vEKtor consultants

# DAILY STATUS REPORT

Prepared By: Peter Rathsack

| | | | |
|---|---|---|---|
| **NYSDEC BCP Site No:** | C224219 | **Date:** | 06/12/2023 |
| **Project Name:** | 450 Union Street | **Weather:** | Overcast, 70-75 $^{0}$F |
| **Client:** | 2201 Union LLC | **Time:** | 8:00 – 15:25 |

**Personnel On-Site:**
Environmental Consultant: Vektor Consultants – Peter Rathsack, Ezgi Karayel
GZA: Daniel Tessar
Coastal Environmental Solutions - Patrick Slavin, Dylan Slavin
NYSDEC Representative: Megan Medwid
WSP: Brian Jessourian

**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 location for DB-1 was measured and marked according to the RSOWP.
- Coastal mobilized with Sonic Drill Rig CRS XL 140 DUO and installed one boring (DB-1) 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 25 feet below grade surface (bgs). Visually impacted soils continued until approximately 55 feet. Coated coal tar was observed between 25 to 45 feet, staining between 40 to 55 feet. Olfactory and PID evidence of impacted soils continued until approximately 70 feet. Therefore, DB-1 was advanced to 80 feet bgs (i.e.: 10 feet of material without evidence of GCM).
- Two shake tests were conducted for the initial suspected GCM at 26-28 feet interval, and a second shake test was conducted to confirm lack of NAPL below 70 feet at 70-72 feet interval.
- 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-1 (26'- 28') from 26 to 28 feet bgs, DB-1 (28'-30') from 28 to 30 feet bgs (on hold), and DB-1 (70'-72') from 70 to 72 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.

**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.

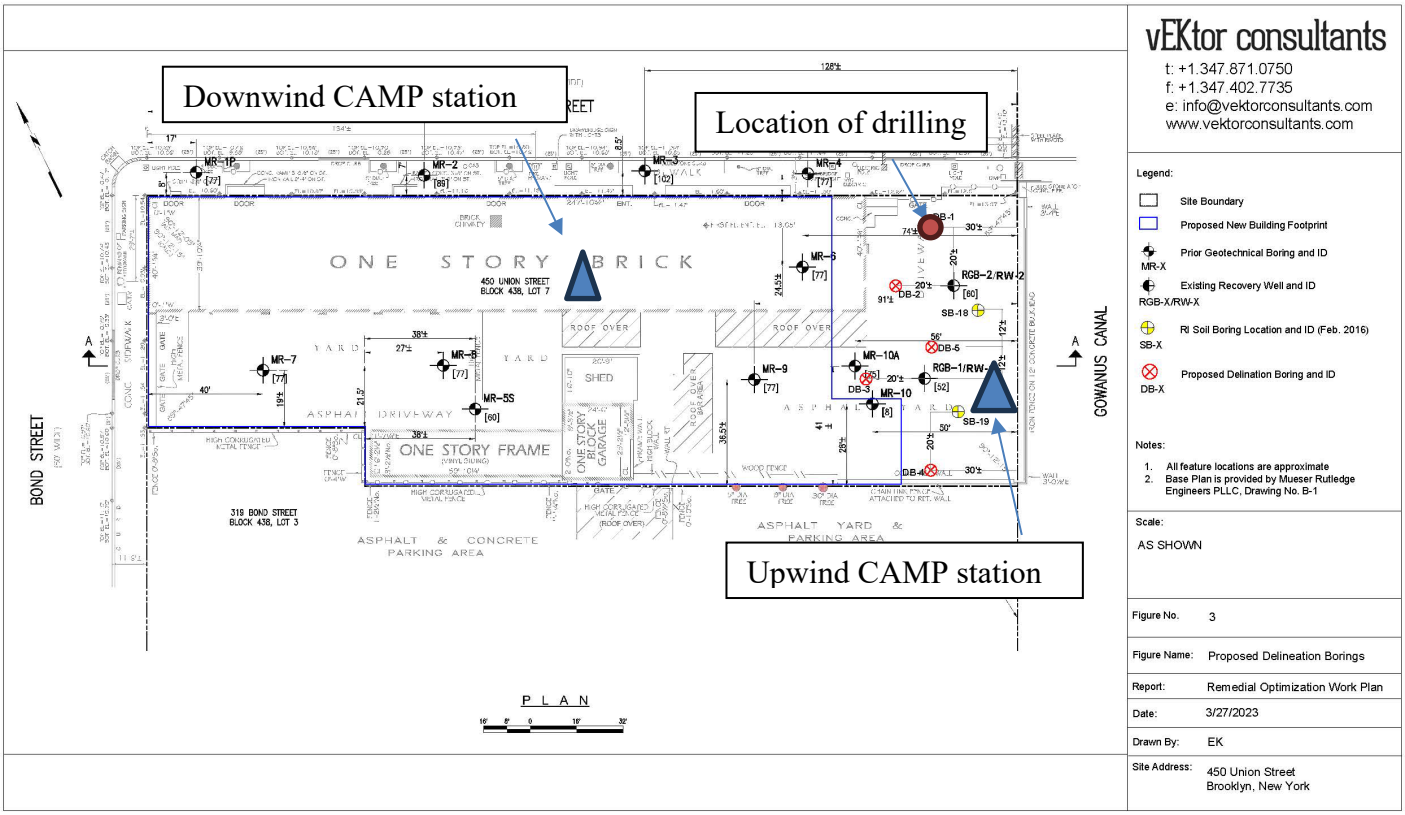
**Problems Encountered**

The Dusttrak II on the Upwind CAMP station malfunctioned causing it to read the highest recordable level capable by the machine. A representative for the CAMP rental equipment company provided over the phone troubleshooting assistance but was unable to provide a solution. A replacement Dusttrak was delivered at the end of the day.

**Planned Activities for the Next Day**

Drilling of DB-2.

## SITE PLAN / WORK AREAS



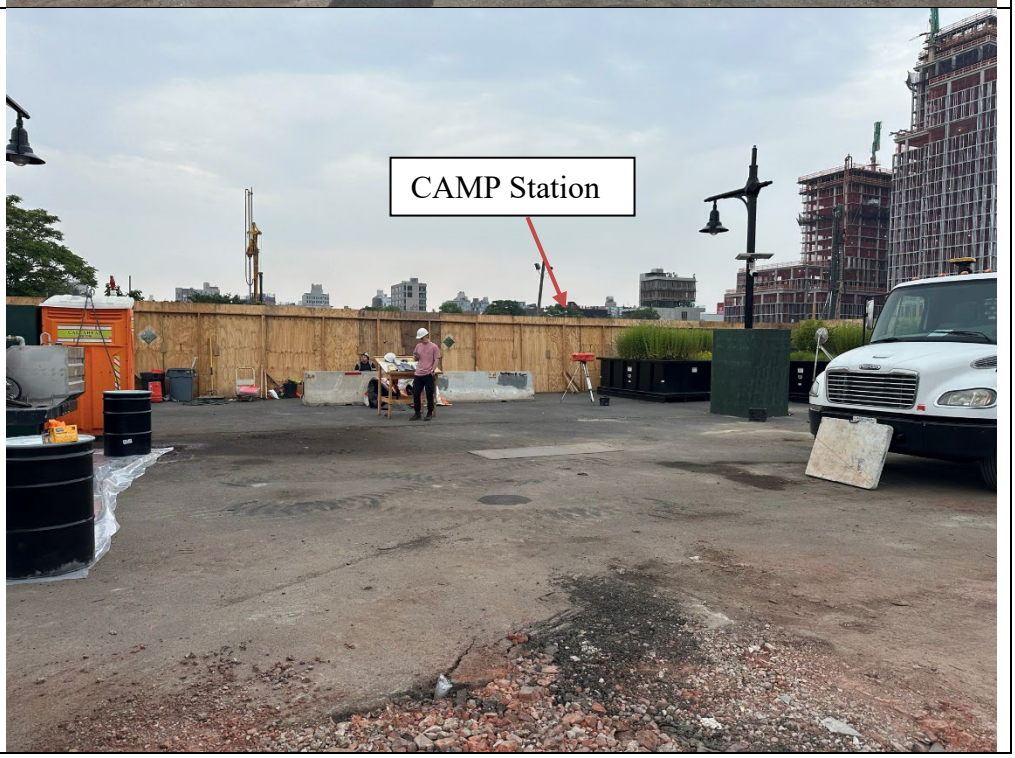

vEKtor consultants
t: +1.347.871.0750
f: +1.347.402.7735
e: info@vektorconsultants.com
www.vektorconsultants.com

Legend:
- Site Boundary
- Proposed New Building Footprint
- MR-X: Prior Geotechnical Boring and ID
- RGB-X/RW-X: Existing Recovery Well and ID
- SB-X: RI Soil Boring Location and ID (Feb. 2016)
- DB-X: Proposed Delination Boring and ID

Notes:
1. All feature locations are approximate
2. Base Plan is provided by Mueser Rutledge Engineers PLLC, Drawing No. B-1

| | |
|---|---|
| Scale: | AS SHOWN |
| Figure No. | 3 |
| Figure Name: | Proposed Delineation Borings |
| Report: | Remedial Optimization Work Plan |
| Date: | 3/27/2023 |
| Drawn By: | EK |
| Site Address: | 450 Union Street<br>Brooklyn, New York |

# PHOTO LOG

| | |
|---|---|
| Photo 1: View of Coastal Environmental Solutions mobilizing sonic drill rig prior to drilling DB-1 facing northeast. |  |
| Photo 2: View of upwind CAMP station facing east |   |

| | |
|---|---|
| Photo 3: View of DB-1 sonic sleeves 20 to 25 feet and 25 to 30 feet. Coating and staining of coal tar is visible. |   |
| Photo 4: View of shake tests preformed on DB-1 26 to 28 feet and DB-1 70 to 72 feet. |  |

vEKtor consultants

| | | |
|---|---|---|
| **Client:** | **2201 Union LLC** | **BORING LOG** |
| **Project:** | **450 Union** | **Boring No. DB-1** |
| **Address:** | **450 Union Street, Brooklyn, NY** | **Page: 1 of 4** |

| | | | |
|---|---|---|---|
| Drilling Start Date: | **06/12/2023 8:00** | Boring Depth (ft): | **80** |
| Drilling End Date: | **06/12/2023 11:00** | Boring Diameter (in): | **4.00** |
| Drilling Company: | **Costal Environmental Solutions** | Sampling Method(s): | **DS - Dedicated Plastic Sonic Sleeve** |
| Drilling Method: | **Sonic** | Location (Lat, Long): | **40.67950, -73.98867** |
| Drilling Equipment: | **CRS XL 140 DUO** | | |
| Driller: | **Patrick Slavin** | | |
| Logged By: | **Peter Rathsack** | | |

| DEPTH (ft) | LITHOLOGY | COLOR CODE | COLLECT: Sample Type | COLLECT: Recovery (ft) | SOIL/ROCK VISUAL DESCRIPTION | MEASURE: PID (ppm) | MEASURE: Lab Sample | DEPTH (ft) |
|---|---|---|---|---|---|---|---|---|
| 0 | | | DS | 1.50 | (0.00') Asphalt | 0.5 | | 0 |
| | | | | | | 0.2 | | |
| 5 | | | DS | 3.33 | (5.00') Well-graded GRAVEL with sand (GW); mostly fine-coarse grained gravel, some fine-coarse sand, dense, dry, gray | | | 5 |
| 10 | | | DS | 2.50 | (10.00') Fat CLAY (CH); few fine-medium sand, mostly clay, medium plasticity, stiff, moist, dark gray | | | 10 |
| | | | | | (13.00') Well-graded SAND with gravel (SW); some fine-medium grained sand, some fine-coarse gravel, loose, moist, brown | | | |
| 15 | | | DS | 2.83 | (15.00') SILT (ML); medium plasticity, medium stiff, moist, dark black | 0 | | 15 |
| | | | | | (16.00') Fat CLAY with sand (CH); little fine-medium sand, high plasticity, stiff, wet, dark black | | | |
| 20 | | | | | | | | 20 |

NOTES:

| vEKtor consultants | Client: 2201 Union LLC | PRELIMINARY BORING LOG |
|---|---|---|
| | Project: 450 Union | Boring No. DB-1 |
| | Address: 450 Union Street, Brooklyn, NY | Page: 2 of 4 |

| | | | |
|---|---|---|---|
| Drilling Start Date: | **06/12/2023 8:00** | Boring Depth (ft): | **80** |
| Drilling End Date: | **06/12/2023 11:00** | Boring Diameter (in): | **4.00** |
| Drilling Company: | **Costal Environmental Solutions** | Sampling Method(s): | **DS - Dedicated Plastic Sonic Sleeve** |
| Drilling Method: | **Sonic** | Location (Lat, Long): | **40.67950, -73.98867** |
| Drilling Equipment: | **CRS XL 140 DUO** | | |
| Driller: | **Patrick Slavin** | | |
| Logged By: | **Peter Rathsack** | | |

| DEPTH (ft) | LITHOLOGY | COLOR CODE | COLLECT: Sample Type | COLLECT: Recovery (ft) | SOIL/ROCK VISUAL DESCRIPTION | MEASURE: PID (ppm) | MEASURE: Lab Sample | DEPTH (ft) |
|---|---|---|---|---|---|---|---|---|
| 20 | | | DS | 3.75 | (20.00') Sandy fat CLAY (CH); some fine-coarse sand, some clay, medium plasticity, medium stiff, wet, dark black, trace organic material | 2 | | 20 |
| 25 | | | DS | 2.50 | (25.00') PEAT (PT); some clay | 75 | DB-1 (26'-28') | 25 |
| 30 | | | DS | 4.00 | (30.00') Poorly graded SAND (SP); mostly fine-medium grained sand, medium dense, wet, gray | | DB-1 (28'-30') | 30 |
| | | | | | (33.00') SILT with sand (ML); some fine-medium sand, some silt, medium plasticity, medium stiff, wet, gray | | | |
| 35 | | | DS | 3.17 | (35.00') SILT with sand (ML); some fine sand, some silt, little clay, medium plasticity, medium stiff, wet, gray | 80 | | 35 |
| | | | | | (39.00') Fat CLAY with sand (CH); some fine-medium sand, high plasticity, stiff, wet, gray | 96 | | |
| 40 | | | | | | | | 40 |

NOTES:

| vEKtor consultants | Client: 2201 Union LLC | BORING LOG |
|---|---|---|
| | Project: 450 Union | Boring No. DB-1 |
| | Address: 450 Union Street, Brooklyn, NY | Page: 3 of 4 |

| | | | |
|---|---|---|---|
| Drilling Start Date: | **06/12/2023 8:00** | Boring Depth (ft): | **80** |
| Drilling End Date: | **06/12/2023 11:00** | Boring Diameter (in): | **4.00** |
| Drilling Company: | **Costal Environmental Solutions** | Sampling Method(s): | **DS - Dedicated Plastic Sonic Sleeve** |
| Drilling Method: | **Sonic** | Location (Lat, Long): | **40.67950, -73.98867** |
| Drilling Equipment: | **CRS XL 140 DUO** | | |
| Driller: | **Patrick Slavin** | | |
| Logged By: | **Peter Rathsack** | | |

| DEPTH (ft) | LITHOLOGY | COLOR CODE | COLLECT: Sample Type | COLLECT: Recovery (ft) | SOIL/ROCK VISUAL DESCRIPTION | MEASURE: PID (ppm) | MEASURE: Lab Sample | DEPTH (ft) |
|---|---|---|---|---|---|---|---|---|
| 40 | | | DS | 3.90 | (40.00') Well-graded SAND with gravel (SW); mostly fine-coarse grained sand, some coarse gravel, loose, wet, gray | | | 40 |
| | | | | | (43.00') Fat CLAY (CH); high plasticity, hard, wet, brown | 1.5 | | |
| 45 | | | DS | 3.67 | (45.00') Well-graded SAND (SW); mostly fine-medium grained sand, few silt, medium dense, wet, gray | 1.3 | | 45 |
| | | | | | | 1.5 | | |
| 50 | | | DS | 3.75 | (50.00') Fat CLAY (CH); trace fine-coarse gravel, trace fine-medium sand, high plasticity, stiff, wet, brown | | | 50 |
| | | | | | (53.00') Well-graded SAND with gravel (SW); mostly fine-coarse grained sand, some coarse gravel, trace clay, medium dense, wet, brown | | | |
| 55 | | | DS | 3.75 | (55.00') Fat CLAY (CH); trace fine-coarse sand, high plasticity, stiff, moist, gray | | | 55 |
| 60 | | | | | | | | 60 |

NOTES:

| vEKtor consultants | Client: 2201 Union LLC | BORING LOG |
|---|---|---|
| | Project: 450 Union | Boring No. DB-1 |
| | Address: 450 Union Street, Brooklyn, NY | Page: 4 of 4 |

| | | | |
|---|---|---|---|
| Drilling Start Date: | **06/12/2023 8:00** | Boring Depth (ft): | **80** |
| Drilling End Date: | **06/12/2023 11:00** | Boring Diameter (in): | **4.00** |
| Drilling Company: | **Costal Environmental Solutions** | Sampling Method(s): | **DS - Dedicated Plastic Sonic Sleeve** |
| Drilling Method: | **Sonic** | Location (Lat, Long): | **40.67950, -73.98867** |
| Drilling Equipment: | **CRS XL 140 DUO** | | |
| Driller: | **Patrick Slavin** | | |
| Logged By: | **Peter Rathsack** | | |

| DEPTH (ft) | LITHOLOGY | COLOR CODE | COLLECT: Sample Type | COLLECT: Recovery (ft) | SOIL/ROCK VISUAL DESCRIPTION | MEASURE: PID (ppm) | MEASURE: Lab Sample | DEPTH (ft) |
|---|---|---|---|---|---|---|---|---|
| 60 | | | DS | 2.66 | (60.00') Poorly graded SAND with gravel (SP); mostly fine-coarse grained sand, some fine-coarse gravel, some clay, loose, moist, brown | 28 | | 60 |
| | | | | | | 7.4 | | |
| 65 | | | DS | 2.50 | (65.00') Well-graded SAND with gravel (SW); some fine-coarse grained sand, some fine-coarse gravel, some clay, medium dense, wet, gray, trace cobble | | | 65 |
| 70 | | | DS | 4.20 | (70.00') SILT with sand (ML); some fine-coarse gravel, low plasticity, soft, moist, brown, little cobble | 0.5 | DB-1 (70'-72) | 70 |
| 75 | | | DS | 2.80 | (75.00') Boulders | | | 75 |
| 80 | | | | | (80.00') Boring terminated | | | 80 |

NOTES:

vEKtor consultants

37 W. 37th St, 6th Floor - New York, NY

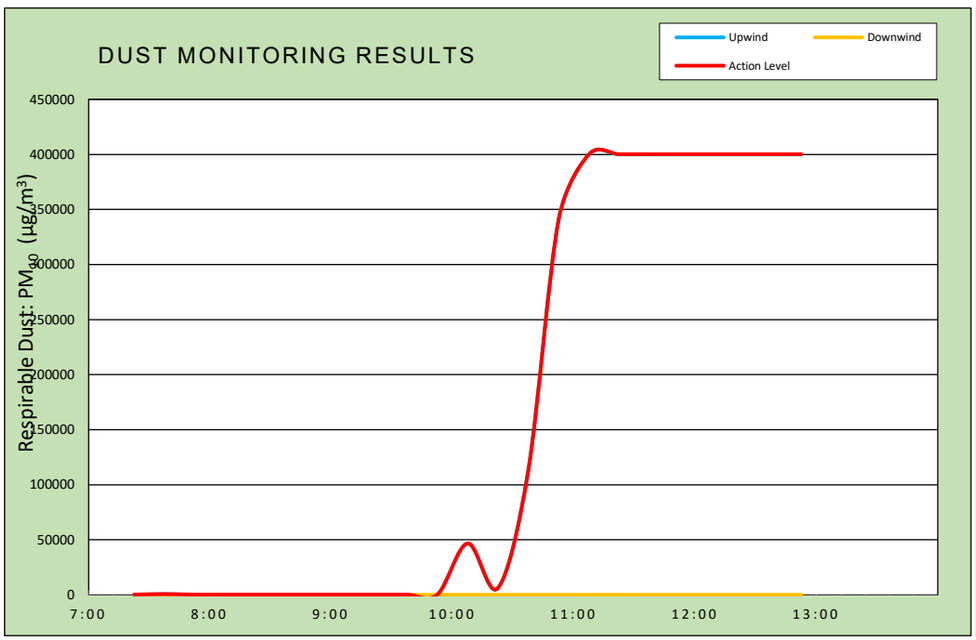
# DAILY AIR MONITORING REPORT
## 450 Union Street
## Brooklyn, New York

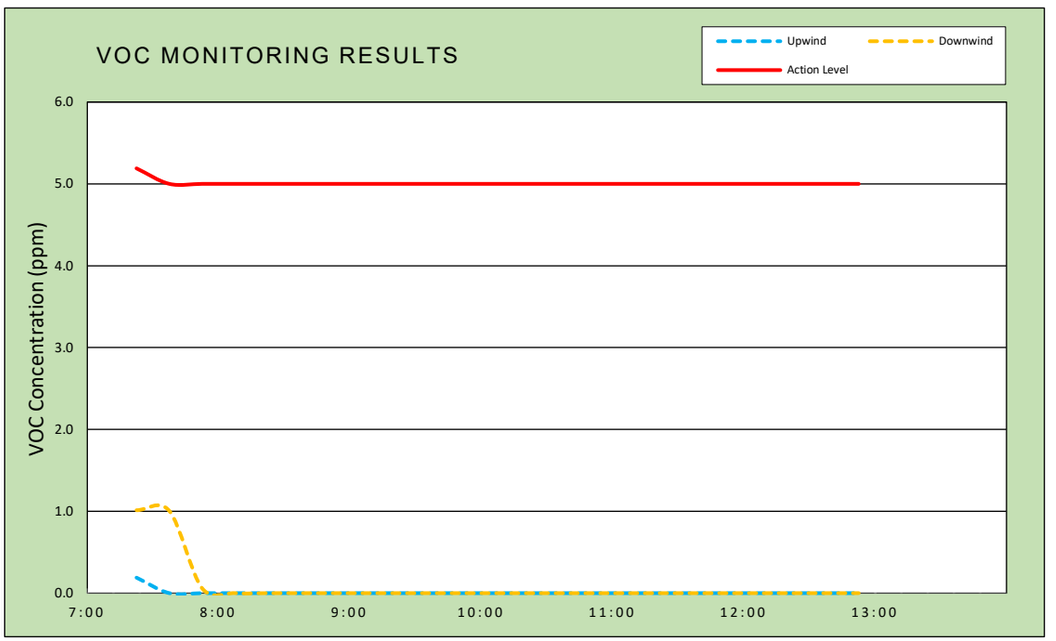
**06/12/2023**

| | |
|---|---|
| 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 | SE | Relative Humidity (%) | 73.0 - 89.0 | Daily Rain Total (in) | 0.02 | Readings in the summary table and graphs below are the reported downwind concentrations. |
| Temperature (°F) | 66.0 - 75.0 | Wind Speed (MPH) | 2.4 - 5.2 | Barometer (inHg) | 29.80 - 29.80 | Avg. Dew Point Temp (°F) | 64.2 | |

| 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 | 152626.8 | 400000.0 | 11:12 | 0.0 | 0.3 | 7:25 |
| Downwind | 88.7 | 233.3 | 7:20 | 0.1 | 1.1 | 7:15 |



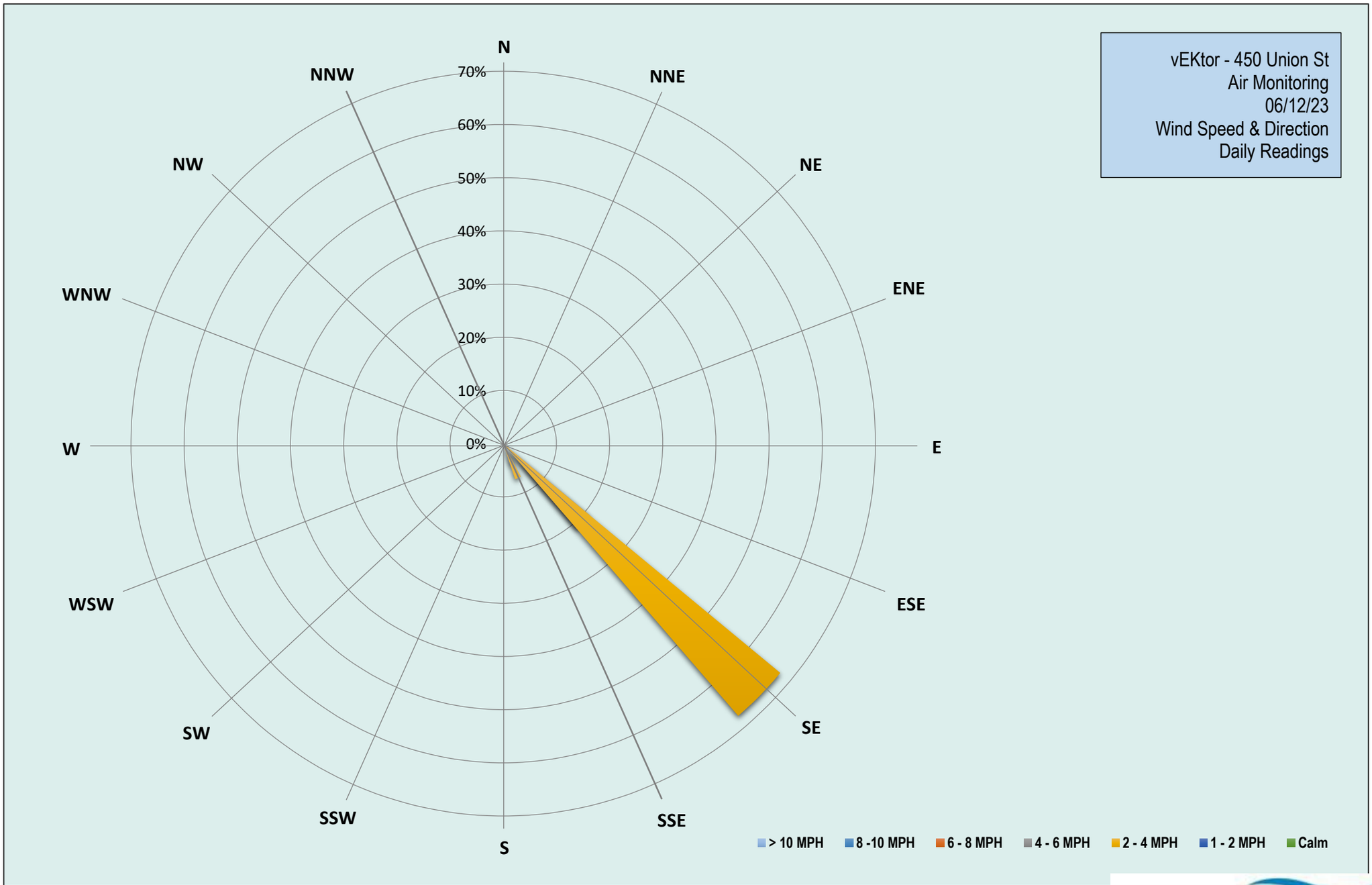

**Air Monitoring Notes:**

**Weather Notes:**

EMILCOTT
A Triumvirate Environmental Company

# Wind Rose






EMILCOTT
A Triumvirate Environmental Company

| Monday, June 12, 2023 | |
|---|---|
| Number of Instances Where Downwind Particulates | 0 |
| Number of Comparable Data Points = | 23 |
| Start Time: | 7:23 |
| End Time: | 12:53 |

**PARTICULATE DATA**

| Upwind | | Downwind | | Exceeds Particulate Alarm Limit | Exceedance Level |
|---|---|---|---|---|---|
| Time | 15-Min Avg Concentration ($ug/m^3$) | Time | 15-Min Avg Concentration ($ug/m^3$) | | |
| 7:23 | 101.2 | 7:23 | 213.3 | - | 251.2 |
| 7:38 | 582.5 | 7:38 | 90.2 | - | 732.5 |
| 7:53 | 95.6 | 7:53 | 92.4 | - | 245.6 |
| 8:08 | 94.0 | 8:08 | 93.1 | - | 244.0 |
| 8:23 | 95.3 | 8:23 | 93.1 | - | 245.3 |
| 8:38 | 95.5 | 8:38 | 91.4 | - | 245.5 |
| 8:53 | 96.3 | 8:53 | 91.2 | - | 246.3 |
| 9:08 | 97.3 | 9:08 | 91.5 | - | 247.3 |
| 9:23 | 96.5 | 9:23 | 87.8 | - | 246.5 |
| 9:38 | 98.4 | 9:38 | 87.3 | - | 248.4 |
| 9:53 | 95.8 | 9:53 | 87.8 | - | 245.8 |
| 10:08 | 46589.0 | 10:08 | 83.8 | - | 46739.0 |
| 10:23 | 6168.3 | 10:23 | 81.5 | - | 6318.3 |
| 10:38 | 113206.7 | 10:38 | 79.9 | - | 113356.7 |
| 10:53 | 340856.0 | 10:53 | 77.4 | - | 341006.0 |
| 11:08 | 399946.7 | 11:08 | 81.3 | - | 400096.7 |
| 11:23 | 400000.0 | 11:23 | 84.0 | - | 400150.0 |
| 11:38 | 400000.0 | 11:38 | 76.3 | - | 400150.0 |
| 11:53 | 400000.0 | 11:53 | 72.6 | - | 400150.0 |
| 12:08 | 400000.0 | 12:08 | 74.0 | - | 400150.0 |
| 12:23 | 400000.0 | 12:23 | 74.2 | - | 400150.0 |
| 12:38 | 400000.0 | 12:38 | 72.3 | - | 400150.0 |
| 12:53 | 400000.0 | 12:53 | 69.3 | - | 400150.0 |

| Upwind DustTrak Data Summary | | |
|---|---|---|
| Daily Maximum | 400000.0 | $ug/m^3$ |
| Daily Minimum | 0.0 | $ug/m^3$ |
| Daily Average | 152626.8 | $ug/m^3$ |
| Maximum 15-Minute Average | 400000.0 | $ug/m^3$ |

| Downwind DustTrak Data Summary | | |
|---|---|---|
| Daily Maximum | 283.0 | $ug/m^3$ |
| Daily Minimum | 65.5 | $ug/m^3$ |
| Daily Average | 88.7 | $ug/m^3$ |
| Maximum 15-Minute Average | 213.3 | $ug/m^3$ |

| Monday, June 12, 2023 | |
|---|---|
| Number of Instances Where Downwind VOCs Exceeds | 0 |
| Number of Comparable Data Points = | 0 |
| Start Time: | 7:29 |
| End Time: | 12:59 |

**PID DATA**

| Upwind | | Downwind | | | |
|---|---|---|---|---|---|
| Time | 15-Min Avg Concentration (ppm) | Time | 15-Min Avg Concentration (ppm) | Exceeds VOC Alarm Limit | Exceedance Level |
| 7:29 | 0.2 | 7:29 | 1.0 | - | 5.2 |
| 7:44 | 0.0 | 7:44 | 1.0 | - | 5.0 |
| 7:59 | 0.0 | 7:59 | 0.1 | - | 5.0 |
| 8:14 | 0.0 | 8:14 | 0.0 | - | 5.0 |
| 8:29 | 0.0 | 8:29 | 0.0 | - | 5.0 |
| 8:44 | 0.0 | 8:44 | 0.0 | - | 5.0 |
| 8:59 | 0.0 | 8:59 | 0.0 | - | 5.0 |
| 9:14 | 0.0 | 9:14 | 0.0 | - | 5.0 |
| 9:29 | 0.0 | 9:29 | 0.0 | - | 5.0 |
| 9:44 | 0.0 | 9:44 | 0.0 | - | 5.0 |
| 9:59 | 0.0 | 9:59 | 0.0 | - | 5.0 |
| 10:14 | 0.0 | 10:14 | 0.0 | - | 5.0 |
| 10:29 | 0.0 | 10:29 | 0.0 | - | 5.0 |
| 10:44 | 0.0 | 10:44 | 0.0 | - | 5.0 |
| 10:59 | 0.0 | 10:59 | 0.0 | - | 5.0 |
| 11:14 | 0.0 | 11:14 | 0.0 | - | 5.0 |
| 11:29 | 0.0 | 11:29 | 0.0 | - | 5.0 |
| 11:44 | 0.0 | 11:44 | 0.0 | - | 5.0 |
| 11:59 | 0.0 | 11:59 | 0.0 | - | 5.0 |
| 12:14 | 0.0 | 12:14 | 0.0 | - | 5.0 |
| 12:29 | 0.0 | 12:29 | 0.0 | - | 5.0 |
| 12:44 | 0.0 | 12:44 | 0.0 | - | 5.0 |
| 12:59 | 0.0 | 12:59 | 0.0 | - | 5.0 |

| Upwind PID Data Summary | | |
|---|---|---|
| Daily Maximum | 0.3 | ppm |
| Daily Minimum | 0.0 | ppm |
| Daily Average | 0.0 | ppm |
| Maximum 15-Minute Average | 0.2 | ppm |

| Downwind PID Data Summary | | |
|---|---|---|
| Daily Maximum | 1.2 | ppm |
| Daily Minimum | 0.0 | ppm |
| Daily Average | 0.1 | ppm |
| Maximum 15-Minute Average | 1.0 | ppm |