

**BP SERVICE STATION
4001-4010 4TH AVENUE
BROOKLYN, NEW YORK
SPILL # 18-11146**

**Supplemental Investigation
Soil and Groundwater
Report**

Prepared for:
**NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
REGION II
LONG ISLAND CITY
NEW YORK**



PREPARED BY:
**BERNINGER ENVIRONMENTAL
17 OLD DOCK ROAD
YAPHANK, NEW YORK 11980**



October 2021

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Berninger Environmental

groundwater consultants, geologists and scientists

17 Old Dock Road

Yaphank • New York • 11980

A WRS Environmental Services Company

Phone: 631 • 589 • 6521

Fax: 631 • 589 • 6528

October 8th, 2021

Mr. Jonathan Kolleeny
Professional Geologist 1-Region 2
Division of Environmental Remediation
47-40 21st Street
Long Island City, NY 11101

Re: BP Service Station
4001 4th Avenue (and 40th St)
Brooklyn, New York

**Groundwater Investigation
Soil Profiling Report**
Spill # 1811146

Dear Mr. Kolleeny,

Introduction

The following is an Investigation Report for the subject site based on the approved Work Plan, which proposed soil and groundwater sampling. The purpose of the investigation was to vertically delineate soil contamination, analyze groundwater and install a monitoring well. Please read below for the results of the investigation work and monitoring well construction details. Please see Figure-1 for the site location.

Scope of Work

The proposed scope of work involved analyzing groundwater conditions in the area of the highest soil contamination based on our June 2020 Report. The Report indicated that elevated levels of VOC contamination was present at the highest concentrations at the B-4 location, which is located down gradient from the pump islands and USTs. Prior collection of groundwater was not feasible based on the multiple refusals encountered at the 30' depth with the Geoprobe direct push rig (note a possible rock strata located at this depth preventing advancement of direct push equipment). The depth to water in this area is depicted on the USGS "Depth to Water Viewer" 2013 as being in the 50' below grade surface range (bgs). The multiple refusals encountered at the 30' mark and failure to reach the target depth of 50' bgs prompted the use of an air rotary drill rig to reach the target depth. Soil profiling (vertical delineation), screening and sampling of the groundwater via a permanent monitoring well installation was the main objective of the investigation work. The investigation work was conducted on June 10, 2021. Figure-2 depicts the sampling and well location. A photo log is included as Attachment-A.

Soil Profiling and Results

Soil was collected using the duel tube sampling method and soil was screened in 2.5' intervals with a photo ionization detector (PID meter) in order to field screen for the presence of gasoline range volatile organic compounds (VOCs). Soil profiling was conducted from approximately twenty (20') bgs to sixty-five (65') as soil was never previously delineated beyond a depth of thirty (30') feet bgs. Soil mainly consisted of brown silty sand, semi tight with a perched water layer observed at approximately thirty feet (30') below grade. Clayey soils were observed at the 30-35' depth followed by silty sands past 35' with silty loam extending from 50'- 65'. PID readings were highest at the 30'-32.5' mark (1,000 ppm); steadily decreasing with depth before reaching 0.0 from 50'-65'. Soil conditions were logged for various characteristics based on the American Geologist Institute for soil classification.

A soil sample (B-6) from selected interval 45'-50' was submitted for lab analysis in an ice filled cooler to a New York State ELAP certified laboratory for testing via EPA method 8260 (VOCs). The PID reading at this location was approximately 9.0 ppm. Lab results did not indicate any levels of contamination above the New York State Part-375 SOC's. Mostly all constituents analyzed for had non-detect readings. Please see Figure-3a (initial boring conducted to 30') and Figure-3b for the soil lithology log from 30'-65'. Please refer to Table-1 for tabulated soil data and Attachment-B for the lab data package. All soil cutting and liquid was properly drummed and disposed of by Clean Earth. The waste manifest for the investigation derived waste is included as Attachment-C.

Monitoring Well Installation

In order to obtain groundwater samples from this area a permanent groundwater monitoring well (MW-1) was installed. Groundwater was originally anticipated to be in the 50' range but was encountered at approximately 35' bgs. The soil was only in fact saturated from a depth of 35'-40' and observed to be dry from 40'-65'. A permanent monitoring well was installed and includes the following specifications: twenty feet (20') of schedule 40, 2" PVC slot screen (0.02" slot) with thirty feet (30') of schedule 40, 2" PVC riser to grade surface. The total depth of the well is approximately fifty feet (50') to the bottom. The area surrounding the well screen was gravel packed extending to two feet (2') above the well screen and a bentonite grout mix was installed to seal the casing at the top of the gravel pack to one foot (1') below the top of the riser pipe. The top of the well is secured with a j-plug and finished at grade with a flush mounted, five inch (5") cast iron bolt down manhole, cement sealed at the surface. Please refer to Figure-3a and b for well construction details.

Groundwater Sampling Results

The newly installed monitoring well (MW-1) was developed days after its installation and adequately purged of 3-5 well volumes and containerized in laboratory approved glassware. The sample was procured by using the manual oscillation method with clean 3/8" poly-tubing affixed with a check valve sampling device. The samples were transported under a chain of custody to a New York State

ELAP certified laboratory for testing of Volatile Organic Compounds (VOCs) via EPA method 8260. Please see Table-2 for groundwater results compared to NYS TOGS standards.

Conclusion

The results of the soil investigation indicate that elevated contamination exists to a depth of approximately thirty five feet (35') below grade with PID readings of 700 ppm at this depth. Beyond 35' PID readings drastically decreased to 200 ppm to 0.0 from 50'-65'. No evidence of groundwater from 40'-65' with only a 10' zone of perched water from 30'-40'. Soil was delineated at a depth of 40'-45' with no constituents detected above the Part-375 SCOs'. The site has plans to be re-developed at which any suspect tanks and soil contamination can be easily excavated and transported for proper disposal. Any questions or comments regarding this Report can be directed to BEI.

Sincerely,
Berninger Environmental

Justin Halpin
Scientist/Project Manager

enc. Figure-1 site location
 Figure-2 sample locations
 Figure-3a and b soil lithology and monitoring well log.
 Attachment-A Photo log
 Attachment-B Lab Data Package
 Attachment-C IDW manifest
 Table-1 Soil tabulated data
 Table-2 Groundwater tabulated data

FIGURES

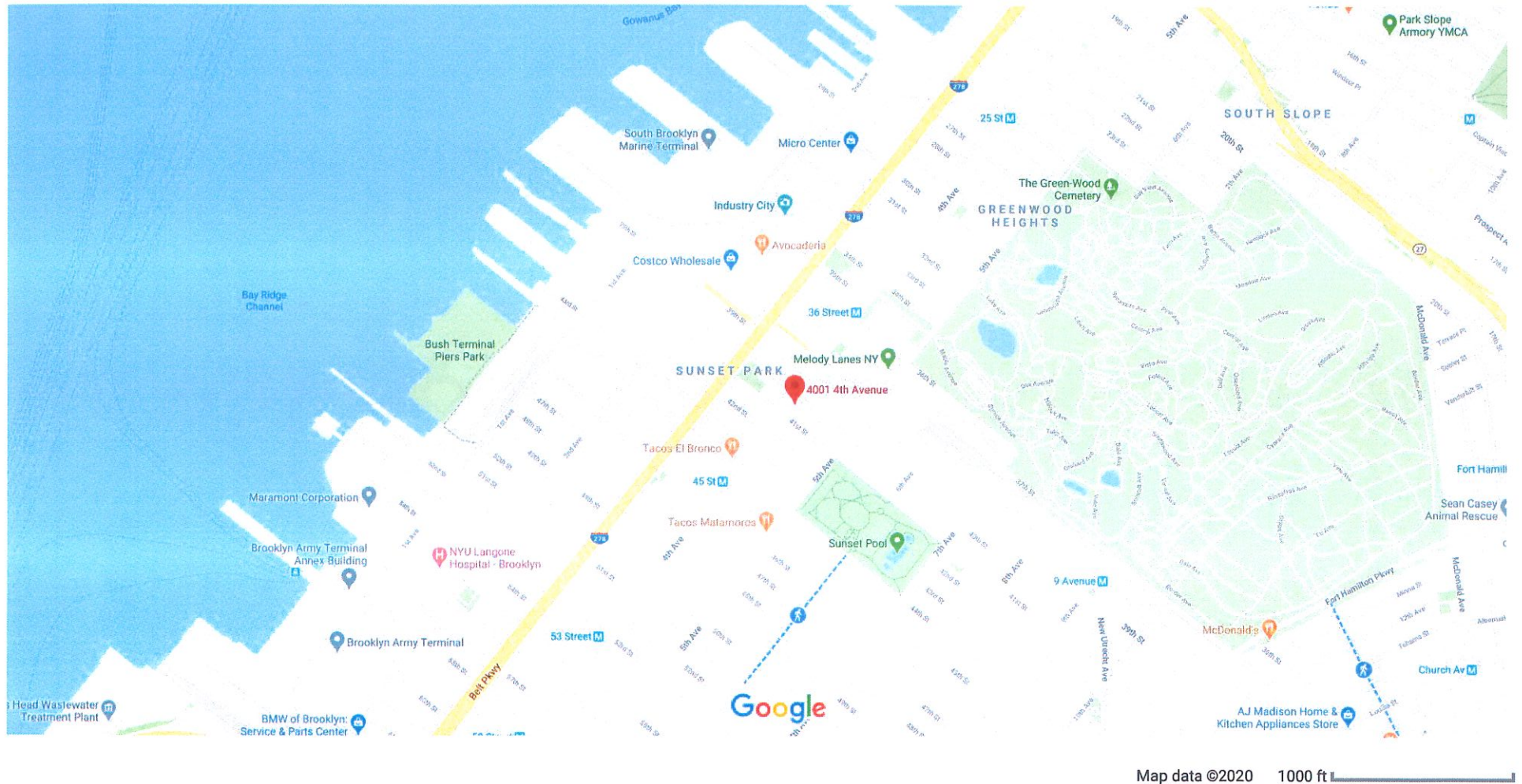


Figure-1
Site Location
Brooklyn, NY

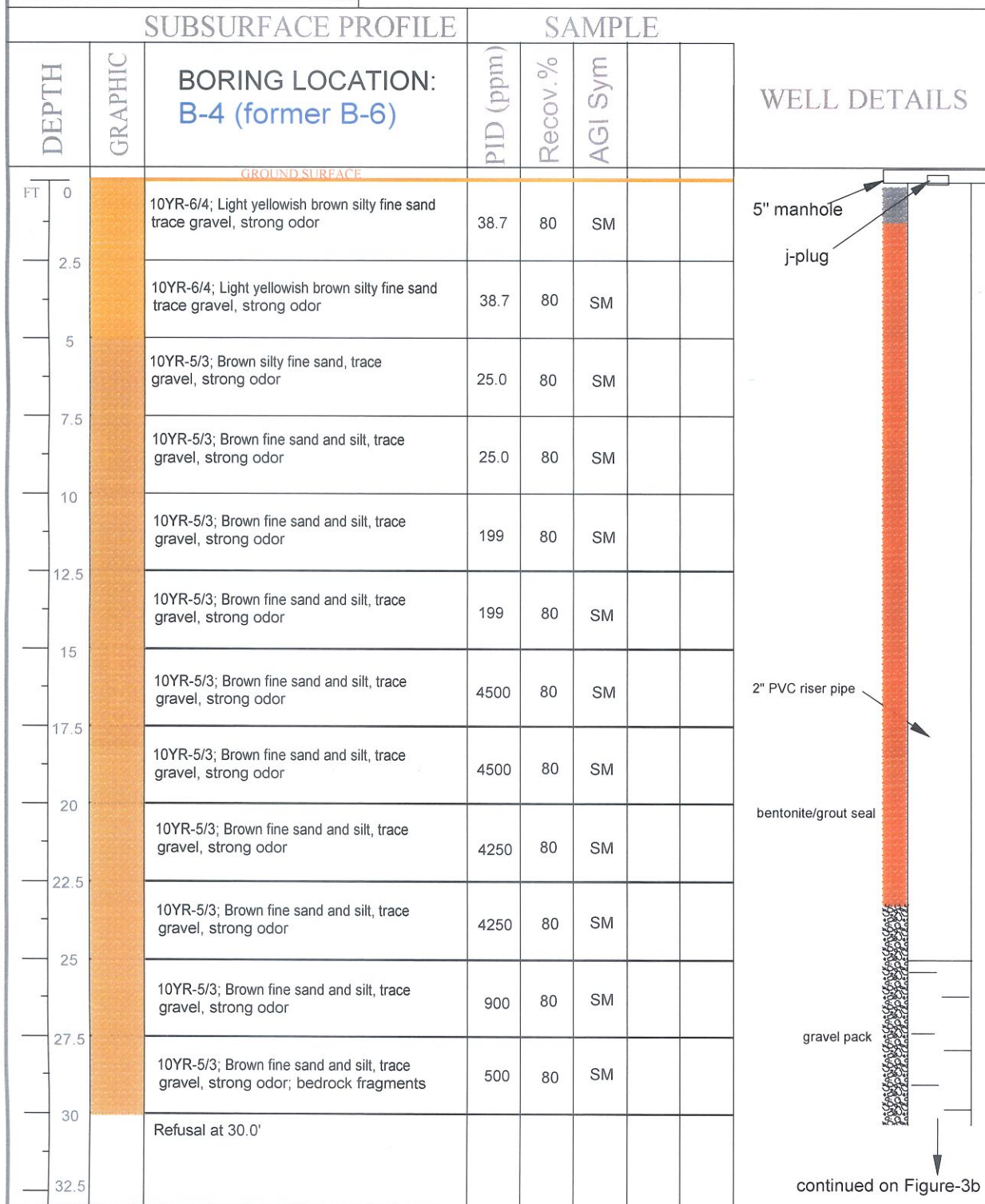


Site Map
Soil Sampling and Well Location
Figure-2

BP Service Station
4001-4010 4th Avenue
Brooklyn, NY

BEi Berninger Environmental
groundwater consultants, geologists and scientists
A WRS Environmental Services Company
Phone: 631 589 6521
17 Old Dock Road Yaphank, NY 11980

PROJECT: BP 4th Ave Brooklyn
 CLIENT: The Macchia Group
 LOCATION: 4001-4010 4th Ave, Brooklyn, NY



Notes: Refusal at 30.0'
 Sampling: B-4 Collected at 27.5'-30.0' please see Figure-3b for log continued

FIGURE: 3a
 METHOD: Direct Push
 BORING COMPANY: BEI

HOLE DIAMETER: 2.25"
 LOGGED BY: Halpin and Patti

PROJECT: BP 4th Ave Brooklyn

CLIENT: The Macchia Group

LOCATION: 4001-4010 4th Ave. Brooklyn, NY

SUBSURFACE PROFILE			SAMPLE				WELL DETAILS
DEPTH	GRAPHIC	BORING LOCATION: B-4 (former B-6) cont...	PID (ppm)	Recov. %	AGI Sym		
30		10YR-5/3; Brown silty fine sand, loose strong odor; wet	1000	80	SM		2" PVC 0.20" screen gravel pack 2" well point 50" DTB
32.5		10YR-5/3; Brown silty fine sand, loose strong odor; wet	700	80	SM		
35		10YR-5/3; Brown silt/ clay mix; tight mild odor; wet	200	80	CL		
37.5		10YR-5/3; Brown silt/ clay mix; tight mild odor; wet	150	80	CL		
40		10YR-5/3; Brown silty loam; tight mild odor; dry	50	80	SM		
42.5		10YR-5/3; Brown silty loam; tight mild odor; dry	45	80	SM		
45		10YR-5/3; Brown sand/silt/ clay mix; tight mild odor; dry	9	80	SM		
47.5		10YR-5/3; Brown sand/silt/ clay mix; tight mild odor; dry	5	80	SM		
50		10YR-5/3; Brown; silty loam; tight no odor; dry	0	80	SM		
52.5		10YR-5/3; Brown; silty loam; tight no odor; dry	0	80	SM		
55		10YR-5/3; Brown; silty loam; tight no odor; dry	0	80	SM		
57.5		10YR-5/3; Brown; silty loam; tight no odor; dry	0	80	SM		
60		10YR-5/3; Brown; silty loam; tight no odor; dry	0	80	SM		
62.5		10YR-5/3; Brown sand/silt/ clay mix; tight no odor; dry	0	80	SM		
65							Notes:

Boring end at 65'

Sampling: B-4 (B-6) Collected at 45-50'

FIGURE: 3b

METHOD: Direct Push

BORING COMPANY: BEI

June 10, 2021

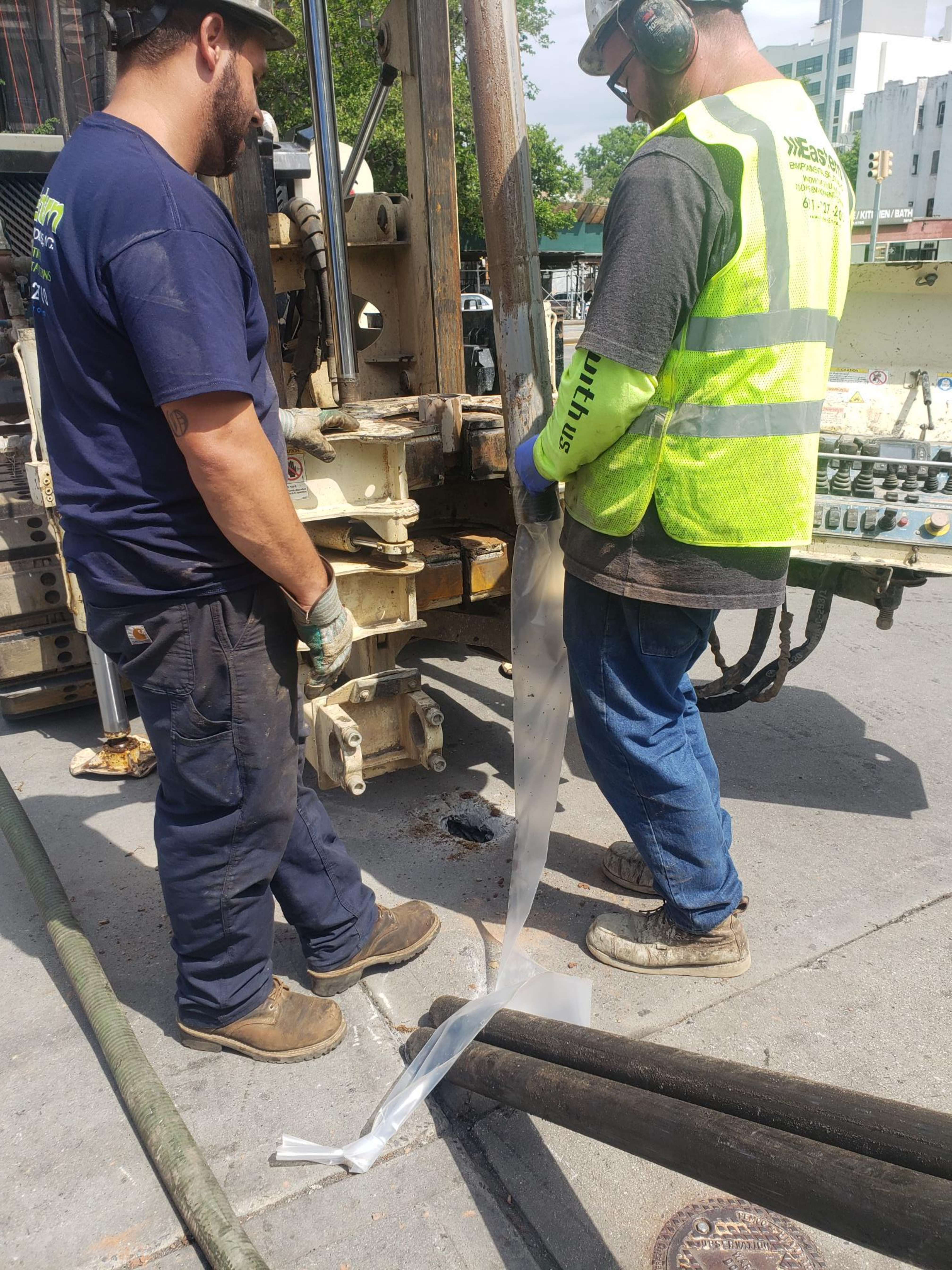
HOLE DIAMETER: 2.25"

LOGGED BY: Halpin and Patti

Attachments

Attachment-A
Photo Log





Design
with
TADONS
210

East
BMP
INNOVATIVE
TOOL
61-27-20

with us

TEMPORARY
OBSERVATION



Attachment-B
Lab Data Package



American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

June 21, 2021

Justin Halpin
WRS d.b.a Berninger Environmental
17 Old Dock Road
Yaphank, NY 11980
TEL: (631) 589-6521
FAX: (631) 589-6528

RE: BP Gas Station, 4001-4010 4th Ave, Brookl

Order No.: 2106083

Dear Justin Halpin:

American Analytical Laboratories, LLC. received 2 sample(s) on 6/14/2021 for the analyses presented in the following report.

Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report. The results reported herein relate only to the items tested or to the samples as received by the laboratory. This report may not be reproduced, except in full, without the approval of American Analytical Laboratories, LLC and is not considered complete without a cover page and chain of custody documentation. The limits (LOQ) provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report or the data is qualified either on the sample results or in the QC section of the report. This package has been reviewed by American Analytical Laboratories' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,

Lori Beyer
Lab Director
American Analytical Laboratories, LLC.



American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Workorder Sample Summary

WO#: 2106083
21-Jun-21

CLIENT: WRS d.b.a Berninger Environmental
Project: BP Gas Station, 4001-4010 4th Ave, Brooklyn,

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
2106083-001A	B-6 @ 45'-50'		6/10/2021 11:00:00 AM	6/14/2021 1:00:00 PM	Soil
2106083-002A	MW-1		6/14/2021 10:00:00 AM	6/14/2021 1:00:00 PM	Liquid

Original



56 Toledo Street, Farmingdale NY 11735
(T) 631-454-6100 (F) 631-454-8027
www.american-analytical.com

CERTIFICATIONS

NY ELAP - 11418 PA DEP - 68-00573
NJ DEP - NY050 CT DOH - PH-0205

[illegible]



American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Sample Log-In Check List

Client Name: Berninger

Work Order Number: 2106083

RcptNo: 1

Logged by: Jenny Mullady 6/14/2021 1:00:00 PM

Jenny Mullady

Completed By: Jenny Mullady 6/14/2021 1:21:54 PM

Jenny Mullady

Reviewed By: Phyllis Masi 6/14/2021

Phyllis Masi

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☒ No ☐
Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒
No. Seal Date: Signed By:
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☒ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

18. Additional remarks:

volatile sample collected in 4 oz jar with zero headspace

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
-----------	---------	-----------	-------------	---------	-----------	-----------



American Analytical Laboratories, LLC.
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Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Case Narrative

WO#: 2106083
Date: 6/21/2021

CLIENT: WRS d.b.a Berninger Environmental
Project: BP Gas Station, 4001-4010 4th Ave, Brooklyn,

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846 and additional methods as detailed throughout the text of the report. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives with exceptions notated in this Narrative discussion.

Soil sample results analyzed for Volatile Organics via preparation method SW846 Method 5035A by the Low Level procedures potentially may be estimated, "J" (biased low) since the samples for this test were not collected according to the 5035A Method. Analysis was performed from intact soil jar. Volatile LCS are analyzed with preservatives - HCL/Methanol depending on level of analysis (high/low) similar to sample analysis. Outliers can be attributed to the presence of chemical preservatives. 2-Chloroethyl vinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Samples were analyzed at the dilutions notated on the reporting forms. MW-1 was analyzed three times. Initial undiluted analysis yielded target analytes over calibration range with peak saturation. Secondary diluted reanalysis was performed at 1:20 dilution. A tertiary analysis was performed for Benzene and Toluene. Toluene raw concentration was still slightly over range but yielded acceptable peak shape. Toluene has been qualified, "E" for tertiary analysis. Acetone detection was confirmed by reanalysis in soil sample B-6 @ 45'-50'.

The following parameters (if included in this report) are not offered by NY ELAP: VOA 8260 Soil; 1,2,4,5-Tetramethylbenzene, Chlorodifluoromethane, Diisopropyl ether, Ethanol, Freon-114, p-Diethylbenzene, p-Ethyltoluene, Limonene. VOA 8260 Liquid; 1,2,4,5-Tetramethylbenzene, Chlorodifluoromethane, Freon-114, p-Diethylbenzene, p-Ethyltoluene, Limonene. Pesticides 8081 Soil; DBCP. Herbicides 8151 Soil; 3,5-Dichlorobenzoic Acid, 4-Nitrophenol, Acifluorfen, Bentazon, Chloramben, DCPA, Picloram, SM 2540G Total Volatile Solids, Soil TKN, Soil Organic Nitrogen, Total Phosphorus in soil, Percent Moisture, pH in non-potable water and temperature at which pH is measured, SM 4500-SO3 B Sulfite in Liquid, Total Sulfur in Soil, Acid Soluble Chloride by ASTM C1152, Water Soluble Chloride by ASTM C1218, Chlorine Demand by SM 2350 B, Total Residual Chlorine in Liquid and Reactivity to Sulfide and Reactivity to Cyanide.

The test results meet the requirements of the NYSDOH and NELAC standards, except where noted. The information contained in this analytical report is the sole property of American Analytical

Original



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Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Case Narrative

WO#: 2106083
Date: 6/21/2021

CLIENT: WRS d.b.a Berninger Environmental
Project: BP Gas Station, 4001-4010 4th Ave, Brooklyn,

Laboratories, LLC. or the client for which this report was issued. The results contained in this report are only representative of the samples received. The sample receipt checklist is included as part of this lab report. Conditions can vary at different times and at different sampling conditions. American Analytical is not responsible for the use or interpretation of the data included herein.

Original



American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Definition Only

WO#: 2106083
Date: 6/21/2021

Definitions:

Sample Result and QC Summary Qualifiers - Level I and Level II Reports

ND - Not detected at the reporting limit/Limit of Quantitation

B - The analyte was detected in the associated method blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything $<5\times$ the blank value as artifact.

E - The value is above the quantitation range

D - Analyte concentration was obtained from diluted analysis or from analysis using reduced sample volume.

J - The analyte was detected below the limit of quantitation but greater than the established Limit of Detection (LOD). There is greater uncertainty associated with these results and data should be considered as estimated.

U - The compound was analyzed for but not detected.

H - Holding time for preparation or analysis has been exceeded.

S - Spike recovery is outside accepted recovery limits.

R - RPD is outside accepted recovery range.

P - Secondary column exceeds 40% difference for GC test.

* - Calibration exceeds method requirement. Due to the large number of analytes for organic testing, the method allows 10% of analytes to have %RSD and/or %D to be $>20\%$.

LOD - Limit of Detection; the lowest level the analyte can be determined to be statistically different from a blank.

LOQ - Limit of Quantitation; the lowest amount of analyte in a sample that can be quantitatively determined with suitable precision and accuracy.

PQL - Practical Quantitation Limit; the lowest level that can be reliably achieved within the specific limits of Precision and accuracy. Listed on the QC Summary Forms.

m - Analyte was manually integrated for GC/MS.

+

Original

American Analytical Laboratories, LLC.

Date: 21-Jun-21

ELAP ID : 11418

CLIENT: WRS d.b.a Berninger Environmental
Lab Order: 2106083
Project: BP Gas Station, 4001-4010 4th Ave, Brooklyn,
Lab ID: 2106083-001A

Client Sample ID: B-6 @ 45'-50'
Collection Date: 6/10/2021 11:00:00 AM
Matrix: SOIL

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
PERCENT MOISTURE			D2216				Analyst: LB
Percent Moisture	9.90	0	1.00		wt%	1	6/15/2021 2:32:45 PM
VOLATILE SW-846 METHOD 8260D			SW8260D	SW5035A			Analyst: IR
1,1,1,2-Tetrachloroethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,1,1-Trichloroethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,1,2,2-Tetrachloroethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,1,2-Trichloroethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,1-Dichloroethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,1-Dichloroethene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,1-Dichloropropene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2,3-Trichlorobenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2,3-Trichloropropane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2,4,5-Tetramethylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2,4-Trichlorobenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2,4-Trimethylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2-Dibromo-3-chloropropane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2-Dibromoethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2-Dichlorobenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2-Dichloroethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,2-Dichloropropane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,3,5-Trimethylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,3-Dichlorobenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,3-dichloropropane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,4-Dichlorobenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
1,4-Dioxane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
2,2-Dichloropropane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
2-Butanone	13	5.7	11		µg/Kg-dry	1	6/16/2021 4:03:00 PM
2-Chloroethyl vinyl ether	ND	11	23	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
2-Chlorotoluene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
2-Hexanone	ND	5.7	11	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
2-Propanol	ND	57	57	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
4-Chlorotoluene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735

Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com



Original

American Analytical Laboratories, LLC.

Date: 21-Jun-21

ELAP ID : 11418

CLIENT: WRS d.b.a Berninger Environmental
Lab Order: 2106083
Project: BP Gas Station, 4001-4010 4th Ave, Brooklyn,
Lab ID: 2106083-001A

Client Sample ID: B-6 @ 45'-50'
Collection Date: 6/10/2021 11:00:00 AM
Matrix: SOIL

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260D			SW8260D	SW5035A	Analyst: IR		
4-Isopropyltoluene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
4-Methyl-2-pentanone	ND	5.7	11	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Acetone	130	5.7	11	B	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Benzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Bromobenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Bromochloromethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Bromodichloromethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Bromoform	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Bromomethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Carbon disulfide	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Carbon tetrachloride	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Chlorobenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Chlorodifluoromethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Chloroethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Chloroform	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Chloromethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
cis-1,2-Dichloroethene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
cis-1,3-Dichloropropene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Cyclohexane	ND	2.3	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Dibromochloromethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Dibromomethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Dichlorodifluoromethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Diisopropyl ether	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Ethylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Freon-114	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Hexachlorobutadiene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Isopropylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
m,p-Xylene	ND	2.3	11	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Methyl Acetate	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Methyl tert-butyl ether	74	1.1	5.7		µg/Kg-dry	1	6/16/2021 4:03:00 PM
Methylene chloride	3.4	1.1	5.7	BJ	µg/Kg-dry	1	6/16/2021 4:03:00 PM
n-Butylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
n-Propylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM

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Original

American Analytical Laboratories, LLC.

Date: 21-Jun-21

ELAP ID : 11418

CLIENT:	WRS d.b.a Berninger Environmental	Client Sample ID:	B-6 @ 45'-50'
Lab Order:	2106083	Collection Date:	6/10/2021 11:00:00 AM
Project:	BP Gas Station, 4001-4010 4th Ave, Brooklyn,	Matrix:	SOIL
Lab ID:	2106083-001A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260D			SW8260D		SW5035A		Analyst: IR
Naphthalene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
o-Xylene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
p-Diethylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
p-Ethyltoluene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
sec-Butylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Styrene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
t-Butyl alcohol	130	2.9	5.7		µg/Kg-dry	1	6/16/2021 4:03:00 PM
tert-Butylbenzene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Tetrachloroethene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Toluene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
trans-1,2-Dichloroethene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
trans-1,3-Dichloropropene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Trichloroethene	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Trichlorofluoromethane	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Vinyl acetate	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Vinyl chloride	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Xylenes, Total	ND	3.4	17	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Methylcyclohexane	ND	2.3	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Acrolein	ND	14	29	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM
Acrylonitrile	ND	1.1	5.7	U	µg/Kg-dry	1	6/16/2021 4:03:00 PM

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Original

American Analytical Laboratories, LLC.

Date: 21-Jun-21

ELAP ID : 11418

CLIENT:	WRS d.b.a Berninger Environmental	Client Sample ID:	MW-1
Lab Order:	2106083	Collection Date:	6/14/2021 10:00:00 AM
Project:	BP Gas Station, 4001-4010 4th Ave, Brooklyn,	Matrix:	LIQUID
Lab ID:	2106083-002A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260D			SW8260D		SW5030C		Analyst: IR
1,1,1,2-Tetrachloroethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,1,1-Trichloroethane	ND	0.25	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,1,2,2-Tetrachloroethane	ND	0.25	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.25	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,1,2-Trichloroethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,1-Dichloroethane	2.9	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
1,1-Dichloroethene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,1-Dichloropropene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,2,3-Trichlorobenzene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,2,3-Trichloropropane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,2,4,5-Tetramethylbenzene	39	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
1,2,4-Trichlorobenzene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,2,4-Trimethylbenzene	790	10	40	D	µg/L	20	6/19/2021 1:53:00 AM
1,2-Dibromo-3-chloropropane	ND	1.0	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,2-Dibromoethane	7.3	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
1,2-Dichlorobenzene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,2-Dichloroethane	1.7	0.50	2.0	J	µg/L	1	6/14/2021 10:25:00 PM
1,2-Dichloropropane	2.6	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
1,3,5-Trimethylbenzene	240	10	40	D	µg/L	20	6/19/2021 1:53:00 AM
1,3-Dichlorobenzene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,3-dichloropropane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,4-Dichlorobenzene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
1,4-Dioxane	ND	0.50	1.0	U	µg/L	1	6/14/2021 10:25:00 PM
2,2-Dichloropropane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
2-Butanone	ND	2.0	5.0	U	µg/L	1	6/14/2021 10:25:00 PM
2-Chloroethyl vinyl ether	ND	10	20	U	µg/L	1	6/14/2021 10:25:00 PM
2-Chlorotoluene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
2-Hexanone	ND	2.0	5.0	U	µg/L	1	6/14/2021 10:25:00 PM
2-Propanol	ND	50	50	U	µg/L	1	6/14/2021 10:25:00 PM
4-Chlorotoluene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
4-Isopropyltoluene	25	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
4-Methyl-2-pentanone	ND	2.0	5.0	U	µg/L	1	6/14/2021 10:25:00 PM
Acetone	110	5.0	10	B	µg/L	1	6/14/2021 10:25:00 PM

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Original

American Analytical Laboratories, LLC.

Date: 21-Jun-21

ELAP ID : 11418**CLIENT:** WRS d.b.a Berninger Environmental**Client Sample ID:** MW-1**Lab Order:** 2106083**Collection Date:** 6/14/2021 10:00:00 AM**Project:** BP Gas Station, 4001-4010 4th Ave, Brooklyn,**Matrix:** LIQUID**Lab ID:** 2106083-002A**Certificate of Results**

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260D			SW8260D		SW5030C		Analyst: IR
Benzene	12000	50	200	D	µg/L	100	6/19/2021 12:50:00 AM
Bromobenzene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Bromochloromethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Bromodichloromethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Bromoform	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Bromomethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Carbon disulfide	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Carbon tetrachloride	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Chlorobenzene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Chlorodifluoromethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Chloroethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Chloroform	34	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
Chloromethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
cis-1,2-Dichloroethene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
cis-1,3-Dichloropropene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Cyclohexane	780	10	40	D	µg/L	20	6/19/2021 1:53:00 AM
Dibromochloromethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Dibromomethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Dichlorodifluoromethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Diisopropyl ether	ND	1.0	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Ethylbenzene	1100	10	40	D	µg/L	20	6/19/2021 1:53:00 AM
Freon-114	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Hexachlorobutadiene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Isopropylbenzene	58	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
m,p-Xylene	4100	20	80	D	µg/L	20	6/19/2021 1:53:00 AM
Methyl Acetate	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Methyl tert-butyl ether	170	10	40	D	µg/L	20	6/19/2021 1:53:00 AM
Methylene chloride	11	0.50	2.0	B	µg/L	1	6/14/2021 10:25:00 PM
n-Butylbenzene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
n-Propylbenzene	120	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
Naphthalene	160	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
o-Xylene	2000	10	40	D	µg/L	20	6/19/2021 1:53:00 AM
p-Diethylbenzene	120	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM

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Original

American Analytical Laboratories, LLC.

Date: 21-Jun-21

ELAP ID : 11418

CLIENT:	WRS d.b.a Berninger Environmental	Client Sample ID:	MW-1
Lab Order:	2106083	Collection Date:	6/14/2021 10:00:00 AM
Project:	BP Gas Station, 4001-4010 4th Ave, Brooklyn,	Matrix:	LIQUID
Lab ID:	2106083-002A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE SW-846 METHOD 8260D			SW8260D			SW5030C	Analyst: IR
p-Ethyltoluene	650	10	40	D	µg/L	20	6/19/2021 1:53:00 AM
sec-Butylbenzene	11	0.50	2.0		µg/L	1	6/14/2021 10:25:00 PM
Styrene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
t-Butyl alcohol	ND	5.0	10	U	µg/L	1	6/14/2021 10:25:00 PM
tert-Butylbenzene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Tetrachloroethene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Toluene	21000	50	200	ED	µg/L	100	6/19/2021 12:50:00 AM
trans-1,2-Dichloroethene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
trans-1,3-Dichloropropene	1.1	0.50	2.0	J	µg/L	1	6/14/2021 10:25:00 PM
Trichloroethene	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Trichlorofluoromethane	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Vinyl acetate	ND	1.0	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Vinyl chloride	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM
Xylenes, Total	6100	30	120	D	µg/L	20	6/19/2021 1:53:00 AM
Methylcyclohexane	520	10	40	D	µg/L	20	6/19/2021 1:53:00 AM
Acrylonitrile	ND	0.50	2.0	U	µg/L	1	6/14/2021 10:25:00 PM

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Original

Attachment-C
IDW Manifest

Please print or type
(Form designed for use on white (12-inch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number CES06		2. Page 1 of 1		3. Emergency Response Phone (877) 577-2669		4. Waste Tracking Number H45722 207 MAC			
5. Generator's Name and Mailing Address The Nacebia Group 556 Central Avenue DELRIDGE NY 11714 Generator's Phone: (516) 493-8700						Generator's Site Address (if different than mailing address) The Nacebia Group 556 Central Avenue DELRIDGE NY 11714					
6. Transporter 1 Company Name								U.S. EPA ID Number			
7. Transporter 2 Company Name								U.S. EPA ID Number			
8. Designated Facility Name and Site Address NORTH AND ENVIRONMENTAL, LLC 225 Hillens Avenue PROVIDENCE, RI 02905 (401) 481 3100 Facility's Phone:								U.S. EPA ID Number R100410001052			
9. Waste Shipping Name and Description						10. Containers		11. Total Quantity	12. Unit Wt./Vol.		
						No.	Type				
1. HAZARDOUS WASTE REGULATED MATERIAL XXX1							HAZ	1350	P		
2.											
3.											
4.											
13. Special Handling Instructions and Additional Information (1) 1742110-00 - INVESTIGATION WASTE XSC 610											
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Generator's/Officer's Printed/Typed Name Toby Wolczynski						Signature <i>Toby Wolczynski</i>		Month 7	Day 22	Year 21	
15. International Shipments ☐ Import to U.S. ☐ Export from U.S.						Port of entry/exit: Date leaving U.S.:					
16. Transporter Acknowledgment of Receipt of Materials											
Transporter 1 Printed/Typed Name John M. Mac						Signature <i>John M. Mac</i>		Month 7	Day 22	Year 21	
Transporter 2 Printed/Typed Name						Signature		Month	Day	Year	
17. Discrepancy											
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection											
Manifest Reference Number:											
17b. Alternate Facility (or Generator)						U.S. EPA ID Number					
Facility's Phone:											
17c. Signature of Alternate Facility (or Generator)						Signature		Month	Day	Year	
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a											
Printed/Typed Name						Signature		Month	Day	Year	

GENERATOR'S/SHIPPER'S INITIAL COPY

TABLES

Table-1
Soil tabulated data

American Analytical Laboratories, LLC.							
WorkOrder: 2106083							
Client: WRS d.b.a Berninger Environmental							
Project: BP Gas Station, 4001-4010 4th Ave, Brooklyn, NY				Client Sample ID:	former B-6 (B-4) @ 45'-50'		
TABLE-1				Laboratory ID:	2106083-001		
				Sampling Date:	06/10/2021		
Cas #:	Procedure:	Analyte:	Units:	Q			
E-11870	PERCENT MOISTURE	Percent Moisture	wt%	9.90			
630-20-6	VOLATILE SW-846 METHOD 8260D	1,1,1,2-Tetrachloroethane	PPB	1.1		U	
71-55-6	VOLATILE SW-846 METHOD 8260D	1,1,1-Trichloroethane	PPB	1.1		U	
79-34-5	VOLATILE SW-846 METHOD 8260D	1,1,2,2-Tetrachloroethane	PPB	1.1		U	
76-13-1	VOLATILE SW-846 METHOD 8260D	1,1,2-Trichloro-1,2,2-trifluoroethane	PPB	1.1		U	
79-00-5	VOLATILE SW-846 METHOD 8260D	1,1,2-Trichloroethane	PPB	1.1		U	
75-34-3	VOLATILE SW-846 METHOD 8260D	1,1-Dichloroethane	PPB	1.1		U	
75-35-4	VOLATILE SW-846 METHOD 8260D	1,1-Dichloroethene	PPB	1.1		U	
563-58-6	VOLATILE SW-846 METHOD 8260D	1,1-Dichloropropene	PPB	1.1		U	
87-61-6	VOLATILE SW-846 METHOD 8260D	1,2,3-Trichlorobenzene	PPB	1.1		U	
96-18-4	VOLATILE SW-846 METHOD 8260D	1,2,3-Trichloropropane	PPB	1.1		U	
95-93-2	VOLATILE SW-846 METHOD 8260D	1,2,4,5-Tetramethylbenzene	PPB	1.1		U	
120-82-1	VOLATILE SW-846 METHOD 8260D	1,2,4-Trichlorobenzene	PPB	1.1		U	
95-63-6	VOLATILE SW-846 METHOD 8260D	1,2,4-Trimethylbenzene	PPB	1.1		U	
96-12-8	VOLATILE SW-846 METHOD 8260D	1,2-Dibromo-3-chloropropane	PPB	1.1		U	
106-93-4	VOLATILE SW-846 METHOD 8260D	1,2-Dibromoethane	PPB	1.1		U	
95-50-1	VOLATILE SW-846 METHOD 8260D	1,2-Dichlorobenzene	PPB	1.1		U	
107-06-2	VOLATILE SW-846 METHOD 8260D	1,2-Dichloroethane	PPB	1.1		U	
78-87-5	VOLATILE SW-846 METHOD 8260D	1,2-Dichloropropane	PPB	1.1		U	
108-67-8	VOLATILE SW-846 METHOD 8260D	1,3,5-Trimethylbenzene	PPB	1.1		U	
541-73-1	VOLATILE SW-846 METHOD 8260D	1,3-Dichlorobenzene	PPB	1.1		U	
142-28-9	VOLATILE SW-846 METHOD 8260D	1,3-dichloropropane	PPB	1.1		U	
106-46-7	VOLATILE SW-846 METHOD 8260D	1,4-Dichlorobenzene	PPB	1.1		U	
123-91-1	VOLATILE SW-846 METHOD 8260D	1,4-Dioxane	PPB	1.1		U	
594-20-7	VOLATILE SW-846 METHOD 8260D	2,2-Dichloropropane	PPB	1.1		U	
78-93-3	VOLATILE SW-846 METHOD 8260D	2-Butanone	PPB	13			
110-75-8	VOLATILE SW-846 METHOD 8260D	2-Chloroethyl vinyl ether	PPB	11		U	
95-49-8	VOLATILE SW-846 METHOD 8260D	2-Chlorotoluene	PPB	1.1		U	
591-78-6	VOLATILE SW-846 METHOD 8260D	2-Hexanone	PPB	5.7		U	
67-63-0	VOLATILE SW-846 METHOD 8260D	2-Propanol	PPB	57		U	
106-43-4	VOLATILE SW-846 METHOD 8260D	4-Chlorotoluene	PPB	1.1		U	
99-87-6	VOLATILE SW-846 METHOD 8260D	4-Isopropyltoluene	PPB	1.1		U	
108-10-1	VOLATILE SW-846 METHOD 8260D	4-Methyl-2-pentanone	PPB	5.7		U	
67-64-1	VOLATILE SW-846 METHOD 8260D	Acetone	PPB	130		B	
71-43-2	VOLATILE SW-846 METHOD 8260D	Benzene	PPB	1.1		U	
108-86-1	VOLATILE SW-846 METHOD 8260D	Bromobenzene	PPB	1.1		U	
74-97-5	VOLATILE SW-846 METHOD 8260D	Bromochloromethane	PPB	1.1		U	
75-27-4	VOLATILE SW-846 METHOD 8260D	Bromodichloromethane	PPB	1.1		U	
75-25-2	VOLATILE SW-846 METHOD 8260D	Bromoform	PPB	1.1		U	
74-83-9	VOLATILE SW-846 METHOD 8260D	Bromomethane	PPB	1.1		U	
75-15-0	VOLATILE SW-846 METHOD 8260D	Carbon disulfide	PPB	1.1		U	
56-23-5	VOLATILE SW-846 METHOD 8260D	Carbon tetrachloride	PPB	1.1		U	
108-90-7	VOLATILE SW-846 METHOD 8260D	Chlorobenzene	PPB	1.1		U	
75-45-6	VOLATILE SW-846 METHOD 8260D	Chlorodifluoromethane	PPB	1.1		U	
75-00-3	VOLATILE SW-846 METHOD 8260D	Chloroethane	PPB	1.1		U	
67-66-3	VOLATILE SW-846 METHOD 8260D	Chloroform	PPB	1.1		U	
74-87-3	VOLATILE SW-846 METHOD 8260D	Chloromethane	PPB	1.1		U	
156-59-2	VOLATILE SW-846 METHOD 8260D	cis-1,2-Dichloroethene	PPB	1.1		U	
10061-01-5	VOLATILE SW-846 METHOD 8260D	cis-1,3-Dichloropropene	PPB	1.1		U	
110-82-7	VOLATILE SW-846 METHOD 8260D	Cyclohexane	PPB	2.3		U	
124-48-1	VOLATILE SW-846 METHOD 8260D	Dibromochloromethane	PPB	1.1		U	
74-95-3	VOLATILE SW-846 METHOD 8260D	Dibromomethane	PPB	1.1		U	
75-71-8	VOLATILE SW-846 METHOD 8260D	Dichlorodifluoromethane	PPB	1.1		U	
108-20-3	VOLATILE SW-846 METHOD 8260D	Diisopropyl ether	PPB	1.1		U	
100-41-4	VOLATILE SW-846 METHOD 8260D	Ethylbenzene	PPB	1.1		U	
76-14-2	VOLATILE SW-846 METHOD 8260D	Freon-114	PPB	1.1		U	
87-68-3	VOLATILE SW-846 METHOD 8260D	Hexachlorobutadiene	PPB	1.1		U	
98-82-8	VOLATILE SW-846 METHOD 8260D	Isopropylbenzene	PPB	1.1		U	
179601-23-1	VOLATILE SW-846 METHOD 8260D	m,p-Xylene	PPB	2.3		U	
79-20-9	VOLATILE SW-846 METHOD 8260D	Methyl Acetate	PPB	1.1		U	
1634-04-4	VOLATILE SW-846 METHOD 8260D	Methyl tert-butyl ether	PPB	74			
75-09-2	VOLATILE SW-846 METHOD 8260D	Methylene chloride	PPB	3.4		BJ	
104-51-8	VOLATILE SW-846 METHOD 8260D	n-Butylbenzene	PPB	1.1		U	
103-65-1	VOLATILE SW-846 METHOD 8260D	n-Propylbenzene	PPB	1.1		U	
91-20-3	VOLATILE SW-846 METHOD 8260D	Naphthalene	PPB	1.1		U	
95-47-6	VOLATILE SW-846 METHOD 8260D	o-Xylene	PPB	1.1		U	
105-05-5	VOLATILE SW-846 METHOD 8260D	p-Diethylbenzene	PPB	1.1		U	
622-96-8	VOLATILE SW-846 METHOD 8260D	p-Ethyltoluene	PPB	1.1		U	
135-98-8	VOLATILE SW-846 METHOD 8260D	sec-Butylbenzene	PPB	1.1		U	
100-42-5	VOLATILE SW-846 METHOD 8260D	Styrene	PPB	1.1		U	
75-65-0	VOLATILE SW-846 METHOD 8260D	t-Butyl alcohol	PPB	130			
98-06-6	VOLATILE SW-846 METHOD 8260D	tert-Butylbenzene	PPB	1.1		U	
127-18-4	VOLATILE SW-846 METHOD 8260D	Tetrachloroethene	PPB	1.1		U	
108-88-3	VOLATILE SW-846 METHOD 8260D	Toluene	PPB	1.1		U	
156-60-5	VOLATILE SW-846 METHOD 8260D	trans-1,2-Dichloroethene	PPB	1.1		U	
10061-02-6	VOLATILE SW-846 METHOD 8260D	trans-1,3-Dichloropropene	PPB	1.1		U	
79-01-6	VOLATILE SW-846 METHOD 8260D	Trichloroethene	PPB	1.1		U	
75-69-4	VOLATILE SW-846 METHOD 8260D	Trichlorofluoromethane	PPB	1.1		U	
108-05-4	VOLATILE SW-846 METHOD 8260D	Vinyl acetate	PPB	1.1		U	
75-01-4	VOLATILE SW-846 METHOD 8260D	Vinyl chloride	PPB	1.1		U	
1330-20-7	VOLATILE SW-846 METHOD 8260D	Xylenes, Total	PPB	3.4		U	
108-87-2	VOLATILE SW-846 METHOD 8260D	Methylcyclohexane	PPB	2.3		U	
107-02-8	VOLATILE SW-846 METHOD 8260D	Acrolein	PPB	14		U	
107-13-1	VOLATILE SW-846 METHOD 8260D	Acrylonitrile	PPB	1.1		U	

Table-2
Groundwater tabulated data

American Analytical Laboratories, LLC.					
WorkOrder: 2106083					
Client: WRS d.b.a Berninger Environmental					
Project: BP Gas Station, 4001-4010 4th Ave, Brooklyn, NY				MW-1	
TABLE-2				2106083-002	
				06/14/2021	
Cas #:	Procedure:	Analyte:	Units:		Q
E-11870	PERCENT MOISTURE	Percent Moisture	wt%		
630-20-6	VOLATILE SW-846 METHOD 8260D	1,1,1,2-Tetrachloroethane	PPB	0.50	U
71-55-6	VOLATILE SW-846 METHOD 8260D	1,1,1-Trichloroethane	PPB	0.25	U
79-34-5	VOLATILE SW-846 METHOD 8260D	1,1,2,2-Tetrachloroethane	PPB	0.25	U
76-13-1	VOLATILE SW-846 METHOD 8260D	1,1,2-Trichloro-1,2,2-trifluoroethane	PPB	0.25	U
79-00-5	VOLATILE SW-846 METHOD 8260D	1,1,2-Trichloroethane	PPB	0.50	U
75-34-3	VOLATILE SW-846 METHOD 8260D	1,1-Dichloroethane	PPB	2.9	
75-35-4	VOLATILE SW-846 METHOD 8260D	1,1-Dichloroethene	PPB	0.50	U
563-58-6	VOLATILE SW-846 METHOD 8260D	1,1-Dichloropropene	PPB	0.50	U
87-61-6	VOLATILE SW-846 METHOD 8260D	1,2,3-Trichlorobenzene	PPB	0.50	U
96-18-4	VOLATILE SW-846 METHOD 8260D	1,2,3-Trichloropropane	PPB	0.50	U
95-93-2	VOLATILE SW-846 METHOD 8260D	1,2,4,5-Tetramethylbenzene	PPB	39	
120-82-1	VOLATILE SW-846 METHOD 8260D	1,2,4-Trichlorobenzene	PPB	0.50	U
95-63-6	VOLATILE SW-846 METHOD 8260D	1,2,4-Trimethylbenzene	PPB	790	D
96-12-8	VOLATILE SW-846 METHOD 8260D	1,2-Dibromo-3-chloropropane	PPB	1.0	U
106-93-4	VOLATILE SW-846 METHOD 8260D	1,2-Dibromoethane	PPB	7.3	
95-50-1	VOLATILE SW-846 METHOD 8260D	1,2-Dichlorobenzene	PPB	0.50	U
107-06-2	VOLATILE SW-846 METHOD 8260D	1,2-Dichloroethane	PPB	1.7	J
78-87-5	VOLATILE SW-846 METHOD 8260D	1,2-Dichloropropane	PPB	2.6	
108-67-8	VOLATILE SW-846 METHOD 8260D	1,3,5-Trimethylbenzene	PPB	240	D
541-73-1	VOLATILE SW-846 METHOD 8260D	1,3-Dichlorobenzene	PPB	0.50	U
142-28-9	VOLATILE SW-846 METHOD 8260D	1,3-dichloropropane	PPB	0.50	U
106-46-7	VOLATILE SW-846 METHOD 8260D	1,4-Dichlorobenzene	PPB	0.50	U
123-91-1	VOLATILE SW-846 METHOD 8260D	1,4-Dioxane	PPB	0.50	U
594-20-7	VOLATILE SW-846 METHOD 8260D	2,2-Dichloropropane	PPB	0.50	U
78-93-3	VOLATILE SW-846 METHOD 8260D	2-Butanone	PPB	2.0	U
110-75-8	VOLATILE SW-846 METHOD 8260D	2-Chloroethyl vinyl ether	PPB	10	U
95-49-8	VOLATILE SW-846 METHOD 8260D	2-Chlorotoluene	PPB	0.50	U
591-78-6	VOLATILE SW-846 METHOD 8260D	2-Hexanone	PPB	2.0	U
67-63-0	VOLATILE SW-846 METHOD 8260D	2-Propanol	PPB	50	U
106-43-4	VOLATILE SW-846 METHOD 8260D	4-Chlorotoluene	PPB	0.50	U
99-87-6	VOLATILE SW-846 METHOD 8260D	4-Isopropyltoluene	PPB	25	
108-10-1	VOLATILE SW-846 METHOD 8260D	4-Methyl-2-pentanone	PPB	2.0	U
67-64-1	VOLATILE SW-846 METHOD 8260D	Acetone	PPB	110	B
71-43-2	VOLATILE SW-846 METHOD 8260D	Benzene	PPB	12000	D
108-86-1	VOLATILE SW-846 METHOD 8260D	Bromobenzene	PPB	0.50	U
74-97-5	VOLATILE SW-846 METHOD 8260D	Bromochloromethane	PPB	0.50	U
75-27-4	VOLATILE SW-846 METHOD 8260D	Bromodichloromethane	PPB	0.50	U
75-25-2	VOLATILE SW-846 METHOD 8260D	Bromoform	PPB	0.50	U
74-83-9	VOLATILE SW-846 METHOD 8260D	Bromomethane	PPB	0.50	U
75-15-0	VOLATILE SW-846 METHOD 8260D	Carbon disulfide	PPB	0.50	U
56-23-5	VOLATILE SW-846 METHOD 8260D	Carbon tetrachloride	PPB	0.50	U
108-90-7	VOLATILE SW-846 METHOD 8260D	Chlorobenzene	PPB	0.50	U
75-45-6	VOLATILE SW-846 METHOD 8260D	Chlorodifluoromethane	PPB	0.50	U
75-00-3	VOLATILE SW-846 METHOD 8260D	Chloroethane	PPB	0.50	U
67-66-3	VOLATILE SW-846 METHOD 8260D	Chloroform	PPB	34	
74-87-3	VOLATILE SW-846 METHOD 8260D	Chloromethane	PPB	0.50	U
156-59-2	VOLATILE SW-846 METHOD 8260D	cis-1,2-Dichloroethene	PPB	0.50	U
10061-01-5	VOLATILE SW-846 METHOD 8260D	cis-1,3-Dichloropropene	PPB	0.50	U
110-82-7	VOLATILE SW-846 METHOD 8260D	Cyclohexane	PPB	780	D
124-48-1	VOLATILE SW-846 METHOD 8260D	Dibromochloromethane	PPB	0.50	U
74-95-3	VOLATILE SW-846 METHOD 8260D	Dibromomethane	PPB	0.50	U
75-71-8	VOLATILE SW-846 METHOD 8260D	Dichlorodifluoromethane	PPB	0.50	U
108-20-3	VOLATILE SW-846 METHOD 8260D	Diisopropyl ether	PPB	1.0	U
100-41-4	VOLATILE SW-846 METHOD 8260D	Ethylbenzene	PPB	1100	D
76-14-2	VOLATILE SW-846 METHOD 8260D	Freon-114	PPB	0.50	U
87-68-3	VOLATILE SW-846 METHOD 8260D	Hexachlorobutadiene	PPB	0.50	U
98-82-8	VOLATILE SW-846 METHOD 8260D	Isopropylbenzene	PPB	58	
179601-23-1	VOLATILE SW-846 METHOD 8260D	m,p-Xylene	PPB	4100	D
79-20-9	VOLATILE SW-846 METHOD 8260D	Methyl Acetate	PPB	0.50	U
1634-04-4	VOLATILE SW-846 METHOD 8260D	Methyl tert-butyl ether	PPB	170	D
75-09-2	VOLATILE SW-846 METHOD 8260D	Methylene chloride	PPB	11	B
104-51-8	VOLATILE SW-846 METHOD 8260D	n-Butylbenzene	PPB	0.50	U
103-65-1	VOLATILE SW-846 METHOD 8260D	n-Propylbenzene	PPB	120	
91-20-3	VOLATILE SW-846 METHOD 8260D	Naphthalene	PPB	160	
95-47-6	VOLATILE SW-846 METHOD 8260D	o-Xylene	PPB	2000	D
105-05-5	VOLATILE SW-846 METHOD 8260D	p-Diethylbenzene	PPB	120	
622-96-8	VOLATILE SW-846 METHOD 8260D	p-Ethyltoluene	PPB	650	D
135-98-8	VOLATILE SW-846 METHOD 8260D	sec-Butylbenzene	PPB	11	
100-42-5	VOLATILE SW-846 METHOD 8260D	Styrene	PPB	0.50	U
75-65-0	VOLATILE SW-846 METHOD 8260D	t-Butyl alcohol	PPB	5.0	U
98-06-6	VOLATILE SW-846 METHOD 8260D	tert-Butylbenzene	PPB	0.50	U
127-18-4	VOLATILE SW-846 METHOD 8260D	Tetrachloroethene	PPB	0.50	U
108-88-3	VOLATILE SW-846 METHOD 8260D	Toluene	PPB	21000	DE
156-60-5	VOLATILE SW-846 METHOD 8260D	trans-1,2-Dichloroethene	PPB	0.50	U
10061-02-6	VOLATILE SW-846 METHOD 8260D	trans-1,3-Dichloropropene	PPB	1.1	J
79-01-6	VOLATILE SW-846 METHOD 8260D	Trichloroethene	PPB	0.50	U
75-69-4	VOLATILE SW-846 METHOD 8260D	Trichlorofluoromethane	PPB	0.50	U
108-05-4	VOLATILE SW-846 METHOD 8260D	Vinyl acetate	PPB	1.0	U
75-01-4	VOLATILE SW-846 METHOD 8260D	Vinyl chloride	PPB	0.50	U
1330-20-7	VOLATILE SW-846 METHOD 8260D	Xylenes, Total	PPB	6100	D
108-87-2	VOLATILE SW-846 METHOD 8260D	Methylcyclohexane	PPB	520	D
107-02-8	VOLATILE SW-846 METHOD 8260D	Acrolein	PPB		
107-13-1	VOLATILE SW-846 METHOD 8260D	Acrylonitrile	PPB	0.50	U