AIR, NOISE AND VIBRATION MONTHLY MONITORING REPORT
Number 012

Prepared By: Roux / Wang Technology

DDC Project No.:	BBJ-XSP	**Period Start:** 7/1/23 **End** 7/31/23
Project Name:	NYCDDC – The Bronx Site Preparation	
DDC Pin No.:	8502021CR0004P-06P	

1) Community Air Monitoring Monthly 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
22	21	3	Community Air Monitoring was not performed on 7/15 because there was no excavation work taking place. There were three instances above the 150 ug/m^3 stop work level. These instances occurred on 7/12, 7/17, 7/28 and are detailed below.

Community Air Monitoring Monthly 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
7/12/23 7:30am	158	89	One elevated reading above the dust action level was caused by machinery moving near the Community Air Monitoring Program (CAMP) station. Work was stopped temporarily, and water was used to mitigate dust in the working area.
7/17/23 6:58am	284	94	One elevated reading above the dust action level was caused by rock scraping adjacent to the CAMP station. Work was stopped temporarily, and water was used to mitigate dust in the working area.
7/28/23 7:40am	158	83	One elevated reading above the dust action level was caused by rock scraping. Work was stopped temporarily, and water was used

			to mitigate dust in the working area.

Narrative Summary of Air Monitoring, Excursions and Corrective Actions:
In July 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) 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
22	22	0	There were no noise levels exceedances.

Community Noise Monitoring Monthly 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
N/A	N/A	N/A	N/A

Narrative Summary of Air Monitoring, Excursions and Corrective Actions:
In July 2023, construction-related levels of noise did not surpass the limits of Local Law 113 of 2005. 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
22	31	13	Four out of six vibration monitors (VM) recorded a total of fifty-one exceedances. Forty-one exceedances were caused by a sensor being out of level. As the longitudinal channel was failing sensor check, the geophone was out of level from front to back and was likely not securely attached to the structure being monitored, hence high readings that exceed the project limits were recorded randomly. Three exceedances were caused by accidental contact during delivery unloading. Seven exceedances were isolated events likely not related to construction activities or were recorded during non-construction hours. 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
7/11/2023 10:54	1.06	0.095	This is an isolated event recorded at VM5 possibly due to non-construction related activities, associated with resident's activities.
7/11/2023 18:30	0.7	0.01	Exceedances observed at VM5 were recorded during non-construction hours.
7/15/2023 23:09	0.515	0.07	Exceedances observed at VM5 were recorded during non-construction hours.
7/16/2023 17:20	1.02	0.18	Exceedances observed at VM5 were recorded during non-construction hours.
7/18/2023 11:27	0.655	0.005	This is an isolated event recorded at VM5 possibly due to non-construction related activities, associated with resident's activities.
7/20/2023 19:02	0.86	0.005	Exceedances observed at VM5 were recorded during non-construction hours.
7/17/2023 09:30	9.075	0.025	This is an isolated event recorded at VM6 possibly due to non-construction related activities, associated with resident's activities.
7/12/2023 07:55	0.5331	0.2799	Exceedance observed at VM11 was due to unloading delivery of sewer bypass pump pipes. No corrective action was required at this time.
7/12/2023 10:45	1.1888	0.0279	Exceedance observed at VM11 was due to unloading delivery of sewer bypass pump pipes. No corrective action was required at

			this time.
7/14/2023, 7/15/2023, 7/16/2023, 7/17/2023, 7/18/2023, 7/19/2023, 7/20/2023, 7/21/2023, 7/22/2023, 7/23/2023, & 7/24/2023	1.8271	0.26	Exceedances observed at VM11 was due to the sensor being out of level. The geophone was installed on the sand on top of the oil static line with a sandbag placed on top. The geophone was likely disturbed, slowly became out of level in the longitudinal direction and no longer securely attached to the structure being monitored, hence high readings that exceed the project limits were recorded randomly. Access was granted on 7/26/2023, the sand around the oil static line was repacked and the sensor was releveled. Once completed, the readings returned to be within the project threshold afterwards.
7/12/2023 10:45	0.5381	0.0242	Exceedance observed at VM12 was due to unloading delivery of sewer bypass pump pipes. No corrective action was required at this time.

Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

In July 2023, four vibration monitors had recorded exceedances.

There were exceedances recorded during non-construction hours at VM5. There were isolated events recorded at VM5 and VM6, possibly due to non-construction related activities, associated with resident's activities. There were isolated events recorded at VM5 and VM6 during baseline period as well. No corrective actions were required at this time.

The exceedances recorded at VM11 and VM12 on July 12th were due to unloading delivery of sewer bypass pump pipes. No corrective actions were required at this time.

The exceedances recorded at VM11 between July 14th and July 24th were due to sensor being out of level. The sensor was releveled on July 26th. Once completed, the readings returned to be within the project threshold afterwards.

ATTACHMENTS:

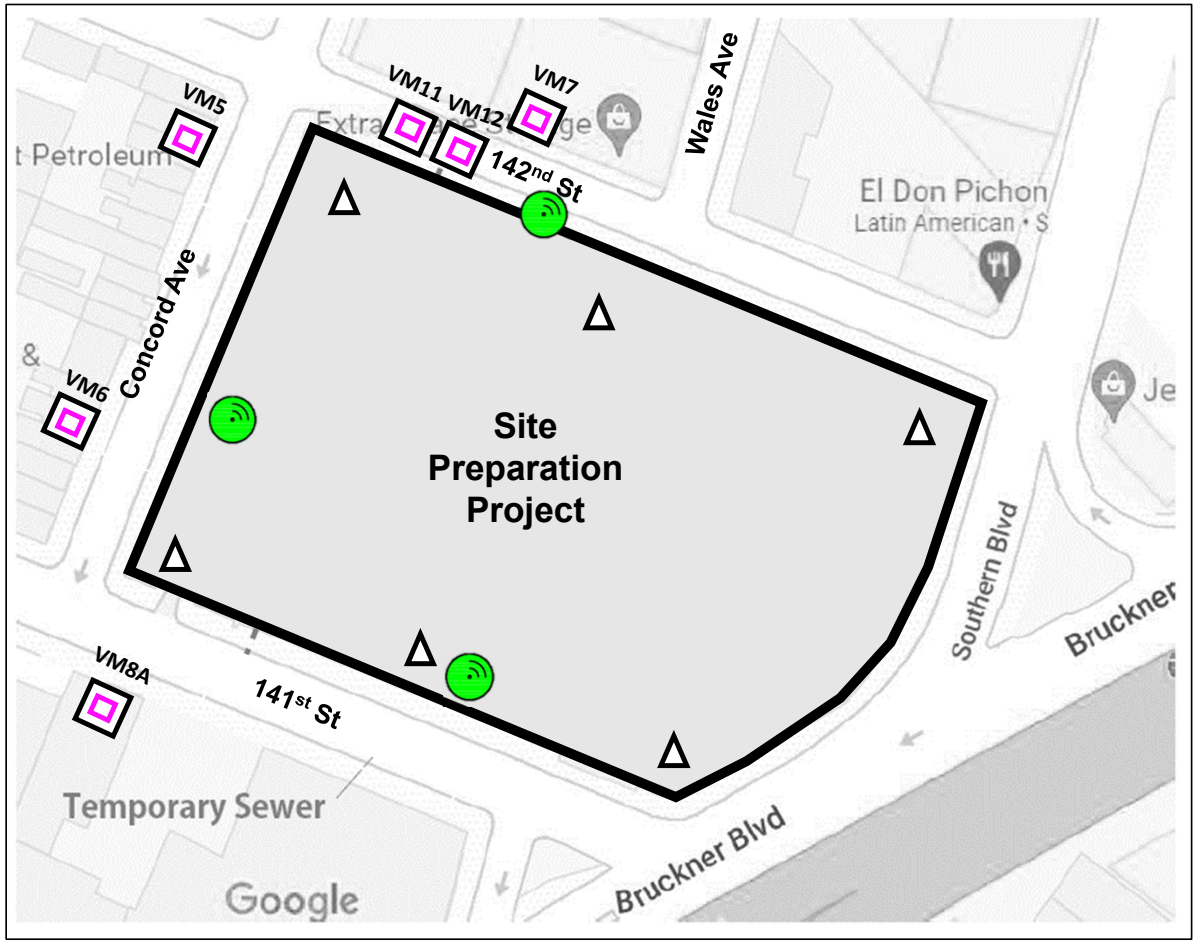
1 – Include one map of monitoring station/locations

2 – Include Data Plots

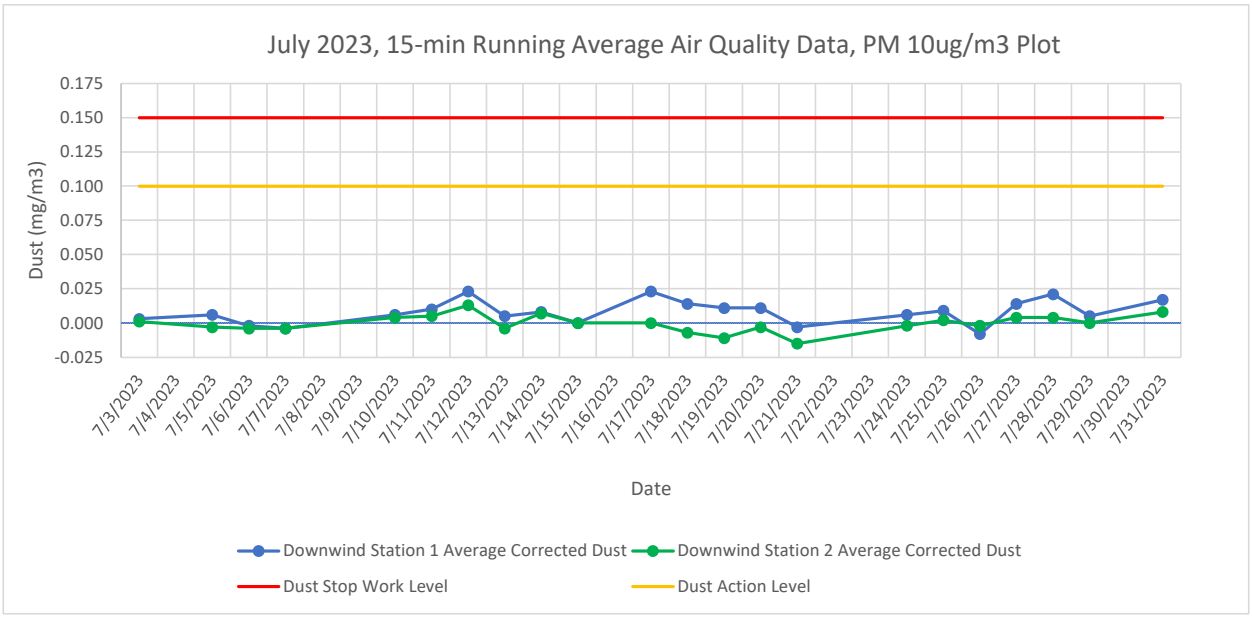
3 – Include Baseline Reference

Attachments

Environmental Monitoring The Bronx



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


July 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
7/3/2023
7/4/2023
7/5/2023
7/6/2023
7/7/2023
7/8/2023
7/9/2023
7/10/2023
7/11/2023
7/12/2023
7/13/2023
7/14/2023
7/15/2023
7/16/2023
7/17/2023
7/18/2023
7/19/2023
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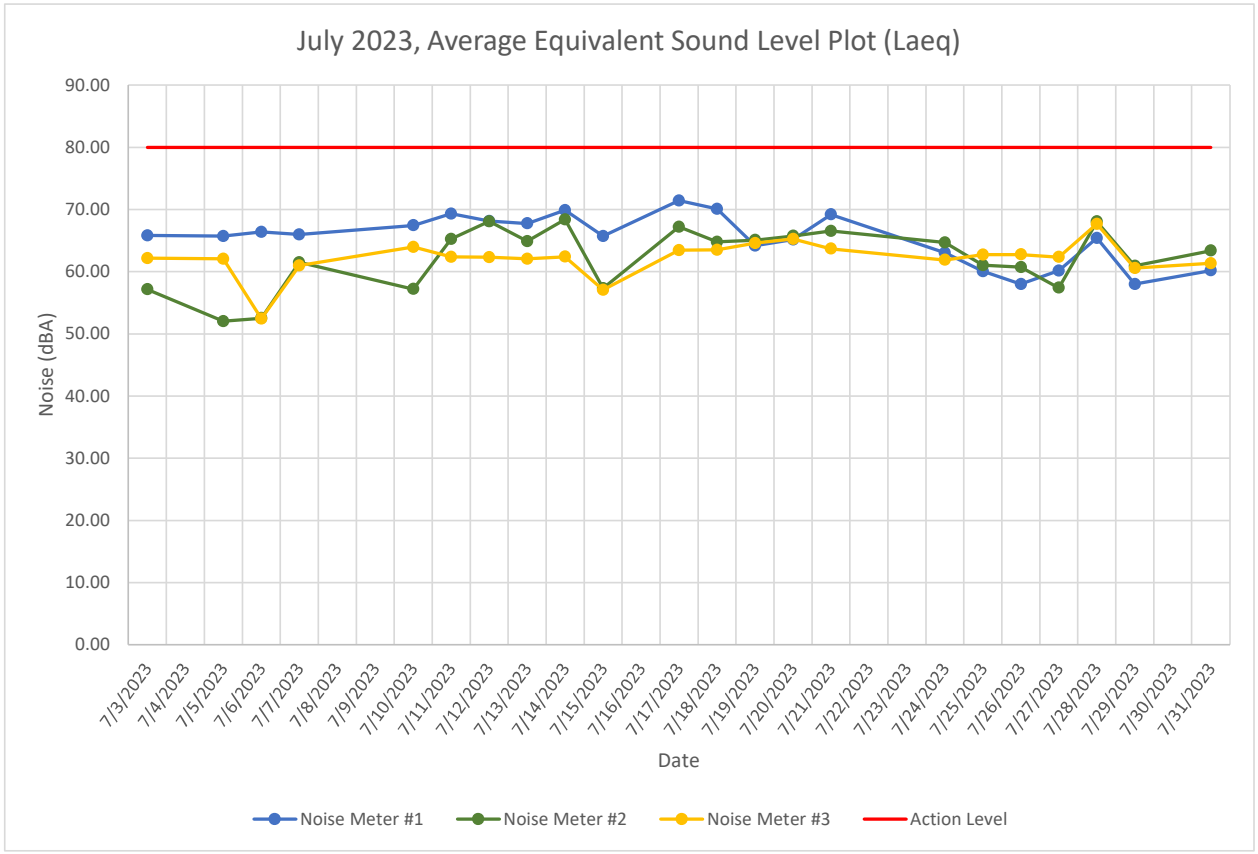
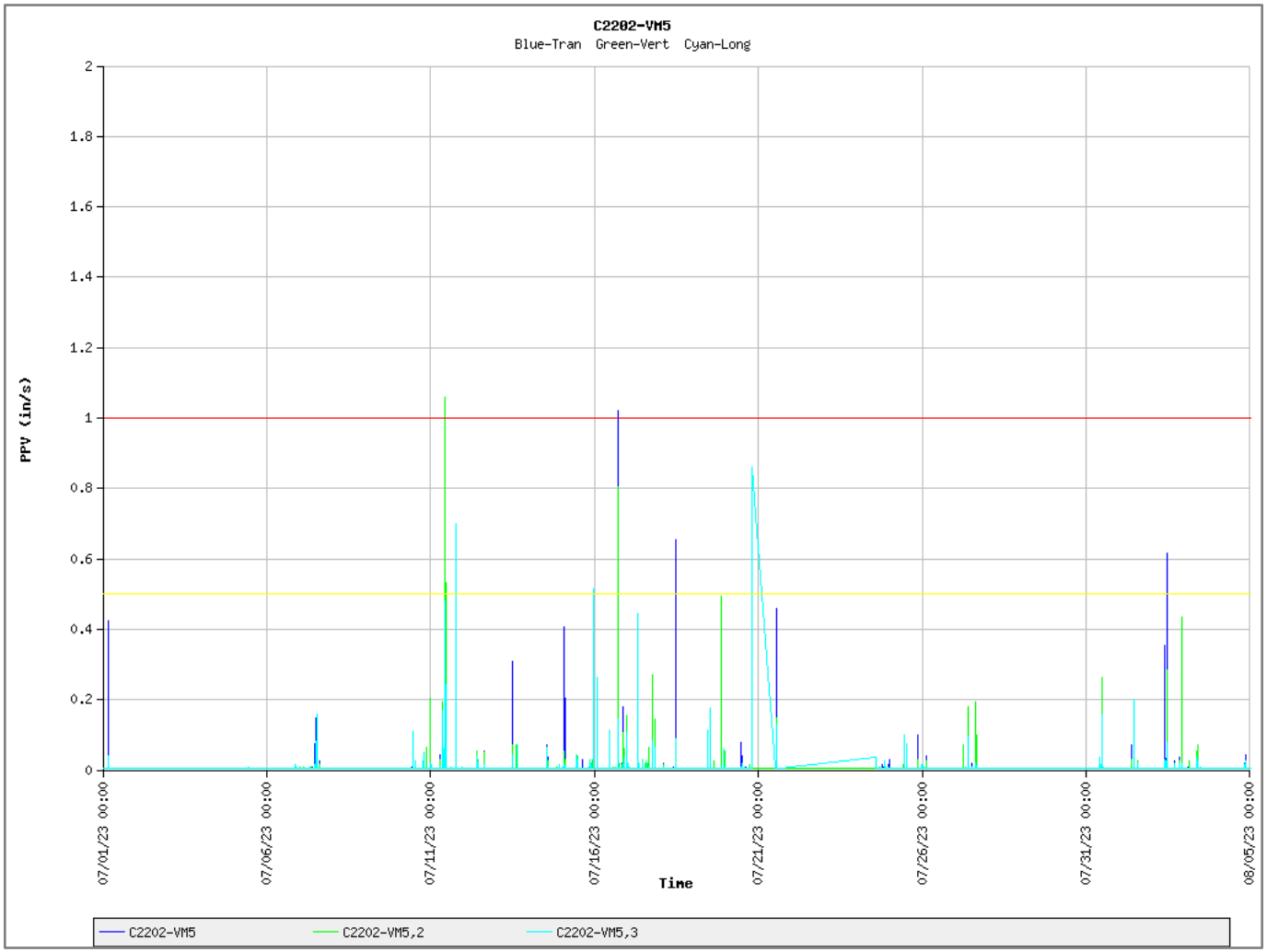
7/21/2023
7/22/2023
7/23/2023
7/24/2023
7/25/2023
7/26/2023
7/27/2023
7/28/2023
7/29/2023
7/30/2023
7/31/2023
Date
Downwind Station 1 Average Corrected Dust
Downwind Station 2 Average Corrected Dust
Dust Stop Work Level
Dust Action Level


July 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
7/3/2023
7/4/2023
7/5/2023
7/6/2023
7/7/2023
7/8/2023
7/9/2023
7/10/2023
7/11/2023
7/12/2023
7/13/2023
7/14/2023
7/15/2023
7/16/2023
7/17/2023
7/18/2023
7/19/2023
7/20/2023
7/21/2023
7/22/2023
7/23/2023
7/24/2023
7/25/2023
7/26/2023
7/27/2023
7/28/2023
7/29/2023
7/30/2023
7/31/2023
Date
Noise Meter #1
Noise Meter #2
Noise Meter #3
Action Level

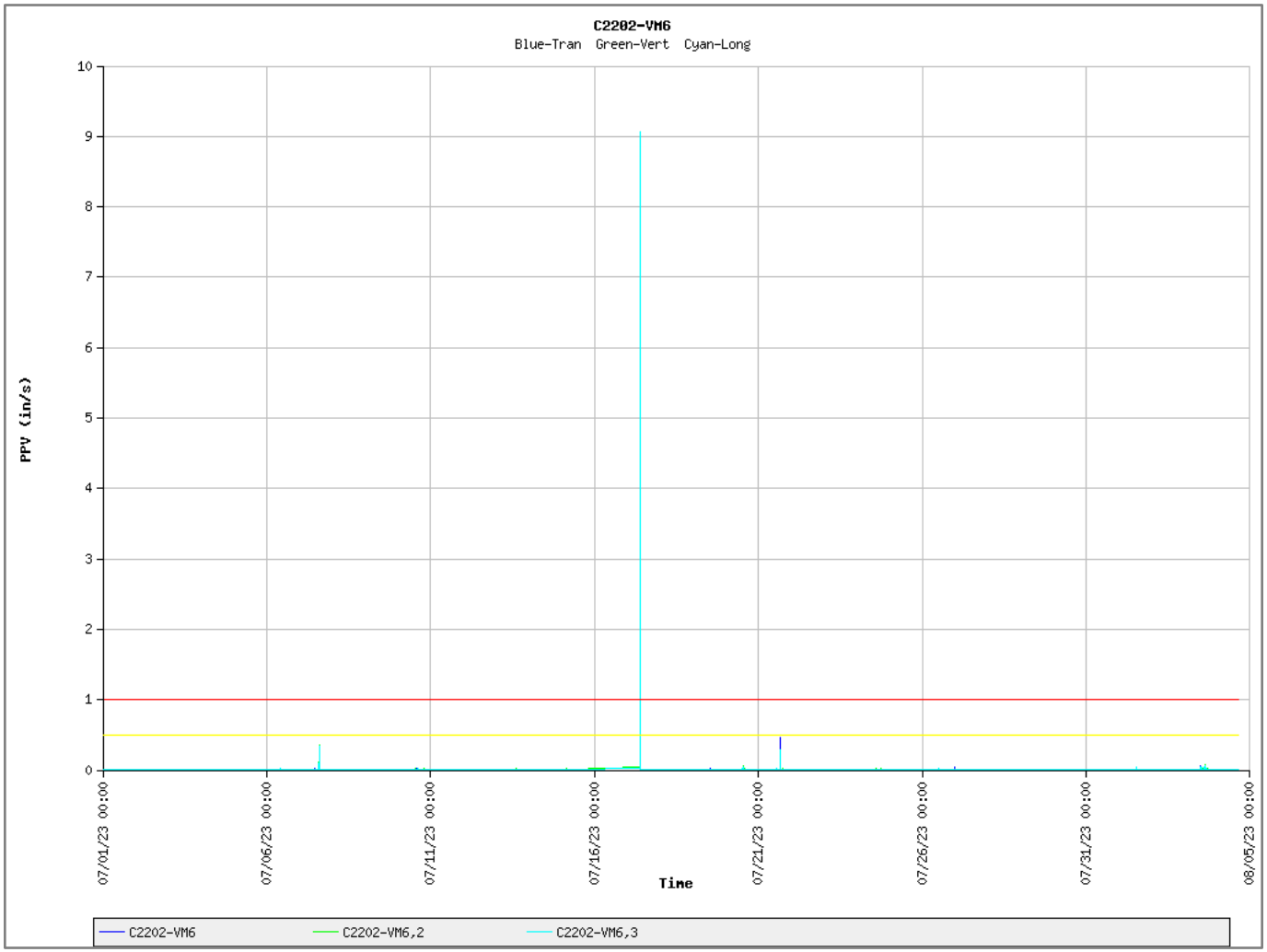
The Bronx Site Preparation July 2023 Vibration Monitoring Data Plots



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

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

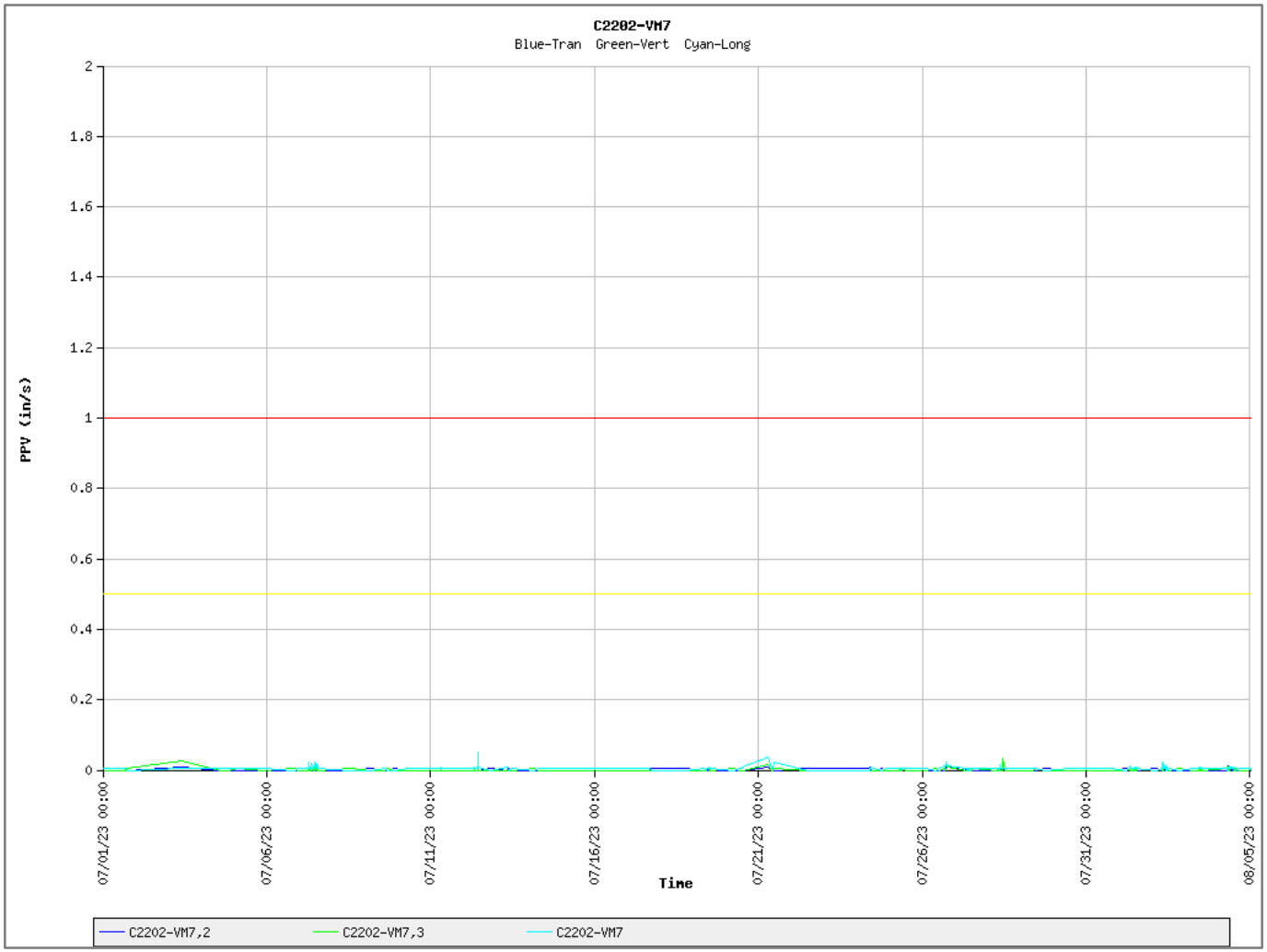
The Bronx Site Preparation July 2023 Vibration Monitoring Data Plots



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

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

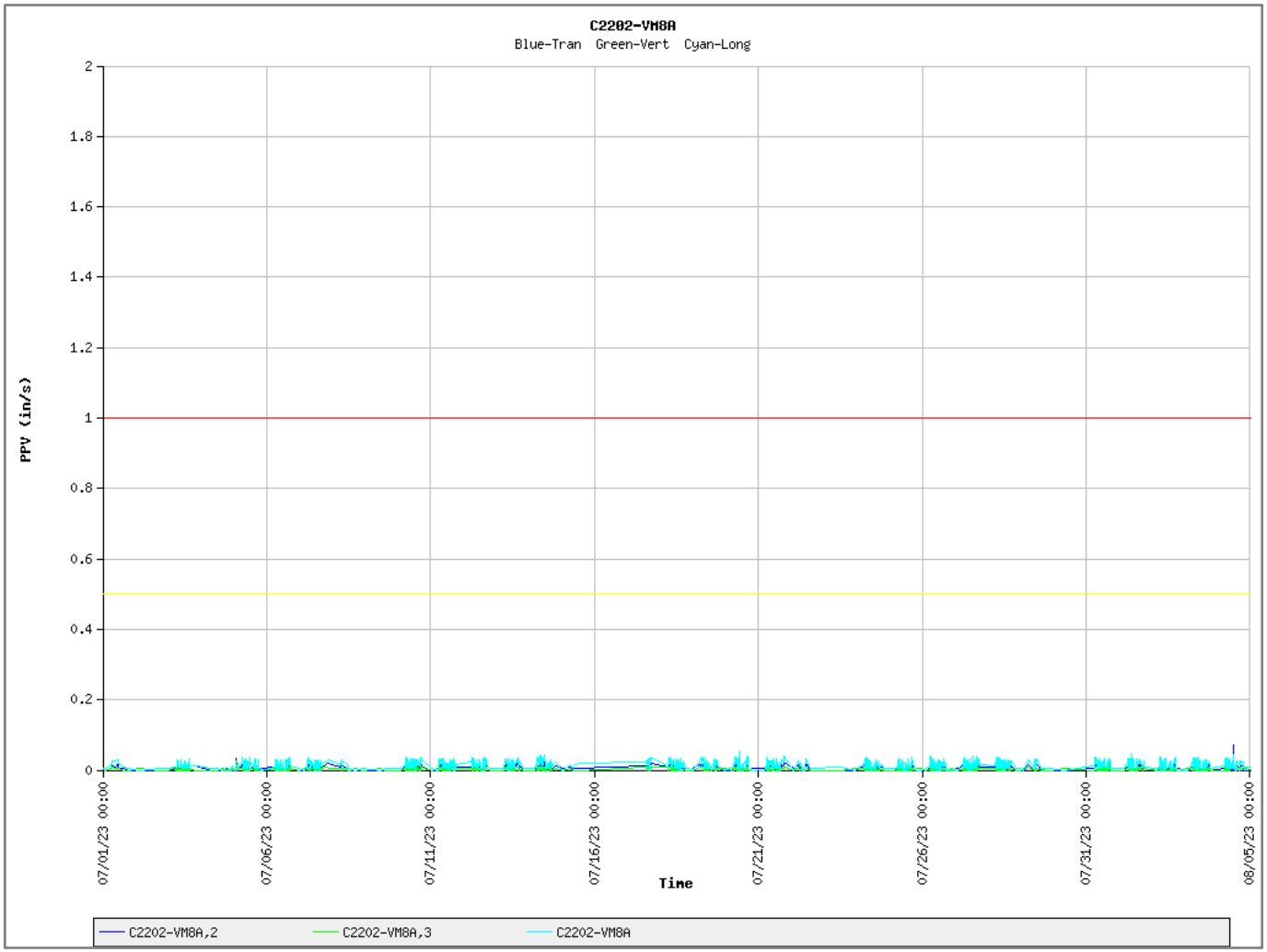
The Bronx Site Preparation July 2023 Vibration Monitoring Data Plots



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

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

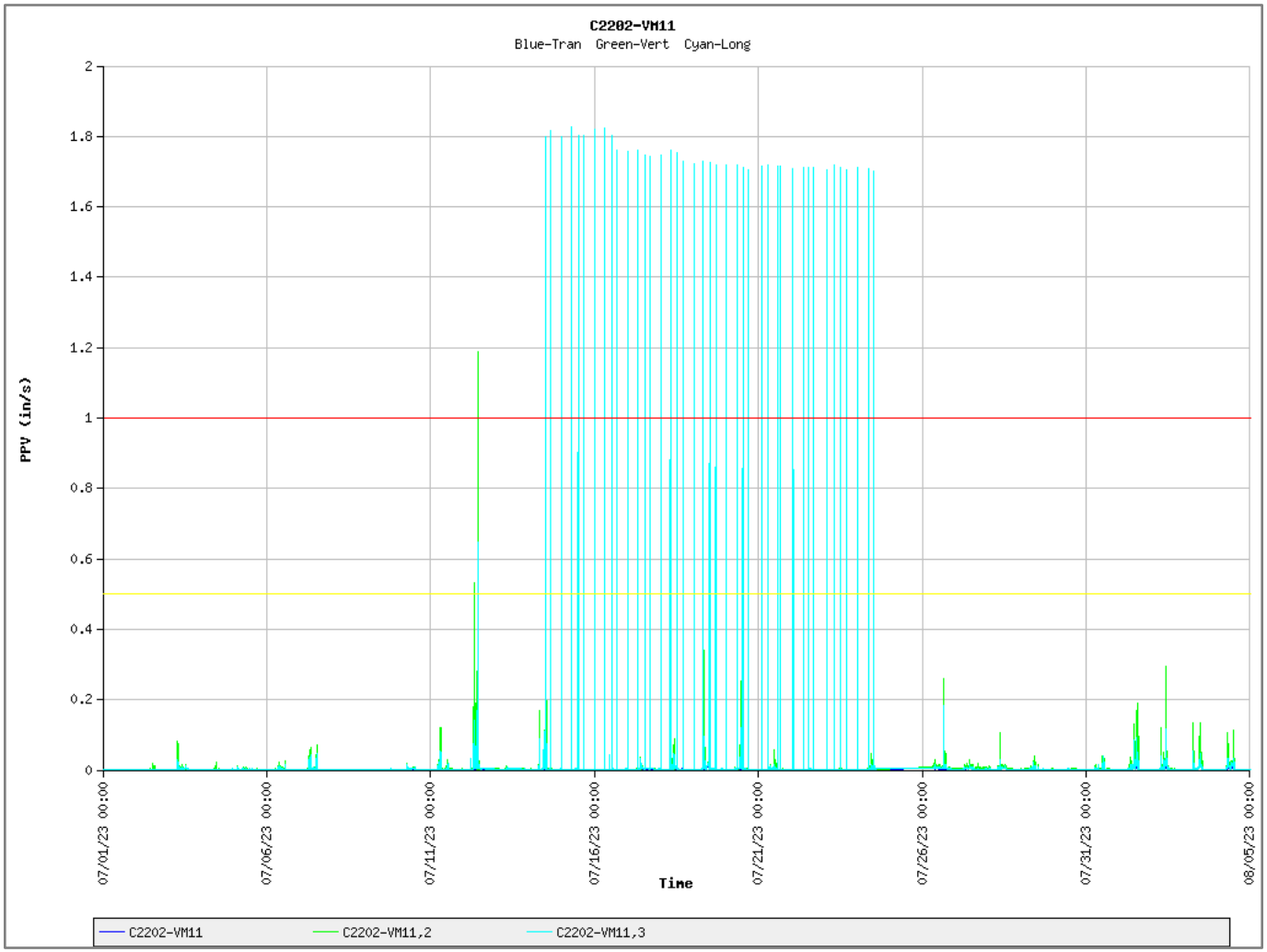
The Bronx Site Preparation July 2023 Vibration Monitoring Data Plots



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

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

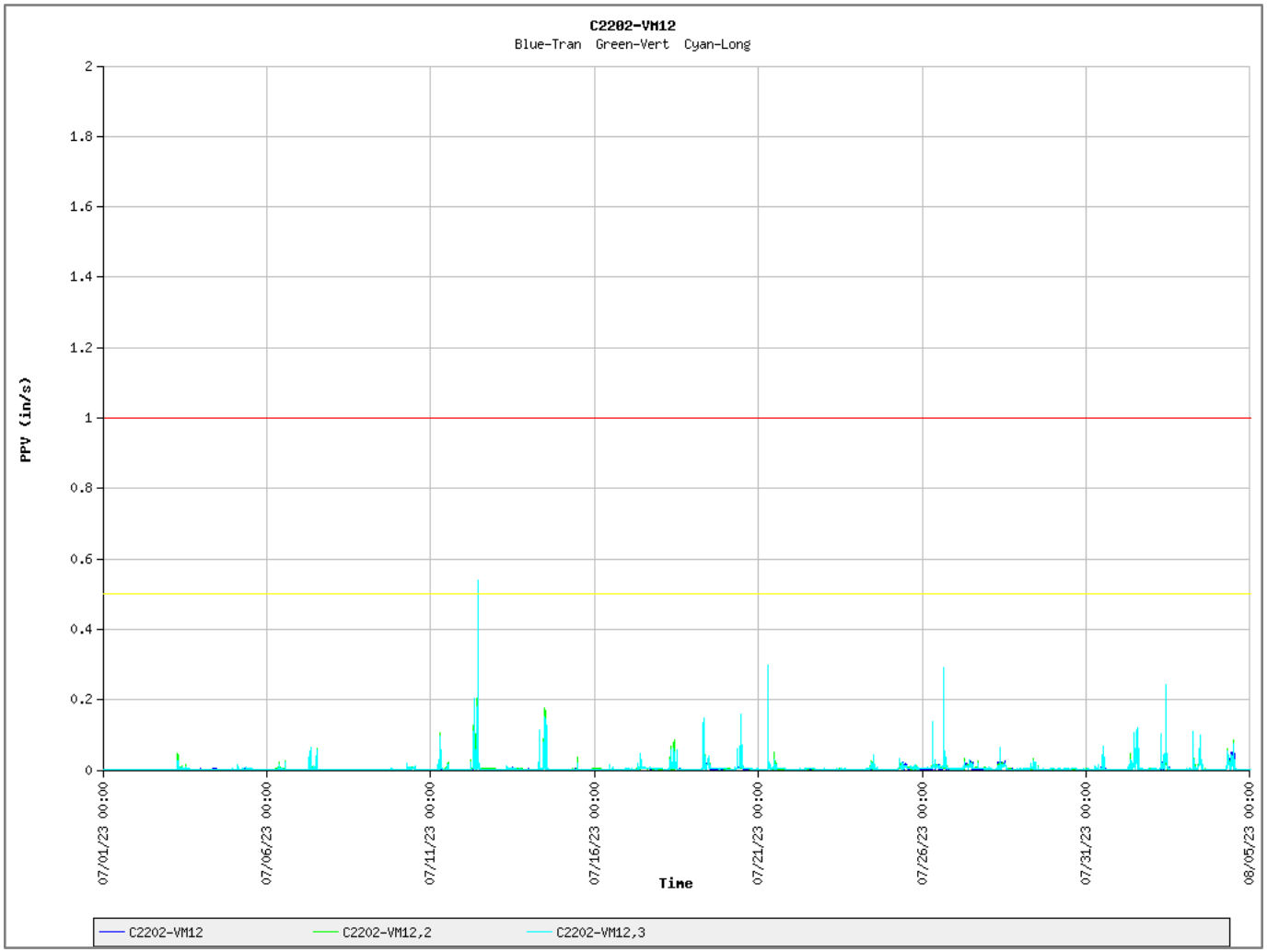
The Bronx Site Preparation July 2023 Vibration Monitoring Data Plots



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

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

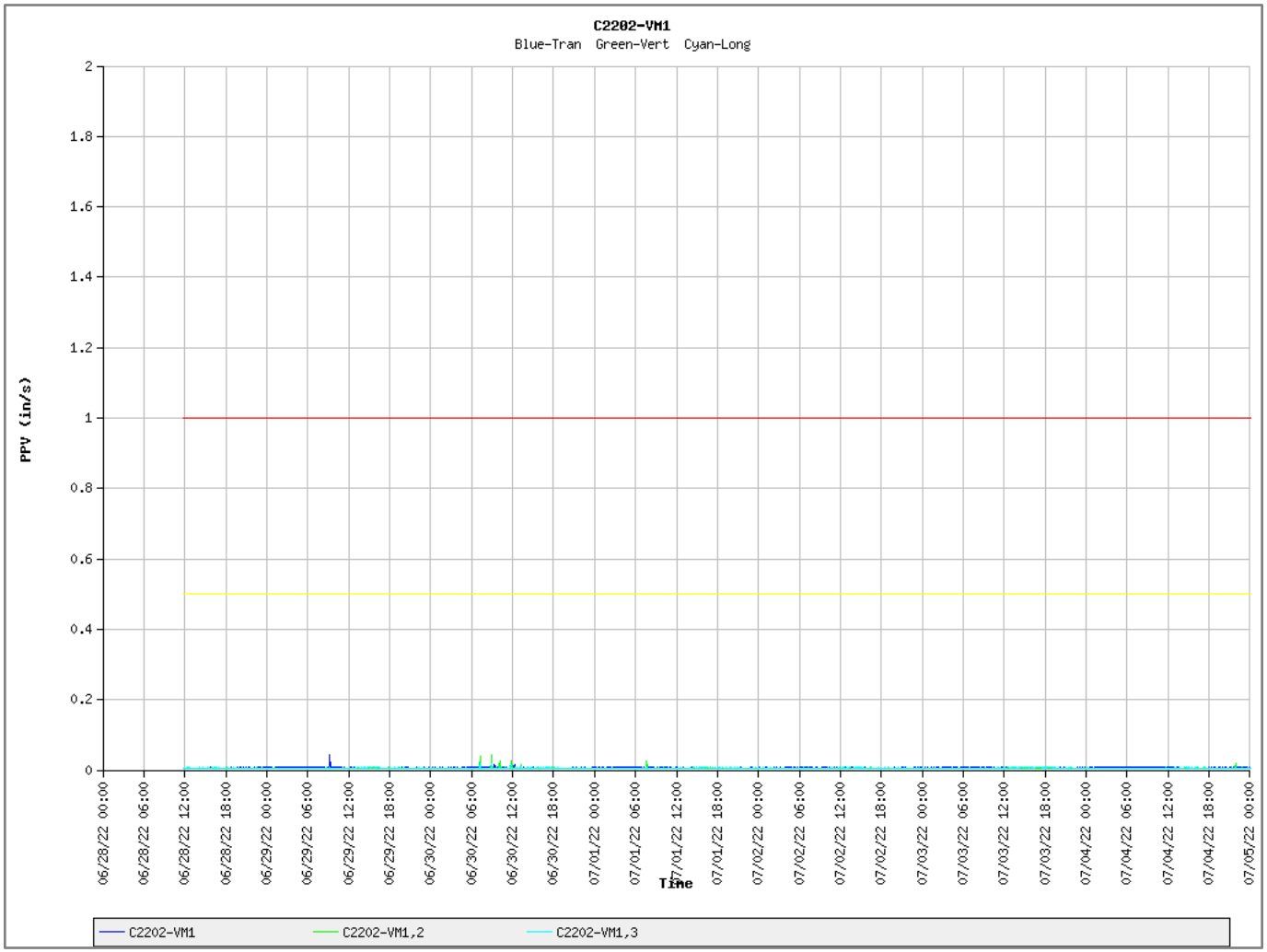
The Bronx Site Preparation July 2023 Vibration Monitoring Data Plots



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

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

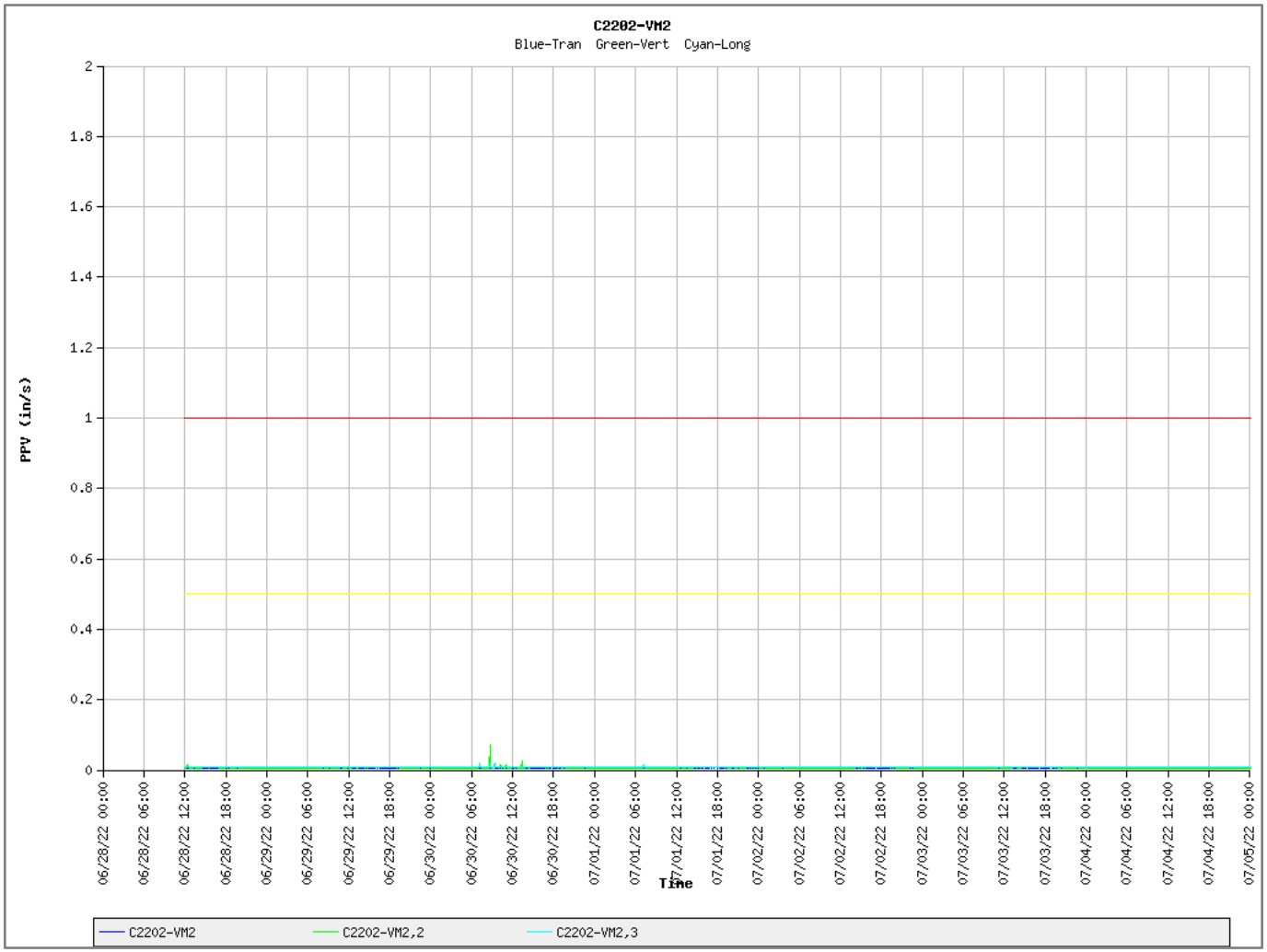
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

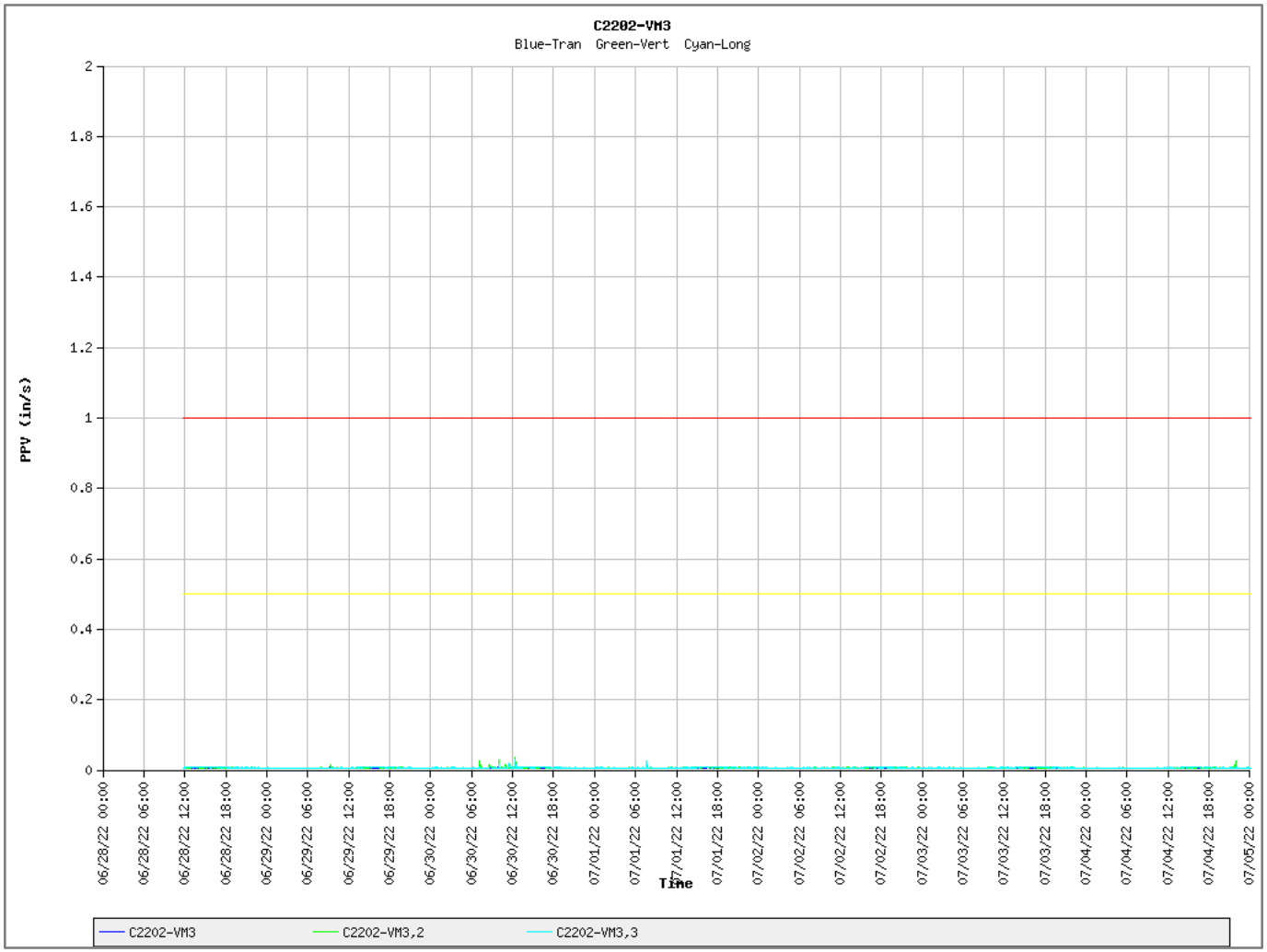
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

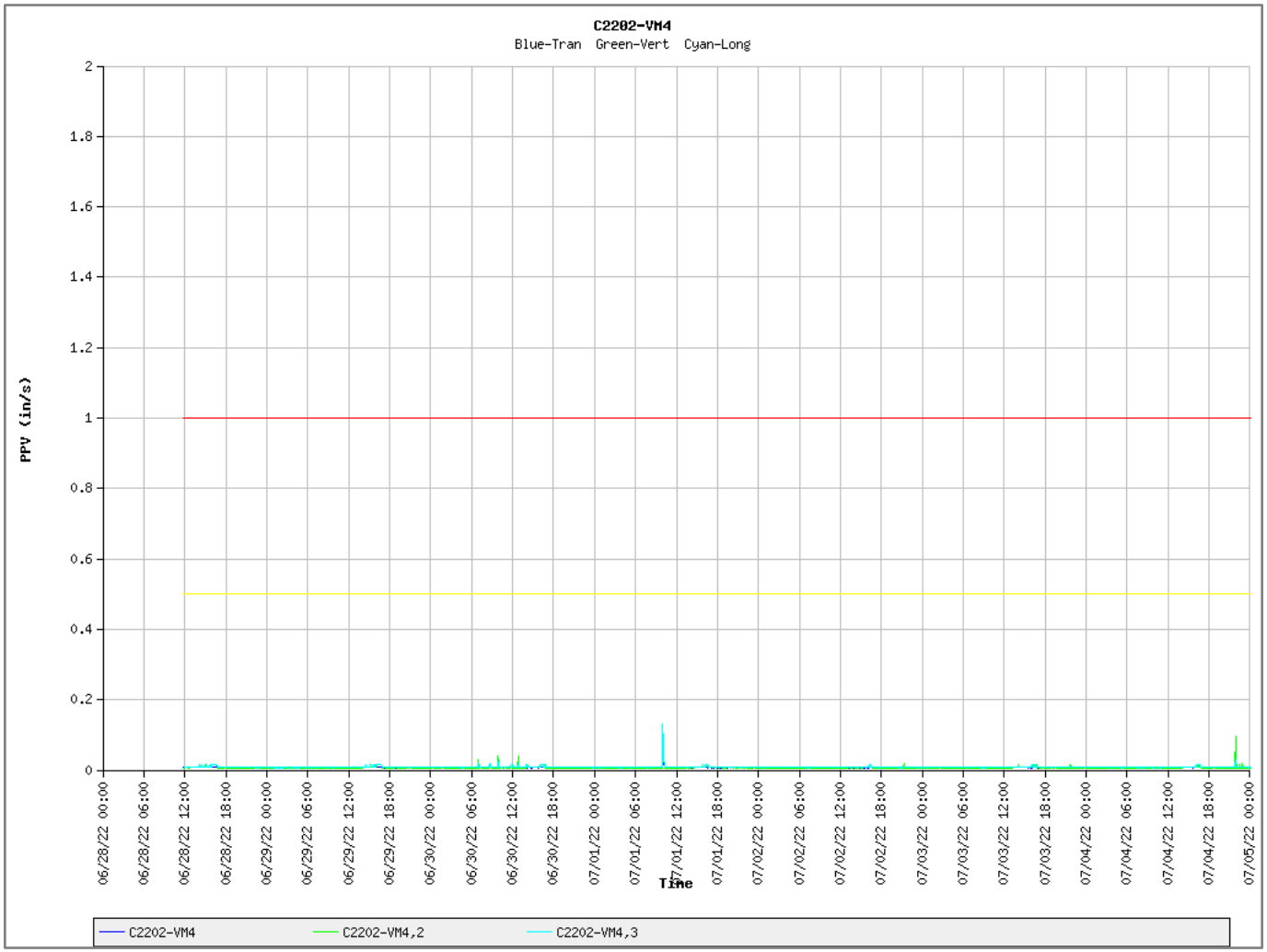
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

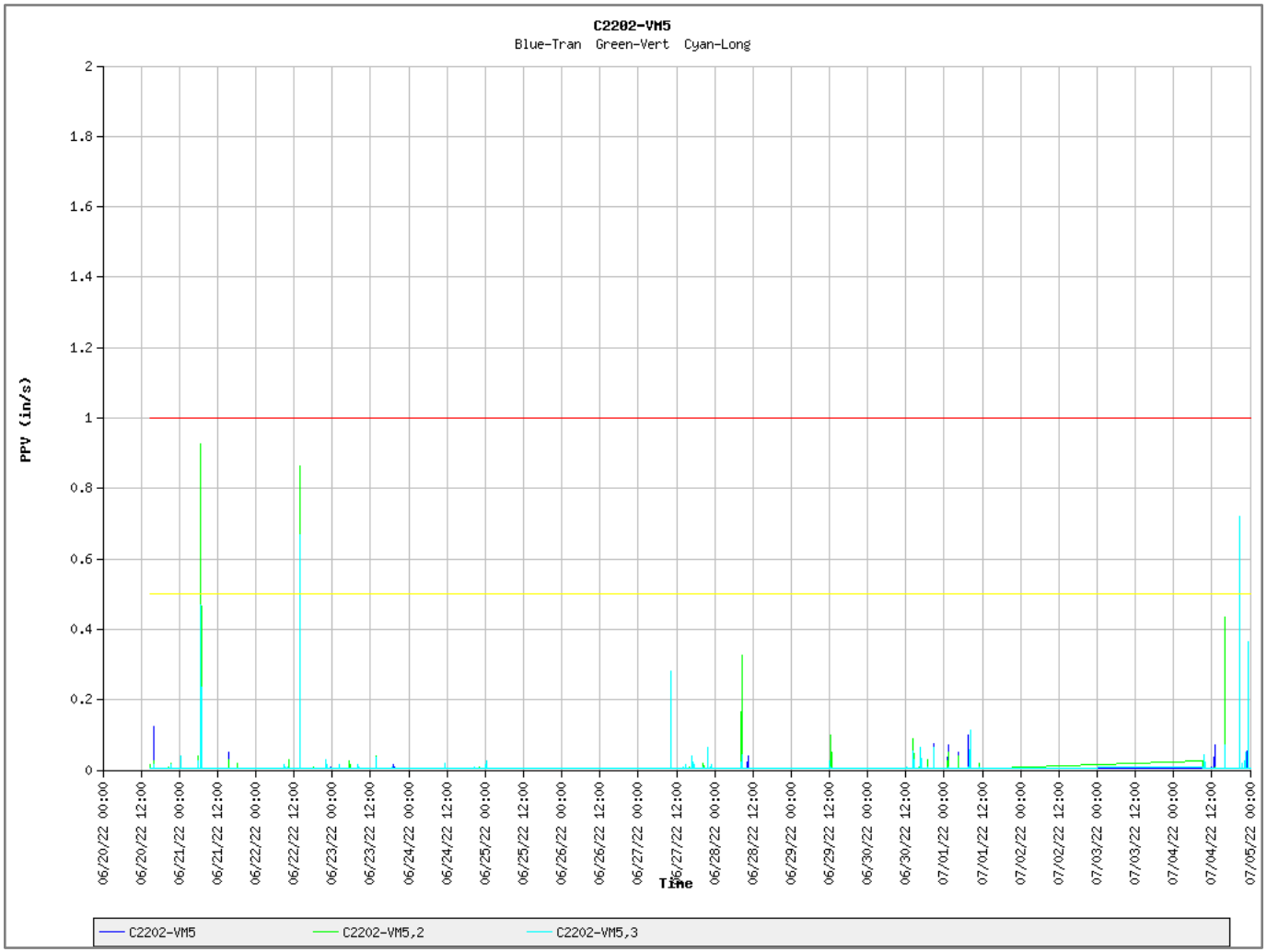
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

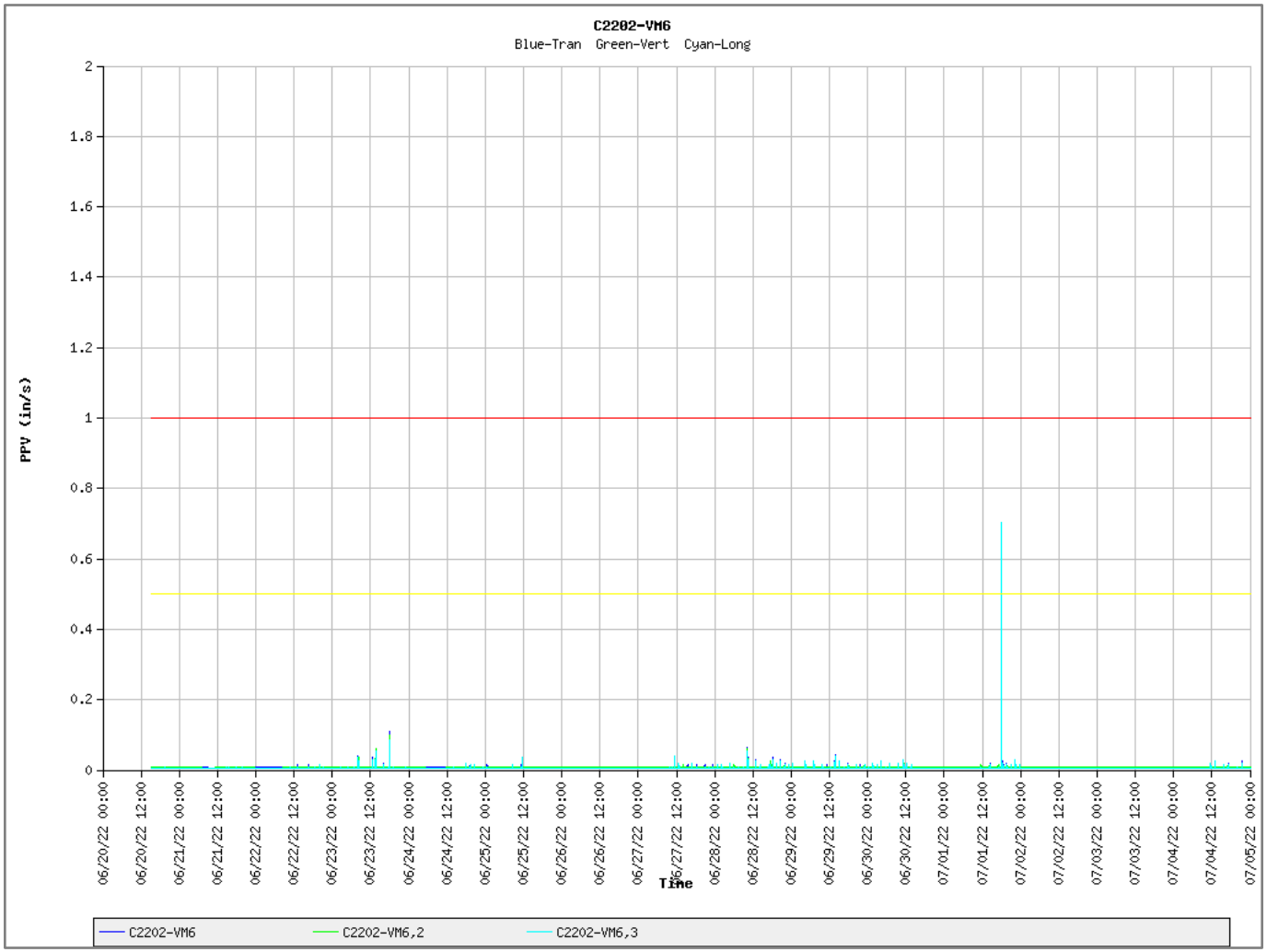
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

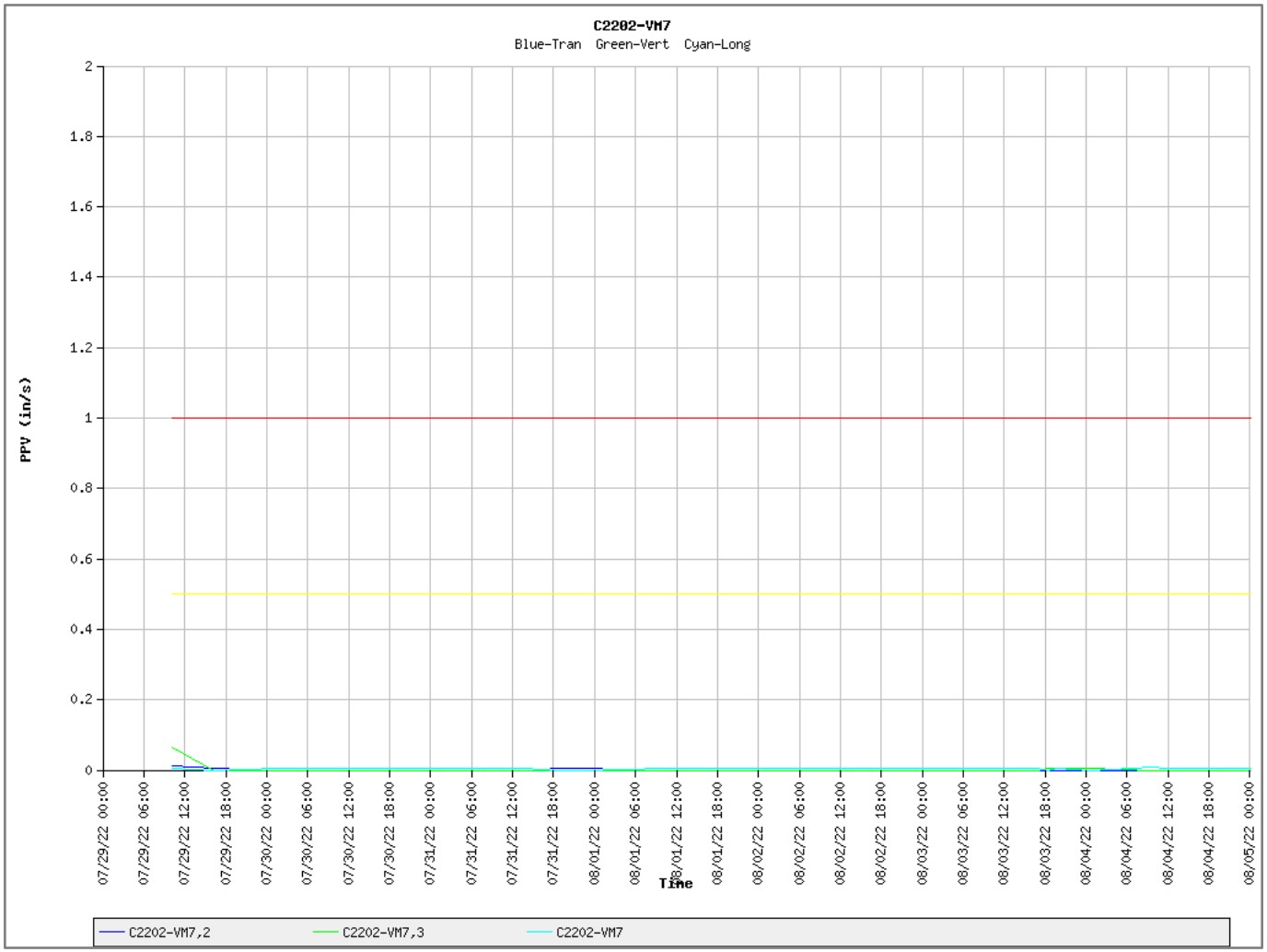
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

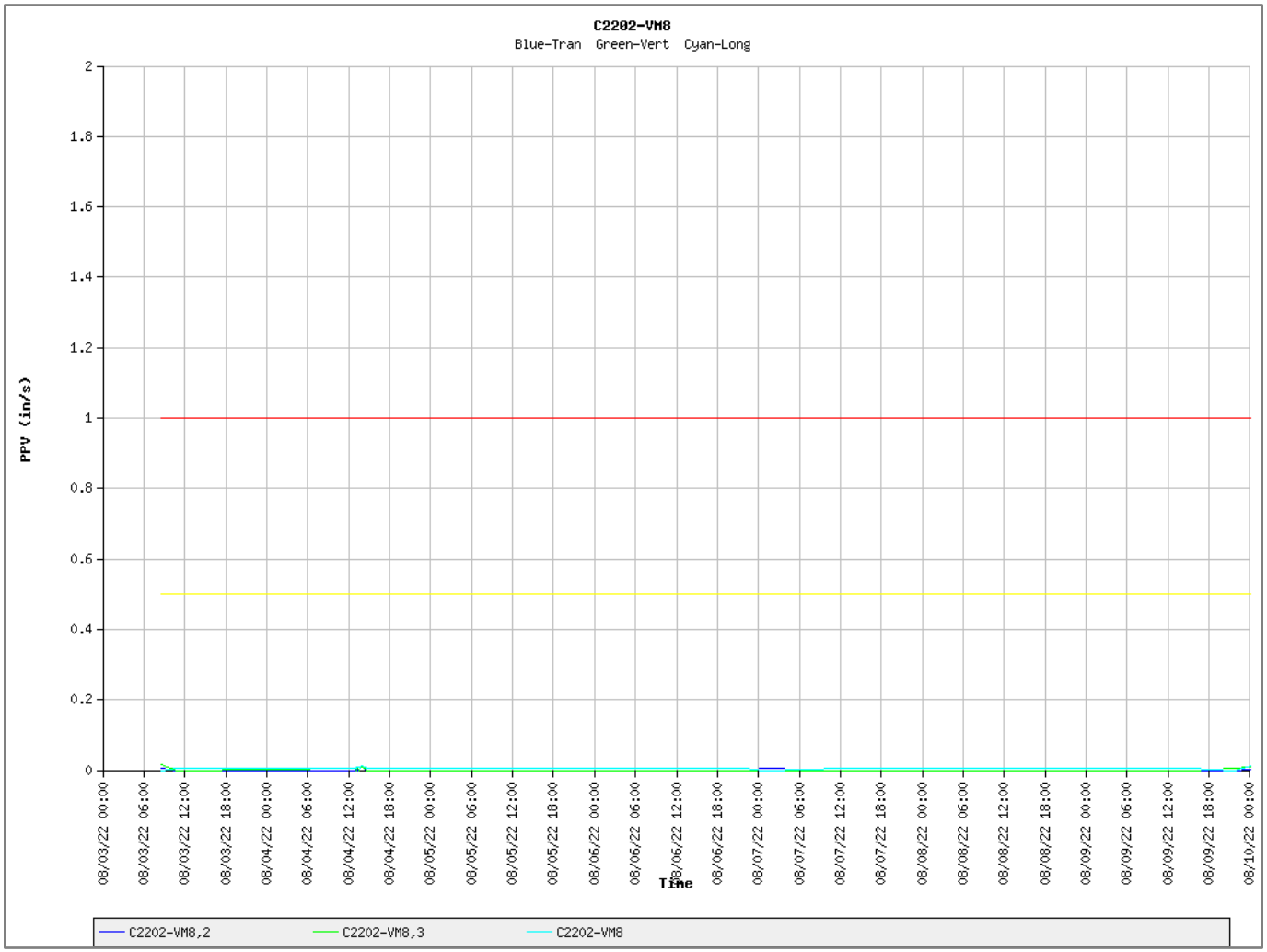
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

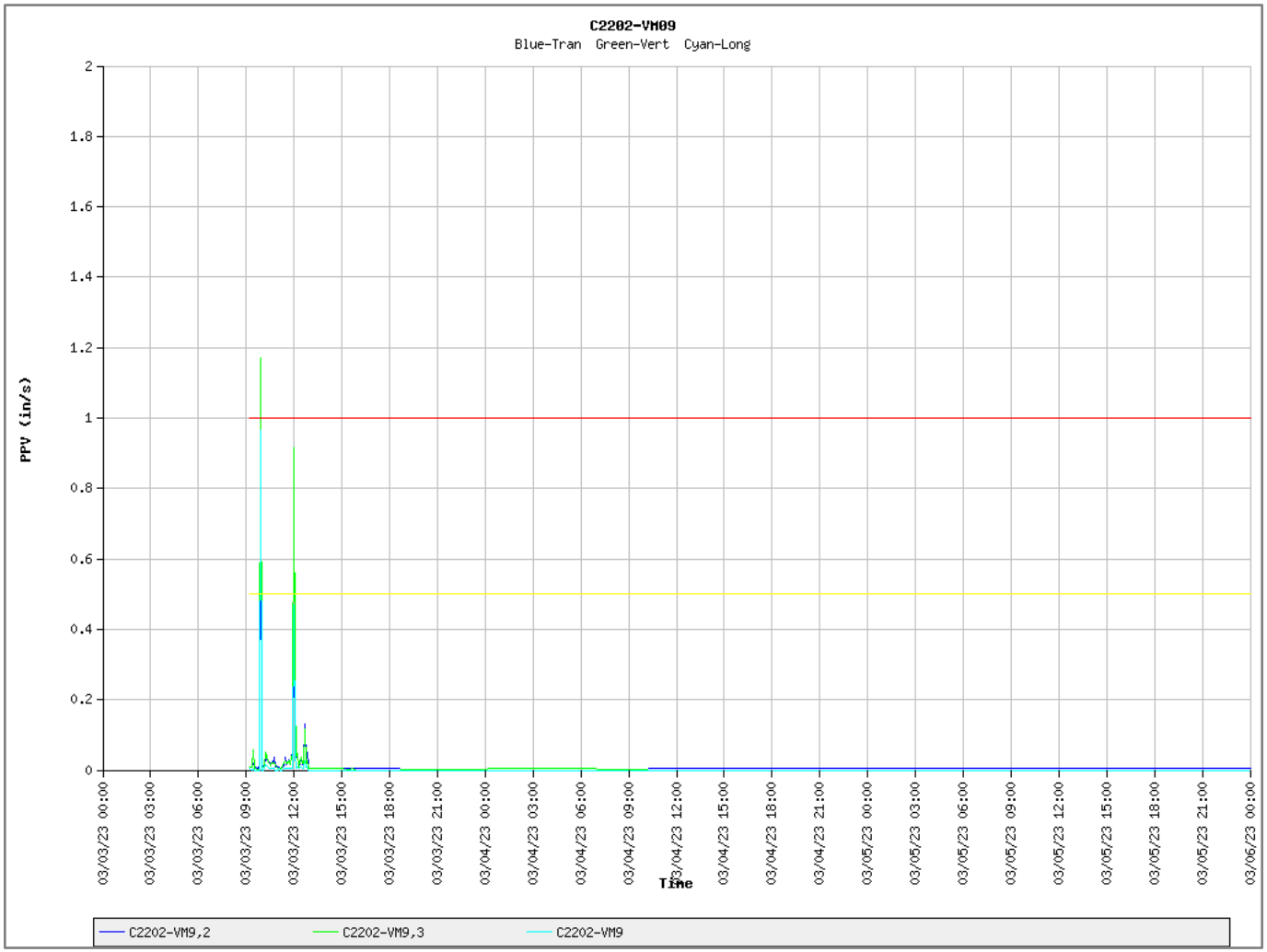
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

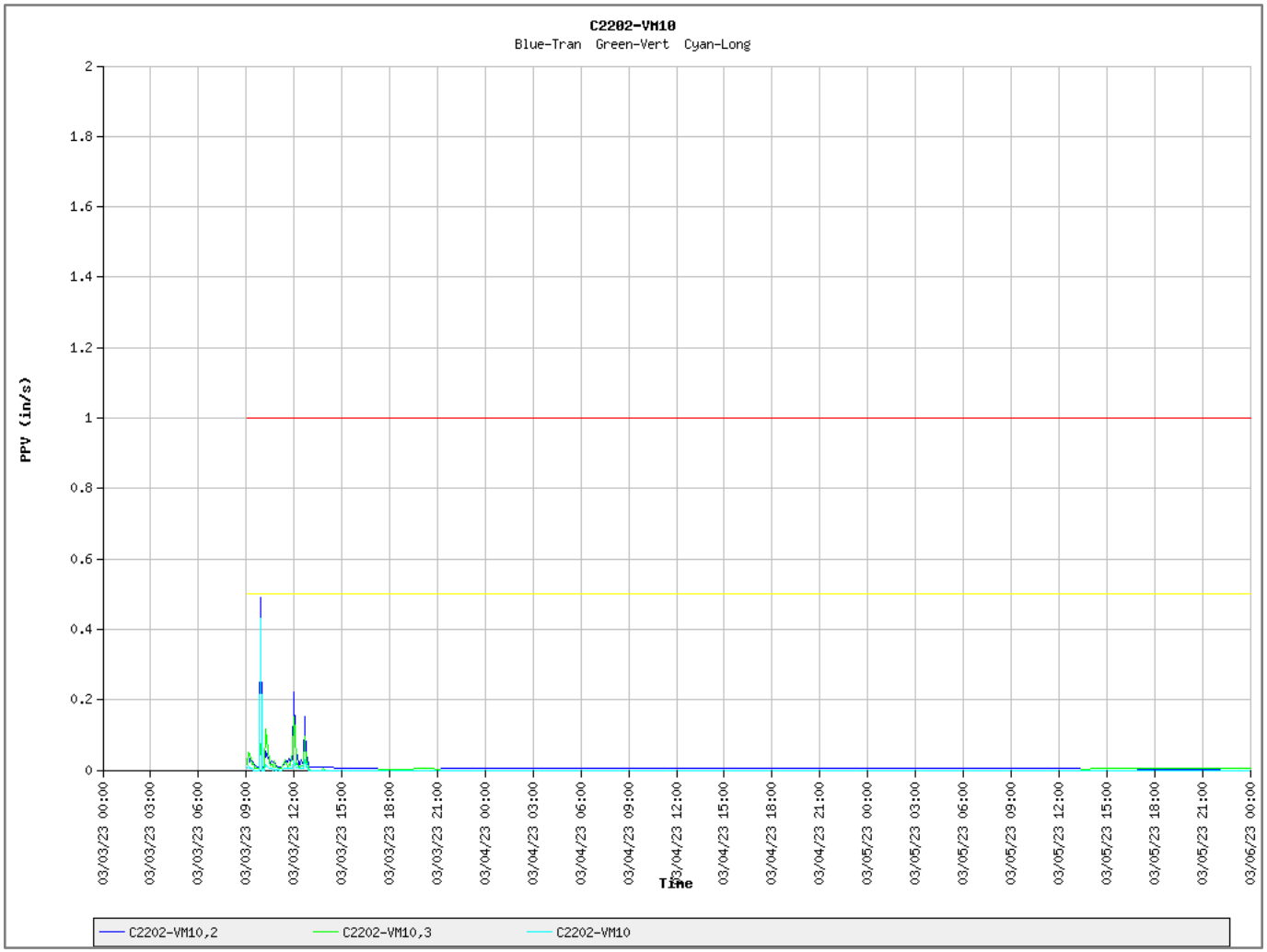
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

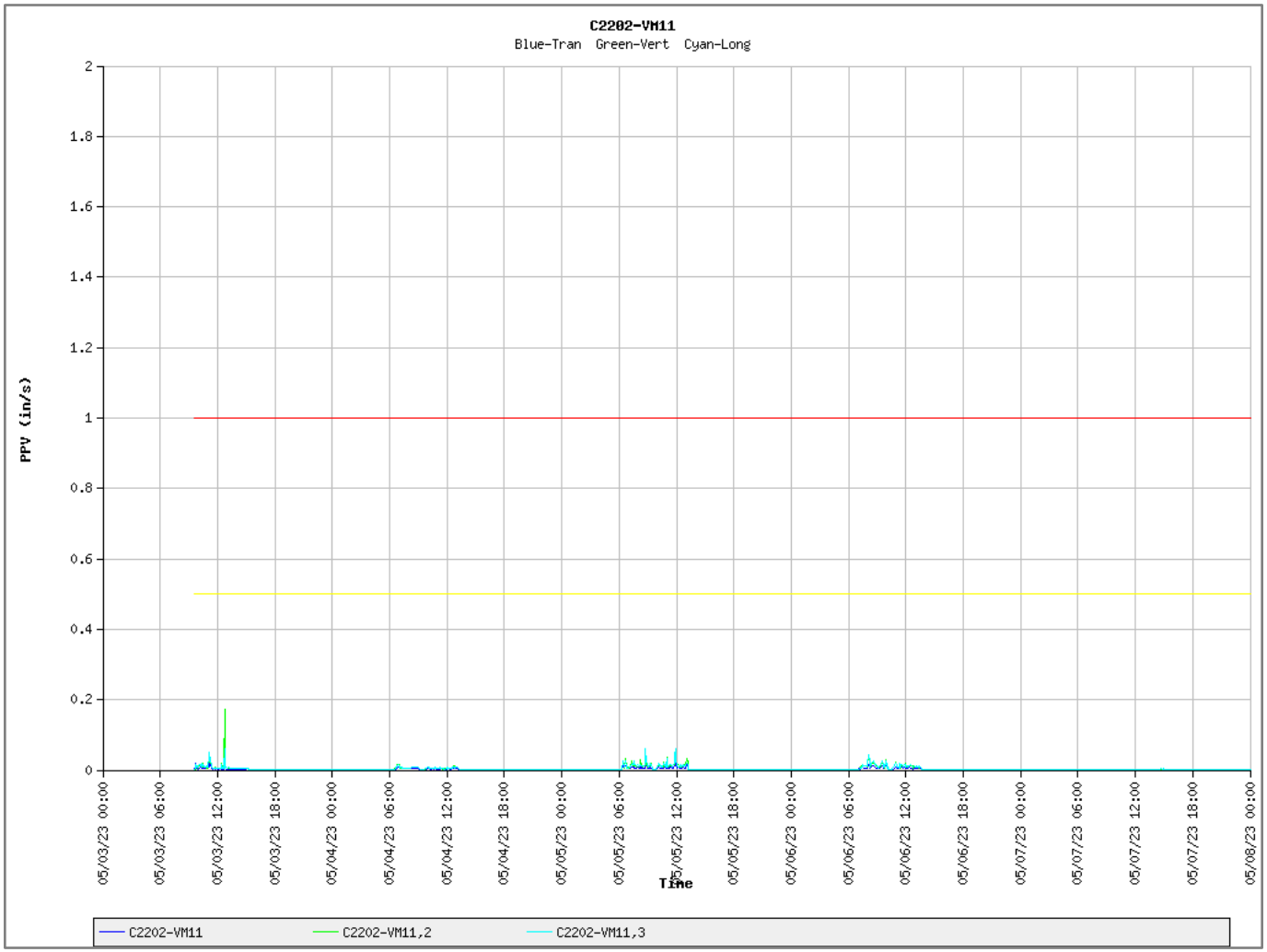
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

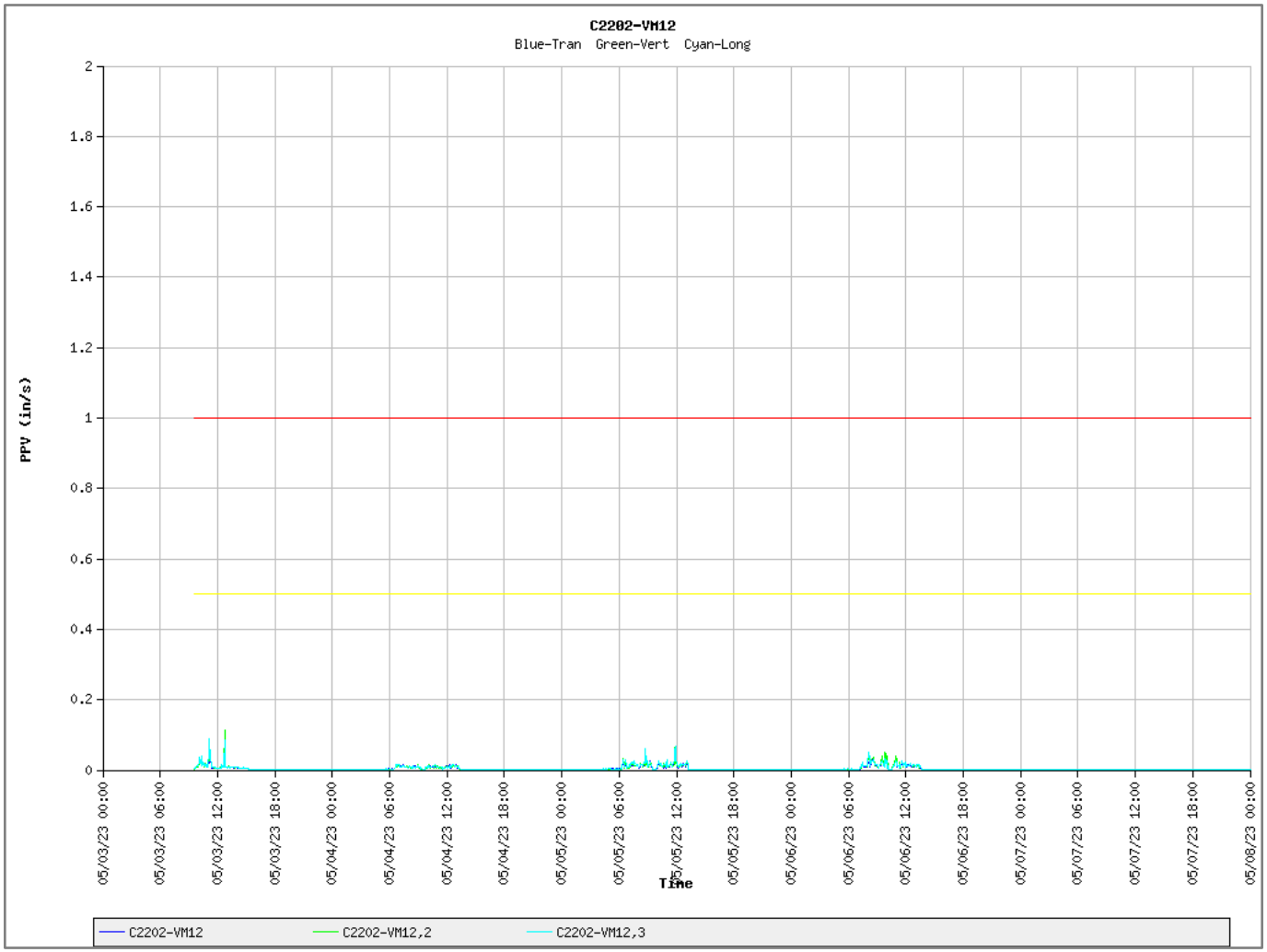
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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