vEKtor consultants

DAILY STATUS REPORT

Prepared By: Peter Rathsack

NYSDEC BCP Site No:	C224219	**Date:**	06/30/2023
Project Name:	450 Union Street	**Weather:**	Overcast, 70-85 ^{0}F
Client:	2201 Union LLC	**Time:**	7:00 – 13:00

Personnel On-Site:

Environmental Consultant: Vektor Consultants – Peter Rathsack, Ezgi Karayel
GZA: Matt Del Blazo
Coastal Environmental Solutions - Patrick Slavin, Marc Morgenstern
WSP: Harry August

Work Activities Performed:

- Vektor mobilized to the site to oversee the grossly contaminated media (GCM) delineation as per the Remedial Site Optimization Work Plan (RSOWP) along with Coastal Environmental Solutions (driller), and GZA (National Grid's environmental consultant).
- The locations for DB-5 and DB-13 were measured and marked according to the RSOWP.
- Coastal mobilized with Sonic Drill Rig CRS XL 140 DUO and installed boring (DB-13). DB-13 was installed to a depth of 50 feet bgs to assess the extent of non-aqueous phase liquid (NAPL) and GCM at the site.
    - No GCM as evidenced by staining, sheen, odors, and PID readings was encountered in any portion of the boring.
- Coastal mobilized with Sonic Drill Rig CRS XL 140 DUO and installed boring (DB-5). DB-5 was installed to a depth of 80 feet bgs to assess the extent of non-aqueous phase liquid (NAPL) and GCM at the site.
    - GCM as evidenced by staining, sheen, odors, and PID readings was encountered starting at a depth of approximately 30 feet below grade surface (bgs). Coating, blebs and elevated PID reading were encountered from 35 to 40 feet bgs. No olfactory or PID evidence of impacted soils were present below 50 feet bgs.
    - A shake test was conducted for suspected GCM at 39-40 feet interval and did reveal evidence of LNAPL but did not reveal any evidence of DNAPL.
- All soil cuttings were placed into a 55-gallon drum at the Site for future off-site disposal, and DB-1 was backfilled with a concrete slurry.

Samples Collected:

- Vektor collected coal tar delineation samples from DB-5 (39'- 40') from 39 to 40 feet bgs, and DB-5 (50'-51') from 50 to 51 feet bgs. The samples will be analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, target analyte list (TAL) metals, and cyanide. One field blank (FB-5) was also collected to be analyzed for the same parameters. One trip blank (TB-5) was included in the samples delivered to the lab.

Community Air Monitoring Program

Real-time Community Air Monitoring Plan (CAMP) was implemented during all intrusive work at an upwind and a downwind location. No CAMP exceedances were observed.

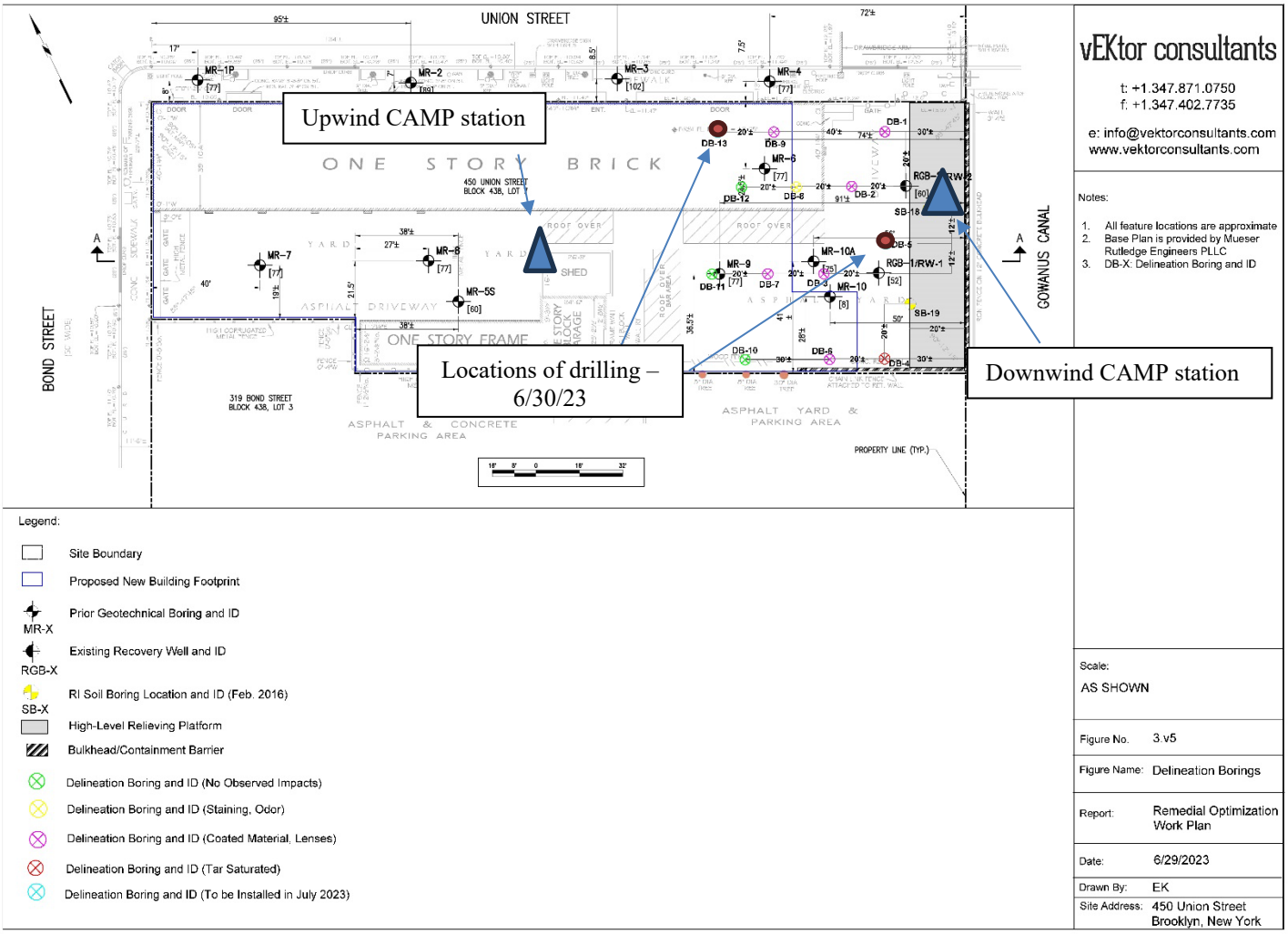
Problems Encountered

N/A

Planned Activities for the Next Day

GCM delineation is currently scheduled to continue on July 10th

SITE PLAN / WORK AREAS



Legend:

- Site Boundary
- Proposed New Building Footprint
- MR-X — Prior Geotechnical Boring and ID
- RGB-X — Existing Recovery Well and ID
- SB-X — RI Soil Boring Location and ID (Feb. 2016)
- High-Level Relieving Platform
- Bulkhead/Containment Barrier
- Delineation Boring and ID (No Observed Impacts)
- Delineation Boring and ID (Staining, Odor)
- Delineation Boring and ID (Coated Material, Lenses)
- Delineation Boring and ID (Tar Saturated)
- Delineation Boring and ID (To be Installed in July 2023)

vEKtor consultants
t: +1.347.871.0750
f: +1.347.402.7735
e: info@vektorconsultants.com
www.vektorconsultants.com

Notes:

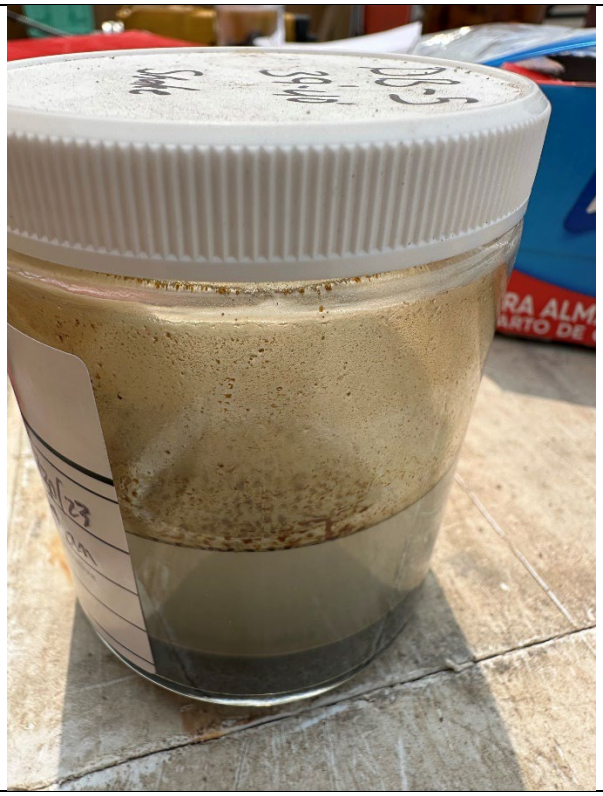
1. All feature locations are approximate
2. Base Plan is provided by Mueser Rutledge Engineers PLLC
3. DB-X: Delineation Boring and ID

Scale:	AS SHOWN
Figure No.	3.v5
Figure Name:	Delineation Borings
Report:	Remedial Optimization Work Plan
Date:	6/29/2023
Drawn By:	EK
Site Address:	450 Union Street Brooklyn, New York

PHOTO LOG

Photo 1: View of the start of drilling at DB-13	
Photo 2: View of DB-13 sonic sleeves 40 to 45 feet bgs. and 45 to 50 feet bgs.	

Photo 3: View of grouting at DB-5.	
Photo 4: View of DB-5 sonic sleeves 30 to 35 feet and 35 to 40 feet. GMC evidence throughout both sleeves.	

Photo 5: View of shake test taken from DB-5 39 to 40 feet below ground surface.	

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Client:	**2201 Union LLC**	**PRELIMINARY BORING LOG**	
Project:	**450 Union**	**Boring No.**	**DB-5**
Address:	**450 Union Street, Brooklyn, NY**	**Page:**	**1 of 5**

Drilling Start Date:	**6/30/2023**	Boring Depth (ft):	**80**
Drilling End Date:	**6/30/2023**	Boring Diameter (in):	**4.00**
Drilling Company:	**Costal Environmental Solutions**	Sampling Method(s):	**DS - Dedicated Plastic Sonic Sleeve**
Drilling Method:	**Sonic**		
Drilling Equipment:	**CRS XL 140 DUO**		
Driller:	**Patrick Slavin**		
Logged By:	**Peter Rathsack**		

DEPTH (ft)	LITHOLOGY	COLOR CODE	COLLECT: Sample Type	COLLECT: Remarks	COLLECT: Recovery (ft)	SOIL/ROCK VISUAL DESCRIPTION	MEASURE: PID (ppm)	MEASURE: Lab Sample	DEPTH (ft)
0			DS	No Observed Impacts	1.90	(0.00') Asphalt (1.00') Poorly graded GRAVEL with sand (GP); fine-coarse grained, little fine-coarse sand, loose, slightly moist, gray	0		0
5			DS	**No Observed Impacts**	2.83		0		5
10			DS	No Observed Impacts	2.66	(12.00') SILT with sand (ML); some fine-coarse sand, nonplastic, soft, saturated, gray	0		10
15			DS	No Observed Impacts	2.83	(15.00') SILT (ML); some fine-coarse sand, nonplastic, soft, wet, black	0		15
20						(18.00') Poorly graded SAND with gravel (SP); fine-medium grained, little fine-coarse gravel, trace silt, loose, moist, brown	0		20

NOTES:

vEKtor consultants	Client: 2201 Union LLC	PRELIMINARY BORING LOG
	Project: 450 Union	Boring No. DB-5
	Address: 450 Union Street, Brooklyn, NY	Page: 2 of 5

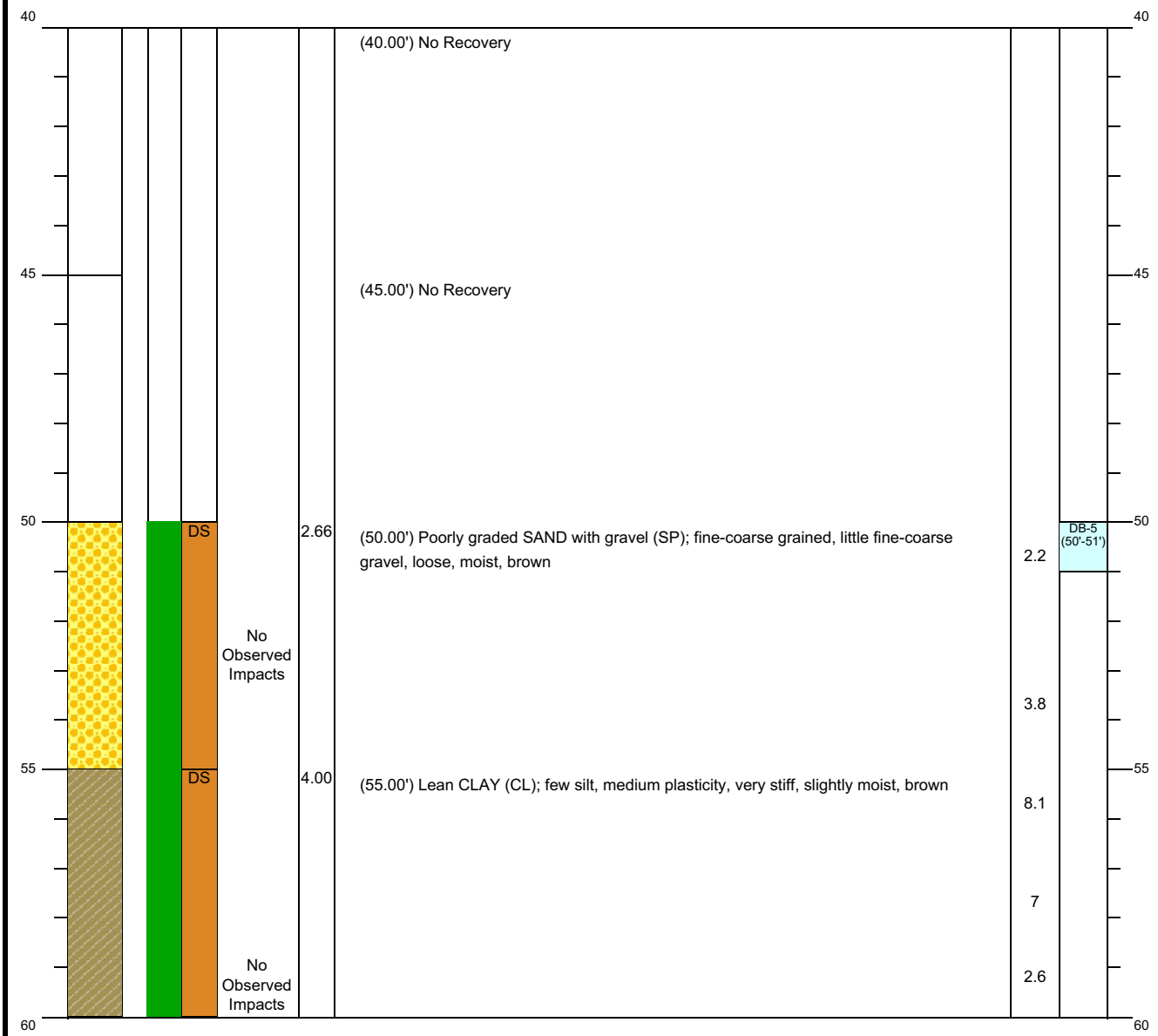
Drilling Start Date:	**6/30/2023**	Boring Depth (ft):	**80**
Drilling End Date:	**6/30/2023**	Boring Diameter (in):	**4.00**
Drilling Company:	**Costal Environmental Solutions**	Sampling Method(s):	**DS - Dedicated Plastic Sonic Sleeve**
Drilling Method:	**Sonic**		
Drilling Equipment:	**CRS XL 140 DUO**		
Driller:	**Patrick Slavin**		
Logged By:	**Peter Rathsack**		

DEPTH (ft)	LITHOLOGY	COLOR CODE	COLLECT: Sample Type	COLLECT: Remarks	COLLECT: Recovery (ft)	SOIL/ROCK VISUAL DESCRIPTION	MEASURE: PID (ppm)	MEASURE: Lab Sample	DEPTH (ft)
20			DS	No Observed Impacts	2.08	(20.00') Poorly graded SAND with gravel (SP); some fine-coarse grained sand, some fine-coarse gravel, trace silt, loose, saturated, gray, some organic material	0		20
						(23.00') Poorly graded SAND with gravel (SP); some fine-coarse grained sand, little fine-coarse gravel, trace silt, loose, moist, gray	0.4		
25			DS		3.00		0.5		25
				No Observed Impacts		(26.00') SILT with sand (ML); some fine sand, low plasticity, medium stiff, moist, dark gray, little organic material	0.6		
							1.1		
30			DS		1.90	(29.5') SILT with organic material, low plasticity, medium stiff, moist, dark gray (30.00') Poorly graded SAND with gravel (SP); fine-coarse grained, some fine-coarse gravel, trace silt, loose, wet, dark gray			30
				Sheen, Staining			66		
						(33.00') SILT with sand (ML); some fine-medium sand, some silt, medium plasticity, medium stiff, wet, gray	64		
35			DS		2.40	(35.00') Poorly graded SAND (SP); fine-coarse grained, loose, moist, brown			35
				Coated, Blebs			193.6		
						(39.00') Fat CLAY with sand (CH); some fine-medium sand, high plasticity, stiff, wet, gray	366.7	DB-5 (39'-40')	
40									40

NOTES:

vEKtor consultants	Client: 2201 Union LLC	PRELIMINARY BORING LOG
	Project: 450 Union	Boring No. DB-5
	Address: 450 Union Street, Brooklyn, NY	Page: 3 of 5

Drilling Start Date:	**6/30/2023**	Boring Depth (ft):	**80**
Drilling End Date:	**6/30/2023**	Boring Diameter (in):	**4.00**
Drilling Company:	**Costal Environmental Solutions**	Sampling Method(s):	**DS - Dedicated Plastic Sonic Sleeve**
Drilling Method:	**Sonic**		
Drilling Equipment:	**CRS XL 140 DUO**		
Driller:	**Patrick Slavin**		
Logged By:	**Peter Rathsack**		



NOTES:

vEKtor consultants	Client: 2201 Union LLC	PRELIMINARY BORING LOG
	Project: 450 Union	Boring No. DB-5
	Address: 450 Union Street, Brooklyn, NY	Page: 4 of 5

Drilling Start Date:	**6/30/2023**	Boring Depth (ft):	**80**
Drilling End Date:	**6/30/2023**	Boring Diameter (in):	**4.00**
Drilling Company:	**Costal Environmental Solutions**	Sampling Method(s):	**DS - Dedicated Plastic Sonic Sleeve**
Drilling Method:	**Sonic**		
Drilling Equipment:	**CRS XL 140 DUO**		
Driller:	**Patrick Slavin**		
Logged By:	**Peter Rathsack**		

DEPTH (ft)	LITHOLOGY	COLOR CODE	COLLECT: Sample Type	COLLECT: Remarks	COLLECT: Recovery (ft)	SOIL/ROCK VISUAL DESCRIPTION	MEASURE: PID (ppm)	MEASURE: Lab Sample	DEPTH (ft)
60			DS	No Observed Impacts	2.50	(60.00') Poorly graded SAND (SP); fine-coarse grained, loose, wet, gray	0		60
							0		
65				**No Observed Impacts**			0		65
70			DS	No Observed Impacts	3.25	(70.00') Poorly graded SAND with gravel (SP); fine-coarse grained, some fine-coarse gravel, trace silt, loose, moist, brown	0		70
75			DS	No Observed Impacts	3.33	(75.00') Poorly graded SAND (SP); fine-medium grained, trace fine-coarse gravel, some silt, medium dense, moist, brown	0		75
							0		
80									80

NOTES:

vEKtor consultants

Client:	**2201 Union LLC**	**PRELIMINARY BORING LOG**
Project:	**450 Union**	**Boring No. DB-5**
Address:	**450 Union Street, Brooklyn, NY**	**Page: 5 of 5**

Drilling Start Date:	**6/30/2023**	Boring Depth (ft):	**80**
Drilling End Date:	**6/30/2023**	Boring Diameter (in):	**4.00**
Drilling Company:	**Costal Environmental Solutions**	Sampling Method(s):	**DS - Dedicated Plastic Sonic Sleeve**
Drilling Method:	**Sonic**		
Drilling Equipment:	**CRS XL 140 DUO**		
Driller:	**Patrick Slavin**		
Logged By:	**Peter Rathsack**		

DEPTH (ft)	LITHOLOGY	COLOR CODE	COLLECT: Sample Type	COLLECT: Remarks	COLLECT: Recovery (ft)	SOIL/ROCK VISUAL DESCRIPTION	MEASURE: PID (ppm)	MEASURE: Lab Sample	DEPTH (ft)
80						(80.00') Boring terminated			80
85									85
90									90
95									95
100									100

NOTES:

vEKtor consultants	Client: 2201 Union LLC	PRELIMINARY BORING LOG
	Project: 450 Union	Boring No. DB-13
	Address: 450 Union Street, Brooklyn, NY	Page: 1 of 3

Drilling Start Date:	**06/30/2023**	Boring Depth (ft):	**50**
Drilling End Date:	**06/30/2023**	Boring Diameter (in):	**4.00**
Drilling Company:	**Costal Environmental Solutions**	Sampling Method(s):	**DS - Dedicated Plastic Sonic Sleeve**
Drilling Method:	**Sonic**		
Drilling Equipment:	**CRS XL 140 DUO**		
Driller:	**Patrick Slavin**		
Logged By:	**Peter Rathsack**		

DEPTH (ft)	LITHOLOGY	COLOR CODE	COLLECT: Sample Type	COLLECT: Remarks	COLLECT: Recovery (ft)	SOIL/ROCK VISUAL DESCRIPTION	MEASURE: PID (ppm)	MEASURE: Lab Sample	DEPTH (ft)
0			DS	No Observed Impacts	0.90	(0.00') Fill: crushed concrete, gravel, fine to course sand	0		0
5			DS		2.75		0		5
				No Observed Impacts		(7.00') Fill: brick, concrete, asphalt, fine to course sand	0		
10			DS		3.00	(10.00') Fill: gravel, asphalt, fine to course sand	0		10
				No Observed Impacts			0		
15							0		15
						(17.00') Poorly graded SAND (SP); mostly fine grained sand, some silt, loose, moist, brown	0		
20				No Observed Impacts			0		20

NOTES:

vEKtor consultants	Client: 2201 Union LLC	PRELIMINARY BORING LOG
	Project: 450 Union	Boring No. DB-13
	Address: 450 Union Street, Brooklyn, NY	Page: 2 of 3

Drilling Start Date:	**06/30/2023**	Boring Depth (ft):	**50**
Drilling End Date:	**06/30/2023**	Boring Diameter (in):	**4.00**
Drilling Company:	**Costal Environmental Solutions**	Sampling Method(s):	**DS - Dedicated Plastic Sonic Sleeve**
Drilling Method:	**Sonic**		
Drilling Equipment:	**CRS XL 140 DUO**		
Driller:	**Patrick Slavin**		
Logged By:	**Peter Rathsack**		

DEPTH (ft)	LITHOLOGY	COLOR CODE	COLLECT: Sample Type	COLLECT: Remarks	COLLECT: Recovery (ft)	SOIL/ROCK VISUAL DESCRIPTION	MEASURE: PID (ppm)	MEASURE: Lab Sample	DEPTH (ft)
20			DS	No Observed Impacts	1.83	(20.00') Poorly graded SAND (SP); fine-coarse grained, trace fine-coarse gravel, little silt, loose, wet, brown	0		20
							0		
25			DS	No Observed Impacts	4.58		0		25
						(28.00') Lean CLAY (CL); few fine-medium sand, few silt, low plasticity, soft, moist, brown, gray, some organic material	0		
30			DS	No Observed Impacts	3.83	(30.00') SILT with sand (ML); some fine-medium sand, little clay, low plasticity, soft, wet, gray, trace organic material	0		30
						(34.00') Poorly graded SAND (SP); fine-medium grained, loose, moist, gray	0		
35			DS	No Observed Impacts	3.88		0		35
40						(39.00') Poorly graded SAND with gravel (SP); mostly fine-medium grained sand, some fine-coarse gravel, trace silt, loose, moist, dark gray			40

NOTES:

vEKtor consultants	Client: 2201 Union LLC	PRELIMINARY BORING LOG
	Project: 450 Union	Boring No. DB-13
	Address: 450 Union Street, Brooklyn, NY	Page: 3 of 3

Drilling Start Date:	**06/30/2023**	Boring Depth (ft):	**50**
Drilling End Date:	**06/30/2023**	Boring Diameter (in):	**4.00**
Drilling Company:	**Costal Environmental Solutions**	Sampling Method(s):	**DS - Dedicated Plastic Sonic Sleeve**
Drilling Method:	**Sonic**		
Drilling Equipment:	**CRS XL 140 DUO**		
Driller:	**Patrick Slavin**		
Logged By:	**Peter Rathsack**		

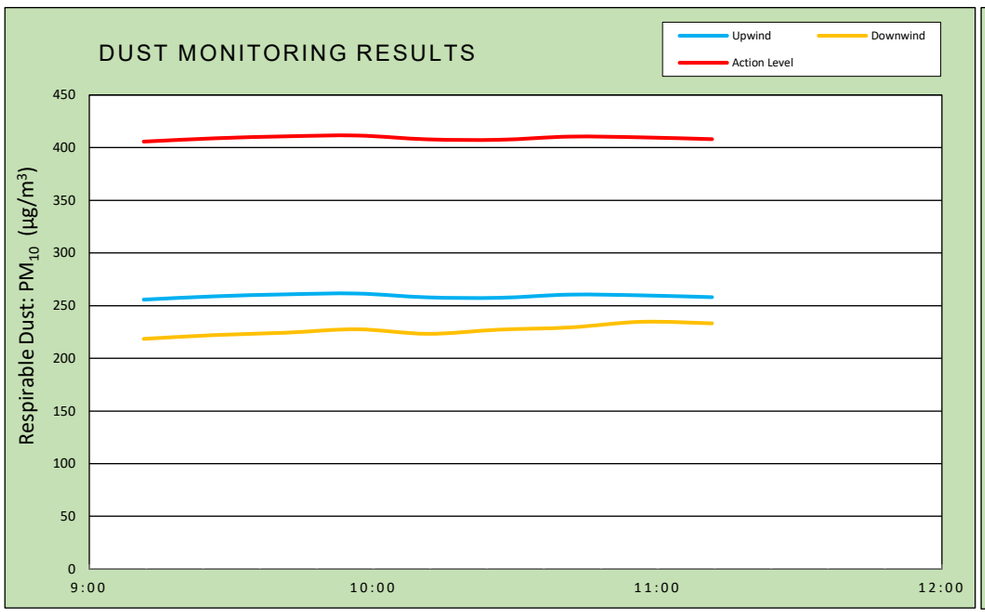
DEPTH (ft)	LITHOLOGY	COLOR CODE	COLLECT: Sample Type	COLLECT: Remarks	COLLECT: Recovery (ft)	SOIL/ROCK VISUAL DESCRIPTION	MEASURE: PID (ppm)	MEASURE: Lab Sample	DEPTH (ft)
40			DS	No Observed Impacts	3.90	(40.00') Poorly graded SAND (SP); mostly medium-coarse grained sand, trace fine-coarse gravel, loose, moist, gray	0		40
						(43.00') Poorly graded SAND with gravel (SP); some fine-coarse grained sand, some fine-coarse gravel, little silt, little clay, loose, moist, brown			
45			DS	No Observed Impacts	4.00	(45.00') Poorly graded SAND (SP); mostly fine-medium grained sand, trace silt, trace clay, loose, moist, brown	0		45
						(46.00') Lean CLAY (CL); trace silt, medium plasticity, very stiff, moist, brown	0		
50						(50.00') Boring terminated			50
55									55
60									60

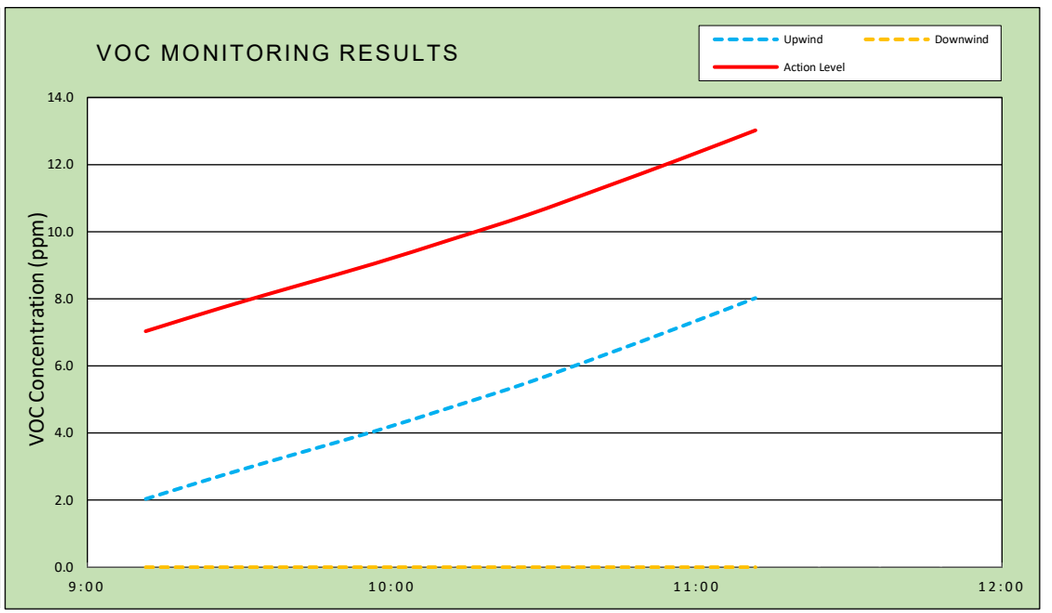
NOTES:

vEKtor consultants	DAILY AIR MONITORING REPORT 450 Union Street Brooklyn, New York	06/30/2023	
37 W. 37th St, 6th Floor - New York, NY		Rev. No. 0	Page 1 of 2
		Project Number:	
		Dust Action Level	150 µg/m^3
		VOC Action Level	5 ppm

Weather Data Range for Work Day		Wind Direction	WSW	Relative Humidity (%)	47.0 - 66.0	Daily Rain Total (in)	0.00	Readings in the summary table and graphs below are the reported downwind concentrations.
Temperature (°F)	75.0 - 83.0	Wind Speed (MPH)	0.6 - 1.8	Barometer (inHg)	30.10 - 30.10	Avg. Dew Point Temp (°F)	62.1	

Station Location	Daily Avg. Dust Concentration (µg/m^3)	Max 15-Min Dust Concentration (µg/m^3)	Time of Max Dust Reading	Daily Avg. VOC Concentration (ppm)	Max 15-Min VOC Concentration (ppm)	Time of Max VOC Reading
Upwind	258.9	262.7	9:51	5.0	8.7	11:32
Downwind	226.9	241.3	11:32	0.0	0.0	8:58



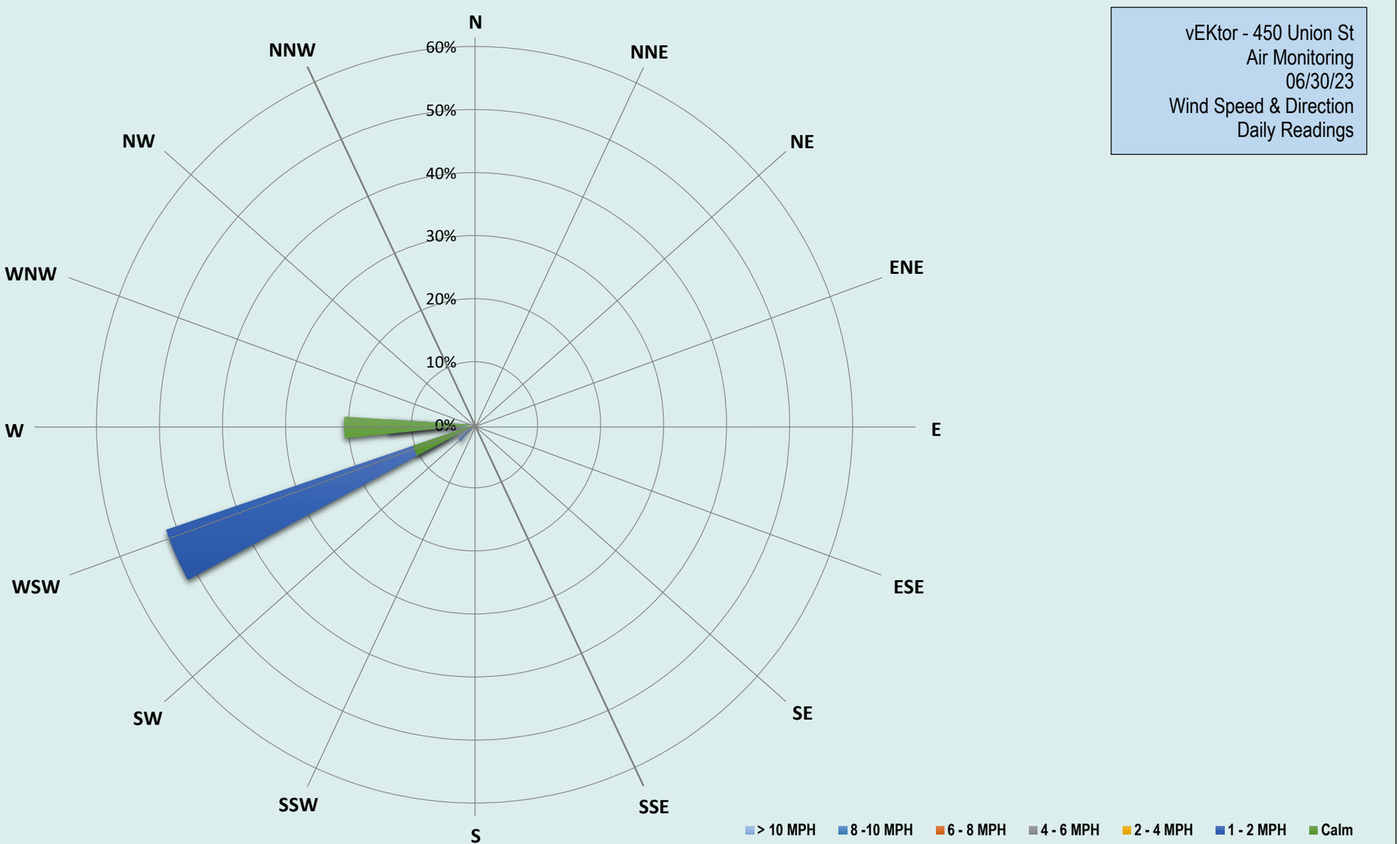


Air Monitoring Notes:

Weather Notes:

EMILCOTT
A Triumvirate Environmental Company

Wind Rose



EMILCOTT
A Triumvirate Environmental Company

Friday, June 30, 2023					
Number of Instances Where Downwind Particulates				0	
Number of Comparable Data Points =				9	
Start Time:				9:12	
End Time:				11:12	
PARTICULATE DATA					
Upwind		Downwind		Exceeds Particulate Alarm Limit	Exceedance Level
Time	15-Min Avg Concentration (ug/m^3)	Time	15-Min Avg Concentration (ug/m^3)		
9:12	255.7	9:12	218.5	-	405.7
9:27	258.9	9:27	222.1	-	408.9
9:42	260.7	9:42	224.3	-	410.7
9:57	261.5	9:57	227.6	-	411.5
10:12	257.9	10:12	223.3	-	407.9
10:27	257.5	10:27	227.2	-	407.5
10:42	260.5	10:42	229.3	-	410.5
10:57	259.8	10:57	234.7	-	409.8
11:12	258.0	11:12	233.2	-	408.0
				-	
				-	
				-	
				-	

Upwind DustTrak Data Summary		
Daily Maximum	277.0	ug/m^3
Daily Minimum	214.3	ug/m^3
Daily Average	258.9	ug/m^3
Maximum 15-Minute Average	261.5	ug/m^3

Downwind DustTrak Data Summary		
Daily Maximum	256.8	ug/m^3
Daily Minimum	212.0	ug/m^3
Daily Average	226.9	ug/m^3
Maximum 15-Minute Average	234.7	ug/m^3

Friday, June 30, 2023	
Number of Instances Where Downwind VOCs Exceeds	0
Number of Comparable Data Points =	0
Start Time:	9:12
End Time:	11:12

PID DATA					
Upwind		Downwind			
Time	15-Min Avg Concentration (ppm)	Time	15-Min Avg Concentration (ppm)	Exceeds VOC Alarm Limit	Exceedance Level
9:12	2.0	9:12	0.0	-	7.0
9:27	2.7	9:27	0.0	-	7.7
9:42	3.4	9:42	0.0	-	8.4
9:57	4.1	9:57	0.0	-	9.1
10:12	4.8	10:12	0.0	-	9.8
10:27	5.5	10:27	0.0	-	10.5
10:42	6.3	10:42	0.0	-	11.3
10:57	7.2	10:57	0.0	-	12.2
11:12	8.0	11:12	0.0	-	13.0
				-	
				-	
				-	
				-	

Upwind PID Data Summary		
Daily Maximum	8.7	ppm
Daily Minimum	0.0	ppm
Daily Average	5.0	ppm
Maximum 15-Minute Average	8.0	ppm

Downwind PID Data Summary		
Daily Maximum	0.0	ppm
Daily Minimum	0.0	ppm
Daily Average	0.0	ppm
Maximum 15-Minute Average	0.0	ppm