

Prepared By: Peter Rath sack

NYSDEC BCP Site No:	C224219	Date:	07/21/2023
Project Name:	450 Union Street	Weather:	Overcast, 70-85 °F
Client:	2201 Union LLC	Time:	7:00 – 15:45

Personnel On-Site:

Environmental Consultant: Vektor Consultants – Peter Rath sack, Saranda Alka
WSP: Brian Jessourian, Tim Williams

Work Activities Performed:

- Vektor mobilized to the site to conduct groundwater sampling as per the Remedial Site Optimization Work Plan (RSOWP)
- Headspace of wells DB1-MW-1S, DB1-MW-1D, and DB1-MW-1 were measured, wells were gauged, and sampled. All depths were measured from top of the casing (TOC).
- Vektor used a peristaltic pump to collect low flow groundwater samples from wells DB1-MW-1S, DB1-MW-1D, and DB1-MW-1. Groundwater was purged from each well to measure water quality parameters (pH, specific conductivity, oxygen reduction potential, dissolved oxygen, turbidity, and temperature) for stabilization criteria prior to sampling.
- Faint coal tar-like odors were observed in purge water generated from wells DB1-MW-1S, DB1-MW-1D, and DB1-MW-1.
- Approximately 18 gallons of purged groundwater were generated and containerized in a sealed and labeled 55-gallon drum.

Well ID	Headspace (ppm)	Pre-Purge Depth to Water (feet)	Post Sampling Depth to Water (feet)	Pump Intake Depth (feet)
DB3-MW-3S	4.7	9.66	9.72	10
DB1-MW-1D	2.5	9.78	9.94	75
DB1-MW-1	11.2	9.84	9.61	47.5

Samples Collected: Vektor collected three groundwater samples for laboratory analysis of NYSDEC Part 375 TCL VOCs, TCL SVOCs, TCL PCBs, TCL Pesticides, TCL Herbicides, TAL Metals, and Total Cyanide.

- DB1-MW-1S
- DB1-MW-1D
- DB1-MW-1

Community Air Monitoring Program

Real-time Community Air Monitoring Plan (CAMP) was implemented during all intrusive work at an upwind and a downwind location.

Problems Encountered

N/A

Sampling of DB2-MW-2S, DB2-MW-2D, and DB2-MW-2.

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1. All feature locations are approximate
2. Base Plan is provided by Mueser Rutledge Engineers PLLC
3. DB-X: Delineation Boring and ID
4. DBX-MW-XD: Deep Monitoring Well screened below GCM and ID
5. DBX-MW-XS: Shallow Monitoring Well screened at groundwater interface and ID
6. DBX-MW-X: NAPL Mobility Well screened over GCM interval

Downwind CAMP station

 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 2022)

 Proposed Monitoring Wells (Shallow + Deep) Proposed NAPL Wells

Scale

AS SHOWN

Figure No. 3.v12

Figure Name: Delineation Borings & Proposed Wells

Report: Remedial Optimization
Work Plan

Date: 7/11/2023

Drawn By: EK

Site Address: 450 Union Street
Brooklyn, New York

PHOTO LOG

Photo 1: View of peristaltic pump during purging and Horiba measuring low flow sampling parameters during the sampling of DB1-MW-1D.



Photo 2: View of Horiba measuring low flow groundwater sampling parameters.

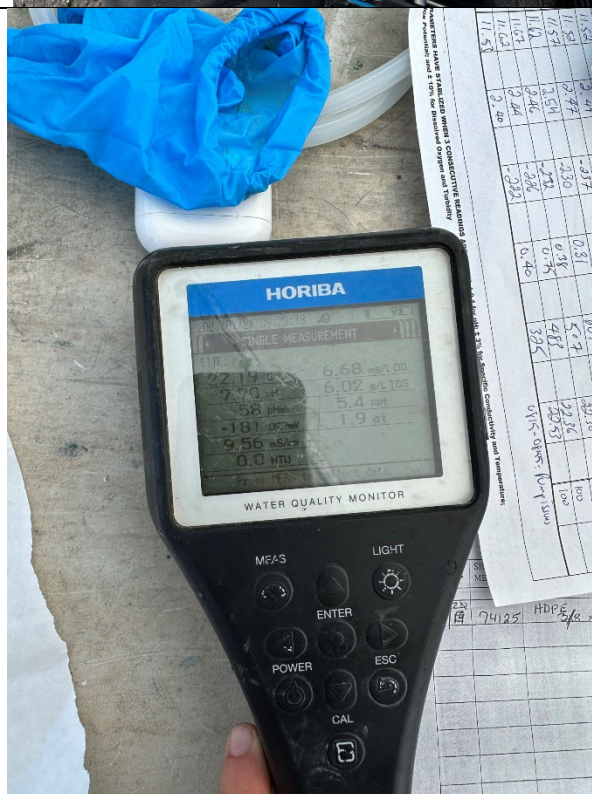


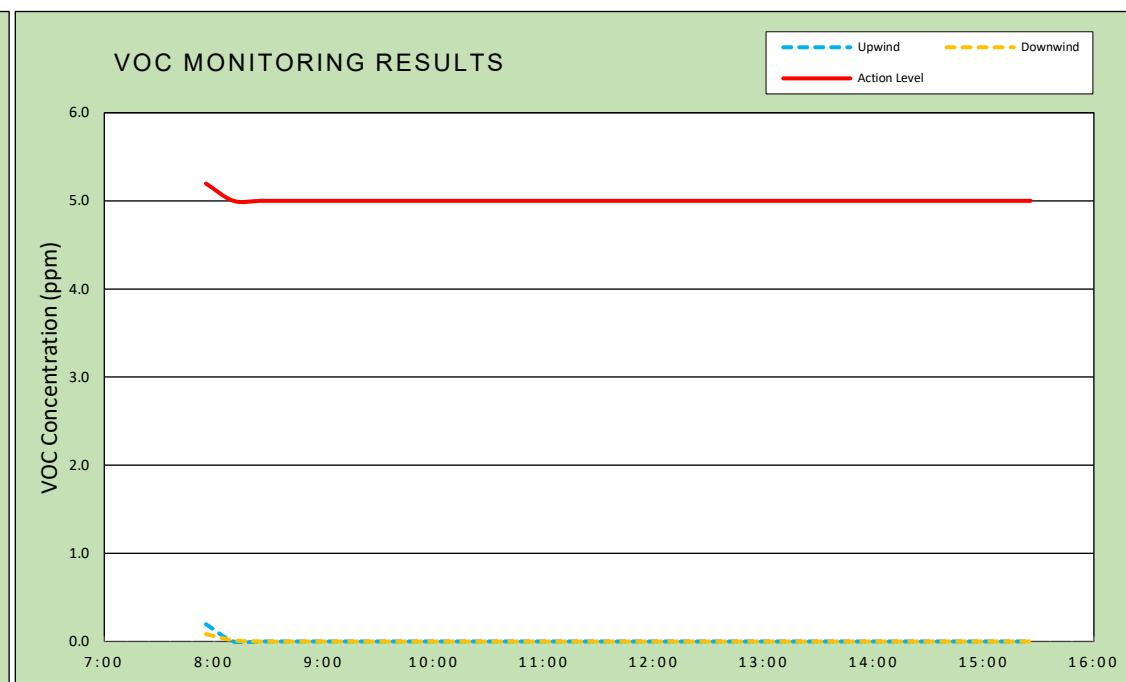
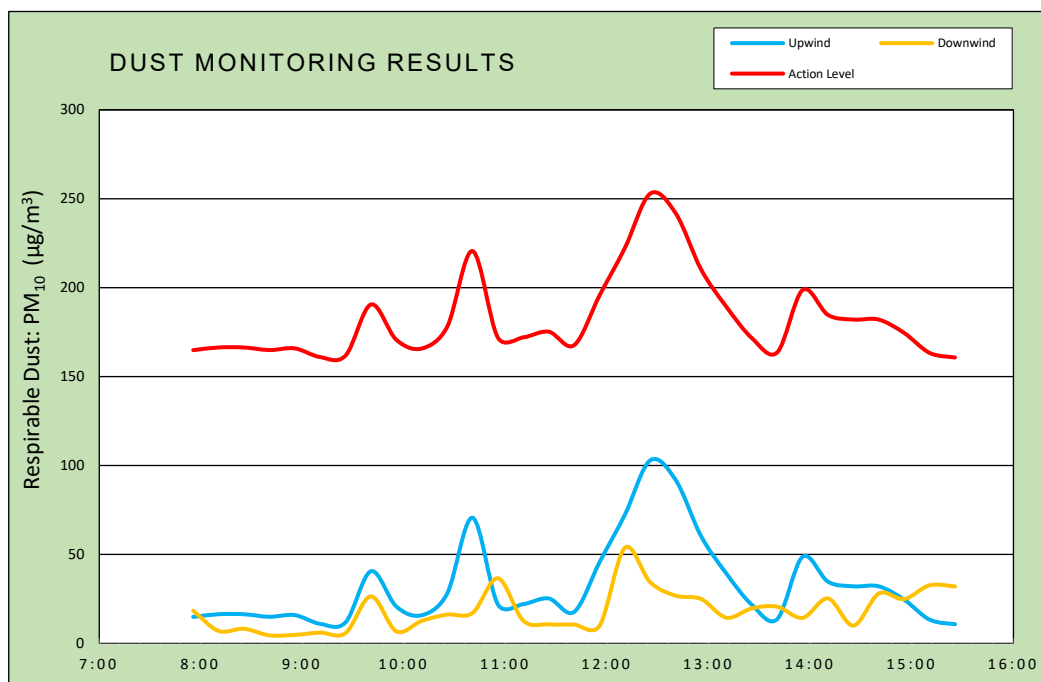
Photo 3: View of site facing southwest at the end of sampling event.



vEktor consultants	DAILY AIR MONITORING REPORT 450 Union Street Brooklyn, New York					07/21/2023	
						Rev. No. 0	Page 1 of 2
						Project Number:	
						Dust Action Level	150 $\mu\text{g}/\text{m}^3$
37 W. 37th St, 6th Floor - New York, NY						VOC Action Level	5 ppm

Weather Data Range for Work Day		Wind Direction	SSW	Relative Humidity (%)	53.0 - 96.0	Daily Rain Total (in)	0.36	Readings in the summary table and graphs below are the reported downwind concentrations.
Temperature (°F)	72.0 - 87.0	Wind Speed (MPH)	1.8 - 4.0	Barometer (inHg)	29.80 - 29.80	Avg. Dew Point Temp (°F)	69.4	

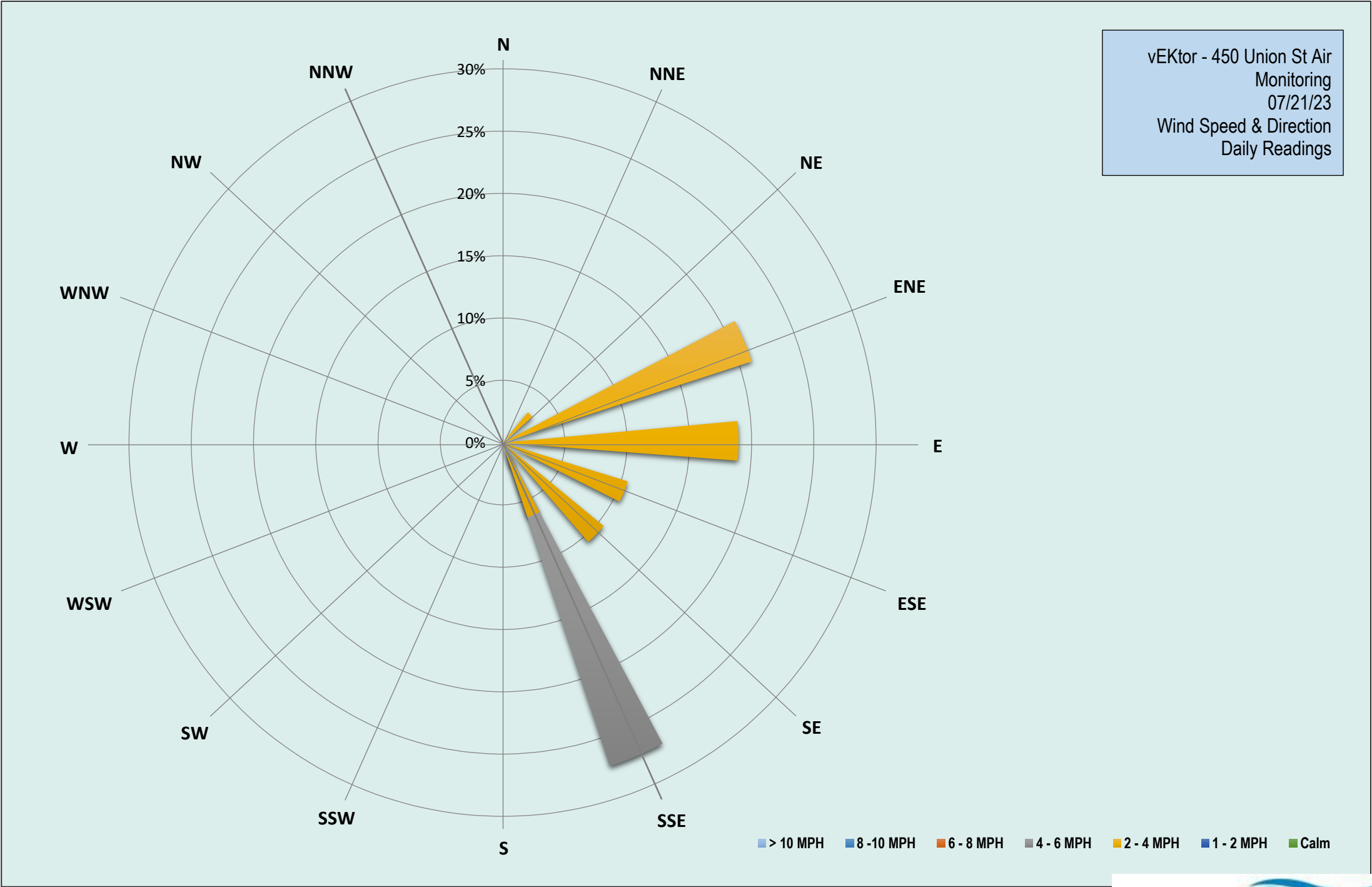
Station Location	Daily Avg. Dust Concentration ($\mu\text{g}/\text{m}^3$)	Max 15-Min Dust Concentration ($\mu\text{g}/\text{m}^3$)	Time of Max Dust Reading	Daily Avg. VOC Concentration (ppm)	Max 15-Min VOC Concentration (ppm)	Time of Max VOC Reading
Upwind	32.5	127.6	12:34	0.0	0.3	7:46
Downwind	18.6	61.3	15:40	0.0	0.1	8:16



Air Monitoring Notes:

Weather Notes:

vEKtor - 450 Union St Air
Monitoring
07/21/23
Wind Speed & Direction
Daily Readings



Friday, July 21, 2023				
Number of Instances Where Downwind Particulates Exceeds Upwind Particulate + 150 =				0
Number of Comparable Data Points =				31
Start Time:				7:56
End Time:				15:26
PARTICULATE DATA				
Upwind		Downwind		Exceeds Particulate Alarm Limit
Time	15-Min Avg Concentration (ug/m ³)	Time	15-Min Avg Concentration (ug/m ³)	
7:56	14.9	7:56	18.3	-
8:11	16.4	8:11	7.0	-
8:26	16.4	8:26	8.2	-
8:41	14.9	8:41	4.5	-
8:56	15.9	8:56	4.8	-
9:11	11.0	9:11	6.0	-
9:26	11.8	9:26	5.8	-
9:41	40.5	9:41	26.4	-
9:56	20.7	9:56	6.7	-
10:11	15.8	10:11	12.6	-
10:26	27.9	10:26	16.2	-
10:41	70.6	10:41	17.1	-
10:56	21.9	10:56	36.6	-
11:11	22.0	11:11	12.7	-
11:26	25.2	11:26	10.7	-
11:41	17.7	11:41	10.6	-
11:56	45.6	11:56	9.8	-
12:11	72.3	12:11	53.7	-
12:26	102.9	12:26	34.3	-
12:41	91.8	12:41	26.8	-
12:56	60.3	12:56	24.9	-
13:11	39.2	13:11	14.4	-
13:26	21.6	13:26	19.7	-
13:41	13.6	13:41	20.6	-
13:56	48.7	13:56	14.3	-
14:11	34.6	14:11	25.2	-
14:26	32.1	14:26	10.0	-
14:41	32.0	14:41	28.0	-
14:56	24.5	14:56	24.9	-
15:11	13.3	15:11	32.6	-
15:26	10.7	15:26	32.0	-

Friday, July 21, 2023				
Number of Instances Where Downwind VOCs Exceeds Upwind VOCs + 5 =				0
Number of Comparable Data Points =				0
Start Time:				7:56
End Time:				15:26
PID DATA				
Upwind		Downwind		Exceeds VOC Alarm Limit
Time	15-Min Avg Concentration (ppm)	Time	15-Min Avg Concentration (ppm)	
7:56	0.2	7:56	0.1	-
8:11	0.0	8:11	0.0	-
8:26	0.0	8:26	0.0	-
8:41	0.0	8:41	0.0	-
8:56	0.0	8:56	0.0	-
9:11	0.0	9:11	0.0	-
9:26	0.0	9:26	0.0	-
9:41	0.0	9:41	0.0	-
9:56	0.0	9:56	0.0	-
10:11	0.0	10:11	0.0	-
10:26	0.0	10:26	0.0	-
10:41	0.0	10:41	0.0	-
10:56	0.0	10:56	0.0	-
11:11	0.0	11:11	0.0	-
11:26	0.0	11:26	0.0	-
11:41	0.0	11:41	0.0	-
11:56	0.0	11:56	0.0	-
12:11	0.0	12:11	0.0	-
12:26	0.0	12:26	0.0	-
12:41	0.0	12:41	0.0	-
12:56	0.0	12:56	0.0	-
13:11	0.0	13:11	0.0	-
13:26	0.0	13:26	0.0	-
13:41	0.0	13:41	0.0	-
13:56	0.0	13:56	0.0	-
14:11	0.0	14:11	0.0	-
14:26	0.0	14:26	0.0	-
14:41	0.0	14:41	0.0	-
14:56	0.0	14:56	0.0	-
15:11	0.0	15:11	0.0	-
15:26	0.0	15:26	0.0	-