

**AIR, NOISE AND VIBRATION
MONTHLY MONITORING REPORT
Number 010**

Prepared By: Roux / Wang Technology

DDC Project ID.:	BBJ-XSP	Period Start: 5/1/23 End 5/31/23	
Project Name:	NYCDDC – 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
25	25	2	There were two instances of elevated readings above 150ug/m ³ . These instances occurred on 5/4 and 5/31 and are detailed below.
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
5/4/23 9:56am	173	91	One elevated reading above the stop work level was caused by work activities taking place near the CAMP station. Work was stopped temporarily, and water was used to mitigate dust in the area but there were no subsequent concentrations above the action or stop work level so work continued.
5/31/23 11:39am	175	71	One elevated reading above the stop work level was caused by rock hammering taking place near the CAMP station. Work was stopped temporarily, and water was used to mitigate dust in the area but there were no subsequent concentrations above the action or stop work level so work continued.

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

2) Community Noise Monitoring Weekly Summary

Units: weighted decibels (dBA) level

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
25	25	4	There were nine instances of noise levels above the 80 dBA limit on four occasions. These instances occurred on 5/17, 5/18, 5/27, and 5/31 and are 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
5/17/23 9:50am	84.64	76.30	Exceedance began at 9:50am and ended at 10:10am due to excavator work near the noise meter on 142 nd St. Excavator work was adjusted to ensure that noise levels were reduced below 80 dBA.
5/17/23 10:00am	83.94		
5/17/23 10:10am	84.57		
5/18/23 7:50am	80.20	79.45	Exceedance began at 7:50am and ended at 8:00am due to rock hammering work. Rock hammering work was adjusted to ensure that noise levels were reduced below 80 dBA.
5/18/23 8:00am	80.16		
5/27/23 7:50am	82.15	63.65	Exceedance was caused by backup alarm for equipment mobilizing near noise meter. Work was stopped in this area.
5/31/23 9:50am	83.99	78.84	Exceedance began at 9:50am

5/31/23 10:00am	84.79		and ended at 10:10am due to unrelated work happening outside construction fence on 141 st Street and Concord Ave.
5/31/23 10:10am	81.65		
<p>Narrative Summary of Air Monitoring, Excursions and Corrective Actions: <i>In May 2023, construction-related levels of noise did surpass the limits of Local Law 113 of 2005 during nine instances on four occasions. On every occasion, the daily average was below the limits and did not cause noise concerns for the community.</i></p>			

ATTACHMENTS:

- 1 – Include Map of Station/Locations
- 2 – Include Data Plots
- 3 – Include Baseline reference

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
25	31	8	Three out of eight vibration monitors (VM) had recorded a total of 13 exceedances, including, and disturbances. Detail 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

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
5/3/2023 23:05	0.895	0.005	Exceedance observed at VM5 was recorded during non-construction hours.
5/4/2023 01:28	0.735	0.065	Exceedance observed at VM5 was recorded during non-construction hours.
5/4/2023 08:09	1.29	0.05	This is an isolated event recorded at VM5 possibly due to non-construction related activities, associated with resident's activities.
5/9/2023 03:12	0.705	0.045	Exceedance observed at VM5 was recorded during non-construction hours.
5/16/2023 22:09	0.725	0.02	Exceedance observed at VM5 was recorded during non-construction hours.
5/26/2023 07:32	0.62	0.05	This is an isolated event recorded at VM5 possibly due to non-construction related activities, associated with resident's activities.
5/5/2023 16:32	1.56	0.025	Exceedance observed at VM6 was recorded during non-construction hours.
5/16/2023 12:31	1.09	0.015	This is an isolated event recorded at VM6 possibly due to non-construction related activities, associated with resident's activities.
5/23/2023 10:05	0.514	0.4664	Exceedance observed at VM12 was due to accidental disturbance of the sensor cable while loading rock debris off-site.
5/25/2023 06:59 to 11:59	0.718	0.4568	Exceedances observed at VM12 were due to accidental disturbance of the sensor cable while pouring concrete for the button piers.

Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

In May 2023, three vibration monitors had recorded exceedances. There were exceedances recorded during non-construction hours at VM5 and VM6. There were isolated events recorded at VM5 and VM6, where residents have access to the sensors as they are installed in the basement of residential buildings. There were isolated events recorded at VM5 and VM6 during baseline period as well.

As VM9 and VM10 were experiencing communication issue after the site condition changed, they were replaced by another type of vibration monitors to resolve the communication issue. The units are named as VM11 and VM12.

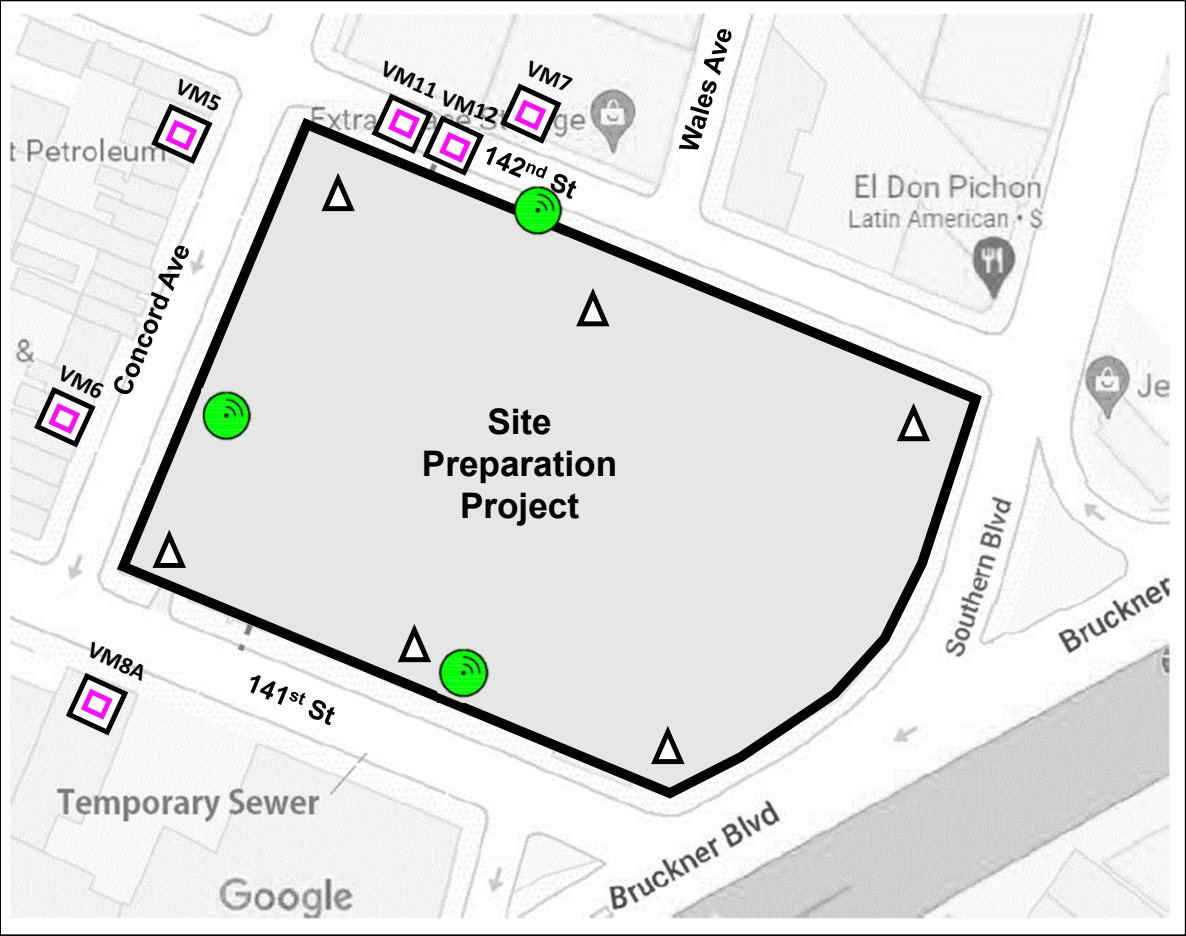
The exceedances recorded at VM12 on May 23rd and May 25th were caused by accidental disturbances of the sensor cable which pulled on the sensor thus causing the exceedances.




ATTACHMENTS:

- 1 – Include one map of monitoring station/locations
- 2 – Include Data Plots
- 3 – Include Baseline Reference

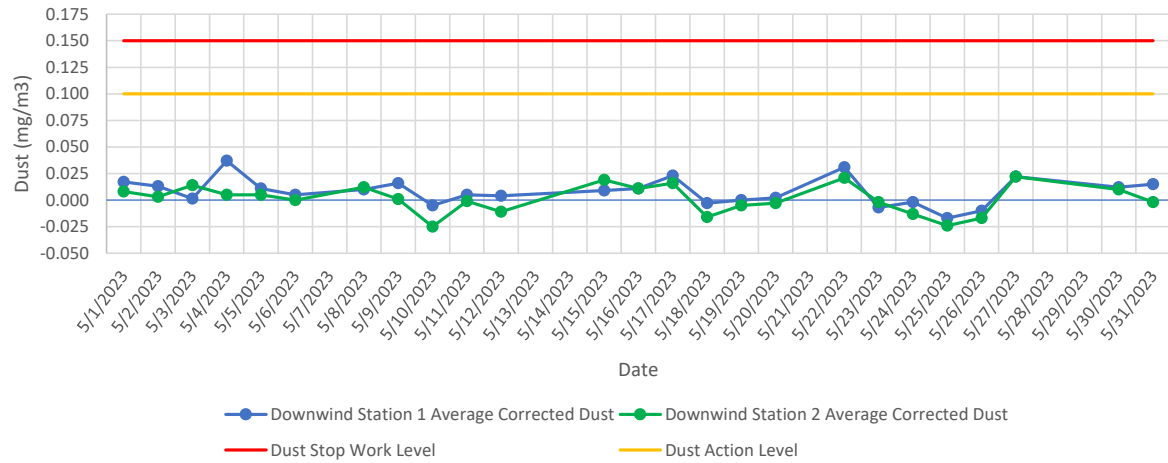
Attachments

Environmental Monitoring The Bronx

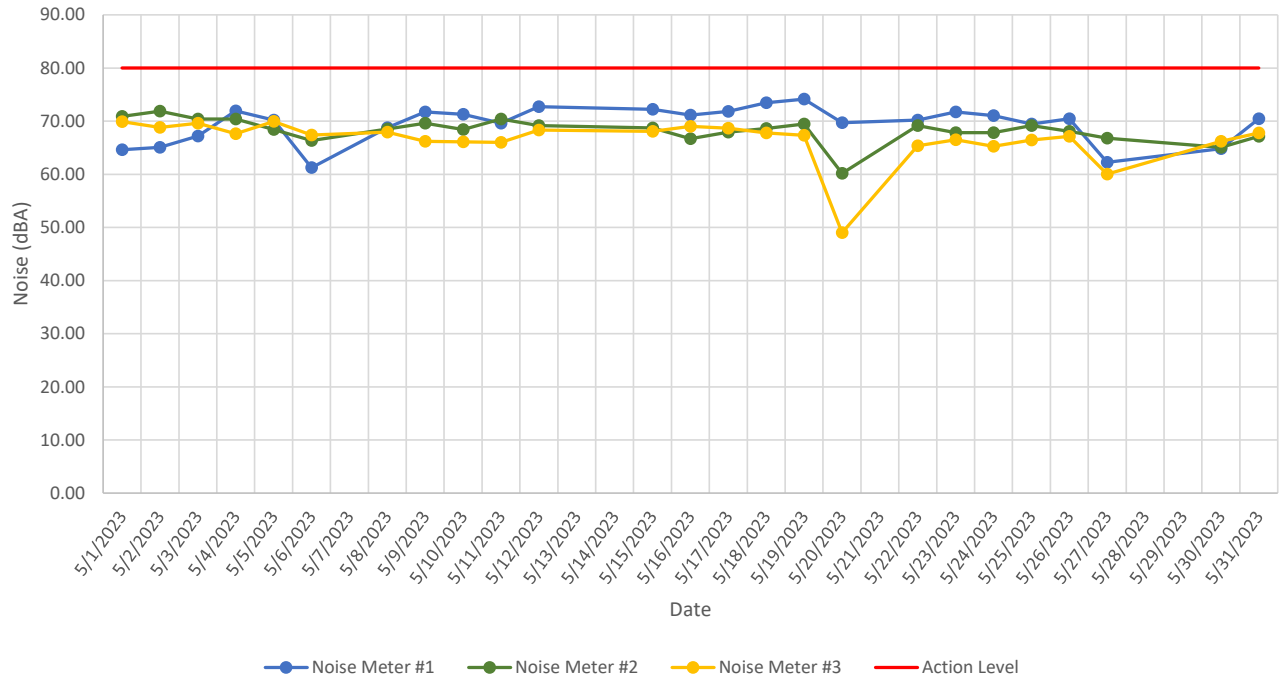


-  Vibration Monitor (VM)
-  Air Monitoring Station (DM)
-  Noise Monitoring Station (NM)

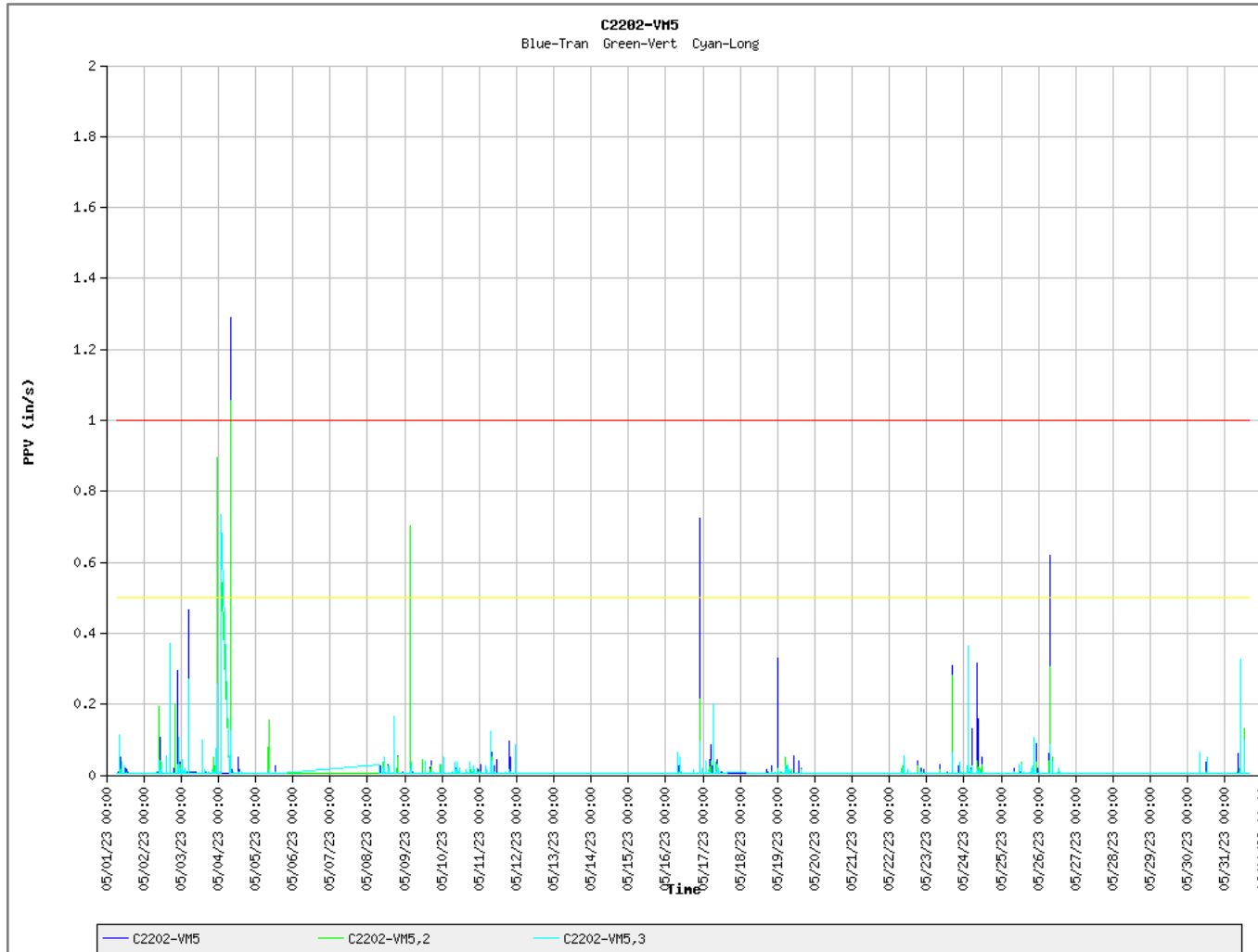
May 2023, 15-min Running Average Air Quality Data, PM 10ug/m3 Plot



May 2023, Average Equivalent Sound Level Plot (Laeq)



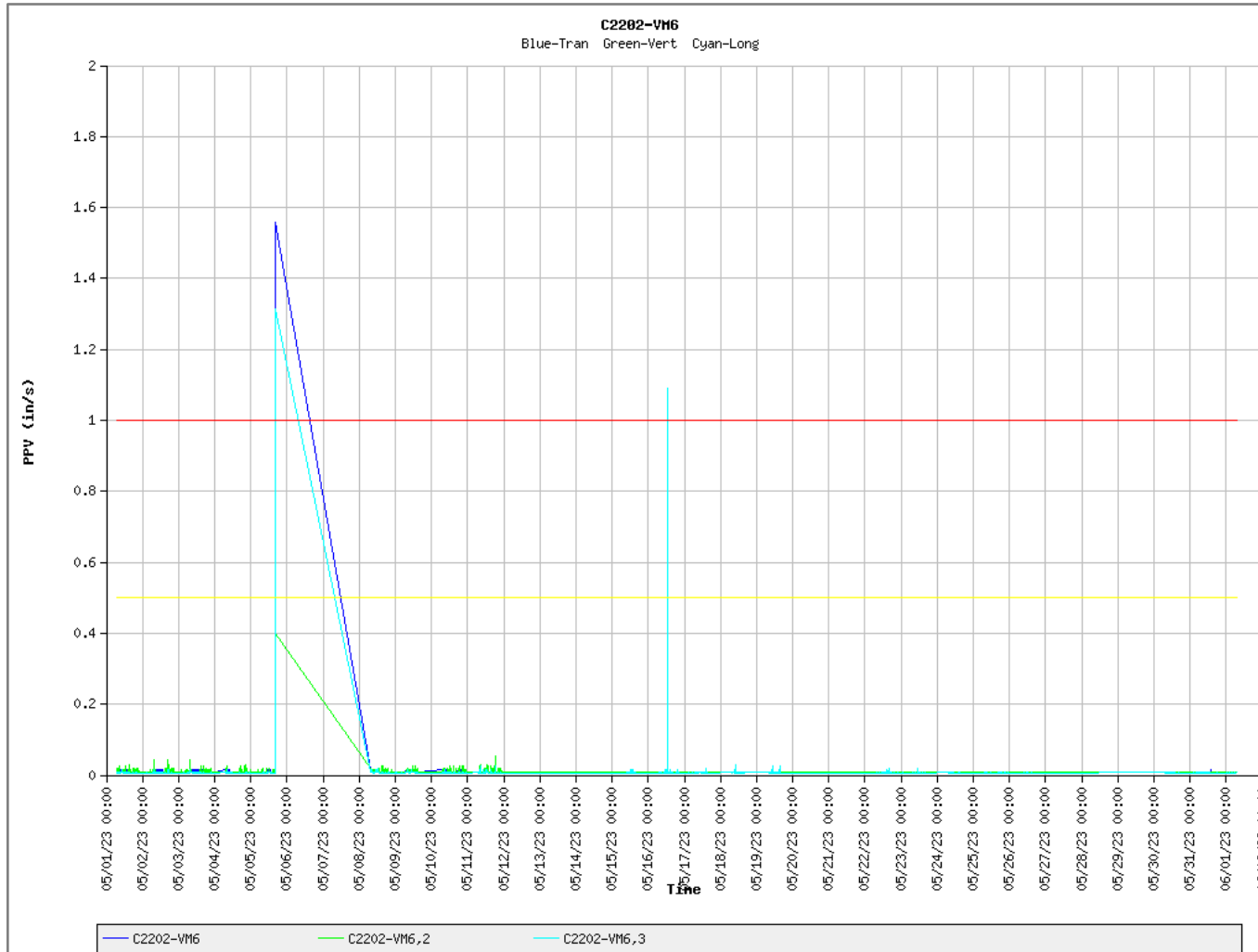
The Bronx Site Preparation May 2023 Vibration Monitoring Data Plots



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

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

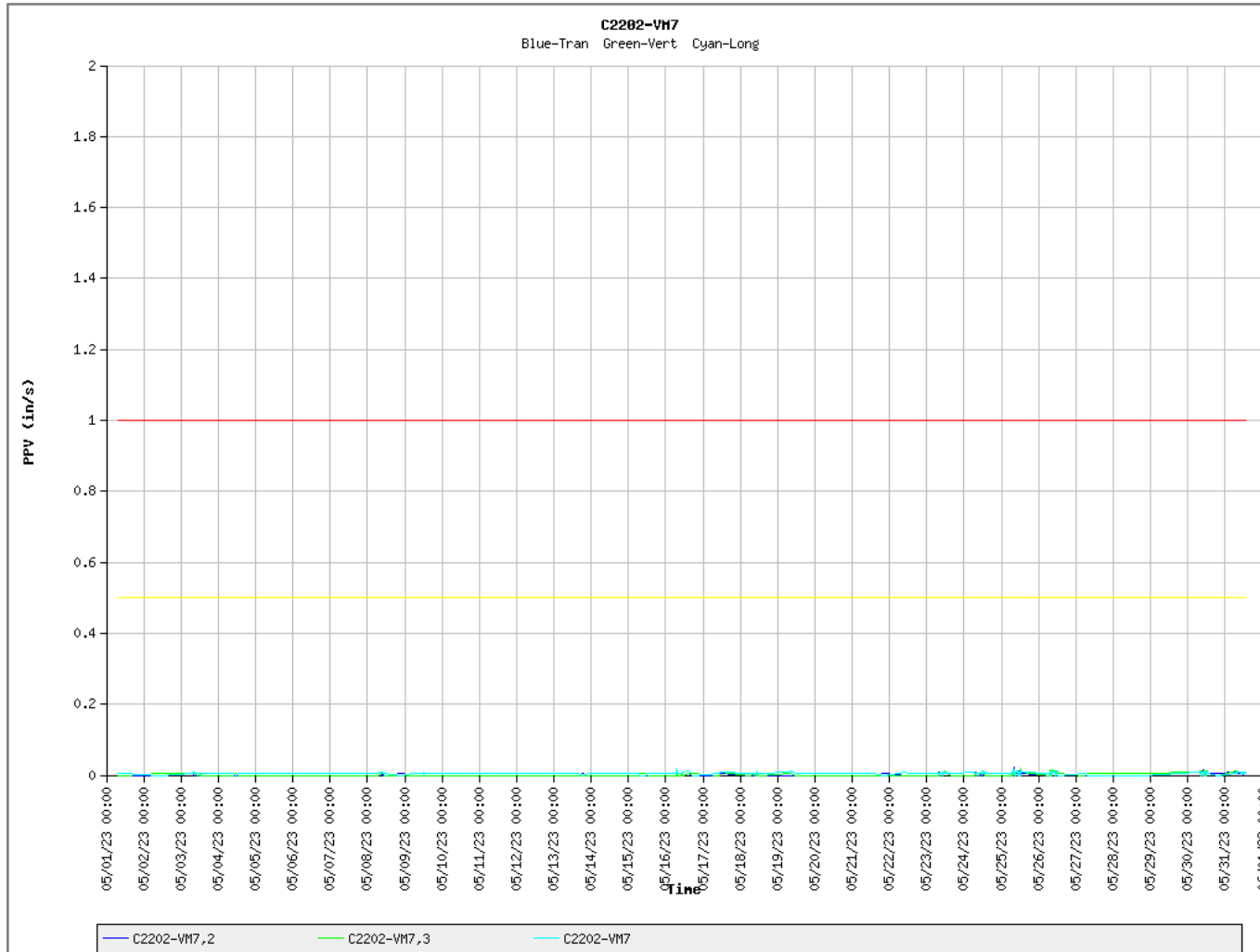
The Bronx Site Preparation May 2023 Vibration Monitoring Data Plots



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

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

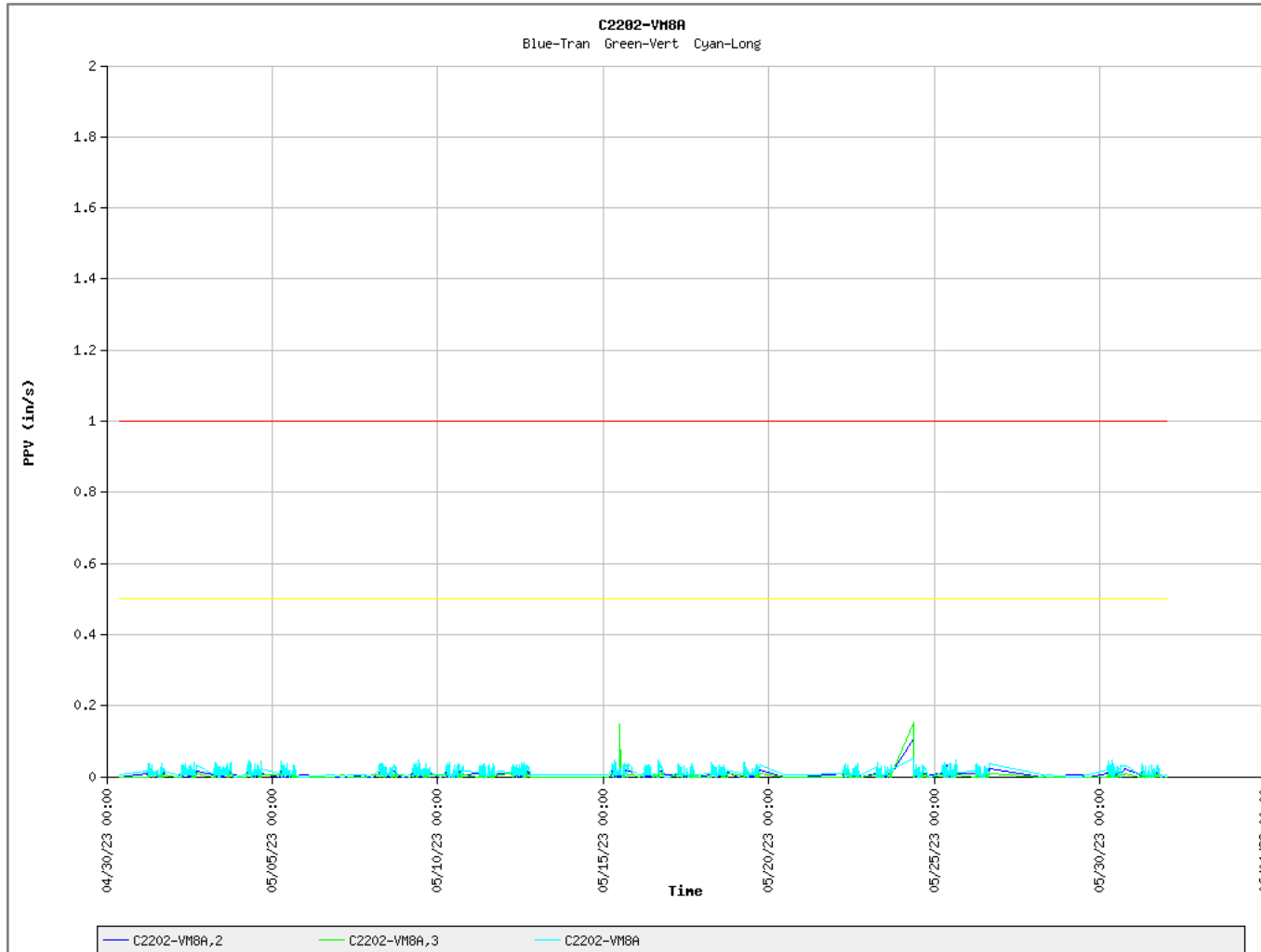
The Bronx Site Preparation May 2023 Vibration Monitoring Data Plots



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

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

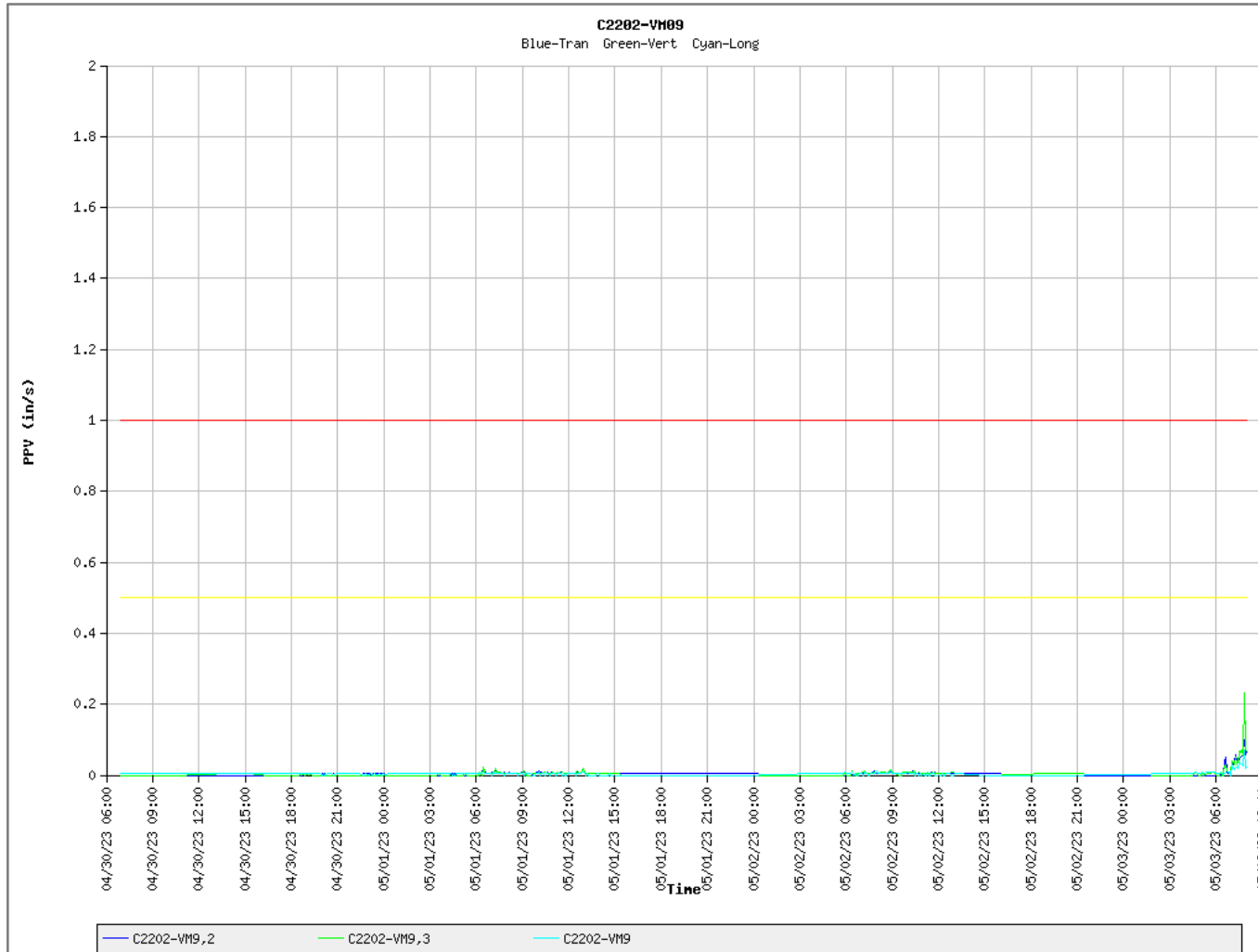
The Bronx Site Preparation May 2023 Vibration Monitoring Data Plots



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

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

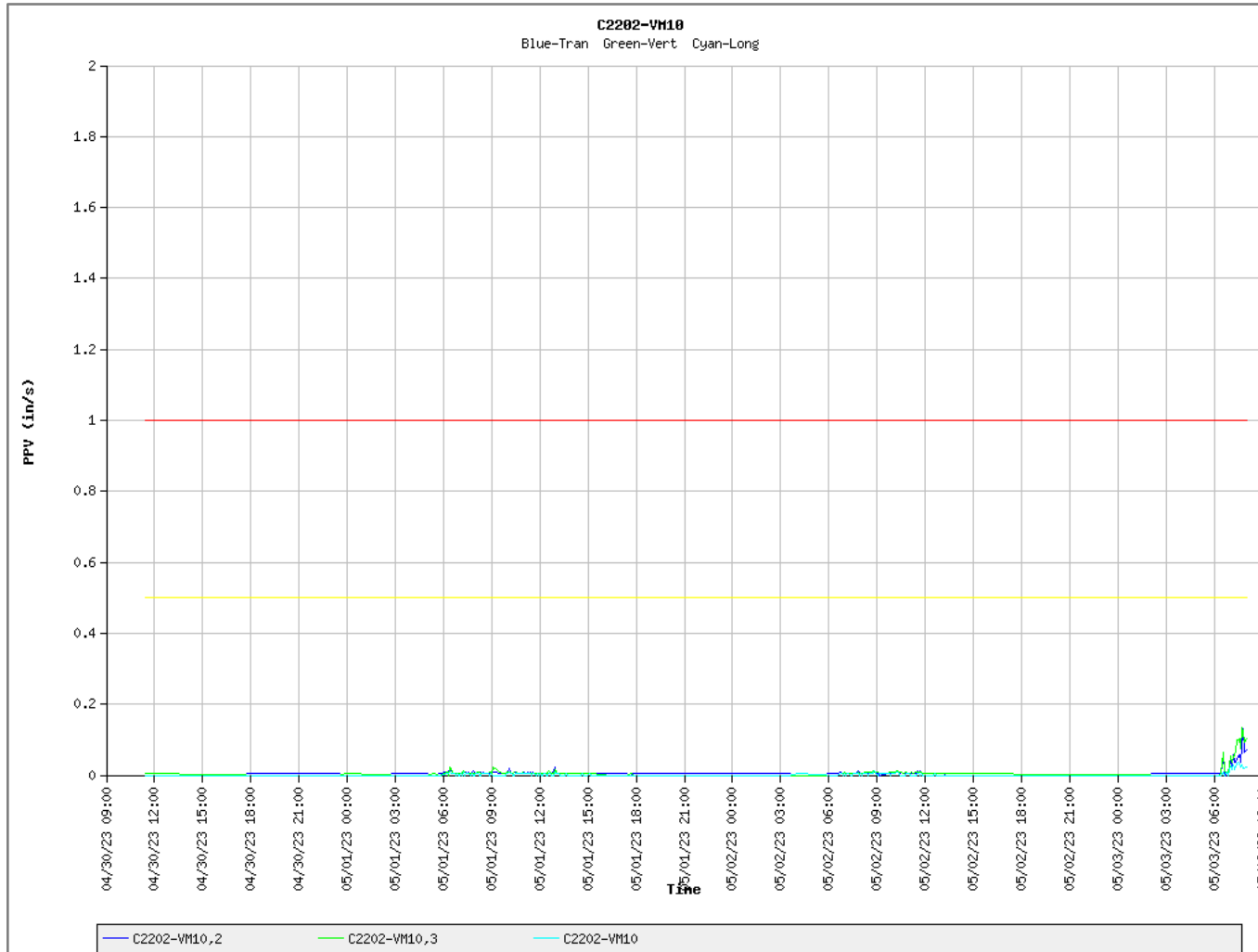
The Bronx Site Preparation May 2023 Vibration Monitoring Data Plots



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

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

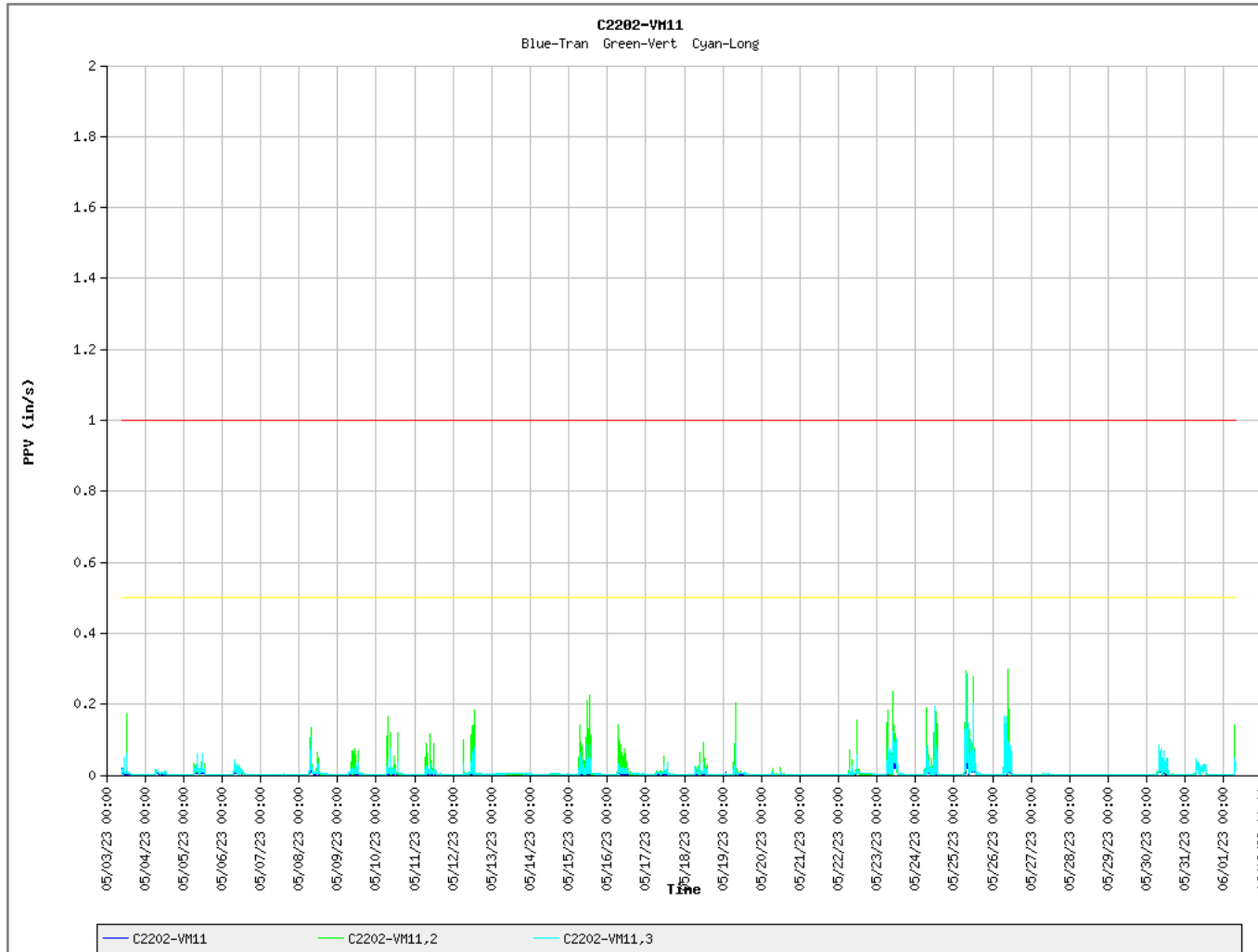
The Bronx Site Preparation May 2023 Vibration Monitoring Data Plots



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

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

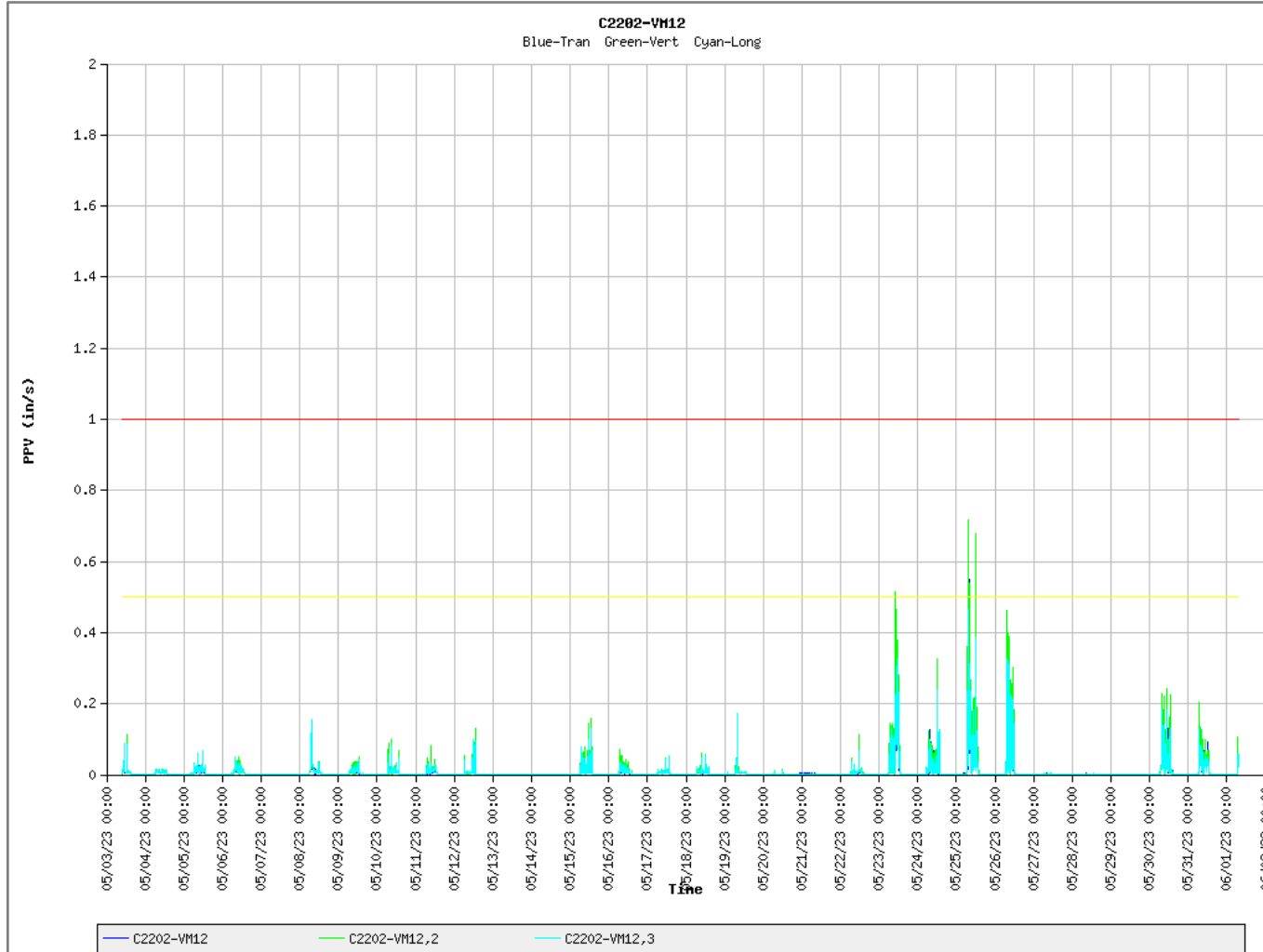
The Bronx Site Preparation May 2023 Vibration Monitoring Data Plots



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

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

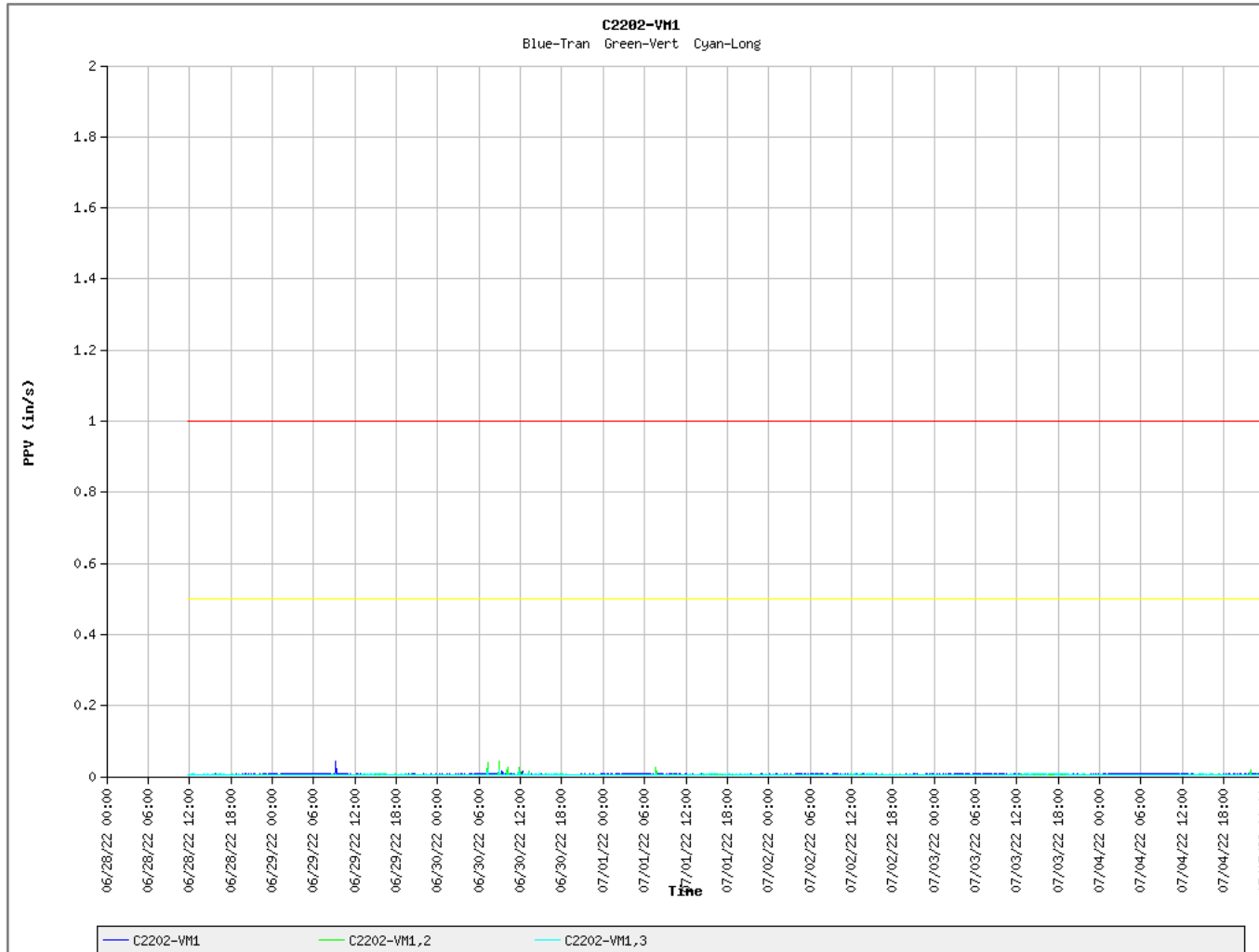
The Bronx Site Preparation May 2023 Vibration Monitoring Data Plots



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

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

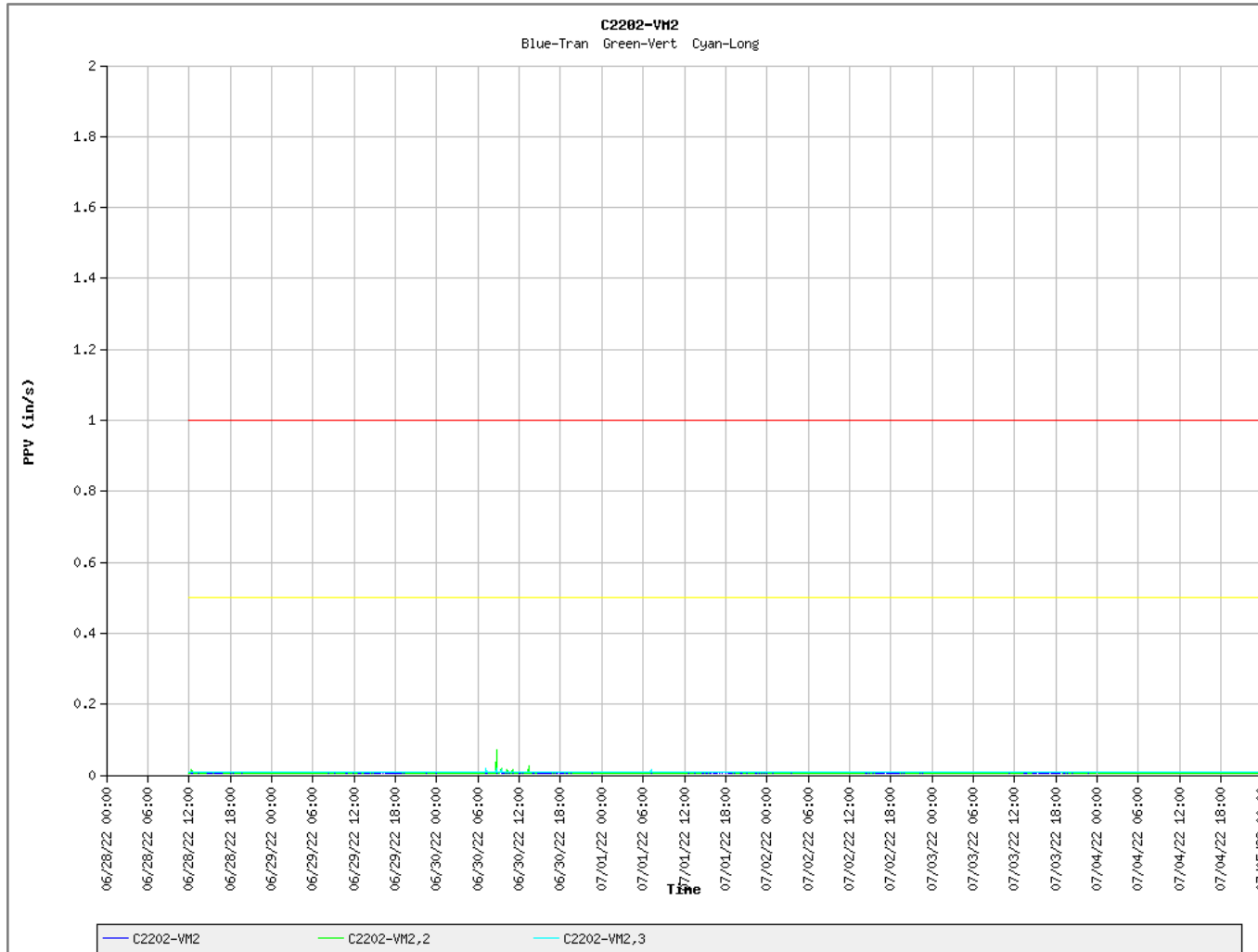
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

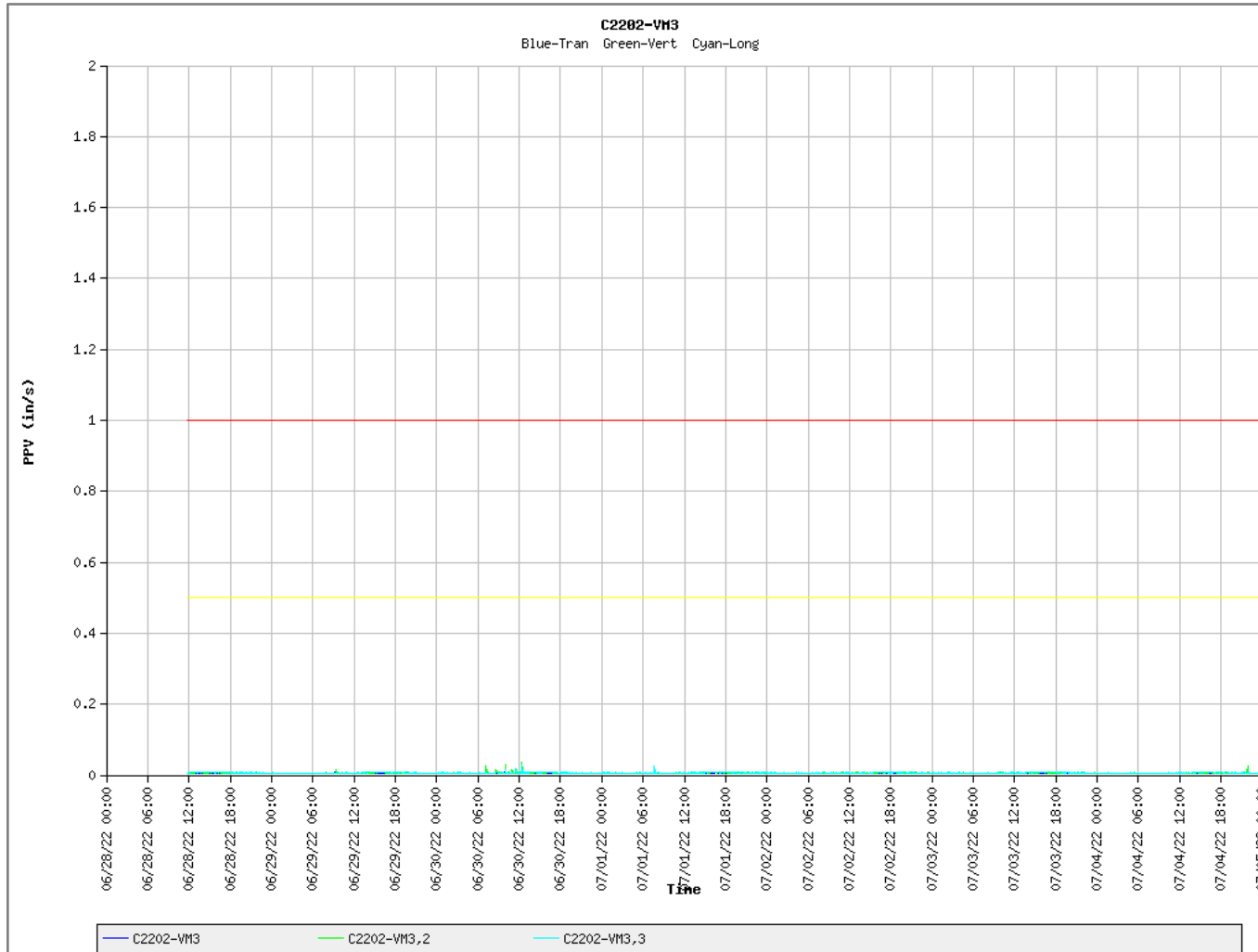
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

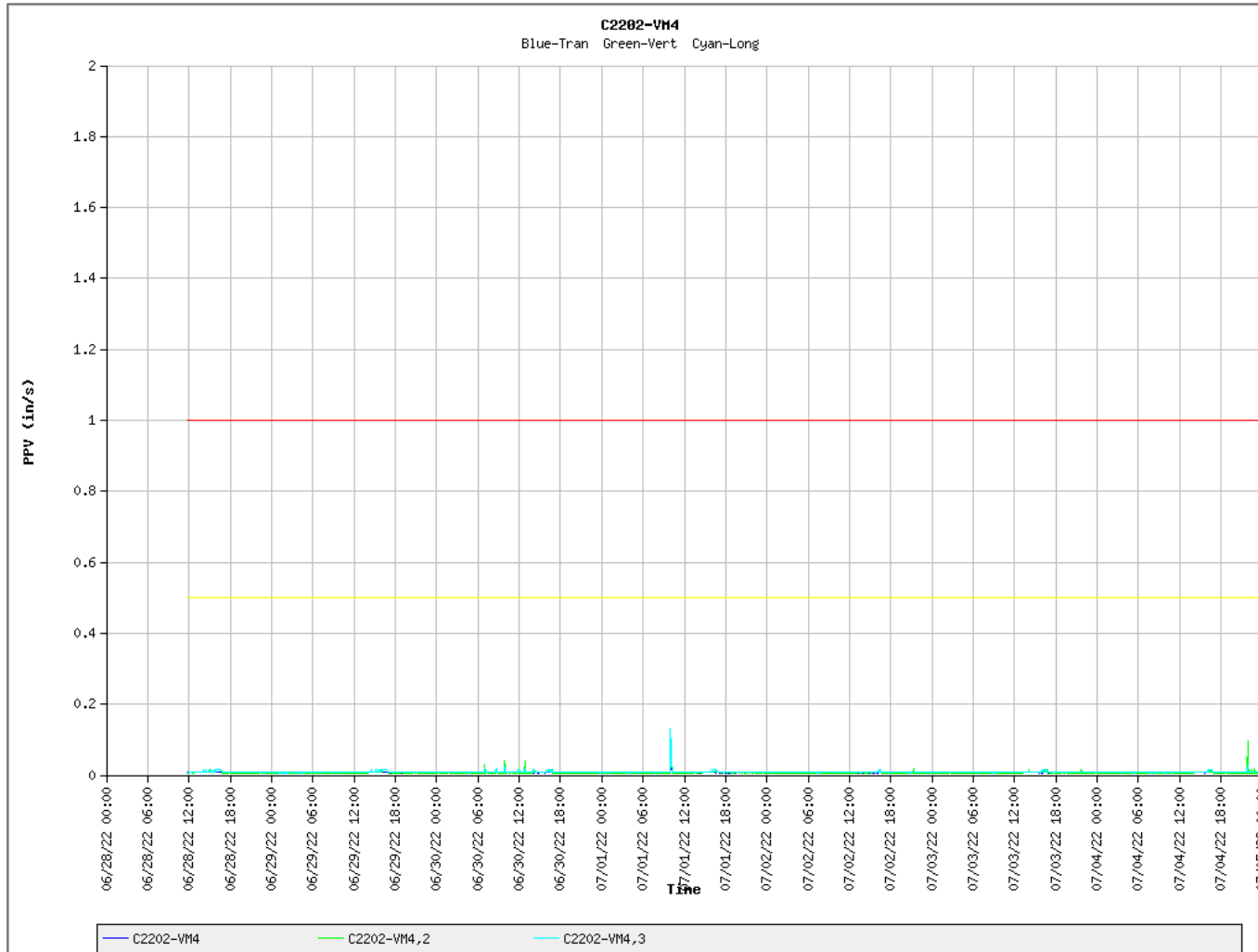
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

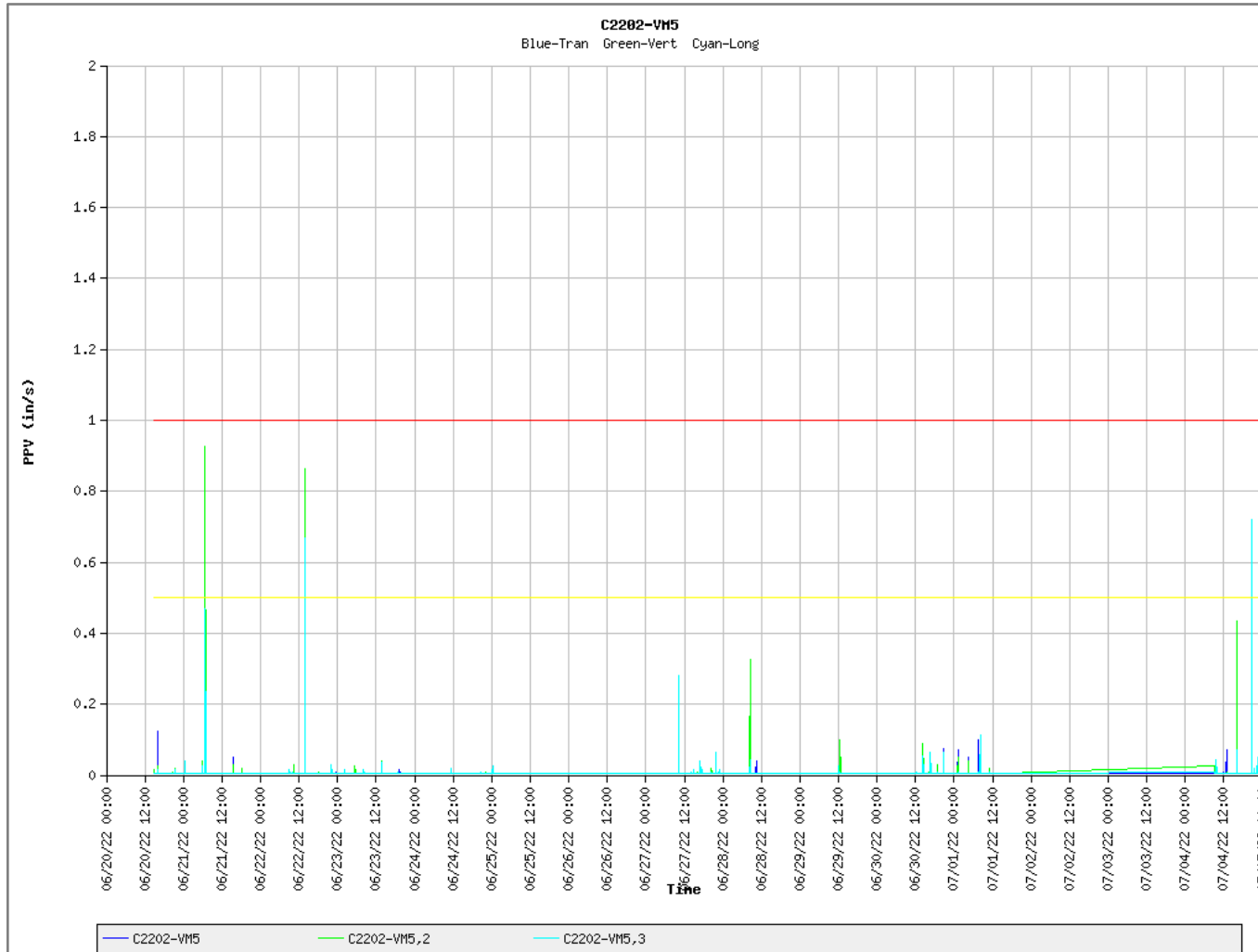
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

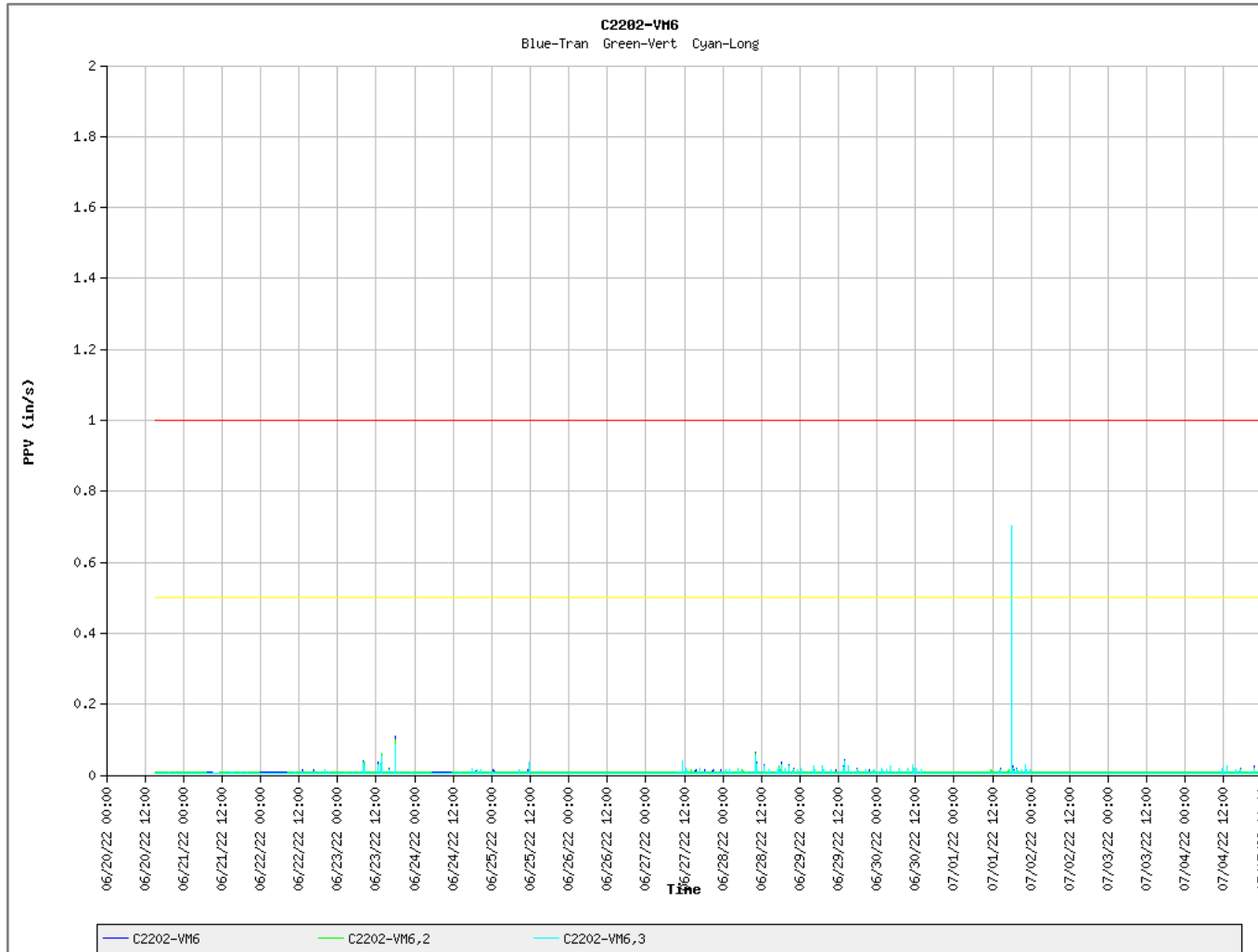
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

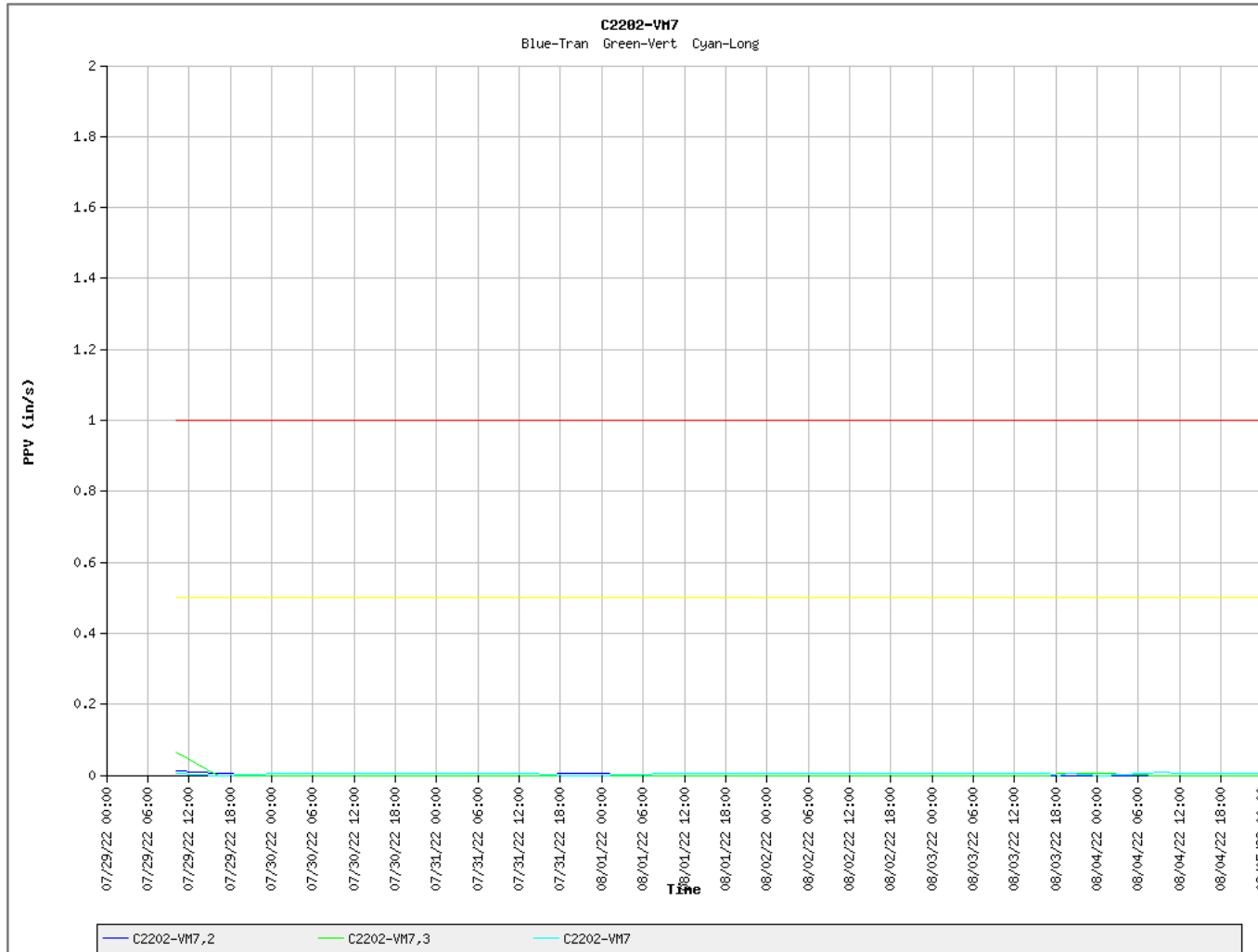
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

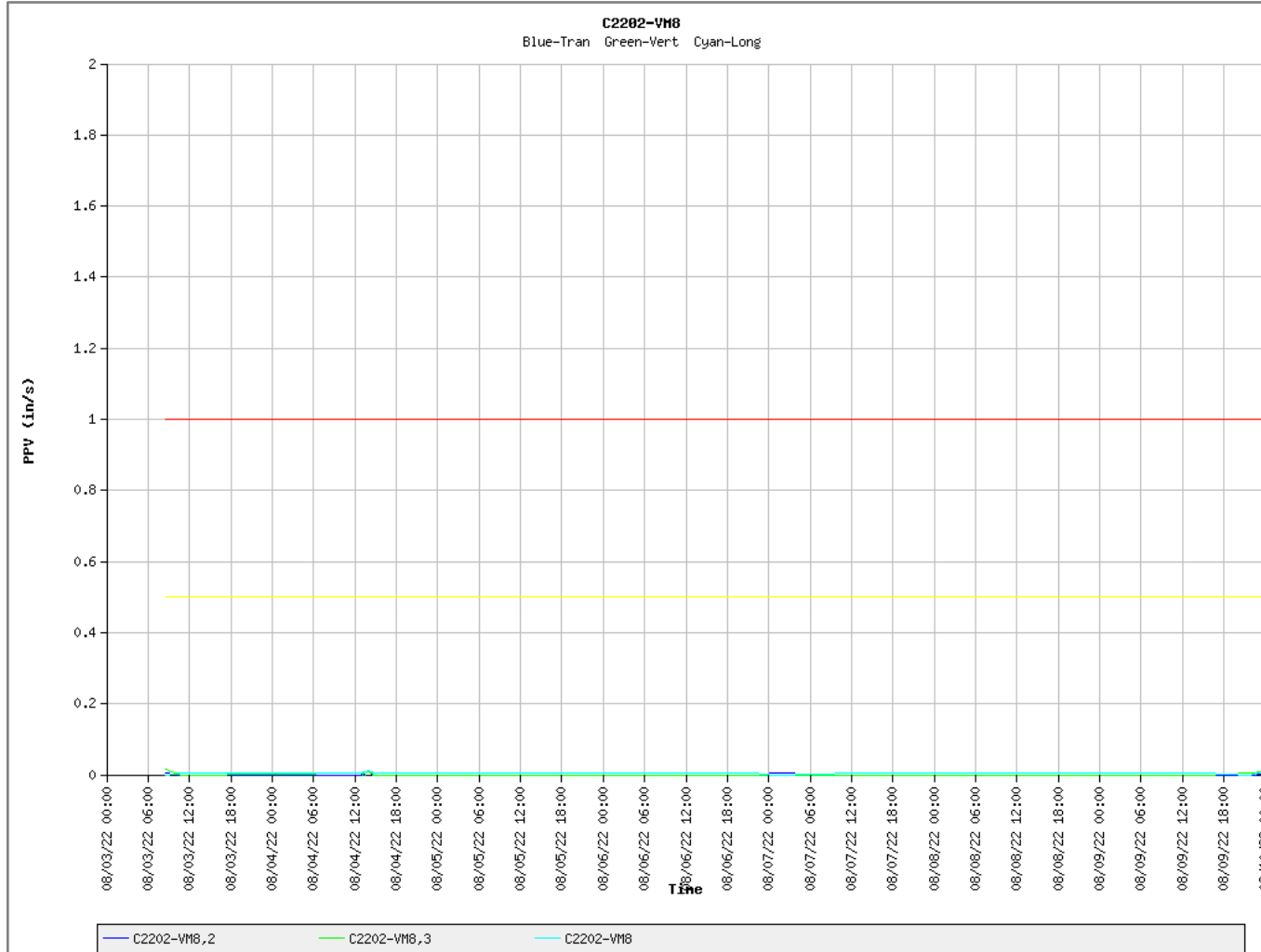
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

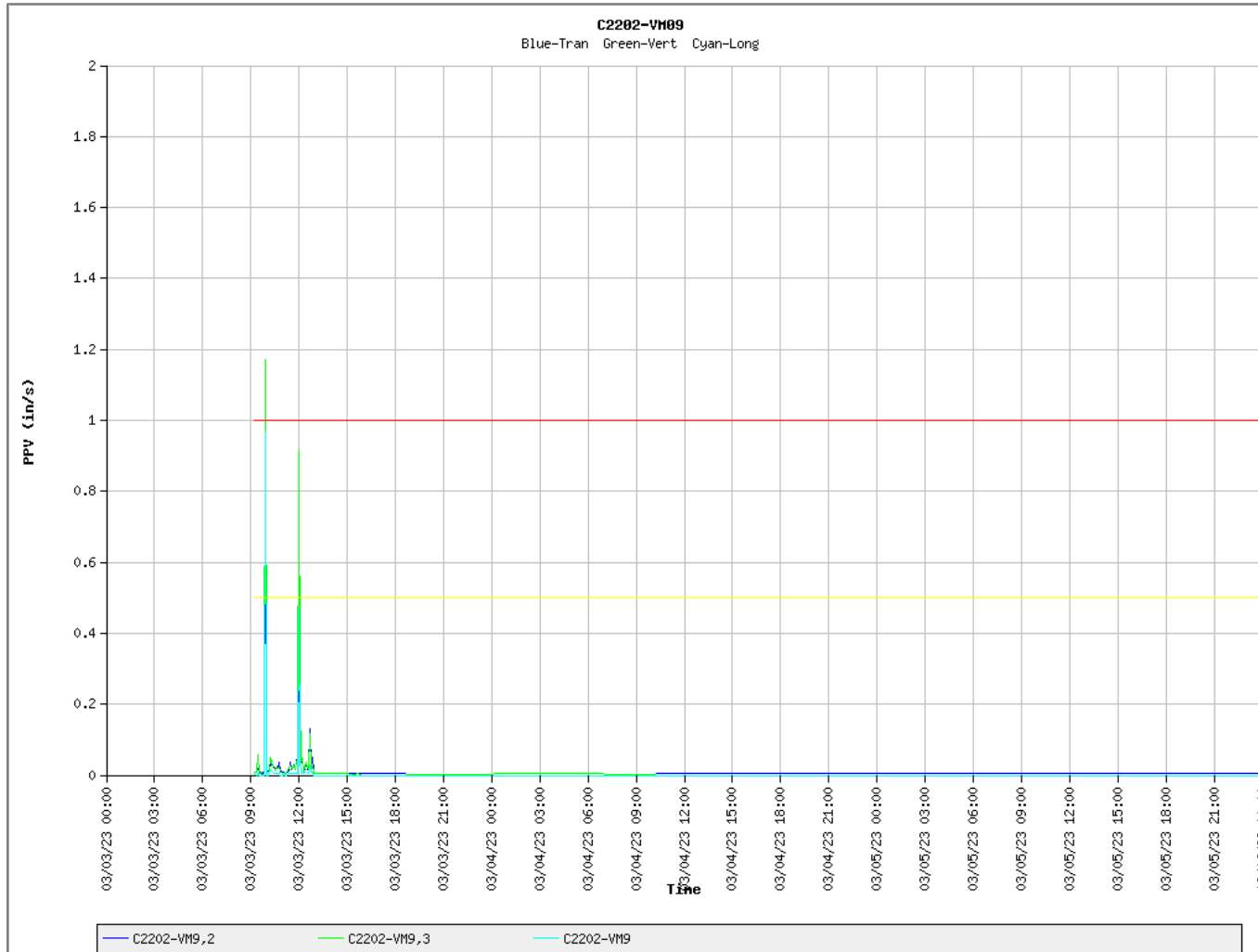
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

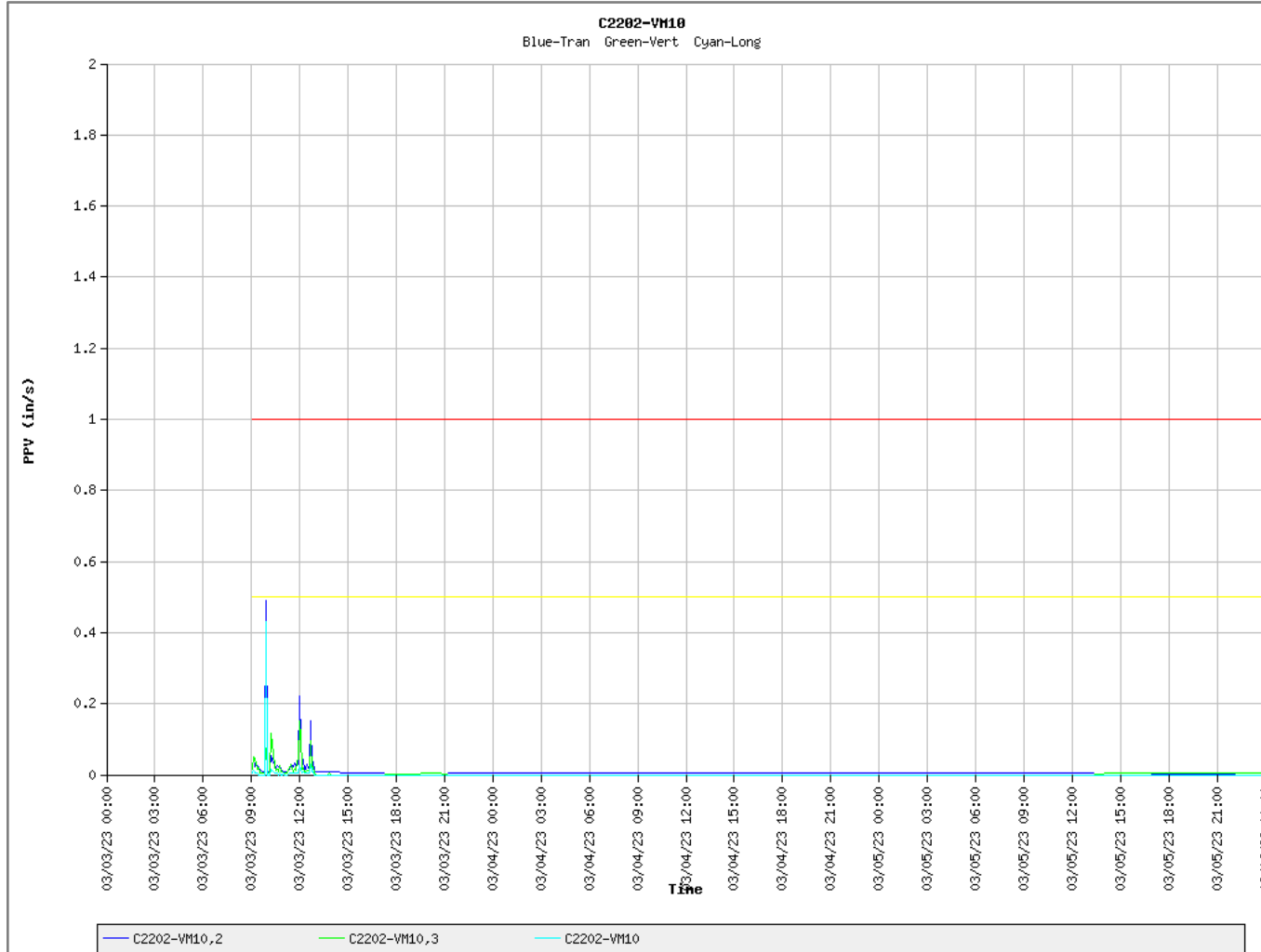
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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