

**GOWANUS CANAL SUPERFUND SITE
RTA1 REMEDIAL CONSTRUCTION
Water Quality Monitoring Weekly Data Summary**

PERIOD: March 15th to March 19th, 2021

Date of Report: March 24, 2021

Report Contents

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Prepared by

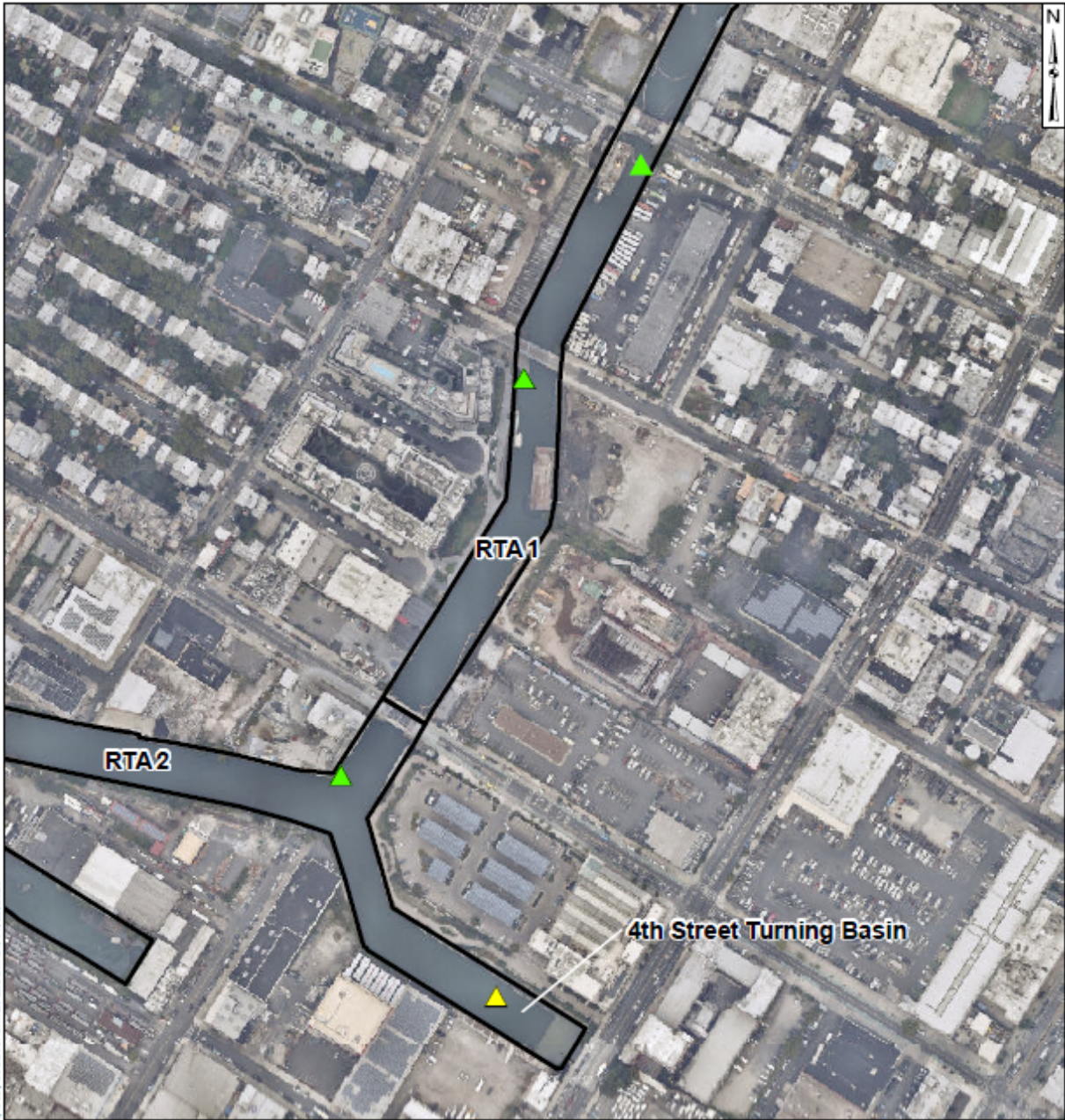
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1. SCOPE OF MONITORING

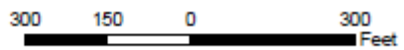
The following report summarizes water quality monitoring data collected during the week of March 15, 2021. In accordance with the Water Quality Monitoring Plan for In-waterway Construction Activities (WQMP) three turbidity buoys were deployed to monitor turbidity at the start of dredging between Carroll Street Bridge and 3rd Street Bridge. One turbidity buoy was deployed just south of the 3rd Street Bridge outside of the air curtain and traditional turbidity curtain. This buoy is referred to as the 3rd Street Sentinel Buoy. A second turbidity buoy was deployed just south of the Carroll Street Bridge and is referred to as the Carroll Street Sentinel Buoy. The third turbidity buoy was deployed in the Fourth Street Turning Basin in order to monitor background turbidity unaffected by in-water construction activities. This turbidity buoy is referred to as the Ambient Buoy. Prior to dredging north of the Union Street Bridge, on January 22, 2021 a fourth turbidity buoy was deployed just south of the Union Street Bridge and is referred to as the Union Street Sentinel Buoy. A map indicating the approximate locations of the turbidity buoys is provided in **Figure 1**. Each turbidity buoy was equipped with a YSI EXO3 water quality meter with optical turbidity sensor. The buoys were field calibrated and programmed such that readings were collected every 15 minutes. After each measurement, the turbidity data were transmitted to a File Transfer Portal (FTP) site via telemetry. This report presents a summary of turbidity data collected from the ambient and sentinel buoys between 7 AM and 6 PM each day during the week of March 15. Daily turbidity data tables are provided in **Appendix A**. No handheld measurements were collected during this reporting period. Visual observations of turbidity and sheen are summarized in Section 4.



\\msrserver\Gowanus-PR-A\03_GIS\mxd\Canal_Wide\Turbidity Buoy Locations.mxd; aka\mrcs; 11/20/2020

Legend

-  Ambient Buoy
-  Sentinel Buoy
-  RTA Boundary



Turbidity Buoy Locations

Gowanus Canal, Brooklyn, NY

B&B Engineers & Geologists
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an affiliate of Geosyntec Consultants

Kennesaw, GA

February 2021

Figure

1

2. REPORT OF EXCEEDANCES

No exceedances of the numerical action criterion were observed during the reporting period. Exceedances of the numerical trigger criterion were observed at the Carroll Street Sentinel Buoy on March 15 and March 16. Exceedances of the numerical trigger criterion were observed at the Union Street Sentinel Buoy on March 17. Further information is provided in Section 2.1. Refer to the WQMP for further information regarding the Trigger and Action Criteria. Threshold criteria are summarized as follows:

- **Trigger criterion** – Any of the following:
 - The rolling average of the relevant sentinel buoy turbidity measurements over a one-hour period exceeds the rolling average of the ambient buoy turbidity measurements by 20 NTU excluding any eliminated outlier measurements and in-waterway construction activities cannot be immediately excluded as the source following consultation with EPA; or
 - Either an oil sheen or a turbidity plume is visually observed at the relevant sentinel buoy and in-waterway construction activities are readily identified as the source.
- **Action criterion** – Any of the following:
 - The rolling average of the turbidity measurements of the sentinel buoy outside of RTA1 over a one-hour period exceeds the rolling average of the ambient buoy turbidity measurements by 40 NTU excluding any eliminated outlier measurements and in-waterway construction activities cannot be immediately excluded as the source following consultation with EPA; or
 - Either an oil sheen or a turbidity plume is visually observed outside of RTA1 and any deployed engineering controls and in-waterway construction activities are readily identified as the source.

An outlier is defined as a reading that is outside the range of 50 to 200 percent of the average of the three previous readings. In addition, to be considered an outlier, the subsequent reading must return to a range of 75 to 133 percent of the average of the three readings preceding the outlier.

2.1 Response to Criteria Exceedances

The trigger level criterion serves to provide early notification to the contractor of construction activities that may lead to an exceedance of the action level criterion. In the event of an exceedance to the trigger criterion, the contractor will not be stopped and the contractor will be directed to investigate the source of the exceedance and evaluate Best Management Practices (BMPs). In the event of an exceedance to the action level criterion, in-waterway construction activities may be slowed or temporarily suspended as necessary while the contractor investigates the source of the exceedance and appropriate mitigation and corrective measures are determined. A more detailed description of responses to exceedances of the trigger and action level criteria is provided in Section 4.2 of the WQMP.

On March 15, an exceedance to the numerical trigger criterion at the Carroll Street Sentinel Buoy from 3:15 PM to 4:15 PM occurred as a result of sediment resuspension during mini hopper changeouts. On March 16 at 5:30 PM, an exceedance to the numerical trigger criterion at the Carroll Street Sentinel Buoy resulted from sediment resuspension from the crew boat departing for the day. On March 17 from 9:45 AM to 10:45 AM an exceedance to the numerical trigger criterion was observed at the Union Street Sentinel Buoy during debris raking operations occurring approximately 150 ft away from the sentinel buoy.

3. TURBIDITY BUOY DATA

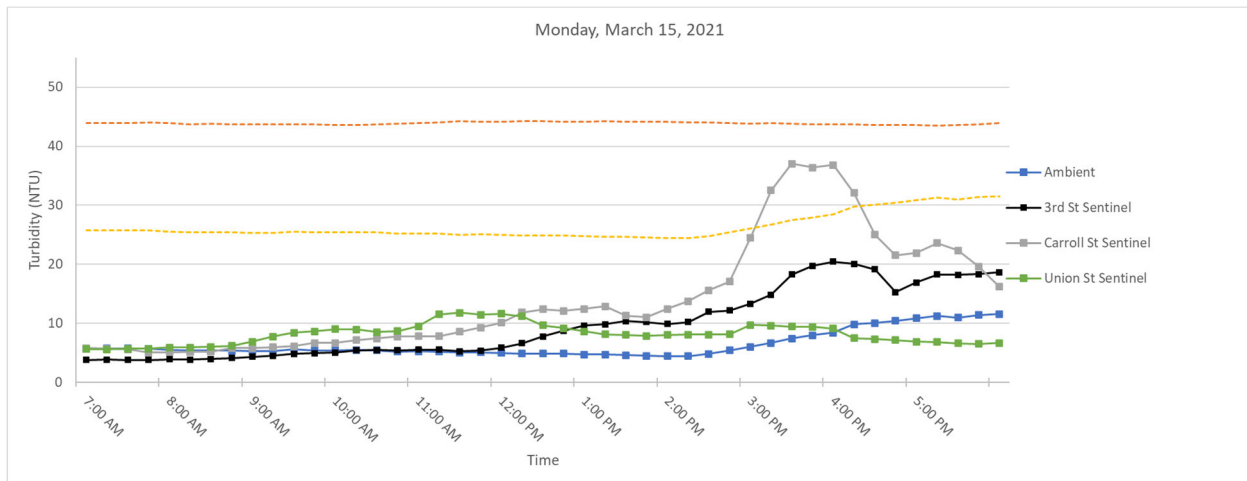
The following section provides turbidity data for the sentinel and ambient turbidity buoys from 7 AM to 6 PM from March 15 to March 19, 2021. Exceedance of the numerical trigger criterion were observed on March 15 and 16 at the Carroll Street Sentinel Buoy and on March 17 at the Union Street Sentinel Buoy. Section 2.1 contains further information on these exceedances. **Table 1** below provides a summary of the turbidity data for the reporting period.

Table 1. Daily average and maximum differences between the rolling average turbidity readings from RTA1 sentinel buoys and the ambient buoy between 7 AM and 6 PM

Date	Average Rolling Average Difference (NTU)			Maximum Rolling Average Difference (NTU)		
	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient
Monday March 15, 2021	3.44	8.02	1.56	12.01	29.58	6.66
Tuesday March 16, 2021	1.48	6.85	2.92	9.78	20.09	6.18
Wednesday March 17, 2021	2.31	5.68	7.95	8.17	16.90	24.48
Thursday March 18, 2021	0.73	3.25	4.20	4.50	9.30	11.03
Friday March 19, 2021	0.21	2.72	3.12	1.99	6.44	8.37

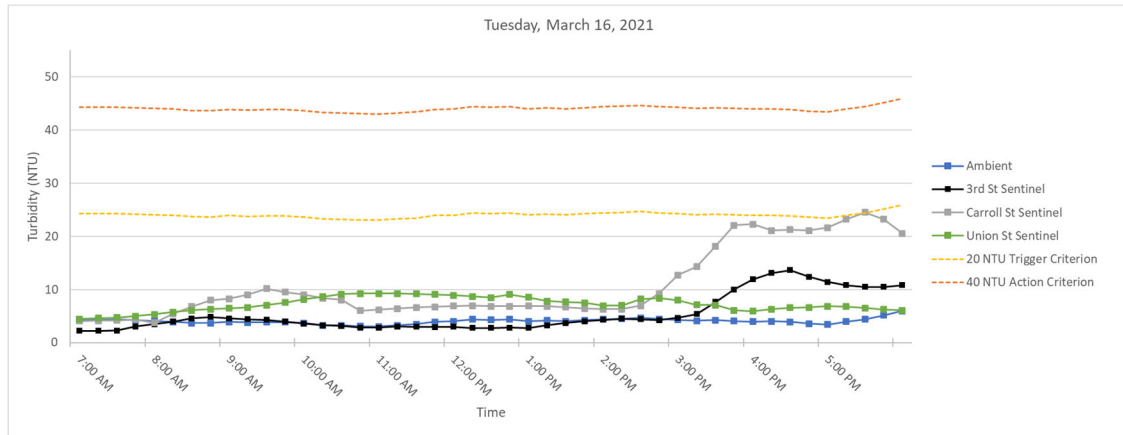
3.1 Monday, March 15, 2021

Figure 2. Hourly rolling average turbidity readings on Monday, March 15, 2021 from 7 AM to 6 PM.



3.2 Tuesday, March 16, 2021

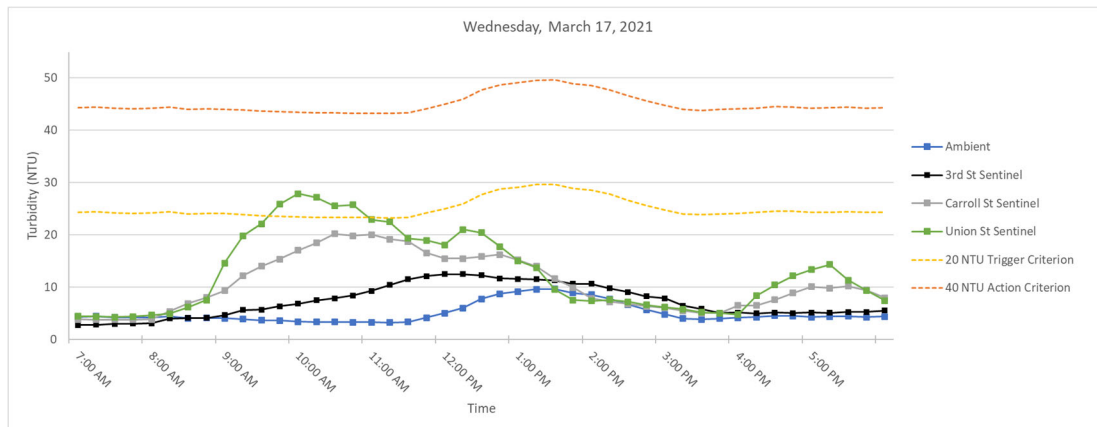
Figure 3. Hourly rolling average turbidity readings on Tuesday, March 16, 2021 from 7 AM to 6 PM.



Note: On March 16, 2021 two spikes in turbidity at the Carroll Street Sentinel Buoy were eliminated as outliers in accordance with the outlier analysis defined in Section 2 and the WQMP. At 07:15 AM a spike in turbidity of 7.33 NTU was removed at the Ambient Buoy. At 3:15 PM a spike of 36.99 NTU was removed.

3.3 Wednesday, March 17, 2021

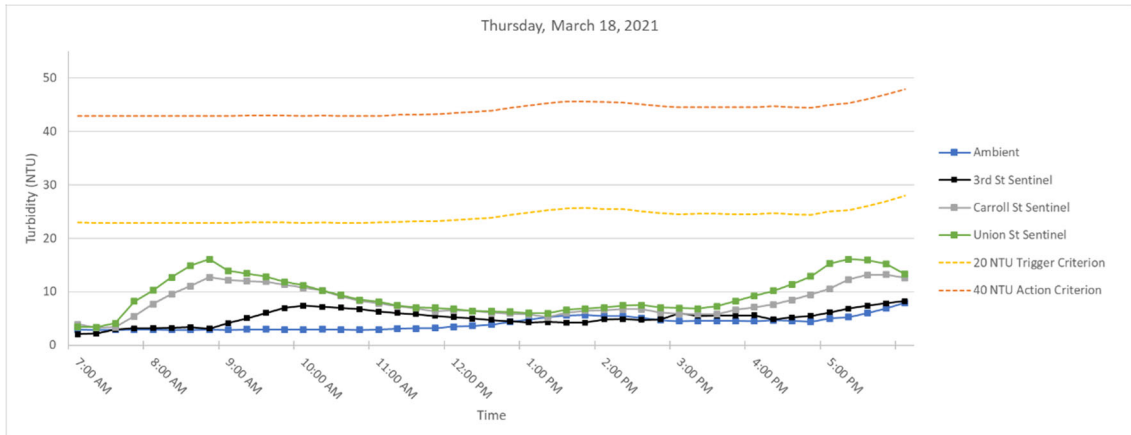
Figure 4. Hourly rolling average turbidity readings on Wednesday, March 17, 2021 from 7 AM to 6 PM.



Note: On March 17, 2021 two spikes in turbidity at the 3rd Street Sentinel Buoy and Carroll Street Sentinel Buoy were eliminated as outliers in accordance with the outlier analysis defined in Section 2 and the WQMP. At 08:15 AM a spike in turbidity of 7.45 NTU was removed at the 3rd Street Sentinel Buoy. At 4:00 PM a spike of 12.0 NTU was removed at the Carroll Street Sentinel Buoy.

3.4 Thursday, March 18, 2021

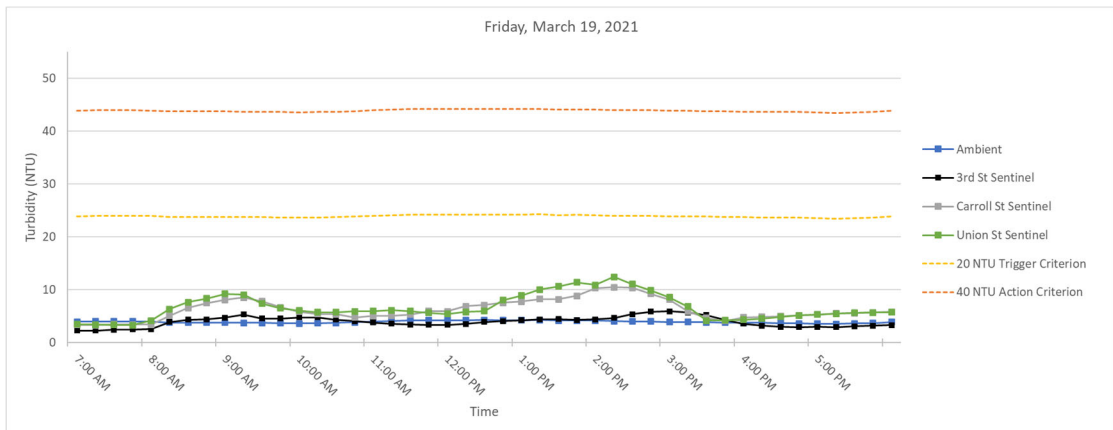
Figure 5. Hourly rolling average turbidity readings on Thursday, March 18, 2021 from 7 AM to 6 PM.



Note: On March 18, 2021 two spikes in turbidity at the 3rd Street Sentinel Buoy were eliminated as outliers in accordance with the outlier analysis defined in Section 2 and the WQMP. At 07:30 AM a spike in turbidity of 6.32 NTU was removed. At 3:00 PM a spike of 9.95 NTU was removed.

3.5 Friday, March 19, 2021

Figure 6. Hourly rolling average turbidity readings on Friday, March 19, 2021 from 7 AM to 6 PM.



SUMMARY OF VISUAL OBSERVATIONS

Some sheen was observed during dredging with the environmental bucket at the head of the Canal. This sheen was localized in the area of dredging and did not migrate south of the Union Street Bridge.

APPENDIX A
Turbidity Data Tables

Monday, March 15, 2021

Time	Turbidity (NTU)				Rolling Average Turbidity (NTU)				Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Union Street	Ambient	3rd Street	Carroll Street	Union Street	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient
7:00:00	5.49	3.94	4.98	6.01	5.71	3.82	5.82	5.62	-1.89	0.12	-0.08
7:15:00	5.46	3.97	4.8	6	5.69	3.84	5.68	5.59	-1.85	-0.01	-0.10
7:30:00	5.54	3.67	5.06	5.69	5.68	3.81	5.59	5.68	-1.87	-0.10	0.00
7:45:00	5.66	3.63	5.44	5.71	5.66	3.80	5.02	5.72	-1.86	-0.64	0.06
8:00:00	5.36	4.25	5.11	6.22	5.50	3.89	5.08	5.93	-1.61	-0.42	0.42
8:15:00	4.93	3.83	5.23	5.98	5.39	3.87	5.13	5.92	-1.52	-0.26	0.53
8:30:00	5.44	4.47	5.1	6.47	5.39	3.97	5.19	6.01	-1.42	-0.20	0.63
8:45:00	5.49	4.41	8.17	6.56	5.38	4.12	5.81	6.19	-1.26	0.43	0.81
9:00:00	5.16	4.74	5.41	9.27	5.28	4.34	5.80	6.90	-0.94	0.53	1.62
9:15:00	5.28	5.07	5.84	10.59	5.26	4.50	5.95	7.77	-0.76	0.69	2.51
9:30:00	6.52	5.51	6.18	9.12	5.58	4.84	6.14	8.40	-0.74	0.56	2.82
9:45:00	4.79	4.99	7.69	7.71	5.45	4.94	6.66	8.65	-0.50	1.21	3.20
10:00:00	5.36	4.96	8.25	8.29	5.42	5.05	6.67	9.00	-0.37	1.25	3.57
10:15:00	5.33	6.47	7.95	9.07	5.46	9.07	7.18	8.96	-0.06	1.73	3.50
10:30:00	5.24	5.51	7.14	10.91	5.45	5.49	7.44	9.02	0.04	1.99	3.57
10:45:00	5.23	5.16	7.81	9.75	5.19	5.42	7.77	9.15	0.23	2.58	3.96
11:00:00	5.13	5.45	7.85	10.91	5.26	5.51	7.80	9.79	0.25	2.54	4.53
11:15:00	5.05	5.01	8.38	16.29	5.20	5.52	7.83	11.39	0.32	2.63	6.19
11:30:00	4.55	5.17	11.76	10.2	5.04	5.26	8.59	11.61	0.22	3.55	6.57
11:45:00	5.51	5.96	10.63	10.28	5.09	5.35	9.29	11.49	0.26	4.19	6.39
12:00:00	4.72	7.62	11.8	10.57	4.99	5.84	10.08	11.65	0.85	5.09	6.66
12:15:00	4.62	9.32	16.74	8.53	4.89	6.62	11.86	11.17	1.73	6.97	6.28
12:30:00	4.98	10.67	11	8.64	4.88	7.75	12.39	9.64	2.87	7.51	4.77
12:45:00	4.61	10.19	10.32	7.82	4.89	8.75	12.10	9.17	3.86	7.21	4.28
13:00:00	4.69	10.37	12.38	7.73	4.72	9.63	12.45	8.66	4.91	7.72	3.93
13:15:00	4.57	8.64	13.98	8.03	4.69	9.84	12.88	8.15	5.14	8.19	3.46
13:30:00	4.2	12.1	8.79	7.95	4.61	10.39	11.29	8.03	5.78	6.68	3.42
13:45:00	4.52	9.79	9.72	7.97	4.52	10.22	11.04	7.90	5.70	6.52	3.38
14:00:00	4.12	8.58	17.4	8.47	4.42	9.90	12.45	8.03	5.48	8.03	3.61
14:15:00	4.89	12.09	18.93	7.94	4.46	10.24	13.76	8.07	5.78	9.30	3.61
14:30:00	6.3	17.22	23.05	8.04	4.81	11.96	15.58	8.07	7.15	10.77	3.27
14:45:00	7.32	13.27	16.2	8.21	5.43	12.19	17.06	8.13	6.76	11.63	2.70
15:00:00	7.48	15.42	46.93	16	6.02	13.32	24.50	9.73	7.29	18.48	3.71
15:15:00	7.51	16.32	57.38	7.83	6.70	14.86	32.50	9.60	8.16	25.80	2.90
15:30:00	8.68	28.98	41.61	7.24	7.46	18.24	37.03	9.46	10.78	29.58	2.01
15:45:00	8.83	24.8	19.9	7.66	7.96	19.76	36.40	9.39	11.79	28.44	1.42
16:00:00	9.72	16.75	18.2	7.03	8.44	20.45	36.80	9.15	12.01	28.36	0.71
16:15:00	14.34	13.57	23.49	7.75	9.82	20.08	32.12	7.50	10.27	22.30	-2.31
16:30:00	8.69	11.51	21.98	7.06	10.05	19.12	25.04	7.35	9.07	14.98	-2.70
16:45:00	10.52	9.87	24	6.22	10.42	15.30	21.51	7.14	4.88	11.09	-3.28
17:00:00	11.16	32.81	33.02	6.3	10.89	16.90	24.14	6.87	6.02	13.25	-4.01
17:15:00	11.52	23.52	24.98	6.93	11.25	18.26	25.49	6.85	7.01	14.25	-4.39
17:30:00	12.92	13.24	18.51	6.52	10.96	18.19	24.50	6.61	7.23	13.54	-4.36
17:45:00	10.84	12.08	10.92	6.65	11.39	18.30	22.29	6.52	6.91	10.89	-4.87
18:00:00	11.42	11.56	10.33	6.93	11.57	18.64	19.55	6.67	7.07	7.98	-4.91

Tuesday, March 16, 2021

Time	Turbidity (NTU)				Rolling Average Turbidity (NTU)				Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Union Street	Ambient	3rd Street	Carroll Street	Union Street	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient
7:00:00	4.4	2	3.54	4.68	4.28	2.25	4.06	4.47	-2.03	-0.22	0.19
7:15:00	4.61	2.17	3.71	4.82	4.30	2.21	4.10	4.62	-2.08	-0.19	0.32
7:30:00	4.12	2.62	3.67	4.99	4.34	2.29	4.17	4.74	-2.05	-0.16	0.40
7:45:00	3.42	6.09	--	5.73	4.21	3.05	4.39	5.01	-1.17	0.17	0.79
8:00:00	3.86	4.41	4.05	6.29	4.08	3.46	3.74	5.30	-0.62	-0.34	1.22
8:15:00	3.66	4.51	10.26	6.9	3.93	3.96	5.42	5.75	0.03	1.49	1.81
8:30:00	3.5	5.17	9.12	6.44	3.71	4.56	6.78	6.07	0.85	3.06	2.36
8:45:00	3.91	4.11	8.62	6.14	3.67	4.86	8.01	6.30	1.19	4.34	2.63
9:00:00	4.65	4.57	9.26	6.6	3.92	4.55	8.26	6.47	0.64	4.35	2.56
9:15:00	3.22	3.74	7.96	7.02	3.79	4.42	9.04	6.62	0.63	5.26	2.83
9:30:00	3.91	3.96	15.83	9.22	3.84	4.31	10.16	7.08	0.47	6.32	3.25
9:45:00	3.7	3.35	5.97	8.9	3.88	3.95	9.53	7.58	0.07	5.65	3.70
10:00:00	2.87	2.27	6.23	8.96	3.67	3.58	9.05	8.14	-0.09	5.38	4.47
10:15:00	2.71	2.91	5.93	9.25	3.28	3.25	8.38	8.67	-0.04	5.10	5.39
10:30:00	2.98	3.29	6.21	9.32	3.23	3.16	8.03	9.13	-0.08	4.80	5.90
10:45:00	3.17	2.38	5.91	9.68	3.09	2.84	6.05	9.22	-0.25	2.96	6.14
11:00:00	3.47	3.36	6.67	8.88	3.04	2.84	6.19	9.22	-0.20	3.15	6.18
11:15:00	3.99	3.17	7.28	9.04	3.26	3.02	6.40	9.23	-0.24	3.14	5.97
11:30:00	3.7	2.81	6.97	9.15	3.46	3.00	6.61	9.21	-0.46	3.15	5.75
11:45:00	5.28	2.89	6.81	8.63	3.92	2.92	6.73	9.08	-1.00	2.81	5.15
12:00:00	3.58	2.64	6.83	9	4.00	2.97	6.91	8.94	-1.03	2.91	4.94
12:15:00	5.43	2.39	6.86	7.8	4.40	2.78	6.95	8.72	-1.62	2.55	4.33
12:30:00	3.48	2.97	6.87	7.72	4.29	2.74	6.87	8.46	-1.55	2.57	4.17
12:45:00	4.12	3.15	6.92	12.14	4.38	2.81	6.86	9.06	-1.57	2.48	4.68
13:00:00	3.48	2.75	7.01	6.04	4.02	2.78	6.90	8.54	-1.24	2.88	4.52
13:15:00	4.4	4.91	6.64	5.48	4.18	3.23	6.86	7.84	-0.95	2.68	3.65
13:30:00	4.68	4.79	5.91	6.81	4.03	3.71	6.67	7.64	-0.32	2.64	3.61
13:45:00	4.52	4.45	5.69	6.91	4.24	4.01	6.43	7.48	-0.23	2.19	3.24
14:00:00	4.84	4.46	6.34	9.53	4.38	4.27	6.32	6.95	-0.11	1.93	2.57
14:15:00	4.22	3.98	6.84	6.23	4.53	4.52	6.28	6.99	-0.01	1.75	2.46
14:30:00	5.1	4.25	10.13	11.43	4.67	4.39	6.98	8.18	-0.29	2.31	3.51
14:45:00	3.49	4.07	17.14	7.66	4.43	4.24	9.23	8.35	-0.19	4.79	3.92
15:00:00	3.8	6.67	23.21	5.03	4.29	4.69	12.73	7.98	0.40	8.44	3.69
15:15:00	3.92	8.06	--	5.33	4.11	5.41	14.33	7.14	1.30	10.22	3.03
15:30:00	4.77	15.25	22.18	5.95	4.22	7.66	18.17	7.08	3.44	13.95	2.86
15:45:00	4.34	16.09	25.73	6.59	4.06	10.03	22.07	6.11	5.96	18.00	2.05
16:00:00	3.11	13.6	18.16	6.71	3.99	11.93	22.32	5.92	7.95	18.33	1.93
16:15:00	3.91	12.61	18.27	6.94	4.01	13.12	21.09	6.30	9.11	17.08	2.29
16:30:00	3.34	10.8	21.87	6.72	3.89	13.67	21.24	6.58	9.78	17.35	2.69
16:45:00	3.33	9.03	21.5	6.31	3.61	12.43	21.11	6.65	8.82	17.50	3.05
17:00:00	3.42	11.03	28.32	7.47	3.42	11.41	21.62	6.83	7.99	18.20	3.41
17:15:00	5.85	10.76	26.3	6.43	3.97	10.85	23.25	6.77	6.88	19.28	2.80
17:30:00	6.16	10.96	24.57	5.59	4.42	10.52	24.51	6.50	6.10	20.09	2.08
17:45:00	7.11	10.79	15.46	5.51	5.17	10.51	23.23	6.26	5.34	18.06	1.09
18:00:00	7.25	10.47	8.25	5.41	5.96	10.80	20.58	6.08	4.84	14.62	0.12

Wednesday, March 17, 2021

Time	Turbidity (NTU)				Rolling Average Turbidity (NTU)				Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Union Street	Ambient	3rd Street	Carroll Street	Union Street	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient
7:00:00	3.53	2.66	3.95	4.21	4.33	2.74	3.82	4.42	-1.59	-0.51	0.09
7:15:00	5.21	3.07	3.64	4.28	4.41	2.80	3.78	4.37	-1.62	-0.63	-0.05
7:30:00	4.05	3.71	3.66	4.57	4.21	2.97	3.75	4.28	-1.24	-0.46	0.07
7:45:00	3.96	2.96	3.82	4.79	4.13	3.00	3.77	4.39	-1.13	-0.36	0.26
8:00:00	4.2	2.81	4.07	5.21	4.19	3.04	3.83	4.61	-1.15	-0.36	0.42
8:15:00	4.56	--	11.58	5.57	4.40	3.14	5.35	4.88	-1.26	0.96	0.49
8:30:00	3.41	3.46	11.24	10.72	4.04	3.24	6.87	6.17	-0.80	2.84	2.14
8:45:00	4.31	3.91	9.42	11.37	4.09	3.29	8.03	7.53	-0.80	3.94	3.44
9:00:00	3.81	5.48	10.36	40.08	4.06	3.92	9.33	14.59	-0.14	5.28	10.53
9:15:00	3.22	7.87	18.45	31.33	3.86	5.18	12.21	19.81	1.32	8.35	15.95
9:30:00	3.44	7.66	20.5	17.1	3.64	5.68	13.99	22.12	2.04	10.36	18.48
9:45:00	3.17	6.7	18.09	29.3	3.59	6.32	15.36	25.84	2.73	11.77	22.25
10:00:00	3.42	6.47	17.72	21.65	3.41	6.84	17.02	27.89	3.42	13.61	24.48
10:15:00	3.48	8.74	17.58	36.54	3.35	7.49	18.47	27.18	4.14	15.12	23.84
10:30:00	3.03	9.71	27.17	23.14	3.31	7.86	20.21	25.55	4.55	16.90	22.24
10:45:00	3.34	10.26	18.62	18.21	3.29	8.38	19.84	25.77	5.09	16.55	22.48
11:00:00	3.18	11.02	19.11	14.99	3.29	9.24	20.04	22.91	5.95	16.75	19.62
11:15:00	3.11	12.23	13.25	19.51	3.23	10.39	19.15	22.48	7.16	15.92	19.25
11:30:00	3.96	14.26	15.38	20.84	3.32	11.50	18.71	19.34	8.17	15.38	16.01
11:45:00	7.23	12.75	16.42	21.09	4.16	12.10	16.56	18.93	7.94	12.39	14.76
12:00:00	7.5	11.99	13.21	13.85	5.00	12.45	15.47	18.06	7.45	10.48	13.06
12:15:00	8.13	11.23	18.96	29.85	5.99	12.49	15.44	21.03	6.51	9.46	15.04
12:30:00	11.76	11.06	15.2	16.38	7.72	12.26	15.83	20.40	4.54	8.12	12.69
12:45:00	9.08	11.29	17.46	7.56	8.74	11.66	16.25	17.75	2.92	7.51	9.01
13:00:00	9.29	12.17	11.04	7.59	9.15	11.55	15.17	15.05	2.40	6.02	5.89
13:15:00	9.71	11.79	7.25	7.32	9.59	11.51	13.98	13.74	1.91	4.39	4.15
13:30:00	8.44	9.99	7.13	8.7	9.66	11.26	11.62	9.51	1.60	1.96	-0.15
13:45:00	7.94	7.79	6.61	6.55	8.89	10.61	9.90	7.54	1.71	1.01	-1.35
14:00:00	7.51	11.3	7.09	6.67	8.58	10.61	7.82	7.37	2.03	-0.75	-1.21
14:15:00	5.16	7.8	7.83	8.64	7.75	9.73	7.18	7.58	1.98	-0.57	-0.18
14:30:00	4.13	8.23	5.23	5.46	6.64	9.02	6.78	7.20	2.39	0.14	0.57
14:45:00	3.54	5.97	4.78	5.65	5.66	8.22	6.31	6.59	2.56	0.65	0.94
15:00:00	3.63	5.86	5.26	4.38	4.79	7.83	6.04	6.16	3.04	1.24	1.37
15:15:00	3.59	4.27	4.19	4.75	4.01	6.43	5.46	5.78	2.42	1.45	1.77
15:30:00	4.24	4.78	5.74	5.68	3.83	5.82	5.04	5.18	2.00	1.21	1.36
15:45:00	4.84	4.57	5.24	4.64	3.97	5.09	5.04	5.02	1.12	1.07	1.05
16:00:00	4.32	6.22	--	4.15	4.12	5.14	5.11	4.72	1.02	0.98	0.60
16:15:00	4.38	4.99	5.19	22.45	4.27	4.97	5.09	8.33	0.69	0.82	4.06
16:30:00	4.9	5.11	9.78	15.24	4.54	5.13	6.49	10.43	0.60	1.95	5.90
16:45:00	4.05	4.21	12.14	14.3	4.50	5.02	8.09	12.16	0.52	3.59	7.66
17:00:00	3.71	5.02	11.32	10.58	4.27	5.11	9.61	13.34	0.84	5.34	9.07
17:15:00	4.78	6.06	10.49	9.12	4.36	5.08	9.78	14.34	0.71	5.42	9.97
17:30:00	4.69	5.89	7.26	7.5	4.43	5.26	10.20	11.35	0.83	5.77	6.92
17:45:00	4.14	5.12	5.94	5.49	4.27	5.26	9.43	9.40	0.99	5.16	5.12
18:00:00	4.38	5.55	4.9	4.49	4.34	5.53	7.98	7.44	1.19	3.64	3.10

Thursday, March 18, 2021

Time	Turbidity (NTU)				Rolling Average Turbidity (NTU)				Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Union Street	Ambient	3rd Street	Carroll Street	Union Street	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient
7:00:00	3.01	2.03	3.25	3.18	2.93	2.02	3.91	3.39	-0.90	0.99	0.46
7:15:00	2.72	2.62	3.21	3.27	2.87	2.13	3.24	3.34	-0.74	0.37	0.47
7:30:00	2.97	--	3.8	7.42	2.89	2.16	3.33	4.14	-0.73	0.44	1.25
7:45:00	2.87	2.41	13.73	23.7	2.90	2.32	5.40	8.20	-0.58	2.50	5.31
8:00:00	2.93	2.57	14.64	13.89	2.90	2.41	7.73	10.29	-0.49	4.83	7.39
8:15:00	2.79	2.43	12.37	15.23	2.86	2.51	9.55	12.70	-0.35	6.69	9.85
8:30:00	2.85	3.13	10.88	14.25	2.88	2.64	11.08	14.90	-0.25	8.20	12.02
8:45:00	3.06	4.86	11.86	13.24	2.90	3.08	12.70	16.06	0.18	9.80	13.16
9:00:00	2.81	7.51	11.19	13	2.89	4.10	12.19	13.92	1.21	9.30	11.03
9:15:00	3.26	7.23	13.72	11.43	2.95	5.03	12.00	13.43	2.08	9.05	10.48
9:30:00	2.87	7.4	11.72	12.07	2.97	6.03	11.87	12.80	3.06	8.90	9.83
9:45:00	2.72	7.81	8.41	9.46	2.94	6.96	11.38	11.84	4.02	8.44	8.90
10:00:00	2.85	7.08	8.8	9.98	2.90	7.41	10.77	11.19	4.50	7.87	8.29
10:15:00	3.12	6.26	8.39	8.07	2.96	7.16	10.21	10.20	4.19	7.24	7.24
10:30:00	2.98	6.58	8.54	7.29	2.91	7.03	9.17	9.37	4.12	6.26	6.47
10:45:00	2.69	5.81	7.31	7.45	2.87	6.71	8.29	8.45	3.84	5.42	5.58
11:00:00	3.01	5.74	5.95	8.01	2.93	6.29	7.80	8.16	3.36	4.87	5.23
11:15:00	3.53	5.67	6.49	6.3	3.07	6.01	7.34	7.42	2.95	4.27	4.36
11:30:00	3.48	5.35	6.25	6.33	3.14	5.83	6.91	7.08	2.69	3.77	3.94
11:45:00	3.36	4.7	5.48	7.01	3.21	5.45	6.30	7.02	2.24	3.08	3.81
12:00:00	3.88	4.77	8.4	6.27	3.45	5.25	6.51	6.78	1.79	3.06	3.33
12:15:00	3.8	4.51	5.32	6.09	3.61	5.00	6.39	6.40	1.39	2.78	2.79
12:30:00	4.66	4.15	5.01	5.94	3.84	4.70	6.09	6.33	0.86	2.26	2.49
12:45:00	6.14	3.95	5.26	5.91	4.37	4.42	5.89	6.24	0.05	1.53	1.88
13:00:00	5.61	4.04	4.72	6.03	4.82	4.28	5.74	6.05	-0.53	0.92	1.23
13:15:00	6.04	5.06	5.68	8.82	5.25	4.34	5.20	6.56	-0.91	-0.05	1.31
13:30:00	5.56	3.95	9.64	8.58	5.60	4.23	6.06	7.06	-1.37	0.46	1.45
13:45:00	4.88	4.25	6.98	6.92	5.65	4.25	6.46	7.25	-1.40	0.81	1.61
14:00:00	5.21	6.72	5.81	6.59	5.46	4.80	6.57	7.39	-0.66	1.11	1.93
14:15:00	5.58	4.33	5.64	7.56	5.45	4.86	6.75	7.69	-0.59	1.30	2.24
14:30:00	4.71	4.39	5.69	7.79	5.19	4.73	6.75	7.49	-0.46	1.56	2.30
14:45:00	4.14	4.38	6.16	6.45	4.90	4.81	6.06	7.06	-0.09	1.15	2.16
15:00:00	3.89	--	6.01	6.46	4.71	4.96	5.86	6.97	0.25	1.16	2.26
15:15:00	5.49	4.39	5.43	5.95	4.76	4.37	5.79	6.84	-0.39	1.02	2.08
15:30:00	4.59	4.44	5.59	9.61	4.56	4.40	5.78	7.25	-0.16	1.21	2.69
15:45:00	4.63	4.51	9.99	12.82	4.55	4.43	6.64	8.26	-0.12	2.09	3.71
16:00:00	3.96	4.55	8.42	11.33	4.51	4.47	7.09	9.23	-0.04	2.58	4.72
16:15:00	4.76	6.18	8.61	11.07	4.69	4.81	7.61	10.16	0.13	2.92	5.47
16:30:00	4.73	6.23	9.73	12.24	4.53	5.18	8.47	11.41	0.65	3.93	6.88
16:45:00	3.98	5.99	10.61	17.05	4.41	5.49	9.47	12.90	1.08	5.06	8.49
17:00:00	7.6	7.75	15.21	24.57	5.01	6.14	10.52	15.25	1.13	5.51	10.25
17:15:00	7.97	8.11	17.34	15.64	5.81	6.85	12.30	16.11	1.04	6.49	10.31
17:30:00	7.88	8.74	12.76	10.18	6.43	7.36	13.13	15.94	0.93	6.70	9.50
17:45:00	8.11	8.54	10.06	8.67	7.11	7.83	13.20	15.22	0.72	6.09	8.11
18:00:00	8.16	7.99	7.57	7.52	7.94	8.23	12.59	13.32	0.28	4.64	5.37

Friday, March 19, 2021

Time	Turbidity (NTU)				Rolling Average Turbidity (NTU)				Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Union Street	Ambient	3rd Street	Carroll Street	Union Street	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient
7:00:00	4.36	2.21	3.14	2.97	3.91	2.23	3.35	3.41	-1.68	-0.56	-0.50
7:15:00	3.77	2.36	3.03	3.3	3.96	2.23	3.27	3.36	-1.73	-0.69	-0.60
7:30:00	3.89	3.01	4.12	3.36	3.96	2.39	3.42	3.31	-1.57	-0.54	-0.65
7:45:00	3.73	2.42	3.35	3.25	3.99	2.45	3.39	3.27	-1.54	-0.60	-0.72
8:00:00	3.86	2.65	3.28	7.79	3.92	2.53	3.38	4.13	-1.39	-0.54	0.21
8:15:00	3.47	8.81	11.47	13.98	3.74	3.85	5.05	6.34	0.11	1.31	2.59
8:30:00	3.87	4.55	10.47	9.63	3.76	4.29	6.54	7.60	0.52	2.77	3.84
8:45:00	3.84	3.32	8.64	7.03	3.75	4.35	7.44	8.34	0.60	3.69	4.58
9:00:00	3.67	4.07	6.48	7.56	3.74	4.68	8.07	9.20	0.94	4.33	5.46
9:15:00	3.7	5.75	5.32	6.98	3.71	5.30	8.48	9.04	1.59	4.77	5.33
9:30:00	3.48	4.88	8.15	5.62	3.71	4.51	7.81	7.36	0.80	4.10	3.65
9:45:00	3.64	4.48	4.52	5.08	3.67	4.50	6.62	6.45	0.83	2.96	2.79
10:00:00	3.56	4.49	4.75	5.06	3.61	4.73	5.84	6.06	1.12	2.23	2.45
10:15:00	3.74	4.04	4.27	5.85	3.62	4.73	5.40	5.72	1.10	1.78	2.09
10:30:00	4.21	3.67	5.01	6.99	3.73	4.31	5.34	5.72	0.59	1.61	1.99
10:45:00	4	3.54	5.24	6.42	3.83	4.04	4.76	5.88	0.21	0.93	2.05
11:00:00	4.38	3.11	5.75	5.37	3.98	3.77	5.00	5.94	-0.21	1.03	1.96
11:15:00	4.1	3.31	5.16	5.83	4.09	3.53	5.09	6.09	-0.55	1.00	2.01
11:30:00	4.32	3.33	5.36	4.95	4.20	3.39	5.30	5.91	-0.81	1.10	1.71
11:45:00	4.17	3.45	8.25	5.59	4.19	3.35	5.95	5.63	-0.85	1.76	1.44
12:00:00	3.89	3.47	4.98	5.26	4.17	3.33	5.90	5.40	-0.84	1.73	1.23
12:15:00	4.61	3.76	10.54	7.28	4.22	3.46	6.86	5.78	-0.75	2.64	1.56
12:30:00	4.19	5.33	6.18	6.7	4.24	3.87	7.06	5.96	-0.37	2.83	1.72
12:45:00	3.98	4.24	7.54	15.11	4.17	4.05	7.50	7.99	-0.12	3.33	3.82
13:00:00	4.3	4.22	9.5	10.07	4.19	4.20	7.75	8.88	0.01	3.55	4.69
13:15:00	4.18	4.15	7.3	11.03	4.25	4.34	8.21	10.04	0.09	3.96	5.79
13:30:00	3.94	4	10.19	10.2	4.12	4.39	8.14	10.62	0.27	4.02	6.50
13:45:00	4.41	4.63	9.64	10.42	4.16	4.25	8.83	11.37	0.09	4.67	7.20
14:00:00	3.75	4.82	14.89	12.65	4.12	4.36	10.30	10.87	0.25	6.19	6.76
14:15:00	3.85	5.43	10.3	17.66	4.03	4.61	10.46	12.39	0.58	6.44	8.37
14:30:00	4.01	7.73	6.65	4.2	3.99	5.32	10.33	11.03	1.33	6.34	7.03
14:45:00	3.87	6.64	4.49	4.28	3.98	5.85	9.19	9.84	1.87	5.22	5.86
15:00:00	3.83	4.66	4.11	3.98	3.86	5.86	8.09	8.55	1.99	4.23	4.69
15:15:00	3.81	3.84	3.86	4.02	3.87	5.66	5.88	6.83	1.79	2.01	2.95
15:30:00	3.59	3.05	4	4.18	3.82	5.18	4.62	4.13	1.36	0.80	0.31
15:45:00	3.66	2.93	3.98	4.44	3.75	4.22	4.09	4.18	0.47	0.34	0.43
16:00:00	3.75	3.23	7.67	4.88	3.73	3.54	4.72	4.30	-0.19	1.00	0.57
16:15:00	3.58	2.71	4.63	5.13	3.68	3.15	4.83	4.53	-0.53	1.15	0.85
16:30:00	3.68	2.84	4.59	5.67	3.65	2.95	4.97	4.86	-0.70	1.32	1.21
16:45:00	3.43	2.77	4.61	5.42	3.62	2.90	5.10	5.11	-0.72	1.48	1.49
17:00:00	3.33	3.06	4.87	5.44	3.55	2.92	5.27	5.31	-0.63	1.72	1.75
17:15:00	3.37	3.13	8.83	5.56	3.48	2.90	5.51	5.44	-0.58	2.03	1.97
17:30:00	4.07	3.45	4.87	6	3.58	3.05	5.55	5.62	-0.53	1.98	2.04
17:45:00	4.12	3.38	5.25	5.8	3.66	3.16	5.69	5.64	-0.51	2.02	1.98
18:00:00	4.51	3.26	5.14	5.81	3.88	3.26	5.79	5.72	-0.62	1.91	1.84