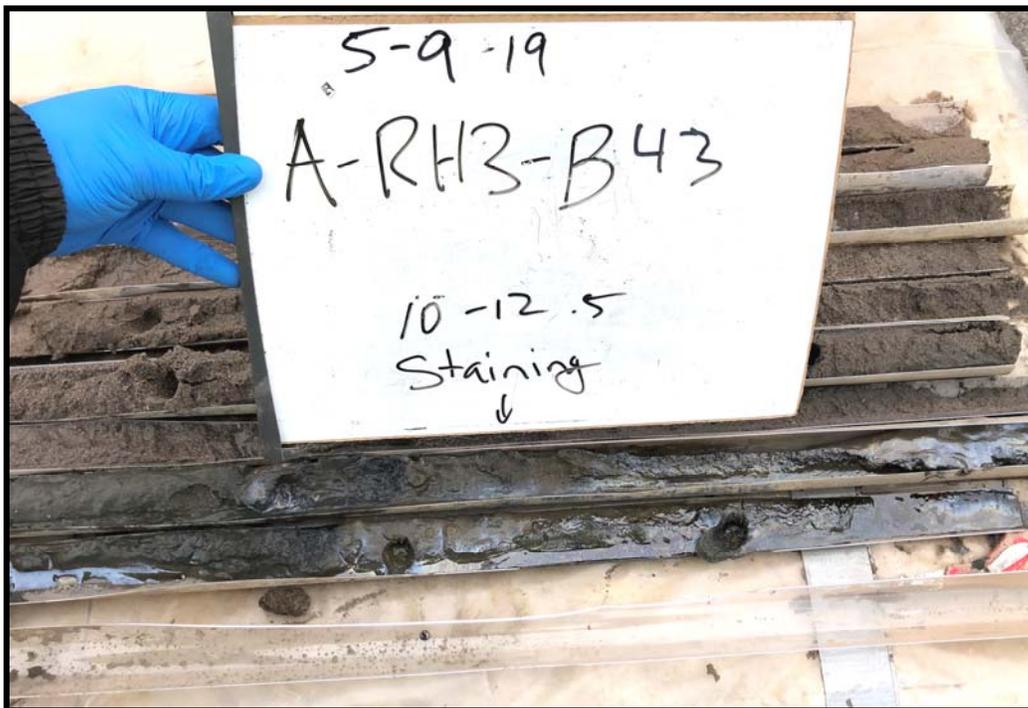


A-RH3-B42: Close-up of NAPL at 15 to 18 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-B43: 5- to 30-Foot Soil Cores



A-RH3-B43: Heavy Staining at 10 to 12.5 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-B44: 5- to 25-Foot Soil Cores (Refusal at 25 Feet)



A-RH3-B44: Showing Close-up of Staining in a Portion of 13.5- to 25-Foot Interval

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS13: 5- to 15-Foot Soil Cores



A-RH3-WS13: 15- to 20-Foot Soil Core

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS13: 20- to 30-Foot Soil Cores



A-RH3-WS14: 5- to 30-Foot Soil Cores with Staining from 15 to 30 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS14: Close-up of NAPL at 19 to 20 Feet



A-RH3-WS15: 5- to 25-Foot Soil Cores

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS15: Close-up of NAPL in 23- to 24-Foot Interval



A-RH3-WS16: 5- to 30-Foot Soil Cores

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS16: Close-up of Staining in 20- to 25-Foot Interval



A-RH3-WS17: 5- to 30-Foot Soil Cores

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-WS17: NAPL at 20 to 23 Feet



A-RH3-WS17: Close-up of NAPL at 20 to 23 Feet and Staining at 25 to 27 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS18: 5- to 20-Foot Soil Cores



A-RH3-WS18: 20- to 30-Foot Soil Cores Showing Stained Soil and Liner at 20 to 25 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-WS19: 5- to 25-Foot Soil Cores Showing Staining 11 to 17 Feet



A-RH3-WS19: 20- to 30-Foot Soil Cores Showing Staining at 20 to 29 Feet

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**

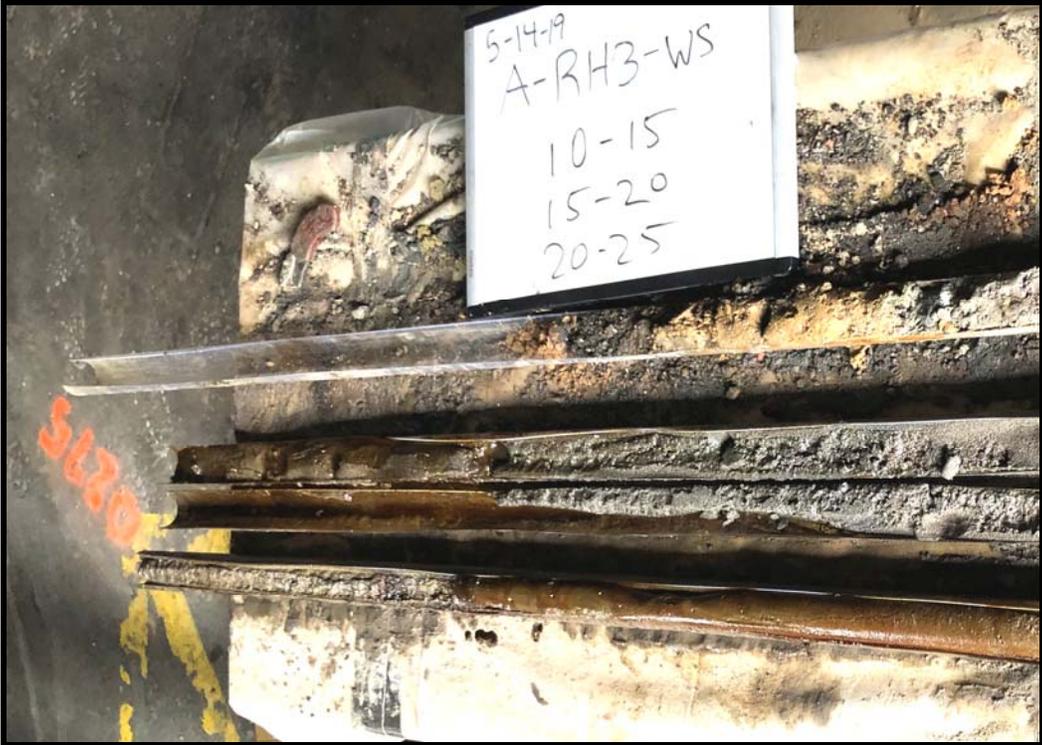


A-RH3-WS19: NAPL at 19 to 20 Feet



A-RH3-WS20: 10- to 25-Foot Soil Cores

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS20: Close-up of NAPL at 15 to 16 Feet and 22 to 27 Feet



A-RH3-WS21: 5- to 30-Foot Soil Cores

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Excavation Interim Remedial Measure Confirmation Soil Borings
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A-RH3-WS21: Close View 1 with Staining at 17 to 23 Feet and 25 to 28 Feet



A-RH3-WS21: Close View 2

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS22: 0- to 25-Foot Soil Cores (Refusal at 22 Feet)



A-RH3-WS22: Close-up of NAPL at 20 to 21 Feet (Upper Sleeve)

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-WS23: 5- to 30-Foot Soil Cores



A-RH3-WS23: Close-up of Blebs at 15 to 16.5 Feet

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68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS24: 5- to 25-Foot Soil Cores



A-RH3-WS24: 5- to 25-Foot Close View 1

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Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS24: 5- to 25-Foot Close View 2



A-RH3-WS24: 20- to 30-Foot Soil Cores

**BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-WS24: NAPL at 10 to 11 Feet (Middle Sleeve)



A-RH3-WS25: 5- to 30-Foot Soil Cores

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68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



A-RH3-WS25: Close-up of NAPL at 15 to 17.5 Feet (Middle Sleeve)



A-RH3-WS26: 5- to 20-Foot Soil Cores

**BT Red Hook, LLC - Red Hook 3
Excavation Interim Remedial Measure Confirmation Soil Borings
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY**



A-RH3-WS26: 20- to 30-Foot Soil Cores



A-RH3-WS26: Staining at 20 to 22 Feet (Lower Sleeve)
and Blebs 25 to 28 Feet (Upper Sleeve)

**Response/Actions to Address Remedial Action Work Plan
Comments, Arcadis, October 2025**

Mr. Robert Bellotti
Project Manager
Division of Environmental Remediation
Bureau A, Section B, 12th Floor
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7015

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United States
Phone: 315 446 9120
Fax: 315 449 0017
www.arcadis.com

Date: October 1, 2025

Our Ref: 30294975

Subject: **Response/Actions to Address Remedial Action Work Plan Comments**

BT Red Hook, LLC

Red Hook 3 Properties Site; #C224213

68 and 100 Ferris Street/242 and 300 Coffey Street

Borough of Brooklyn, Kings County, New York

Dear Mr. Bellotti,

As discussed during the July 24, 2025 meeting between representatives of the New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), BT Red Hook, LLC (BT Red Hook) and Arcadis of New York, Inc. (Arcadis), this letter transmits updated geologic cross sections prepared by Arcadis to facilitate NYSDEC's evaluation of remaining dense non-aqueous phase liquid (DNAPL) on the Red Hook 3 Properties Site (RH3 or Site; **Figure 1**) and completion of the Remedial Action Work Plan (RAWP). In NYSDEC's RAWP comment letter to BT Red Hook dated April 28, 2025, the following was identified: "NYSDEC requires confirmation that the source area has been properly remediated to approve a "No Further Action" remedial action." Since receiving the letter, there have been a number of communications with NYSDEC, including the July 24th meeting and NYSDEC's June 25, 2025 email which identified six soil boring locations where NYSDEC recommended drilling step out soil borings, collecting soil samples and observing cores for visual evidence of remaining DNAPL. A timeline and communications summary regarding major deliverables transmitted to and meetings with NYSDEC regarding the IRM and preferred final site remedy components consistently identified since 2019 is provided in **Table 1**.

NYSDEC's April 28, 2025 RAWP comment letter and June 25, 2025 email also requested additional soil vapor sampling on RH3. Arcadis prepared and NYSDEC approved (letter dated August 12, 2025) the August 2025 *Soil Vapor Sampling Plan – Revised*. Arcadis conducted the additional soil vapor sampling August 19 through August 21, 2025.

To address NYSDEC's inquiries regarding remaining DNAPL, a brief summary of the Interim Remedial Measure (IRM) conducted in 2020 is summarized below, followed by a discussion of the updated geologic cross sections, overall conclusions, and proposed next steps. Additionally, because the 2025 soil vapor results are pertinent to determining if additional remedial action is required on RH3, a preliminary summary of the unvalidated soil vapor results received from the laboratory on September 9th is also provided below. As identified in the August 2025 *Soil Vapor Sampling Plan – Revised*, Arcadis will submit a letter report to NYSDEC and NYSDOH within 6 weeks of completion of data validation (in progress as of this writing) and receipt of the data useability summary report (DUSR).

1 IRM Summary

Prior to implementing the IRM, as detailed in the NYSDEC-approved 2019 *Supplemental Remedial Investigation Report* and 2020 *Interim Remedial Measure Design Work Plan*, numerous subsurface investigations were conducted at RH3 over a period of more than seven years to define the nature and extent of impacts, which included:

- Sampling 22 monitoring wells;
- Drilling/characterizing 114 soil borings prior to and during the Supplemental Remedial Investigation (SRI); and
- Drilling/characterizing 75 soil borings post-SRI to confirm DNAPL extent and obtain waste characterization data required for off-site treatment/disposal purposes.

NYSDEC's April 2020 RH3 Fact Sheet *Interim Remedial Measure to Begin at Brownfield Site* identified the following:

“Soil and groundwater sampling was conducted during the Supplemental Remedial Investigation, which complemented the previously completed Remedial Investigation. These investigations have sufficiently defined the nature and extent of contamination at this site.”

IRM activities were conducted by BT Red Hook on RH3 between February 11, 2020 and December 11, 2020 to effectively address the source of contamination (DNAPL source areas) as documented in the 2022 *Construction Completion Report* (approved by NYSDEC in letter dated February 11, 2022).

The RH3 DNAPL source areas were addressed by:

- Excavation of 13,928.91 tons of DNAPL-impacted soil from the three DNAPL source areas (**Figure 2**), with the NYSDEC-approved excavation design depths ranging from 14.5 to 22.5 ft below ground surface (bgs). All observations of DNAPL in soil borings were made prior to the IRM design and implementation and accordingly it was known and documented that DNAPL would remain after the IRM. For example, NYSDEC's April 2020 RH3 Fact Sheet identified excavation to “an approximate maximum depth of 24 feet below ground surface” and that “tar was identified in the eastern and southeastern portions of the site at depths between 7 and 27 feet below grade.”
- In-situ treatment through Anaerobic Biological Oxidation (ABOx) consisting of subsurface emplacement of gypsum (409.16 tons) to enhance biodegradation of remaining impacts. The gypsum was blended into the backfill from the bottom of each excavation up to approximately 5 feet bgs (i.e., saturated zone, incorporating the approximate seasonal high water table) to provide a long-term source of sulfate. The resultant increase in sulfate concentrations from the gypsum emplacement facilitates degradation of dissolved phase petroleum tar-related hydrocarbons, which enhances DNAPL dissolution.
- Removal/treatment of 3,231,247.14 gallons of wastewater generated primarily from dewatering conducted to remove groundwater from the excavations to allow for soil removal. Groundwater can be found at depths ranging from approximately 4 to 8 feet bgs across the Site.

2 Updated Geologic Cross Sections

A detailed review of existing data was undertaken to update the RH3 geologic cross sections that were provided in the NYSDEC-approved *Supplemental Remedial Investigation Report – Red Hook 3 – Revised* (March 2019). The updated cross sections are presented in **Attachment 1**. Updates to the cross sections and **Figure 2** included:

- Different cross sections such that one or more of the sections transect each of six soil boring locations recommended by NYSDEC (NYSDEC's June 25, 2025 email) to drill step out soil borings, collect soil samples and observe cores for visual evidence of remaining DNAPL. **Figure A-1 (Attachment 1)** shows the five cross sections (AA through EE) in plan view and includes locations of previous soil borings, showing a dense network of soil borings within and adjacent the IRM excavations. On the plan view (**Figure A-1**), the six soil boring locations identified by NYSDEC are highlighted in green. **Figure 2** shows the locations of and identifies the bottom depth of the soil borings, as well as the surveyed horizontal limits and depths of the IRM excavation areas, and locations/intervals of DNAPL excavated (turquoise) and not excavated (red) during the IRM.
- Added DNAPL depth intervals on **Figure 2** for two soil boring locations on the concrete walk along Wolcott Street: RH3-TGHP2-GP and RH3-TGHP4-GP. The DNAPL intervals for these soil borings were identified in prior reports submitted to NYSDEC, including the *Interim Remedial Measure Design Work Plan* (Figure 5), but were inadvertently not identified on the recent Arcadis figures provided to NYSDEC that show DNAPL not excavated.
- Added the former concrete building slab (approximately 1.5 feet thick) to the cross sections. The former Metal Warehouse (footprint shown on **Figure A-1** and **Figure 2**) was demolished prior to the 2020 IRM and the concrete slab was removed. The RH3 soil borings were drilled and locations and elevations surveyed prior to demolition of the warehouse. Accounting for this approximate 1.5 foot difference in the ground surface elevation between when the soil borings were drilled and the IRM conducted, the DNAPL intervals identified at A-RH3-WS15 (Area 2A), A-RH3-WS17 (Area 2C) and A-RH3-B32 (Area 3B) on the recent figures provided to NYSDEC were removed from **Figure 2** because the intervals were excavated during the IRM. None of these soil boring locations were recommended by NYSDEC to drill step out soil borings.
- Added the horizontal and vertical surveyed IRM excavation limits on the plan view and cross sections.
- Added post-SRI soil boring locations relative to the original 2019 geologic cross-sections: 75 soil borings were drilled/characterized post-SRI to confirm DNAPL extent and obtain IRM waste characterization data for off-site disposal purposes. The DNAPL extent was confirmed pursuant to NYSDEC's request (letter dated May 24, 2019) whereby soil borings, including step out borings, were drilled/logged to 30 feet bgs. The results were documented in Arcadis' letter to NYSDEC dated June 28, 2019. The letter also documented that installation of soil borings and/or horizontal excavation advancement did not occur in the area of the Site boundary parallel to Wolcott Street, which is proximate to underground utilities along/beneath Wolcott Street (**Figure A-1**). **Figure A-2** through **Figure A-6** show cross section views AA through EE, respectively.

Review of Data at Key Soil Boring Locations

Each of the six soil boring locations recommended by NYSDEC for added attention are discussed below with respect to DNAPL observations, including adjacent and nearby soil borings.

- **A-RH3-WS14** was advanced in May 2019 as part of waste characterization (for off-site disposal purposes) and pre-IRM DNAPL delineation. The soil boring was advanced to a terminal depth of 30 feet bgs using direct-push techniques. DNAPL was observed at 19 to 20 feet bgs, with staining through 30 feet and markedly diminished photoionization detector readings between 25 and 30 feet bgs. Data suggests that a limited vertical zone of DNAPL is present. Cross section AA (**Figure A-2**) shows horizontal and vertical DNAPL distribution along transect AA with the DNAPL zone excavated in excavation Areas 1 and 2, with the exception of 1-foot of DNAPL from 19 to 20 feet bgs at boring A-RH3-WS19 and 1.5-feet of DNAPL from 16 to 17.5 feet bgs at boring A-RH3-WS25, which remain below the excavation (Area 2B) bottom of 14.7 feet (**Figure A-2**). Moving further southeast along Transect AA, DNAPL was not observed in proximate soil boring LMW-08 (boring depth 70 feet bgs). Additionally, in the groundwater sample collected (February 2017) from

nearby monitoring well MW-2 (screened 5 to 15 ft bgs) benzene was detected at 19 micrograms/liter (ug/L) and was the only volatile organic compound (VOC) exceeding the Class GA groundwater quality standards (**Attachment 2**). Transect DD (**Figure A-5**) also crosses A-RH3-WS14 and shows DNAPL excavated to the northeast in excavation Area 2A and not present to the immediate southwest at boring A-RH3-B24 (boring depth 30 feet bgs).

- **A-RH3-B35** was completed on May 13, 2019 as part of DNAPL delineation in and proximate to the proposed IRM excavation areas. This boring was advanced to a terminal depth of 30 feet bgs by direct-push and is located within the excavation Area 3A as shown on **Figure 2** and extends beyond the excavation bottom as discussed below. Field observations noted DNAPL at the 16 to 16.5 foot bgs depth interval. Soil samples were not collected for laboratory analyses from this location. Cross section CC (**Figure A-4**) and cross section EE (**Figure A-6**) show the approximately one-half foot thick interval of DNAPL remaining just below the bottom of the excavation, but no further along the depth of the boring. Adjacent borings A-RH3-WS4 and A-RH3-WS20 along cross section CC show a limited thickness of horizontally and vertically delineated DNAPL remaining beneath the excavation bottom. Cross section EE also shows vertical and horizontal delineation of DNAPL with a one-foot thick vertical zone of DNAPL just beneath the excavation bottom at adjacent boring A-RH3-WS2R.
- **A-RH3-WS20** was advanced in May 2019 as part of waste characterization (for off-site disposal) and pre-IRM DNAPL delineation is located further southeast along transect AA (**Figure A-2**) and also on transect CC (**Figure A-4**) and has a 5-foot thick zone of DNAPL remaining at 22 to 27 feet bgs (excavation Area 3A bottom is 15 feet bgs). This zone is vertically delineated and does not extend beyond 27 feet bgs. Borings proximate to A-RH3-WS20 both within and outside excavation Area 3A and into Area 3B (see **Figure A-2**) show the DNAPL to be horizontally and vertically delineated or excavated. Additionally, the 2019 waste characterization sample collected at A-RH3-WS20 from 22 to 24 feet bgs contained ethylbenzene and methylene chloride at 3.6 ppm and 0.56 parts per million, respectively. There were no other VOC exceedances of NYSDEC's Part 375 Protection of Groundwater Soil Cleanup Objectives (SCOs). Tables presenting available waste characterization VOC and semi-volatile organic compound (SVOC) data for the DNAPL locations and proximate soil borings were provided to NYSDEC in an Arcadis' June 12, 2025 email, which is provided in **Attachment 3**.
- **A-RH3-WS22** (pre-IRM DNAPL delineation boring) is located further southeast along transect AA and shows a zone of DNAPL remaining below the 15 foot excavation bottom at 20 to 21 feet bgs. Referring to **Figure A-2**, nearby borings have delineated the horizontal and vertical extent of DNAPL proximate to A-RH3-WS22.
- **A-RH3-B6** was advanced on June 28, 2017 as part of an environmental due diligence investigation conducted by Arcadis on behalf of BT Red Hook. Note that the 2017 *Remedial Investigation Report* prepared by Atlantic Environmental Solutions Inc. had not yet been submitted to NYSDEC.
A-RH3-B6 lies outside of the IRM excavation areas and was advanced to a depth of 25 feet bgs using direct-push techniques. Field observations noted DNAPL at the 20 to 25 foot bgs depth interval. Analytical results from a soil sample collected from 24 to 25 feet bgs did not detect VOCs at concentrations at or above NYSDEC Part 375 Commercial SCOs. Cross section **Figure A-2** and cross section DD (**Figure A-5**) show borings proximate to A-RH3-B6. This soil boring location is near the Site boundary parallel to Wolcott Street, which is proximate to the underground utilities along/beneath Wolcott Steet (**Figure A-1**).
- **A-RH3-B19** is located south of the IRM excavation areas near the former Dikeman Street. Boring logs indicate a limited vertical zone marginally identified as DNAPL from 20 to 22.6 feet bgs. Boring depth is 25 feet bgs. Nearby borings (**Figure A-3**) other than A-RH3-B13 to the south, where DNAPL was marginally identified at 14.5 feet bgs, do not indicate the presence of DNAPL.

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Cross section view (AA-AA') provided on **Figure A-2** shows depths of soil borings across the Site. Most borings within and outside the IRM excavation areas extend below the bottom of the three respective excavations and the sub-areas within the excavations. The five cross section transects show that the majority of boring locations exhibiting DNAPL were excavated during the IRM. Those that were not excavated are horizontally bracketed by other borings not showing DNAPL or by excavation areas. Vertical DNAPL zones are limited to thicknesses of 1 to 5 feet.

Conclusions

A detailed review of data and associated updated geologic cross sections have validated BT Red Hook's and NYSDEC's previous conclusion that the nature and extent of DNAPL have been adequately delineated to meet the objectives of the Brownfield Track 4 remedy for the RH3 Site presented in the RAWP. Although the data show limited (horizontally and vertically) remaining pockets of DNAPL, the dense network of borings has satisfactorily delineated its horizontal and vertical extent. Remaining DNAPL, such as at borings A-RH3-WS14, A-RH3-WS20 and A-RH3-WS25 where the DNAPL was at, or just beneath the excavation bottoms or proximate to the excavations, was the reason that ABOx was identified as a remedy component and associated gypsum amendments placed in the excavations during the IRM.

Photographs taken upon completing the excavation in Area 2B and Area 3A (where DNAPL remained below the excavation in several locations) further support that the DNAPL remaining after the IRM is minimal. Photographs for the bottom of excavation Areas 2B and 3A are provided in **Attachment 4**.

As identified in the opening of this letter, NYSDEC requires confirmation that the source area has been properly remediated to approve a "No Further Action" remedial action for RH3. NYSDEC's definition of "source area" as presented in DER-10 requires the area to contain "contaminants in sufficient concentrations to migrate in that medium, or to release significant levels of contaminants to another environmental medium, which could result in a threat to public health and the environment". For RH3, migration of soil impacts would be limited to groundwater and soil vapor. With respect to groundwater, as most recently presented to NYSDEC in Arcadis' June 12, 2025 email (**Attachment 3**), the results of the comprehensive 2017 RI groundwater sampling event were used to identify the source areas removed during the IRM and documented that VOC and SVOC concentrations in groundwater fall off sharply with distance from the DNAPL source areas. Migration of soil impacts to soil vapor is discussed below.

3 Preliminary 2025 Soil Vapor Results

In 2017 during the RI, indoor air, sub slab soil vapor, and soil vapor samples were collected and the results provided in the 2017 *Remedial Investigation Report* prepared by Atlantic Environmental Solutions, Inc. VOCs were identified as potential indoor air constituents of potential concern; however due to the uncertainties associated with the 2017 data set, additional evaluation was recommended in Arcadis' 2018 *Human Health and Environmental Assessment*. BT Red Hook demolished the on-site buildings in 2019, prior to the IRM remedial excavations.

NYSDEC's April 28, 2025 RAWP comment letter and June 25, 2025 email requested additional soil vapor sampling on RH3. In accordance with the NYSDEC-approved August 2025 *Soil Vapor Sampling Plan – Revised*, Arcadis conducted the soil vapor sampling August 19 through August 21, 2025. A figure showing the soil vapor sampling locations and a table providing a preliminary draft summary of the unvalidated soil vapor results received from the laboratory on September 9, 2025 are provided in **Attachment 5**. In the table, the data are compared to: 1) applicable NYSDOH decision matrices provided in their *Guidance for Evaluating Soil Vapor*

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Intrusion in the State of New York (October 2006, as updated) that are to be used as tool in the decision making process; and 2) United States Environmental Protection Agency (USEPA) commercial vapor intrusion screening levels (VISLs). RH3 is zoned for manufacturing as M2-1, which allows manufacturing and certain commercial uses.

The 2025 preliminary RH3 soil vapor data summarized in the table provided in **Attachment 5** indicate a few VOC concentrations were detected at concentrations slightly exceeding NYSDOH's matrix lower limit in two samples collected in the interior of the Site: A-SV3 collected within the footprint of the former Government Office Building and A-SV6 collected in the area between the other two former RH3 buildings (see figure in **Attachment 5**). There was also one slight exceedance of the USEPA VISLs: 1,3-Butadiene detected in sample A-SV8 (collected near the Site boundary along Ferris Street) at 18 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) compared to the commercial VISL of 14 $\mu\text{g}/\text{m}^3$. There is not a NYSDOH matrix for 1,3-Butadiene.

Because the NYSDOH's subslab lower limit was only marginally exceeded in just two samples collected from the interior of the Site, no further action regarding soil vapor is necessary at this time based on the following:

- Site is currently vacant with no buildings;
- Data does not indicate off-site impacts in soil vapor related to RH3; and
- Prior NYSDEC-approved documents prepared by Arcadis (e.g., 2022 Construction Completion Report and 2025 RAWP) identified implementation of a potential engineering control in the form of vapor mitigation measures (e.g., subslab depressurization system) if any occupied building(s) is to be constructed onsite.

4 Overall Conclusions

As identified in Section 2, the detailed review of data and associated updated geologic cross sections have validated BT Red Hook's and NYSDEC's previous conclusion that the nature and extent of DNAPL have been adequately delineated to meet the objectives of the Brownfield Track 4 remedy for the RH3 Site that has been identified in NYSDEC-approved documents since the 2020 *Interim Remedial Measure Design Work Plan*. The 2025 soil vapor data (unvalidated) preliminarily summarized in Section 3 corroborates this conclusion.

The results of the comprehensive 2017 groundwater sampling event conducted during the Remedial Investigation support that the source areas were removed during the IRM, VOC and SVOC concentrations in groundwater fall off sharply with distance from the DNAPL source areas, and Site-related groundwater impacts are not migrating off-site, which NYSDEC confirmed during our July 24, 2025 meeting. Additionally, no recoverable DNAPL was identified in any of the 22 monitoring wells and DNAPL was not observed deeper than 27 ft bgs. DNAPL at RH3 is not mobile. The limited, residual DNAPL present at the Site is not impacting other media (soil vapor or groundwater) and thus NYSDEC's original position to support a no further action alternative is justified.

5 Proposed Next Steps

BT Red Hook/Arcadis propose a Teams Meeting with NYSDEC and NYSDOH to discuss this letter and path forward for RH3, after the 2025 soil vapor sampling data have been validated and the associated soil vapor sampling report submitted. As identified in the August 2025 *Soil Vapor Sampling Plan – Revised*, Arcadis will submit a letter report to NYSDEC and NYSDOH within 6 weeks of completion of data validation and receipt of the DUSR. We anticipate submitting the letter report to NYSDEC mid-October and plan to reach out within the next week to check the Agencies' availability for a call late October.

Mr. Robert Bellotti
New York State Department of Environmental Conservation
October 1, 2025

Please let me know if you have any questions. Thank you.

Sincerely,
Arcadis of New York, Inc.



Terry Young
Vice President

Email: Terry.Young2@arcadis.com
Direct Line: 315 671 9478

- CC. C. Moseley, UPS
F. Otto, UPS
S. Gulam, UPS
A. Briggs, UPS
R. Mustico, NYSDEC
M. Sweet, NYSDEC
J. O'Connell, NYSDEC Region 2
D. Tucholski, NYSDOH
A. Tamuno, NYSDEC Project Attorney
H. Devery, Arcadis
A. Korik, Arcadis
C. Geraci, Arcadis

Enclosures:

- Table 1 – Timeline and Communications Summary - Preferred Final Site Remedy Components
- Figure 1 – Site Plan
- Figure 2 – Excavation Areas and IRM DNAPL Excavation Details
- Attachment 1 – Geologic Cross Sections
- Attachment 2 – Table Extracted from Arcadis' April 2025 RAWP
- Attachment 3 – Arcadis' June 12, 2025 email to NYSDEC
- Attachment 4 – RH3 Photolog Write-Up and Photologs of the Bottom of Excavation Areas 2B and 3A
- Attachment 5 – Soil Vapor Sampling Results and Sample Locations
 - Table: Preliminary Draft Soil Vapor Summary – August 2025
 - Figure: Temporary Soil Vapor Sample Locations and Piezometers

Table

Table 1
Timeline and Communications Summary - Preferred Final Site Remedy Components
Red Hook 3 Brownfield Site #C224213
Borough of Brooklyn, Kings County, New York



Major Interim Remedial Measure (IRM) Deliverable or Meeting	Key DNAPL and Final Site Remedy Communication	NYSDEC Approval or Meeting Attendees
Remedial Scope Meeting at NYSDEC's Albany, NY Office September 9, 2019	Discussed proposed, revised remedy relative to the July 2019 Revised Draft Interim Remedial Measure (IRM) Design Work Plan: expand excavation limits horizontally and vertically and amend the backfill to enhance naturally occurring bioremediation.	NYSDEC Meeting Attendees C. Heller, R. DeCandia, E. Obrecht, G. Heitzman
IRM Design Work Plan Revised Draft December 2019 Final March 2020	Mobile dense non-aqueous phase liquid (DNAPL) major driver for remediation based on discussions with NYSDEC Pre-Design Confirmation Soil Boring Results Revised Proposed Limits of Excavation Preferred Final Site Remedy Components Identified	Approval Letter dated 3/13/20 Signed by C. Heller cc list included R. Mustico, R. DeCandia and J. O'Connell
IRM Design Revised Draft (95%) February 2020 Final (100%) March 2020	Detailed plans and specifications for excavation and in-situ treatment Addressed the three DNAPL source areas identified in the NYSDEC-approved IRM Design Work Plan Same Preferred Final Site Remedy Components Identified*	Revised Draft (95%) Approval letter dated 3/13/20 Final (100%) Approval letter dated 3/24/20 Signed by C. Heller cc list included R. Mustico, R. DeCandia and J. O'Connell
Construction Completion Report (CCR) Draft July 2021 Revised Draft February 2022 Final March 2022	Documented the Red Hook 3 (RH3) IRM conducted in 2020 Same Preferred Final Site Remedy Components Identified* NYSDEC 12/28/21 comment letter identified three comments, including a request to include details "about how the excavation boundaries were defined". Accordingly, Section 3.4.2 IRM Excavation Boundaries was added to the February 2022 Revised Draft CCR, no further comments were received from NYSDEC, and the CCR was approved.	Approval letter dated 2/11/22 Signed by R. Bellotti cc list included R. DeCandia and J. O'Connell

Table 1
Timeline and Communications Summary - Preferred Final Site Remedy Components
Red Hook 3 Brownfield Site #C224213
Borough of Brooklyn, Kings County, New York



Major Interim Remedial Measure (IRM) Deliverable or Meeting	Key DNAPL and Final Site Remedy Communication	NYSDEC Approval or Meeting Attendees
<p>Remedial Action Work Plan (RAWP) Draft February 2025 Final April 2025</p>	<p>Identified the basis for and presented the preferred final remedy for RH3</p> <p>Same Preferred Final Remedy Components Identified*</p> <p>NYSDEC's letter dated March 25, 2025 provided two comments on the Draft February RAWP: 1) add information and summary table for soil vapor sampling conducted during the RI; and 2) proposed remedial action must address any further remaining DNAPL and why further excavation and removal is not needed. BT Red Hook/Arcadis addressed the comments in Arcadis' letter dated April 2, 2025 and transmitted the Final RAWP to NYSDEC and NYSDOH.</p> <p>March 25, 2025 through July 24, 2025 multiple communications between NYSDEC, NYSDOH, BT Red Hook and Arcadis principally regarding DNAPL remaining after the IRM but also addressing the NYSDEC/NYSDOH request for soil vapor sampling (NYSDEC's letter to BT Red Hook dated April 28, 2025).</p>	<p>Not Applicable</p>
<p>RAWP Meeting at NYSDEC's Albany, NY Office July 24, 2025</p>	<p>All agreed upon the scope of the soil vapor sampling activities and Arcadis identified the field work was tentatively scheduled to begin 8/19/25, pending NYSDEC/NYSDOH's approval of Arcadis' sampling plan.</p> <p>NYSDEC indicated that remaining DNAPL may require remediation.</p> <p>NYSDEC agreed that geologic cross-sections of the Site which also show observed DNAPL intervals may be helpful to define/limit the scope of the additional soil borings to define the extent of DNAPL. BT Red Hook/Arcadis agreed to prepare and provide the cross-sections to NYSDEC/NYSDOH.</p>	<p>NYSDEC Meeting Attendees R. Mustico, S. Deyette, M. Sweet, J. O'Connell, R. Bellotti</p>

* Same Preferred Final Site Remedy Components as identified in the NYSDEC-approved March 2020 IRM Design Work Plan.

Figures

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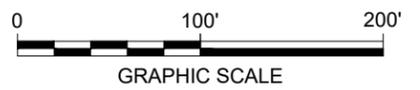
LEGEND:

- BLOCK/LOT BOUNDARY
- BROWNFIELD BOUNDARY
- FORMER BUILDING



NOTE:

1. BASED ON "EXISTING SITE" FIGURE (AESI MARCH 2017) AND "NY CITY DEPARTMENT OF FINANCE DIGITAL TAX MAP" (AUGUST 15, 2017).



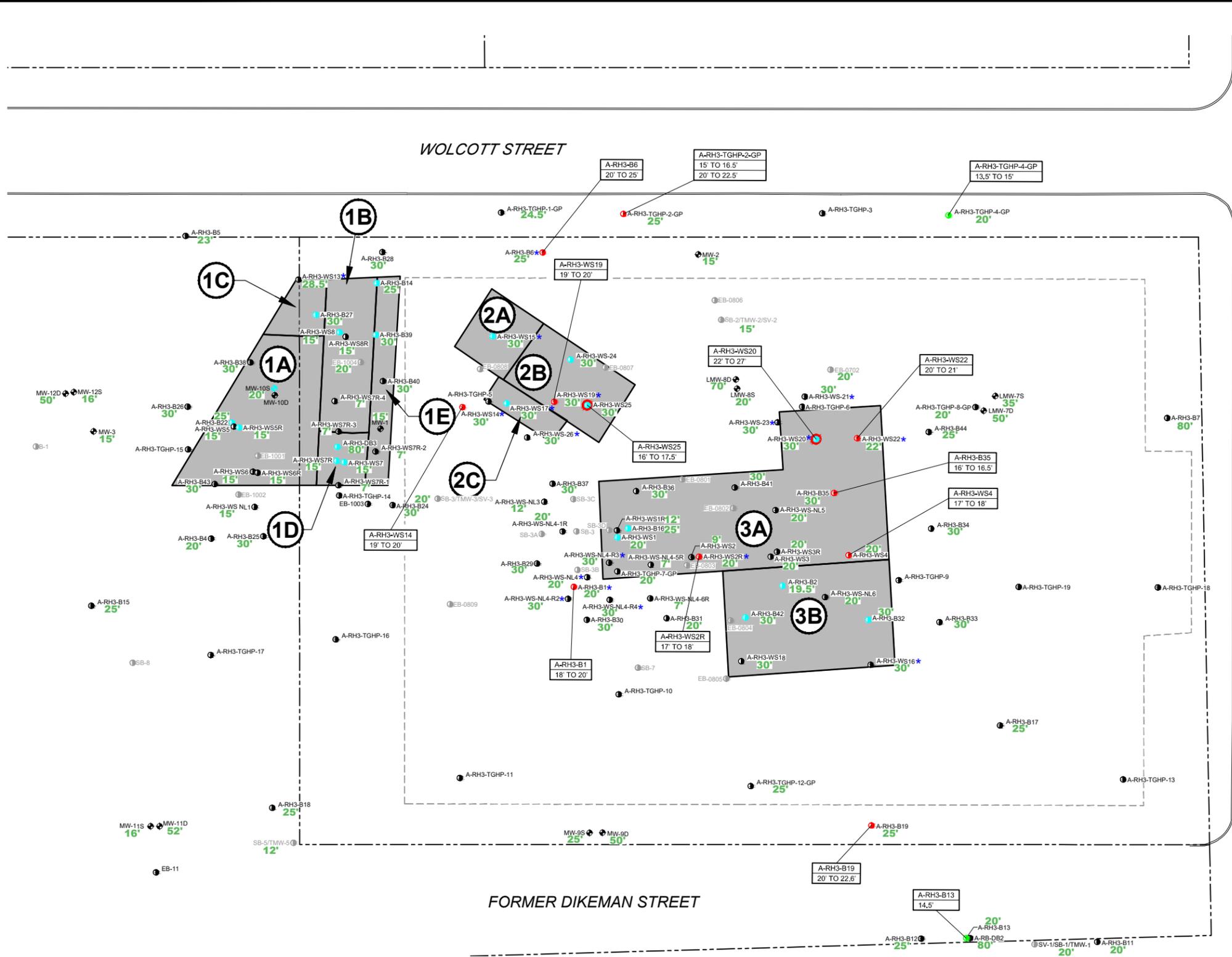
BT RED HOOK, LLC - RED HOOK 3
68 AND 100 FERRIS STREET/242 AND 300 COFFEY STREET
BROOKLYN, NEW YORK

SITE MAP WITH BLOCK AND LOT BOUNDARIES

ARCADIS | FIGURE
1

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XREFS: IMAGES: CCR_REDHOOK_BASE X02-RH-Post Construction Grade



FERRIS STREET

LEGEND:

- PROPERTY LINE (APPROXIMATE)
- - - - - FOOTPRINT OF FORMER WAREHOUSE BUILDING
- MONITORING WELL INSTALLED BY OTHERS (DECOMMISSIONED, MAY 2019)
- SOIL BORING LOCATION
- SOIL BORING (NOT SURVEYED)
- DNAPL 15 FEET OR SHALLOWER
- DNAPL DEEPER THAN 15 FEET
- DNAPL EXCAVATED DURING 2020 IRM
- DNAPL EXCAVATED DURING 2020 IRM WITH SOME REMAINING
- EXCAVATION AREA (SEE NOTE 1)
- ① EXCAVATION AREA ID
- ★ VOC AND/OR SVOC ANALYTICAL DATA AVAILABLE (2017/2019; PRE-IRM) AS SUMMARIZED IN ARCADIS' 6/12/25 EMAIL TO NYSDEC
- 20' BOTTOM OF BORING DEPTH IN FEET BELOW GRADE - BASED ON BORING LOG OR GAUGED WELL DEPTH IF BORING LOG UNAVAILABLE
- DNAPL DENSE NON-AQUEOUS PHASE LIQUID
- A-RH3-WS19 - SAMPLE IDENTIFICATION
- 19' TO 20' - DNAPL DEPTH (PRE BUILDING DEMOLITION PRIOR TO 2020 IRM)

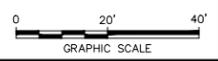
EXCAVATION AND BACKFILL SCHEDULE

IRM EXCAVATION AREA	DEPTH OF EXCAVATION (FEET BGS)		EXCAVATION VOLUME (IN-SITU CUBIC YARDS)
	DESIGN	ACTUAL	
1A	15	15.3	1,098
1B	15	16.1	577
1C	18.5	19.6	234
1D	18	18.9	233
1E	23	23.4	511
2A	22.5	22.3	434
2B	14.5	14.7	525
2C	21.5	21.6	217
3A	14.5	15.0	2,348
3B	18.5	19.5	1,602
TOTAL	--	--	7,779

- NOTES:**
- NYSDEC-APPROVED EXCAVATION INTERIM REMEDIAL MEASURE (IRM) CONDUCTED BETWEEN FEBRUARY 11, 2020 AND DECEMBER 11, 2020, AS DETAILED IN THE NYSDEC-APPROVED CONSTRUCTION COMPLETION REPORT (ARCADIS FEBRUARY 2022).
 - EXCAVATION DEPTHS ARE BELOW GRADE AT TIME OF THE 2020 IRM.
 - DEPTHS OF EXCAVATIONS AND SURFACE AREAS WERE CALCULATED FOR EACH EXCAVATION AREA USING AS-BUILT SURVEY DATA AS DETAILED IN ARCADIS' CONSTRUCTION COMPLETION REPORT.
 - SOIL BORING LOCATIONS WITH ASSOCIATED SOIL OBSERVATION TEXT BOXES IDENTIFY DEPTH INTERVALS WHERE DNAPL-SATURATED SOIL WAS OBSERVED (NOT BLEBS).
 - SAMPLE IDENTIFICATION EXPLANATION:
 - a. B1 - B13 AND "TGHP" = 2017 DUE DILIGENCE SOIL SAMPLE
 - b. B14 - B23 = 2018 SRI SOIL SAMPLE
 - c. B24 - B44 = 2019 PRE-DESIGN CONFIRMATION SOIL SAMPLE
 - d. WS = 2019 WASTE CHARACTERIZATION SOIL SAMPLE
 - e. "A" PREFIX = BORING INSTALLED BY ARCADIS
 - DURING THE SITE-WIDE MONITORING WELL GAUGING EVENTS CONDUCTED BY ARCADIS IN 2018 AND 2019, 0.1' DNAPL WAS MEASURED IN MW-1 ON 6/1/18, NO PRODUCT WAS IDENTIFIED DURING THE NEXT 7 EVENTS, AND 0.02' WAS MEASURED ON 4/26/19 (PRIOR TO DECOMMISSIONING ALL SITE MONITORING WELLS). MW-1 WAS A SHALLOW WELL (15 FEET BGS DEPTH TO BOTTOM) LOCATED IN EXCAVATION AREA 1E (DEPTH OF EXCAVATION 23.4 FT BGS).
 - "TGHP" LOCATIONS WITHOUT A "GP" SUFFIX DID NOT HAVE CO-LOCATED GEOPROBE SOIL CORES COLLECTED.

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BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK

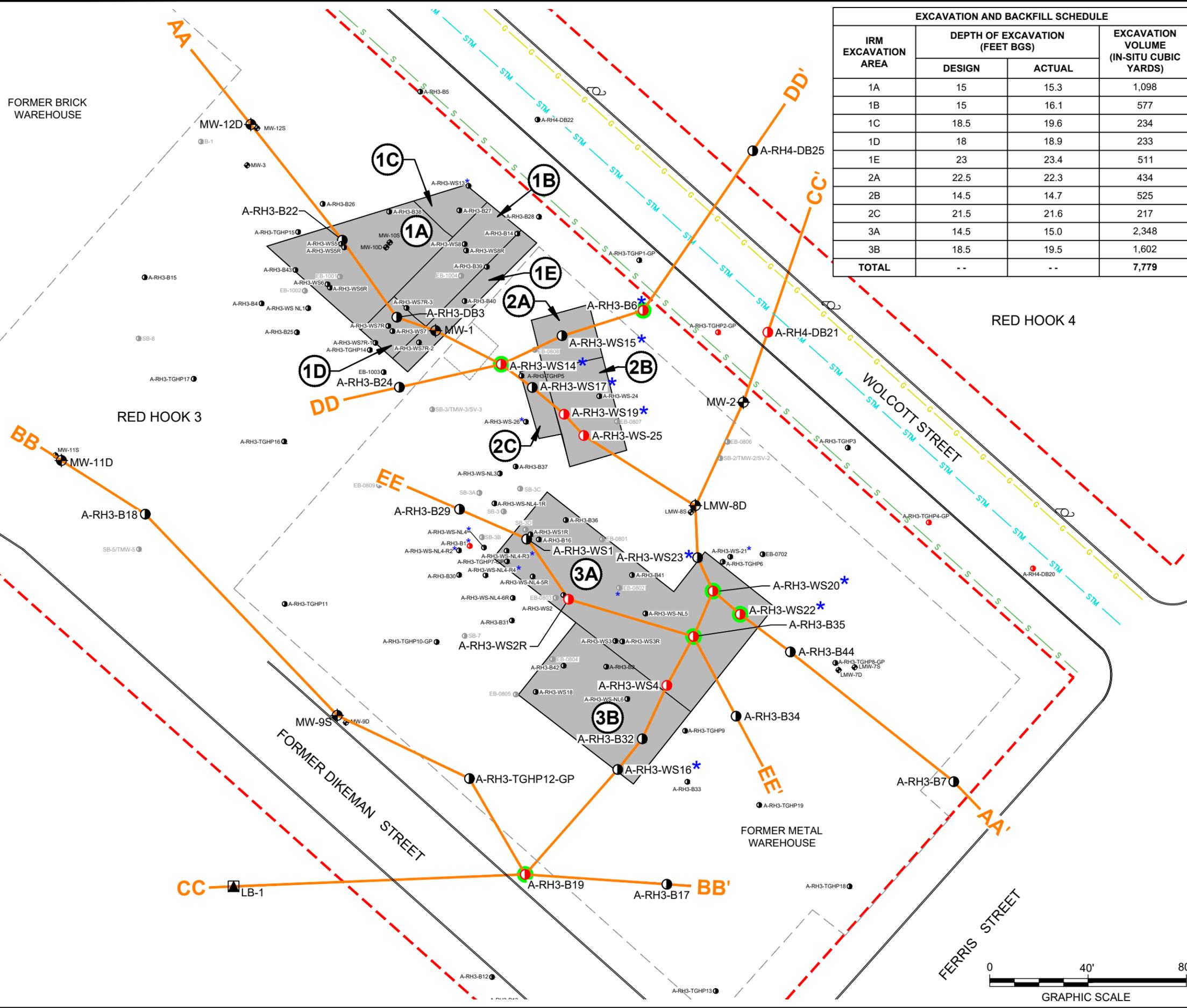
EXCAVATION AREAS AND IRM DNAPL EXCAVATION DETAILS



Attachment 1

Geologic Cross Sections

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EXCAVATION AND BACKFILL SCHEDULE			
IRM EXCAVATION AREA	DEPTH OF EXCAVATION (FEET BGS)		EXCAVATION VOLUME (IN-SITU CUBIC YARDS)
	DESIGN	ACTUAL	
1A	15	15.3	1,098
1B	15	16.1	577
1C	18.5	19.6	234
1D	18	18.9	233
1E	23	23.4	511
2A	22.5	22.3	434
2B	14.5	14.7	525
2C	21.5	21.6	217
3A	14.5	15.0	2,348
3B	18.5	19.5	1,602
TOTAL	--	--	7,779

LEGEND:

- FOOTPRINT OF FORMER WAREHOUSE BUILDING
- ⊕ MONITORING WELL (DECOMMISSIONED 2019)
- SOIL BORING
- SOIL BORING (NOT SURVEYED)
- SOIL BORING (NOT EXCAVATED DNAPL)
- ▲ GEOTECHNICAL BORING
- SITE BOUNDARY
- G GAS LINE
- S SANITARY SEWER LINE
- STM STORM SEWER LINE
- ▭ SURVEYED LIMITS OF NYSDEC-APPROVED INTERIM REMEDIAL MEASURE (IRM) EXCAVATION AREA, 2020, KENNON SURVEYING SERVICES
- A-A' GEOLOGIC CROSS-SECTION TRANSECT
- NYSDEC RECOMMENDED LOCATION (6/25/25 EMAIL) TO DRILL STEP OUT SOIL BORINGS TO COLLECT SOIL SAMPLES AND OBSERVE CORES FOR VISUAL EVIDENCE OF REMAINING DNAPL
- * VOC AND/OR SVOC ANALYTICAL DATA AVAILABLE (2017/2019; PRE-IRM) AS SUMMARIZED IN ARCADIS' 6/12/25 EMAIL TO NYSDEC

NOTES:

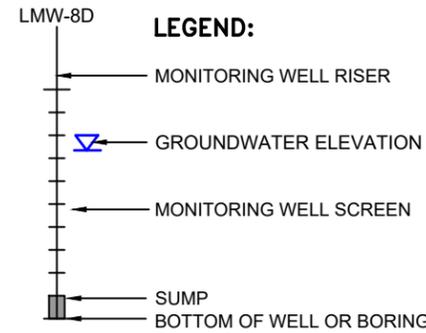
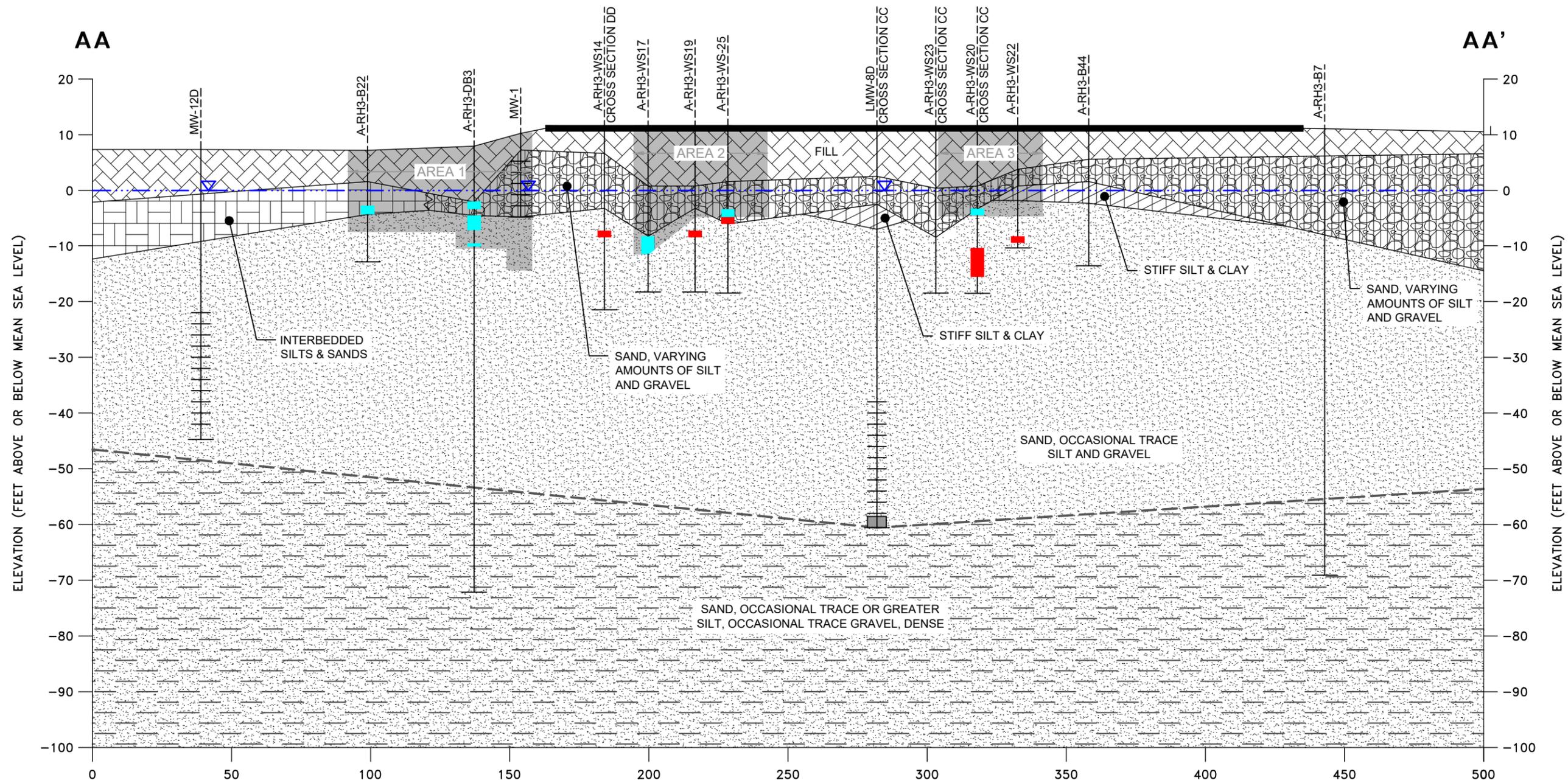
- BORING/WELL LOCATIONS AND PHYSICAL FEATURES BASED ON SURVEYS CONDUCTED BY DPK LAND SURVEYING, LLC ON OCTOBER 27, 2017 AND SEPTEMBER 26, 2018, MAY 20 AND MAY 30, 2019.
- PROPERTY BOUNDARIES OBTAINED FROM FIGURE ENTITLED "ALTA/NSPS LAND TITLE SURVEY" (LANGAN APRIL 4, 2017).
- BORING LOCATIONS SHOWN IN GRAY WERE NOT FIELD LOCATED OR SURVEYED BY ARCADIS AND WERE DIGITIZED FROM FIGURES PROVIDED BY AESI AND LANGAN.
- TarGOST® -TAR SPECIFIC GREEN OPTICAL SENSING TOOL.
- DNAPL = DENSE NON-AQUEOUS PHASE LIQUID
- NYSDEC-APPROVED IRM CONDUCTED BETWEEN 2/11/20 AND 12/11/20, AS DETAILED IN THE NYSDEC-APPROVED CONSTRUCTION COMPLETION REPORT (ARCADIS FEBRUARY 2022).
- EXCAVATION AREAS WERE AMENDED WITH GYPSUM (409.16 TONS) FROM THE BOTTOM OF EACH EXCAVATION TO APPROXIMATELY 5 FEET BELOW GRADE TO FACILITATE BIOLOGICAL DEGRADATION OF DISSOLVED PHASE PETROLEUM HYDROCARBONS, WHICH ENHANCES DNAPL DISSOLUTION.

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 68 AND 100 FERRIS STREET/242 AND 300 COFFEY STREET
 BROOKLYN, NEW YORK

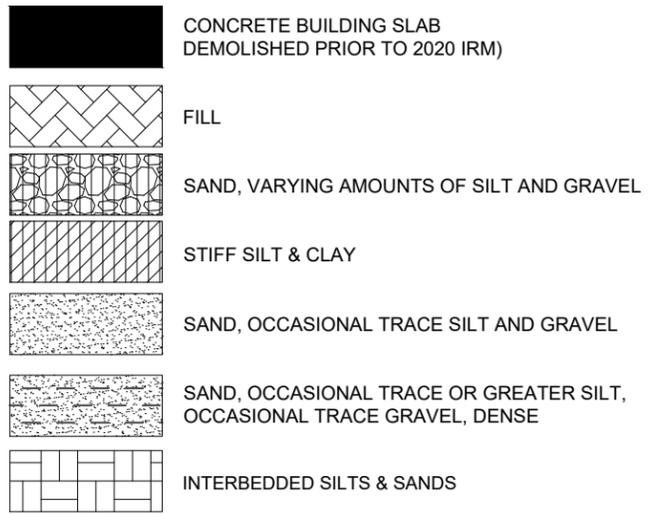
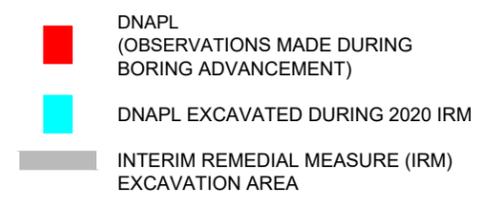
**GEOLOGIC CROSS SECTION
 LOCATION MAP**

ARCADIS | **FIGURE A-1**



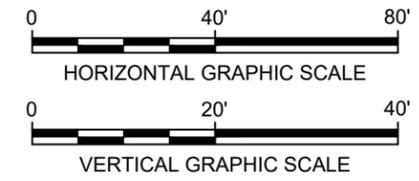


LEGEND:



NOTES:

- GROUNDWATER TABLE DEPICTED ON FIGURE IS APPROXIMATE AND IS INFLUENCED BY THE TIDE.
- COORDINATES ARE BASED ON THE NORTH AMERICAN DATUM NEW YORK LONG ISLAND STATE PLANE COORDINATE NAD 83.
- ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 88.
- ALL LOCATIONS ARE APPROXIMATE.
- SURFACE ELEVATIONS ARE PRE BUILDING DEMOLITION (PRIOR TO 2020 IRM)
- SOIL LAYERS AND GEOLOGICAL CONTACT LOCATIONS ARE APPROXIMATE AND INFERRED BETWEEN BORING LOCATIONS.
- MONITORING WELLS ("LMW-" AND "MW-" PREFIX) HAVE BEEN DECOMMISSIONED.

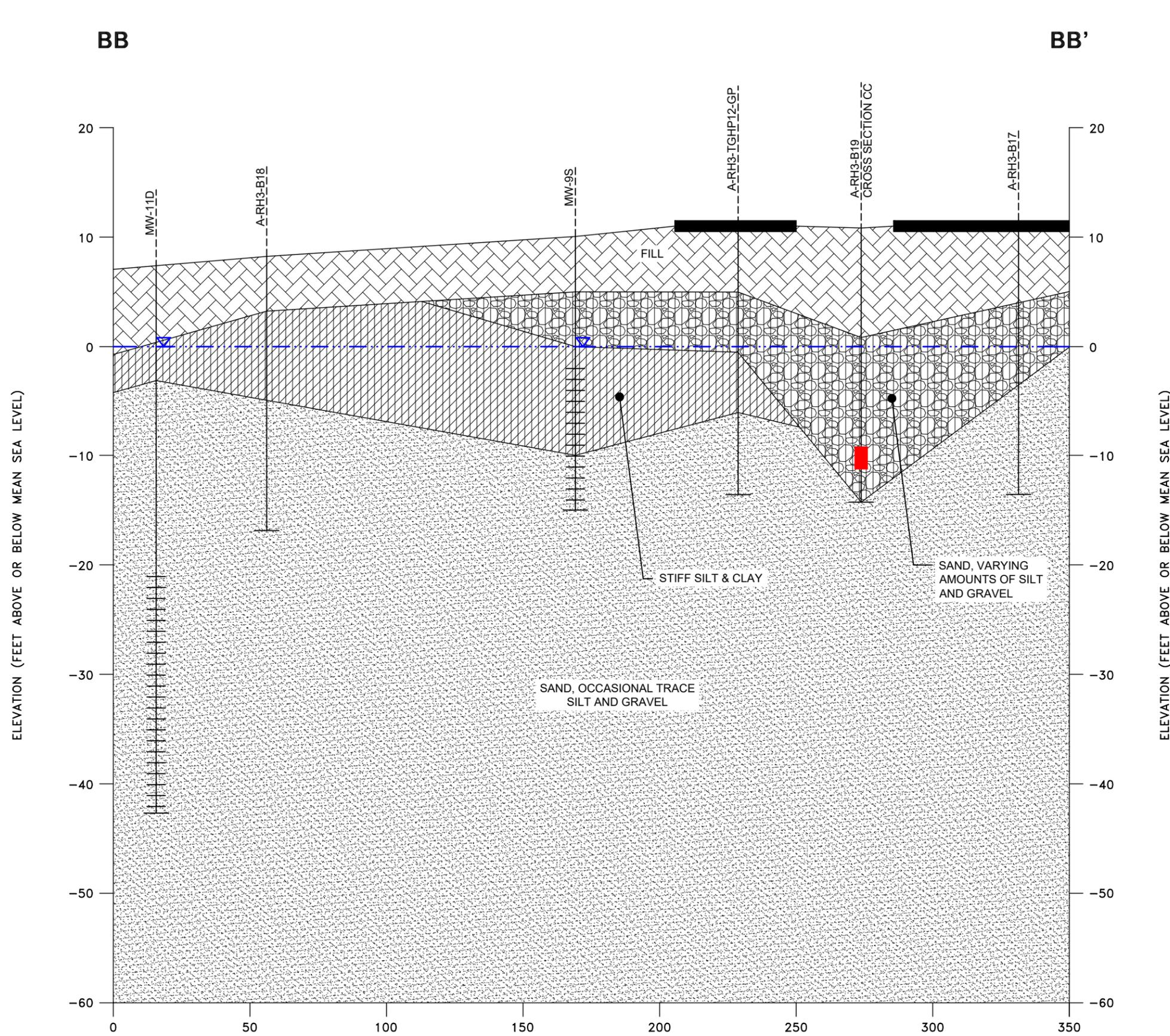


BT RED HOOK, LLC - RED HOOK 3
68 AND 100 FERRIS STREET/242 AND 300 COFFEY STREET
BROOKLYN, NEW YORK

GEOLOGIC CROSS SECTION AA-AA'



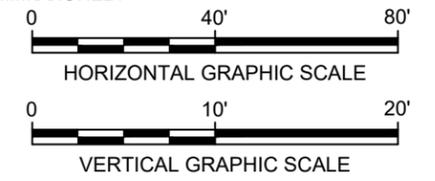
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LEGEND:

- MONITORING WELL RISER
- GROUNDWATER ELEVATION
- MONITORING WELL SCREEN
- BOTTOM OF WELL OR BORING
- DNAPL (OBSERVATIONS MADE DURING BORING ADVANCEMENT)
- CONCRETE BUILDING SLAB DEMOLISHED PRIOR TO 2020 IRM)
- FILL
- SAND, VARYING AMOUNTS OF SILT AND GRAVEL
- STIFF SILT & CLAY
- SAND, OCCASIONAL TRACE SILT AND GRAVEL
- SAND, OCCASIONAL TRACE OR GREATER SILT, OCCASIONAL TRACE GRAVEL, DENSE

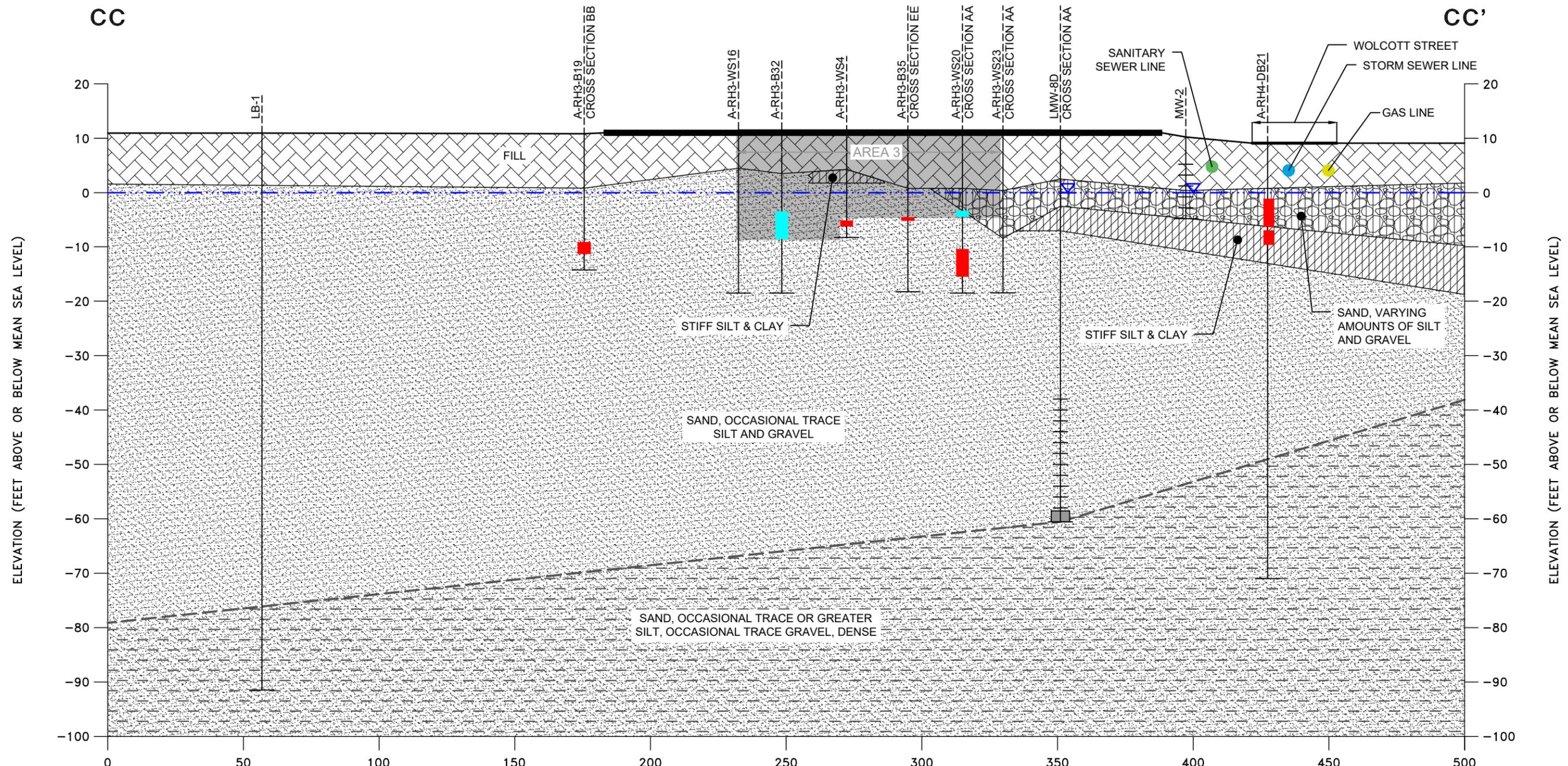
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 7. MONITORING WELLS ("MW-" PREFIX) HAVE BEEN DECOMMISSIONED.



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 68 AND 100 FERRIS STREET/242 AND 300 COFFEY STREET
 BROOKLYN, NEW YORK

GEOLOGIC CROSS SECTION BB-BB'

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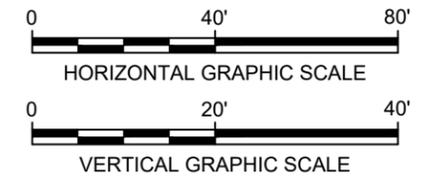


LEGEND:

- MONITORING WELL RISER
- GROUNDWATER ELEVATION
- MONITORING WELL SCREEN
- SUMP
- BOTTOM OF WELL OR BORING
- DNAPL (OBSERVATIONS MADE DURING BORING ADVANCEMENT)
- DNAPL EXCAVATED DURING 2020 IRM
- INTERIM REMEDIAL MEASURE (IRM) EXCAVATION AREA

- CONCRETE BUILDING SLAB DEMOLISHED PRIOR TO 2020 IRM)
- FILL
- SAND, VARYING AMOUNTS OF SILT AND GRAVEL
- STIFF SILT & CLAY
- SAND, OCCASIONAL TRACE SILT AND GRAVEL
- SAND, OCCASIONAL TRACE OR GREATER SILT, OCCASIONAL TRACE GRAVEL, DENSE

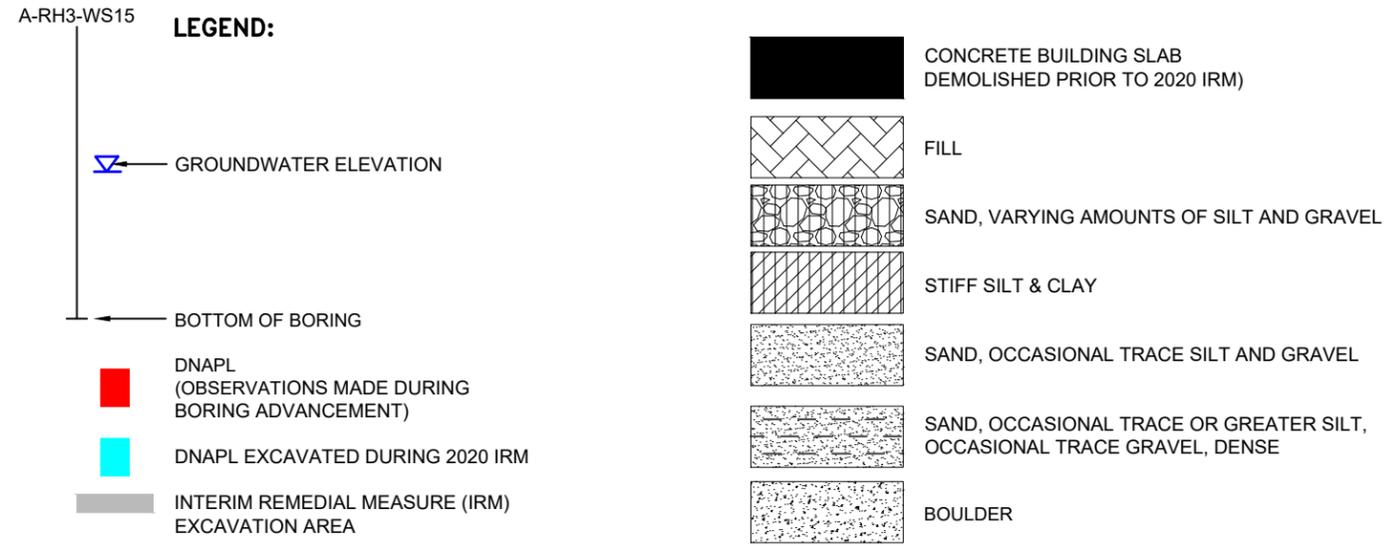
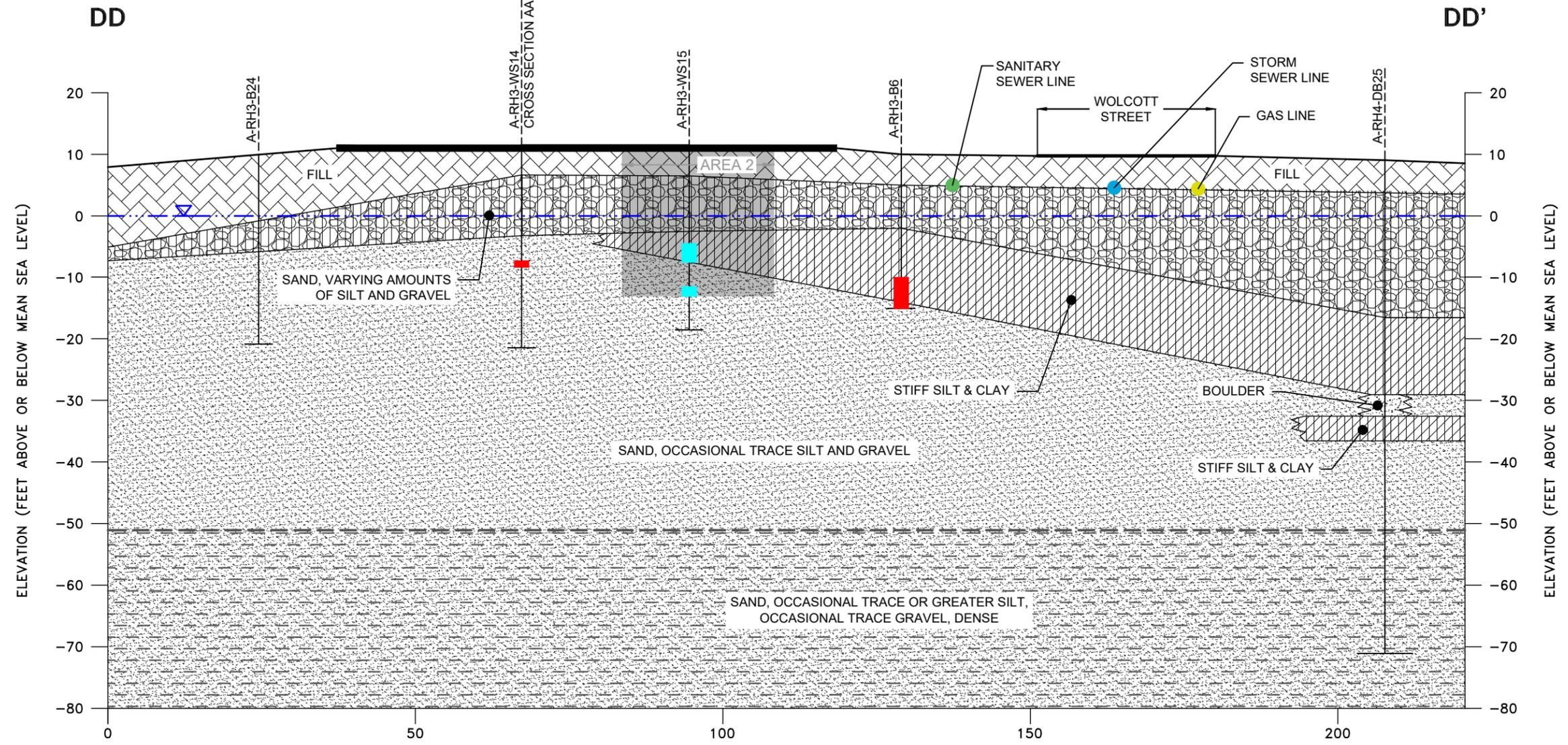
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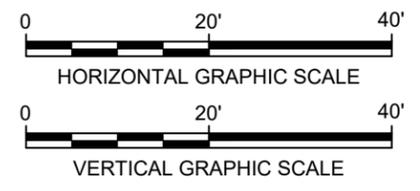
BT RED HOOK, LLC - RED HOOK 3
68 AND 100 FERRIS STREET/242 AND 300 COFFEY STREET
BROOKLYN, NEW YORK

GEOLOGIC CROSS SECTION CC-CC'

FIGURE
A-4



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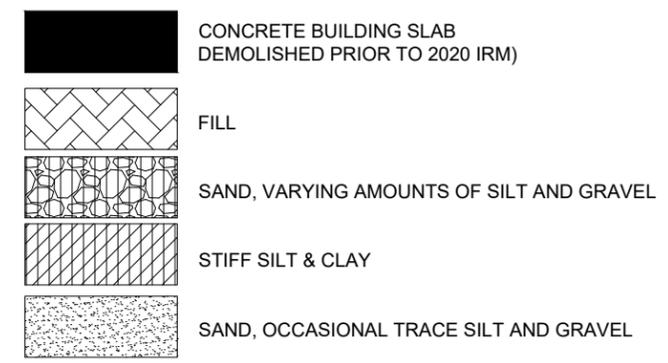
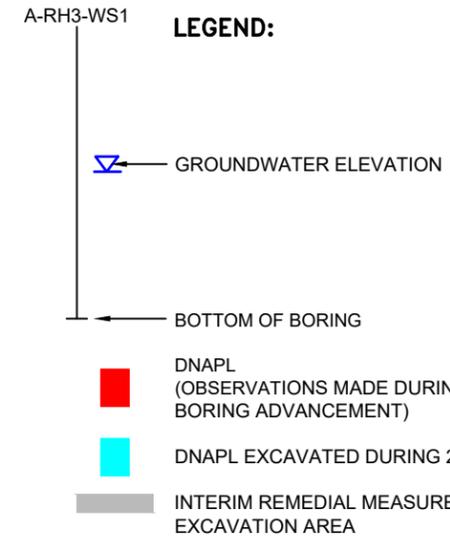
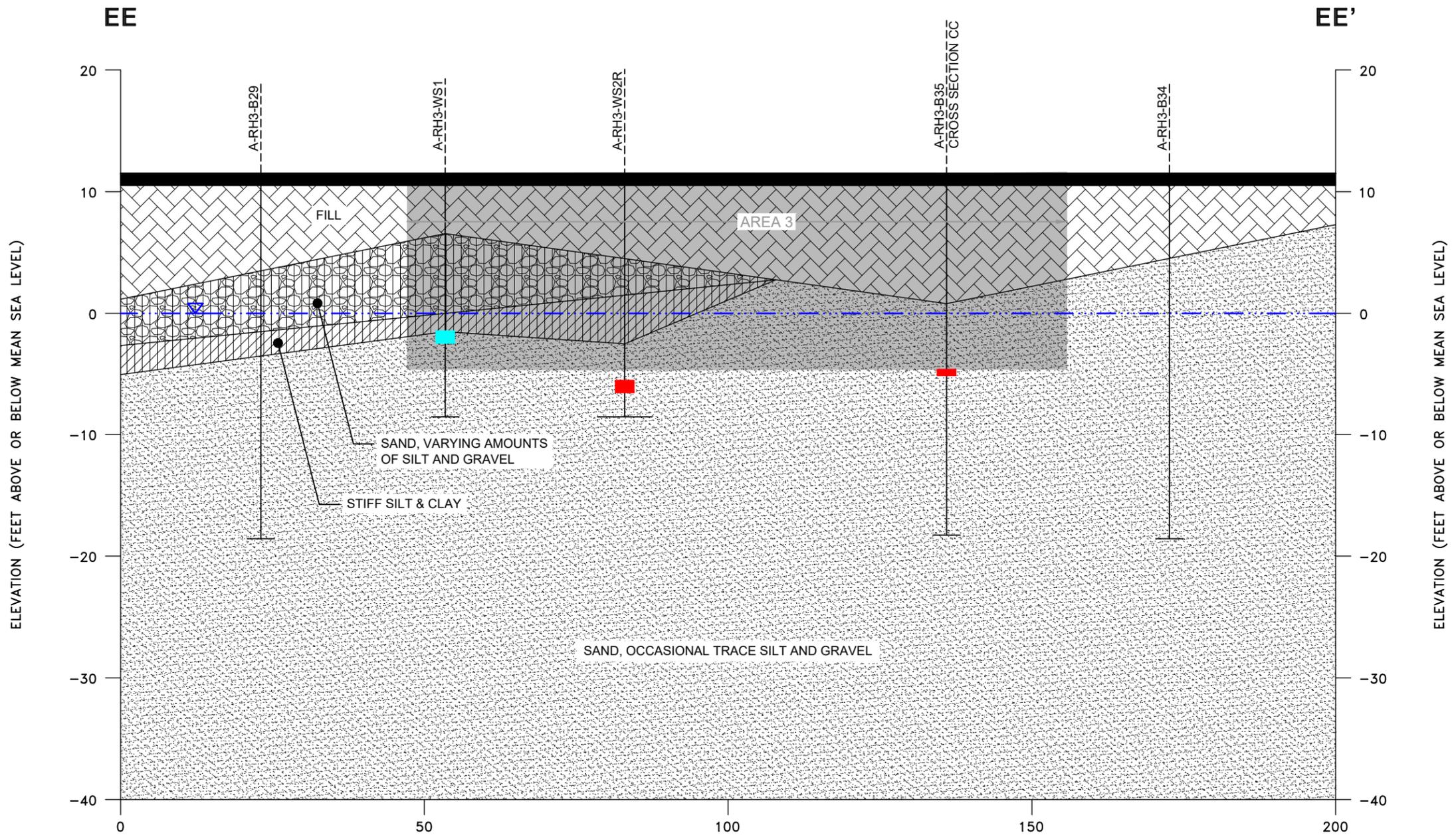
BT RED HOOK, LLC - RED HOOK 3
 68 AND 100 FERRIS STREET/242 AND 300 COFFEY STREET
 BROOKLYN, NEW YORK

GEOLOGIC CROSS SECTION DD-DD'

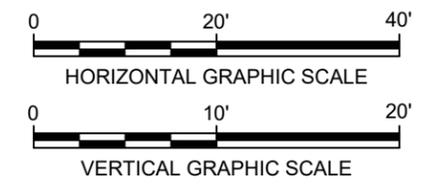
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FIGURE
A-5

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BT RED HOOK, LLC - RED HOOK 3
68 AND 100 FERRIS STREET/242 AND 300 COFFEY STREET
BROOKLYN, NEW YORK

GEOLOGIC CROSS SECTION EE-EE'

Attachment 2

Table Extracted from Arcadis' April 2025 RAWP

Table 2
Summary of Groundwater Analytical Results - Exceedances
Remedial Action Work Plan
Red Hook 3 Brownfield Site #C224213
Borough of Brooklyn, Kings County, New York



Location ID: Date Collected: Sample Name:	NYSDEC TOGS 1 1 1	Units	LMW-1 06/09/17 LMW01_E17- 04815-001	LMW-1 09/19/18 LMW-1_ 091918	LMW-2 06/14/17 LMW_2_E17- 04934-001	LMW-3 06/09/17 LMW03_E17- 04815-003	LMW-4 06/09/17 LMW04_E17- 04815-004	LMW-4 09/19/18 LMW-4_ 091918	LMW-5 06/09/17 LMW05_E17- 04815-005	LMW-6 06/12/17 LMW06_E17- 04838-003	LMW-6 09/19/18 LMW-6_ 091918
PFAS											
Perfluorooctanoic acid	6.7	ng/L	NA	130 J	NA	NA	NA	46.0 J	NA	NA	170
Perfluorooctanoic Sulfonate	2.7	ng/L	NA	18.0	NA	NA	NA	20.0 J	NA	NA	3.50
PCBs											
Aroclor-1248	0.09	ug/L	<0.0500	NA	<0.250	<0.0500	<0.0500	NA	<0.0500	<0.0500	NA
Total PCBs	0.09	ug/L	<0.0500	NA	<0.250	<0.0500	<0.0500	NA	<0.0500	<0.0500	NA
Volatile Organics											
1,2,3-Trimethylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Methyl-2-isopropylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	50	ug/L	24.5	NA	252 D	9.56	13.1	NA	34.5	<2.00	NA
Benzene	1	ug/L	<0.500	NA	34.4 D	<0.500	<0.500	NA	<0.500	<0.500	NA
Ethylbenzene	5	ug/L	<0.500	NA	84.9 D	<0.500	<0.500	NA	2.16	<0.500	NA
Isopropylbenzene	5	ug/L	<0.500	NA	24.9 D	<0.500	<0.500	NA	1.68	<0.500	NA
m,p-Xylene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether	10	ug/L	<0.500	NA	<10.0	<0.500	<0.500	NA	<0.500	<0.500	NA
Naphthalene	10	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	5	ug/L	1.87	NA	42.3 D	<0.500	<0.500	NA	0.939	<0.500	NA
Xylenes (total)	5	ug/L	<1.00	NA	77.0 D	<1.00	<1.00	NA	6.10	<1.00	NA
Semivolatile Organics											
1,1'-Biphenyl	5	ug/L	0.164 J	NA	369 D	<1.00	<1.00	NA	<1.00	<1.00	NA
1,3,5-Trimethylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	1	ug/L	<1.00	NA	630 D	<1.00	<1.00	NA	<1.00	<1.00	NA
4-Methylphenol	1	ug/L	<1.00	NA	218 D	<1.00	<1.00	NA	<1.00	<1.00	NA
Acenaphthene	20	ug/L	2.23	NA	1,590 D	0.479 J	0.929 J	NA	4.18	<1.00	NA
Anthracene	50	ug/L	1.44	NA	382 D	<1.00	<1.00	NA	0.319 J	<1.00	NA
Benzo(a)anthracene	0.002	ug/L	1.12	NA	97.6	<0.100	<0.100	NA	1.63	<0.100	NA
Benzo(b)fluoranthene	0.002	ug/L	0.799 J	NA	34.7	<0.100	<0.100	NA	1.07	<0.100	NA
Benzo(k)fluoranthene	0.002	ug/L	0.825 J	NA	39.9	<0.100	<0.100	NA	0.940 J	<0.100	NA
Chrysene	0.002	ug/L	0.990 J	NA	79.2	<1.00	<1.00	NA	1.75	<1.00	NA
Fluoranthene	50	ug/L	<1.00	NA	458 D	<1.00	<1.00	NA	1.75	<1.00	NA
Fluorene	50	ug/L	1.62	NA	977 D	0.271 J	0.424 J	NA	<1.00	<1.00	NA
Indeno(1,2,3-cd)pyrene	0.002	ug/L	0.663 J	NA	20.0	<0.100	<0.100	NA	0.874 J	<0.100	NA
Isopropylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	10	ug/L	1.32	NA	3,980 D	<1.00	<1.00	NA	<1.00	<1.00	NA
o-Cresol (2-Methylphenol)	1	ug/L	<1.00	NA	293 D	<1.00	<1.00	NA	<1.00	<1.00	NA
Phenanthrene	50	ug/L	4.24	NA	1,570 D	0.198 J	0.217 J	NA	1.19	<1.00	NA

See Notes on Page 7.

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Semivolatile Organics (cont.)											
Phenol	1	ug/L	<1.00	NA	39.0	<1.00	<1.00	NA	<1.00	<1.00	NA
p-Xylene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	2.54	NA	284 D	<1.00	0.532 J	NA	4.28	<1.00	NA
Organochlorine Pesticides											
Dieldrin	0.004	ug/L	<0.0100	NA	<0.200	<0.0100	<0.0100	NA	<0.0100	0.00581 J	NA
Herbicides - No Exceedances											
Inorganics											
Arsenic	25	ug/L	5.04	NA	22.1	3.21	13.1	NA	2.45	3.08	NA
Barium	1,000	ug/L	566	NA	422	262	342	NA	156	196	NA
Chromium, hexavalent	50	ug/L	<25.0	NA	<25.0	<25.0	<25.0	NA	<25.0	<25.0	NA
Iron	300	ug/L	81,400	NA	83,700	55,300	71,900	NA	77,600	3,010	NA
Lead	25	ug/L	34.8	NA	<2.00	1.35 J	1.34 J	NA	44.0	13.0	NA
Magnesium	35,000	ug/L	617,000	NA	25,000	10,200	21,600	NA	85,000	257,000	NA
Manganese	300	ug/L	1,820	NA	672	1,050	1,050	NA	1,100	461	NA
Sodium	20,000	ug/L	4,850,000 D	NA	99,100	89,000	116,000	NA	222,000	2,030,000 D	NA

See Notes on Page 7.

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PFAS											
Perfluorooctanoic acid	6.7	ng/L	NA	NA	63.0	NA	NA	50.0	66.0	NA	NA
Perfluorooctanoic Sulfonate	2.7	ng/L	NA	NA	10.0 J	NA	NA	49.0 J	27.0	NA	NA
PCBs											
Aroclor-1248	0.09	ug/L	<0.0500	<0.250	NA	<0.0500	<0.250	NA	<0.200	<0.0571	<0.0500
Total PCBs	0.09	ug/L	<0.0500	<0.250	NA	<0.0500	<0.250	NA	NA	<0.0571	<0.0500
Volatile Organics											
1,2,3-Trimethylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	280	0.800	NA
1-Methyl-2-isopropylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	50	ug/L	11.4 D	<4.00	NA	<2.00	<10.0	NA	<5,000	1.10 JB	<2.00
Benzene	1	ug/L	56.8 D	<1.00	NA	1.39	183 D	NA	550	19.0	<0.500
Ethylbenzene	5	ug/L	53.5 D	73.2 D	NA	3.75	1,980 D	NA	1,600	2.50	3.40
Isopropylbenzene	5	ug/L	19.0 D	45.6 D	NA	5.30	123 D	NA	<100	2.10	10.6
m,p-Xylene	5	ug/L	NA	NA	NA	NA	NA	NA	1,300	0.680 J	NA
Methyl tert-butyl ether	10	ug/L	2.93 D	<1.00	NA	51.0	<2.50	NA	<100	<0.200	<0.500
Naphthalene	10	ug/L	NA	NA	NA	NA	NA	NA	5,700	NA	NA
n-Propylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	<100	0.670	NA
o-Xylene	5	ug/L	NA	NA	NA	NA	NA	NA	720	1.30	NA
Toluene	5	ug/L	3.54 D	6.84 D	NA	<0.500	20.6 D	NA	<100	0.220 J	<0.500
Xylenes (total)	5	ug/L	151 D	276 D	NA	2.18	2,920 D	NA	NA	1.90	<1.00
Semivolatile Organics											
1,1'-Biphenyl	5	ug/L	0.157 J	17.9	NA	<1.00	101	NA	62.0 JN	<9.62	<1.00
1,3,5-Trimethylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	250 JN	NA	NA
2,4-Dimethylphenol	1	ug/L	<1.00	<1.00	NA	<1.00	<1.00	NA	11.0	<4.81	<1.00
4-Methylphenol	1	ug/L	<1.00	<1.00	NA	<1.00	<1.00	NA	NA	NA	<1.00
Acenaphthene	20	ug/L	25.5	<1.00	NA	<1.00	233 D	NA	190 D	76.8 D	10.7
Anthracene	50	ug/L	3.43	10.3	NA	<1.00	86.3	NA	18.0	14.3 JD	0.512 J
Benzo(a)anthracene	0.002	ug/L	<0.100	0.905	NA	<0.100	24.5	NA	<4.90	<9.62	<0.100
Benzo(b)fluoranthene	0.002	ug/L	<0.100	0.299	NA	<0.100	7.37	NA	<4.90	<9.62	<0.100
Benzo(k)fluoranthene	0.002	ug/L	<0.100	0.225	NA	<0.100	6.63	NA	<4.90	<9.62	<0.100
Chrysene	0.002	ug/L	<1.00	1.71	NA	<1.00	20.3	NA	<4.90	<9.62	<1.00
Fluoranthene	50	ug/L	2.06	5.15	NA	<1.00	64.2	NA	11.0	14.4 JD	1.49
Fluorene	50	ug/L	8.90	32.1	NA	<1.00	144	NA	61.0	33.7 D	0.728 J
Indeno(1,2,3-cd)pyrene	0.002	ug/L	<0.100	0.240	NA	<0.100	4.49	NA	<4.90	<9.62	<0.100
Isopropylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	41.0 JN	NA	NA
Naphthalene	10	ug/L	3.87	3.66	NA	<1.00	4,030 D	NA	5,200 D	<9.62	<1.00
o-Cresol (2-Methylphenol)	1	ug/L	<1.00	<1.00	NA	<1.00	<1.00	NA	<9.80	<4.81	<1.00
Phenanthrene	50	ug/L	6.38	43.8	NA	<1.00	297 D	NA	82.0	54.3 D	0.355 J

See Notes on Page 7.

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Location ID: Date Collected: Sample Name:	NYSDEC TOGS 1 1 1	Units	LMW-7D 06/14/17 LMW 7D_E17- 04934-003	LMW-7S 06/14/17 LMW 7S_E17- 04934-002	LMW-7S 09/17/18 LMW-7S- 091718	LMW-8D 06/14/17 LMW 8D_E17- 04934-005	LMW-8S 06/14/17 LMW 8S_E17- 04934-004	LMW-8S 09/17/18 LMW-8S- 091718	MW-1 09/20/18 MW-1_ 092018	MW-2 02/10/17 MW2_ 021017	MW-3 06/12/17 MW-3_E17- 04838-002
Semivolatile Organics (cont.)											
Phenol	1	ug/L	21.9	<1.00	NA	<1.00	<1.00	NA	<9.80	<4.81	<1.00
p-Xylene	5	ug/L	NA	NA	NA	NA	NA	NA	320 JN	NA	NA
Pyrene	50	ug/L	2.45	8.78	NA	<1.00	85.9	NA	16.0	20.2 D	2.54
Organochlorine Pesticides											
Dieldrin	0.004	ug/L	<0.0100	<0.0500	NA	<0.0100	<0.0100	NA	<0.0200	<0.00229	<0.0100
Herbicides - No Exceedances											
Inorganics											
Arsenic	25	ug/L	8.38	9.77	NA	2.92	17.1	NA	9.10 J	2.76 D	18.2
Barium	1,000	ug/L	514	287	NA	90.5	473	NA	240	305	1,260
Chromium, hexavalent	50	ug/L	<25.0	<25.0	NA	<25.0	<25.0	NA	<4.00	82.0	<25.0
Iron	300	ug/L	1,740	13,500	NA	912	43,900	NA	19,000	15,800	16,700
Lead	25	ug/L	<2.00	27.2	NA	<2.00	1.54 J	NA	43.0	192	<2.00
Magnesium	35,000	ug/L	73,900	22,800	NA	957,000 D	44,300	NA	21,000	25,500	559,000
Manganese	300	ug/L	281	3,540	NA	3,960	1,510	NA	970	212	1,120
Sodium	20,000	ug/L	824,000 D	106,000	NA	8,980,000 D	507,000	NA	200,000	110,000	5,000,000 D

See Notes on Page 7.

Table 2
Summary of Groundwater Analytical Results - Exceedances
Remedial Action Work Plan
Red Hook 3 Brownfield Site #C224213
Borough of Brooklyn, Kings County, New York



Location ID: Date Collected: Sample Name:	NYSDEC TOGS 1 1 1	Units	MW-9D 06/12/17 LMW09D_E17- 04838-007	MW-9S 06/12/17 LMW09S_E17- 04838-006	MW-10D 09/18/18 MW-10D_ 091818	MW-10S 06/13/17 LMW10S_ 20170613	MW-11D 06/12/17 LMW11D_E17- 04838-009	MW-11S 06/12/17 LMW11S_E17- 04838-008	MW-12D 06/13/17 LMW12D_ 20170613	MW-12S 06/12/17 LMW12S_E17- 04838-010
PFAS										
Perfluorooctanoic acid	6.7	ng/L	NA	NA	150	NA	NA	NA	NA	NA
Perfluorooctanoic Sulfonate	2.7	ng/L	NA	NA	9.60 J	NA	NA	NA	NA	NA
PCBs										
Aroclor-1248	0.09	ug/L	<0.0500	<0.0500	<0.200	<10,000	<0.0500	0.262	<10,000	<0.0500
Total PCBs	0.09	ug/L	<0.0500	<0.0500	NA	<10,000	<0.0500	0.262	<10,000	<0.0500
Volatile Organics										
1,2,3-Trimethylbenzene	5	ug/L	NA	NA	34.0 JN	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	5	ug/L	NA	NA	20.0	NA	NA	NA	NA	NA
1-Methyl-2-isopropylbenzene	5	ug/L	NA	NA	27.0 JN	NA	NA	NA	NA	NA
Acetone	50	ug/L	<2.00	<2.00	<100	<10,000	<2.00	9.33	<10,000	<2.00
Benzene	1	ug/L	<0.500	<0.500	8.00	49.2	<0.500	<0.500	<10,000	<0.500
Ethylbenzene	5	ug/L	5.21	<0.500	41.0	1,290	<0.500	<0.500	<10,000	<0.500
Isopropylbenzene	5	ug/L	0.900	<0.500	29.0	87.1	<0.500	<0.500	<10,000	<0.500
m,p-Xylene	5	ug/L	NA	NA	<4.00	NA	NA	NA	NA	NA
Methyl tert-butyl ether	10	ug/L	<0.500	<0.500	2.00	<10,000	<0.500	<0.500	<10,000	<0.500
Naphthalene	10	ug/L	NA	NA	150	NA	NA	NA	NA	NA
n-Propylbenzene	5	ug/L	NA	NA	7.10	NA	NA	NA	NA	NA
o-Xylene	5	ug/L	NA	NA	17.0	NA	NA	NA	NA	NA
Toluene	5	ug/L	<0.500	<0.500	<2.00	17.0	<0.500	<0.500	<10,000	<0.500
Xylenes (total)	5	ug/L	2.46	<1.00	NA	844	<1.00	<1.00	<10,000	<1.00
Semivolatile Organics										
1,1'-Biphenyl	5	ug/L	<1.00	<1.00	NA	17.0	<1.00	<1.00	<10,000	<1.00
1,3,5-Trimethylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	1	ug/L	<1.00	<1.00	<10.0	<10,000	<1.00	<1.00	<10,000	<1.00
4-Methylphenol	1	ug/L	<1.00	<1.00	NA	<10,000	<1.00	<1.00	<10,000	<1.00
Acenaphthene	20	ug/L	<1.00	<1.00	34.0	110	<1.00	<1.00	0.518	0.445 J
Anthracene	50	ug/L	<1.00	<1.00	10.0	21.2	<1.00	<1.00	<10,000	<1.00
Benzo(a)anthracene	0.002	ug/L	<0.100	<0.100	<5.00	8.14	<0.100	<0.100	<10,000	<0.100
Benzo(b)fluoranthene	0.002	ug/L	<0.100	<0.100	<5.00	3.18	<0.100	<0.100	<10,000	<0.100
Benzo(k)fluoranthene	0.002	ug/L	<0.100	<0.100	<5.00	3.13	<0.100	<0.100	<10,000	<0.100
Chrysene	0.002	ug/L	<1.00	<1.00	<5.00	7.18	<1.00	<1.00	<10,000	<1.00
Fluoranthene	50	ug/L	<1.00	<1.00	<5.00	16.0	<1.00	<1.00	<10,000	<1.00
Fluorene	50	ug/L	<1.00	<1.00	5.30	48.5	<1.00	<1.00	<10,000	<1.00
Indeno(1,2,3-cd)pyrene	0.002	ug/L	<0.100	<0.100	<5.00	2.42	<0.100	<0.100	<10,000	<0.100
Isopropylbenzene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	10	ug/L	<1.00	<1.00	94.0	2,040	<1.00	<1.00	2.02	<1.00
o-Cresol (2-Methylphenol)	1	ug/L	<1.00	<1.00	<10.0	<10,000	<1.00	<1.00	<10,000	<1.00
Phenanthrene	50	ug/L	<1.00	<1.00	45.0	84.4	0.301 J	<1.00	0.240	<1.00

See Notes on Page 7.

Table 2
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Borough of Brooklyn, Kings County, New York

Location ID: Date Collected: Sample Name:	NYSDEC TOGS 1 1 1	Units	MW-9D 06/12/17 LMW09D_E17- 04838-007	MW-9S 06/12/17 LMW09S_E17- 04838-006	MW-10D 09/18/18 MW-10D_ 091818	MW-10S 06/13/17 LMW10S_ 20170613	MW-11D 06/12/17 LMW11D_E17- 04838-009	MW-11S 06/12/17 LMW11S_E17- 04838-008	MW-12D 06/13/17 LMW12D_ 20170613	MW-12S 06/12/17 LMW12S_E17- 04838-010
Semivolatile Organics (cont.)										
Phenol	1	ug/L	<1.00	<1.00	<10.0	<10,000	<1.00	<1.00	<10,000	<1.00
p-Xylene	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50	ug/L	<1.00	<1.00	6.90	32.3	<1.00	<1.00	<10,000	<1.00
Organochlorine Pesticides										
Dieldrin	0.004	ug/L	<0.0100	<0.0100	<0.00200	<10,000	<0.0100	<0.0100	<10,000	<0.0100
Herbicides - No Exceedances										
Inorganics										
Arsenic	25	ug/L	9.20	<2.00	10.0	30.5	26.9	12.4	21.7	9.31
Barium	1,000	ug/L	108	144	390	991	73.9	230	469	718
Chromium, hexavalent	50	ug/L	<25.0	<25.0	1.20 J	<10,000	<25.0	<25.0	<10,000	<25.0
Iron	300	ug/L	392	193 J	2,300	37,000	344	4,410	8,330	39,000
Lead	25	ug/L	<2.00	<2.00	<10.0	2.26	<2.00	1.98 J	<10,000	8.80
Magnesium	35,000	ug/L	11,100	8,650	110,000	13,300	47,100	20,700	60,200	198,000
Manganese	300	ug/L	333	770	1,900	693	459	1,570	2,180	1,810
Sodium	20,000	ug/L	374,000	35,000	220,000	221,000	467,000	365,000	580,000	2,170,000 D

See Notes on Page 7.

Table 2
Summary of Groundwater Analytical Results - Exceedances
Remedial Action Work Plan
Red Hook 3 Brownfield Site #C224213
Borough of Brooklyn, Kings County, New York

Notes:

Groundwater data collected in 2017 are from the Remedial Investigation Report (AESI 2017).

Groundwater data collected in 2018 are from the Supplemental Remedial Investigation Report (Arcadis 2019b).

Data presented are most recent results at each monitoring well.

Gray values were not analyzed or not detected.

Black values are detections below the NYSDEC TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.

Shaded and black values indicate exceedance of the NYSDEC TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values.

ug/L = micrograms per liter

ng/L = nanograms per liter

NA = not analyzed

ND = the compound was not detected above the laboratory method detection limit and the laboratory detection limit was not provided

NYSDEC = New York State Department of Environmental Conservation

PCBs = polychlorinated biphenyls

PFAS = per- and polyfluoroalkyl substances

SVOCs = semivolatile organic compounds

TOGS = NYSDEC Technical and Operational Guidance Series

VOCs = volatile organic compounds

< = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

B = Analyte was also detected in the associated method blank.

D = Compound quantitated using a secondary dilution.

J = Indicates an estimated value.

Attachment 3

Arcadis' June 12, 2025 Email to NYSDEC

Geraci, Cathy

From: Geraci, Cathy
Sent: Thursday, June 12, 2025 10:30 AM
To: Bellotti, Robert V (DEC)
Cc: Young, Terry; Devery, Hugh; Korik, Andrew; Jacobsen, James
Subject: Red Hook 3 (C224213) - Not Excavated DNAPL
Attachments: RH3 Figure_Excavation Areas and DNAPL Not Excavated.pdf; Waste Characterization VOC and SVOC Tables_6-12-2025.pdf; RH3 SRI Report_Tables A-2 and A-3 _VOCs and SVOCs in Soil.pdf; RH3 RI Report Figures_VOC and SVOC Results in Groundwater.pdf; RH4 RI Report Figures_VOC and SVOC Results in Groundwater.pdf; RH3 SRI Report_Groundwater Contour Figures.pdf

Robert,

As follow-up to our recent communications, attached are:

- Figure showing: 1) surveyed IRM excavation areas (as identified in Arcadis' Construction Completion Report; 2) former monitoring well locations (all 22 monitoring wells were decommissioned in 2019, prior to the IRM); and 3) DNAPL locations/intervals not excavated. The DNAPL locations/intervals were identified prior to the IRM remedial design and used with NYSDEC to determine the excavation limits.
- Tables presenting available waste characterization VOC and SVOC analytical data for the DNAPL locations and proximate borings. Waste characterization sample locations begin with "A-RH3-WS..." These samples were collected in 2019, after the SRI, and were used to profile the soil for off-site disposal/treatment purposes during the IRM.
- Soil boring VOC and SVOC analytical data tables A-2 and A-3 from Arcadis' SRI Report Appendix A: soil samples were collected from the not excavated DNAPL intervals at soil borings A-RH3-B1 and A-RH3-B6 and analyzed for VOCs and SVOCs. The soil samples were collected/analyzed in 2017 (before the SRI) and the soil boring locations are shown on the attached RH3 Figure_Excavation Areas and DNAPL Not Excavated PDF.

Also attached for ease of reference are:

- RI Report figures showing VOC and SVOC concentrations in groundwater (June 2017) for RH3 and RH4; noting that the RH4 monitoring wells closest to RH3 were relatively clean as well as the RH3 monitoring wells along Dikeman and Ferris Streets. NYSDEC's December 2019 and April 2020 RH3 public fact sheets identified that contaminant concentrations fall off sharply with distance from NAPL (tar) source areas.
- Groundwater contour figures from the RH3 SRI Report; noting that groundwater is tidally influenced and variable and does periodically flow toward RH4.

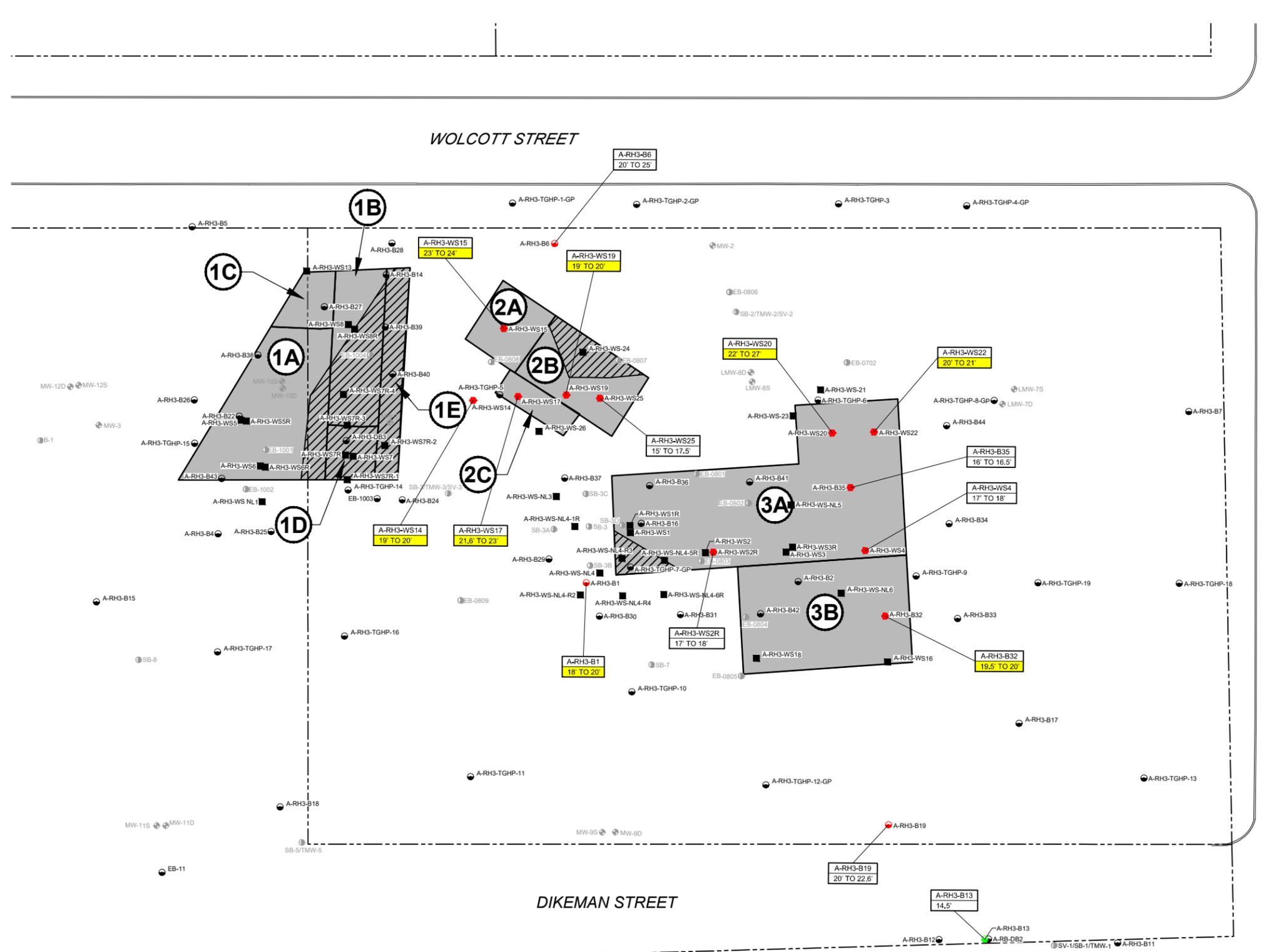
Please let us know if you have any questions. Thank you.

Kind regards,
Cathy

M. Cathy Geraci
Principal Engineer

C:\Users\BSS\small\ID\ACCDocs\Arcadis ACC USA\SUS-59999999-UPS_RED_HOOK_BROOKLYN_NY\Project Files\10_WIP\101_ARC_ENV\2022\01-DWG\RH3-F01-EXCAVATION AREAS.dwg BY: SMALL, BRIAN SAVED: 6/11/2025 5:01 PM

XREFS: IMAGES: CCR_REDHOOK_BASE X02-RH-Post Construction Grade



LEGEND:

- PROPERTY LINE (APPROXIMATE)
- MONITORING WELL (DECOMMISSIONED, MAY 2019)
- SOIL BORING LOCATION
- WASTE CHARACTERIZATION BORING LOCATION
- DNAPL 15 FEET OR SHALLOWER
- DNAPL DEEPER THAN 15 FEET
- EXCAVATION AREA (SEE NOTE 1)
- ▨ HAZARDOUS MATERIAL EXCAVATION (SEE GENERAL NOTE 5)
- ① EXCAVATION AREA ID
- NAPL INTERVAL IDENTIFIED IN NYSDEC LETTER DATED 8/27/2019 AS NAPL SOURCE MATERIAL
- DNAPL DENSE NON-AQUEOUS PHASE LIQUID
- NAPL NON-AQUEOUS PHASE LIQUID
- A-RH3-WS19 — SAMPLE IDENTIFICATION
- 19' TO 20' — DNAPL DEPTH (BELOW ORIGINAL GRADE)

IRM EXCAVATION AREA	DEPTH OF EXCAVATION (FEET BGS)		EXCAVATION VOLUME (IN-SITU CUBIC YARDS)
	DESIGN	ACTUAL	
1A	15	15.3	1,098
1B	15	16.1	577
1C	18.5	19.6	234
1D	18	18.9	233
1E	23	23.4	511
2A	22.5	22.3	434
2B	14.5	14.7	525
2C	21.5	21.6	217
3A	14.5	15.0	2,348
3B	18.5	19.5	1,602
TOTAL	--	--	7,779

- NOTES:**
- NYSDEC-APPROVED EXCAVATION INTERIM REMEDIAL MEASURE (IRM) CONDUCTED BETWEEN FEBRUARY 11, 2020 AND DECEMBER 11, 2020, AS DETAILED IN THE NYSDEC-APPROVED CONSTRUCTION COMPLETION REPORT (ARCADIS FEBRUARY 2022)
 - EXCAVATION AREAS WERE AMENDED WITH GYPSUM FROM THE BOTTOM OF EACH EXCAVATION TO APPROXIMATELY 5 FEET BGS. FILL MATERIALS AND GYPSUM WERE HOMOGENEOUSLY BLENDED AT A CONCENTRATION OF UP TO 5% BY DRY WEIGHT PRIOR TO COMPACTION.
 - DEPTHS OF EXCAVATIONS AND SURFACE AREAS WERE CALCULATED FOR EACH EXCAVATION AREA USING AS-BUILT SURVEY DATA.
 - GRAYED BACK SOIL BORING AND MONITORING WELL LOCATIONS INSTALLED BY OTHERS.
 - GRAYED BACK LOCATIONS ARE DIGITIZED FROM FIGURES PREPARED BY OTHERS.
 - SOIL BORING LOCATIONS WITH ASSOCIATED SOIL OBSERVATION TEXT BOXES IDENTIFY DEPTH INTERVALS WHERE DNAPL-SATURATED SOIL WAS OBSERVED (NOT BLEBS).
 - DURING THE SITE-WIDE MONITORING WELL GAUGING EVENTS CONDUCTED BY ARCADIS IN 2018 AND 2019, 0.1' NAPL WAS MEASURED IN MW-1 ON 6/28/18, NO PRODUCT WAS IDENTIFIED DURING THE NEXT 7 EVENTS, AND 0.02' WAS MEASURED ON 4/26/19 (PRIOR TO DECOMMISSIONING ALL SITE MONITORING WELLS). MW-1 WAS A SHALLOW WELL (15 FEET BGS DEPTH TO BOTTOM) LOCATED IN EXCAVATION AREA 1E (DEPTH OF EXCAVATION 23.4 FT BGS).



- GENERAL NOTES:**
- EXCAVATION DEPTHS ARE BELOW ORIGINAL GRADE (AT TIME OF SUPPLEMENTAL REMEDIAL INVESTIGATION OR PRIOR).
 - HORIZONTAL REFERENCE DATUM IS THE NORTH AMERICAN DATUM OF 1983, NEW YORK STATE PLANE EAST ZONE.
 - VERTICAL REFERENCE DATUM IS THE NORTH AMERICAN DATUM OF 1988.
 - AS-BUILT CONSTRUCTION INFORMATION IS BASED ON SITE SURVEY PERFORMED BY KENNON SURVEYING SERVICES INC. DETAILS ARE PROVIDED IN THE NYSDEC-APPROVED CONSTRUCTION COMPLETION REPORT (ARCADIS FEBRUARY 2022).
 - HAZARDOUS MATERIAL EXCAVATION (LEAD) IN AREAS 1A, 1B, 1D, AND 1E EXTENDED FROM 0 TO 9 FEET BELOW GROUND SURFACE (BGS). HAZARDOUS MATERIAL EXCAVATION (BENZENE) IN AREA 2B EXTENDED FROM 4.5 TO 14.5 FEET BGS. HAZARDOUS MATERIAL EXCAVATION (LEAD) IN AREA 3A EXTENDED FROM 0 TO 7.5 FEET BGS.

BT RED HOOK, LLC - RED HOOK 3
68 AND 100 FERRIS STREET / 242 AND 300 COFFEY STREET
BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK

EXCAVATION AREAS AND DNAPL NOT EXCAVATED DURING IRM

ARCADIS

FIGURE
1

Table 1
Waste Characterization Analytical Data (2019) – VOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS2R- DEEP (GRAB)	A-RH3-WS-13- DEEPEST (GRAB)	A-RH3-WS14- DEEP (GRAB)	A-RH3-WS14- DEEPEST (GRAB)	A-RH3-WS15- DEEPEST (GRAB)	A-RH3-WS16- DEEP (GRAB)	A-RH3-WS16- DEEPEST (GRAB)
				Depth: Date:	16' - 17' 4/24/2019	20' - 21' 5/7/2019	19' - 20' 5/8/2019	24' - 25' 5/8/2019	28' - 29' 5/14/2019	19' - 20' 5/13/2019	20' - 21' 5/13/2019
VOCs											
1,1,1-Trichloroethane	71-55-6	mg/kg	500		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,1,2-Trichloroethane	79-00-5	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,1-Dichloroethane	75-34-3	mg/kg	240		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,1-Dichloroethene	75-35-4	mg/kg	500		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,2-Dibromoethane	106-93-4	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,2-Dichlorobenzene	95-50-1	mg/kg	500		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,2-Dichloroethane	107-06-2	mg/kg	30		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,2-Dichloropropane	78-87-5	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,3-Dichlorobenzene	541-73-1	mg/kg	280		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,4-Dichlorobenzene	106-46-7	mg/kg	130		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
1,4-Dioxane	123-91-1	mg/kg	130		< 95 U	< 0.020 U	< 49 U	< 110 U	< 5.4 U	< 250 U	< 100 U
2-Butanone (MEK)	78-93-3	mg/kg	500		< 9.5 U	0.0054	< 4.9 U	< 11 U	< 0.54 U	< 25 U	< 10 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	--		< 9.5 U	< 0.0051 U	< 4.9 U	< 11 U	< 0.54 U	< 25 U	< 10 U
Acetone	67-64-1	mg/kg	500		< 9.5 U	0.11	< 4.9 U	< 11 U	< 0.54 U	< 25 U	< 10 U
Benzene	71-43-2	mg/kg	44		0.96 J	0.031	25	5.8	0.19	< 5.0 U	< 2.1 U
Bromochloromethane	74-97-5	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Bromodichloromethane	75-27-4	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Bromoform	75-25-2	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Bromomethane	74-83-9	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U*
Carbon Disulfide	75-15-0	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Carbon Tetrachloride	56-23-5	mg/kg	22		< 1.9 U	0.00020 J	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
CFC-11	75-69-4	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U*
CFC-12	75-71-8	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U*

See Notes on Page 7.

Table 1
Waste Characterization Analytical Data (2019) – VOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS2R- DEEP (GRAB)	A-RH3-WS-13- DEEPEST (GRAB)	A-RH3-WS14- DEEP (GRAB)	A-RH3-WS14- DEEPEST (GRAB)	A-RH3-WS15- DEEPEST (GRAB)	A-RH3-WS16- DEEP (GRAB)	A-RH3-WS16- DEEPEST (GRAB)
				Depth: Date:	16' - 17' 4/24/2019	20' - 21' 5/7/2019	19' - 20' 5/8/2019	24' - 25' 5/8/2019	28' - 29' 5/14/2019	19' - 20' 5/13/2019	20' - 21' 5/13/2019
VOCs (continued)											
Chlorobenzene	108-90-7	mg/kg	500		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Chlorodibromomethane	124-48-1	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Chloroethane	75-00-3	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Chloroform	67-66-3	mg/kg	350		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Chloromethane	74-87-3	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	500		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Cyclohexane	110-82-7	mg/kg	--		0.65 J	0.00079 J	1.1	2.9	< 0.11 U	2.4 J	0.68 J
Dichloromethane	75-09-2	mg/kg	500		< 1.9 U	0.00046 J	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Ethylbenzene	100-41-4	mg/kg	390		170	0.033	300	440	0.88	180	140
Isopropylbenzene	98-82-8	mg/kg	--		16	0.010	28	54	0.042 J	27	17
Methyl Acetate	79-20-9	mg/kg	--		< 9.5 U	0.0051	< 4.9 U	< 11 U	< 0.54 U	< 25 U	< 10 U
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	mg/kg	--		< 9.5 U	< 0.0051 U	< 4.9 U	< 11 U	< 0.54 U	< 25 U	< 10 U
Methylcyclohexane	108-87-2	mg/kg	--		4.0	0.0017	7.4	21	< 0.11 U	9.3	4.7
Methyl-tert-butylether	1634-04-4	mg/kg	500		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
m,p-Xylene	ARC-mpXyl	mg/kg	--		110	0.012	270	230	0.68	90	100
o-Xylene	95-47-6	mg/kg	--		65	0.0062	130	180	0.39	81	62
Total Xylenes	1330-20-7	mg/kg	500		175	0.0182	400	410	1.07	171	162
Styrene (Monomer)	100-42-5	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Tetrachloroethene	127-18-4	mg/kg	150		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Toluene	108-88-3	mg/kg	500		0.82 J	0.0015	3.7	2.5	< 0.11 U	< 5.0 U	1.1 J
trans-1,2-Dichloroethene	156-60-5	mg/kg	500		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg	--		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Trichloroethene	79-01-6	mg/kg	200		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U
Vinyl chloride	75-01-4	mg/kg	13		< 1.9 U	< 0.0010 U	< 0.98 U	< 2.1 U	< 0.11 U	< 5.0 U	< 2.1 U

See Notes on Page 7.

Table 1
Waste Characterization Analytical Data (2019) – VOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS17- DEEPEST (GRAB)	A-RH3-WS19- DEEPEST (GRAB)	A-RH3-WS20- DEEPEST (GRAB)	A-RH3-WS21- DEEP (GRAB)	A-RH3-WS22- DEEP (GRAB)	A-RH3-WS23- DEEP (GRAB)
				Depth: Date:	24' - 25' 5/13/2019	22' - 23' 5/14/2019	23' - 24' 5/14/2019	17' - 17.5' 5/21/2019	16' - 16.5' 5/21/2019	18' - 19' 5/21/2019
VOCs										
1,1,1-Trichloroethane	71-55-6	mg/kg	500		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,1,2-Trichloroethane	79-00-5	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,1-Dichloroethane	75-34-3	mg/kg	240		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,1-Dichloroethene	75-35-4	mg/kg	500		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,2-Dibromoethane	106-93-4	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,2-Dichlorobenzene	95-50-1	mg/kg	500		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,2-Dichloroethane	107-06-2	mg/kg	30		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,2-Dichloropropane	78-87-5	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,3-Dichlorobenzene	541-73-1	mg/kg	280		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,4-Dichlorobenzene	106-46-7	mg/kg	130		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
1,4-Dioxane	123-91-1	mg/kg	130		< 5.4 U	< 25	< 4.9	< 100 U	< 99 U	< 100 U
2-Butanone (MEK)	78-93-3	mg/kg	500		< 0.54 U	< 2.5	< 0.49	< 10 U	< 9.9 U	< 10 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	--		< 0.54 U	< 2.5	< 0.49	< 10 U	< 9.9 U	< 10 U
Acetone	67-64-1	mg/kg	500		< 0.54 U	< 2.5	< 0.49	< 10 U	< 9.9 U	< 10 U
Benzene	71-43-2	mg/kg	44		0.066 J	0.44	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Bromochloromethane	74-97-5	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Bromodichloromethane	75-27-4	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Bromoform	75-25-2	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Bromomethane	74-83-9	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Carbon Disulfide	75-15-0	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Carbon Tetrachloride	56-23-5	mg/kg	22		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
CFC-11	75-69-4	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
CFC-12	75-71-8	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U

See Notes on Page 7.

Table 1
Waste Characterization Analytical Data (2019) – VOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY



Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS17- DEEPEST (GRAB)	A-RH3-WS19- DEEPEST (GRAB)	A-RH3-WS20- DEEPEST (GRAB)	A-RH3-WS21- DEEP (GRAB)	A-RH3-WS22- DEEP (GRAB)	A-RH3-WS23- DEEP (GRAB)
				Depth: Date:	24' - 25' 5/13/2019	22' - 23' 5/14/2019	23' - 24' 5/14/2019	17' - 17.5' 5/21/2019	16' - 16.5' 5/21/2019	18' - 19' 5/21/2019
VOCs (continued)										
Chlorobenzene	108-90-7	mg/kg	500		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Chlorodibromomethane	124-48-1	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Chloroethane	75-00-3	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Chloroform	67-66-3	mg/kg	350		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Chloromethane	74-87-3	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	500		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Cyclohexane	110-82-7	mg/kg	--		< 0.11 U	< 0.49	< 0.099	1.8 J	1.8 J	2.4
Dichloromethane	75-09-2	mg/kg	500		0.075 J	< 0.49	0.056	< 2.1 U	< 2.0 U	< 2.1 U
Ethylbenzene	100-41-4	mg/kg	390		4.9	63	3.6	280	330	390
Isopropylbenzene	98-82-8	mg/kg	--		0.80	7.4	0.42	32	36	39
Methyl Acetate	79-20-9	mg/kg	--		< 0.54 U	< 2.5	< 0.49	< 10 U	< 9.9 U	< 10 U
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	mg/kg	--		< 0.54 U	< 2.5	< 0.49	< 10 U	< 9.9 U	< 10 U
Methylcyclohexane	108-87-2	mg/kg	--		0.23	1.0	0.15	8.3	9.4	11
Methyl-tert-butylether	1634-04-4	mg/kg	500		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
m,p-Xylene	ARC-mpXyl	mg/kg	--		1.4	68	3.6	300	330	390
o-Xylene	95-47-6	mg/kg	--		1.6	33	1.9	140	160	190
Total Xylenes	1330-20-7	mg/kg	500		3	101	5.5	440	490	580
Styrene (Monomer)	100-42-5	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Tetrachloroethene	127-18-4	mg/kg	150		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Toluene	108-88-3	mg/kg	500		< 0.11 U	0.70	0.038	2.1	3.7	4.6
trans-1,2-Dichloroethene	156-60-5	mg/kg	500		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg	--		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Trichloroethene	79-01-6	mg/kg	200		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U
Vinyl chloride	75-01-4	mg/kg	13		< 0.11 U	< 0.49	< 0.099	< 2.1 U	< 2.0 U	< 2.1 U

See Notes on Page 7.

Table 1
Waste Characterization Analytical Data (2019) – VOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS26- DEEP (GRAB)	A-RH3-WS26- DEEPEST (GRAB)	A-RH3-WS- NL4-DEEP (GRAB)	A-RH3-WS- NL4-R2- DEEPEST (GRAB)	A-RH3-WS- NL4-R3- DEEPEST (GRAB)	A-RH3-WS- NL4-R4- DEEPEST (GRAB)
				Depth: Date:	18' - 19' 5/22/2019	20' - 21' 5/22/2019	19' - 20' 4/24/2019	21' - 22' 5/6/2019	20' - 21' 5/7/2019	25' - 26' 5/7/2019
VOCs										
1,1,1-Trichloroethane	71-55-6	mg/kg	500		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,1,2-Trichloroethane	79-00-5	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,1-Dichloroethane	75-34-3	mg/kg	240		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,1-Dichloroethene	75-35-4	mg/kg	500		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,2-Dibromoethane	106-93-4	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,2-Dichlorobenzene	95-50-1	mg/kg	500		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,2-Dichloroethane	107-06-2	mg/kg	30		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,2-Dichloropropane	78-87-5	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,3-Dichlorobenzene	541-73-1	mg/kg	280		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,4-Dichlorobenzene	106-46-7	mg/kg	130		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
1,4-Dioxane	123-91-1	mg/kg	130		< 100 U	< 49 U	< 9.5 U	< 5.1 U	< 5.2 U	< 5.3 U
2-Butanone (MEK)	78-93-3	mg/kg	500		< 10 U	< 4.9 U	< 0.95 U	< 0.51 U	< 0.52 U	< 0.53 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	--		< 10 U	< 4.9 U	< 0.95 U	< 0.51 U	< 0.52 U	< 0.53 U
Acetone	67-64-1	mg/kg	500		< 10 U	< 4.9 U	< 0.95 U	< 0.51 U	< 0.52 U	< 0.53 U
Benzene	71-43-2	mg/kg	44		7.8	6.4	1.2	< 0.10 U	< 0.10 U	< 0.11 U
Bromochloromethane	74-97-5	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Bromodichloromethane	75-27-4	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Bromoform	75-25-2	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Bromomethane	74-83-9	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Carbon Disulfide	75-15-0	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Carbon Tetrachloride	56-23-5	mg/kg	22		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
CFC-11	75-69-4	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
CFC-12	75-71-8	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U

See Notes on Page 7.

Table 1
Waste Characterization Analytical Data (2019) – VOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS26- DEEP (GRAB)	A-RH3-WS26- DEEPEST (GRAB)	A-RH3-WS- NL4-DEEP (GRAB)	A-RH3-WS- NL4-R2- DEEPEST (GRAB)	A-RH3-WS- NL4-R3- DEEPEST (GRAB)	A-RH3-WS- NL4-R4- DEEPEST (GRAB)
				Depth: Date:	18' - 19' 5/22/2019	20' - 21' 5/22/2019	19' - 20' 4/24/2019	21' - 22' 5/6/2019	20' - 21' 5/7/2019	25' - 26' 5/7/2019
VOCs (continued)										
Chlorobenzene	108-90-7	mg/kg	500		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Chlorodibromomethane	124-48-1	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Chloroethane	75-00-3	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Chloroform	67-66-3	mg/kg	350		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Chloromethane	74-87-3	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	500		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Cyclohexane	110-82-7	mg/kg	--		1.3 J	0.73 J	0.096 J	< 0.10 U	< 0.10 U	< 0.11 U
Dichloromethane	75-09-2	mg/kg	500		< 2.0 U	< 0.97 U	< 0.19 U	0.070 J	0.10	0.063 J
Ethylbenzene	100-41-4	mg/kg	390		230	140	72	0.15	10	3.3
Isopropylbenzene	98-82-8	mg/kg	--		28	18	13	0.94	6.0	3.0
Methyl Acetate	79-20-9	mg/kg	--		< 10 U	< 4.9 U	0.27 J	< 0.51 U	< 0.52 U	< 0.53 U
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	mg/kg	--		< 10 U	< 4.9 U	< 0.95 U	< 0.51 U	< 0.52 U	< 0.53 U
Methylcyclohexane	108-87-2	mg/kg	--		5.9	3.7	0.57	0.93	3.9	1.4
Methyl-tert-butylether	1634-04-4	mg/kg	500		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
m,p-Xylene	ARC-mpXyl	mg/kg	--		230	150	58	< 0.10 U	0.93	0.68
o-Xylene	95-47-6	mg/kg	--		120	77	35	0.072 J	3.1	1.3
Total Xylenes	1330-20-7	mg/kg	500		350	227	93	0.072	4.03	1.98
Styrene (Monomer)	100-42-5	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Tetrachloroethene	127-18-4	mg/kg	150		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Toluene	108-88-3	mg/kg	500		5.8	3.0	0.60	< 0.10 U	0.073 J	< 0.11 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	500		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg	--		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Trichloroethene	79-01-6	mg/kg	200		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U
Vinyl chloride	75-01-4	mg/kg	13		< 2.0 U	< 0.97 U	< 0.19 U	< 0.10 U	< 0.10 U	< 0.11 U

See Notes on Page 7.

Table 1
Waste Characterization Analytical Data (2019) – VOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Notes:

Soil analytical data from waste characterizations samples collected by Arcadis in 2019, in advance of the Excavation Interim Remedial Measure conducted in 2020.

Bold values indicate a detection above the analytical method detection limit

Bold and shaded cells indicate an exceedance of SCO for the 6 NYCRR Part 375-6.8(b) Commercial Soil Cleanup Objectives

Sample depths are below original grade at time of waste characterization sampling

mg/kg = milligrams per kilogram

-- indicates no criterion established

NA = not analyzed

SCO = NYSDEC Part 375 (6.8) commercial soil cleanup objective

CAS = chemical abstract service

VOCs = volatile organic compounds

COMP = composite soil sample

DNAPL = dense non-aqueous phase liquid

< value U, or < value = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J = Indicates an estimated value.

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS2R- DEEP (COMP)	A-RH3-WS-13- DEEP (COMP)	A-RH3-WS-13- DEEPEST (COMP)	A-RH3-WS14- DEEP (COMP)	A-RH3-WS14- DEEPEST (COMP)	A-RH3-WS15- DEEP (COMP)	A-RH3-WS15- DEEPEST (COMP)
				Depth: Date:	7' - 20' 4/24/2019	7' - 20' 5/7/2019	20' - 28.5' 5/7/2019	7' - 20' 5/8/2019	20' - 30' 5/8/2019	7' - 20' 5/14/2019	20' - 30' 5/14/2019
SVOCs											
1,1-Biphenyl	92-52-4	mg/kg	--		4.5	0.34 J	< 2.0 U	32	25	16 J	13 J
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
2,2-Oxybis(1-Chloropropane)	108-60-1	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	--		< 0.77 U	< 0.16 U	< 0.79 U	< 7.7 U	< 3.9 U	< 8.3 U	< 7.9 U
2,4-Dichlorophenol	120-83-2	mg/kg	--		< 0.77 U	< 0.16 U	< 0.79 U	< 7.7 U	< 3.9 U	< 8.3 U	< 7.9 U
2,4-Dimethylphenol	105-67-9	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
2,4-Dinitrophenol	51-28-5	mg/kg	--		< 1.5 U	< 0.32 U	< 1.6 U	< 15 U	< 7.7 U	< 17 U	< 16 U
2,4-Dinitrotoluene	121-14-2	mg/kg	--		0.83	< 0.081 U	< 0.40 U	< 3.9 U	< 2.0 U	2.7 J	< 4.0 U
2,6-Dinitrotoluene	606-20-2	mg/kg	--		< 0.39 U	< 0.081 U	< 0.40 U	< 3.9 U	< 2.0 U	< 4.2 U	< 4.0 U
2-Chloronaphthalene	91-58-7	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
2-Chlorophenol	95-57-8	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
2-Methyl-4,6-dinitrophenol	534-52-1	mg/kg	--		< 1.5 U	< 0.32 U	< 1.6 U	< 15 U	< 7.7 U	< 17 U	< 16 U
2-Methylnaphthalene	91-57-6	mg/kg	--		13	0.083 J	< 2.0 U	250	130	160	120
2-Methylphenol	95-48-7	mg/kg	500		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
2-Nitroaniline	88-74-4	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
2-Nitrophenol	88-75-5	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
3,3-Dichlorobenzidine	91-94-1	mg/kg	--		< 0.77 U	< 0.16 U	< 0.79 U	< 7.7 U	< 3.9 U	< 8.3 U	< 7.9 U
3-Methylphenol, 4-Methylphenol	65794-96-9	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
3-Nitroaniline	99-09-2	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
4-Bromophenyl phenyl ether	101-55-3	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
4-Chloro-3-Methylphenol	59-50-7	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
4-Chlorophenyl phenyl ether	7005-72-3	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
4-Nitroaniline	100-01-6	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
4-Nitrophenol	100-02-7	mg/kg	--		< 3.9 U	< 0.81 U	< 4.0 U	< 39 U	< 20 U	< 42 U	< 40 U
Acenaphthene	83-32-9	mg/kg	500		10	3.1	< 2.0 U	180	75	68	53
Acenaphthylene	208-96-8	mg/kg	500		1.4 J	0.23 J	< 2.0 U	19	11	7.9 J	5.4 J

See Notes on Page 10.

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS2R- DEEP (COMP)	A-RH3-WS-13- DEEP (COMP)	A-RH3-WS-13- DEEPEST (COMP)	A-RH3-WS14- DEEP (COMP)	A-RH3-WS14- DEEPEST (COMP)	A-RH3-WS15- DEEP (COMP)	A-RH3-WS15- DEEPEST (COMP)
				Depth: Date:	7' - 20' 4/24/2019	7' - 20' 5/7/2019	20' - 28.5' 5/7/2019	7' - 20' 5/8/2019	20' - 30' 5/8/2019	7' - 20' 5/14/2019	20' - 30' 5/14/2019
SVOCs (continued)											
Acetophenone	98-86-2	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Anthracene	120-12-7	mg/kg	500		8.2	1.9	< 2.0 U	100	45	31	25
Atrazine	1912-24-9	mg/kg	--		< 0.77 U	< 0.16 U	< 0.79 U	< 7.7 U	< 3.9 U	< 8.3 U	< 7.9 U
Benz(a)anthracene	56-55-3	mg/kg	5.6		4.0	0.97	0.093 J	56	26	16	12
Benzaldehyde	100-52-7	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Benzo(a)pyrene	50-32-8	mg/kg	1		2.9	1.0	< 0.20 U	44	20	11	9.0
Benzo(b)fluoranthene	205-99-2	mg/kg	5.6		3.0	0.77	< 0.20 U	37	16	7.7	6.8
Benzo(g,h,i)perylene	191-24-2	mg/kg	500		1.6 J	0.44	0.11 J	16 J	8.3 J	4.0 J	2.9 J
Benzo(k)fluoranthene	207-08-9	mg/kg	56		0.88	0.28	< 0.20 U	11	5.0	2.4	2.3
bis(2-Chloroethoxy)methane	111-91-1	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
bis(2-Chloroethyl)ether	111-44-4	mg/kg	--		< 0.19 U	< 0.040 U	< 0.20 U	< 1.9 U	< 0.96 U	< 2.1 U	< 2.0 U
bis(2-Ethylhexyl)phthalate	117-81-7	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Butyl benzyl phthalate	85-68-7	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Caprolactam	105-60-2	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Carbazole	86-74-8	mg/kg	--		0.41 J	< 0.40 U	< 2.0 U	1.5 J	1.1 J	1.1 J	< 20 U
Chrysene	218-01-9	mg/kg	56		3.8	0.93	< 2.0 U	53	26	15 J	12 J
Dibenz(a,h)anthracene	53-70-3	mg/kg	0.56		0.33	0.11	< 0.20 U	4.0	1.5	< 2.1 U	< 2.0 U
Dibenzofuran	132-64-9	mg/kg	350		1.1 J	< 0.40 U	< 2.0 U	14 J	4.7 J	4.3 J	3.5 J
Diethyl phthalate	84-66-2	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Dimethyl phthalate	131-11-3	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Di-n-butyl phthalate	84-74-2	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Di-n-octyl phthalate	117-84-0	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Fluoranthene	206-44-0	mg/kg	500		8.4	1.5	< 2.0 U	100	44	26	21
Fluorene	86-73-7	mg/kg	500		8.9	1.8	< 2.0 U	120	49	38	30
Hexachloro-1,3-butadiene	87-68-3	mg/kg	--		< 0.39 U	< 0.081 U	< 0.40 U	< 3.9 U	< 2.0 U	< 4.2 U	< 4.0 U
Hexachlorobenzene	118-74-1	mg/kg	6		< 0.19 U	< 0.040 U	< 0.20 U	< 1.9 U	< 0.96 U	< 2.1 U	< 2.0 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Hexachloroethane	67-72-1	mg/kg	--		< 0.19 U	< 0.040 U	< 0.20 U	< 1.9 U	< 0.96 U	< 2.1 U	< 2.0 U

See Notes on Page 10.

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS2R- DEEP (COMP)	A-RH3-WS-13- DEEP (COMP)	A-RH3-WS-13- DEEPEST (COMP)	A-RH3-WS14- DEEP (COMP)	A-RH3-WS14- DEEPEST (COMP)	A-RH3-WS15- DEEP (COMP)	A-RH3-WS15- DEEPEST (COMP)
				Depth: Date:	7' - 20' 4/24/2019	7' - 20' 5/7/2019	20' - 28.5' 5/7/2019	7' - 20' 5/8/2019	20' - 30' 5/8/2019	7' - 20' 5/14/2019	20' - 30' 5/14/2019
SVOCs (continued)											
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	5.6		1.5	0.33	0.087 J	16	7.6	3.8	3.0
Isophorone	78-59-1	mg/kg	--		< 0.77 U	< 0.16 U	< 0.79 U	< 7.7 U	< 3.9 U	< 8.3 U	< 7.9 U
Naphthalene	91-20-3	mg/kg	500		8.9	0.45	< 2.0 U	280	160	370	260
Nitrobenzene	98-95-3	mg/kg	--		< 0.19 U	< 0.040 U	< 0.20 U	< 1.9 U	< 0.96 U	< 2.1 U	< 2.0 U
N-Nitrosodi-n-propylamine	621-64-7	mg/kg	--		< 0.19 U	< 0.040 U	< 0.20 U	< 1.9 U	< 0.96 U	< 2.1 U	< 2.0 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	--		0.82 J	0.50	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
p-Chloroaniline	106-47-8	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Pentachlorophenol	87-86-5	mg/kg	6.7		< 1.5 U	< 0.32 U	< 1.6 U	< 15 U	< 7.7 U	< 17 U	< 16 U
Phenanthrene	85-01-8	mg/kg	500		31	7.6	0.25 J	370	160	110	85
Phenol	108-95-2	mg/kg	500		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U
Pyrene	129-00-0	mg/kg	500		13	3.9	0.14 J	160	76	40	35
Pyridine	110-86-1	mg/kg	--		< 1.9 U	< 0.40 U	< 2.0 U	< 19 U	< 9.6 U	< 21 U	< 20 U

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS16- DEEP (COMP)	A-RH3-WS16- DEEPEST (COMP)	A-RH3-WS17- DEEPEST (COMP)	A-RH3-WS19- DEEP (COMP)	A-RH3-WS19- DEEPEST (COMP)	A-RH3-WS20- DEEPEST (COMP)	A-RH3-WS21- DEEP (COMP)
				Depth: Date:	7' - 20' 5/13/2019	20' - 30' 5/13/2019	20' - 30' 5/13/2019	7' - 20' 5/14/2019	20' - 30' 5/14/2019	20' - 30' 5/14/2019	7' - 20' 5/21/2019
SVOCs											
1,1-Biphenyl	92-52-4	mg/kg	--		1.5 J	1.2	23	21	10	3.1	3.5 J
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
2,2-Oxybis(1-Chloropropane)	108-60-1	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	--		< 0.78 U	< 0.16 U	< 4.0 U	< 16	< 3.9	< 0.81	< 1.6 U
2,4-Dichlorophenol	120-83-2	mg/kg	--		< 0.78 U	< 0.16 U	< 4.0 U	< 16	< 3.9	< 0.81	< 1.6 U
2,4-Dimethylphenol	105-67-9	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
2,4-Dinitrophenol	51-28-5	mg/kg	--		< 1.6 U	< 0.31 U	< 8.1 U	< 32	< 7.8	< 1.6	< 3.1 U
2,4-Dinitrotoluene	121-14-2	mg/kg	--		< 0.39 U	< 0.079 U	< 2.0 U	< 8.1	< 2.0	< 0.41	< 0.78 U
2,6-Dinitrotoluene	606-20-2	mg/kg	--		< 0.39 U	< 0.079 U	< 2.0 U	< 8.1	< 2.0	< 0.41	< 0.78 U
2-Chloronaphthalene	91-58-7	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
2-Chlorophenol	95-57-8	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
2-Methyl-4,6-dinitrophenol	534-52-1	mg/kg	--		< 1.6 U	< 0.31 U	< 8.1 U	< 32	< 7.8	< 1.6	< 3.1 U
2-Methylnaphthalene	91-57-6	mg/kg	--		4.7	4.3	100	180	75	20	24
2-Methylphenol	95-48-7	mg/kg	500		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
2-Nitroaniline	88-74-4	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
2-Nitrophenol	88-75-5	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
3,3-Dichlorobenzidine	91-94-1	mg/kg	--		< 0.78 U	< 0.16 U	< 4.0 U	< 16	< 3.9	< 0.81	< 1.6 U
3-Methylphenol, 4-Methylphenol	65794-96-9	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
3-Nitroaniline	99-09-2	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
4-Bromophenyl phenyl ether	101-55-3	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
4-Chloro-3-Methylphenol	59-50-7	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
4-Chlorophenyl phenyl ether	7005-72-3	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
4-Nitroaniline	100-01-6	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
4-Nitrophenol	100-02-7	mg/kg	--		< 3.9 U	< 0.79 U	< 20 U	< 81	< 20	< 4.1	< 7.8 U
Acenaphthene	83-32-9	mg/kg	500		3.8	1.9	69	55	27	6.7	7.8
Acenaphthylene	208-96-8	mg/kg	500		0.43 J	0.27 J	11	4.8	2.9	0.73	0.60 J

See Notes on Page 10.

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS16- DEEP (COMP)	A-RH3-WS16- DEEPEST (COMP)	A-RH3-WS17- DEEPEST (COMP)	A-RH3-WS19- DEEP (COMP)	A-RH3-WS19- DEEPEST (COMP)	A-RH3-WS20- DEEPEST (COMP)	A-RH3-WS21- DEEP (COMP)
				Depth: Date:	7' - 20' 5/13/2019	20' - 30' 5/13/2019	20' - 30' 5/13/2019	7' - 20' 5/14/2019	20' - 30' 5/14/2019	20' - 30' 5/14/2019	7' - 20' 5/21/2019
SVOCs (continued)											
Acetophenone	98-86-2	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Anthracene	120-12-7	mg/kg	500		2.9	1.5	48	31	16	3.7	4.4
Atrazine	1912-24-9	mg/kg	--		< 0.78 U	< 0.16 U	< 4.0 U	< 16	< 3.9	< 0.81	< 1.6 U
Benz(a)anthracene	56-55-3	mg/kg	5.6		1.5	1.2	27	14	8.2	2.1	2.2
Benzaldehyde	100-52-7	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Benzo(a)pyrene	50-32-8	mg/kg	1		0.93	0.64	21	9.4	6.0	1.5	1.5
Benzo(b)fluoranthene	205-99-2	mg/kg	5.6		0.94	0.65	18	8.1	4.7	1.0	1.1
Benzo(g,h,i)perylene	191-24-2	mg/kg	500		0.50 J	0.32 J	9.0 J	4.0	2.3	0.65	0.59 J
Benzo(k)fluoranthene	207-08-9	mg/kg	56		0.24	0.29	4.5	2.8	1.5	0.42	0.33 J
bis(2-Chloroethoxy)methane	111-91-1	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
bis(2-Chloroethyl)ether	111-44-4	mg/kg	--		< 0.19 U	< 0.039 U	< 1.0 U	< 4.0	< 0.96	< 0.20	< 0.39 U
bis(2-Ethylhexyl)phthalate	117-81-7	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Butyl benzyl phthalate	85-68-7	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Caprolactam	105-60-2	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Carbazole	86-74-8	mg/kg	--		0.11 J	0.065 J	1.2 J	1.9	0.58	0.14	0.16 J
Chrysene	218-01-9	mg/kg	56		1.3 J	1.1	27	12	7.0	1.9	2.3 J
Dibenz(a,h)anthracene	53-70-3	mg/kg	0.56		< 0.19 U	0.11	1.9	< 4.0	0.56	0.16	< 0.39 U
Dibenzofuran	132-64-9	mg/kg	350		0.40 J	0.28 J	5.9 J	8.0	2.5	0.32	0.59 J
Diethyl phthalate	84-66-2	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Dimethyl phthalate	131-11-3	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Di-n-butyl phthalate	84-74-2	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Di-n-octyl phthalate	117-84-0	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Fluoranthene	206-44-0	mg/kg	500		3.1	2.5	49	29	15	2.9	3.7 J
Fluorene	86-73-7	mg/kg	500		3.2	2.4	54	44	20	4.2	5.2
Hexachloro-1,3-butadiene	87-68-3	mg/kg	--		< 0.39 U	< 0.079 U	< 2.0 U	< 8.1	< 2.0	< 0.41	< 0.78 U
Hexachlorobenzene	118-74-1	mg/kg	6		< 0.19 U	< 0.039 U	< 1.0 U	< 4.0	< 0.96	< 0.20	< 0.39 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Hexachloroethane	67-72-1	mg/kg	--		< 0.19 U	< 0.039 U	< 1.0 U	< 4.0	< 0.96	< 0.20	< 0.39 U

See Notes on Page 10.

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS16- DEEP (COMP)	A-RH3-WS16- DEEPEST (COMP)	A-RH3-WS17- DEEPEST (COMP)	A-RH3-WS19- DEEP (COMP)	A-RH3-WS19- DEEPEST (COMP)	A-RH3-WS20- DEEPEST (COMP)	A-RH3-WS21- DEEP (COMP)
				Depth: Date:	7' - 20' 5/13/2019	20' - 30' 5/13/2019	20' - 30' 5/13/2019	7' - 20' 5/14/2019	20' - 30' 5/14/2019	20' - 30' 5/14/2019	7' - 20' 5/21/2019
SVOCs (continued)											
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	5.6		0.45	0.31	8.1	4.4	2.1	0.49	0.50
Isophorone	78-59-1	mg/kg	--		< 0.78 U	< 0.16 U	< 4.0 U	< 16	< 3.9	< 0.81	< 1.6 U
Naphthalene	91-20-3	mg/kg	500		3.2	3.1	94	420	150	43	58
Nitrobenzene	98-95-3	mg/kg	--		< 0.19 U	< 0.039 U	< 1.0 U	< 4.0	< 0.96	< 0.20	< 0.39 U
N-Nitrosodi-n-propylamine	621-64-7	mg/kg	--		< 0.19 U	< 0.039 U	< 1.0 U	< 4.0	< 0.96	< 0.20	< 0.39 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	--		0.40 J	< 0.39 U	4.2 J	< 40	< 9.6	< 2.0	1.4 J
p-Chloroaniline	106-47-8	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Pentachlorophenol	87-86-5	mg/kg	6.7		< 1.6 U	< 0.31 U	< 8.1 U	< 32	< 7.8	< 1.6	< 3.1 U
Phenanthrene	85-01-8	mg/kg	500		12	8.9	180	120	58	14	17
Phenol	108-95-2	mg/kg	500		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U
Pyrene	129-00-0	mg/kg	500		4.8	3.5	81	44	26	6.7	7.4
Pyridine	110-86-1	mg/kg	--		< 1.9 U	< 0.39 U	< 10 U	< 40	< 9.6	< 2.0	< 3.9 U

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS22- DEEP (COMP)	A-RH3-WS23- DEEP (COMP)	A-RH3-WS26- DEEP (COMP)	A-RH3-WS26- DEEPEST (COMP)	A-RH3-WS- NL4-R2- DEEPEST (COMP)	A-RH3-WS- NL4-R3- DEEPEST (COMP)	A-RH3-WS- NL4-R4- DEEPEST (COMP)
				Depth: Date:	7' - 20' 5/21/2019	7' - 20' 5/21/2019	7' - 20' 5/22/2019	20' - 30' 5/22/2019	20' - 30' 5/6/2019	20' - 30' 5/7/2019	20' - 30' 5/7/2019
SVOCs											
1,1-Biphenyl	92-52-4	mg/kg	--		15 J	2.7 J	25 J	5.8 J	0.17 J	4.0	4.9 J
1,2,4,5-Tetrachlorobenzene	95-94-3	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
2,2-Oxybis(1-Chloropropane)	108-60-1	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
2,3,4,6-Tetrachlorophenol	58-90-2	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	--		< 7.7 U	< 1.6 U	< 15 U	< 8.4 U	< 0.16 U	< 0.85 U	< 3.4 U
2,4-Dichlorophenol	120-83-2	mg/kg	--		< 7.7 U	< 1.6 U	< 15 U	< 8.4 U	< 0.16 U	< 0.85 U	< 3.4 U
2,4-Dimethylphenol	105-67-9	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
2,4-Dinitrophenol	51-28-5	mg/kg	--		< 15 U	< 3.2 U	< 30 U	< 17 U	< 0.32 U	< 1.7 U	< 6.7 U
2,4-Dinitrotoluene	121-14-2	mg/kg	--		< 3.9 U	< 0.80 U	< 7.6 U	< 4.2 U	< 0.081 U	< 0.43 U	< 1.7 U
2,6-Dinitrotoluene	606-20-2	mg/kg	--		< 3.9 U	< 0.80 U	< 7.6 U	< 4.2 U	< 0.081 U	< 0.43 U	< 1.7 U
2-Chloronaphthalene	91-58-7	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
2-Chlorophenol	95-57-8	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
2-Methyl-4,6-dinitrophenol	534-52-1	mg/kg	--		< 15 U	< 3.2 U	< 30 U	< 17 U	< 0.32 U	< 1.7 U	< 6.7 U
2-Methylnaphthalene	91-57-6	mg/kg	--		100	19	250	48	0.76	19	31
2-Methylphenol	95-48-7	mg/kg	500		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
2-Nitroaniline	88-74-4	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
2-Nitrophenol	88-75-5	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
3,3-Dichlorobenzidine	91-94-1	mg/kg	--		< 7.7 U	< 1.6 U	< 15 U	< 8.4 U	< 0.16 U	< 0.85 U	< 3.4 U
3-Methylphenol, 4-Methylphenol	65794-96-9	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
3-Nitroaniline	99-09-2	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
4-Bromophenyl phenyl ether	101-55-3	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
4-Chloro-3-Methylphenol	59-50-7	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
4-Chlorophenyl phenyl ether	7005-72-3	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
4-Nitroaniline	100-01-6	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
4-Nitrophenol	100-02-7	mg/kg	--		< 39 U	< 8.0 U	< 76 U	< 42 U	< 0.81 U	< 4.3 U	< 17 U
Acenaphthene	83-32-9	mg/kg	500		35	6.5	84	17 J	0.47	11	20
Acenaphthylene	208-96-8	mg/kg	500		3.6 J	0.67 J	4.8 J	1.1 J	0.035 J	1.1 J	2.2 J

See Notes on Page 10.

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS22- DEEP (COMP)	A-RH3-WS23- DEEP (COMP)	A-RH3-WS26- DEEP (COMP)	A-RH3-WS26- DEEPEST (COMP)	A-RH3-WS- NL4-R2- DEEPEST (COMP)	A-RH3-WS- NL4-R3- DEEPEST (COMP)	A-RH3-WS- NL4-R4- DEEPEST (COMP)
				Depth: Date:	7' - 20' 5/21/2019	7' - 20' 5/21/2019	7' - 20' 5/22/2019	20' - 30' 5/22/2019	20' - 30' 5/6/2019	20' - 30' 5/7/2019	20' - 30' 5/7/2019
SVOCs (continued)											
Acetophenone	98-86-2	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Anthracene	120-12-7	mg/kg	500		19	3.3 J	47	9.7 J	0.44	6.0	13
Atrazine	1912-24-9	mg/kg	--		< 7.7 U	< 1.6 U	< 15 U	< 8.4 U	< 0.16 U	< 0.85 U	< 3.4 U
Benz(a)anthracene	56-55-3	mg/kg	5.6		11	1.8	17	4.9	0.25	3.0	5.7
Benzaldehyde	100-52-7	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Benzo(a)pyrene	50-32-8	mg/kg	1		7.5	1.3	11	3.5	0.18	2.3	4.5
Benzo(b)fluoranthene	205-99-2	mg/kg	5.6		5.3	0.82	8.0	2.4	0.15	1.9	3.8
Benzo(g,h,i)perylene	191-24-2	mg/kg	500		3.5 J	0.59 J	4.4 J	1.5 J	0.080 J	0.81 J	1.7 J
Benzo(k)fluoranthene	207-08-9	mg/kg	56		1.4 J	0.31 J	3.0 J	0.99 J	0.050	0.56	1.0
bis(2-Chloroethoxy)methane	111-91-1	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
bis(2-Chloroethyl)ether	111-44-4	mg/kg	--		< 1.9 U	< 0.39 U	< 3.8 U	< 2.1 U	< 0.040 U	< 0.21 U	< 0.83 U
bis(2-Ethylhexyl)phthalate	117-81-7	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Butyl benzyl phthalate	85-68-7	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Caprolactam	105-60-2	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Carbazole	86-74-8	mg/kg	--		< 19 U	< 3.9 U	2.3 J	< 21 U	< 0.40 U	0.12 J	0.31 J
Chrysene	218-01-9	mg/kg	56		11 J	1.8 J	17 J	5.2 J	0.22 J	2.8	5.8 J
Dibenz(a,h)anthracene	53-70-3	mg/kg	0.56		0.93 J	< 0.39 U	< 3.8 U	< 2.1 U	0.021 J	0.14 J	< 0.83 U
Dibenzofuran	132-64-9	mg/kg	350		1.9 J	0.45 J	8.5 J	1.7 J	0.034 J	0.88 J	1.7 J
Diethyl phthalate	84-66-2	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Dimethyl phthalate	131-11-3	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Di-n-butyl phthalate	84-74-2	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Di-n-octyl phthalate	117-84-0	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Fluoranthene	206-44-0	mg/kg	500		16 J	3.0 J	35 J	8.4 J	0.43	5.6	12
Fluorene	86-73-7	mg/kg	500		23	4.4	65	12 J	0.36 J	6.8	14
Hexachloro-1,3-butadiene	87-68-3	mg/kg	--		< 3.9 U	< 0.80 U	< 7.6 U	< 4.2 U	< 0.081 U	< 0.43 U	< 1.7 U
Hexachlorobenzene	118-74-1	mg/kg	6		< 1.9 U	< 0.39 U	< 3.8 U	< 2.1 U	< 0.040 U	< 0.21 U	< 0.83 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Hexachloroethane	67-72-1	mg/kg	--		< 1.9 U	< 0.39 U	< 3.8 U	< 2.1 U	< 0.040 U	< 0.21 U	< 0.83 U

See Notes on Page 10.

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Analyte	CAS	Units	NYSDEC Part 375 Commercial SCO	Sample ID:	A-RH3-WS22- DEEP (COMP)	A-RH3-WS23- DEEP (COMP)	A-RH3-WS26- DEEP (COMP)	A-RH3-WS26- DEEPEST (COMP)	A-RH3-WS- NL4-R2- DEEPEST (COMP)	A-RH3-WS- NL4-R3- DEEPEST (COMP)	A-RH3-WS- NL4-R4- DEEPEST (COMP)
				Depth: Date:	7' - 20' 5/21/2019	7' - 20' 5/21/2019	7' - 20' 5/22/2019	20' - 30' 5/22/2019	20' - 30' 5/6/2019	20' - 30' 5/7/2019	20' - 30' 5/7/2019
SVOCs (continued)											
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	5.6		2.7	0.49	4.3	1.2 J	0.058	0.72	1.3
Isophorone	78-59-1	mg/kg	--		< 7.7 U	< 1.6 U	< 15 U	< 8.4 U	< 0.16 U	< 0.85 U	< 3.4 U
Naphthalene	91-20-3	mg/kg	500		220	46	510	100	0.16 J	21	72
Nitrobenzene	98-95-3	mg/kg	--		< 1.9 U	< 0.39 U	< 3.8 U	< 2.1 U	< 0.040 U	< 0.21 U	< 0.83 U
N-Nitrosodi-n-propylamine	621-64-7	mg/kg	--		< 1.9 U	< 0.39 U	< 3.8 U	< 2.1 U	< 0.040 U	< 0.21 U	< 0.83 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	--		2.7 J	0.99 J	10 J	2.2 J	0.13 J	0.60 J	1.4 J
p-Chloroaniline	106-47-8	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Pentachlorophenol	87-86-5	mg/kg	6.7		< 15 U	< 3.2 U	< 30 U	< 17 U	< 0.32 U	< 1.7 U	< 6.7 U
Phenanthrene	85-01-8	mg/kg	500		70	13	190	38	1.4	22	45
Phenol	108-95-2	mg/kg	500		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U
Pyrene	129-00-0	mg/kg	500		33	5.9	60	15 J	1.0	9.2	19
Pyridine	110-86-1	mg/kg	--		< 19 U	< 3.9 U	< 38 U	< 21 U	< 0.40 U	< 2.1 U	< 8.3 U

Table 2
Waste Characterization Analytical Data (2019) – SVOCs
Sample Locations with or Proximate to Observed DNAPL
Red Hook 3 - NYSDEC Brownfield Site C224213
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, NY

Notes:

Soil analytical data from waste characterizations samples collected by Arcadis in 2019, in advance of the Excavation Interim Remedial Measure conducted in 2020.

Bold values indicate a detection above the analytical method detection limit

Bold and shaded cells indicate an exceedance of SCO for the 6 NYCRR Part 375-6.8(b) Commercial Soil Cleanup Objectives

Sample depths are below original grade at time of waste characterization sampling

mg/kg = milligrams per kilogram

-- indicates no criterion established

NA = not analyzed

SCO = NYSDEC Part 375 (6.8) commercial soil cleanup objective

CAS = chemical abstract service

SVOCs = semivolatile organic compounds

COMP = composite soil sample

DNAPL = dense non-aqueous phase liquid

< value U, or < value = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

J = Indicates an estimated value.

Table A-2
Laboratory Analytical Summary – Volatile Organic Compounds in Soil

BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York

						Sample ID:	A-RB-DB2	A-RH3-B1	A-RH3-B2	A-RH3-B4	A-RH3-B5	A-RH3-B6	A-RH3-B7
						Sample Date:	9/27/2017	6/28/2017	6/28/2017	6/28/2017	6/29/2017	6/28/2017	6/28/2017
						Sample Depth (feet bgs):	5	18-20	18-19.5	5-10	15-16	24-25	9-10
CAS No	Analyte	6 NYCRR Part 375-6.8(b) Soil Cleanup Objectives			Units								
		Unrestricted	Restricted Residential	Commercial									
VOCs													
630-20-6	1,1,1,2-Tetrachloroethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
71-55-6	1,1,1-Trichloroethane	0.68	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
79-34-5	1,1,2,2-Tetrachloroethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
76-13-1	1,1,2-trichloro-1,2,2-trifluoroethane	--	--	--	mg/kg	< 0.011	2.5 UJ	< 12	< 2.1	< 0.014	< 11	< 0.011	
79-00-5	1,1,2-Trichloroethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
75-34-3	1,1-Dichloroethane	0.27	26	240	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
75-35-4	1,1-Dichloroethene	0.33	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
563-58-6	1,1-Dichloropropene	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
87-61-6	1,2,3-Trichlorobenzene	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
96-18-4	1,2,3-Trichloropropane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
120-82-1	1,2,4-Trichlorobenzene	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
95-63-6	1,2,4-Trimethylbenzene	3.6	52	190	mg/kg	< 0.005	17	62	5.4	0.004 J	23	< 0.005	
96-12-8	1,2-Dibromo-3-chloropropane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
106-93-4	1,2-Dibromoethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
95-50-1	1,2-Dichlorobenzene	1.1	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
107-06-2	1,2-Dichloroethane	0.02	3.1	30	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
78-87-5	1,2-Dichloropropane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
108-70-3	1,3,5-Trichlorobenzene	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
108-67-8	1,3,5-Trimethylbenzene	8.4	52	190	mg/kg	< 0.005	2.9 J	22	2	0.001 J	8.4	< 0.005	
541-73-1	1,3-Dichlorobenzene	2.4	49	280	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
142-28-9	1,3-Dichloropropane	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
106-46-7	1,4-Dichlorobenzene	1.8	13	130	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
123-91-1	1,4-Dioxane	0.1	13	130	mg/kg	< 0.27	63 UJ	< 290	< 52	< 0.34	< 290	< 0.27	
594-20-7	2,2-Dichloropropane	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
78-93-3	2-Butanone (MEK)	0.12	100	500	mg/kg	< 0.011	2.5 UJ	< 12	< 2.1	0.007 J	< 11	0.005 J	
95-49-8	2-Chlorotoluene	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
106-43-4	4-Chlorotoluene	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
108-10-1	4-Methyl-2-Pentanone	--	--	--	mg/kg	< 0.011	2.5 UJ	< 12	< 2.1	< 0.014	< 11	< 0.011	
67-64-1	Acetone	0.05	100	500	mg/kg	0.021 J	5.1 UJ	< 24	< 4.2	0.1	< 23	0.044	
107-02-8	Acrolein	--	--	--	mg/kg	< 0.11	25 UJ	< 120	< 21	< 0.14	< 110	< 0.11	
107-13-1	Acrylonitrile	--	--	--	mg/kg	< 0.022	5.1 UJ	< 24	< 4.2	< 0.027	< 23	< 0.022	
71-43-2	Benzene	0.06	4.8	44	mg/kg	< 0.005	1.3 UJ	0.61 J	< 1	0.004 J	< 5.7	< 0.005	
108-86-1	Bromobenzene	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
74-97-5	Bromochloromethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
75-27-4	Bromodichloromethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
75-25-2	Bromoform	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
74-83-9	Bromomethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
75-15-0	Carbon Disulfide	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	0.008	< 5.7	< 0.005	
56-23-5	Carbon Tetrachloride	0.76	2.4	22	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
75-69-4	CFC-11	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
75-71-8	CFC-12	--	--	--	mg/kg	< 0.005	< 1.3	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
108-90-7	Chlorobenzene	1.1	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
124-48-1	Chlorodibromomethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	

See Notes on Page 5.

Table A-2
Laboratory Analytical Summary – Volatile Organic Compounds in Soil

BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York

						Sample ID:	A-RB-DB2	A-RH3-B1	A-RH3-B2	A-RH3-B4	A-RH3-B5	A-RH3-B6	A-RH3-B7
						Sample Date:	9/27/2017	6/28/2017	6/28/2017	6/28/2017	6/29/2017	6/28/2017	6/28/2017
						Sample Depth (feet bgs):	5	18-20	18-19.5	5-10	15-16	24-25	9-10
CAS No	Analyte	6 NYCRR Part 375-6.8(b) Soil Cleanup Objectives				Units							
		Unrestricted	Restricted Residential	Commercial									
VOCs													
75-00-3	Chloroethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
67-66-3	Chloroform	0.37	49	350	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
74-87-3	Chloromethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
156-59-2	cis-1,2-Dichloroethene	0.25	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
10061-01-5	cis-1,3-Dichloropropene	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
110-82-7	Cyclohexane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	0.001 J	< 5.7	< 0.005	
99-87-6	Cymene (p-Isopropyltoluene)	--	--	--	mg/kg	< 0.005	3.1 J	5.3 J	0.72 J	< 0.007	2.2 J	< 0.005	
74-95-3	Dibromomethane	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
75-09-2	Dichloromethane	0.05	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
60-29-7	Diethyl ether	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
108-20-3	Di-isopropyl ether	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
637-92-3	Ethyl tert-butyl ether	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
100-41-4	Ethylbenzene	1	41	390	mg/kg	< 0.005	0.29 J	86	0.7 J	< 0.007	28	< 0.005	
87-68-3	Hexachloro-1,3-butadiene	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
98-82-8	Isopropylbenzene	--	--	--	mg/kg	< 0.005	2.6 J	12	0.33 J	0.005 J	4.7 J	< 0.005	
ARC-mpXyl	m&p-Xylenes	--	--	--	mg/kg	< 0.005	1.3 UJ	79	2.1	0.002 J	24	< 0.005	
79-20-9	Methyl Acetate	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
591-78-6	Methyl N-Butyl Ketone (2-Hexanone)	--	--	--	mg/kg	< 0.011	2.5 UJ	< 12	< 2.1	< 0.014	< 11	< 0.011	
108-87-2	Methylcyclohexane	--	--	--	mg/kg	< 0.005	0.87 J	3.8 J	< 1	0.011	< 5.7	< 0.005	
1634-04-4	Methyl-tert-butyl ether	0.93	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
104-51-8	n-Butylbenzene	12	100	500	mg/kg	< 0.005	2.5 J	3.4 J	< 1	< 0.007	1.8 J	< 0.005	
103-65-1	n-Propylbenzene	3.9	100	500	mg/kg	< 0.005	3 J	10	0.33 J	0.002 J	2.9 J	< 0.005	
95-47-6	o-Xylene	--	--	--	mg/kg	< 0.005	1.3 UJ	43	1 J	0.001 J	11	< 0.005	
135-98-8	sec-Butylbenzene	11	100	500	mg/kg	< 0.005	0.63 J	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
100-42-5	Styrene (Monomer)	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
994-05-8	tert-Amyl methyl ether	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
75-65-0	tert-Butyl alcohol	--	--	--	mg/kg	< 0.11	25 UJ	< 120	< 21	0.042 J	< 110	< 0.11	
98-06-6	tert-Butylbenzene	5.9	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
127-18-4	Tetrachloroethene	1.3	19	150	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
109-99-9	Tetrahydrofuran	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
108-88-3	Toluene	0.7	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	0.24 J	< 0.007	< 5.7	< 0.005	
1330-20-7	Total Xylenes	0.26	100	500	mg/kg	< 0.005	1.3 UJ	120	3.1	0.003 J	35	< 0.005	
156-60-5	trans-1,2-Dichloroethene	0.19	100	500	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
10061-02-6	trans-1,3-Dichloropropene	--	--	--	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
110-57-6	trans-1,4-Dichloro-2-butene	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	
79-01-6	Trichloroethene	0.47	21	200	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
75-01-4	Vinyl chloride	0.02	0.9	13	mg/kg	< 0.005	1.3 UJ	< 5.9	< 1	< 0.007	< 5.7	< 0.005	
	Total VOC TICs				mg/kg	0	291	878	210	1.273	450	0	

See Notes on Page 5.

Table A-2
Laboratory Analytical Summary – Volatile Organic Compounds in Soil

BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York

					Sample ID:	A-RH3-B7	A-RH3-B8	A-RH3-B9	A-RH3-B10	A-RH3-B11	A-RH3-B12
					Sample Date:	6/28/2017	6/29/2017	6/29/2017	10/16/2017	10/18/2017	10/18/2017
					Sample Depth (feet bgs):	65-75	10-12	15-16	9	11	11
CAS No	Analyte	6 NYCRR Part 375-6.8(b) Soil Cleanup Objectives			Units						
		Unrestricted	Restricted Residential	Commercial							
VOCs											
630-20-6	1,1,1,2-Tetrachloroethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
71-55-6	1,1,1-Trichloroethane	0.68	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
79-34-5	1,1,2,2-Tetrachloroethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
76-13-1	1,1,2-trichloro-1,2,2-trifluoroethane	--	--	--	mg/kg	< 0.01 [< 0.01]	< 0.54	< 0.47	< 0.013	< 0.014	< 0.012 [< 0.012]
79-00-5	1,1,2-Trichloroethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
75-34-3	1,1-Dichloroethane	0.27	26	240	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
75-35-4	1,1-Dichloroethene	0.33	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
563-58-6	1,1-Dichloropropene	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]
87-61-6	1,2,3-Trichlorobenzene	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
96-18-4	1,2,3-Trichloropropane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
120-82-1	1,2,4-Trichlorobenzene	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
95-63-6	1,2,4-Trimethylbenzene	3.6	52	190	mg/kg	< 0.005 [< 0.005]	0.11 J	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
96-12-8	1,2-Dibromo-3-chloropropane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
106-93-4	1,2-Dibromoethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
95-50-1	1,2-Dichlorobenzene	1.1	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
107-06-2	1,2-Dichloroethane	0.02	3.1	30	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
78-87-5	1,2-Dichloropropane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
108-70-3	1,3,5-Trichlorobenzene	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]
108-67-8	1,3,5-Trimethylbenzene	8.4	52	190	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
541-73-1	1,3-Dichlorobenzene	2.4	49	280	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
142-28-9	1,3-Dichloropropane	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]
106-46-7	1,4-Dichlorobenzene	1.8	13	130	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
123-91-1	1,4-Dioxane	0.1	13	130	mg/kg	< 0.25 [< 0.24]	< 13	< 12	< 0.33	< 0.35	< 0.30 [< 0.29]
594-20-7	2,2-Dichloropropane	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]
78-93-3	2-Butanone (MEK)	0.12	100	500	mg/kg	< 0.01 [< 0.01]	< 0.54	< 0.47	0.006 J	< 0.014	< 0.012 [< 0.012]
95-49-8	2-Chlorotoluene	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]
106-43-4	4-Chlorotoluene	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]
108-10-1	4-Methyl-2-Pentanone	--	--	--	mg/kg	< 0.01 [< 0.01]	< 0.54	< 0.47	< 0.013	< 0.014	< 0.012 [< 0.012]
67-64-1	Acetone	0.05	100	500	mg/kg	< 0.02 [< 0.009 J]	2.5	< 0.95	0.43	0.016 J	< 0.024 [< 0.023]
107-02-8	Acrolein	--	--	--	mg/kg	< 0.1 [< 0.096]	< 5.4	< 4.7	< 0.13	0.14 UJ	< 0.012 [< 0.012]
107-13-1	Acrylonitrile	--	--	--	mg/kg	< 0.02 [< 0.019]	< 1.1	< 0.95	< 0.026	< 0.028	< 0.024 [< 0.023]
71-43-2	Benzene	0.06	4.8	44	mg/kg	< 0.005 [< 0.001 J]	0.044 J	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
108-86-1	Bromobenzene	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]
74-97-5	Bromochloromethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
75-27-4	Bromodichloromethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
75-25-2	Bromoform	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
74-83-9	Bromomethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
75-15-0	Carbon Disulfide	--	--	--	mg/kg	< 0.005 [< 0.005]	0.13 J	< 0.24	0.002 J	< 0.007	< 0.006 [< 0.006]
56-23-5	Carbon Tetrachloride	0.76	2.4	22	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
75-69-4	CFC-11	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
75-71-8	CFC-12	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
108-90-7	Chlorobenzene	1.1	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]
124-48-1	Chlorodibromomethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]

See Notes on Page 5.

Table A-2
Laboratory Analytical Summary – Volatile Organic Compounds in Soil

BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York

						Sample ID:	A-RH3-B7	A-RH3-B8	A-RH3-B9	A-RH3-B10	A-RH3-B11	A-RH3-B12
						Sample Date:	6/28/2017	6/29/2017	6/29/2017	10/16/2017	10/18/2017	10/18/2017
						Sample Depth (feet bgs):	65-75	10-12	15-16	9	11	11
CAS No	Analyte	6 NYCRR Part 375-6.8(b) Soil Cleanup Objectives			Units							
		Unrestricted	Restricted Residential	Commercial								
VOCs												
75-00-3	Chloroethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
67-66-3	Chloroform	0.37	49	350	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
74-87-3	Chloromethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
156-59-2	cis-1,2-Dichloroethene	0.25	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
10061-01-5	cis-1,3-Dichloropropene	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
110-82-7	Cyclohexane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
99-87-6	Cymene (p-Isopropyltoluene)	--	--	--	mg/kg	< 0.005 [< 0.005]	21 D	0.85	0.012	< 0.007	< 0.006 [< 0.006]	
74-95-3	Dibromomethane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
75-09-2	Dichloromethane	0.05	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
60-29-7	Diethyl ether	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]	
108-20-3	Di-isopropyl ether	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]	
637-92-3	Ethyl tert-butyl ether	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]	
100-41-4	Ethylbenzene	1	41	390	mg/kg	< 0.005 [< 0.005]	0.076 J	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
87-68-3	Hexachloro-1,3-butadiene	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
98-82-8	Isopropylbenzene	--	--	--	mg/kg	< 0.005 [< 0.005]	1.6	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
ARC-mpXyl	m&p-Xylenes	--	--	--	mg/kg	< 0.005 [< 0.005]	0.18 J	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
79-20-9	Methyl Acetate	--	--	--	mg/kg	< 0.005 [< 0.005]	0.24 J	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
591-78-6	Methyl N-Butyl Ketone (2-Hexanone)	--	--	--	mg/kg	< 0.01 [< 0.01]	< 0.54	< 0.47	< 0.013	< 0.014	< 0.012 [< 0.012]	
108-87-2	Methylcyclohexane	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
1634-04-4	Methyl-tert-butyl ether	0.93	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
104-51-8	n-Butylbenzene	12	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
103-65-1	n-Propylbenzene	3.9	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
95-47-6	o-Xylene	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
135-98-8	sec-Butylbenzene	11	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
100-42-5	Styrene (Monomer)	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
994-05-8	tert-Amyl methyl ether	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]	
75-65-0	tert-Butyl alcohol	--	--	--	mg/kg	< 0.1 [< 0.096]	< 5.4	< 4.7	< 0.13	< 0.14	< 0.012 [< 0.012]	
98-06-6	tert-Butylbenzene	5.9	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
127-18-4	Tetrachloroethene	1.3	19	150	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
109-99-9	Tetrahydrofuran	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]	
108-88-3	Toluene	0.7	100	500	mg/kg	< 0.005 [< 0.005]	0.18 J	< 0.24	0.002 J	< 0.007	< 0.006 [< 0.006]	
1330-20-7	Total Xylenes	0.26	100	500	mg/kg	< 0.005 [< 0.005]	0.18 J	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
156-60-5	trans-1,2-Dichloroethene	0.19	100	500	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
10061-02-6	trans-1,3-Dichloropropene	--	--	--	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
110-57-6	trans-1,4-Dichloro-2-butene	--	--	--	mg/kg	NA [NA]	NA	NA	NA	NA	NA [NA]	
79-01-6	Trichloroethene	0.47	21	200	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
75-01-4	Vinyl chloride	0.02	0.9	13	mg/kg	< 0.005 [< 0.005]	< 0.27	< 0.24	< 0.007	< 0.007	< 0.006 [< 0.006]	
	Total VOC TICs				mg/kg	0 [0.006]	50.05	43.35	0.485	0.007	0.177 [0.215]	

See Notes on Page 5.

**Table A-2
Laboratory Analytical Summary – Volatile Organic Compounds in Soil**

**BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York**

- Notes:**
Bold values indicate exceedance of the 6 NYCRR Part 375-6.8(b) Unrestricted Soil Cleanup Objectives
Bold and shaded values indicate exceedance of the 6 NYCRR Part 375-6.8(b) Restricted Residential Soil Cleanup Objectives
Outlined, bold and shaded cells indicate exceedance of the 6 NYCRR Part 375-6.8(b) Commercial Soil Cleanup Objectives
-- = no criterion established
[] = duplicate sample
bgs = below ground surface
CAS = Chemical Abstract Service
mg/kg = milligrams per kilogram
NA = not analyzed
NYCRR = New York Codes, Rules, and Regulations
TICs = Tentatively Identified Compounds
VOCs = volatile organic compounds
D = The concentration is based on a diluted sample analysis
DJ = The concentration is estimated and based on a diluted sample analysis
J = The compound was positively identified; however, the associated numerical value is an estimated concentration only
UJ = The compound was not detected above the reported sample quantitation limit; however, the reported limit is approximate and may or may not represent the actual limit of quantitation
< = Compound not detected above the laboratory reporting limit

Table A-3
Laboratory Analytical Summary – Semivolatile Organic Compounds in Soil

BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York

CAS No	Analyte	6 NYCRR Part 375-6.8(b) Soil Cleanup Objectives			Units	Sample ID:	A-RB-DB2	A-RH3-B1	A-RH3-B2	A-RH3-B4	A-RH3-B5	A-RH3-B6	A-RH3-B7	A-RH3-B7
		Unrestricted	Restricted Residential	Commercial		Sample Date:	9/27/2017	6/28/2017	6/28/2017	6/28/2017	6/29/2017	6/28/2017	6/28/2017	
						Sample Depth (feet bgs):	5	18-20	18-19.5	5-10	15-16	24-25	9-10	65-75
SVOCs														
92-52-4	1,1-Biphenyl	--	--	--	mg/kg	< 0.037	29 D	35 D	17	< 0.23	7.5	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
95-94-3	1,2,4,5-Tetrachlorobenzene	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
120-82-1	1,2,4-Trichlorobenzene	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
95-50-1	1,2-Dichlorobenzene	1.1	100	500	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
122-66-7	1,2-Diphenylhydrazine	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
541-73-1	1,3-Dichlorobenzene	2.4	49	280	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
106-46-7	1,4-Dichlorobenzene	1.8	13	130	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
90-12-0	1-Methylnaphthalene	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA [NA]	
58-90-2	2,3,4,6-Tetrachlorophenol	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [<lt; 0.19]<="" td=""> </lt;>	
95-95-4	2,4,5-Trichlorophenol	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
88-06-2	2,4,6-Trichlorophenol	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
120-83-2	2,4-Dichlorophenol	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
105-67-9	2,4-Dimethylphenol	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
51-28-5	2,4-Dinitrophenol	--	--	--	mg/kg	< 1.1	5.9 UJ	< 5.7	< 5.9	< 6.9	< 5.9	< 1.2	< 1.1 [<lt; 1.1]<="" td=""> </lt;>	
121-14-2	2,4-Dinitrotoluene	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [<lt; 0.19]<="" td=""> </lt;>	
606-20-2	2,6-Dinitrotoluene	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
91-58-7	2-Chloronaphthalene	--	--	--	mg/kg	< 0.037	< 0.19	< 0.19	< 0.19	< 0.23	< 0.2	< 0.038	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
95-57-8	2-Chlorophenol	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
534-52-1	2-Methyl-4,6-dinitrophenol	--	--	--	mg/kg	< 0.56	2.9 UJ	< 2.9	< 2.9	< 3.4	< 3	< 0.58	< 0.55 [<lt; 0.56]<="" td=""> </lt;>	
91-57-6	2-Methylnaphthalene	--	--	--	mg/kg	< 0.019	150 D	250 D	76 D	0.092 J	60 D	< 0.02	< 0.019 [0.006 J]	
95-48-7	2-Methylphenol	0.33	100	500	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
88-74-4	2-Nitroaniline	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
88-75-5	2-Nitrophenol	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
91-94-1	3,3-Dichlorobenzidine	--	--	--	mg/kg	< 0.37	< 2	< 1.9	< 2	< 2.3	< 2	< 0.39	< 0.37 [<lt; 0.37]<="" td=""> </lt;>	
65794-96-9	3-Methylphenol, 4-Methylphenol	0.33	100	500	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
99-09-2	3-Nitroaniline	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [<lt; 0.19]<="" td=""> </lt;>	
101-55-3	4-Bromophenyl phenyl ether	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
59-50-7	4-Chloro-3-Methylphenol	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
7005-72-3	4-Chlorophenyl phenyl ether	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
100-01-6	4-Nitroaniline	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [<lt; 0.19]<="" td=""> </lt;>	
100-02-7	4-Nitrophenol	--	--	--	mg/kg	< 0.56	< 2.9	< 2.9	< 2.9	< 3.4	< 3	< 0.58	< 0.55 [<lt; 0.56]<="" td=""> </lt;>	
83-32-9	Acenaphthene	20	100	500	mg/kg	< 0.019	67 D	76 D	110 D	0.85	26 D	< 0.02	< 0.019 [<lt; 0.019]<="" td=""> </lt;>	
208-96-8	Acenaphthylene	100	100	500	mg/kg	0.007 J	5.3	8.5	20	0.28	4.5	< 0.02	< 0.019 [<lt; 0.019]<="" td=""> </lt;>	
98-86-2	Acetophenone	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [<lt; 0.037]<="" td=""> </lt;>	
62-53-3	Aniline	--	--	--	mg/kg	< 0.56	< 2.9	< 2.9	< 2.9	< 3.4	< 3	< 0.58	< 0.55 [<lt; 0.56]<="" td=""> </lt;>	
120-12-7	Anthracene	100	100	500	mg/kg	0.008 J	36 D	40 D	53 D	0.22	15	0.004 J	< 0.019 [<lt; 0.019]<="" td=""> </lt;>	
1912-24-9	Atrazine	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [<lt; 0.19]<="" td=""> </lt;>	
56-55-3	Benz(a)anthracene	1	1	5.6	mg/kg	0.023	14	15	27 D	0.13	7.9	0.006 J	< 0.019 [<lt; 0.019]<="" td=""> </lt;>	
100-52-7	Benzaldehyde	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [<lt; 0.19]<="" td=""> </lt;>	
92-87-5	Benzidine	--	--	--	mg/kg	< 0.56	< 2.9	< 2.9	< 2.9	< 3.4	< 3	< 0.58	< 0.55 [<lt; 0.56]<="" td=""> </lt;>	

See Notes on Page 5.

Table A-3
Laboratory Analytical Summary – Semivolatile Organic Compounds in Soil

BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York

CAS No	Analyte	6 NYCRR Part 375-6.8(b) Soil Cleanup Objectives			Units	Sample ID:	A-RB-DB2	A-RH3-B1	A-RH3-B2	A-RH3-B4	A-RH3-B5	A-RH3-B6	A-RH3-B7	A-RH3-B7
		Unrestricted	Restricted Residential	Commercial		Sample Date:	9/27/2017	6/28/2017	6/28/2017	6/28/2017	6/29/2017	6/28/2017	6/28/2017	6/28/2017
						Sample Depth (feet bgs):	5	18-20	18-19.5	5-10	15-16	24-25	9-10	65-75
SVOCs														
50-32-8	Benzo(a)pyrene	1	1	1	mg/kg	0.031	10	12	29 D	0.11 J	5.8	0.006 J	< 0.019 [< 0.019]	
205-99-2	Benzo(b)fluoranthene	1	1	5.6	mg/kg	0.038	7.6	8.7	18	0.11 J	4	0.008 J	< 0.019 [< 0.019]	
191-24-2	Benzo(g,h,i)perylene	100	100	500	mg/kg	0.03	5.4	5.7	16	< 0.12	2.6	0.008 J	< 0.019 [< 0.019]	
207-08-9	Benzo(k)fluoranthene	0.8	3.9	56	mg/kg	0.017 J	2.7	3.1	5.9	0.045 J	1.5	< 0.02	< 0.019 [< 0.019]	
65-85-0	Benzoic Acid	--	--	--	mg/kg	< 0.56	< 2.9	< 2.9	< 2.9	< 3.4	< 3	0.43 J	0.4 J [0.4 J]	
100-51-6	Benzyl Alcohol	--	--	--	mg/kg	< 0.56	< 2.9	< 2.9	< 2.9	< 3.4	< 3	< 0.58	< 0.55 [< 0.56]	
111-91-1	bis(2-Chloroethoxy)methane	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [< 0.037]	
111-44-4	bis(2-Chloroethyl)ether	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [< 0.037]	
39638-32-9	bis(2-Chloroisopropyl)ether	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [< 0.037]	
117-81-7	bis(2-Ethylhexyl)phthalate	--	--	--	mg/kg	< 0.19	< 1	< 0.97	< 1	< 1.2	< 1	< 0.2	< 0.19 [< 0.19]	
85-68-7	Butyl benzyl phthalate	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [< 0.19]	
105-60-2	Caprolactam	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [< 0.19]	
86-74-8	Carbazole	--	--	--	mg/kg	< 0.037	< 0.2	1.3	< 0.2	< 0.23	0.42	< 0.039	< 0.037 [< 0.037]	
218-01-9	Chrysene	1	3.9	56	mg/kg	0.03	14	14	24 D	0.12	7.4	0.008 J	< 0.019 [< 0.019]	
53-70-3	Dibenz(a,h)anthracene	0.33	0.33	0.56	mg/kg	0.006 J	1	1.3	3.3	< 0.12	0.66	< 0.02	< 0.019 [< 0.019]	
132-64-9	Dibenzofuran	7	59	350	mg/kg	< 0.037	4	4.9	6.7	< 0.23	1.5	< 0.039	< 0.037 [< 0.037]	
84-66-2	Diethyl phthalate	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [< 0.19]	
131-11-3	Dimethyl phthalate	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [< 0.19]	
84-74-2	Di-n-butyl phthalate	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [< 0.19]	
117-84-0	Di-n-octyl phthalate	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [< 0.19]	
206-44-0	Fluoranthene	100	100	500	mg/kg	0.053	33 D	33 D	61 D	0.21	13	0.007 J	< 0.019 [< 0.019]	
86-73-7	Fluorene	30	100	500	mg/kg	< 0.019	39 D	47 D	67 D	0.19	14	< 0.02	< 0.019 [< 0.019]	
87-68-3	Hexachloro-1,3-butadiene	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [< 0.037]	
118-74-1	Hexachlorobenzene	0.33	1.2	6	mg/kg	< 0.019	< 0.1	< 0.097	< 0.1	< 0.12	< 0.1	< 0.02	< 0.019 [< 0.019]	
77-47-4	Hexachlorocyclopentadiene	--	--	--	mg/kg	< 0.56	< 2.9	< 2.9	< 2.9	< 3.4	< 3	< 0.58	< 0.55 [< 0.56]	
67-72-1	Hexachloroethane	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [< 0.19]	
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	mg/kg	0.019	3.6	3.8	11	0.05 J	1.8	0.005 J	< 0.019 [< 0.019]	
78-59-1	Isophorone	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [< 0.037]	
91-20-3	Naphthalene	12	100	500	mg/kg	0.004 J	110 D	550 D	100 D	0.61	110 D	0.006 J	0.023 [0.009 J]	
98-95-3	Nitrobenzene	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [< 0.037]	
62-75-9	N-Nitrosodimethylamine	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [< 0.19]	
621-64-7	N-Nitrosodi-n-propylamine	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [< 0.037]	
86-30-6	N-Nitrosodiphenylamine	--	--	--	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [< 0.037]	
106-47-8	p-Chloroaniline	--	--	--	mg/kg	< 0.075	< 0.39	< 0.38	< 0.39	< 0.46	< 0.4	< 0.078	< 0.074 [< 0.074]	
82-68-8	Pentachloronitrobenzene	--	--	--	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA [NA]	
87-86-5	Pentachlorophenol	0.8	6.7	6.7	mg/kg	< 0.19	< 1	< 0.97	< 1	< 1.2	< 1	< 0.2	< 0.19 [< 0.19]	
85-01-8	Phenanthrene	100	100	500	mg/kg	0.021	130 D	140 D	150	0.34	44 D	0.007 J	> 0.019 [0.005 J]	
108-95-2	Phenol	0.33	100	500	mg/kg	< 0.037	< 0.2	< 0.19	< 0.2	< 0.23	< 0.2	< 0.039	< 0.037 [< 0.037]	
129-00-0	Pyrene	100	100	500	mg/kg	0.049	51 D	54 D	110	0.36	22	0.011 J	< 0.019 [0.005 J]	
110-86-1	Pyridine	--	--	--	mg/kg	< 0.19	< 0.98	< 0.95	< 0.98	< 1.1	< 0.99	< 0.19	< 0.18 [< 0.19]	
	Total SVOC TICs				mg/kg	0	146.9	247.17	101.7	26.9	126.9	4.38	1.92 [5.28]	

Table A-3
Laboratory Analytical Summary – Semivolatile Organic Compounds in Soil

BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York

CAS No	Analyte	6 NYCRR Part 375-6.8(b) Soil Cleanup Objectives			Units	Sample ID:	A-RH3-B8	A-RH3-B9	A-RH3-B10	A-RH3-B11	A-RH3-B12
		Unrestricted	Restricted Residential	Commercial		Sample Date:	6/29/2017	6/29/2017	10/16/2017	10/18/2017	10/18/2017
						Sample Depth (feet bgs):	10-12	15-16	9	11	11
SVOCs											
92-52-4	1,1-Biphenyl	--	--	--	mg/kg	< 0.19	< 0.2	0.031 J	< 0.039	< 0.037 [0.018 J]	
95-94-3	1,2,4,5-Tetrachlorobenzene	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
120-82-1	1,2,4-Trichlorobenzene	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
95-50-1	1,2-Dichlorobenzene	1.1	100	500	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
122-66-7	1,2-Diphenylhydrazine	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
541-73-1	1,3-Dichlorobenzene	2.4	49	280	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
106-46-7	1,4-Dichlorobenzene	1.8	13	130	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
90-12-0	1-Methylnaphthalene	--	--	--	mg/kg	NA	NA	NA	NA	NA [NA]	
58-90-2	2,3,4,6-Tetrachlorophenol	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
95-95-4	2,4,5-Trichlorophenol	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
88-06-2	2,4,6-Trichlorophenol	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
120-83-2	2,4-Dichlorophenol	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
105-67-9	2,4-Dimethylphenol	--	--	--	mg/kg	0.34	< 0.2	0.029 J	< 0.039	< 0.037 [< 0.036]	
51-28-5	2,4-Dinitrophenol	--	--	--	mg/kg	< 5.8	< 5.9	< 1.2	< 1.2	< 1.1 [< 1.1]	
121-14-2	2,4-Dinitrotoluene	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
606-20-2	2,6-Dinitrotoluene	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
91-58-7	2-Chloronaphthalene	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.035]	
95-57-8	2-Chlorophenol	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
534-52-1	2-Methyl-4,6-dinitrophenol	--	--	--	mg/kg	< 2.9	< 3	< 0.62	< 0.59	< 0.55 [< 0.53]	
91-57-6	2-Methylnaphthalene	--	--	--	mg/kg	0.19	0.078 J	0.12	< 0.020	0.006 J [0.052]	
95-48-7	2-Methylphenol	0.33	100	500	mg/kg	0.21	< 0.2	0.19	< 0.039	< 0.037 [< 0.036]	
88-74-4	2-Nitroaniline	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
88-75-5	2-Nitrophenol	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
91-94-1	3,3-Dichlorobenzidine	--	--	--	mg/kg	< 1.9	< 2	< 0.41	< 0.39	< 0.37 [< 0.36]	
65794-96-9	3-Methylphenol, 4-Methylphenol	0.33	100	500	mg/kg	0.24	< 0.2	0.96	< 0.039	< 0.037 [< 0.036]	
99-09-2	3-Nitroaniline	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
101-55-3	4-Bromophenyl phenyl ether	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
59-50-7	4-Chloro-3-Methylphenol	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
7005-72-3	4-Chlorophenyl phenyl ether	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
100-01-6	4-Nitroaniline	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
100-02-7	4-Nitrophenol	--	--	--	mg/kg	< 2.9	< 3	< 0.62	< 0.59	< 0.55 [< 0.53]	
83-32-9	Acenaphthene	20	100	500	mg/kg	0.19	0.086 J	0.20	< 0.020	< 0.019 [< 0.018]	
208-96-8	Acenaphthylene	100	100	500	mg/kg	0.28	0.13	0.035	< 0.020	< 0.019 [0.007 J]	
98-86-2	Acetophenone	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
62-53-3	Aniline	--	--	--	mg/kg	< 2.9	< 3	< 0.62	0.59 UJ	< 0.55 [< 0.53]	
120-12-7	Anthracene	100	100	500	mg/kg	0.48	0.22	0.13	< 0.020	0.004 J [0.021]	
1912-24-9	Atrazine	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	0.20 UJ	< 0.18 [< 0.18]	
56-55-3	Benz(a)anthracene	1	1	5.6	mg/kg	0.47	0.42	0.27	< 0.020	0.01 J [0.051]	
100-52-7	Benzaldehyde	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
92-87-5	Benzidine	--	--	--	mg/kg	< 2.9	< 3	< 0.62	< 0.59	< 0.55 [< 0.53]	

See Notes on Page 5.

Table A-3
Laboratory Analytical Summary – Semivolatile Organic Compounds in Soil

BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York

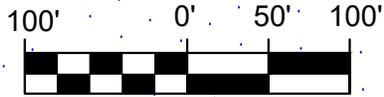
CAS No	Analyte	6 NYCRR Part 375-6.8(b) Soil Cleanup Objectives			Units	Sample ID:	A-RH3-B8	A-RH3-B9	A-RH3-B10	A-RH3-B11	A-RH3-B12
		Unrestricted	Restricted Residential	Commercial		Sample Date:	6/29/2017	6/29/2017	10/16/2017	10/18/2017	10/18/2017
						Sample Depth (feet bgs):	10-12	15-16	9	11	11
SVOCs											
50-32-8	Benzo(a)pyrene	1	1	1	mg/kg	0.42	0.38	0.29	< 0.020	0.011 J [0.055]	
205-99-2	Benzo(b)fluoranthene	1	1	5.6	mg/kg	0.45	0.42	0.35	< 0.020	0.015 J [0.066]	
191-24-2	Benzo(g,h,i)perylene	100	100	500	mg/kg	0.27	0.22	0.22	< 0.020	0.011 J [0.062]	
207-08-9	Benzo(k)fluoranthene	0.8	3.9	56	mg/kg	0.19	0.17	0.14	< 0.020	0.006 J [0.032]	
65-85-0	Benzoic Acid	--	--	--	mg/kg	< 2.9	< 3	< 0.62	< 0.59	< 0.55 [< 0.53]	
100-51-6	Benzyl Alcohol	--	--	--	mg/kg	< 2.9	< 3	< 0.62	< 0.59	< 0.55 [< 0.53]	
111-91-1	bis(2-Chloroethoxy)methane	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
111-44-4	bis(2-Chloroethyl)ether	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
39638-32-9	bis(2-Chloroisopropyl)ether	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
117-81-7	bis(2-Ethylhexyl)phthalate	--	--	--	mg/kg	< 0.99	< 1	0.087 J	< 0.20	< 0.19 [0.083 J]	
85-68-7	Butyl benzyl phthalate	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
105-60-2	Caprolactam	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
86-74-8	Carbazole	--	--	--	mg/kg	< 0.19	< 0.2	0.040 J	< 0.039	< 0.037 [< 0.036]	
218-01-9	Chrysene	1	3.9	56	mg/kg	0.49	0.44	0.29	< 0.020	0.013 J [0.10 J]	
53-70-3	Dibenz(a,h)anthracene	0.33	0.33	0.56	mg/kg	0.078 J	0.077 J	0.052	< 0.020	0.006 J [0.011 J]	
132-64-9	Dibenzofuran	7	59	350	mg/kg	0.15 J	< 0.2	0.13	< 0.039	< 0.037 [< 0.036]	
84-66-2	Diethyl phthalate	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
131-11-3	Dimethyl phthalate	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
84-74-2	Di-n-butyl phthalate	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
117-84-0	Di-n-octyl phthalate	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
206-44-0	Fluoranthene	100	100	500	mg/kg	1.2	0.95	0.46	< 0.020	0.032 J [0.15 J]	
86-73-7	Fluorene	30	100	500	mg/kg	0.25	0.08 J	0.12	< 0.020	0.005 J [0.021]	
87-68-3	Hexachloro-1,3-butadiene	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
118-74-1	Hexachlorobenzene	0.33	1.2	6	mg/kg	< 0.099	< 0.1	< 0.021	< 0.020	< 0.019 [< 0.018]	
77-47-4	Hexachlorocyclopentadiene	--	--	--	mg/kg	< 2.9	< 3	< 0.62	< 0.59	< 0.55 [< 0.53]	
67-72-1	Hexachloroethane	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	mg/kg	0.21	0.17	0.16	< 0.020	0.007 J [0.047]	
78-59-1	Isophorone	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
91-20-3	Naphthalene	12	100	500	mg/kg	0.37	0.18	0.88	< 0.020	0.007 J [0.015 J]	
98-95-3	Nitrobenzene	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
62-75-9	N-Nitrosodimethylamine	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
621-64-7	N-Nitrosodi-n-propylamine	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
86-30-6	N-Nitrosodiphenylamine	--	--	--	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
106-47-8	p-Chloroaniline	--	--	--	mg/kg	< 0.39	< 0.39	< 0.083	< 0.079	< 0.074 [< 0.071]	
82-68-8	Pentachloronitrobenzene	--	--	--	mg/kg	NA	NA	NA	NA	NA [NA]	
87-86-5	Pentachlorophenol	0.8	6.7	6.7	mg/kg	< 0.99	< 1	< 0.21	< 0.20	< 0.19 [< 0.18]	
85-01-8	Phenanthrene	100	100	500	mg/kg	1.4	0.42	0.42	< 0.020	0.018 J [0.11 J]	
108-95-2	Phenol	0.33	100	500	mg/kg	< 0.19	< 0.2	< 0.041	< 0.039	< 0.037 [< 0.036]	
129-00-0	Pyrene	100	100	500	mg/kg	1.3	0.96	0.52	< 0.020	0.020 J [0.097 J]	
110-86-1	Pyridine	--	--	--	mg/kg	< 0.97	< 0.98	< 0.21	< 0.20	< 0.18 [< 0.18]	
	Total SVOC TICs				mg/kg	227.4	55	104.24	2.11	89.04 [189.37]	

See Notes on Page 5.

**Table A-3
Laboratory Analytical Summary – Semivolatile Organic Compounds in Soil**

**BT Red Hook, LLC – Red Hook 3
2017 Investigation
68 and 100 Ferris Street/242 and 300 Coffey Street, Brooklyn, New York**

- Notes:**
- Bold values indicate exceedance of the 6 NYCRR Part 375-6.8(b) Unrestricted Soil Cleanup Objectives
 - Bold and shaded values indicate exceedance of the 6 NYCRR Part 375-6.8(b) Restricted Residential Soil Cleanup Objectives
 - Outlined, bold and shaded cells indicate exceedance of the 6 NYCRR Part 375-6.8(b) Commercial Soil Cleanup Objectives
 - = no criterion established
 - [] = duplicate sample
 - bgs = below ground surface
 - CAS = Chemical Abstract Service
 - mg/kg = milligrams per kilogram
 - NA = not analyzed
 - NYCRR = New York Codes, Rules, and Regulations
 - TIC = Tentatively Identified Compound
 - SVOCs = semivolatile organic compounds
 - D = The concentration is based on a diluted sample analysis
 - DJ = The concentration is estimated and based on a diluted sample analysis
 - J = The compound was positively identified; however, the associated numerical value is an estimated concentration only
 - UJ = The compound was not detected above the reported sample quantitation limit; however, the reported limit is approximate and may or may not represent the actual limit of quantitation
 - R = The sample results are rejected
 - < = Compound not detected above the laboratory reporting limit



LEGEND:

- MONITORING WELL LOCATION
- * ALL SAMPLES RECORDED IN MICROGRAMS PER LITER (ug/L)

BUTTERMILK CHANNEL

WOLCOTT STREET

HOOK 4

DIKEMA STREET

COFFEY STREET

Date Sampled: 06/09/2017		LMW05
Volatiles (ug/L)	Conc	
Acetone	34.5	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	0.99	
Ethylbenzene	2.16	
Total Xylenes	6.10	
Isopropylbenzene	1.68	

Date Sampled: 06/12/2017		LMW2
Volatiles (ug/L)	Conc	
Acetone	29	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	34.4	
Toluene	42.3	
Ethylbenzene	84.5	
Total Xylenes	77.8	
Isopropylbenzene	24.9	

Date Sampled: 06/12/2017		MW3
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	3.40	
Total Xylenes	ND	
Isopropylbenzene	10.6	

Date Sampled: 06/13/2017		LMW20
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	ND	
Total Xylenes	ND	
Isopropylbenzene	ND	

Date Sampled: 06/13/2017		LMW25
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	ND	
Total Xylenes	ND	
Isopropylbenzene	ND	

Date Sampled: 06/13/2017		LMW05
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	49.2	
Toluene	17.0	
Ethylbenzene	4290	
Total Xylenes	844	
Isopropylbenzene	87.1	

Date Sampled: 06/13/2017		MW1
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	401	
Toluene	45.5	
Ethylbenzene	1630	
Total Xylenes	1600	
Isopropylbenzene	59.5	

Date Sampled: 06/09/2017		LMW01
Volatiles (ug/L)	Conc	
Acetone	24.5	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	1.87	
Ethylbenzene	ND	
Total Xylenes	ND	
Isopropylbenzene	ND	

Date Sampled: 06/12/2017		LMW15
Volatiles (ug/L)	Conc	
Acetone	9.33	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	ND	
Total Xylenes	ND	
Isopropylbenzene	ND	

Date Sampled: 06/13/2017		LMW10
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	13.4	
Ethylbenzene	775	
Total Xylenes	623	
Isopropylbenzene	53.3	

Date Sampled: 06/14/2017		LMW02
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	1.39	
Toluene	ND	
Ethylbenzene	3.75	
Total Xylenes	2.18	
Isopropylbenzene	5.30	

Date Sampled: 06/09/2017		LMW03
Volatiles (ug/L)	Conc	
Acetone	9.56	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	ND	
Total Xylenes	ND	
Isopropylbenzene	ND	

Date Sampled: 06/12/2017		LMW10
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	ND	
Total Xylenes	ND	
Isopropylbenzene	ND	

Date Sampled: 06/13/2017		LMW10
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	13.4	
Ethylbenzene	775	
Total Xylenes	623	
Isopropylbenzene	53.3	

Date Sampled: 06/14/2017		LMW05
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	193	
Toluene	20.6	
Ethylbenzene	1980	
Total Xylenes	2120	
Isopropylbenzene	123	

Date Sampled: 06/14/2017		LMW75
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	6.84	
Ethylbenzene	73.2	
Total Xylenes	276	
Isopropylbenzene	45.6	

Date Sampled: 06/09/2017		LMW04
Volatiles (ug/L)	Conc	
Acetone	13.1	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	ND	
Total Xylenes	ND	
Isopropylbenzene	ND	

Date Sampled: 06/12/2017		LMW09S
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	ND	
Total Xylenes	ND	
Isopropylbenzene	ND	

Date Sampled: 06/12/2017		LMW10
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	5.21	
Total Xylenes	2.46	
Isopropylbenzene	0.80	

Date Sampled: 06/12/2017		TMW1
Volatiles (ug/L)	Conc	
Acetone	ND	
Methyl tert-butyl ether (MTBE)	ND	
Benzene	ND	
Toluene	ND	
Ethylbenzene	ND	
Total Xylenes	ND	
Isopropylbenzene	ND	

Date Sampled: 06/14/2017		LMW7D
Volatiles (ug/L)	Conc	
Acetone	11.4	
Methyl tert-butyl ether (MTBE)	2.93	
Benzene	59.8	
Toluene	3.54	
Ethylbenzene	53.5	
Total Xylenes	151	
Isopropylbenzene	19.0	

ADDRESS: RED HOOK 3
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TITLE: **FIGURE 7**
VOLATILE ORGANIC COMPOUND RESULTS IN GROUNDWATER

JOB NO.: 37106
CREATED BY: SD
DATE: JUNE 2017

Division of Water Technical and Operational Guidance Series - Limitations (Class GA) (ug/L)	
Acetone	50
Methyl tert-butyl ether (MTBE)	10
Benzene	1
Toluene	5
Ethylbenzene	5
Total Xylenes	15
Isopropylbenzene	5



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100' 0' 50' 100'



LEGEND:
 MONITORING WELL LOCATION
 * ALL SAMPLES RECORDED IN MICROGRAMS PER LITER (ug/L)

Division of Water Technical and Operational Guidance Series - Limitations (Class 0A)

Naphthalene	10
1,1'-Biphenyl	5
Acenaphthene	20
Fluorene	50
Phenanthrene	50
Naphthalene	50
Fluorene	50
Phenanthrene	50
Anthracene	50
Fluoranthene	50
Pyrene	50
Benzo[a]anthracene	0.002
Chrysene	0.002
Benzo[b]fluoranthene	0.002
Benzo[k]fluoranthene	0.002
Indeno[1,2,3-cd]pyrene	0.002

Sample #: LMW2
Date Sam pled: 06/14/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	3980
1,1'-Biphenyl	369
Acenaphthene	1590
Fluorene	977
Phenanthrene	1570
Anthracene	382
Fluoranthene	458
Pyrene	284
Benzo[a]anthracene	97.6
Chrysene	79.2
Benzo[b]fluoranthene	34.7
Benzo[k]fluoranthene	39.9
Indeno[1,2,3-cd]pyrene	20.0

Sample #: LMW05
Date Sam pled: 06/09/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	ND
1,1'-Biphenyl	ND
Acenaphthene	4.18
Fluorene	ND
Phenanthrene	1.19
Anthracene	0.319
Fluoranthene	1.75
Pyrene	4.28
Benzo[a]anthracene	1.63
Chrysene	1.75
Benzo[b]fluoranthene	1.07
Benzo[k]fluoranthene	0.940
Indeno[1,2,3-cd]pyrene	0.874

Sample #: LMW06
Date Sam pled: 06/12/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	ND
1,1'-Biphenyl	ND
Acenaphthene	ND
Fluorene	ND
Phenanthrene	ND
Anthracene	ND
Fluoranthene	ND
Pyrene	ND
Benzo[a]anthracene	ND
Chrysene	ND
Benzo[b]fluoranthene	ND
Benzo[k]fluoranthene	ND
Indeno[1,2,3-cd]pyrene	ND

Sample #: MW-3
Date Sam pled: 06/12/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	ND
1,1'-Biphenyl	ND
Acenaphthene	ND
Fluorene	ND
Phenanthrene	0.728
Anthracene	0.355
Fluoranthene	0.512
Pyrene	1.49
Benzo[a]anthracene	2.54
Chrysene	ND
Benzo[b]fluoranthene	ND
Benzo[k]fluoranthene	ND
Indeno[1,2,3-cd]pyrene	ND

Sample #: LMW12D, LMW12S
Date Sam pled: 06/13/2017, 06/12/2017

Semivolatiles - ENA (ug/L)	Conc	Conc
Naphthalene	2.02	ND
1,1'-Biphenyl	ND	ND
Acenaphthene	0.518	0.445
Fluorene	ND	ND
Phenanthrene	0.240	ND
Anthracene	ND	ND
Fluoranthene	ND	ND
Pyrene	ND	ND
Benzo[a]anthracene	ND	ND
Chrysene	ND	ND
Benzo[b]fluoranthene	ND	ND
Benzo[k]fluoranthene	ND	ND
Indeno[1,2,3-cd]pyrene	ND	ND

Sample #: LMW10D, LMW10S
Date Sam pled: 06/13/2017, 06/13/2017

Semivolatiles - ENA (ug/L)	Conc	Conc
Naphthalene	3.91	2040
1,1'-Biphenyl	13.8	17.0
Acenaphthene	51.0	110
Fluorene	29.6	48.5
Phenanthrene	43.3	84.4
Anthracene	9.82	21.2
Fluoranthene	4.59	16.0
Pyrene	ND	32.3
Benzo[a]anthracene	0.857	8.14
Chrysene	1.15	7.18
Benzo[b]fluoranthene	0.266	3.18
Benzo[k]fluoranthene	0.274	3.13
Indeno[1,2,3-cd]pyrene	0.223	2.42

Sample #: MW-1
Date Sam pled: 06/13/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	1860
1,1'-Biphenyl	22.1
Acenaphthene	95.7
Fluorene	59.2
Phenanthrene	110
Anthracene	29.4
Fluoranthene	27.1
Pyrene	46.7
Benzo[a]anthracene	14.0
Chrysene	13.4
Benzo[b]fluoranthene	4.43
Benzo[k]fluoranthene	5.96
Indeno[1,2,3-cd]pyrene	3.05

Sample #: LMW03
Date Sam pled: 06/09/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	ND
1,1'-Biphenyl	ND
Acenaphthene	0.479
Fluorene	0.271
Phenanthrene	0.196
Anthracene	ND
Fluoranthene	ND
Pyrene	ND
Benzo[a]anthracene	ND
Chrysene	ND
Benzo[b]fluoranthene	ND
Benzo[k]fluoranthene	ND
Indeno[1,2,3-cd]pyrene	ND

Sample #: LMW01
Date Sam pled: 06/09/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	1.32
1,1'-Biphenyl	0.164
Acenaphthene	2.23
Fluorene	1.62
Phenanthrene	4.24
Anthracene	1.44
Fluoranthene	ND
Pyrene	2.54
Benzo[a]anthracene	1.12
Chrysene	0.990
Benzo[b]fluoranthene	0.799
Benzo[k]fluoranthene	0.825
Indeno[1,2,3-cd]pyrene	0.663

Sample #: LMW04
Date Sam pled: 06/09/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	ND
1,1'-Biphenyl	ND
Acenaphthene	0.929
Fluorene	0.424
Phenanthrene	0.217
Anthracene	ND
Fluoranthene	ND
Pyrene	0.532
Benzo[a]anthracene	ND
Chrysene	ND
Benzo[b]fluoranthene	ND
Benzo[k]fluoranthene	ND
Indeno[1,2,3-cd]pyrene	ND

Sample #: LMW11S
Date Sam pled: 06/12/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	ND
1,1'-Biphenyl	ND
Acenaphthene	ND
Fluorene	ND
Phenanthrene	ND
Anthracene	ND
Fluoranthene	ND
Pyrene	ND
Benzo[a]anthracene	ND
Chrysene	ND
Benzo[b]fluoranthene	ND
Benzo[k]fluoranthene	ND
Indeno[1,2,3-cd]pyrene	ND

Sample #: LMW8D, LMW8S
Date Sam pled: 06/14/2017, 06/14/2017

Semivolatiles - ENA (ug/L)	Conc	Conc
Naphthalene	ND	4030
1,1'-Biphenyl	ND	101
Acenaphthene	ND	233
Fluorene	ND	144
Phenanthrene	ND	297
Anthracene	ND	86.3
Fluoranthene	ND	64.2
Pyrene	ND	85.9
Benzo[a]anthracene	ND	24.5
Chrysene	ND	20.3
Benzo[b]fluoranthene	ND	7.37
Benzo[k]fluoranthene	ND	6.63
Indeno[1,2,3-cd]pyrene	ND	4.49

Sample #: LMW11D
Date Sam pled: 06/12/2017

Semivolatiles - ENA (ug/L)	Conc
Naphthalene	ND
1,1'-Biphenyl	ND
Acenaphthene	ND
Fluorene	ND
Phenanthrene	ND
Anthracene	ND
Fluoranthene	ND
Pyrene	ND
Benzo[a]anthracene	ND
Chrysene	ND
Benzo[b]fluoranthene	ND
Benzo[k]fluoranthene	ND
Indeno[1,2,3-cd]pyrene	ND

Sample #: LMW9S, LMW9D
Date Sam pled: 06/12/2017, 06/12/2017

Semivolatiles - ENA (ug/L)	Conc	Conc
Naphthalene	ND	ND
1,1'-Biphenyl	ND	ND
Acenaphthene	ND	ND
Fluorene	ND	ND
Phenanthrene	ND	ND
Anthracene	ND	ND
Fluoranthene	ND	ND
Pyrene	ND	ND
Benzo[a]anthracene	ND	ND
Chrysene	ND	ND
Benzo[b]fluoranthene	ND	ND
Benzo[k]fluoranthene	ND	ND
Indeno[1,2,3-cd]pyrene	ND	ND

Sample #: LMW9D, LMW9S
Date Sam pled: 06/12/2017, 06/12/2017

Semivolatiles - ENA (ug/L)	Conc	Conc
Naphthalene	ND	ND
1,1'-Biphenyl	ND	ND
Acenaphthene	ND	ND
Fluorene	ND	ND
Phenanthrene	ND	ND
Anthracene	ND	ND
Fluoranthene	ND	ND
Pyrene	ND	ND
Benzo[a]anthracene	ND	ND
Chrysene	ND	ND
Benzo[b]fluoranthene	ND	ND
Benzo[k]fluoranthene	ND	ND
Indeno[1,2,3-cd]pyrene	ND	ND

Sample #: LMW7D, LMW7S
Date Sam pled: 06/14/2017, 06/14/2017

Semivolatiles - ENA (ug/L)	Conc	Conc
Naphthalene	3.87	3.66
1,1'-Biphenyl	0.157	17.9
Acenaphthene	25.5	ND
Fluorene	8.90	32.1
Phenanthrene	6.38	43.8
Anthracene	3.43	10.3
Fluoranthene	2.08	5.15
Pyrene	2.45	6.78
Benzo[a]anthracene	ND	0.905
Chrysene	ND	1.71
Benzo[b]fluoranthene	ND	0.289
Benzo[k]fluoranthene	ND	0.225
Indeno[1,2,3-cd]pyrene	ND	0.240

ADDRESS: RED HOOK 3
BROOKLYN, NEW YORK

FIGURE 8
SEMI-VOLATILE ORGANIC COMPOUND RESULTS IN GROUNDWATER

JOB NO: 37106
CREATED BY: SD
DATE: JUNE 2017

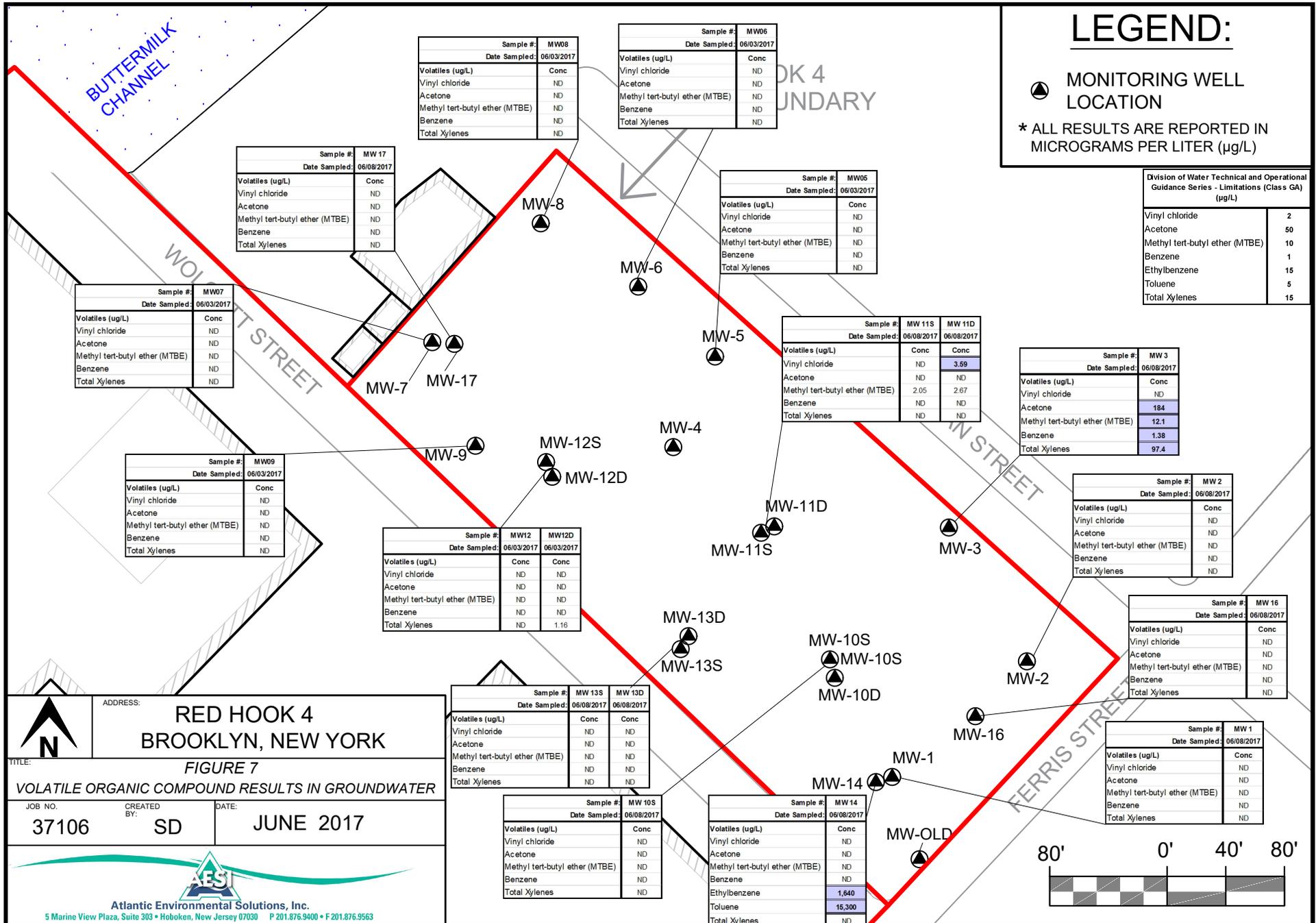
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LEGEND:

● MONITORING WELL LOCATION

* ALL RESULTS ARE REPORTED IN MICROGRAMS PER LITER (µg/L)

Division of Water Technical and Operational Guidance Series - Limitations (Class GA) (µg/L)	
Vinyl chloride	2
Acetone	50
Methyl tert-butyl ether (MTBE)	10
Benzene	1
Ethylbenzene	15
Toluene	5
Total Xylenes	15



Sample #:	MW08
Date Sampled:	06/03/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND

Sample #:	MW06
Date Sampled:	06/03/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND

Sample #:	MW17
Date Sampled:	06/08/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND

Sample #:	MW05
Date Sampled:	06/03/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND

Sample #:	MW07
Date Sampled:	06/03/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND

Sample #:	MW11S	MW11D
Date Sampled:	06/08/2017	06/08/2017
Volatiles (ug/L)	Conc	Conc
Vinyl chloride	ND	3.59
Acetone	ND	ND
Methyl tert-butyl ether (MTBE)	2.05	2.67
Benzene	ND	ND
Total Xylenes	ND	ND

Sample #:	MW3
Date Sampled:	06/08/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	184
Methyl tert-butyl ether (MTBE)	12.1
Benzene	1.38
Total Xylenes	97.4

Sample #:	MW09
Date Sampled:	06/03/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND

Sample #:	MW12	MW12D
Date Sampled:	06/03/2017	06/03/2017
Volatiles (ug/L)	Conc	Conc
Vinyl chloride	ND	ND
Acetone	ND	ND
Methyl tert-butyl ether (MTBE)	ND	ND
Benzene	ND	ND
Total Xylenes	ND	1.16

Sample #:	MW2
Date Sampled:	06/08/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND

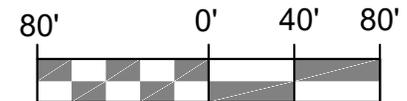
Sample #:	MW13S	MW13D
Date Sampled:	06/08/2017	06/08/2017
Volatiles (ug/L)	Conc	Conc
Vinyl chloride	ND	ND
Acetone	ND	ND
Methyl tert-butyl ether (MTBE)	ND	ND
Benzene	ND	ND
Total Xylenes	ND	ND

Sample #:	MW16
Date Sampled:	06/08/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND

Sample #:	MW10S
Date Sampled:	06/08/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND

Sample #:	MW14
Date Sampled:	06/08/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Ethylbenzene	1,640
Toluene	15,300
Total Xylenes	ND

Sample #:	MW1
Date Sampled:	06/08/2017
Volatiles (ug/L)	Conc
Vinyl chloride	ND
Acetone	ND
Methyl tert-butyl ether (MTBE)	ND
Benzene	ND
Total Xylenes	ND



Attachment 4

**RH3 Photolog Write-Up and Photologs of the Bottom of Excavation
Areas 2B and 3A**

Red Hook 3 Interim Remedial Measure (IRM) Excavation Bottom Photolog Write-Up

The following photographs were taken by Arcadis on the day excavation Area 2B and excavation Area 3A were completed (7/17/2020 and 6/23/2020, respectively), to their maximum respective depths which were slightly deeper than the 2020 design depths of excavation approved by NYSDEC. These are the two excavation areas (out of 10 IRM excavation areas) where dense-non aqueous phase liquid (DNAPL) was observed in soil borings (drilled/logged in 2019 and prior) at depths below the IRM excavation depths; and therefore some DNAPL remained after the IRM.

Identified locations of NAPL on the excavation bottoms are shown by red arrows on the photos; noting that each of the locations show NAPL in water. Excavation Area 2B was completed at a depth of 14.7 feet below ground surface, which was equal to an elevation of 4.4 to 5 feet below mean sea level. Note that the first two photos for excavation Area 2B show a small machine being used to complete the soil removal activities. Excavation Area 3A was completed at a depth of 15 feet below ground surface, equal to 4.5 to 4.9 feet below sea level. The groundwater table elevation across the site is approximately equal to sea level elevation, thus, water had to be actively pumped from around/beneath the excavations to keep them from flooding with water.

Area 2B Photolog



Red Hook 3 IRM Excavation Bottom



Area 2B, Photo 1



Area 2B, Photo 2

Area 2B Photolog

Red Hook 3 IRM Excavation Bottom



Area 2B, Photo 3



Area 2B, Photo 4

Area 2B Photolog



Red Hook 3 IRM Excavation Bottom



Area 2B, Photo 5



Area 2B, Photo 6

Area 3A Photolog



Red Hook 3 IRM Excavation Bottom



Area 3A, Photo 1



Area 3A, Photo 2

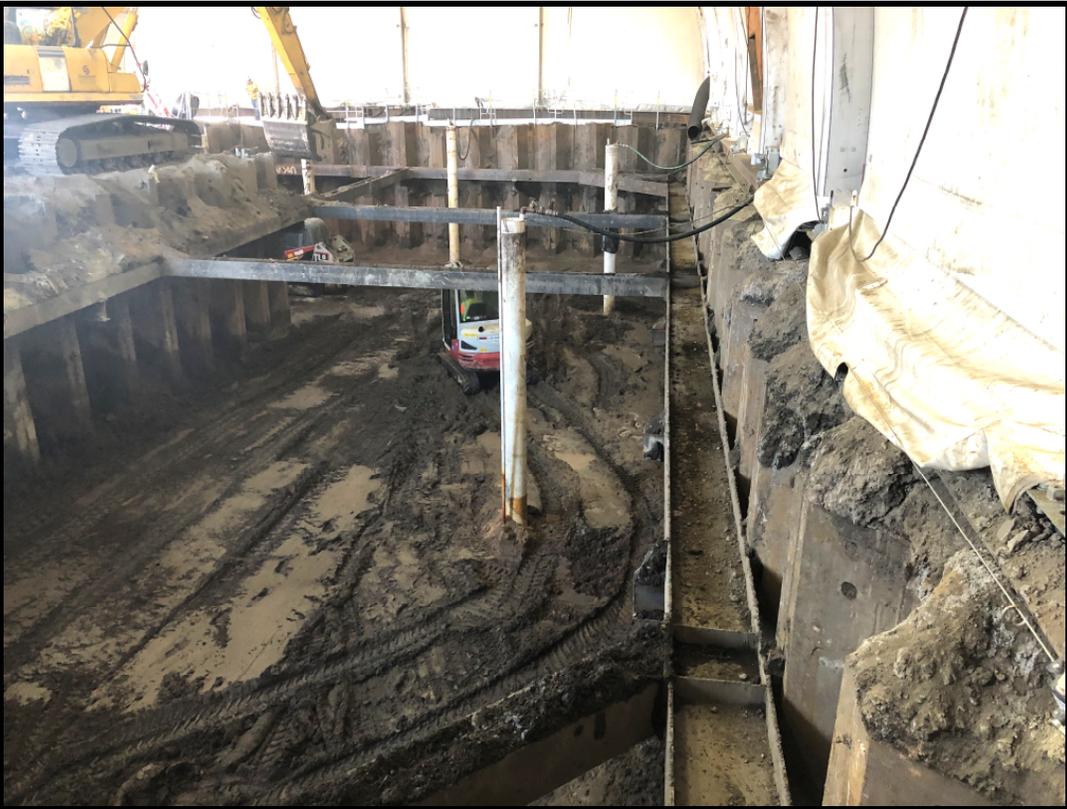
Area 3A Photolog



Red Hook 3 IRM Excavation Bottom



Area 3A, Photo 3



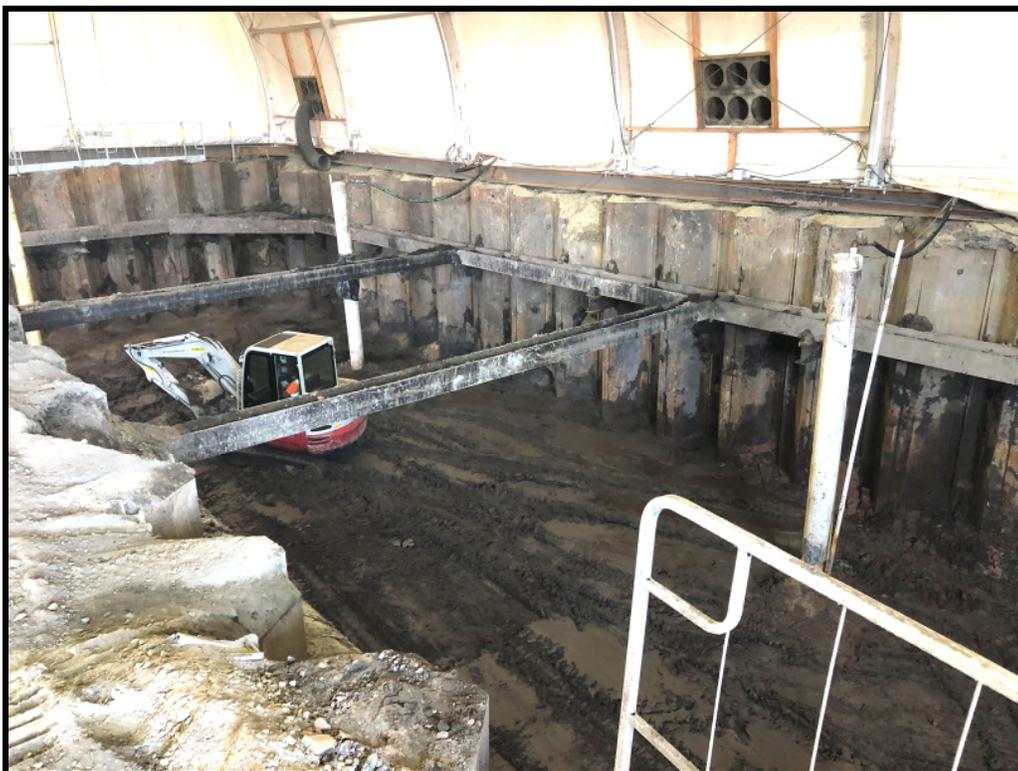
Area 3A, Photo 4

Area 3A Photolog

Red Hook 3 IRM Excavation Bottom



Area 3A, Photo 5



Area 3A, Photo 6

Attachment 5

Attachment 5 – Soil Vapor Sampling Results and Sample Locations

Table 1
Soil Vapor Summary - August 2025
BT Red Hook, LLC
Red Hook 3

PRELIMINARY DRAFT



Analyte	CAS Number	Unit	NYSDOH Matrix Lower Limit	NYSDOH Matrix Upper Limit	USEPA VISL Commercial	AMBIENT	AMBIENT	ASV-1	ASV-2	ASV-3	ASV-4	ASV-5	ASV-6	ASV-7	ASV-8	ASV-9	ASV-10	ASV-11
						082025-AMBIENT 8/20/2025	082125-AMBIENT 8/21/2025	ASV-1_20250820 8/20/2025	ASV-2_20250820 8/20/2025	ASV-3_20250821 8/21/2025	ASV-4_20250821 8/21/2025	ASV-5_20250821 8/21/2025	ASV-6_20250820 8/20/2025	ASV-7_20250820 8/20/2025	ASV-8_20250821 8/21/2025	ASV-9_20250821 8/21/2025	ASV-10_20250821 8/21/2025	ASV-11_20250821 8/21/2025
VOCs																		
1,1,1-Trichloroethane	71-55-6	µg/m ³	100	1000	73000	< 1.1 U	< 1.1 U	0.53 J	< 1.1 U	6.3	3.0	3.5 [0.83 J]	160	12	0.49 J	1.4	< 1.1 U	3.6
1,1,2,2-Tetrachloroethane	79-34-5	µg/m ³	--	--	7.1	< 1.4 U	< 1.4 U [< 1.4 U]	< 1.4 U	< 1.4 U									
1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	µg/m ³	--	--	73000	0.88 J	0.62 J	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U [< 1.5 U]	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	0.56 J	< 1.5 U
1,1,2-Trichloroethane	79-00-5	µg/m ³	--	--	2.9	< 1.1 U	< 1.1 U [< 1.1 U]	< 1.1 U	< 1.1 U									
1,1-Dichloroethane	75-34-3	µg/m ³	--	--	260	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	2.5	25	< 0.81 U [< 0.81 U]	0.56 J	0.43 J	< 0.81 U	< 0.81 U	< 0.81 U	2.5
1,1-Dichloroethene	75-35-4	µg/m ³	6	60	58	< 0.20 U	< 0.20 U [< 0.20 U]	< 0.20 U	< 0.20 U									
1,2,4-Trichlorobenzene	120-82-1	µg/m ³	--	--	29	< 3.7 U	< 3.7 U [< 3.7 U]	< 3.7 U	< 3.7 U									
1,2,4-Trimethylbenzene	95-63-6	µg/m ³	60	600	880	0.73 J	< 0.98 U	2.3	1.8	< 0.98 U	1.3	0.76 J [0.87 J]	1.9	1.8	2.5	1.2	0.53 J	0.52 J
1,2-Dibromoethane	106-93-4	µg/m ³	--	--	0.68	< 1.5 U	< 1.5 U [< 1.5 U]	< 1.5 U	< 1.5 U									
1,2-Dichlorobenzene	95-50-1	µg/m ³	--	--	2900	< 1.2 U	< 1.2 U [< 1.2 U]	< 1.2 U	< 1.2 U									
1,2-Dichloroethane	107-06-2	µg/m ³	--	--	16	< 0.81 U	< 0.81 U [< 0.81 U]	< 0.81 U	< 0.81 U									
1,2-Dichloropropane	78-87-5	µg/m ³	--	--	58	< 0.92 U	< 0.92 U [< 0.92 U]	< 0.92 U	< 0.92 U	< 0.92 U	0.33 J	< 0.92 U	0.37 J					
1,2-Dichlorotetrafluoroethane	76-14-2	µg/m ³	--	--	--	< 1.4 U	0.55 J	230 [210]	< 1.4 U	< 1.4 U	< 1.4 U	2.4	2.6	< 1.4 U				
1,3,5-Trimethylbenzene	108-67-8	µg/m ³	60	600	880	< 0.98 U	< 0.98 U	0.49 J	< 0.98 U	0.34 J	< 0.98 U	< 0.98 U [< 0.98 U]	< 0.98 U	0.35 J	0.62 J	< 0.98 U	< 0.98 U	< 0.98 U
1,3-Butadiene	106-99-0	µg/m ³	--	--	14	< 0.44 U	< 0.44 U	3.2	3.9	4.9	12	7.2 [7.0]	11	1.4	18	6.6	0.30 J	6.1
1,3-Dichlorobenzene	541-73-1	µg/m ³	--	--	--	< 1.2 U	< 1.2 U	< 1.2 U	0.44 J	1.3	0.87 J	< 1.2 U [< 1.2 U]	< 1.2 U	0.41 J	< 1.2 U	3.5	< 1.2 U	1.2
1,4-Dichlorobenzene	106-46-7	µg/m ³	--	--	37	< 1.2 U	< 1.2 U [< 1.2 U]	< 1.2 U	< 1.2 U									
1,4-Dioxane	123-91-1	µg/m ³	--	--	82	< 18 U	< 18 U	< 18 U	1.1 J	0.67 J	< 18 U	< 18 U [< 18 U]	< 18 U	2.1 J	< 18 U	< 18 U	< 18 U	< 18 U
2,2,4-Trimethylpentane	540-84-1	µg/m ³	60	600	--	0.69 J	< 0.93 U	4.9	16	13	0.94	0.74 J [0.92]	2.9	5.7	< 0.93 U	0.51 J	< 0.93 U	0.87 J
2-Butanone (MEK)	78-93-3	µg/m ³	--	--	73000	2.5	< 1.5 U	4.7	21	78	18	5.8 [5.0]	23	22	42	5.2	1.6	15
2-Chlorotoluene	95-49-8	µg/m ³	--	--	--	< 1.0 U	< 1.0 U [< 1.0 U]	< 1.0 U	< 1.0 U									
4-Ethyltoluene	622-96-8	µg/m ³	--	--	--	< 0.98 U	< 0.98 U	0.41 J	< 0.98 U	< 0.98 U	< 0.98 U	< 0.98 U [< 0.98 U]	< 0.98 U	< 0.98 U	0.58 J	< 0.98 U	< 0.98 U	< 0.98 U
4-Methyl-2-Pentanone	108-10-1	µg/m ³	--	--	44000	2.6	< 2.0 U	8.6	9.2	8.7	4.3	2.5 [1.8 J]	5.8	5.5	0.95 J	2.5	< 2.0 U	2.5
Acetone	67-64-1	µg/m ³	--	--	--	38	8.2 J	44	400 D	1100 D	130 D	58 [48]	550 D	240 D	130 D	54	15	140 D
Allyl chloride	107-05-1	µg/m ³	--	--	15	< 1.6 U	< 1.6 U [< 1.6 U]	< 1.6 U	< 1.6 U									
Benzene	71-43-2	µg/m ³	60	600	52	0.69 J	0.30 J	5.3	33	160 D	12	33 [32]	12	16	12	7.8	2.0	11
Benzyl Chloride	100-44-7	µg/m ³	--	--	8.3	< 1.0 U	< 1.0 U [< 1.0 U]	< 1.0 U	< 1.0 U									
Bromodichloromethane	75-27-4	µg/m ³	--	--	11	< 1.3 U	< 1.3 U [< 1.3 U]	< 1.3 U	< 1.3 U	0.58 J	< 1.3 U	< 1.3 U	0.52 J					
Bromoform	75-25-2	µg/m ³	--	--	370	< 2.1 U	< 2.1 U [< 2.1 U]	< 2.1 U	< 2.1 U									
Bromomethane	74-83-9	µg/m ³	--	--	73	< 0.78 U	< 0.78 U [< 0.78 U]	< 0.78 U	< 0.78 U									
Butane	106-97-8	µg/m ³	--	--	--	2.2	0.94 J	50	740 D	430 D	82	53 [53]	40	290 D	310 D	35	2.5	69
Carbon Disulfide	75-15-0	µg/m ³	--	--	10000	< 1.6 U	1.1 J	31	45	39	210 D	13 [12]	12	10	7.1	26	0.57 J	27
Carbon Tetrachloride	56-23-5	µg/m ³	6	60	68	0.47	0.71	0.74	0.32	4.4	0.45	0.35 [0.28]	5.3	1.6	< 0.22 U	0.64	0.45	2.0
CFC-11	75-69-4	µg/m ³	--	--	--	2.0	1.9	2.2	< 1.1 U	4.1	1.0 J	6.8 [6.7]	3.2	4.9	1.0 J	4.4	1.4	2.5
CFC-12	75-71-8	µg/m ³	--	--	1500	2.6	2.9	4.6	< 2.5 U	3.2	3.0	26 [27]	3.4	4.1	2.0 J	3.6	2.7	2.8
Chlorobenzene	108-90-7	µg/m ³	--	--	730	< 0.92 U	< 0.92 U [< 0.92 U]	< 0.92 U	< 0.92 U									
Chlorodibromomethane	124-48-1	µg/m ³	--	--	--	< 1.7 U	< 1.7 U [< 1.7 U]	< 1.7 U	< 1.7 U									
Chlorodifluoromethane	75-45-6	µg/m ³	--	--	730000	1.8	1.8	< 1.8 U	1.5 J	4.6	1.4 J	< 1.8 U [< 1.8 U]	< 1.8 U	< 1.8 U				
Chloroethane	75-00-3	µg/m ³	--	--	58000	< 1.3 U	< 1.3 U	0.78 J	< 1.3 U	2.7	1.2 J	< 1.3 U [< 1.3 U]	< 1.3 U	< 1.3 U				
Chloroform	67-66-3	µg/m ³	--	--	18	< 0.98 U	< 0.98 U	1.2	12	5.7	1.2	4.0 [3.8]	9.8	7.7	1.3	1.4	0.38 J	8.6
Chloromethane	74-87-3	µg/m ³	--	--	1300	1.9	1.2	6.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U [< 1.0 U]	< 1.0 U	< 1.0 U	< 1.0 U	0.73 J	1.2	1.2
cis-1,2-Dichloroethene	156-59-2	µg/m ³	6	60	580	< 0.20 U	< 0.20 U [< 0.20 U]	< 0.20 U	< 0.20 U									
cis-1,3-Dichloropropene	10061-01-5	µg/m ³	--	--	100	< 0.91 U	< 0.91 U [< 0.91 U]	< 0.91 U	< 0.91 U									
Cyclohexane	110-82-7	µg/m ³	60	600	88000	< 0.69 U	< 0.69 U	7.1	50	67	7.9	30 [29]	12	20	5.3	5.6	1.3	16
Cymene (p-Isopropyltoluene)	99-87-6	µg/m ³	--	--	580	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	14	< 1.1 U	< 1.1 U [< 1.1 U]	0.50 J	< 1.1 U	1.3	< 1.1 U	< 1.1 U	< 1.1 U
Dichloromethane (Methylene Chloride)	75-09-2	µg/m ³	100	1000	8800	1.0 J	0.85 J	1.9	< 1.7 U	1.7 J	3.5	< 1.7 U [< 1.7 U]	0.73 J	< 1.7 U	1.4 J	1.9	< 1.7 U	1.6 J

Table 1
Soil Vapor Summary - August 2025
BT Red Hook, LLC
Red Hook 3

PRELIMINARY DRAFT



Analyte	CAS Number	Unit	NYSDOH Matrix Lower Limit	NYSDOH Matrix Upper Limit	USEPA VISL Commercial	AMBIENT	AMBIENT	ASV-1	ASV-2	ASV-3	ASV-4	ASV-5	ASV-6	ASV-7	ASV-8	ASV-9	ASV-10	ASV-11
						082025-AMBIENT 8/20/2025	082125-AMBIENT 8/21/2025	ASV-1_20250820 8/20/2025	ASV-2_20250820 8/20/2025	ASV-3_20250821 8/21/2025	ASV-4_20250821 8/21/2025	ASV-5_20250821 8/21/2025	ASV-6_20250820 8/20/2025	ASV-7_20250820 8/20/2025	ASV-8_20250821 8/21/2025	ASV-9_20250821 8/21/2025	ASV-10_20250821 8/21/2025	ASV-11_20250821 8/21/2025
VOCs																		
Ethylbenzene	100-41-4	µg/m ³	60	600	160	0.38 J	< 0.87 U	1.5	1.3	4.1	2.5	2.6 [2.5]	1.7	2.0	2.9	2.5	0.41 J	1.7
Hexachloro-1,3-butadiene	87-68-3	µg/m ³	--	--	19	< 2.1 U	< 2.1 U [< 2.1 U]	< 2.1 U	< 2.1 U									
Hexane	110-54-3	µg/m ³	200	2000	10000	< 1.8 U	< 1.8 U	8.9	120	170 D	16	110 [110]	16	43	54	12	3.6	34
Isopropyl alcohol	67-63-0	µg/m ³	--	--	2900	< 12 U	< 12 U	6.8 J	20	18	11 J	5.6 J [< 12 U]	29	7.7 J	< 12 U	7.8 J	5.7 J	6.5 J
Isopropylbenzene	98-82-8	µg/m ³	--	--	5800	< 0.98 U	< 0.98 U	0.48 J	< 0.98 U	< 0.98 U	0.95 J	0.66 J [0.42 J]	< 0.98 U	< 0.98 U	< 0.98 U	1.2	< 0.98 U	0.70 J
m,p-Xylenes	179601-23-1	µg/m ³	200	2000	1500	1.3 J	0.56 J	4.4	3.8	5.3	4.3	1.7 J [1.7 J]	4.0	4.8	6.7	1.7 J	0.53 J	1.9 J
Methyl methacrylate	80-62-6	µg/m ³	--	--	10000	< 2.0 U	< 2.0 U [< 2.0 U]	< 2.0 U	< 2.0 U									
Methyl N-Butyl Ketone (2-Hexanone)	591-78-6	µg/m ³	--	--	440	< 2.0 U	< 2.0 U	< 2.0 U	13	< 2.0 U	< 2.0 U	< 2.0 U [< 2.0 U]	< 2.0 U	< 2.0 U	2.2	< 2.0 U	< 2.0 U	< 2.0 U
Methyl-tert-butylether	1634-04-4	µg/m ³	--	--	1600	< 0.72 U	< 0.72 U [< 0.72 U]	0.34 J	< 0.72 U	< 0.72 U	< 0.72 U	< 0.72 U	< 0.72 U					
Naphthalene	91-20-3	µg/m ³	60	600	12	< 2.0 U	< 2.0 U	1.1 J	0.70 J	< 2.0 U	< 2.0 U	0.85 J [< 2.0 U]	< 2.0 U	< 2.0 U				
n-Butylbenzene	104-51-8	µg/m ³	--	--	--	< 1.1 U	< 1.1 U [< 1.1 U]	< 1.1 U	< 1.1 U									
n-Heptane	142-82-5	µg/m ³	200	2000	5800	0.82	< 0.82 U	13	69	93	7.9	67 [64]	18	33	18	17	3.9	18
n-Propylbenzene	103-65-1	µg/m ³	--	--	15000	< 0.98 U	< 0.98 U [< 0.98 U]	< 0.98 U	< 0.98 U	0.57 J	< 0.98 U	< 0.98 U	< 0.98 U					
o-Xylene	95-47-6	µg/m ³	60	600	1500	0.56 J	< 0.87 U	2.1	1.6	2.4	1.4	0.85 [0.84 J]	1.5	1.8	2.9	0.96	< 0.87 U	0.91
sec-Butylbenzene	135-98-8	µg/m ³	--	--	--	< 1.1 U	< 1.1 U [< 1.1 U]	< 1.1 U	< 1.1 U									
Styrene (Monomer)	100-42-5	µg/m ³	--	--	15000	< 0.85 U	< 0.85 U	0.85	0.54 J	0.44 J	1.1	0.28 J [0.28 J]	0.41 J	0.49 J	0.75 J	0.30 J	< 0.85 U	0.25 J
tert-Butyl alcohol	75-65-0	µg/m ³	--	--	73000	< 15 U	< 15 U	< 15 U	8.8 J	37	22	< 15 U [< 15 U]	6.8 J	5.1 J	5.2 J	16	< 15 U	26
tert-Butylbenzene	98-06-6	µg/m ³	--	--	--	< 1.1 U	< 1.1 U [< 1.1 U]	< 1.1 U	< 1.1 U									
Tetrachloroethene	127-18-4	µg/m ³	100	1000	580	1.0 J	< 1.4 U	< 1.4 U	< 1.4 U	11	13	0.69 J [0.54 J]	4.6	2.6	4.4	7.8	< 1.4 U	15
Tetrahydrofuran	109-99-9	µg/m ³	--	--	29000	< 15 U	< 15 U [< 15 U]	< 15 U	< 15 U									
Toluene	108-88-3	µg/m ³	300	300	73000	2.3	0.89	5.1	8.4	50	9.3	11 [10]	11	11	15	6.4	1.8	7.2
trans-1,2-Dichloroethene	156-60-5	µg/m ³	--	--	580	< 0.79 U	< 0.79 U [< 0.79 U]	< 0.79 U	< 0.79 U									
trans-1,3-Dichloropropene	10061-02-6	µg/m ³	--	--	100	< 0.91 U	< 0.91 U [< 0.91 U]	< 0.91 U	< 0.91 U									
Trichloroethene	79-01-6	µg/m ³	6	60	29	< 0.20 U	< 0.20 U	0.52	2.7	6.7	2.8	0.61 [< 0.20 U]	1.2	1.4	< 0.20 U	0.73	< 0.20 U	2.7
Vinyl bromide	593-60-2	µg/m ³	--	--	27	< 0.87 U	< 0.87 U [< 0.87 U]	< 0.87 U	< 0.87 U									
Vinyl chloride	75-01-4	µg/m ³	6	60	93	< 0.20 U	< 0.20 U	1.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U [< 0.20 U]	< 0.20 U	< 0.20 U				

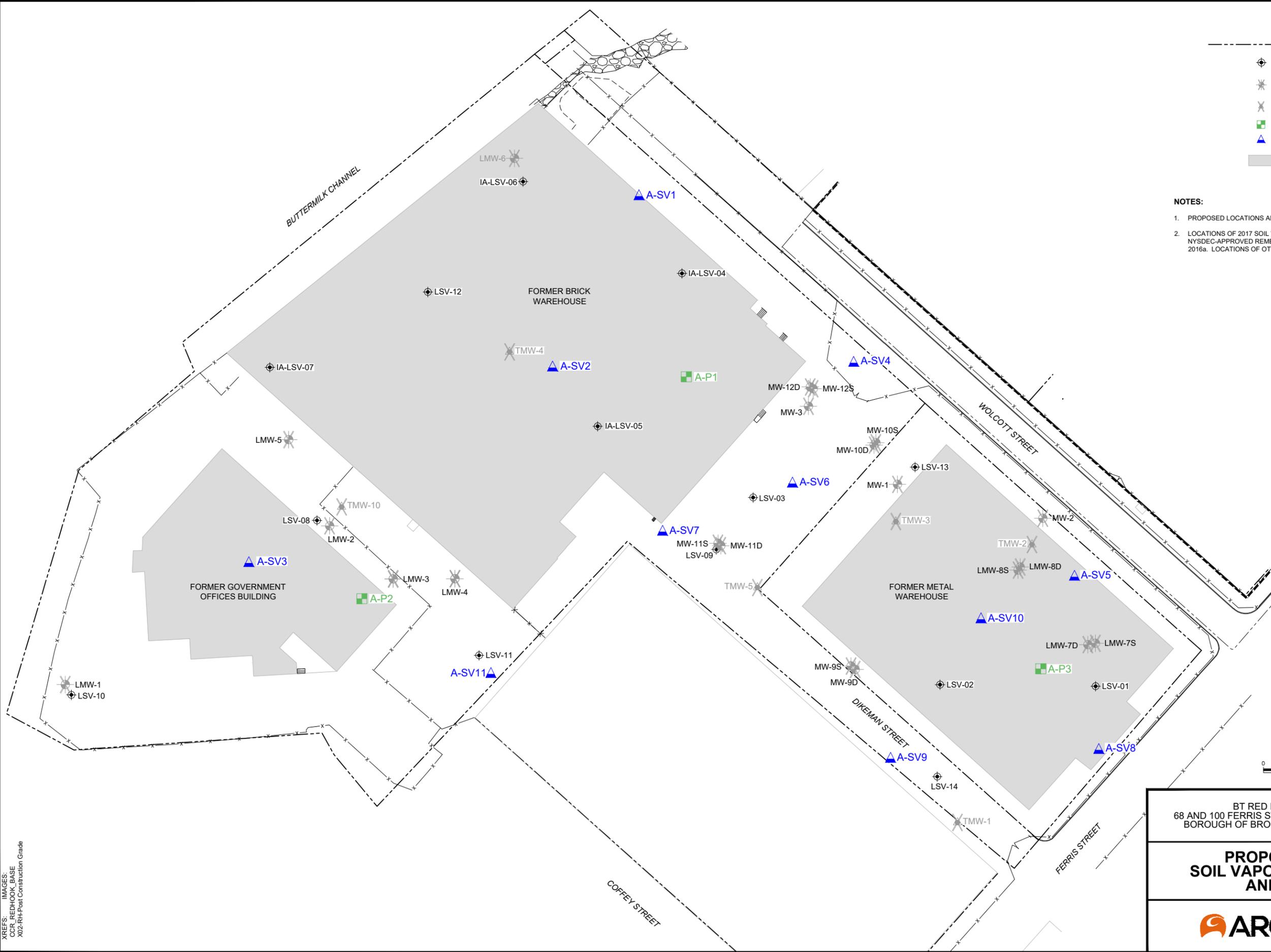
Notes:
Data are unvalidated.
"Ambient" samples are outdoor air (background) samples collected during each day of soil vapor sampling.
The United States Environmental Protection Agency (USEPA) Residential and Commercial Vapor Intrusion Screening Levels (VISLs) for soil gas were obtained from the USEPA VISL Calculator (USEPA 2024). Commercial VISLs were calculated using a target cancer risk (TCR) of 1x10⁻⁶ or a hazard quotient (HQ) of 0.1, whichever resulted in a lower VISL.
VISLs for total 1,3-dichloropropene were used to evaluate 1,3-dichloropropene (cis) and 1,3-dichloropropene (trans). VISLs for m-xylenes were used to evaluate m,p-xylenes.
Bold values indicate a detected concentration.
Amber values exceed the NYSDOH Matrix Lower Limit.
Orange shaded cells are the 20 New York State Department of Health (NYSDOH) Soil Vapor Intrusion Guidance matrix compounds (February 2024 updates).
Gray shaded values exceed the USEPA Commercial VISL for soil gas.
CAS = Chemical Abstract Service.
Values in brackets [] are duplicate analytical results.
µg/m³ = micrograms per cubic meter.
SV = soil vapor.
D = Result is from an analysis that required dilution.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the reporting limit (RL); the value shown in the table is the RL.
J = The analyte was detected at an estimated concentration between the reporting limit and the method detection limit.

References:
NYSDOH. 2006, 2024. Guidance for Evaluating Soil Vapor Intrusion in the State of New York.
USEPA. 2024. Vapor Intrusion Screening Level Calculator, accessed on September 11, 2025. <https://www.epa.gov/vaporintrusion/vapor-intrusion-screening-level-calculator>.

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- LEGEND:**
- PROPERTY LINE (APPROXIMATE)
 - ⊕ 2017 AESI REMEDIAL INVESTIGATION SOIL VAPOR AND/OR INDOOR AIR LOCATION (SEE NOTE 2)
 - ✖ MONITORING WELL (DECOMMISSIONED OR REMOVED)
 - ✖ TEMPORARY MONITORING WELL (DECOMMISSIONED OR REMOVED)
 - PROPOSED TEMPORARY PIEZOMETER LOCATION
 - ▲ PROPOSED TEMPORARY SOIL VAPOR SAMPLING LOCATION
 - FORMER BUILDING

- NOTES:**
1. PROPOSED LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED IN THE FIELD.
 2. LOCATIONS OF 2017 SOIL VAPOR SAMPLES LSV-01, LSV-02 AND LSV-14 ARE BASED ON NYSDEC-APPROVED REMEDIAL INVESTIGATION WORK PLAN, LANGAN ENGINEERING 2016a. LOCATIONS OF OTHER SAMPLING POINTS BASED ON AESI, 2017.



BT RED HOOK, LLC - RED HOOK 3
 68 AND 100 FERRIS STREET / 242 AND 300 COFFEY STREET
 BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK

**PROPOSED TEMPORARY
 SOIL VAPOR SAMPLE LOCATIONS
 AND PIEZOMETERS**

Additional Soil Borings Letter, NYSDEC, November 2025



November 18, 2025

Mr. Adam Briggs
BT Red Hook LLC
55 Glenlake Parkway, NE
Atlanta, GA, 30328

Re: Additional Soil Borings
NYSDEC Brownfield Site #C224213; Red Hook 3 Properties
68 and 100 Ferris Street, 242 and 300 Coffey St.
Brooklyn, Kings County, New York

Dear Mr. Briggs:

In response to the “Remedial Action Work Plan Comments” letter received on October 1, NYSDEC has prepared the attached figure (RH3 Figure_Step Out Sample Locations) to better outline our requirements for further delineation of the extent of NAPL contamination on the Red Hook 3 Properties site. The eleven step-out borings are denoted by green cross marks on the attached site map. Each boring should be advanced to a depth of at least 30 feet below grade. Submit for review an investigatory work plan for these soil borings within 30 days of the date of this letter.

As indicated in DEC’s “Interim Remedial Measure Design Work Plan Comment Letter”, dated August 27, 2019, the source material remaining after the IRM will require monitoring and possible additional remedial action. The remaining source material (NAPL) requires delineation following the IRM to establish extent and to properly design the remedy.

As discussed in the attached e-mail sent by Chris Heller on April 29, 2019 (RE_Red Hook site well decommissioning plans), the decommissioning of the groundwater monitoring wells was done with the understanding that reinstallation may be needed as part of the final remedy. DEC may require the installation of stainless steel monitoring and/or recovery wells as part of the remedy.

I hope this provides more clarification on DEC’s concerns moving forward. If you have any questions please feel free to contact me at 518-402-2230 or at Robert.Bellotti@dec.ny.gov.

Sincerely,

Robert Bellotti
Project Manager

EC:

M. Sweet, NYSDEC

R. Mustico, NYSDEC

J. O'Connell, NYSDEC Region 2

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E. Rieseler, NYSDOH

D. Tucholski, NYSDOH

F. Otto, UPS

R. Rezvani, UPS

T. Young, Arcadis

A. Korik, Arcadis

H. Devery, Arcadis

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EXCAVATION AND BACKFILL SCHEDULE			
IRM EXCAVATION AREA	DEPTH OF EXCAVATION (FEET BGS)		EXCAVATION VOLUME (IN-SITU CUBIC YARDS)
	DESIGN	ACTUAL	
1A	15	15.3	1,098
1B	15	16.1	577
1C	18.5	19.6	234
1D	18	18.9	233
1E	23	23.4	511
2A	22.5	22.3	434
2B	14.5	14.7	525
2C	21.5	21.6	217
3A	14.5	15.0	2,348
3B	18.5	19.5	1,602
TOTAL	--	--	7,779

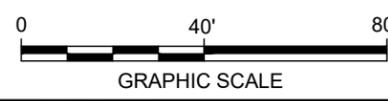
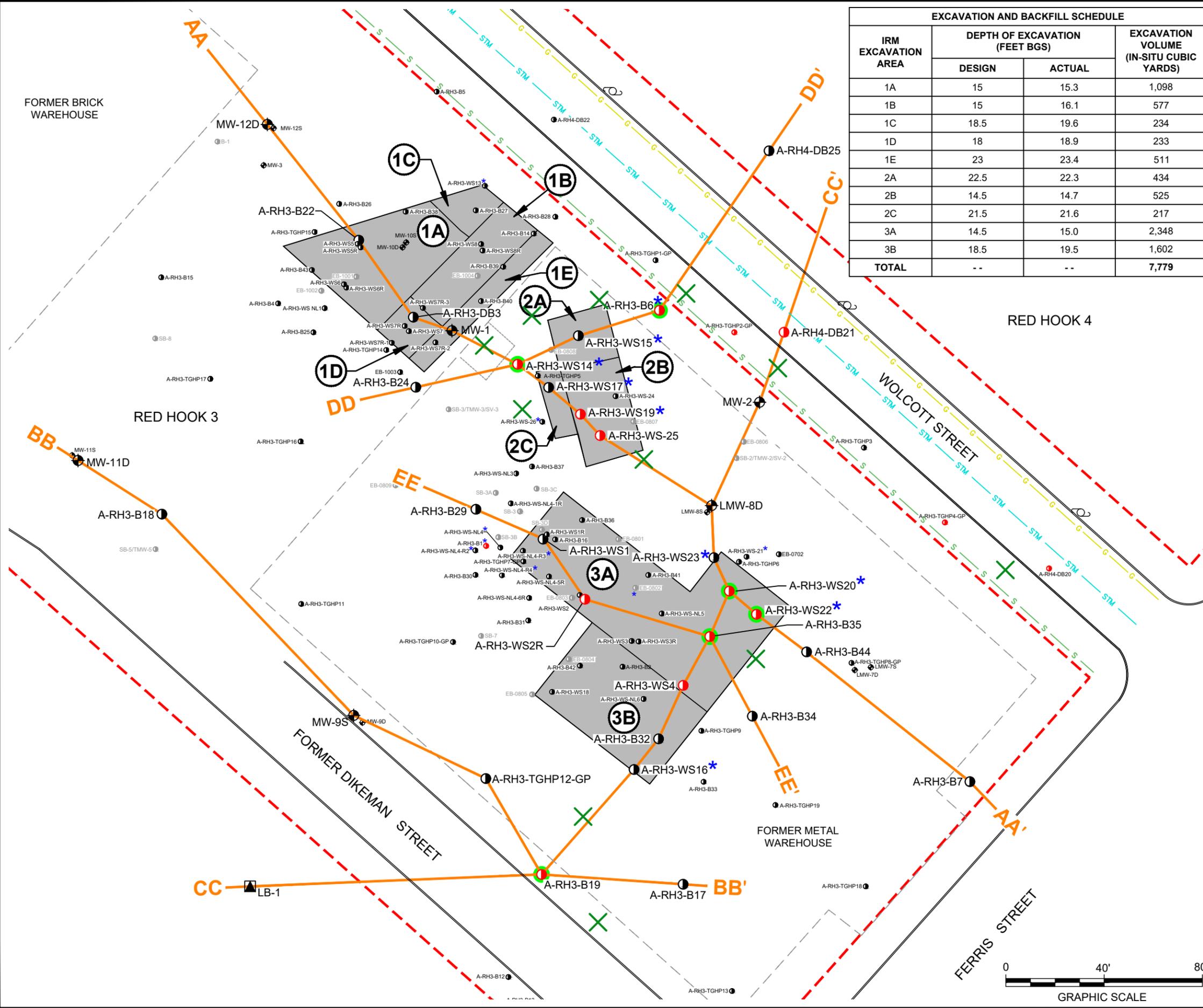
- LEGEND:**
- FOOTPRINT OF FORMER WAREHOUSE BUILDING
 - ⊕ MONITORING WELL (DECOMMISSIONED 2019)
 - SOIL BORING
 - SOIL BORING (NOT SURVEYED)
 - SOIL BORING (NOT EXCAVATED DNAPL)
 - ▲ GEOTECHNICAL BORING
 - SITE BOUNDARY
 - G GAS LINE
 - S SANITARY SEWER LINE
 - STM STORM SEWER LINE
 - ▭ SURVEYED LIMITS OF NYSDEC-APPROVED INTERIM REMEDIAL MEASURE (IRM) EXCAVATION AREA, 2020, KENNON SURVEYING SERVICES
 - A-A' GEOLOGIC CROSS-SECTION TRANSECT
 - NYSDEC RECOMMENDED LOCATION (6/25/25 EMAIL) TO DRILL STEP OUT SOIL BORINGS TO COLLECT SOIL SAMPLES AND OBSERVE CORES FOR VISUAL EVIDENCE OF REMAINING DNAPL
 - * VOC AND/OR SVOC ANALYTICAL DATA AVAILABLE (2017/2019; PRE-IRM) AS SUMMARIZED IN ARCADIS' 6/12/25 EMAIL TO NYSDEC

- NOTES:**
- BORING/WELL LOCATIONS AND PHYSICAL FEATURES BASED ON SURVEYS CONDUCTED BY DPK LAND SURVEYING, LLC ON OCTOBER 27, 2017 AND SEPTEMBER 26, 2018, MAY 20 AND MAY 30, 2019.
 - PROPERTY BOUNDARIES OBTAINED FROM FIGURE ENTITLED "ALTA/NSPS LAND TITLE SURVEY" (LANGAN APRIL 4, 2017).
 - BORING LOCATIONS SHOWN IN GRAY WERE NOT FIELD LOCATED OR SURVEYED BY ARCADIS AND WERE DIGITIZED FROM FIGURES PROVIDED BY AESI AND LANGAN.
 - TarGOST® -TAR SPECIFIC GREEN OPTICAL SENSING TOOL.
 - DNAPL = DENSE NON-AQUEOUS PHASE LIQUID
 - NYSDEC-APPROVED IRM CONDUCTED BETWEEN 2/11/20 AND 12/11/20, AS DETAILED IN THE NYSDEC-APPROVED CONSTRUCTION COMPLETION REPORT (ARCADIS FEBRUARY 2022).
 - EXCAVATION AREAS WERE AMENDED WITH GYPSUM (409.16 TONS) FROM THE BOTTOM OF EACH EXCAVATION TO APPROXIMATELY 5 FEET BELOW GRADE TO FACILITATE BIOLOGICAL DEGRADATION OF DISSOLVED PHASE PETROLEUM HYDROCARBONS, WHICH ENHANCES DNAPL DISSOLUTION.

BT RED HOOK, LLC - RED HOOK 3
68 AND 100 FERRIS STREET/242 AND 300 COFFEY STREET
BROOKLYN, NEW YORK

GEOLOGIC CROSS SECTION LOCATION MAP

ARCADIS | **FIGURE A-1**



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