AIR, NOISE AND VIBRATION MONTHLY MONITORING REPORT
Number 014

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DDC Project No.:	BBJ-XSP	**Period Start:** 9/1/23 **End** 9/30/23
Project Name:	NYCDDC D&B – The Bronx Site Preparation	
DDC Pin No.:	8502021CR0004P-06P	

1) Community Air Monitoring Weekly Status Summary

TWA – Time Weighted Average
ug/m^3- micrograms per cubic meter

Number of Workdays in a Month	Number of Air Monitoring Days in a Month	Number of Days with Dust Concentrations above Action Concentrations by Month (100 ug/m^3 15 minute TWA)	Comments
20	17	0	Dust monitoring not performed on 9/18, 9/25, or 9/29 due to rain

Community Air Monitoring Weekly Excursions and Corrective Actions
Action Concentration =100 ug/m^3 15 minute TWA above background concentration
Stop Work Concentration = 150 ug/m^3 15 minute TWA above background concentration

Date: Time	Maximum Dust Reading Before Corrective Action 15 Minute TWA (ug/m^3)	Maximum Dust Reading After Corrective Action 15 Minute TWA (ug/m^3)	Corrective Action

Narrative Summary of Air Monitoring, Excursions and Corrective Actions:
In September 2023, construction-related levels of Particulate Matter (PM) PM10 did not surpass the Daily Permissible Exposure Limits (PEL) as set by federal standards for the 8-hour Time Weighted Average (TWA) and did not cause air quality concerns to the community and/or onsite workers.

2) Community Noise Monitoring Weekly Summary

Units: A-weighted decibels (dBA)

Number of Workdays in a Month	Number of Noise Monitoring Days in a Month	Number of Days with Noise Levels above Action Levels by Month	Comments
20	17	3	Noise monitoring not performed on 9/18, 9/25, or 9/29 due to rain. There were three instances of noise levels above the 80 dBA

			limit that occurred on 9/1, 9/5, and 9/26, as detailed below.

Community Noise Monitoring Weekly Excursions and Corrective Actions
Action Level = 80 dBA
Stop Work Level = 80 dBA

Date: Time	Maximum Noise Reading before Corrective Action (dBA)	Maximum Noise Reading after Corrective Action (dBA)	Corrective Action
9/1/23 06:10 am	80.58	78.99	Noise meter #2 detected noise levels of between 80dbA and 81 dbA between 06:10am and 06:20am due to truck unloading merchandise on Concord. This work was not associated with the onsite work.
9/5/23 10:40 am	80.66	75.10	Noise meter #2 detected noise levels of between 80dbA and 81dbA between 10:40am and 10:50am due to rock blasting activities adjacent to the noise station. Blasting operations were halted, and work pace was reduced to keep noise levels below 80dbA.
9/26/23 12:50 pm 9/26/23 01:00 pm 9/26/23 01:10 pm 9/26/23 01:20 pm	80.44 81.98 76.16 80.15	70.14	Noise meter #2 detected noise levels between 80dbA and 82dbA between 12:50pm and 1:20pm, as listed here, due to rock drilling activities adjacent to the noise station. Hammering operations were modified and work pace was reduced but when noise levels didn't decrease below 80dbA, hammering work was halted in the area.

Narrative Summary of Noise Monitoring, Excursions and Corrective Actions:

In September 2023, construction-related levels of noise did surpass the limits of Local Law 113 of 2005 during one occasion on 9/1/23, one occasion on 9/5/23, and three occasions on 9/26/23. The daily average was below the limits and did not cause noise concerns for the community.

3) Community Vibration Monitoring Monthly Summary

Units: inches per second (in/sec)

Number of Workdays in a Month	Number of Vibration Monitoring Days in a Month	Number of Days with Vibration Levels above Action Levels by Month	Comments
20	30	27	Four out of six vibration recorded a total of two hundred and eight exceedances. Three exceedances were caused by rock chopping with an excavator hoe ram. Two exceedances are isolated events, possibly due to non-construction related activities, associated with resident's activities. Ninety-eight events are not construction related; contractor confirmed that there was no work being performed in the area during the event times. One hundred and five exceedances were recorded during non-construction hours. Detailed information about exceedances is provided in the narrative summary section and plots.

Community Vibration Monitoring Excursions and Corrective Actions

Action Level = 0.5 in/sec above background for VM
Stop Work Level = 1.0 in/sec above background

Date: Time	Maximum Vibration Level before Corrective Action (in/sec)	Maximum Vibration Level after Corrective Action (in/sec)	Corrective Action
9/19/2023 17:27 & 17:34	3.025	N/A	Exceedances observed at VM6 were recorded during non-construction hours.
9/27/2023 18:07	3.48	N/A	Exceedance observed at VM6 was recorded during non-construction hours.
9/29/2023 10:34	8.465	0.16	This is an isolated event recorded at VM6 possibly due to non-construction related activities, associated with resident's activities.
9/27/2023 14:19	0.552	0.007	This is an isolated event recorded at VM7 possibly due to non-construction related activities, associated with resident's activities.
9/1/2023 00:35 & 06:15	0.7953	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/1/2023 07:35, 08:00, & 08:10	0.6988	0.2979	Exceedances observed at VM11 were due to rock chopping with an excavator hoe ram. The intensity of the hoe ram on the excavator was lower post-events.
9/5/2023 09:01, 12:35, & 14:14	0.5685	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/5/2023 15:49, 17:05, 19:00, & 19:35	0.5443	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/6/2023 00:50, 05:50, & 06:55	0.7072	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/6/2023 08:15 to 11:33	0.6458	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/6/2023 14:25 & 14:45	0.5806	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no

			work was being performed in the area.
9/6/2023 16:25 & 17:25	0.5511	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/7/2023 03:10	0.5545	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/7/2023 07:05, 07:45, 09:50, & 11:05	0.6225	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/7/2023 12:45	0.5015	N/A	Exceedance observed at VM11 was not construction related, it is confirmed that no work was being performed in the area.
9/7/2023 17:15 & 22:50	0.6101	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/8/2023 00:40 to 05:55	0.6479	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/8/2023 08:20	0.5378	N/A	Exceedance observed at VM11 was not construction related, it is confirmed that no work was being performed in the area.
9/8/2023 09:10	0.5508	N/A	Exceedance observed at VM11 was not construction related, it is confirmed that no work was being performed in the area.
9/8/2023 13:00	0.6656	N/A	Exceedance observed at VM11 was not construction related, it is confirmed that no work was being performed in the area.
9/8/2023 15:10, 16:50, 18:00, & 21:50	0.57	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/9/2023 03:25, 05:45, 13:10, 13:45	0.6963	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/10/2023 11:35, 11:40, & 23:45	0.8139	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/11/2023 01:20, 05:20, 06:05	0.8093	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/11/2023 09:30 & 09:45	0.7829	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/11/2023 13:20 & 13:45	0.5421	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/11/2023 15:50 to 18:30	1.757	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/12/2023 00:45, 05:20, 05:35, & 06:50	0.6793	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/12/2023 07:35	0.5679	N/A	Exceedance observed at VM11 was not construction related, it is confirmed that no work was being performed in the area.
9/12/2023 15:35	0.5179	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/13/2023 00:30	0.7171	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/13/2023 07:40, 07:55, 09:35, & 13:00	0.6293	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/13/2023 15:20	0.5136	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/14/2023 00:35, 05:00, & 05:15	0.7047	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/14/2023 07:05, 08:15, 08:50, & 11:45	0.6724	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/15/2023 00:25, 05:15, 05:20, & 05:50	0.6305	N/A	Exceedances observed at VM11 were recorded during non-construction hours.

9/15/2023 07:30 to 11:45	0.6343	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/15/2023 15:40	0.5312	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/16/2023 00:40	0.5077	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/17/2023 21:40	0.624	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/18/2023 05:20 & 06:55	0.7463	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/18/2023 07:40 to 13:20	1.5342	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/18/2023 18:30 to 20:45	0.9927	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/19/2023 05:20	0.5592	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/19/2023 21:35	0.8475	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/20/2023 00:20	0.6029	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/20/2023 10:15	0.5005	N/A	Exceedance observed at VM11 was not construction related, it is confirmed that no work was being performed in the area.
9/20/2023 15:45, 18:25, & 22:55	0.741	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/21/2023 02:50	0.5101	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/21/2023 09:40 & 10:05	0.57	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/21/2023 14:55	0.5021	N/A	Exceedance observed at VM11 was not construction related, it is confirmed that no work was being performed in the area.
9/22/2023 07:50 & 08:10	0.5322	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.
9/22/2023 12:05	0.5306	N/A	Exceedance observed at VM11 was not construction related, it is confirmed that no work was being performed in the area.
9/22/2023 16:15 & 18:05	0.5306	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/23/2023 00:35, 15:00, 15:45, & 16:55	0.6163	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/24/2023 23:12	0.6144	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/25/2023 05:35	0.5036	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/26/2023 15:05 & 23:50	0.5638	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/27/2023 05:20	0.534	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/27/2023 15:45 & 16:15	0.5744	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/28/2023 00:10 & 17:05	0.5039	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/29/2023 05:30, 06:25, & 06:30	1.2844	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/29/2023 07:05 to 14:01	2.2842	N/A	Exceedances observed at VM11 were not construction related, it is confirmed that no work was being performed in the area.

9/29/2023 15:16 & 15:31	0.6991	N/A	Exceedances observed at VM11 were recorded during non-construction hours.
9/30/2023 00:20	0.7004	N/A	Exceedance observed at VM11 was recorded during non-construction hours.
9/10/2023 11:20, 11:35, 11:40, & 11:50	2.1805	N/A	Exceedances observed at VM12 were recorded during non-construction hours.
9/11/2023 01:20	1.0141	N/A	Exceedance observed at VM12 was recorded during non-construction hours.
9/11/2023 15:50, 15:59, & 18:15	4.1932	N/A	Exceedances observed at VM12 were recorded during non-construction hours.
9/18/2023 08:35	0.5784	N/A	Exceedance observed at VM12 was not construction related, it is confirmed that no work was being performed in the area.
9/18/2023 11:15	1.6682	N/A	Exceedance observed at VM12 was not construction related, it is confirmed that no work was being performed in the area.
9/20/2023 18:25	0.5359	N/A	Exceedance observed at VM12 was recorded during non-construction hours.
9/29/2023 06:25 & 06:30	0.8295	N/A	Exceedances observed at VM12 were recorded during non-construction hours.
9/29/2023 09:35 to 13:05	3.3088	N/A	Exceedances observed at VM12 were not construction related, it is confirmed that no work was being performed in the area.

Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

In September 2023, four vibration monitors had recorded exceedances.

There were exceedances recorded during non-construction hours at VM6, VM11, and VM12. There were isolated events recorded at VM6 and VM7, possibly due to non-construction related activities, associated with resident's activities. No corrective actions were required at this time.

The exceedances recorded at VM11 on September 1st were due to rock chopping with an excavator hoe ram. The intensity of the hoe ram on the excavator was lower post events.

The rest of the exceedances recorded at VM11 and VM12 were non-construction related. The event times when the exceedances were recorded were reviewed by the contractor, it is confirmed that no work was being performed in the area during these event periods. No corrective action was required at these times.

4) Community Vibration Blasting Monitoring Monthly Summary

Units: inches per second (in/sec)

Number of Workdays in a Month	Number of Vibration Monitoring Days in a Month	Number of Days with Vibration Levels above Action Levels by Month	Comments
20	30	0	No vibration exceedance was observed in September.

Community Vibration Monitoring Excursions and Corrective Actions

Action Level = 2.0 in/sec for VMs install at Concord Ave, 141st St, and Southern Blvd.
Action Level = 4.0 in/sec for VMs install at 142nd St
Action Level = 12.0 in/sec for VMs install on all underground utilities

Date: Time	Maximum Vibration Level before Corrective Action (in/sec)	Maximum Vibration Level after Corrective Action (in/sec)	Corrective Action
9/6/2023 11:38	0.6054	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/7/2023 11:40	0.5424	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/8/2023 08:45	0.5821	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/8/2023 11:35	0.5561	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/11/2023 11:55	0.5908	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/19/2023 09:56	0.7097	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/19/2023 12:35	0.9387	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is

			12 in/s. The reading is within the limit. No corrective action was required at this time.
9/20/2023 09:55	1.2841	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/21/2023 10:40	1.218	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/22/2023 09:40	0.9173	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/22/2023 12:30	0.7662	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/25/2023 10:47	0.7084	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/26/2023 09:07	0.9669	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/26/2023 13:25	0.9539	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/27/2023 10:20	0.6762	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/27/2023 14:20	0.8195	N/A	Vibration reading over 0.5 in/s was observed at VM11. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/5/2023 10:50	0.53	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.

9/6/2023 11:40	0.916	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/7/2023 08:15	0.5074	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/7/2023 11:40	0.6606	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/8/2023 08:50	0.5449	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/8/2023 11:35	0.6597	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/11/2023 11:55	0.7069	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/18/2023 10:05	0.5437	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/18/2023 13:20	0.6479	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/19/2023 09:55	1.0271	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/19/2023 12:35	1.1574	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/20/2023 09:55	1.6766	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all

			underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/20/2023 12:15	0.5902	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/21/2023 10:40	1.4913	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/21/2023 13:40	0.764	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/22/2023 09:40	0.9815	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/22/2023 12:30	1.0836	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/25/2023 10:47	0.6516	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/26/2023 09:07	1.2384	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/26/2023 13:26	1.2896	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/27/2023 10:20	1.2037	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.
9/27/2023 14:20	1.564	N/A	Vibration reading over 0.5 in/s was observed at VM12. Per blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. The reading is within the limit. No corrective action was required at this time.

Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

In September 2023, no vibration monitors had recorded exceedance that's over the action level for blasting.

Blasting activities caused thirty-eight readings over 0.5 in/s at VM11 and VM12. Per the blast plan, the peak particle velocity allowed for all underground utilities caused by blasting is 12 in/s. All these vibration events are within the limit. No corrective action was required at these times.

Four portable vibration monitors for blasting monitoring were deployed at the following locations:
BVM-A was installed at location no. 10, BVM-B at location no. 1, BVM-C at location no. 9, and BVM-D at location no. 6 on September 1st, September 5th to September 8th, and September 11th.

BVM-A was installed at location no. 11, BVM-B at location no. 2, BVM-C at location no. 8, and BVM-D at location no. 5 on September 12th, September 14th, September 18th to September 22nd, and September 25th to September 27th.

ATTACHMENTS:

1 – Include one map of monitoring station/locations

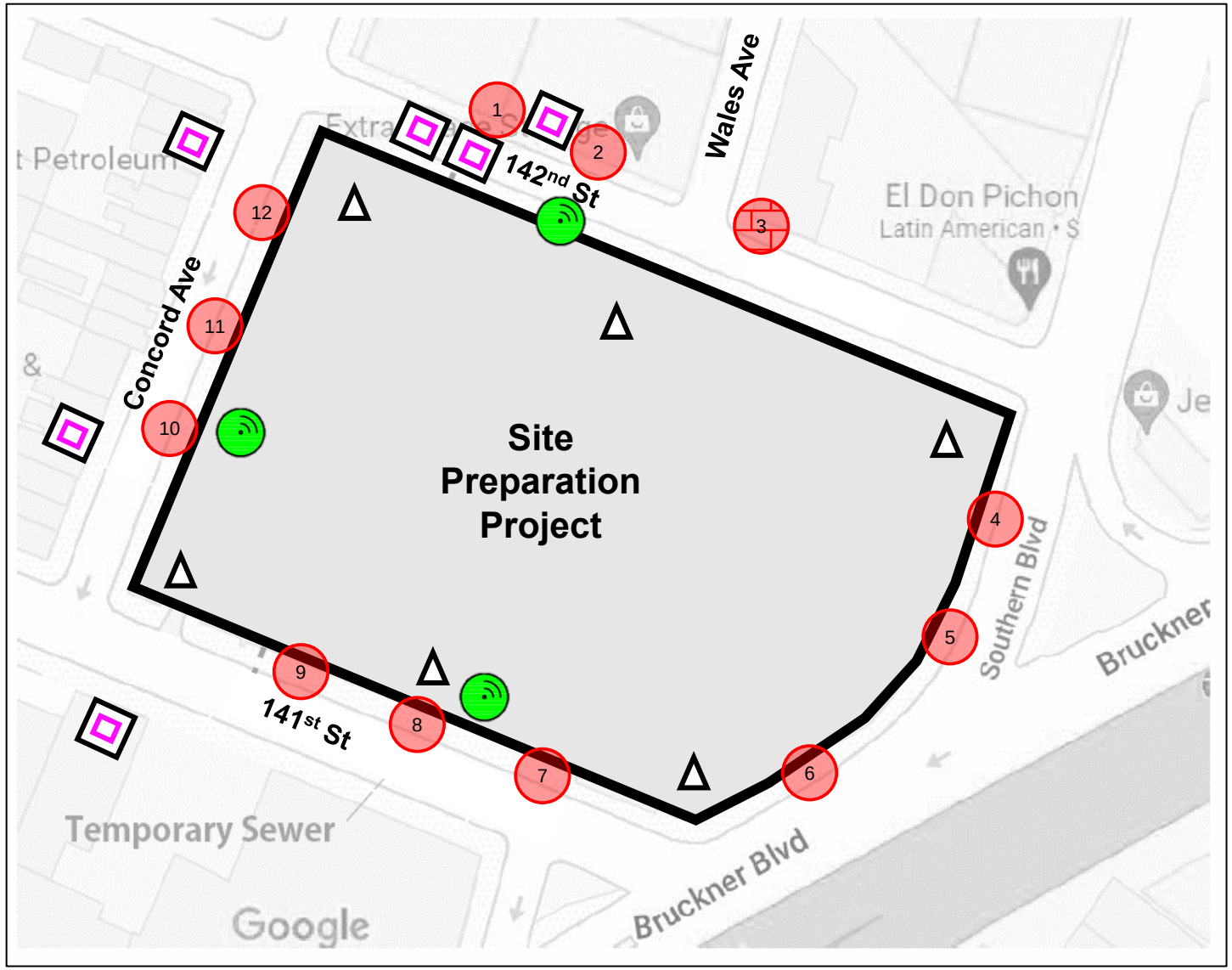
2 – Include Data Plots

3 – Include Baseline Reference

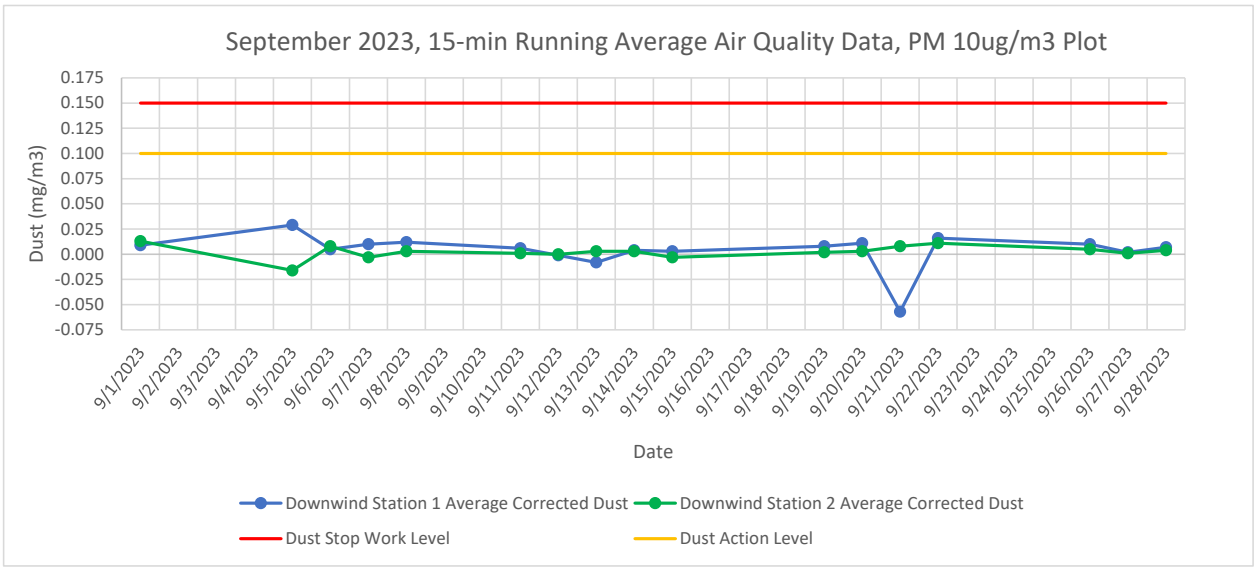

Plan North
Blasting - Vibration Monitor Locations
1
2
3
4
5
6
7
8
9
10
11
12
E 142nd St
Southern Blvd
Bruckner Blvd
Concord Ave
E 141st St
353
343
333

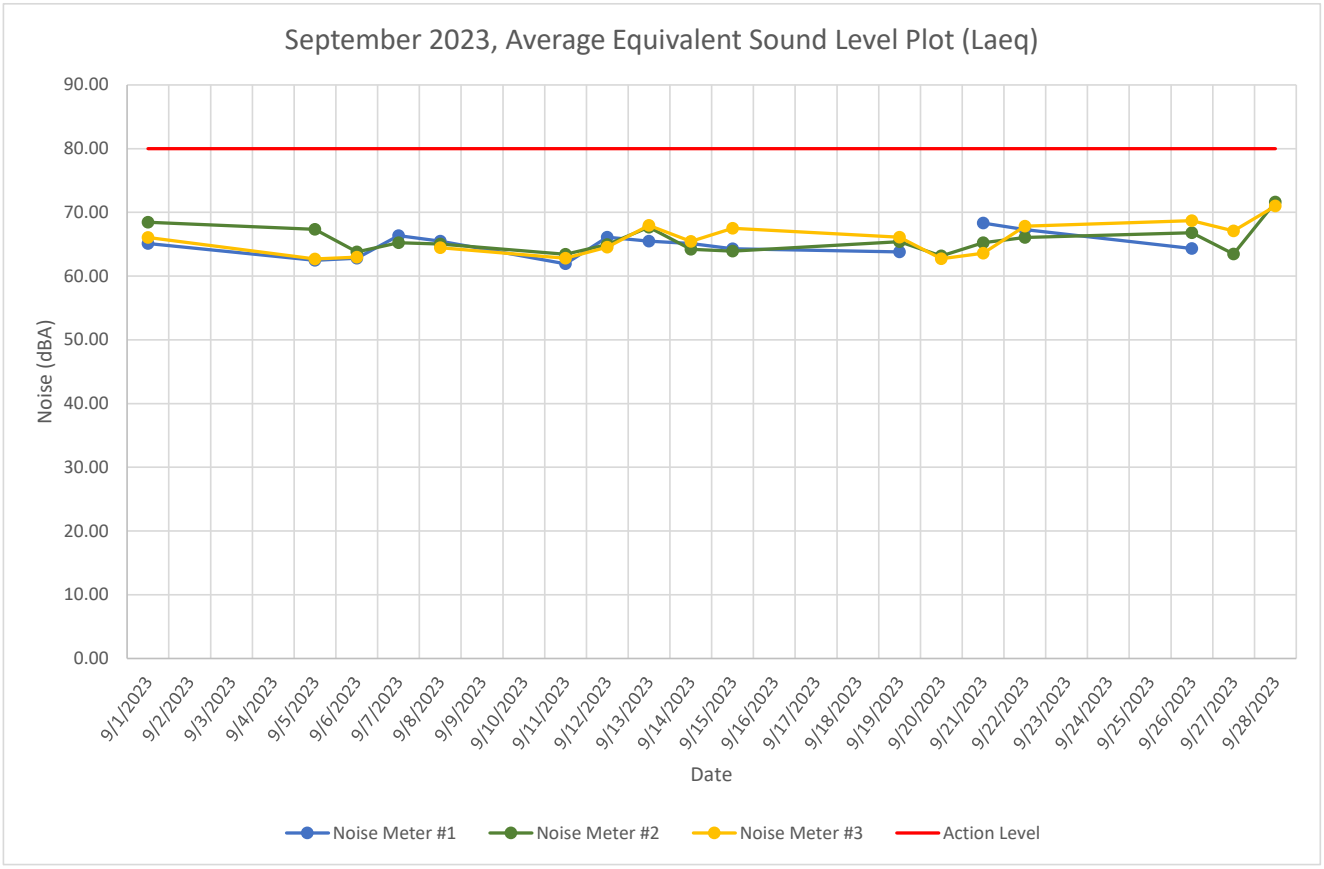
Attachments

Environmental Monitoring The Bronx

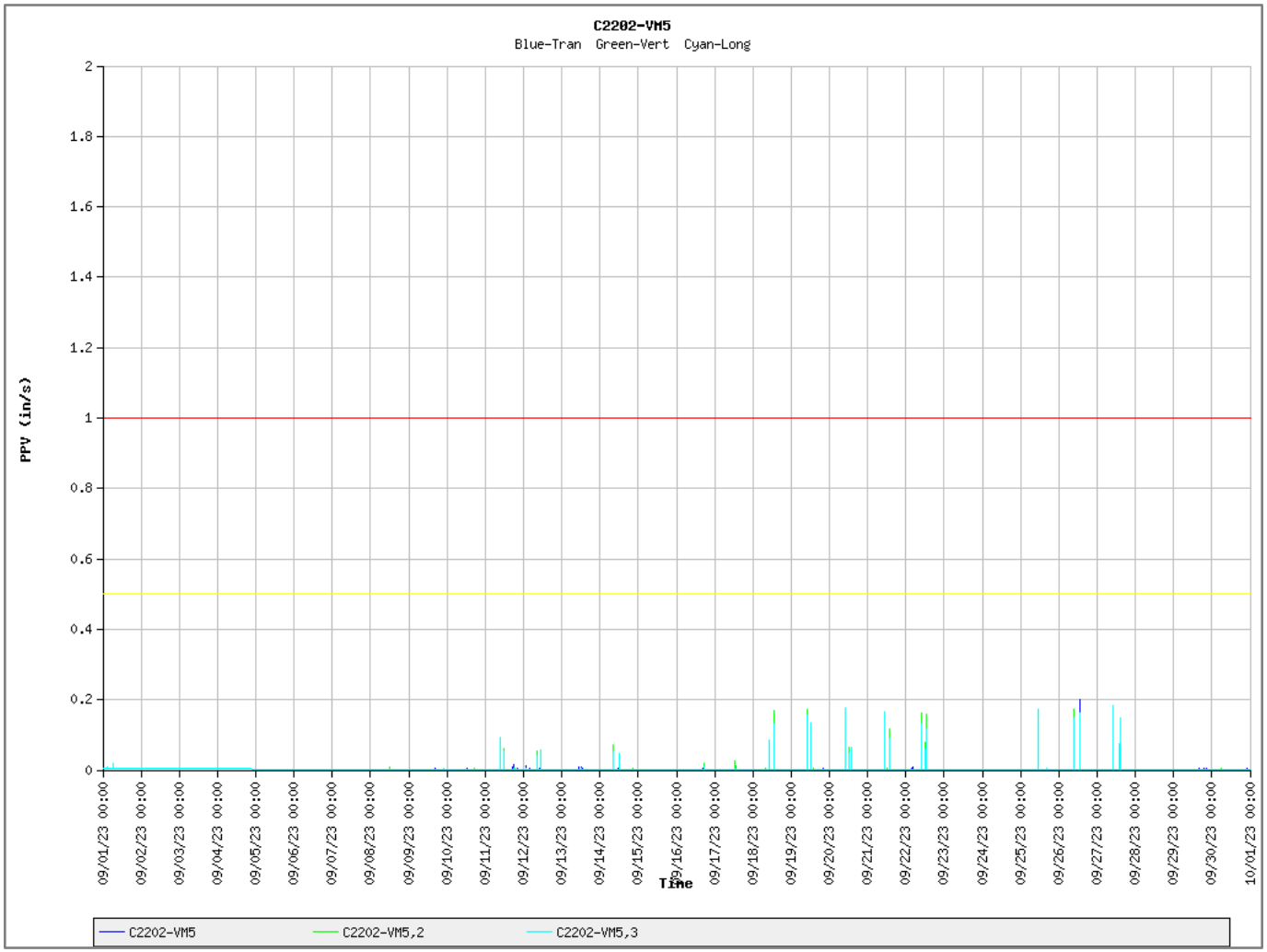


- Vibration Monitor (VM)
- Air Monitoring Station (DM)
- Noise Monitoring Station (NM)
- 1 Blasting - Vibration Monitor (VM)


September 2023, 15-min Running Average Air Quality Data, PM 10ug/m3 Plot
Dust (mg/m3)
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
-0.025
-0.050
-0.075
9/1/2023
9/2/2023
9/3/2023
9/4/2023
9/5/2023
9/6/2023
9/7/2023
9/8/2023
9/9/2023
9/10/2023
9/11/2023
9/12/2023
9/13/2023
9/14/2023
9/15/2023
9/16/2023
9/17/2023
9/18/2023
9/19/2023
9/20/2023
9/21/2023
9/22/2023
9/23/2023
9/24/2023
9/25/2023
9/26/2023
9/27/2023
9/28/2023
Date
Downwind Station 1 Average Corrected Dust
Downwind Station 2 Average Corrected Dust
Dust Stop Work Level
Dust Action Level


September 2023, Average Equivalent Sound Level Plot (Laeq)
Noise (dBA)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
9/1/2023
9/2/2023
9/3/2023
9/4/2023
9/5/2023
9/6/2023
9/7/2023
9/8/2023
9/9/2023
9/10/2023
9/11/2023
9/12/2023
9/13/2023
9/14/2023
9/15/2023
9/16/2023
9/17/2023
9/18/2023
9/19/2023
9/20/2023
9/21/2023
9/22/2023
9/23/2023
9/24/2023
9/25/2023
9/26/2023
9/27/2023
9/28/2023
Date
Noise Meter #1
Noise Meter #2
Noise Meter #3
Action Level

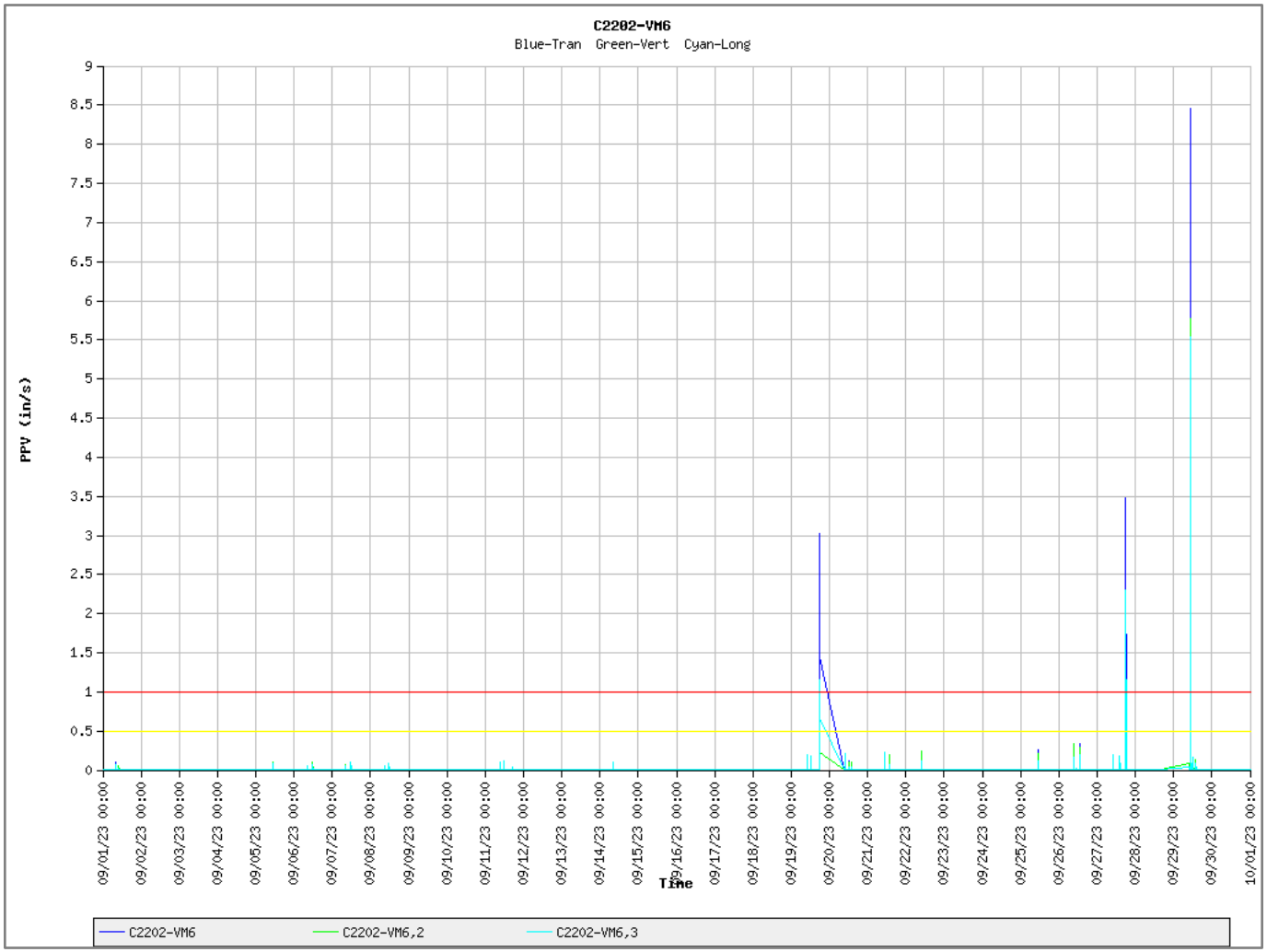
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM5 Transverse
C2202-VM5,2 Vertical
C2202-VM5,3 Longitudinal

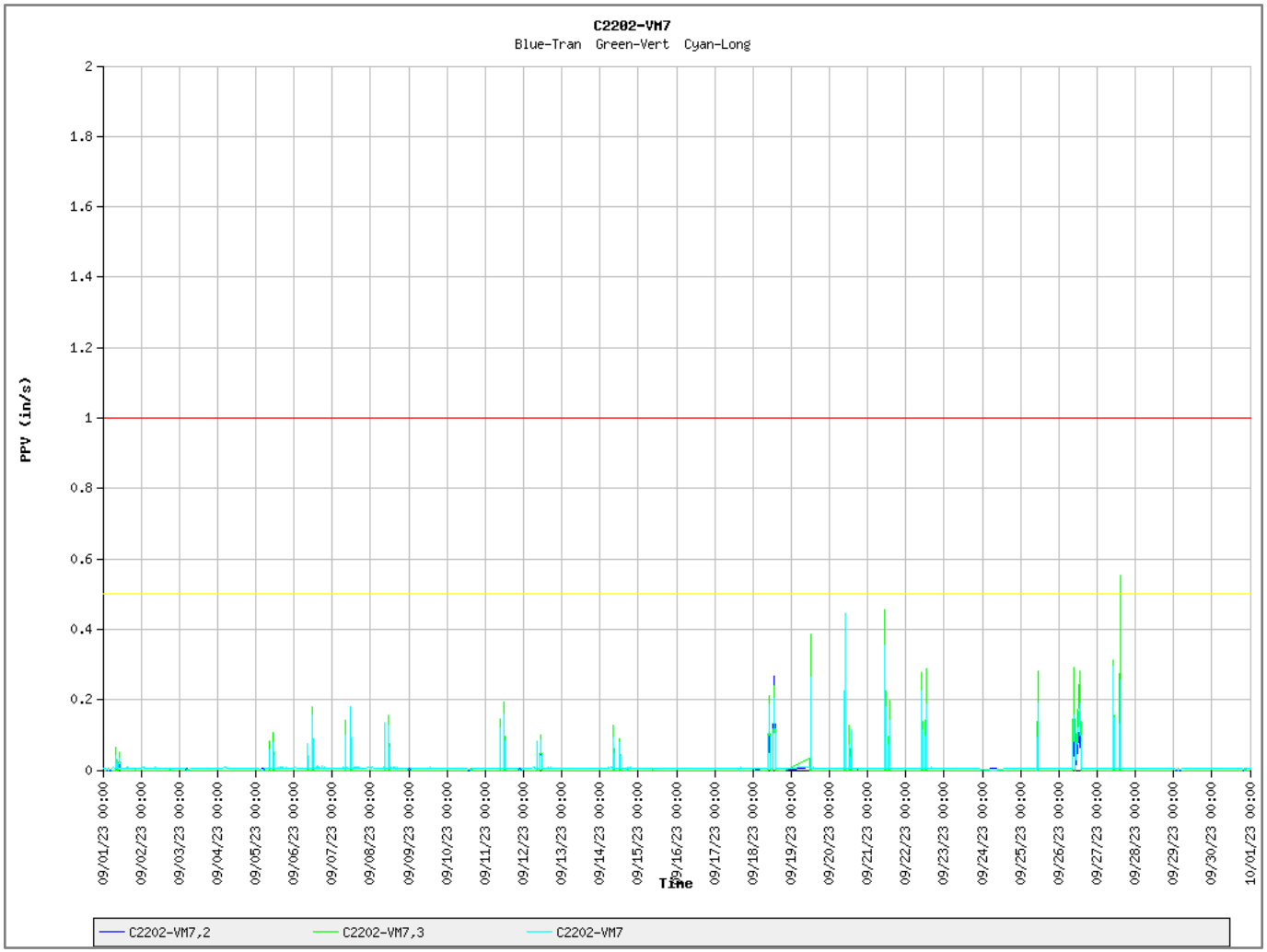
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM6 Transverse
C2202-VM6,2 Vertical
C2202-VM6,3 Longitudinal

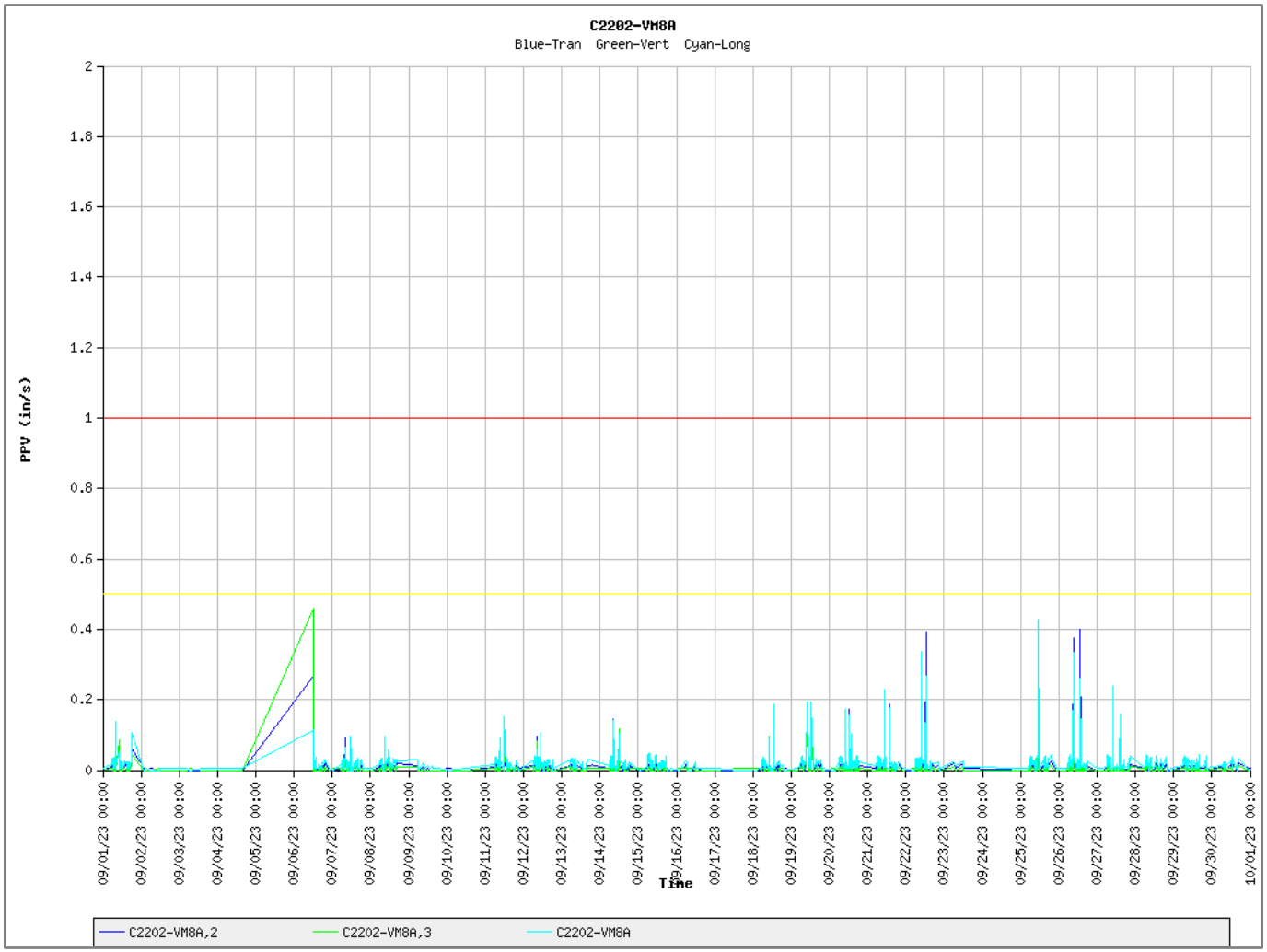
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM7 Longitudinal
C2202-VM7,2 Transverse
C2202-VM7,3 Vertical

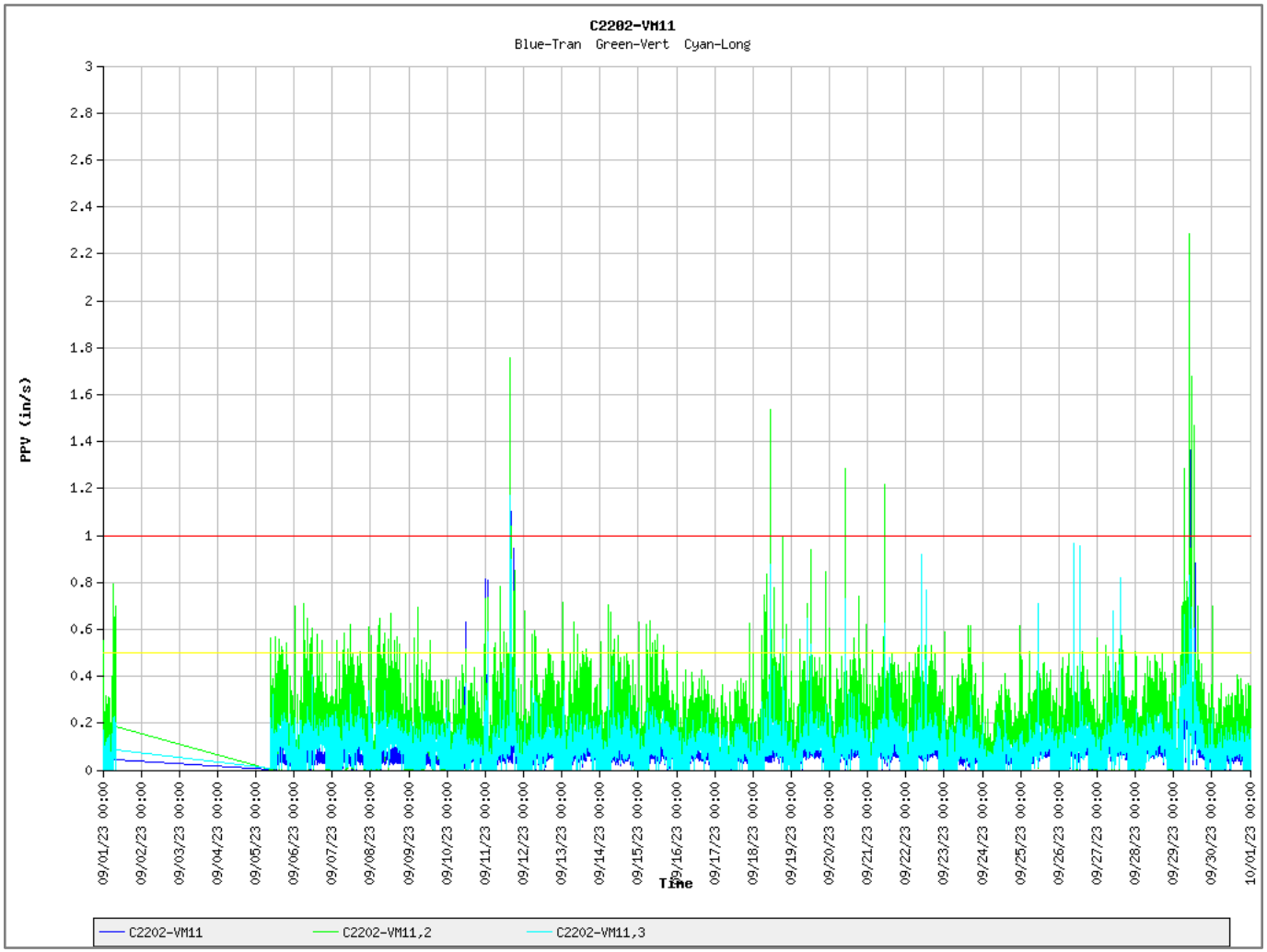
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM8A Longitudinal
C2202-VM8A,2 Transverse
C2202-VM8A,3 Vertical

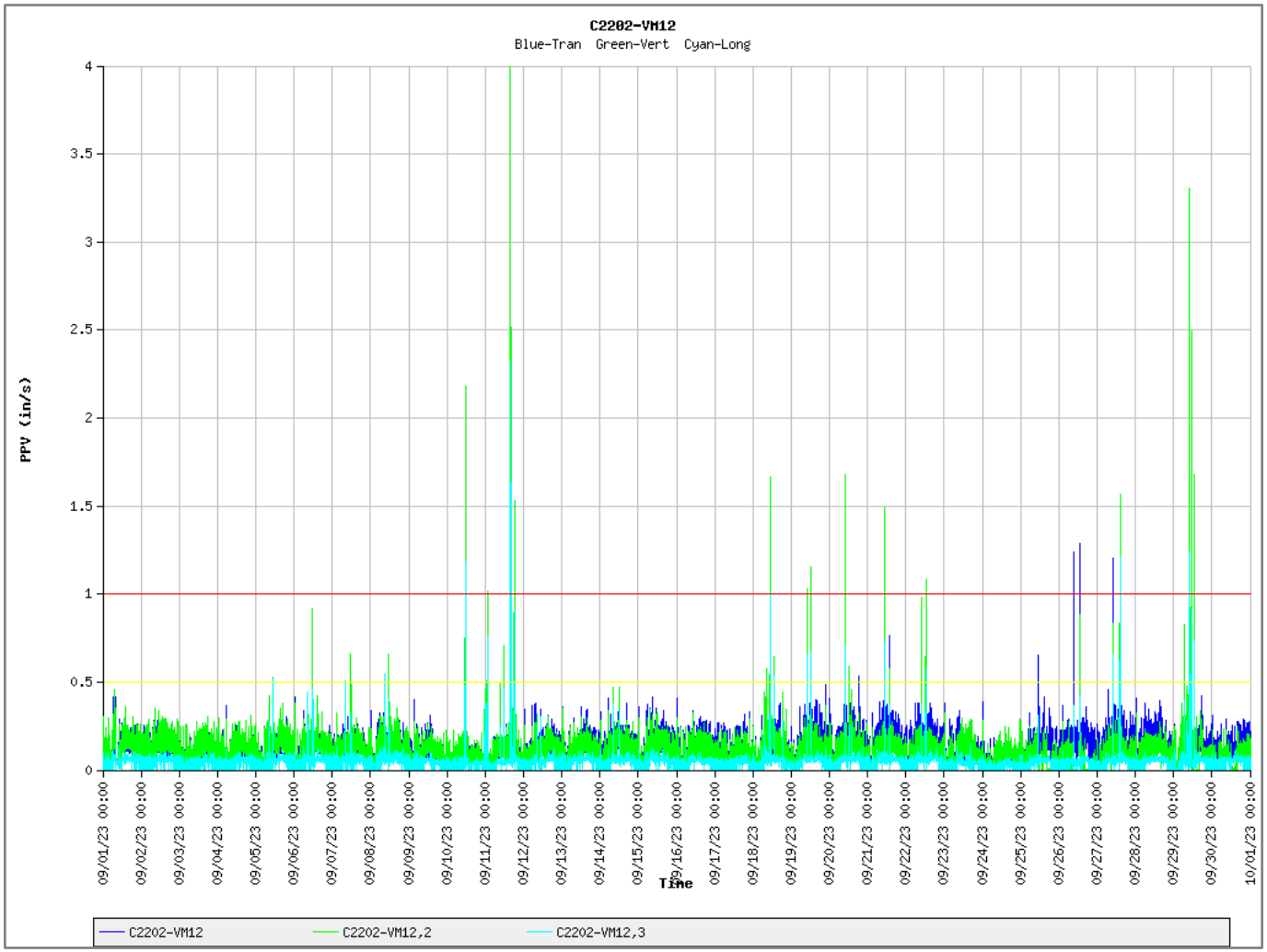
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM11 Transverse
C2202-VM11,2 Vertical
C2202-VM11,3 Longitudinal

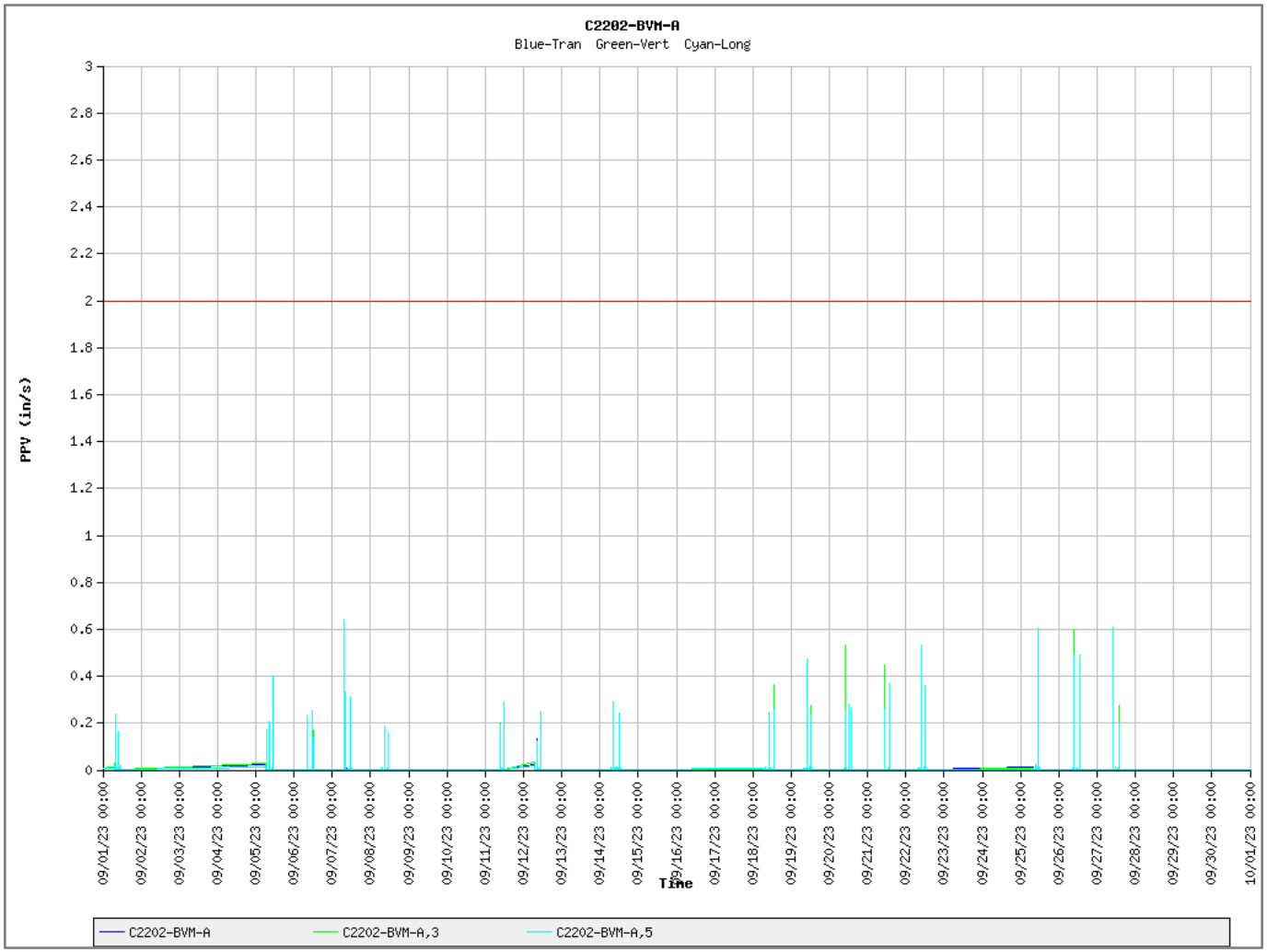
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM12 Transverse
C2202-VM12,2 Vertical
C2202-VM12,3 Longitudinal

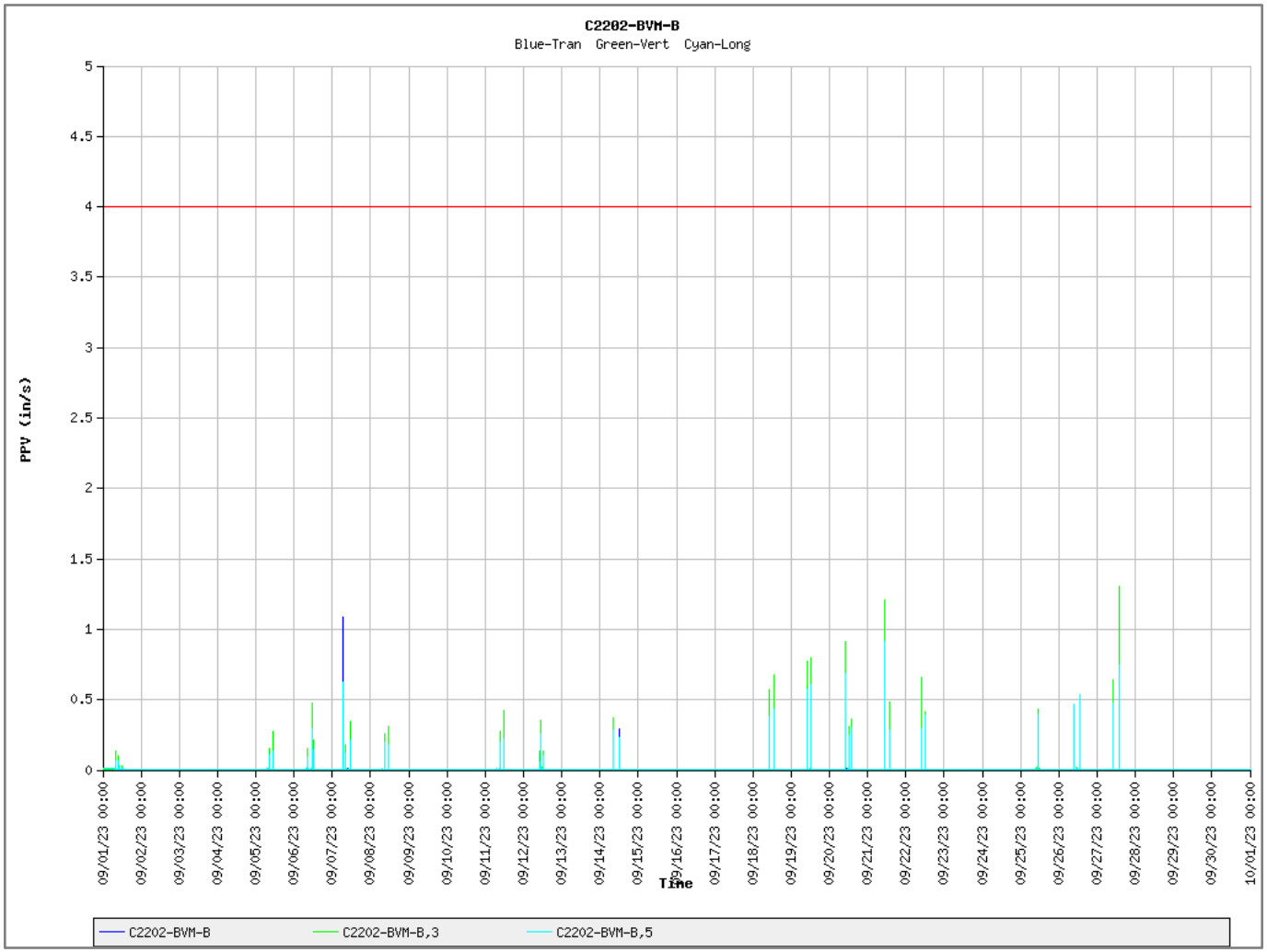
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 2 in/sec
9/1/2023-9/11/2023 at location# 10
9/12/2023-9/30/2023 at location# 11

C2202-BVM-A Transverse
C2202-BVM-A,3 Vertical
C2202-BVM-A,5 Longitudinal

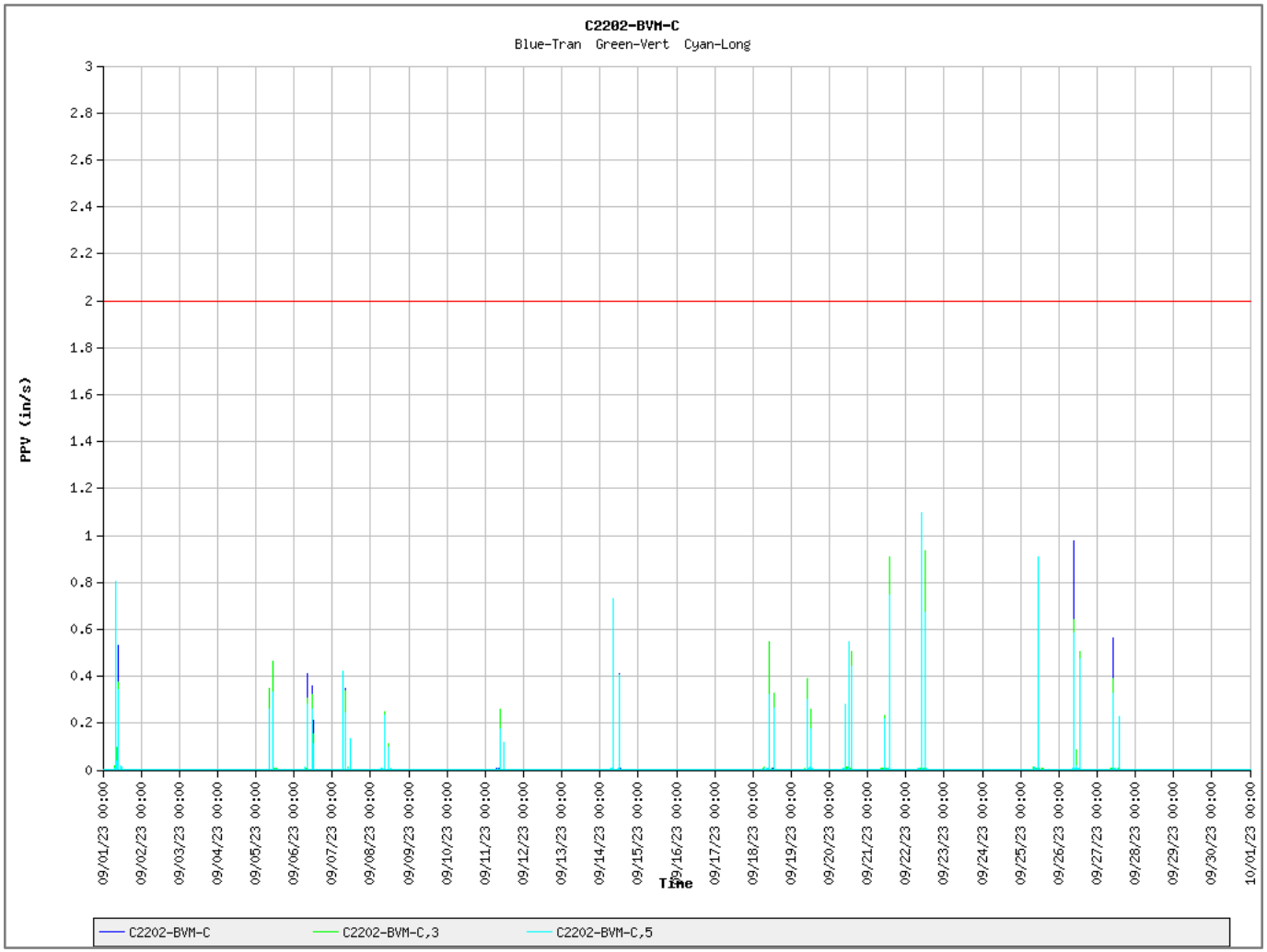
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 4 in/sec
9/1/2023-9/11/2023 at location# 1
9/12/2023-9/30/2023 at location# 2

C2202-BVM-B Transverse
C2202-BVM-B,3 Vertical
C2202-BVM-B,5 Longitudinal

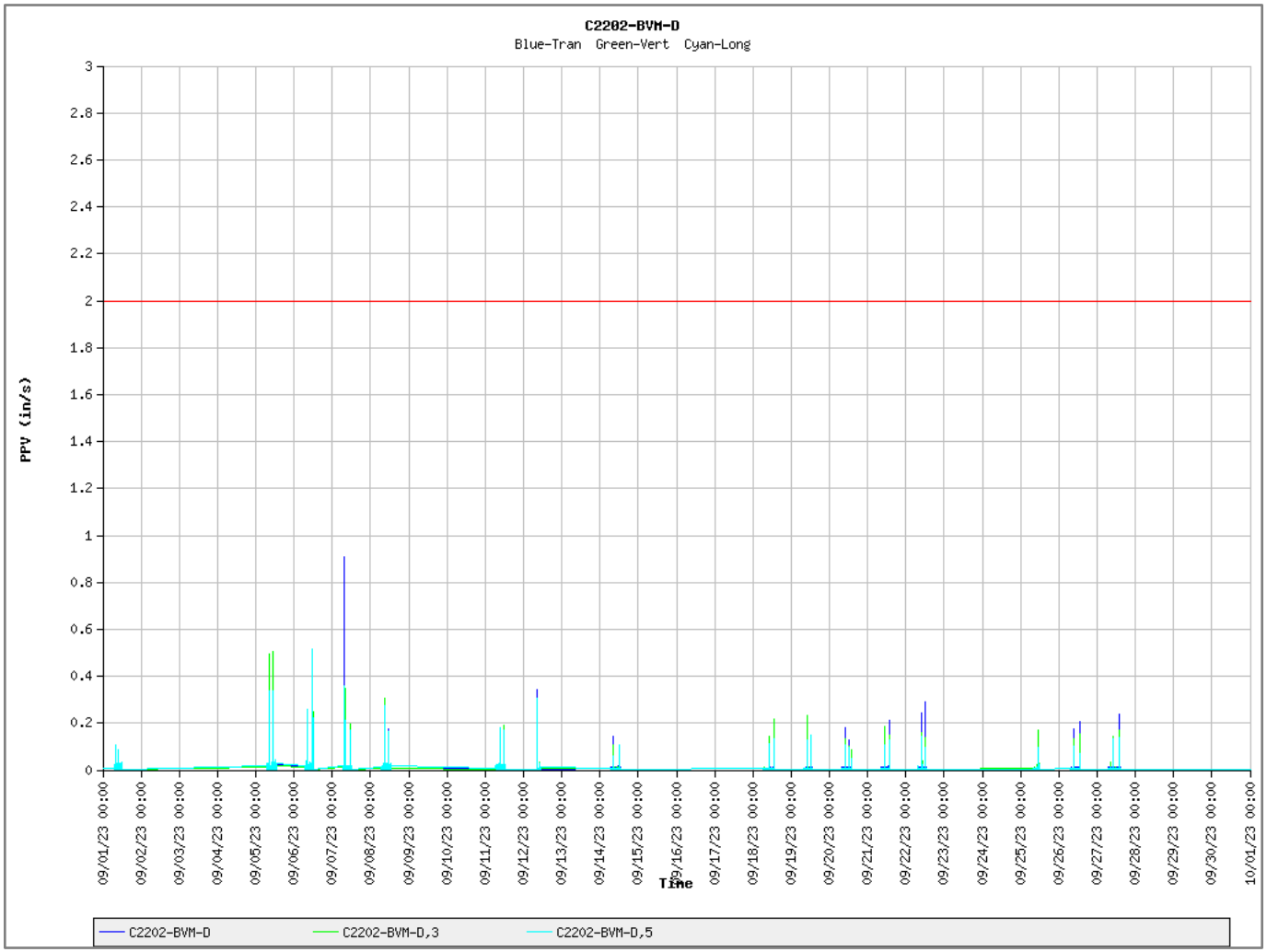
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 2 in/sec
8/31/2023-9/11/2023 at location# 9
9/12/2023-9/30/2023 at location# 8

C2202-BVM-C Transverse
C2202-BVM-C,3 Vertical
C2202-BVM-C,5 Longitudinal

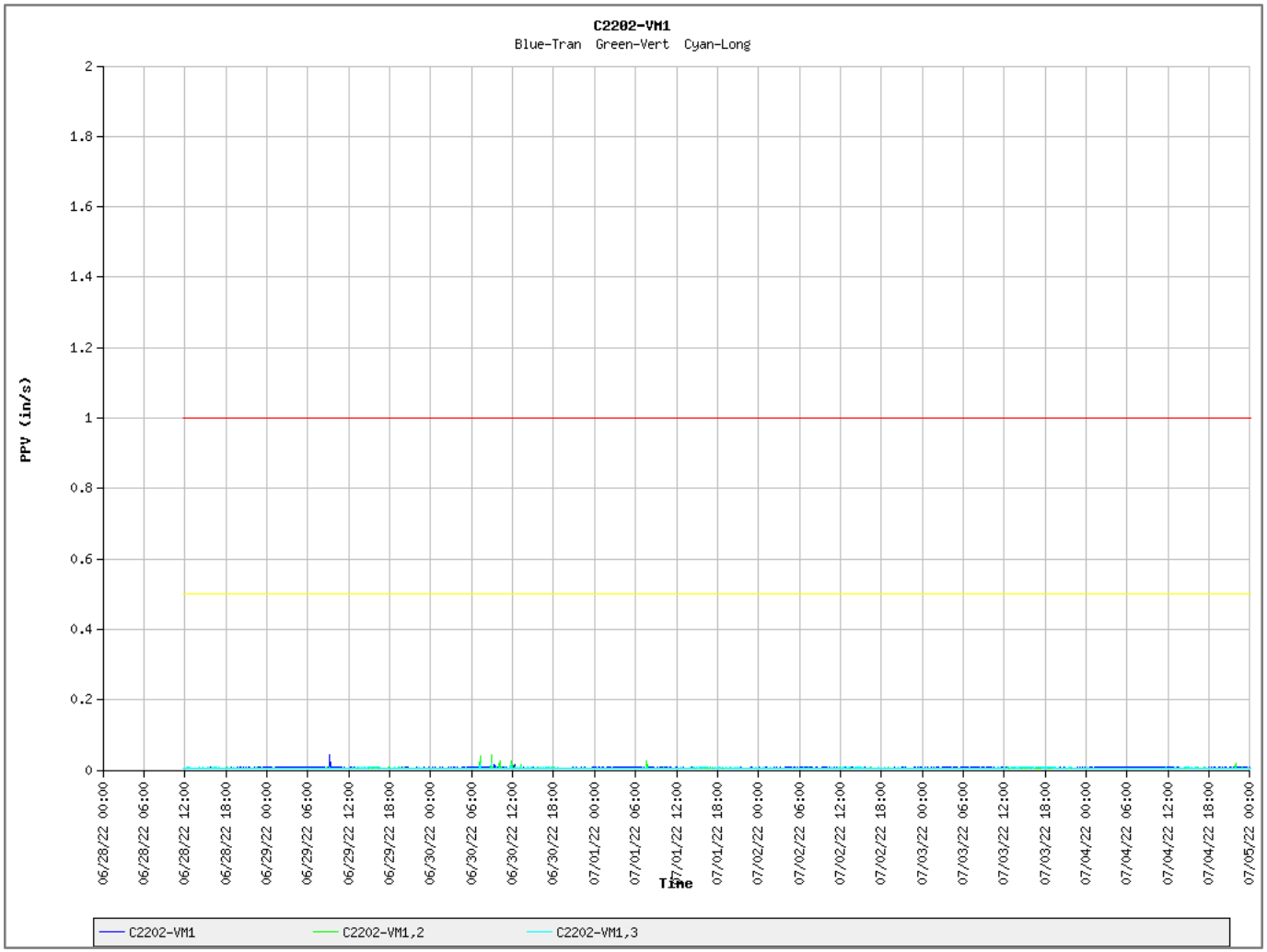
The Bronx Site Preparation September 2023 Vibration Monitoring Data Plots



Exceedance level: 2 in/sec
8/31/2023-9/11/2023 at location# 6
9/12/2023-9/30/2023 at location# 5

C2202-BVM-D Transverse
C2202-BVM-D,3 Vertical
C2202-BVM-D,5 Longitudinal

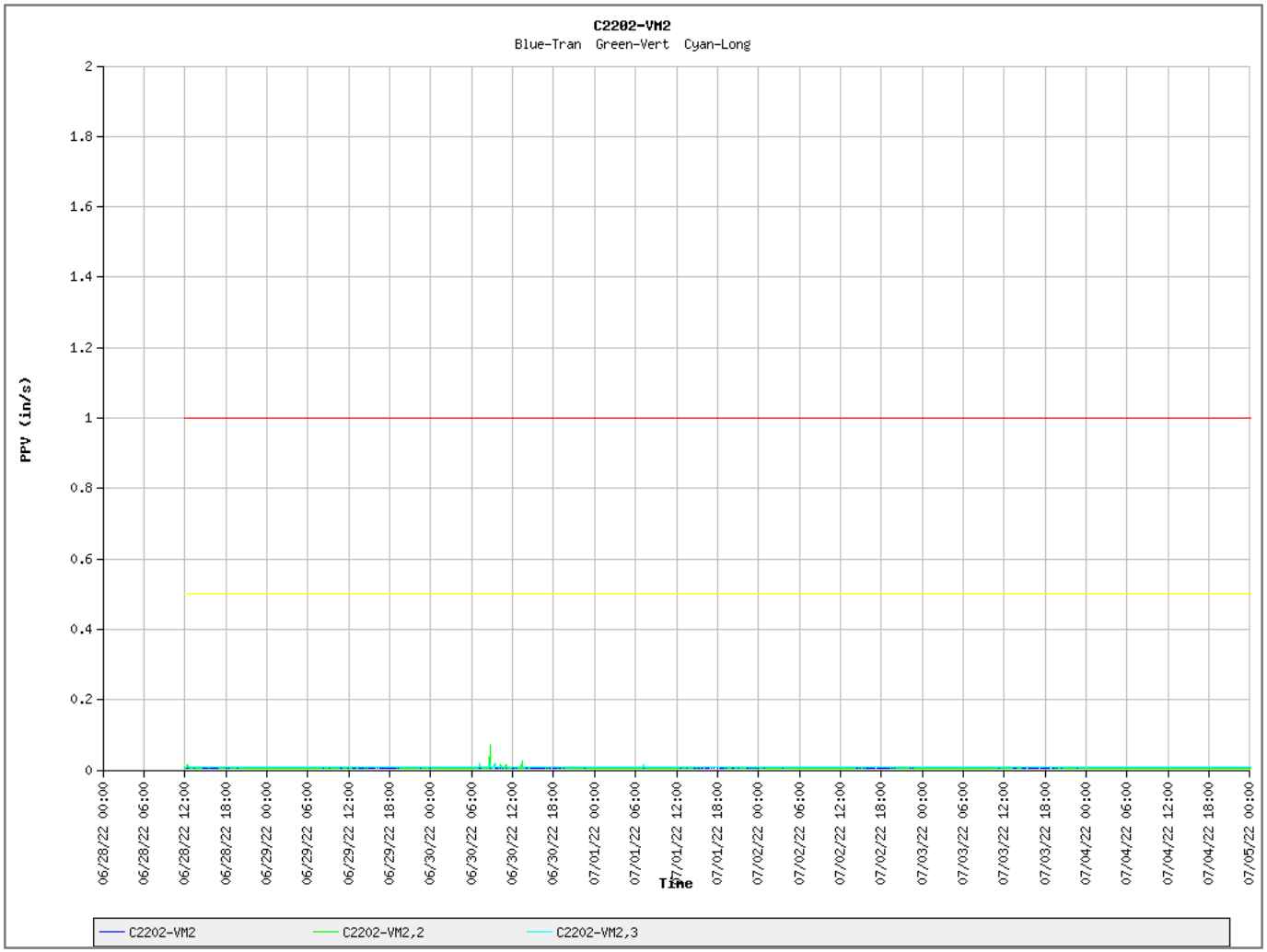
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM1 Transverse
C2202-VM1,2 Vertical
C2202-VM1,3 Longitudinal

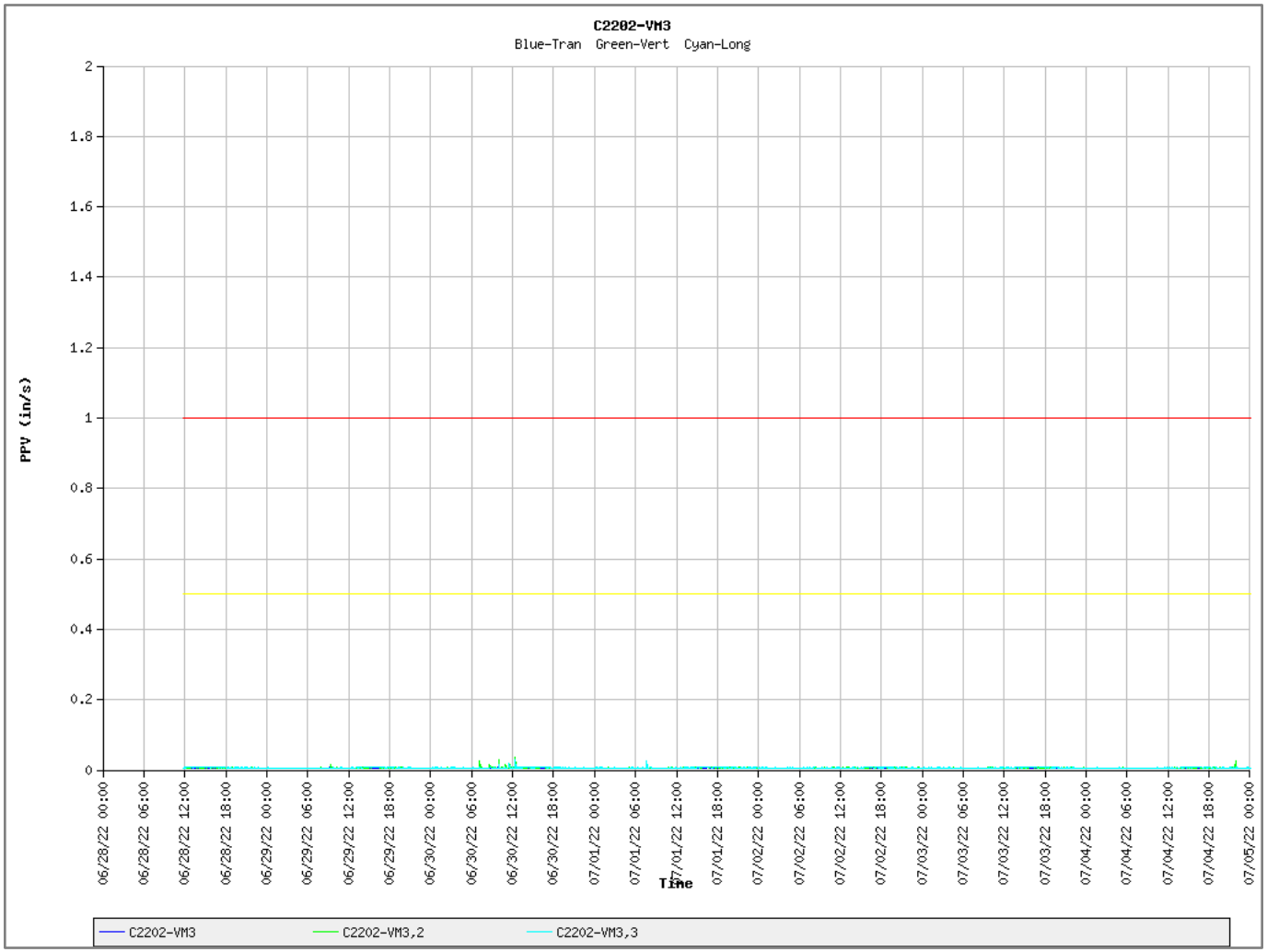
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM2 Transverse
C2202-VM2,2 Vertical
C2202-VM2,3 Longitudinal

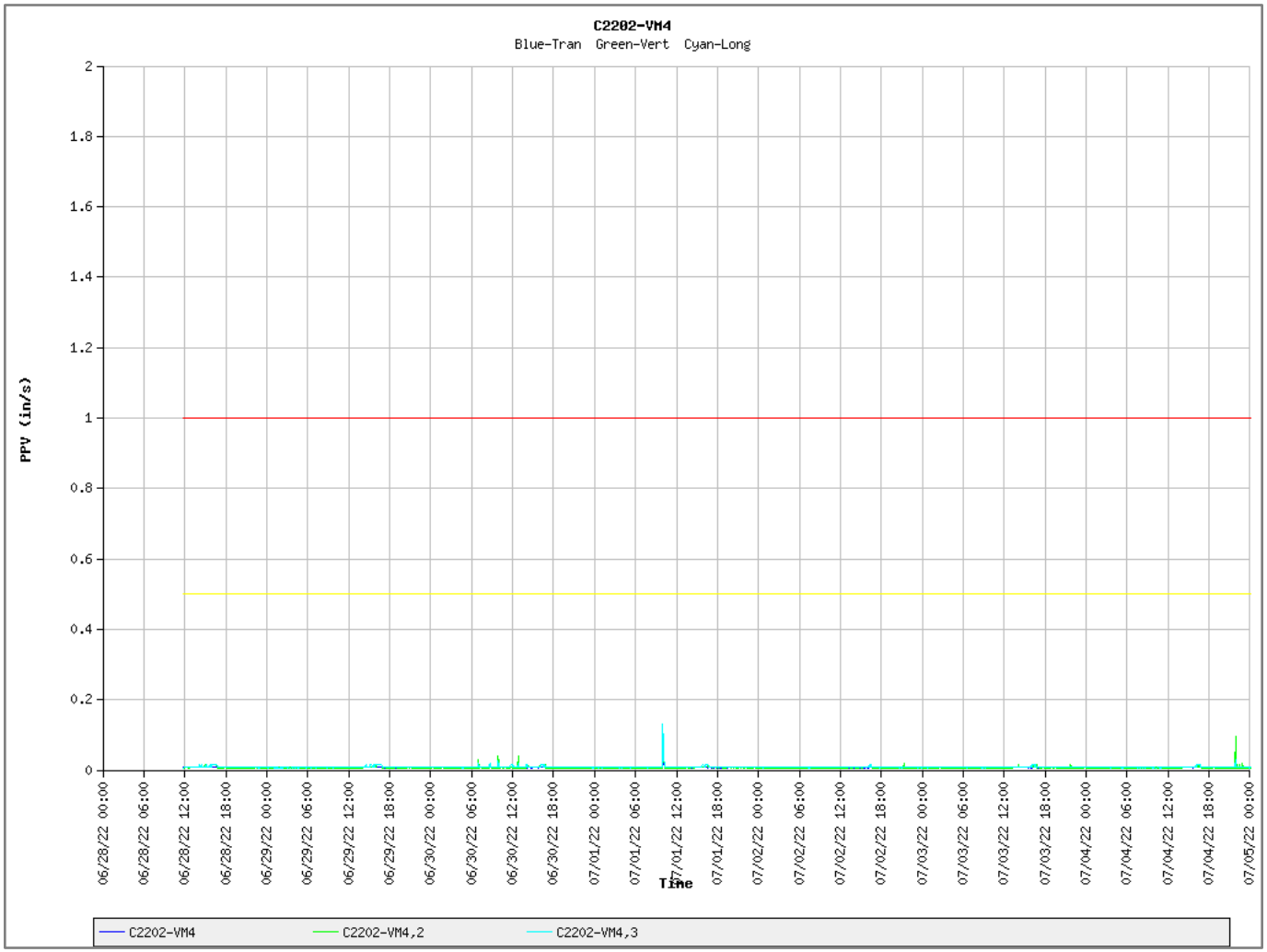
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM3 Transverse
C2202-VM3,2 Vertical
C2202-VM3,3 Longitudinal

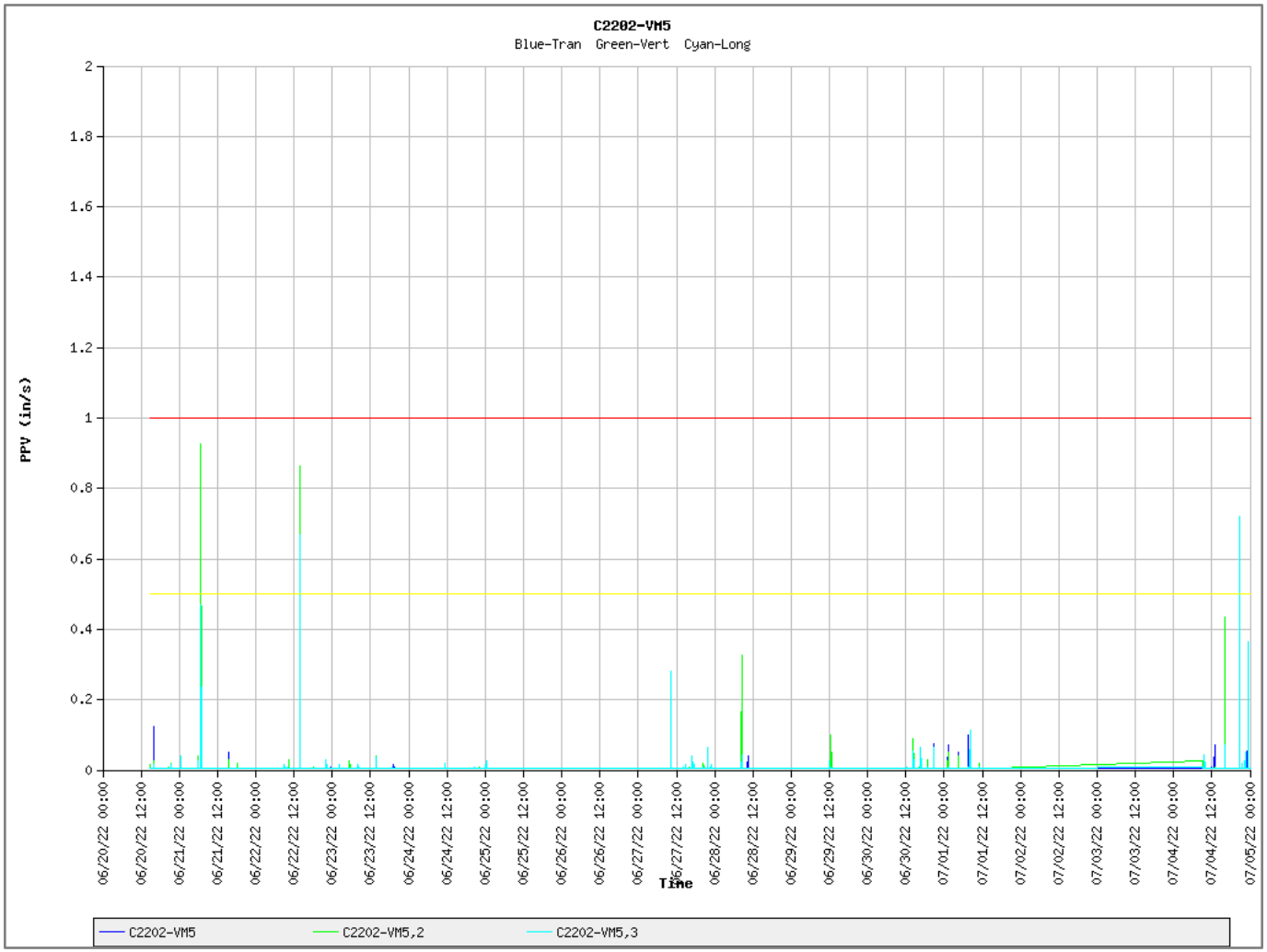
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM4 Transverse
C2202-VM4,2 Vertical
C2202-VM4,3 Longitudinal

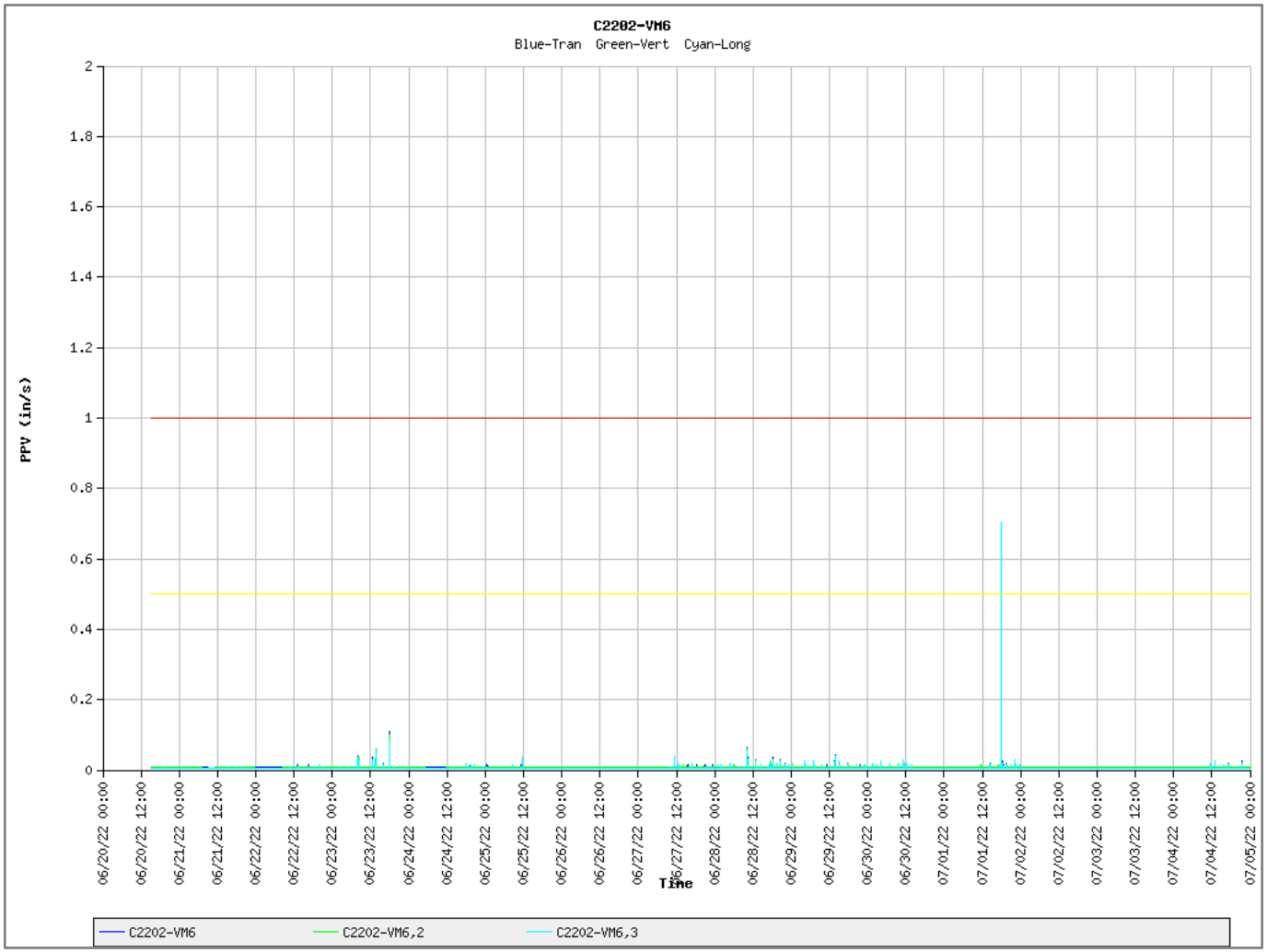
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM5 Transverse
C2202-VM5,2 Vertical
C2202-VM5,3 Longitudinal

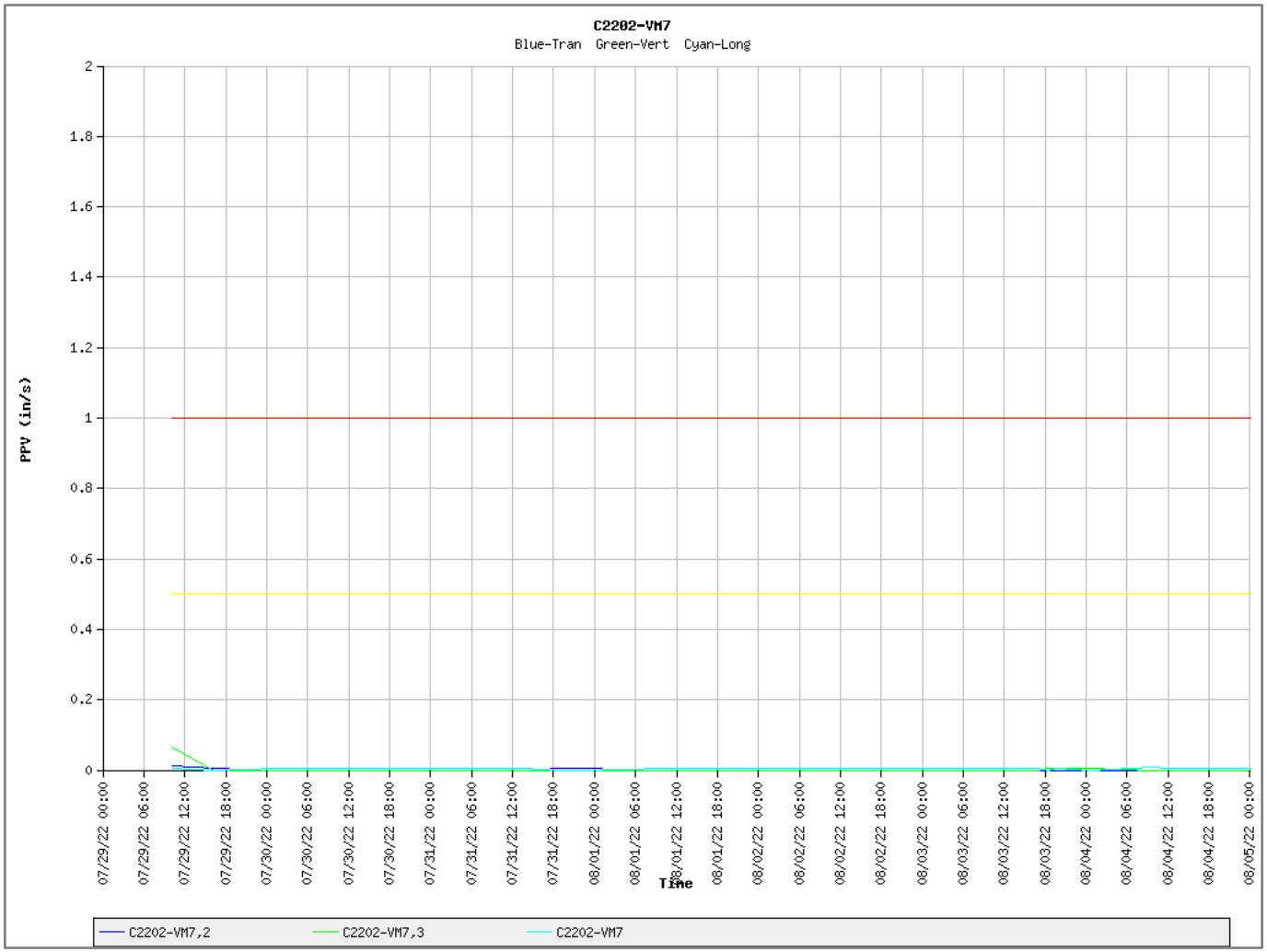
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM6 Transverse
C2202-VM6,2 Vertical
C2202-VM6,3 Longitudinal

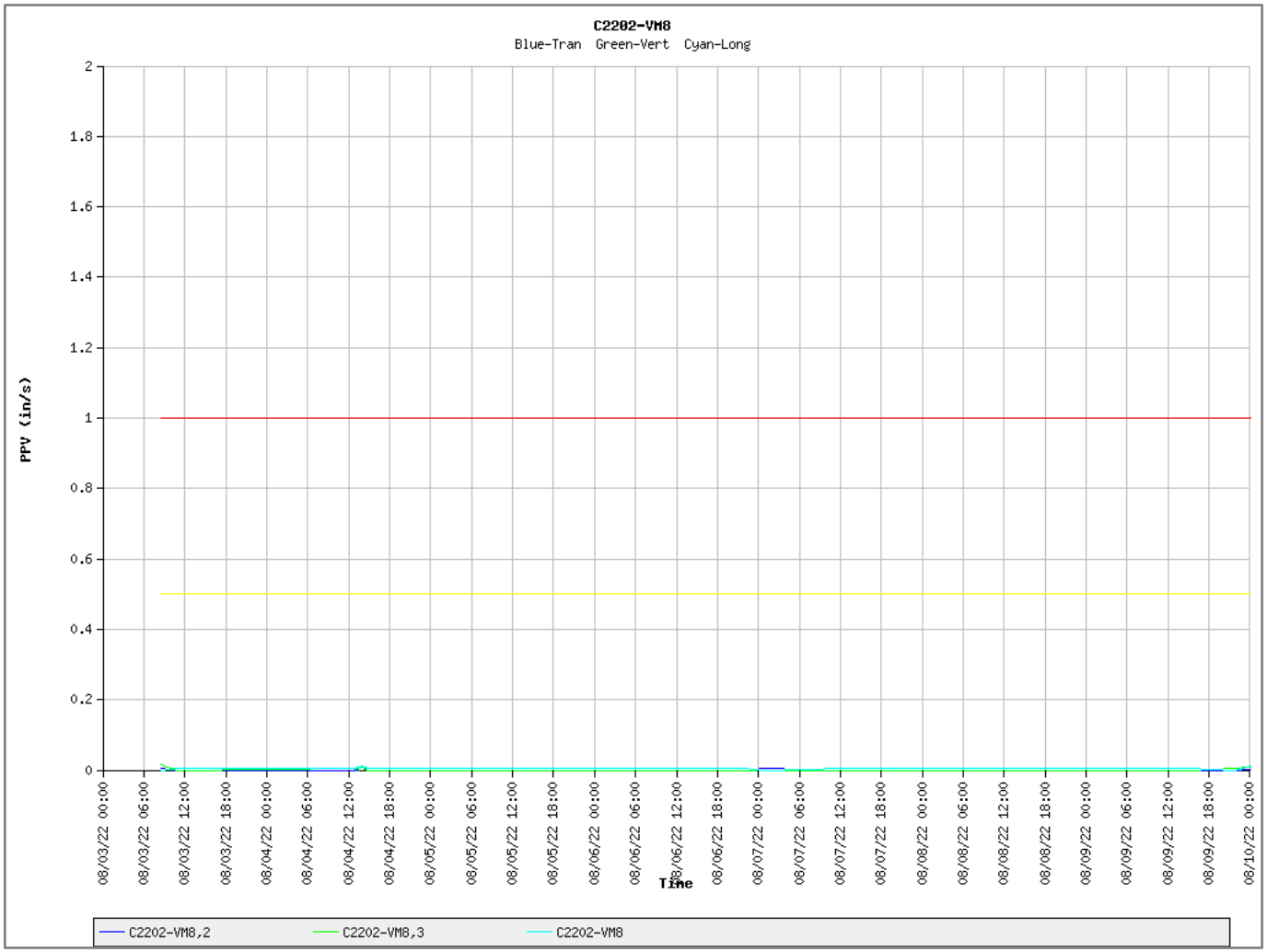
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM7 Longitudinal
C2202-VM7,2 Transverse
C2202-VM7,3 Vertical

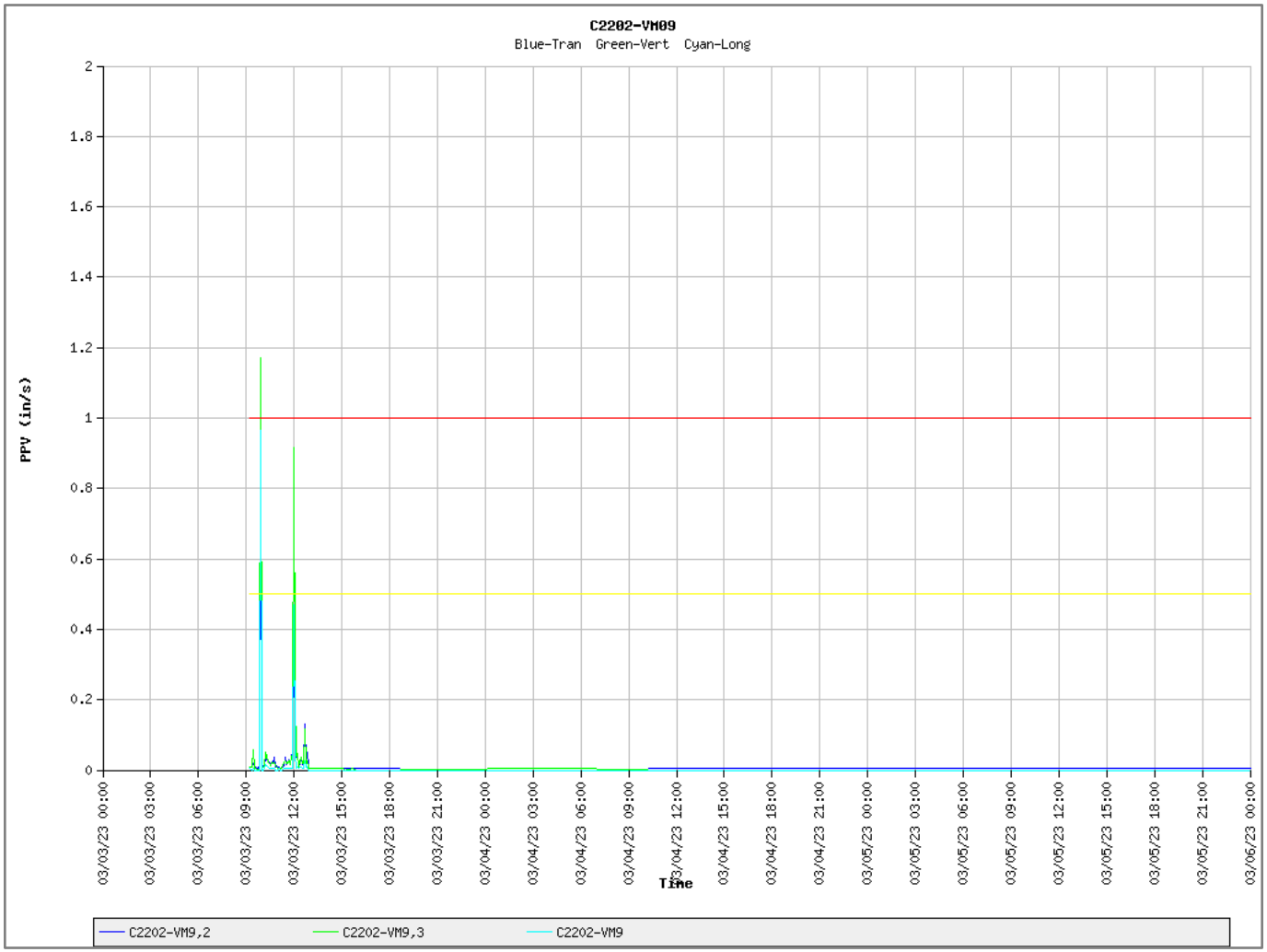
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM8 Longitudinal
C2202-VM8,2 Transverse
C2202-VM8,3 Vertical

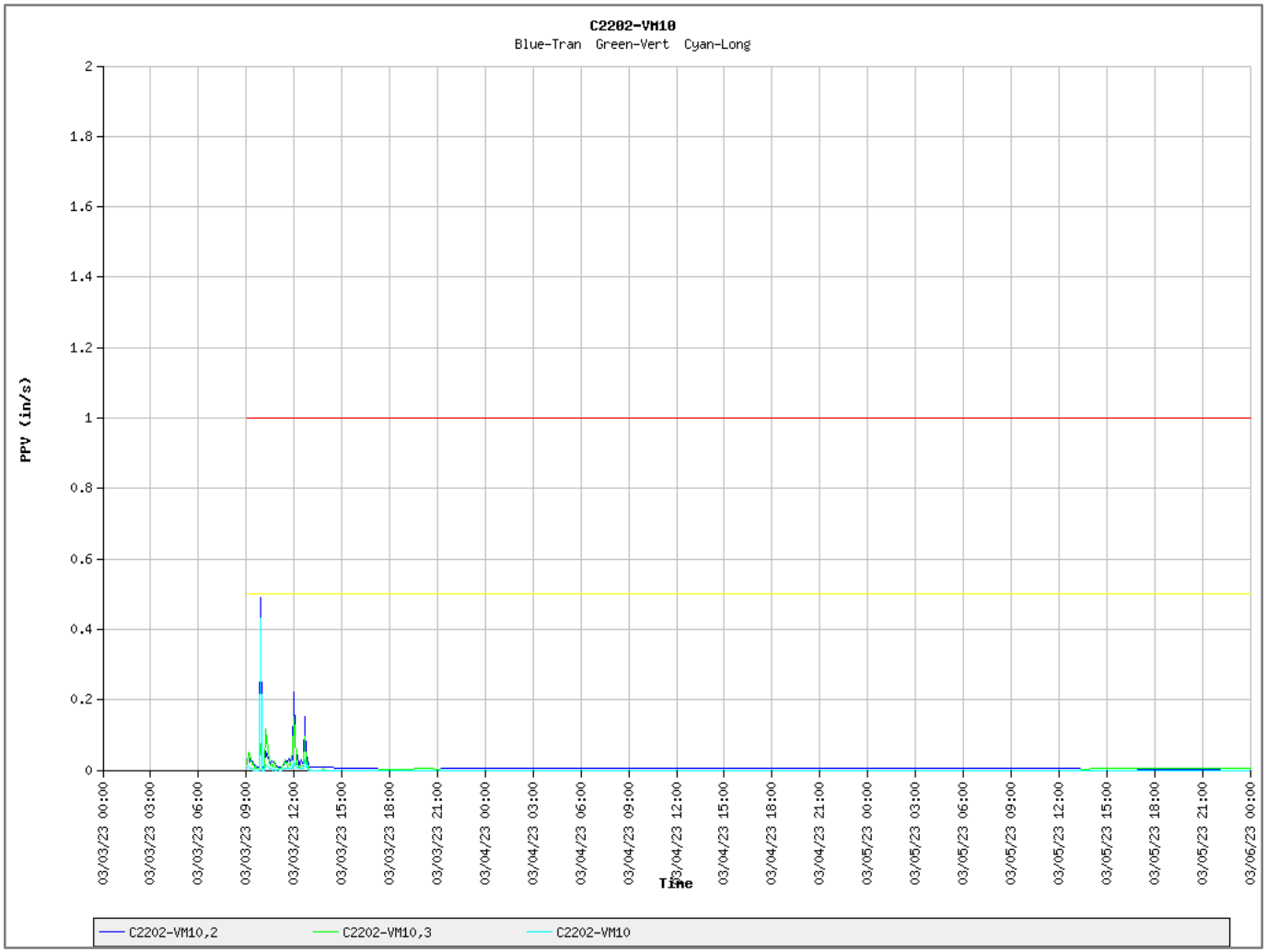
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM9 Longitudinal
C2202-VM9,2 Transverse
C2202-VM9,3 Vertical

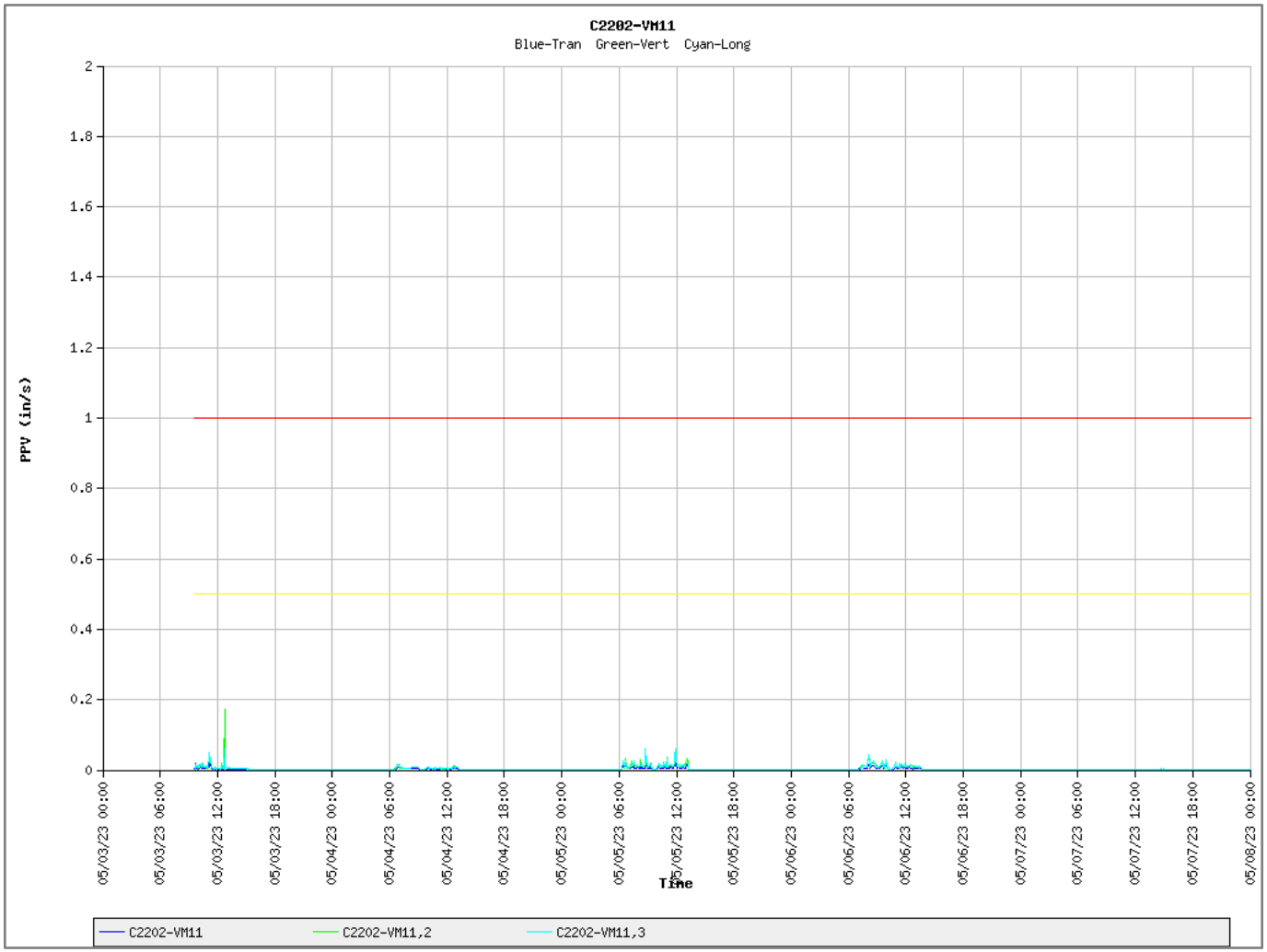
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM10 Longitudinal
C2202-VM10,2 Transverse
C2202-VM10,3 Vertical

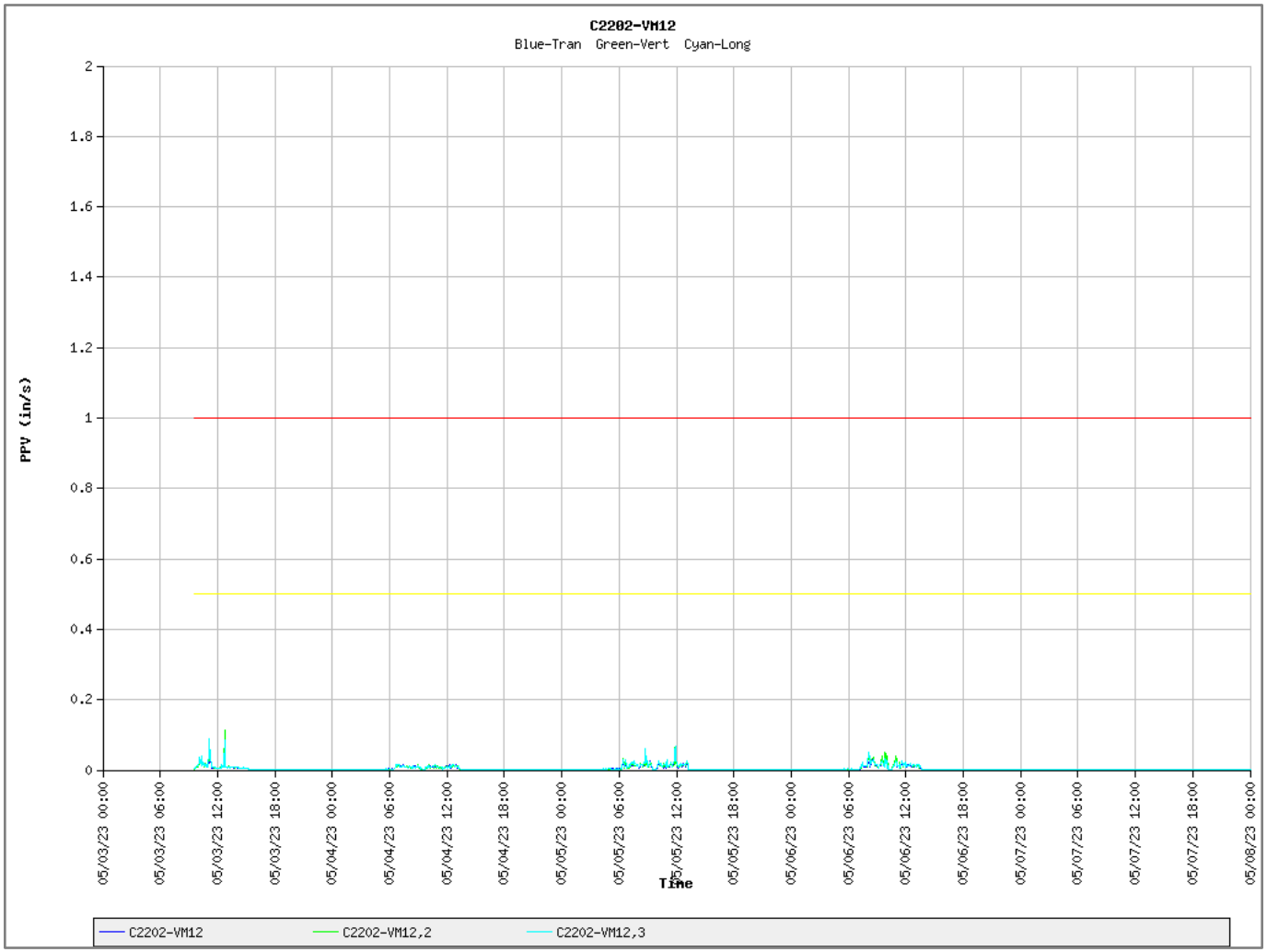
The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM11 Transverse
C2202-VM11,2 Vertical
C2202-VM11,3 Longitudinal

The Bronx Site Preparation Vibration Baseline Reference Data Plots



Exceedance level: 1 in/sec
Warning level: 0.5 in/sec

C2202-VM12 Transverse
C2202-VM12,2 Vertical
C2202-VM12,3 Longitudinal