

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

Prepared By: Roux / Wang Technology

DDC Pin No.:	BBJ-XSP	Period Start: 4/1/23 End 4/30/23
Project Name:	NYCDDC – The Bronx Site Preparation	
DDC Project No.:	8502021CR0004P-06P	

1) Community Air Monitoring Weekly Status Summary

TWA – Time Weighted Average
ug/m³- 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
23	22	2	There were three instances of CAMP excursions above the 0.100 ug/m ³ dust action level. In all instances, there were no exceedances. These instances occurred on 4/26 and 4/28 and are detailed below. Dust monitoring was not performed on 4/29 due to inclement weather.

Community Air Monitoring Weekly Excursions and Corrective Actions

Action Concentration = 100 ug/m³ 15 minute TWA above background concentration
Stop Work Concentration = 150 ug/m³ 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
4/26/23 7:45am	109	13	An elevated reading was caused by saw cutting taking place near the CAMP station. Water was used to mitigate dust in the area.
4/26/23 9:00am	108	56	An elevated reading was caused by saw cutting taking place near the CAMP station. Water was used to mitigate dust in the area.
4/28/23 8:00am	116	29	An elevated reading was caused by hammer drilling activities. Water was used to mitigate dust in the area.

Narrative Summary of Air Monitoring, Excursions and Corrective Actions:
In April 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: weighted decibels level (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
23	22	0	There were no instances of noise levels above the 80 dBA limit. Noise monitoring was not performed on 4/29 due to inclement weather.

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

Narrative Summary of Air Monitoring, Excursions and Corrective Actions:
In April 2023, construction-related levels of noise did not surpass the limits of Local Law 113 of 2005 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
23	30	15	Four out of six vibration monitors (VM) had recorded a total of 193 exceedances, including backfilling, compacting, and installing concrete road base, moving equipment near the sensor, pouring asphalt for street restoration, relocating lining station and equipment to 142 nd Street, maintenance work for the vibration monitors, 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
4/20/2023 13:55	0.615	0.02	This is an isolated event recorded at VM5.
4/26/2023 10:53	0.625	0.065	This is an isolated event recorded at VM5.
4/1/2023 10:06 to 18:05	4.81	0.1	Exceedances observed at VM6 were recorded during non-construction hours.
4/2/2023 10:54 to 16:34	6.865	0.025	Exceedances observed at VM6 were recorded during non-construction hours.
4/3/2023 16:05 to 18:22	5.3	0.03	Exceedances observed at VM6 were recorded during non-construction hours.
4/7/2023 12:51	1.98	0.045	This is an isolated event recorded at VM6.
4/8/2023 11:33	0.655	0.075	This is an isolated event recorded at VM6.
4/9/2023 15:03 to 15:35	6.18	0.06	Exceedances observed at VM6 were recorded during non-construction hours.
4/10/2023 13:47 & 13:50	2.865	0.03	These are isolated events recorded at VM6.
4/10/2023 15:18 to 17:13	2.04	0.025	Exceedances observed at VM6 were recorded during non-construction hours.
4/17/2023 09:36	1.11	0.02	This is an isolated event recorded at VM6.
4/20/2023 08:05 to 08:07	5.07	0.05	Exceedances observed at VM6 were due to unit being serviced; geophone sensor was leveled.
4/5/2023 07:24 to 08:49	8.646	0.375	Exceedances observed at VM9 were caused by backfilling, compacting, and installing concrete road base. Workers reduced intensity level of machinery to reduce vibrations. The exceedances were not continuous high readings. None of the nearby homes had exceedances during this period.
4/6/2023 08:54 to 11:44	0.601	0.426	Exceedances observed at VM9 were caused by moving equipment near the sensor. Workers reduced intensity level of

			machinery to reduce vibrations.
4/7/2023 07:24 to 08:49	8.593	0.356	Exceedances observed at VM9 were caused by backfilling, compacting, and installing concrete road base. Workers reduced intensity level of machinery to reduce vibrations. The exceedances were not continuous high readings. None of the nearby homes had exceedances during this period.
4/10/2023 08:34 to 8:54 & 9:44 to 10:04	10.897	0.415	Exceedances observed at VM9 were caused by pouring asphalt for street restoration. Workers reduced intensity level of machinery to reduce vibrations. The exceedances were not continuous high readings. None of the nearby homes had exceedances during this period.
4/11/2023 08:59 & 09:04	0.577	0.187	Exceedances observed at VM9 were caused by pouring asphalt for street restoration. Workers reduced intensity level of machinery to reduce vibrations.
4/12/2023 11:09 to 13:24	1.014	0.491	Exceedances observed at VM9 were caused by relocating lining station and equipment to 142 nd Street. Workers reduced intensity level of machinery to reduce vibrations.
4/5/2023 07:29 & 07:34	2.724	0.443	Exceedances observed at VM10 were caused by backfilling, compacting, and installing concrete road base. Workers reduced intensity level of machinery to reduce vibrations.
4/6/2023 08:54 to 12:14	1.117	0.375	Exceedances observed at VM10 were caused by moving equipment near the sensor. Workers reduced intensity level of machinery to reduce vibrations.
4/7/2023 07:39 to 7:54 & 8:34 to 08:49	5.421	0.48	Exceedances observed at VM10 were caused by backfilling, compacting, and installing concrete road base. Workers reduced intensity level of machinery to reduce vibrations. The exceedances were not continuous high readings. None of the nearby homes had exceedances during this period.
4/10/2023 08:09 to 10:04	0.862	0.429	Exceedances observed at VM10 were caused by pouring asphalt for street restoration. Workers reduced intensity level of machinery to reduce vibrations.
4/12/2023 11:04 to 13:39	1.261	0.193	Exceedances observed at VM10 were caused by relocating lining station and equipment to 142 nd Street. Workers reduced intensity level of machinery to reduce vibrations.
4/13/2023 11:39 to 14:09	0.748	0.095	Exceedances observed at VM10 was due to the unit being serviced.

Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

In April 2023, four vibration monitors had recorded exceedances. There were exceedances recorded during non-construction hours at 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.

The exceedances recorded at VM9 and VM10 on April 5th and April 7th were caused by backfilling, compacting, and installing concrete road base. Workers reduced intensity level of machinery to reduce vibrations. The exceedances were not continuous high readings. None of the nearby homes had exceedances during this period.

The exceedances recorded at VM9 and VM10 on April 6th were caused by moving equipment near the sensors. Workers reduced intensity level of machinery to reduce vibrations.

The exceedances recorded at VM9 on April 10th and April 11th, and the exceedances recorded at VM10 on April 10th were caused by pouring asphalt for street restoration. Workers reduced intensity level of machinery to reduce vibrations. The exceedances were not continuous high readings. None of the nearby homes had exceedances during this period.

The exceedances recorded at VM9 and VM10 on April 12th were caused by relocating lining station and equipment to 142nd Street. Workers reduced intensity level of machinery to reduce vibrations.

The exceedances recorded at VM10 on April 13th was due by the unit being serviced.

The exceedances recorded at VM6 on April 20th was due to the unit being serviced; the geophone was being leveled.




ATTACHMENTS:

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

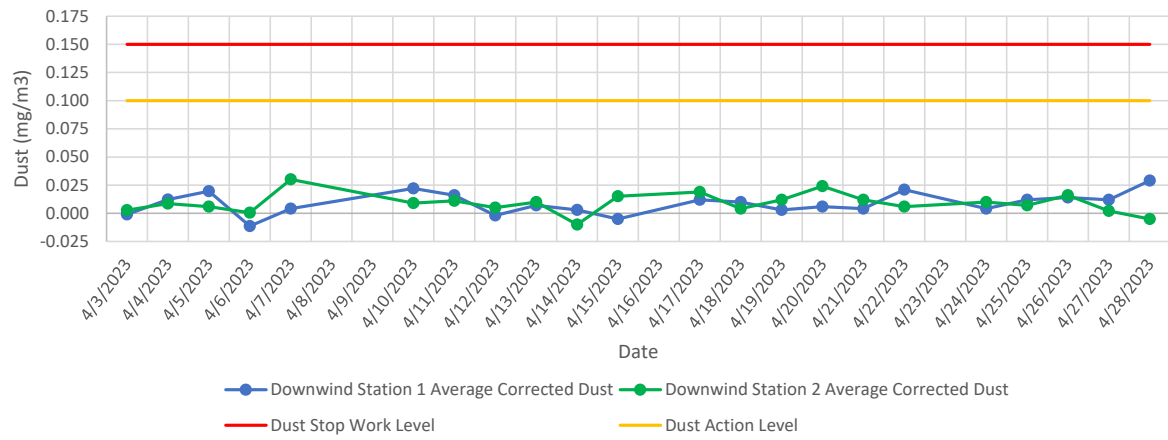
Attachments

Environmental Monitoring The Bronx

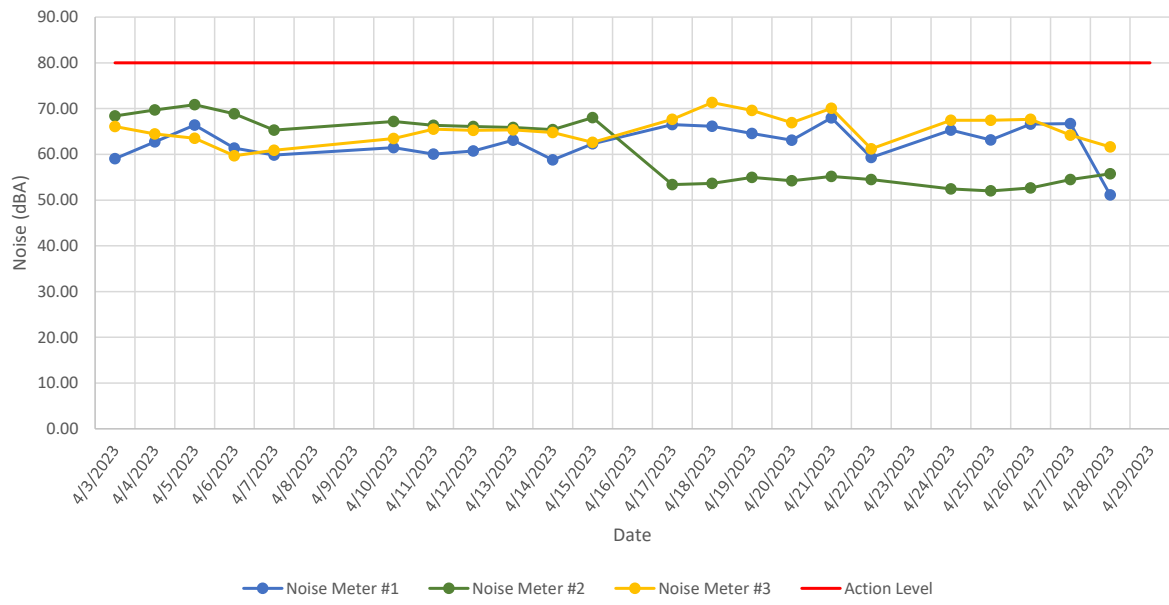


-  Vibration Monitor (VM)
-  Air Monitoring Station (DM)
-  Noise Monitoring Station (NM)

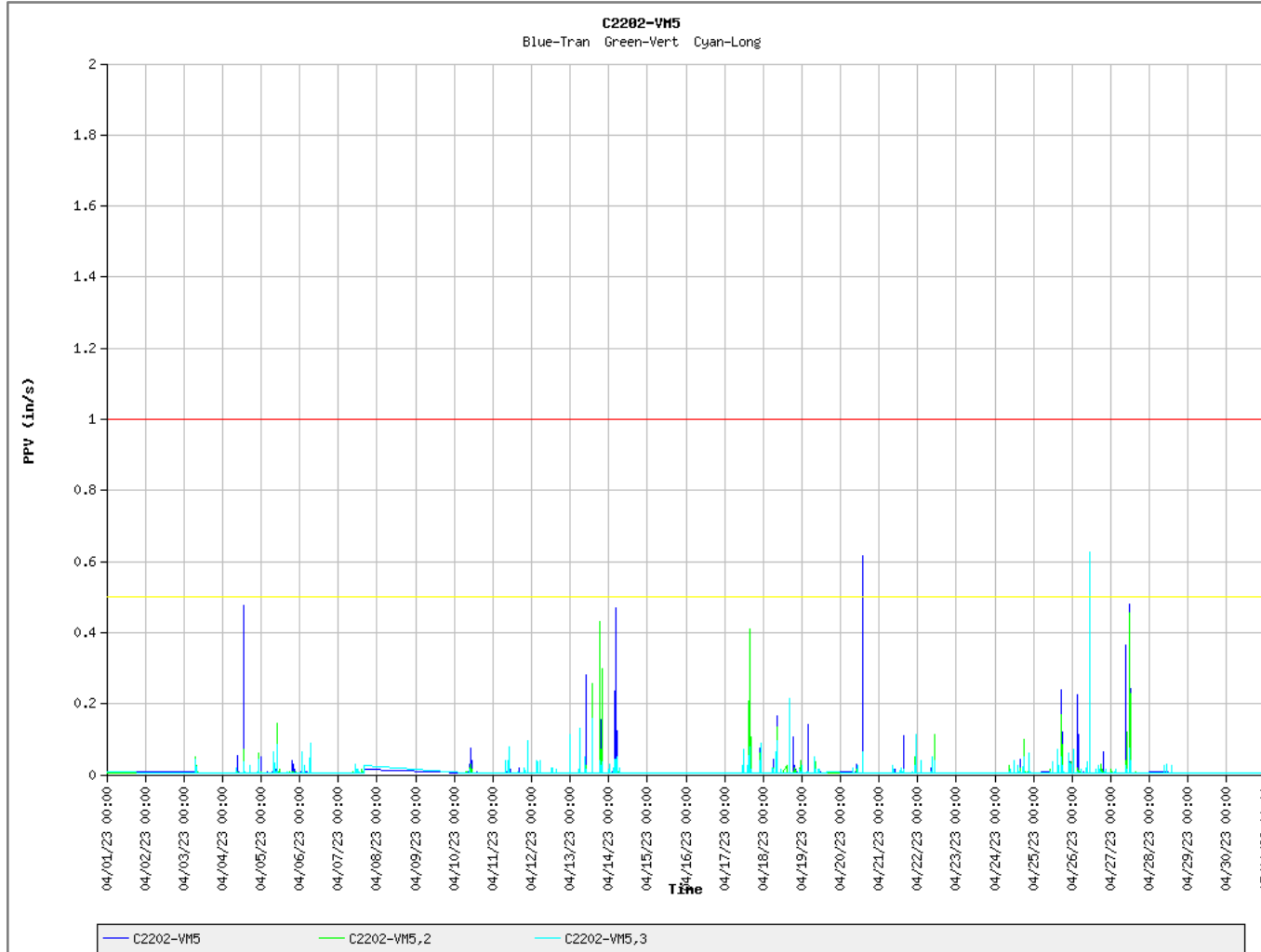
April 2023, 15-min Running Average Air Quality Data, PM 10ug/m3 Plot



April 2023, Average Equivalent Sound Level Plot (Laeq)



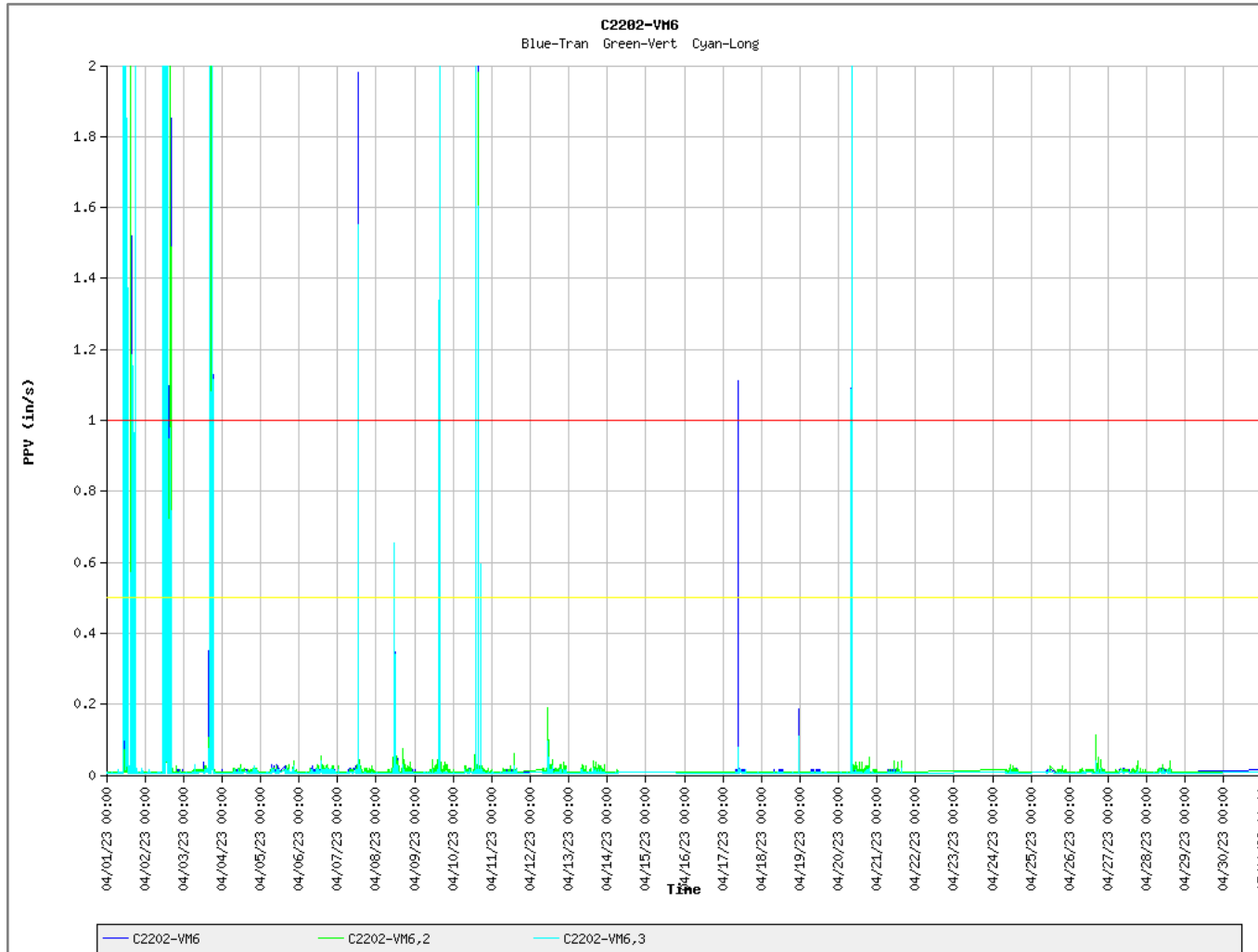
The Bronx Site Preparation April 2023 Vibration Monitoring Data Plots



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

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

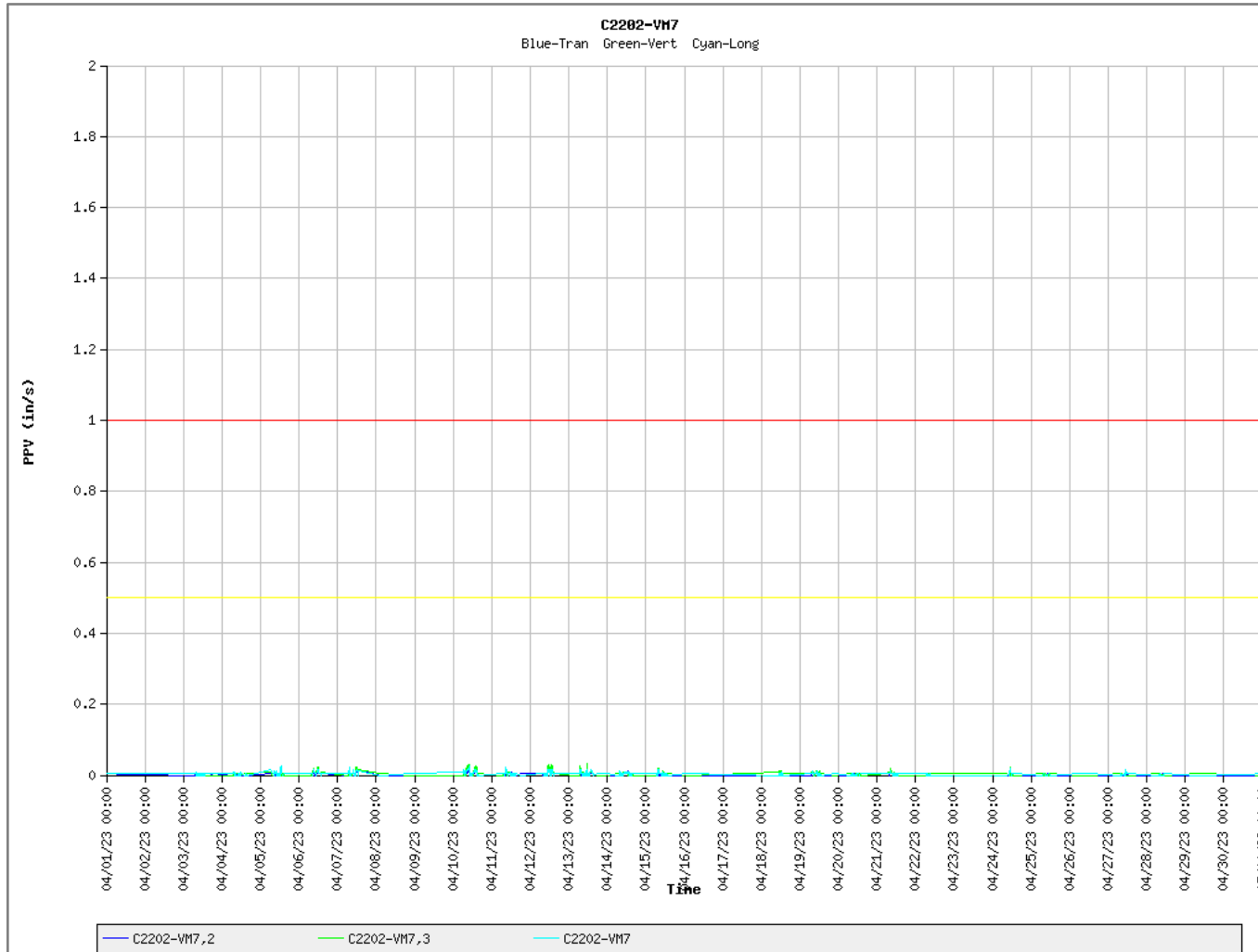
The Bronx Site Preparation April 2023 Vibration Monitoring Data Plots



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

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

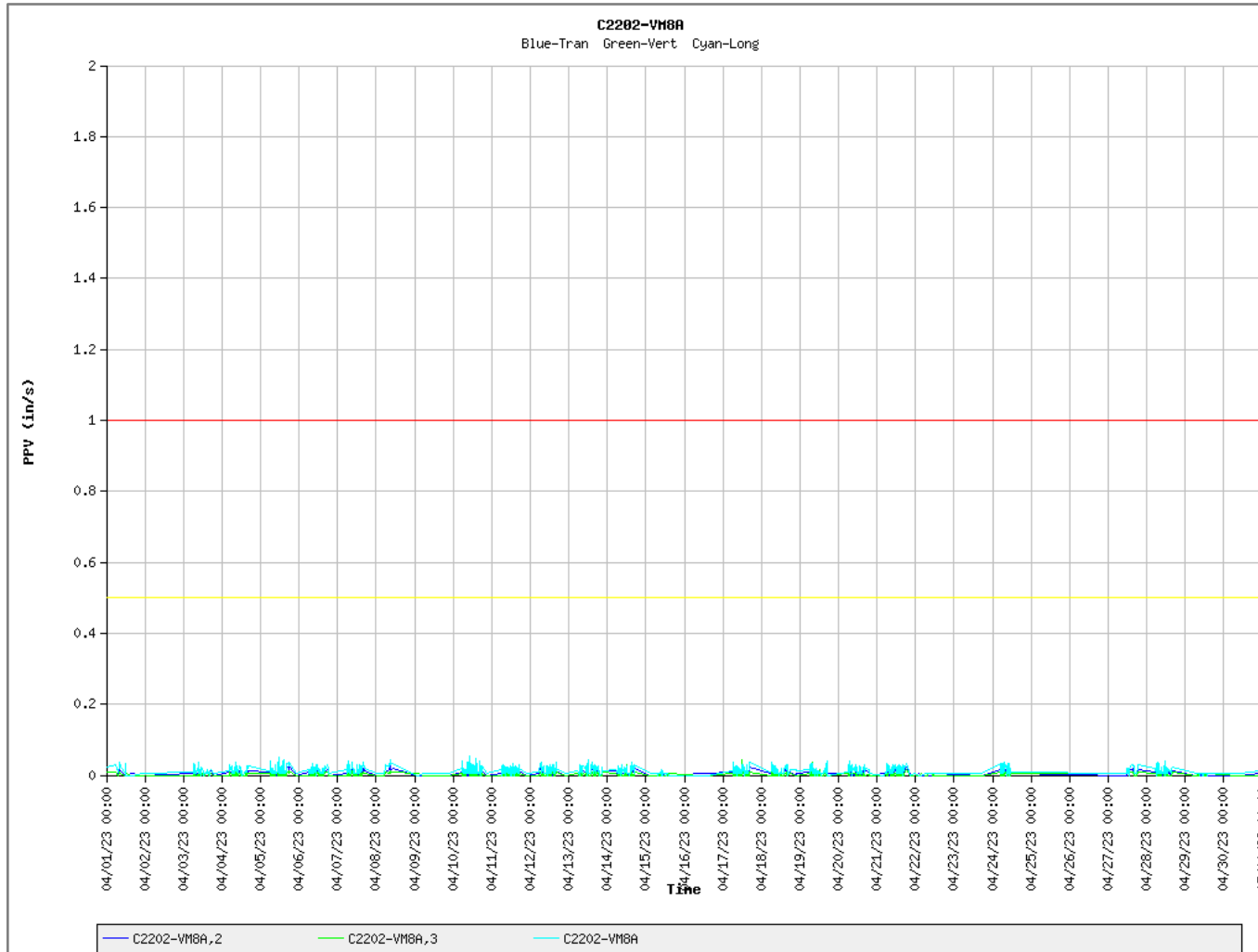
The Bronx Site Preparation April 2023 Vibration Monitoring Data Plots



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

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

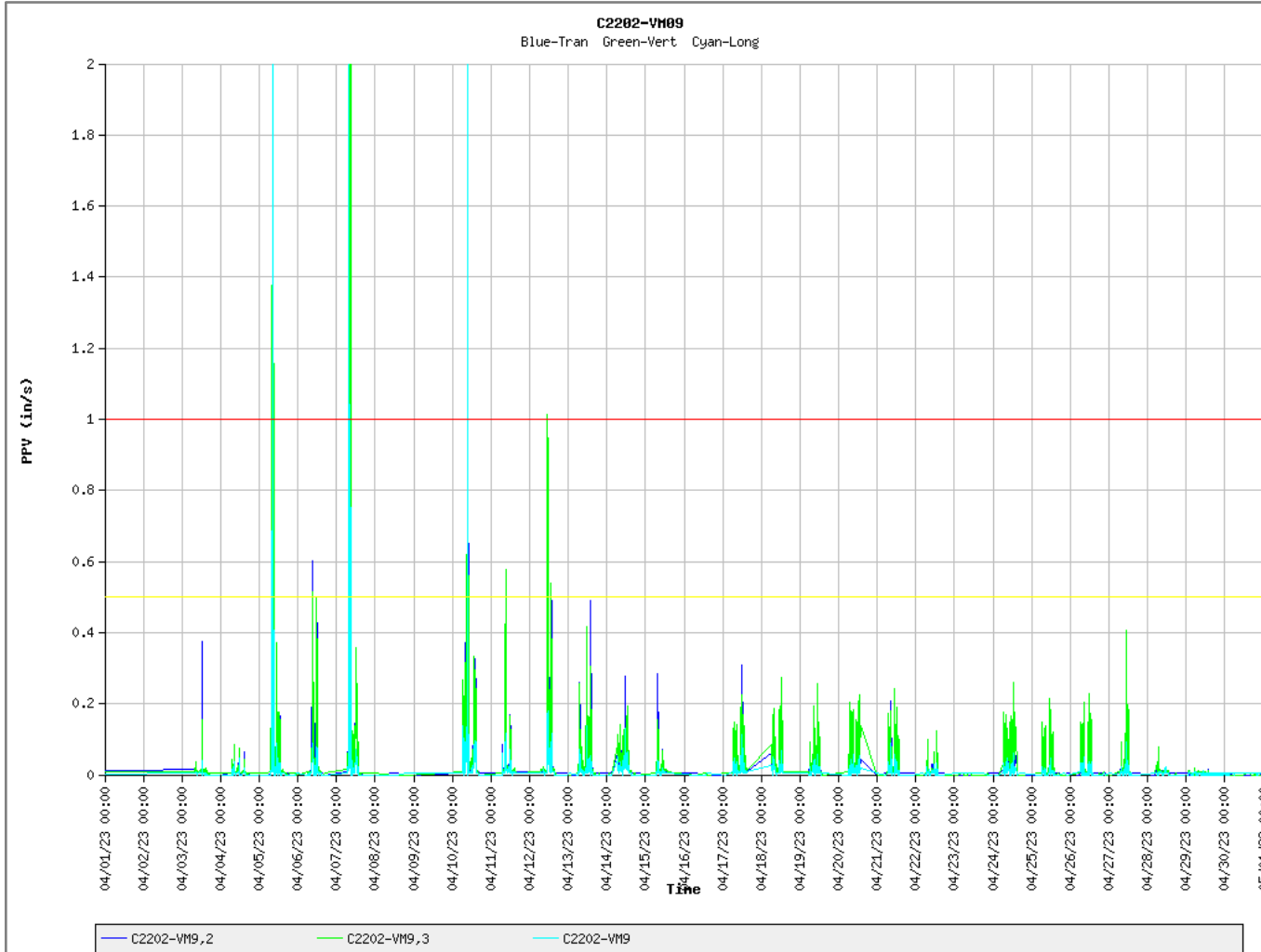
The Bronx Site Preparation April 2023 Vibration Monitoring Data Plots



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

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

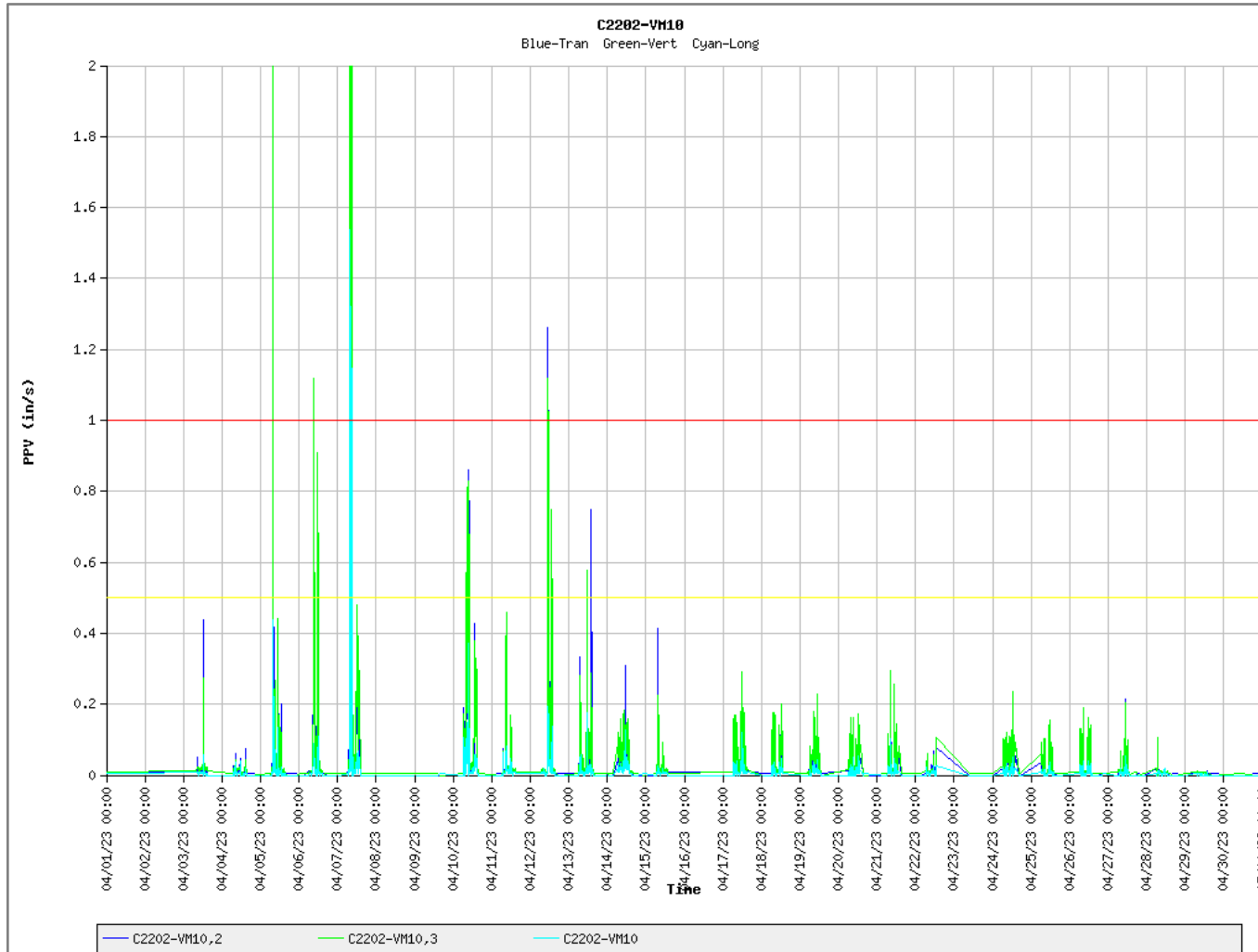
The Bronx Site Preparation April 2023 Vibration Monitoring Data Plots



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

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

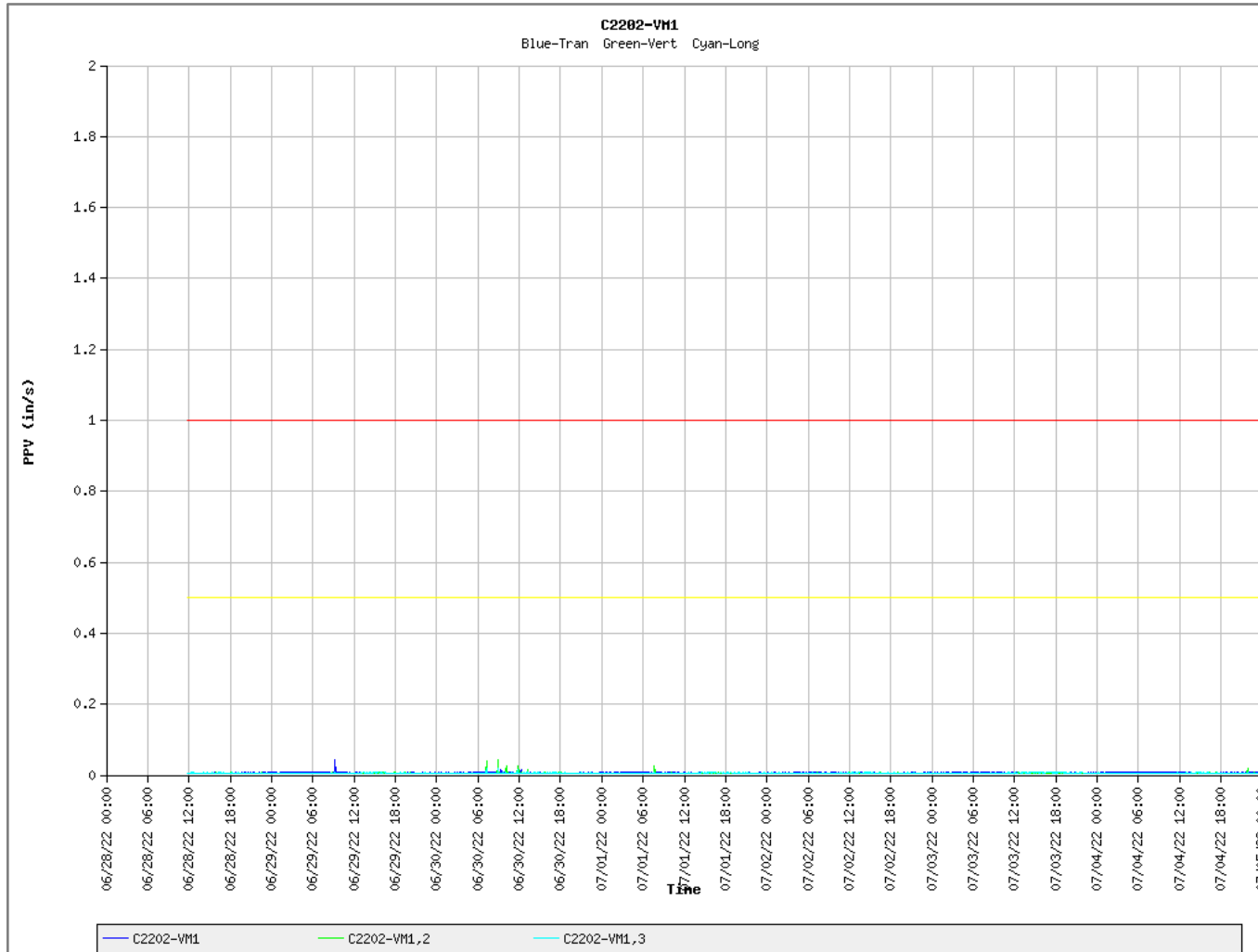
The Bronx Site Preparation April 2023 Vibration Monitoring Data Plots



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

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

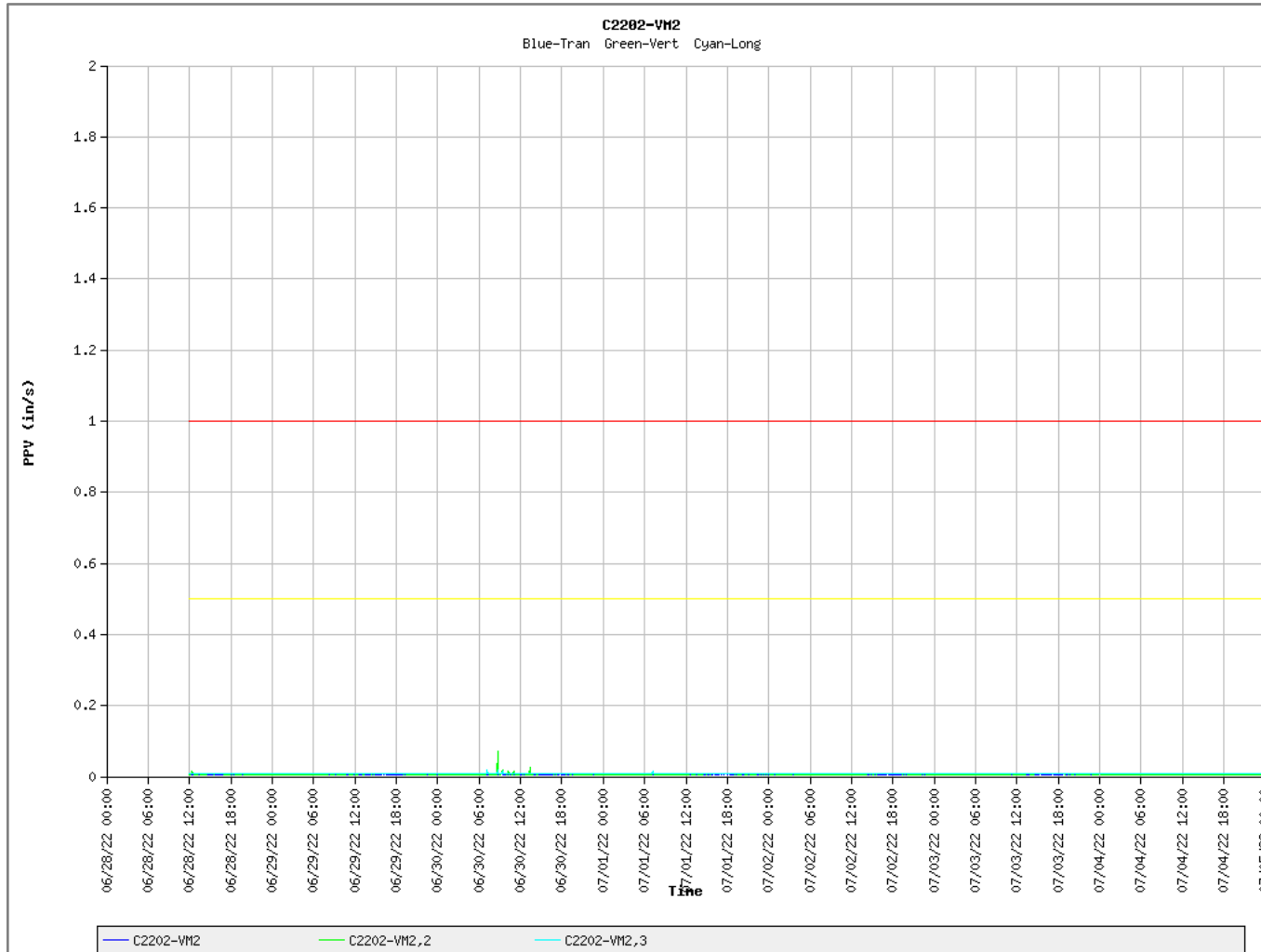
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

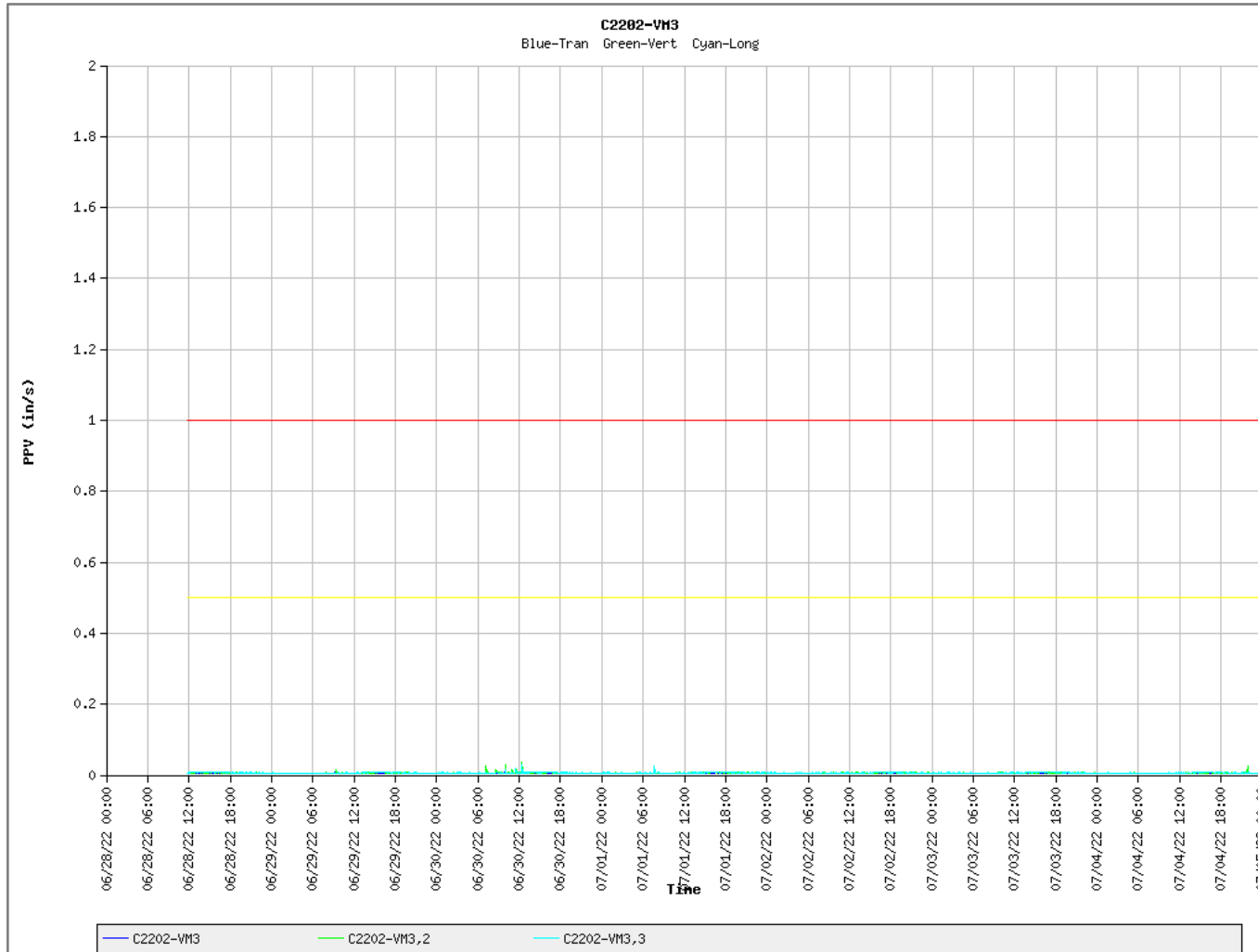
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

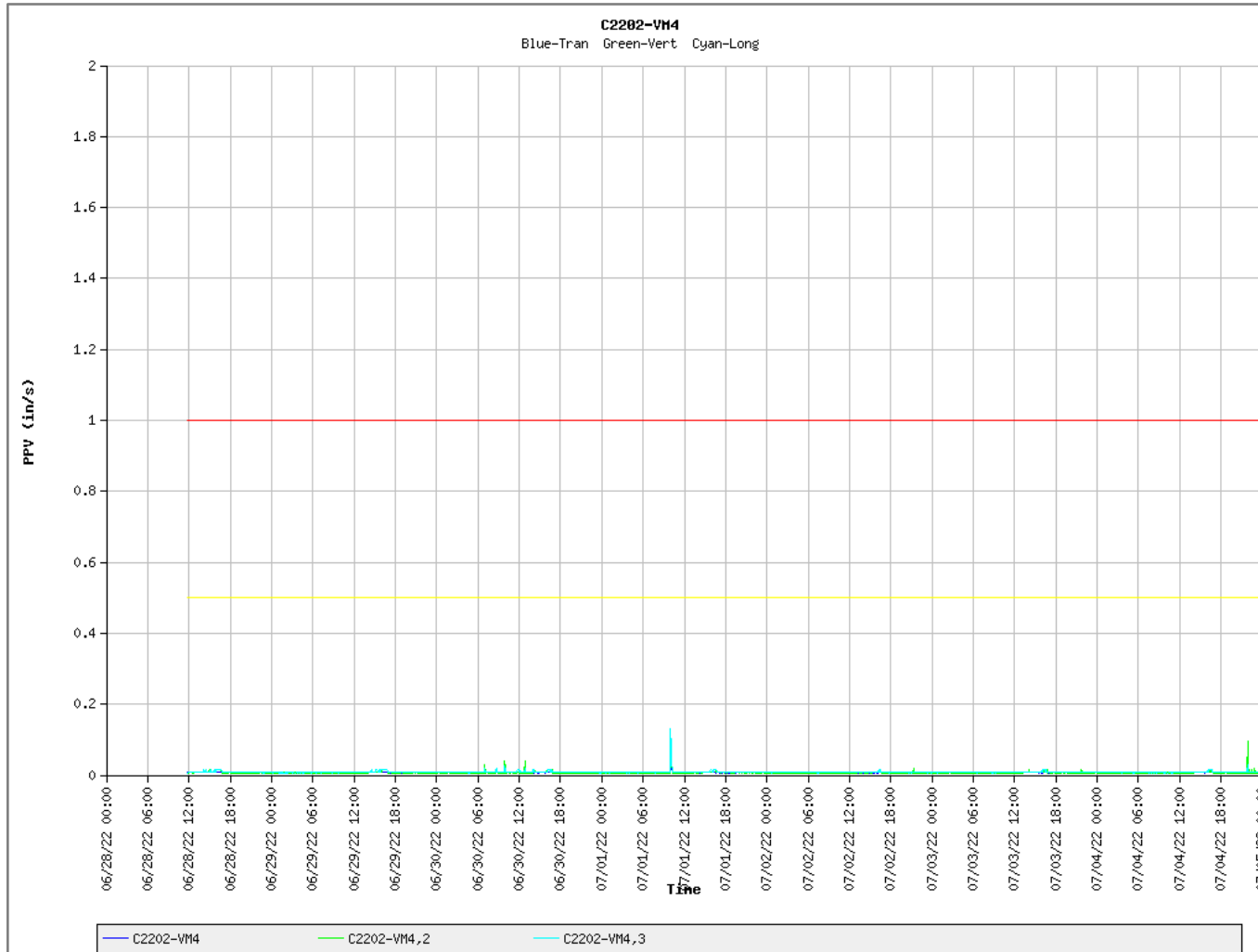
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

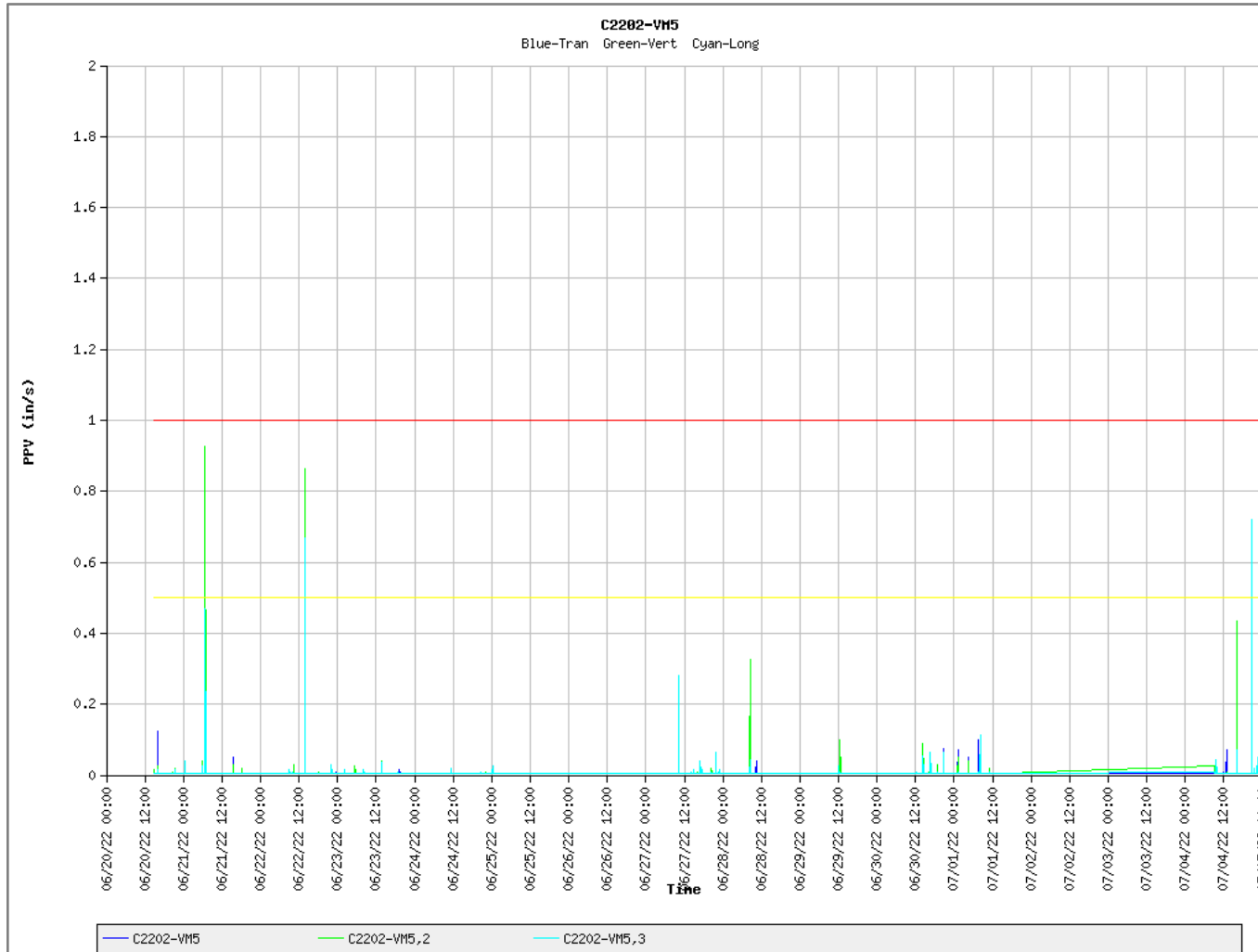
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

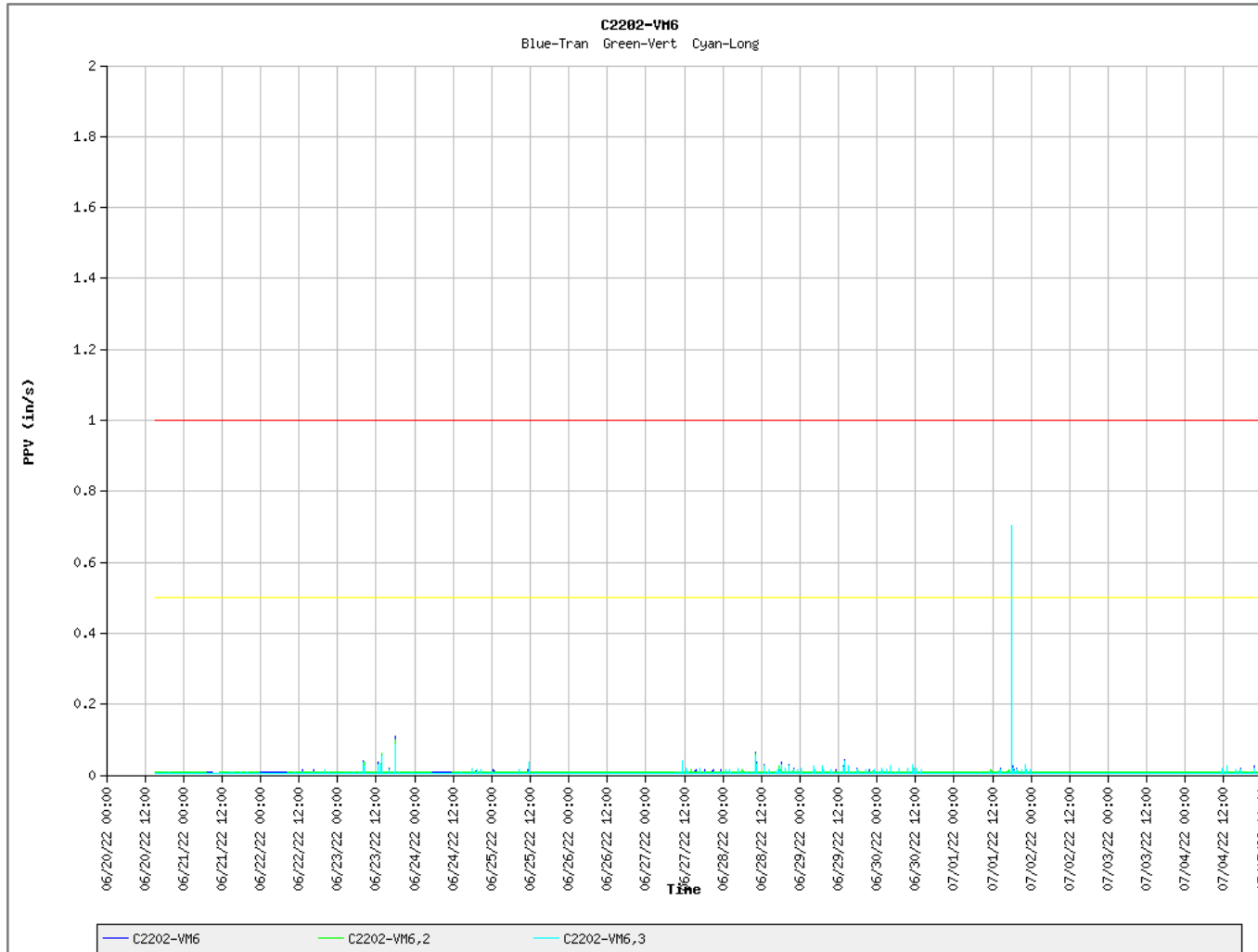
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

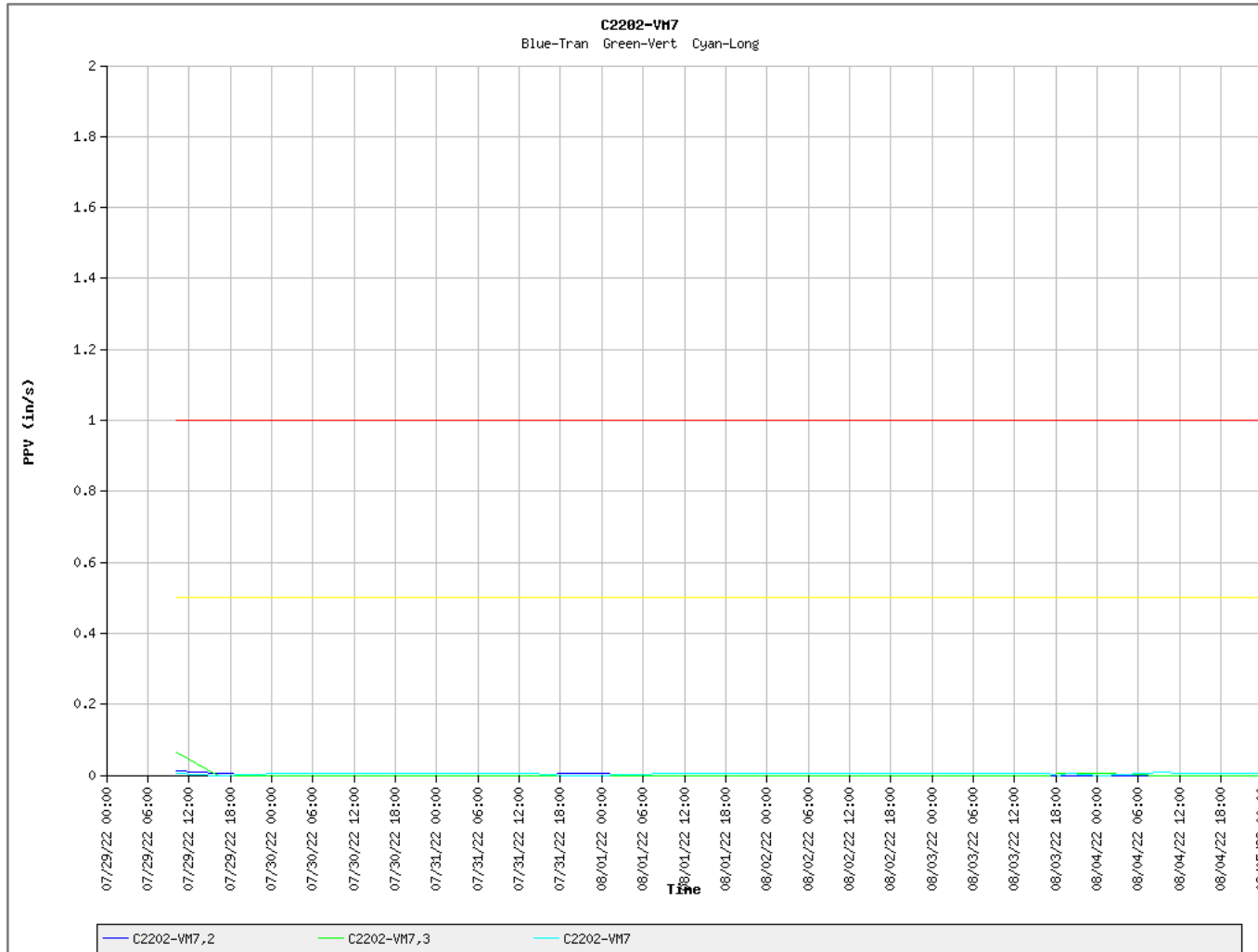
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

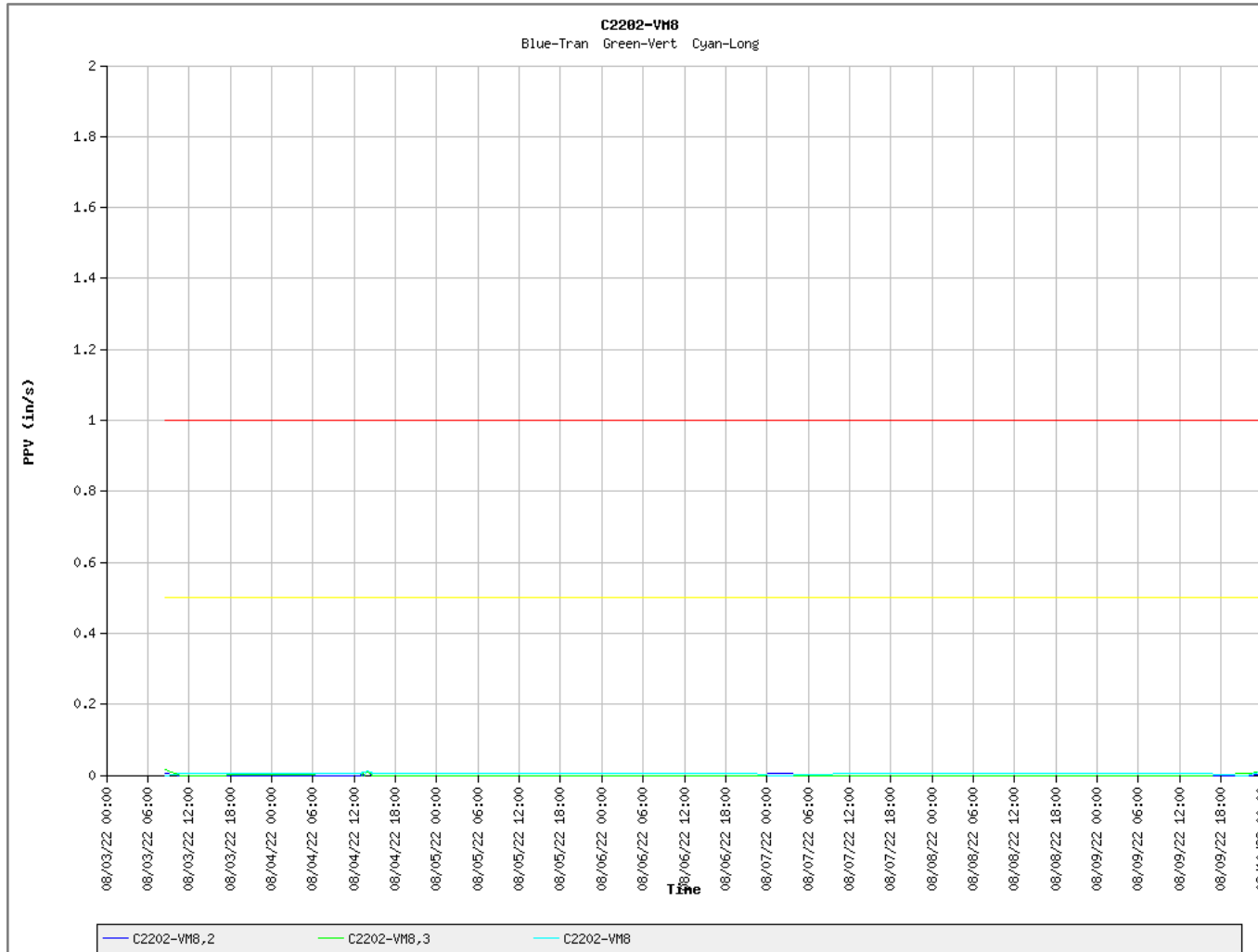
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

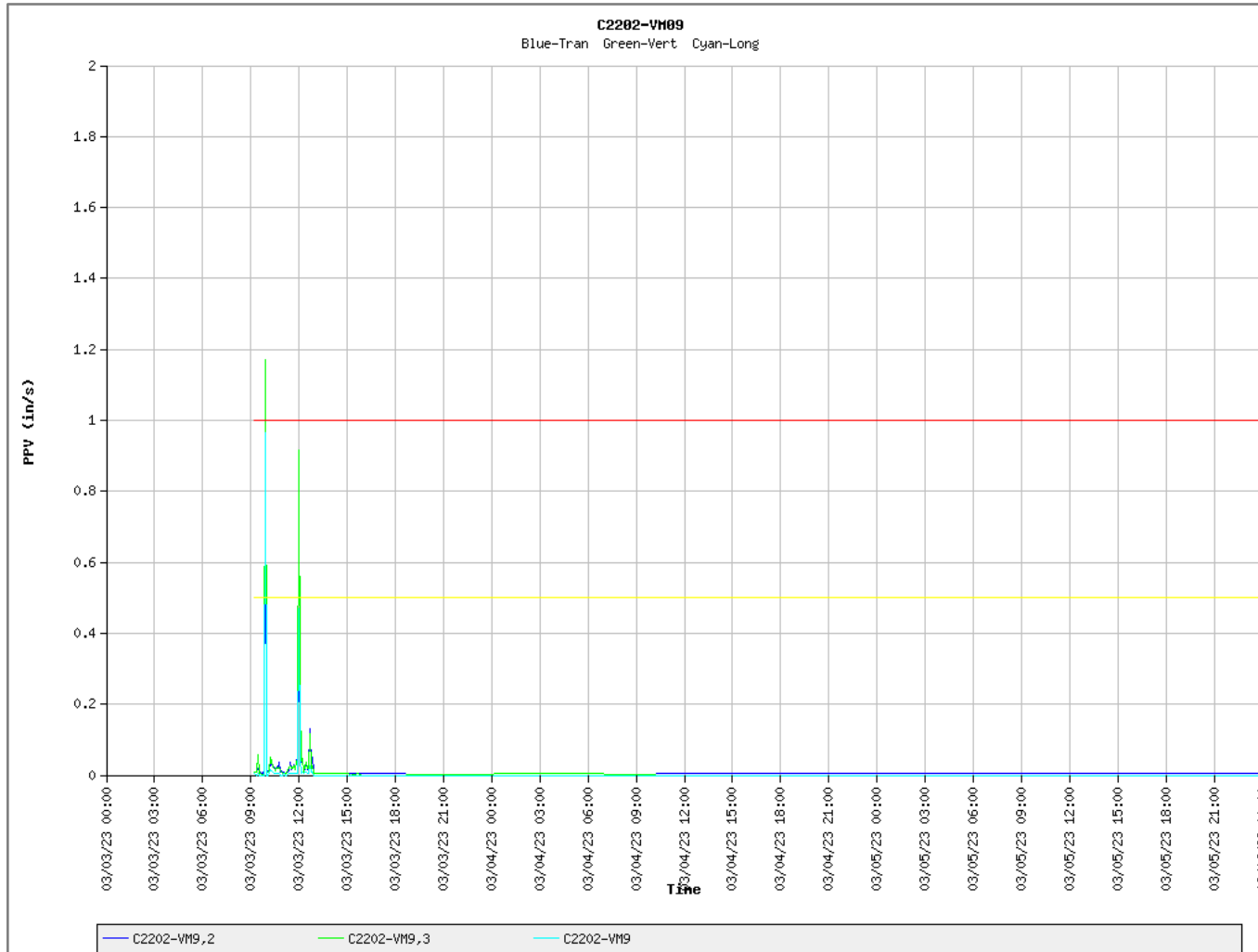
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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

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

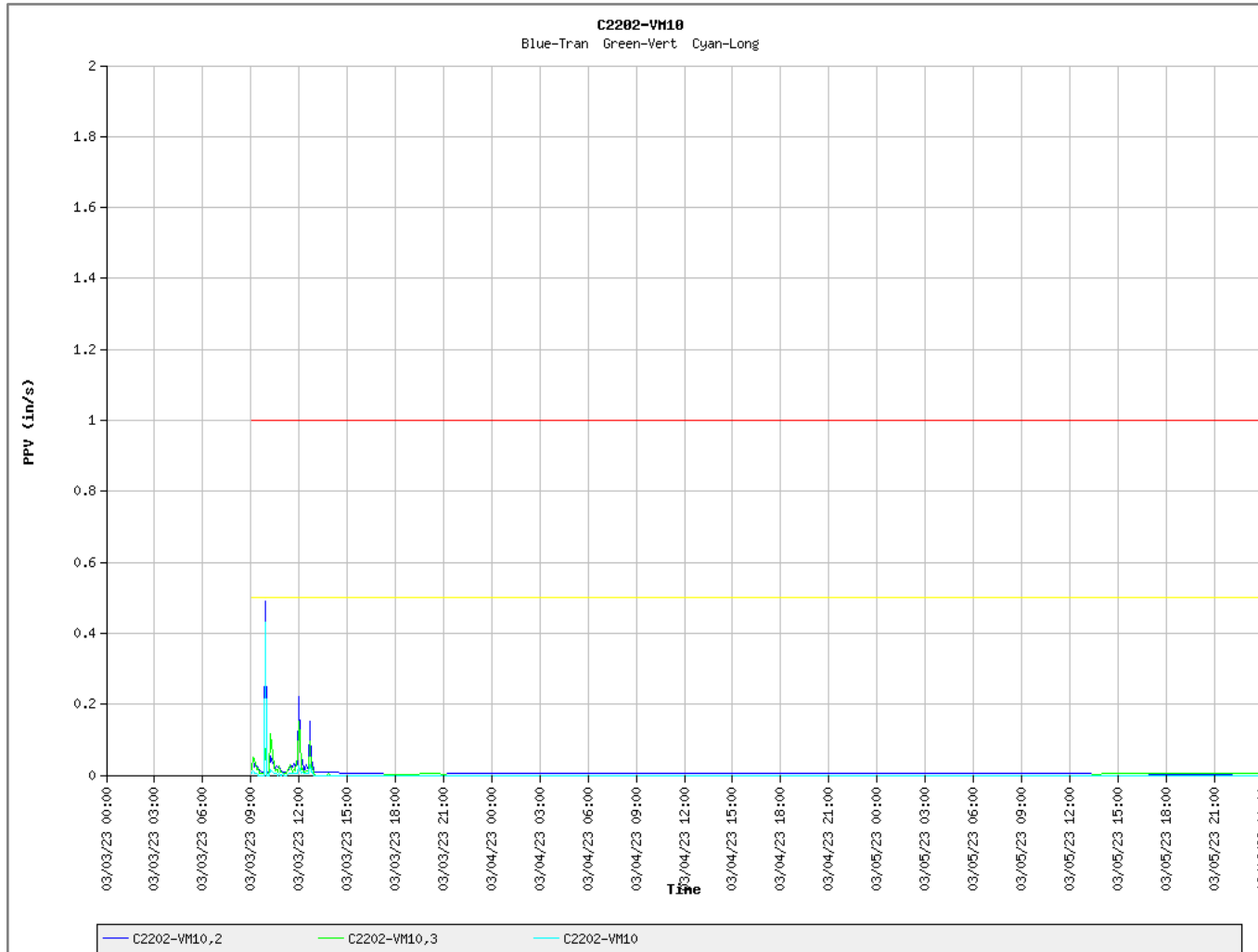
The Bronx Site Preparation Vibration Baseline Reference Data Plots



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