MATTHEW PALAVIDIS
VICTOR FATTORETTO
MATTHEW SHIELDS

Nepean Hospital Stage 2 Main Works

Noise and Vibration Monitoring Report 2

SYDNEY
9 Sarah St
MASCOT NSW 2020
(02) 8339 8000

ABN 98 145 324 714
www.acousticlogic.com.au

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Attention To	CPB Contractors Pty Limited

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TABLE OF CONTENTS

1 INTRODUCTION

This report presents the results of noise and vibration monitoring conducted by Acoustic Logic for the Nepean Hospital Stage 2 Main Works project site. Details presented in this report include monitoring locations, relevant noise and vibration objectives, measured levels over the monitoring period and discussion of results.

This report presents the monitoring results for the period between 26/01/2024 and 09/02/2024 for noise and vibration. Monitoring has been ongoing since 11th January 2023.

This report should be read in conjunction with the Construction Noise and Vibration Management Sub Plan prepared by this office (ref: 20230373.3/2908A/R3/VF, dated 29/08/2023)

2 MONITORING LOCATIONS AND DESCRIPTION

2.1 MONITORING EQUIPMENT

Noise

Noise monitoring was conducted using Acoustic Research Laboratories Rion NL-42 noise monitors. Monitors are programmed to continuously store noise data over every 15-minute period throughout the monitoring period. The monitor was calibrated before and after the measurements using a Rion Type NC-74 calibrator. No significant drift was recorded.

Vibration

Vibration monitoring was conducted using Texcel ETM vibration monitors fitted with external Tri-axial Geophones. The monitors are programmed to store statistical vibration data over every 5-minute period, along with any 'triggered' events that occur throughout the monitoring period. Texcel monitors are equipped with the ability to send SMS alarm messages to site operators and project managers.

2.2 MONITORING LOCATIONS AND ID

Acoustic Logic are currently conducting noise and vibration monitoring at surrounding internal and external locations as follows (refer to the figures below):

- Nepean Stage 1 – Level 2 waiting area near staff offices and pharmacy (internal)
    - Noise monitor ID: 01010769
    - Texcel monitor ID: ETM7381
- Tower Block 1 (TB1) – Level 3 corridor near staff offices and meeting rooms (internal)
    - Noise monitor ID:01259209
    - Texcel monitor ID: ETM7280
- Tresillian Building (external)
    - Noise monitor ID: 01010764
    - Texcel monitor ID: ETM7426

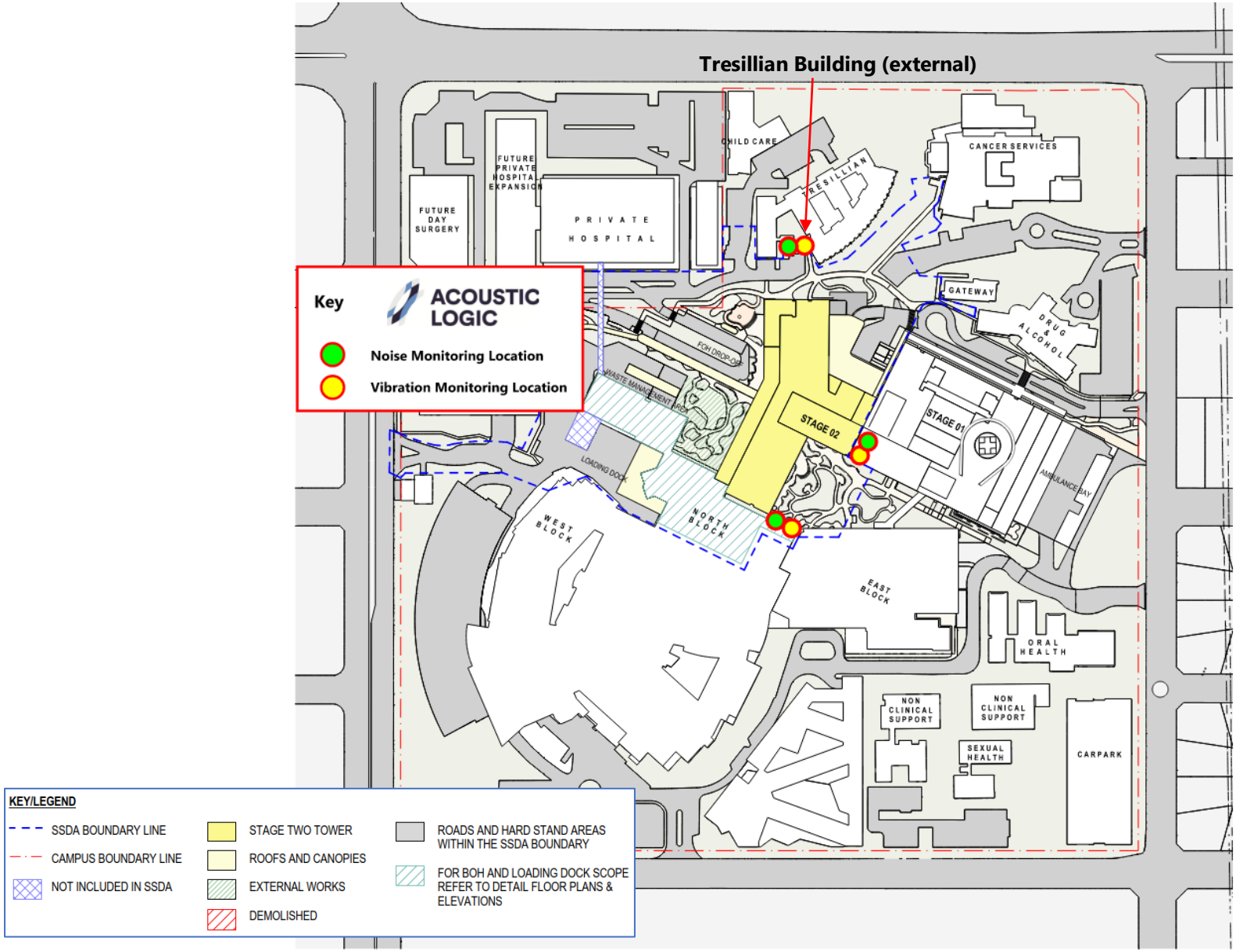

Figure 1 – Stage 2 Site Plan and Monitoring Locations (Source: BVN)

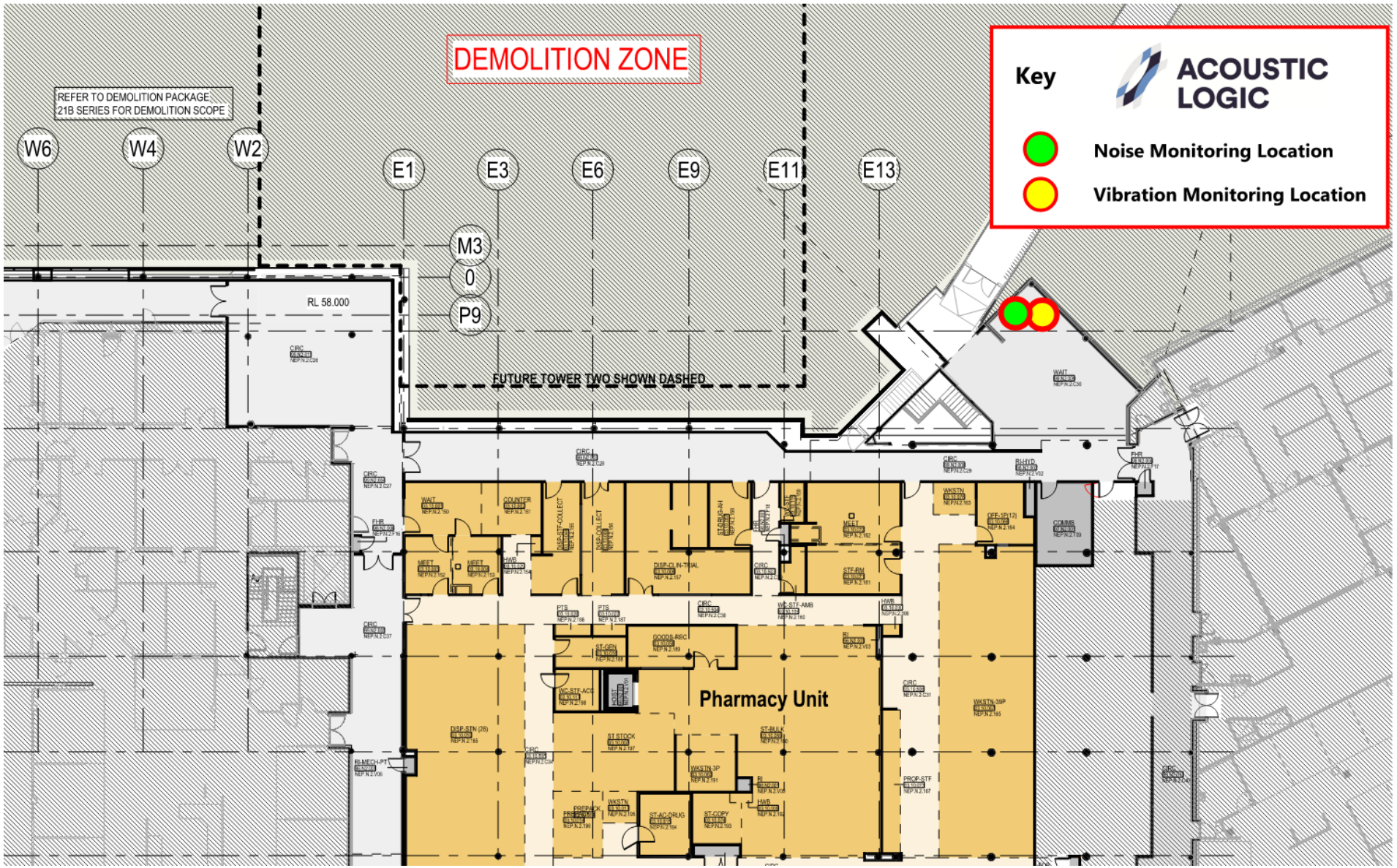

Figure 2 – Waiting Area Near Staff Offices and Pharmacy (Internal)

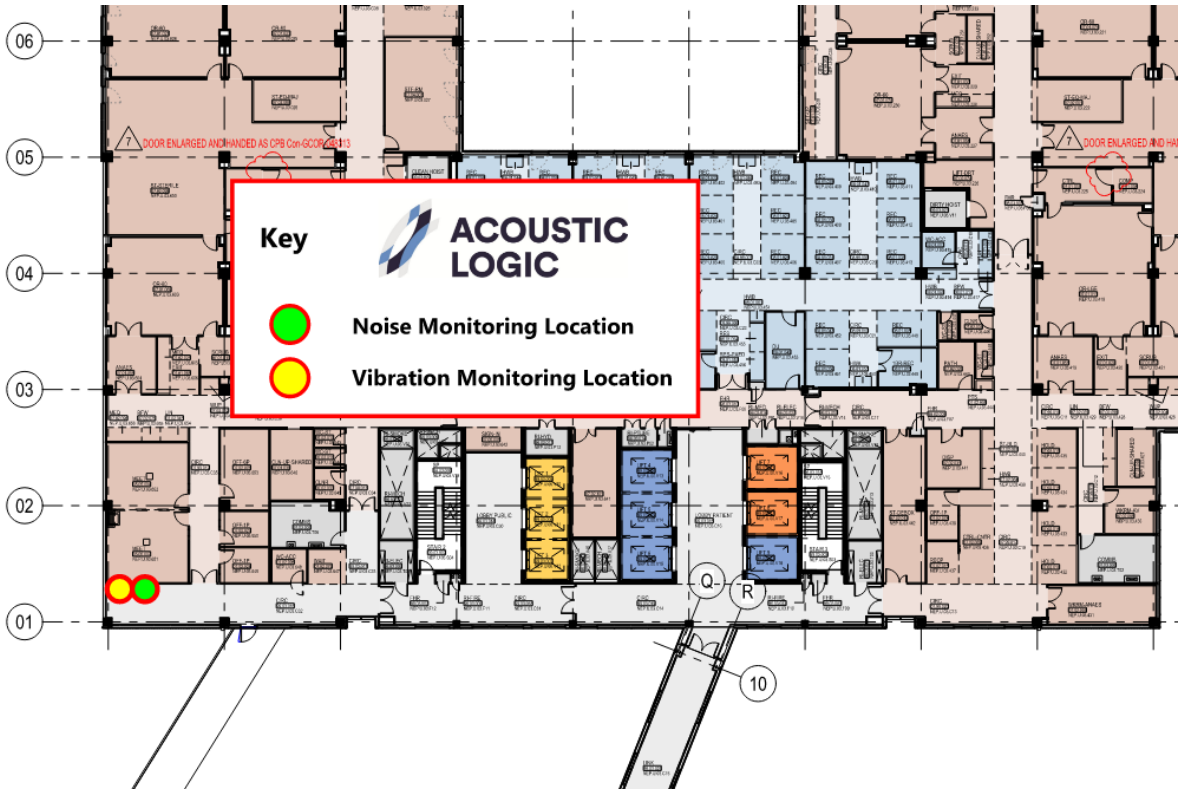

Figure 3 – TB1 Level 3 Staff Offices and Meeting Rooms (Internal)

3 NOISE AND VIBRATION OBJECTIVES

3.1 PROJECT DOCUMENTATION

Construction impacts to nearby development have been determined in the Construction Noise and Vibration Management Sub Plan prepared by this office (ref: 20230373.3/2908A/R3/VF, dated 29/08/2023)

3.2 NOISE MANAGEMENT LEVELS (NML)

The project specific NML's for the most impacted receivers are summarised from the Sub-Plan and are reproduced as follows:

Table 1 – Noise Management Levels for Most Impacted Receivers

Location/Receiver	Noise Management Level dB(A) L_{eq}
Tresillian	65 (external)
Private offices / waiting areas	50 (internal)

*Noise levels within private offices and waiting areas area expected to exceed the noise management level occasionally as they are still in use by active staff / public.

3.3 VIBRATION MANAGEMENT LEVELS

3.3.1 Structure Vibration Damage Criteria

The Type 2 criteria below will be adopted for the external Tresillian Building.

German Standard DIN 4150-3 (1992-02) provides a guideline for acceptable levels of vibration velocity in building foundations, to assess the effects of vibration on structures. The table give guidance on the maximum accepted values of velocity at the foundation and in the plane of the highest floor of various types of buildings, to prevent any structural damage.

The table below lists the peak particle velocity, which is the maximum absolute value of the velocity signals for the three orthogonal components. This is measured as a maximum value of any of the three orthogonal component particle velocities when measured at the foundation, and the maximum levels measured in the x- and y-horizontal directions in the plane of the floor of the uppermost storey.

It is noted that if measured vibration levels are below the guidelines listed below, damage that will reduce the serviceability of the building will not occur and if damage to the building does occur, it is assumed that the damage is related to other activities or sources. Furthermore, the DIN4150-3 guideline states the following regarding the limits presented in Table 1 of the standard:

"Exceeding the guideline values does not necessarily lead to damage. Should they be exceeded, however, further investigations may be necessary, such as determining and evaluating the stresses as detailed in 4.3 and 4.4.".

Table 2 - DIN 4150-3 (1999-02) Safe Limits for Building Vibration

TYPE OF STRUCTURE		PEAK PARTICLE VELOCITY (mms^{-1})			
		At Foundation at a Frequency of			Plane of Floor of Uppermost Storey
		< 10Hz	10Hz to 50Hz	50Hz to 100Hz	All Frequencies
1	Buildings used in commercial purposes, industrial buildings and buildings of similar design	20	20 to 40	40 to 50	40
2	Dwellings and buildings of similar design and/or use	5	5 to 15	15 to 20	15
3	Structures that because of their particular sensitivity to vibration, do not correspond to those listed in Lines 1 or 2 and have intrinsic value (e.g. buildings that are under a preservation order)	3	3 to 8	8 to 10	8

NOTE Even if guideline values as in line 1, columns 2 to 5, are complied with, minor damage cannot be excluded.

a At frequencies above 100 Hz, the guideline values for 100 Hz can be applied as minimum values.

b It may be necessary to lower the guideline value markedly to prevent minor damage

The Type 2 criteria above will be adopted for the external Tresillian Building.

3.3.2 Amenity Criteria

Vibration levels for the amenity of nearby land users are those recommended by the EPA document *Assessing Vibration: A technical guideline.* These levels are presented below:

Table 3 – Construction Vibration Goals - Amenity

Location	Time	Peak velocity (mm/s)	
		Preferred	Maximum
Continuous Vibration			
Residences	Daytime	0.28	0.56
Hospitals – Office Areas	When in use	0.56	1.1
Hospitals – Theatres	When in use	0.14	0.28
Impulsive Vibration			
Residences	Daytime	8.6	17
Hospitals – Office Areas	When in use	18	36
Hospitals – Theatres	When in use	0.14	0.28

It is typically accepted that:

- operating theatres and medical imaging rooms have a response factor of 1
- intensive care wards have a response factor of 2
- general hospital rooms have a response factor of 4
- offices/consulting rooms have a response factor of 8.

Hence, we will assume the waiting areas/pharmacy (PPV) and offices (PPV) vibration levels for the internal levels, derived from the UK Hospitals Guide. The working 'alert level' will be set at 85% of the 'stop work' criteria level. These criteria are valid for vibrations at frequencies above 8Hz.

Table 4 – Summarised Project Vibration Management Levels

Location	Orientation	Alert Level (mm/s)	Stop Work Level (mm/s)
Staff offices, meeting rooms (internal)	Vertical	0.95	1.1
Public waiting areas (internal)	Vertical	1.9	2.2
Tresillian Building (external)	Ground Plane	4.25	5.0

4 MEASUREMENT RESULTS

4.1 NOISE MONITORING RESULTS

The tables below present a summary of daily measured noise levels across a 15-minute period. Refer to appendices for detailed noise monitoring results.

ICNG Standard construction hours are as follows:

- Monday to Friday between 7am and 6pm
- Saturday between 8am and 1pm

Note: all presented noise levels are measured at the monitoring location with no correction factors applied.

NML = Noise Management Level

HNAML = Highly Noise Affected Management Level

A discussion will be provided where exceedances of the highly affected noise management level occur.

Monitoring locations and monitor IDs are repeated below:

- Nepean Stage 1 – Level 2 waiting area near staff offices and pharmacy (internal)
    - Rion Noise monitor ID: 01010769
- Tower Block 1 (TB1) – Level 3 corridor near staff offices and meeting rooms (internal)
    - Rion Noise monitor ID:01259209
- Tresillian Building (external)
    - Rion Noise monitor ID: 01010764

Table 5 – Monitored Noise Levels – Level 2 Waiting Area (monitor ID: 01010769)

Date	Noise Management Trigger Level dB(A) $L_{eq,15\text{-}min}$	NML Exceedance Range ($L_{Aeq,\ 15\text{-}min}$ dB(A)) – Standard Operating Hours			
		<NML	0-5 above NML	5-10 above NML	10-15 Above NML
26/01/2024	50 (internal)	15.9%	61.4%	15.9%	4.5%
27/01/2024		20.0%	65.0%	0.0%	10.0%
28/01/2024		Sunday – No Works			
29/01/2024		0.0%	18.2%	63.6%	9.1%
30/01/2024		0.0%	36.4%	50.0%	9.1%
31/01/2024		0.0%	29.5%	56.8%	9.1%
1/02/2024		0.0%	19.5%	48.8%	22.0%
2/02/2024		0.0%	18.8%	43.8%	37.5%
3/02/2024		5.0%	75.0%	10.0%	5.0%
4/02/2024		Sunday – No Works			
5/02/2024		0.0%	15.9%	68.2%	11.4%
6/02/2024		0.0%	18.2%	56.8%	18.2%
7/02/2024		0.0%	29.5%	59.1%	6.8%
8/02/2024		0.0%	25.0%	56.8%	11.4%
9/02/2024		0.0%	38.6%	50.0%	6.8%

Table 6 – Monitored Noise Levels – TB1 Corridor (monitor ID:01259209)

Date	Noise Management Trigger Level dB(A) $L_{eq,15\text{-}min}$	NML Exceedance Range ($L_{Aeq,\ 15\text{-}min}$ dB(A)) – Standard Operating Hours			
		<NML	0-5 above NML	5-10 above NML	10-15 Above NML
26/01/2024	50 (internal)	100.0%	0.0%	0.0%	0.0%
27/01/2024		100.0%	0.0%	0.0%	0.0%
28/01/2024		Sunday – No Works			
29/01/2024		100.0%	0.0%	0.0%	0.0%
30/01/2024		97.7%	2.3%	0.0%	0.0%
31/01/2024		100.0%	0.0%	0.0%	0.0%
1/02/2024		100.0%	0.0%	0.0%	0.0%
2/02/2024		100.0%	0.0%	0.0%	0.0%
3/02/2024		95.0%	5.0%	0.0%	0.0%
4/02/2024		Sunday – No Works			
5/02/2024		100.0%	0.0%	0.0%	0.0%
6/02/2024		95.5%	2.3%	2.3%	0.0%
7/02/2024		100.0%	0.0%	0.0%	0.0%
8/02/2024		100.0%	0.0%	0.0%	0.0%

9/02/2024		100.0%	0.0%	0.0%	0.0%

Table 7 – Monitored Noise Levels – Tresillian Building (monitor ID: 01010764)

Date	Noise Management Trigger Level dB(A) $L_{eq,15\text{-}min}$	NML Exceedance Range ($L_{Aeq,\ 15\text{-}min}$ dB(A)) – Standard Operating Hours			
		<NML	0-5 above NML	5-10 above NML	10-15 Above NML
26/01/2024	65 (external)	100.0%	0.0%	0.0%	0.0%
27/01/2024		100.0%	0.0%	0.0%	0.0%
28/01/2024		Sunday – No Works			
29/01/2024		84.1%	15.9%	0.0%	0.0%
30/01/2024		29.5%	65.9%	4.5%	0.0%
31/01/2024		50.0%	50.0%	0.0%	0.0%
1/02/2024		81.8%	11.4%	2.3%	2.3%
2/02/2024		55.6%	44.4%	0.0%	0.0%
3/02/2024		87.5%	12.5%	0.0%	0.0%
4/02/2024		100.0%	0.0%	0.0%	0.0%
5/02/2024		Sunday – No Works			
6/02/2024		81.8%	15.9%	2.3%	0.0%
7/02/2024		100.0%	0.0%	0.0%	0.0%
8/02/2024		100.0%	0.0%	0.0%	0.0%
9/02/2024		86.4%	13.6%	0.0%	0.0%

4.2 VIBRATION MONITORING RESULTS

The tables below present a summary of measured daily maximum vibration levels (PPVs). Refer to appendices for detailed noise monitoring results.

ICNG Standard construction hours are as follows:

- Monday to Friday between 7am and 6pm
- Saturday between 8am and 1pm

Note: all presented noise levels are measured at the monitoring location with no correction factors applied.

NML = Noise Management Level

HNAML = Highly Noise Affected Management Level

A discussion will be provided where exceedances of the vibration criteria occur.

Monitoring locations and monitor IDs are repeated below:

- Nepean Stage 1 – Level 2 waiting area near staff offices and pharmacy (internal)
    - Texcel monitor ID: ETM7381
- Tower Block 1 (TB1) – Level 3 corridor near staff offices and meeting rooms (internal)
    - Texcel monitor ID: ETM7280
- Tresillian Building (external)
    - Texcel monitor ID: ETM7426

Table 8 – Monitored Vibration Levels – Level 2 Waiting Area (monitor ID: ETM7381)

Date	Measured PPV Daily Maximum (mm/s)	Vibration Monitoring Criteria	Compliance
26/01/2024	0.2	Alarm Level: 1.9 mm/s Stop Work Level: 2.2 mm/s (8 -100Hz)	Yes
27/01/2024	0.2		Yes
28/01/2024	0.1		Yes
29/01/2024	0.9		Yes
30/01/2024	0.6		Yes
31/01/2024	0.6		Yes
1/02/2024	0.6		Yes
2/02/2024	0.5		Yes
3/02/2024	0.2		Yes
4/02/2024	0.1		Yes
5/02/2024	0.6		Yes
6/02/2024	0.2		Yes
7/02/2024	0.3		Yes
8/02/2024	0.4		Yes
9/02/2024	0.2		Yes

Table 9 – Monitored Vibration Levels – TB1 Corridor (monitor ID: ETM7280)

Date	Measured PPV Daily Maximum (mm/s)	Vibration Monitoring Criteria	Compliance
26/01/2024	0.9	Alarm Level: 0.95 mm/s Stop Work Level: 1.1 mm/s (8 -100Hz)	Yes
27/01/2024	0.2		Yes
28/01/2024	0.1		Yes
29/01/2024	0.3		Yes
30/01/2024	0.3		Yes
31/01/2024	0.4		Yes
1/02/2024	0.3		Yes
2/02/2024	0.2		Yes
3/02/2024	0.2		Yes
4/02/2024	0.3		Yes
5/02/2024	0.2		Yes
6/02/2024	3.9		Yes*
7/02/2024	0.4		Yes
8/02/2024	0.2		Yes
9/02/2024	0.3		Yes

*See discussion

Table 10 – Monitored Vibration Levels – Tresillian Building (monitor ID: ETM7426)

Date	Measured PPV Daily Maximum (mm/s)	Vibration Monitoring Criteria	Compliance
26/01/2024	0.2	DIN4150 Type 2 (Refer Table 2): 7 mm/s (<10 Hz) 10 to 15 mm/s (10- 50Hz) 15 to 20 mm/s (50 – 100 Hz)	Yes
27/01/2024	0.1		Yes
28/01/2024	0.1		Yes
29/01/2024	0.4		Yes
30/01/2024	1.1		Yes
31/01/2024	0.6		Yes
1/02/2024	7.3		Yes*
2/02/2024	0.4		Yes
3/02/2024	0.1		Yes
4/02/2024	0.1		Yes
5/02/2024	0.7		Yes
6/02/2024	0.1		Yes
7/02/2024	0.6		Yes
8/02/2024	0.5		Yes
9/02/2024	0.7		Yes

*Analysis indicates the measured event was within the frequency threshold of the DIN4150 curve

4.3 DISCUSSION

4.3.1 Noise

Level 2 Waiting Area – Internal (01010769)

- Works were generally above the Noise Management Level.
- Review of the noise monitoring data show that there is minimal deviation of the background levels within the space, and measured noise levels are likely to be operational noise from use of the waiting area, or from staff/public transitioning through the space.
- Considering the above, it is unlikely that the measured noise levels within the space are associated with demolition activities.

TB1 Staff offices - Internal (ETM7280)

- Works were generally below the Noise Management Level over the monitoring period.

Tresillian Building – External (01010764)

- Works were generally below the Noise Management Level over the monitoring period.
- Where exceedances measured 10-15 dB above the management level have occurred throughout the monitoring period, these are detailed below:
    - 01/01/24 – Thursday – between 11:00am and 11:30am
        - Maximum noise level of 83dB(A) $L_{eq(15min)}$
        - We note works were preceded and followed by periods where noise were below the NMLs on this date.

4.3.2 Vibration

Level 2 Waiting Area – Internal (ETM7381)

- Vibration levels were all within the nominated criteria during this monitoring period.
- We note external demolition works were carried out adjacent to this zone

TB1 Staff offices - Internal (ETM7280)

- Vibration levels were generally within the nominated criteria during this monitoring period.
- One measured exceedance occurred at 1:35pm with a measured PPV of 3.9mm/s.
    - The project team was notified via SMS alert messages and methodology was investigated.
    - Further analysis shows that the event was a singular event and not of typical construction activity where there are sustained vibration levels.
- We note external demolition works were carried out adjacent to this zone

Tresillian Building – External (7426)

- Vibration levels were all within the nominated criteria during this monitoring period.
- We note external demolition works were carried out adjacent to this zone

4.3.3 General Notes:

Regarding measured exceedances generally, we note that an exceedance of the noise management level is not necessarily prohibited, however is a trigger for providing mitigation measures for the control of noise from construction activities.

5 CONCLUSION

Noise and Vibration monitoring has been conducted at various locations for the Nepean Hospital Stage 2 Main Works between 26/01/2024 and 09/02/2024.

For this monitoring period, we note the following:

Noise

- **Level 2 waiting area near pharmacy** - whilst measured noise levels generally exceeded the NML's, assessment indicates that this is unlikely to be related to construction activities.
- **TB1 Staff offices** - measured noise levels were generally below NMLs over the monitoring period.
- **Tresillian Building** - measured noise levels were generally below NMLs over the monitoring period.

Vibration

- **Level 2 waiting area near pharmacy** - vibration levels were all within the nominated criteria during this monitoring period.
- **TB1 Staff offices** - vibration levels were all within the nominated criteria during this monitoring period.
- **Tresillian Building** - vibration levels were all within the nominated criteria during this monitoring period.

Please contact us should you have any further queries.

Yours faithfully,

Acoustic Logic Pty Ltd
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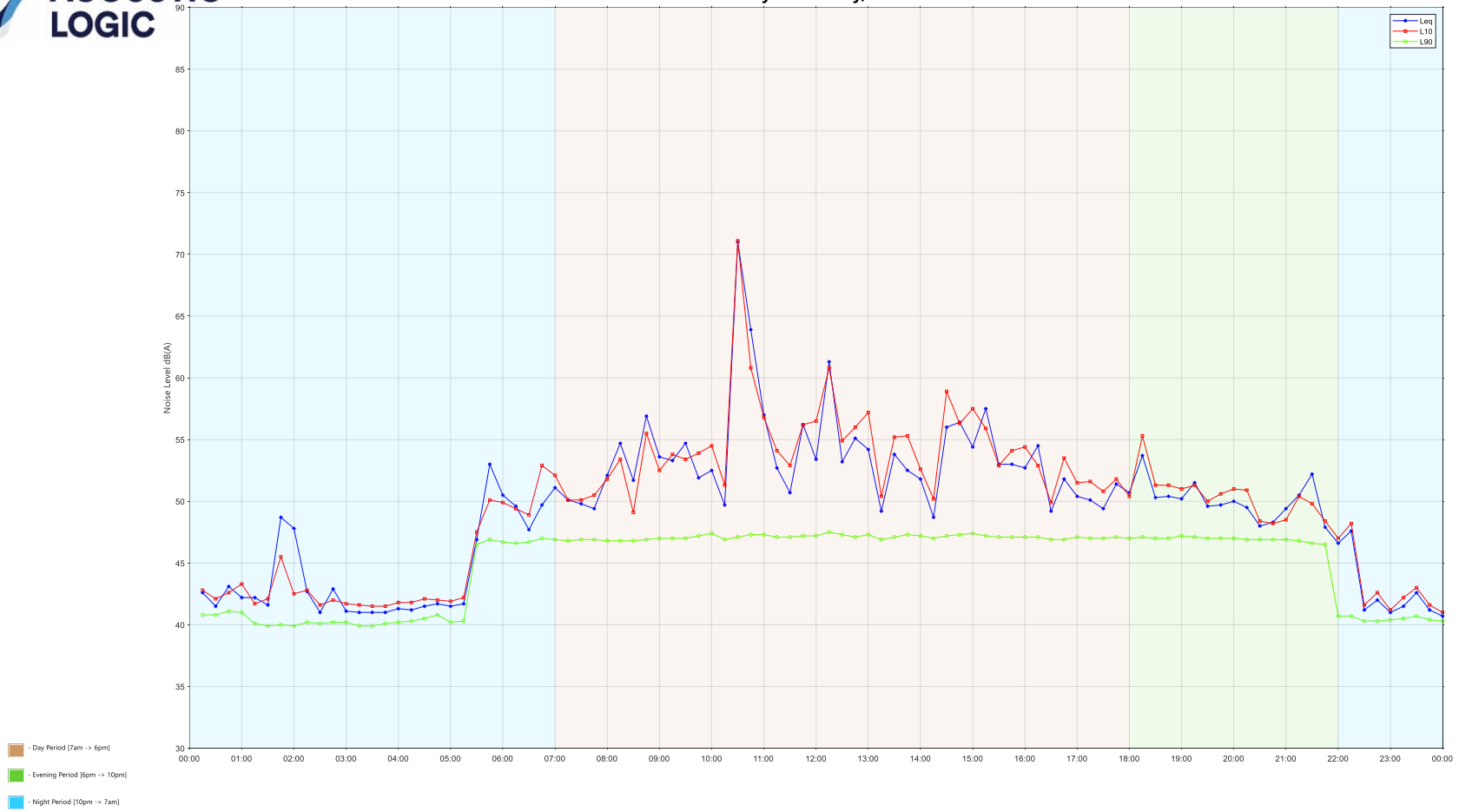
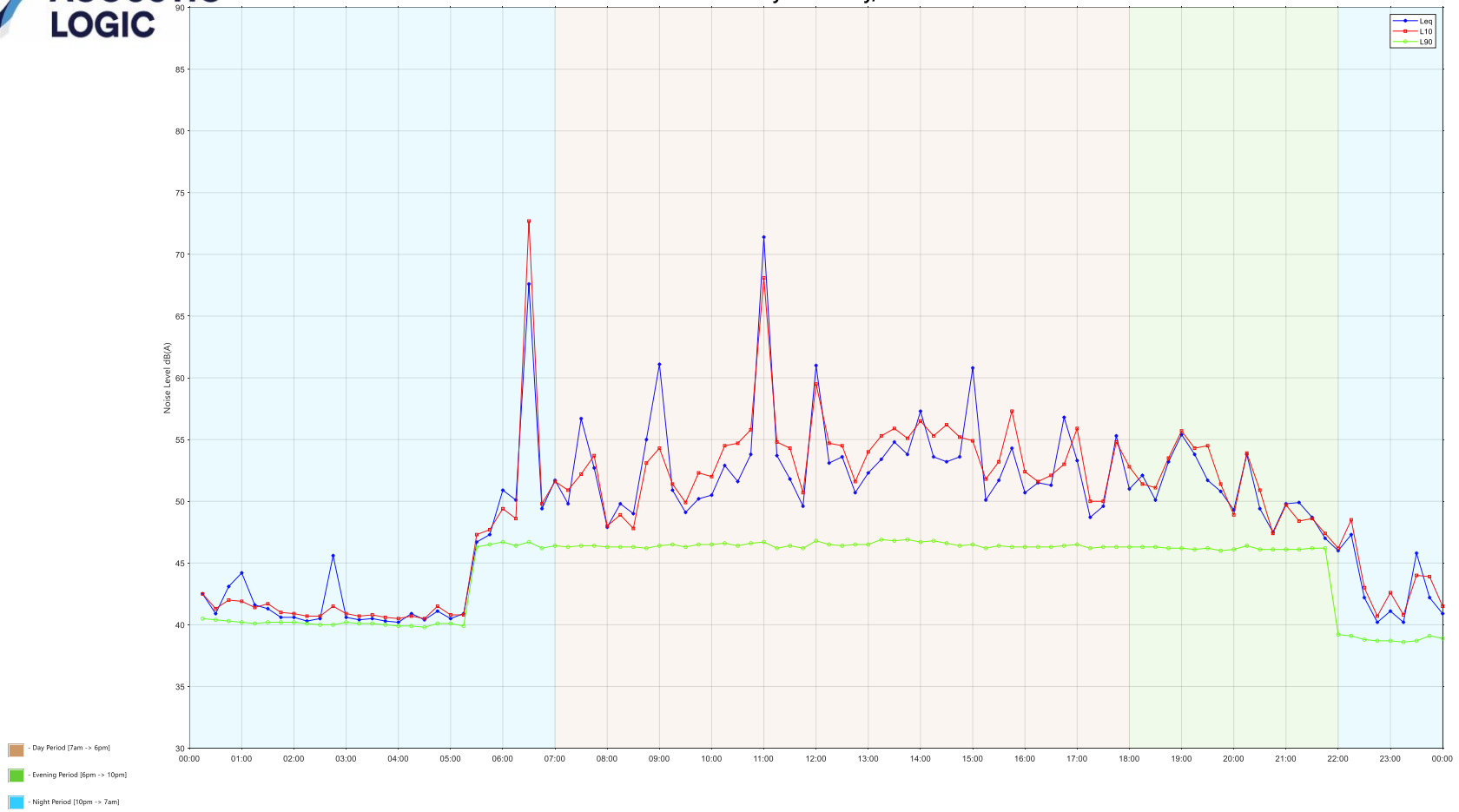
APPENDIX A – UNATTENDED NOISE MONITORING DATA

Nepean Hospital Stage 2 - Level 2 Waiting Area
Friday 26 January, 2024



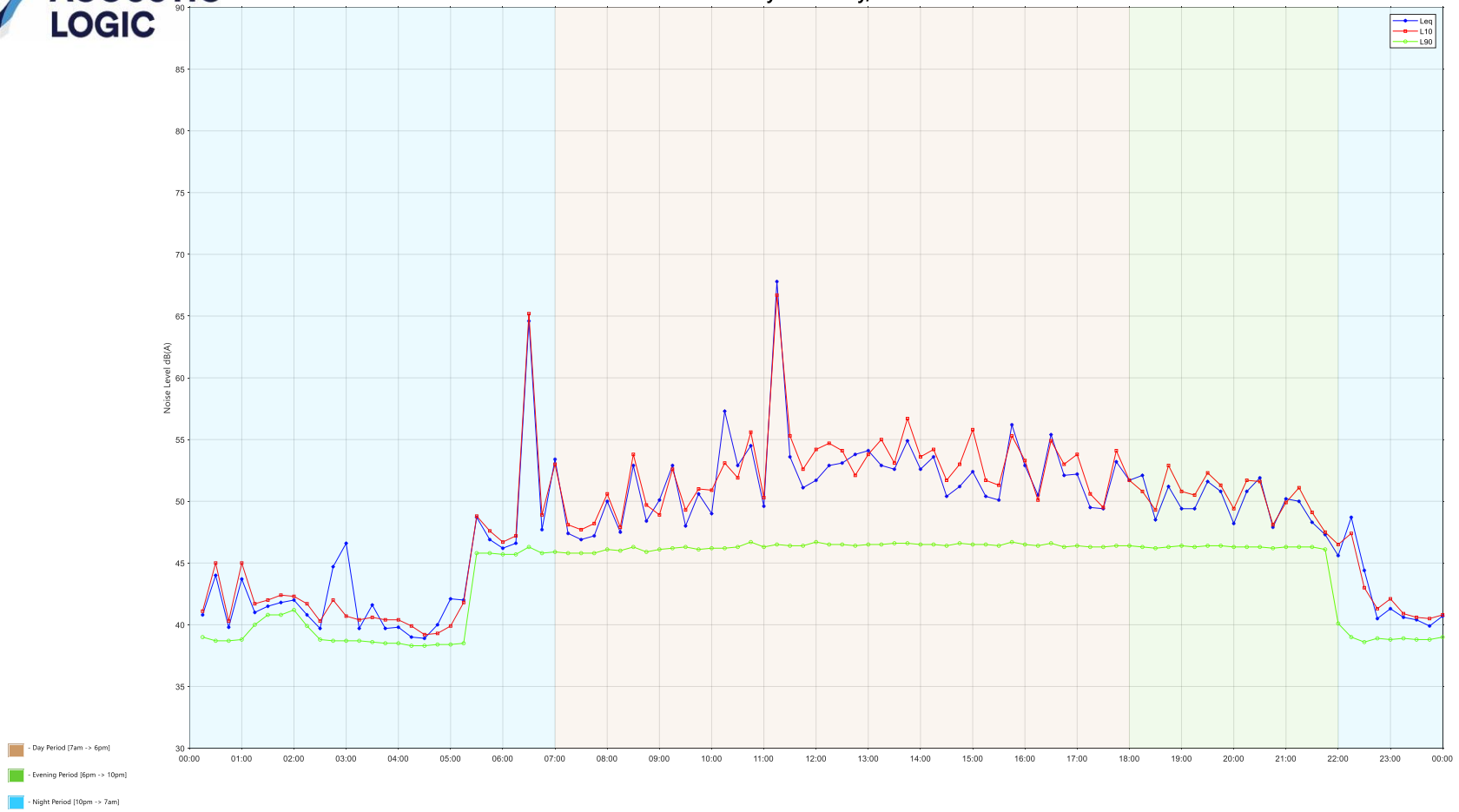
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Level 2 Waiting Area
Saturday 27 January, 2024



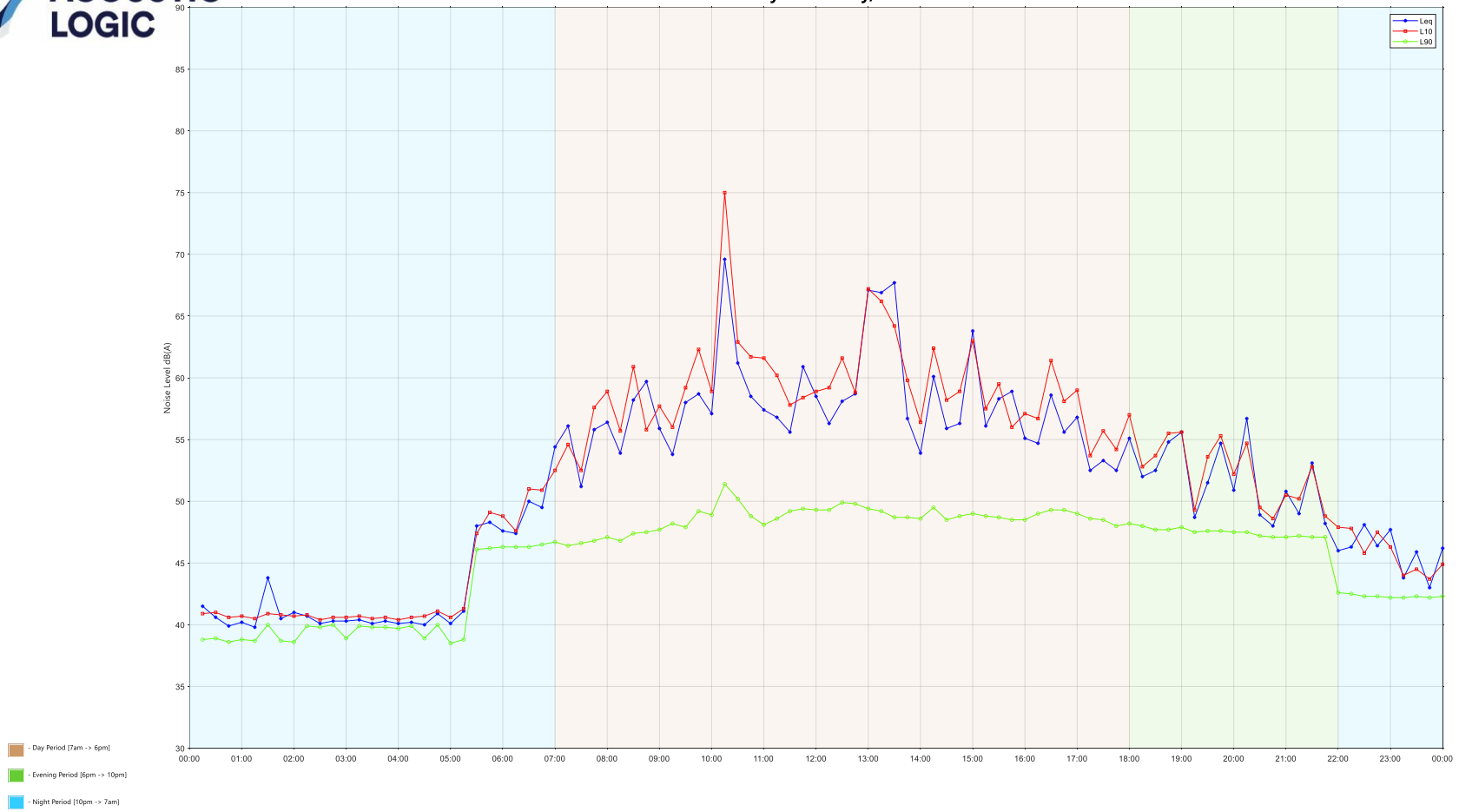
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Level 2 Waiting Area
Sunday 28 January, 2024



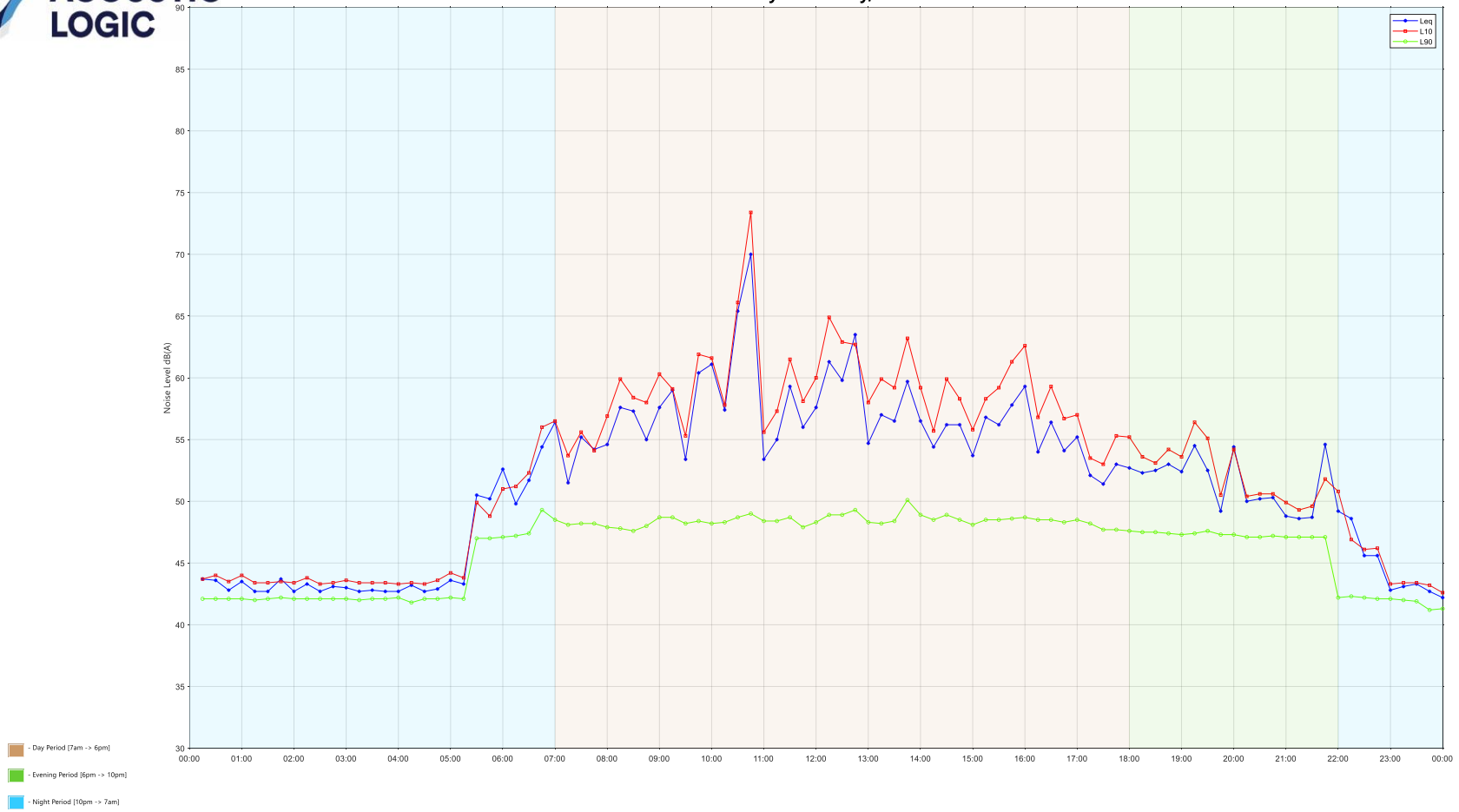
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Level 2 Waiting Area
Monday 29 January, 2024

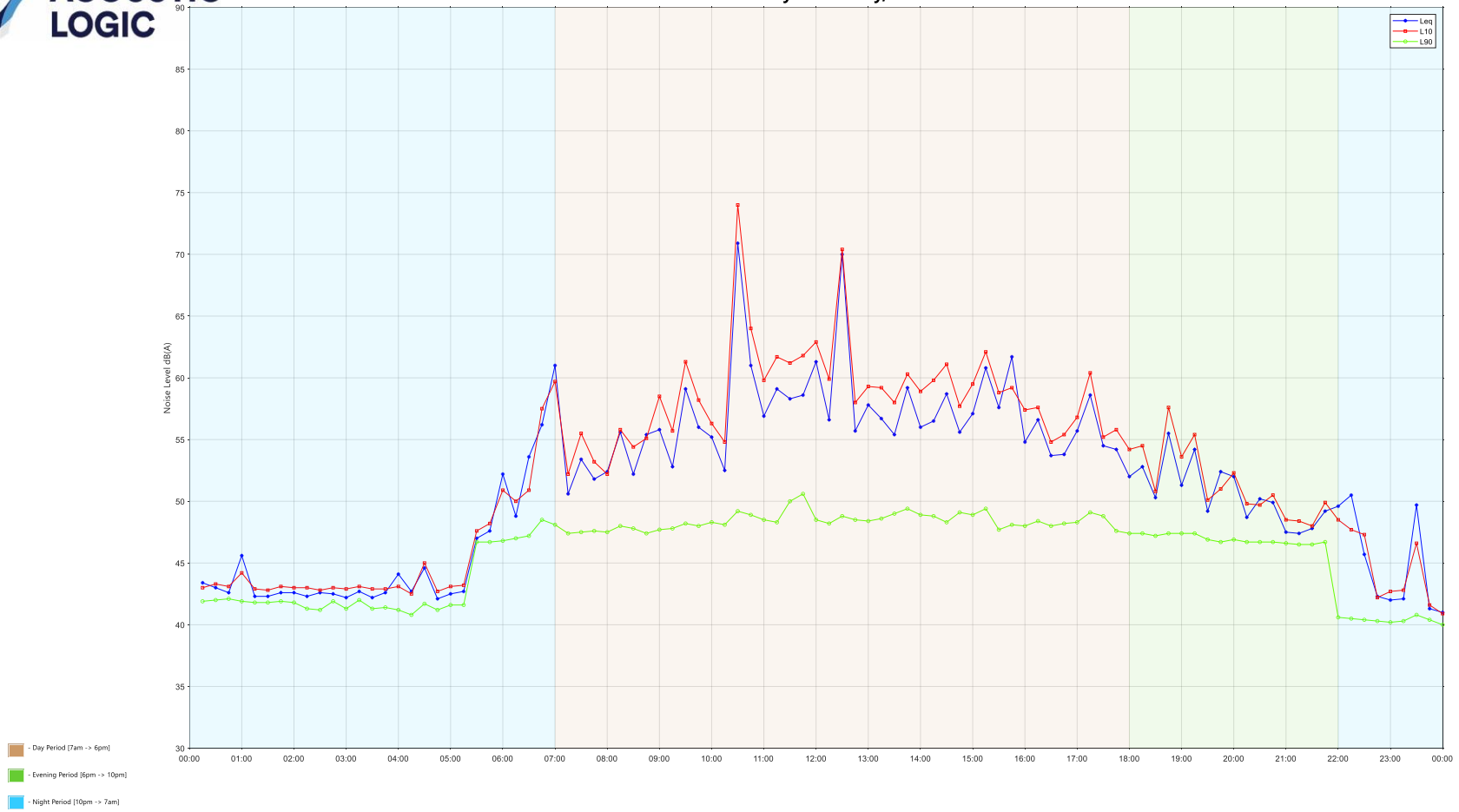


ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Level 2 Waiting Area
Tuesday 30 January, 2024

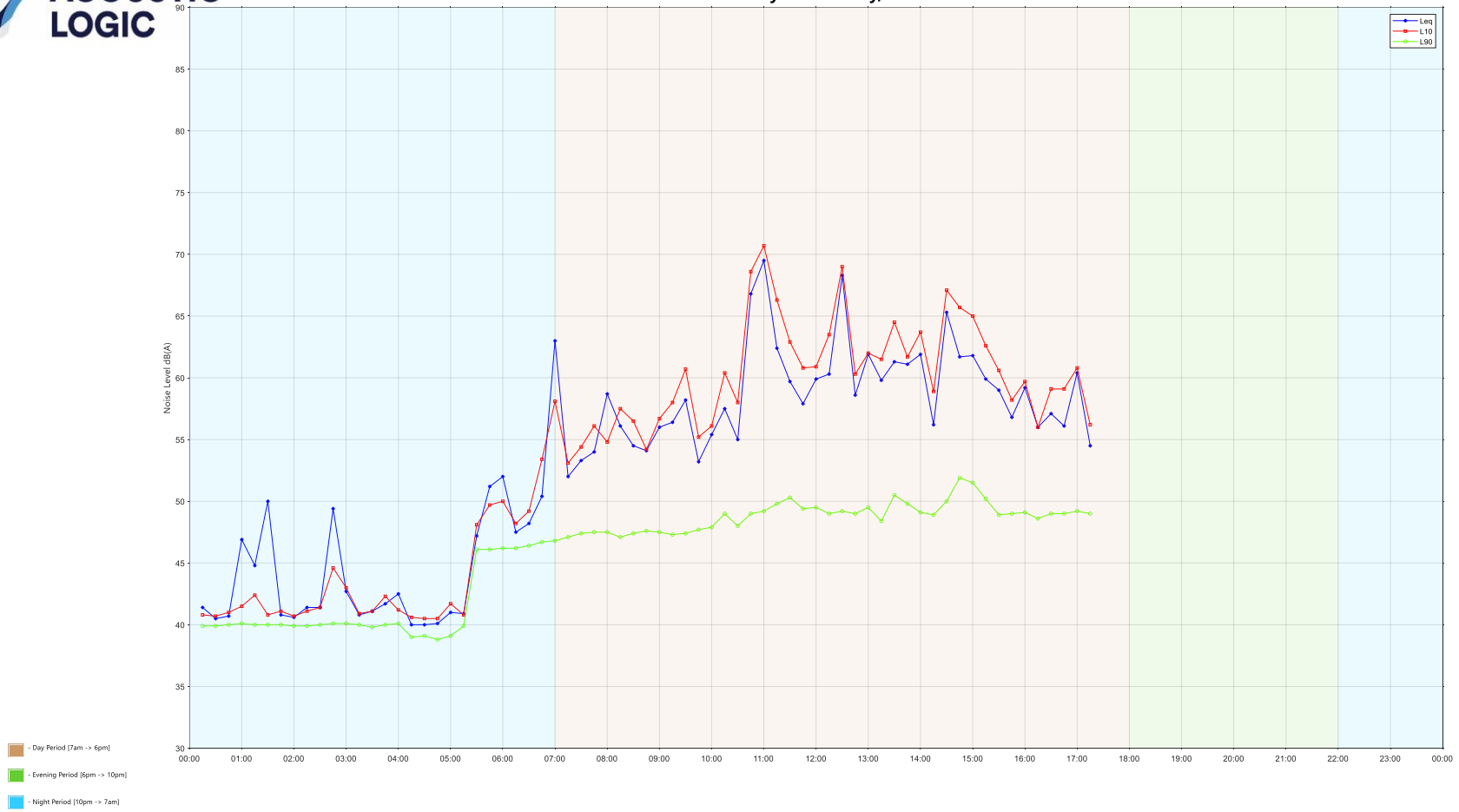


Nepean Hospital Stage 2 - Level 2 Waiting Area
Wednesday 31 January, 2024



ACOUSTIC LOGIC

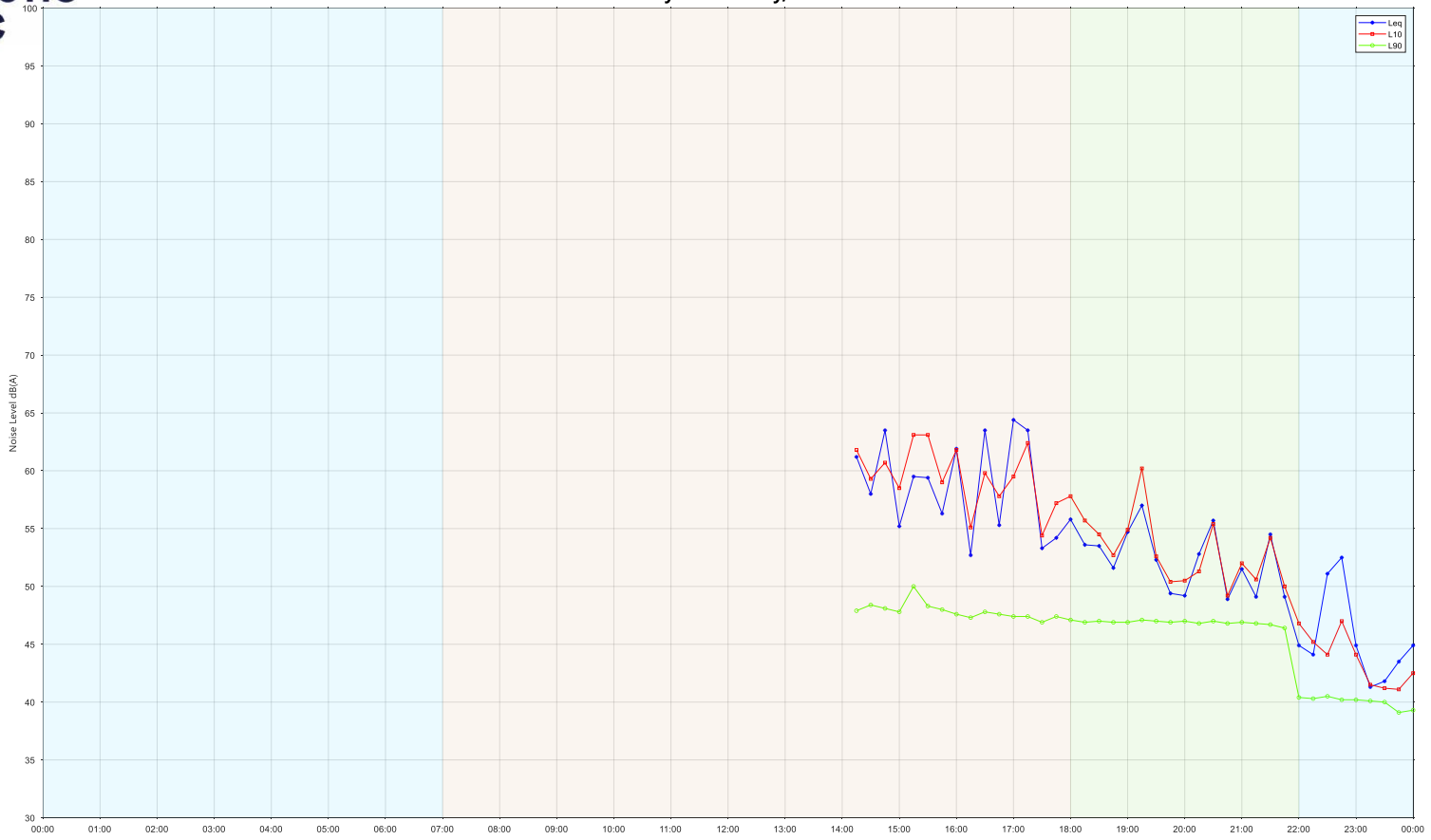
Nepean Hospital Stage 2 - Level 2 Waiting Area
Thursday 01 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

ACOUSTIC LOGIC

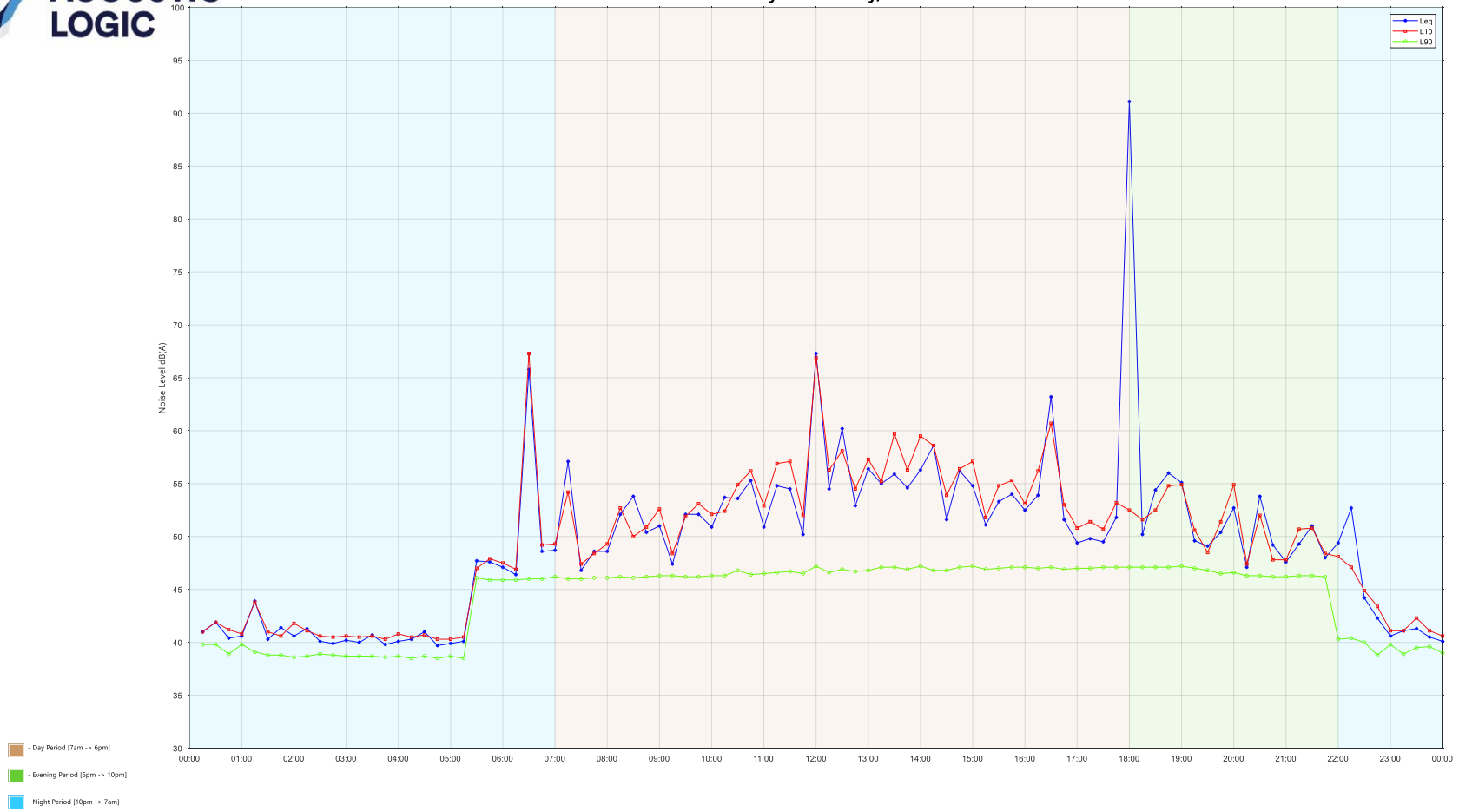
Nepean Hospital Stage 2 - Level 2 Waiting Area
Friday 02 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

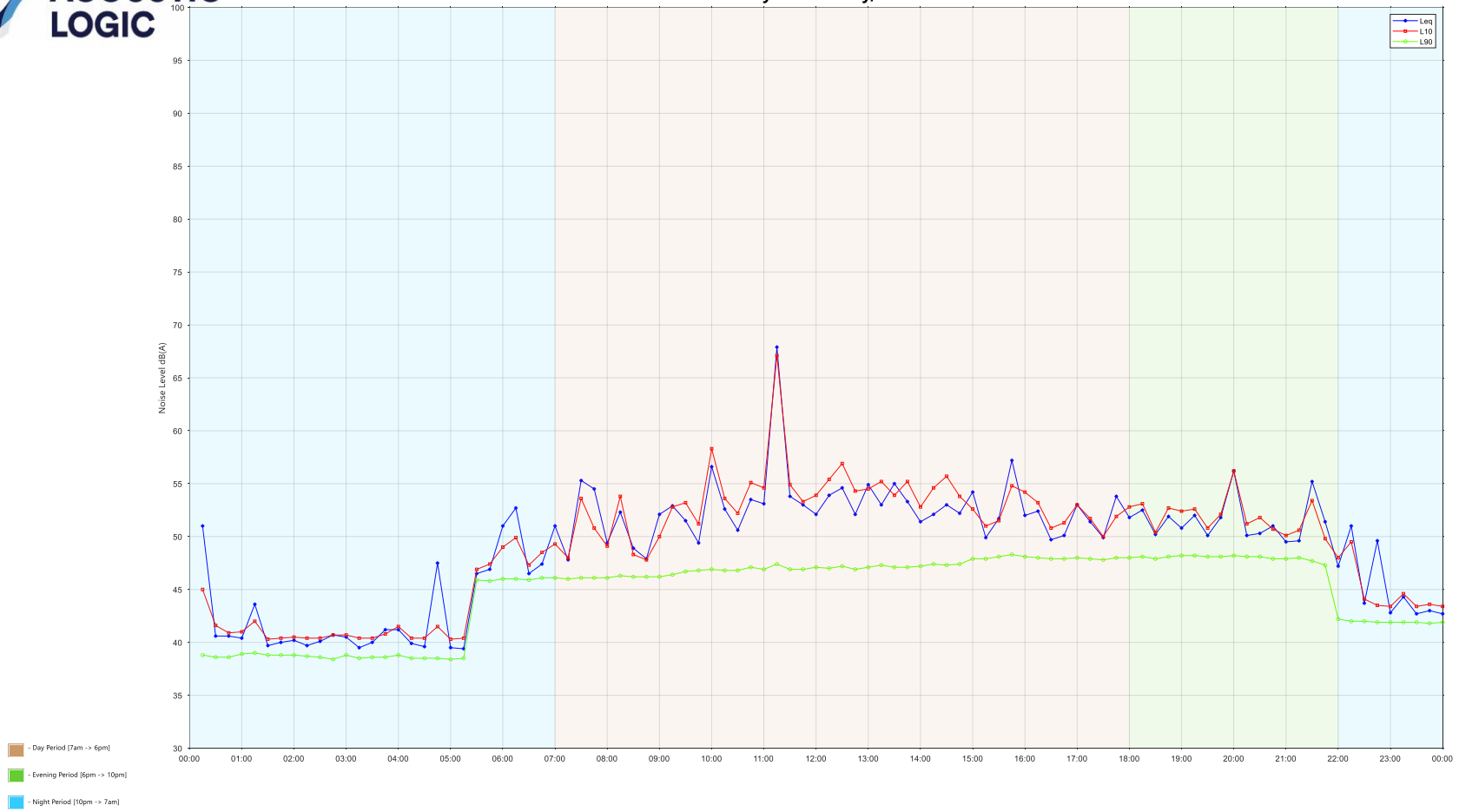
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Level 2 Waiting Area
Saturday 03 February, 2024



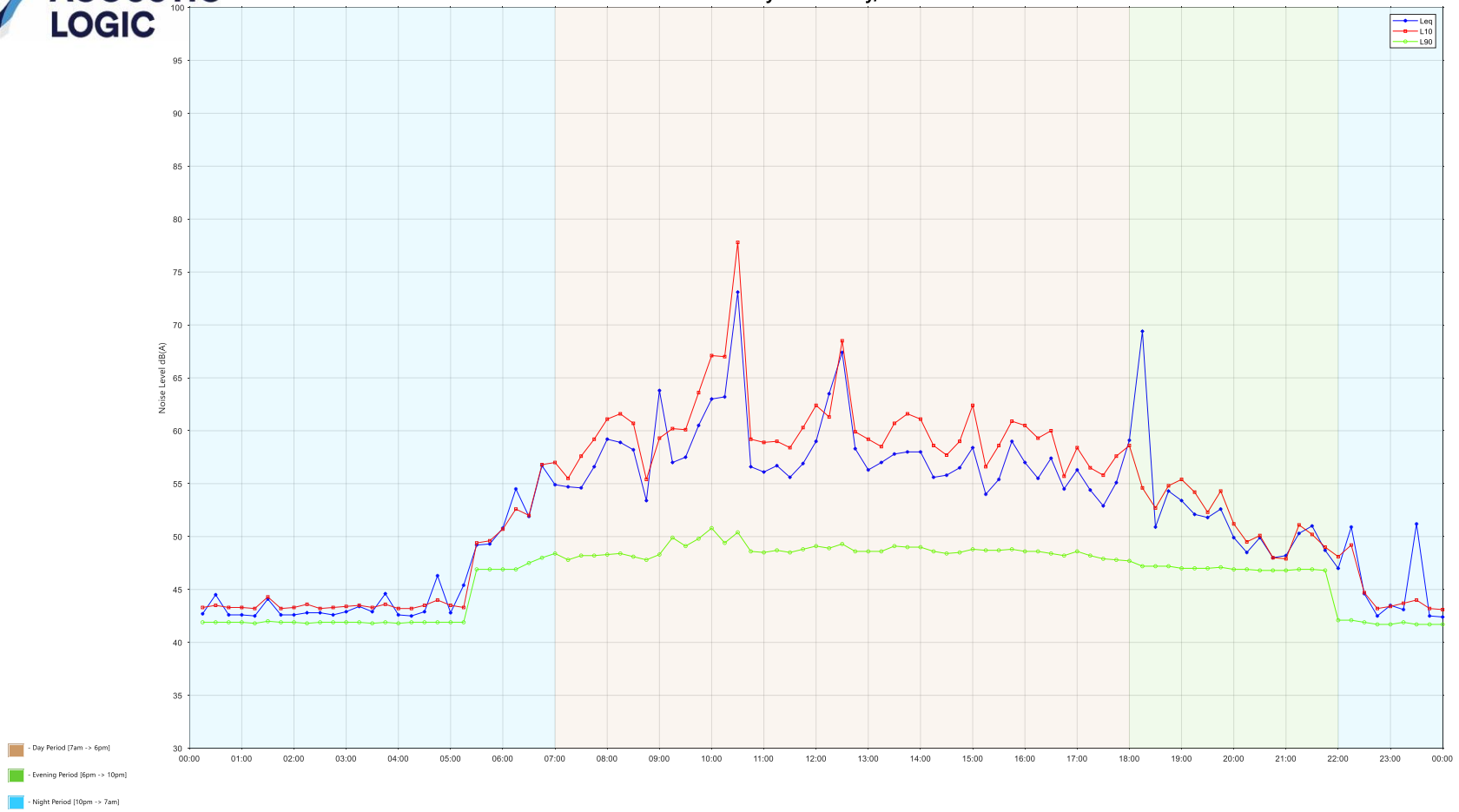
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Level 2 Waiting Area
Sunday 04 February, 2024



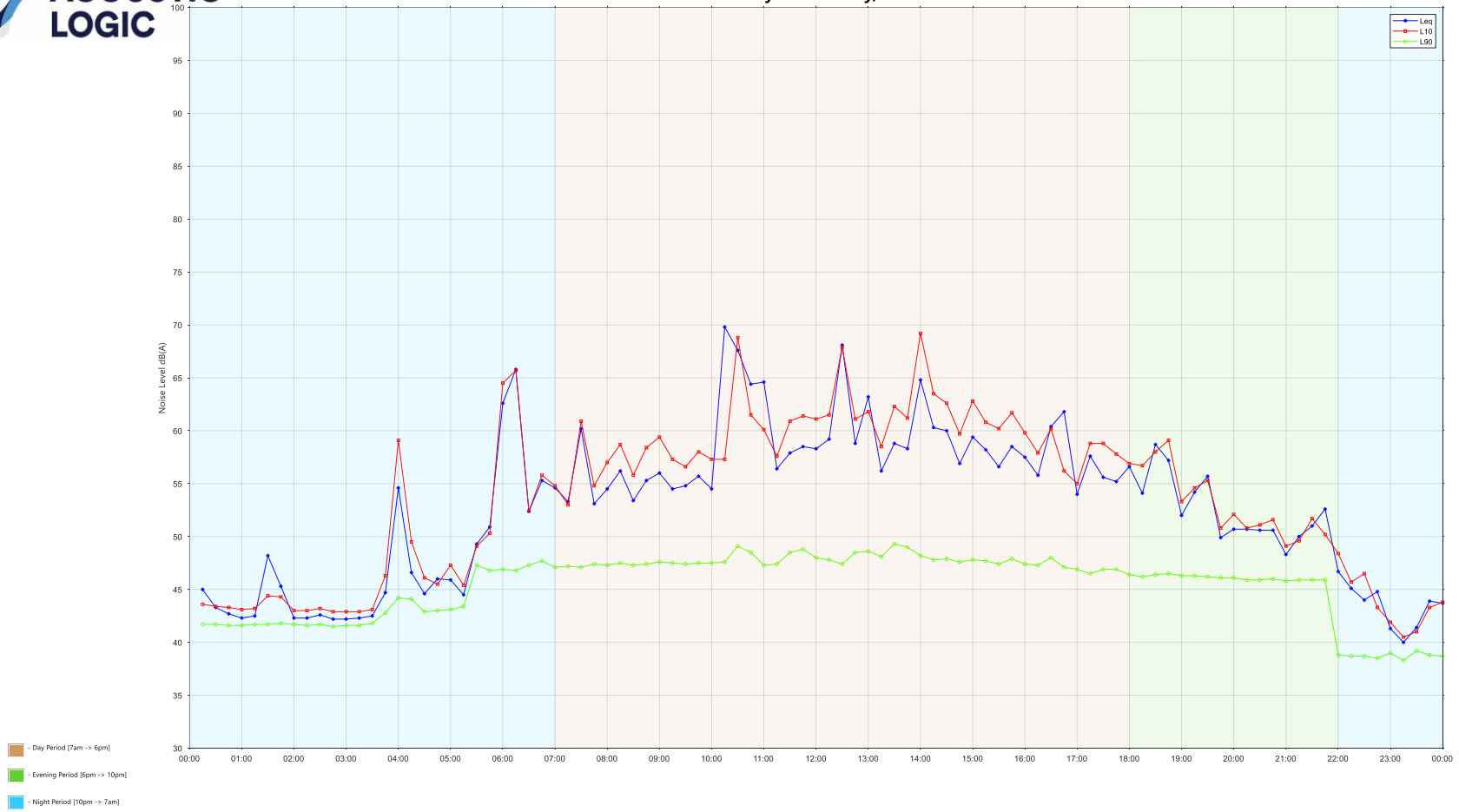
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Level 2 Waiting Area
Monday 05 February, 2024



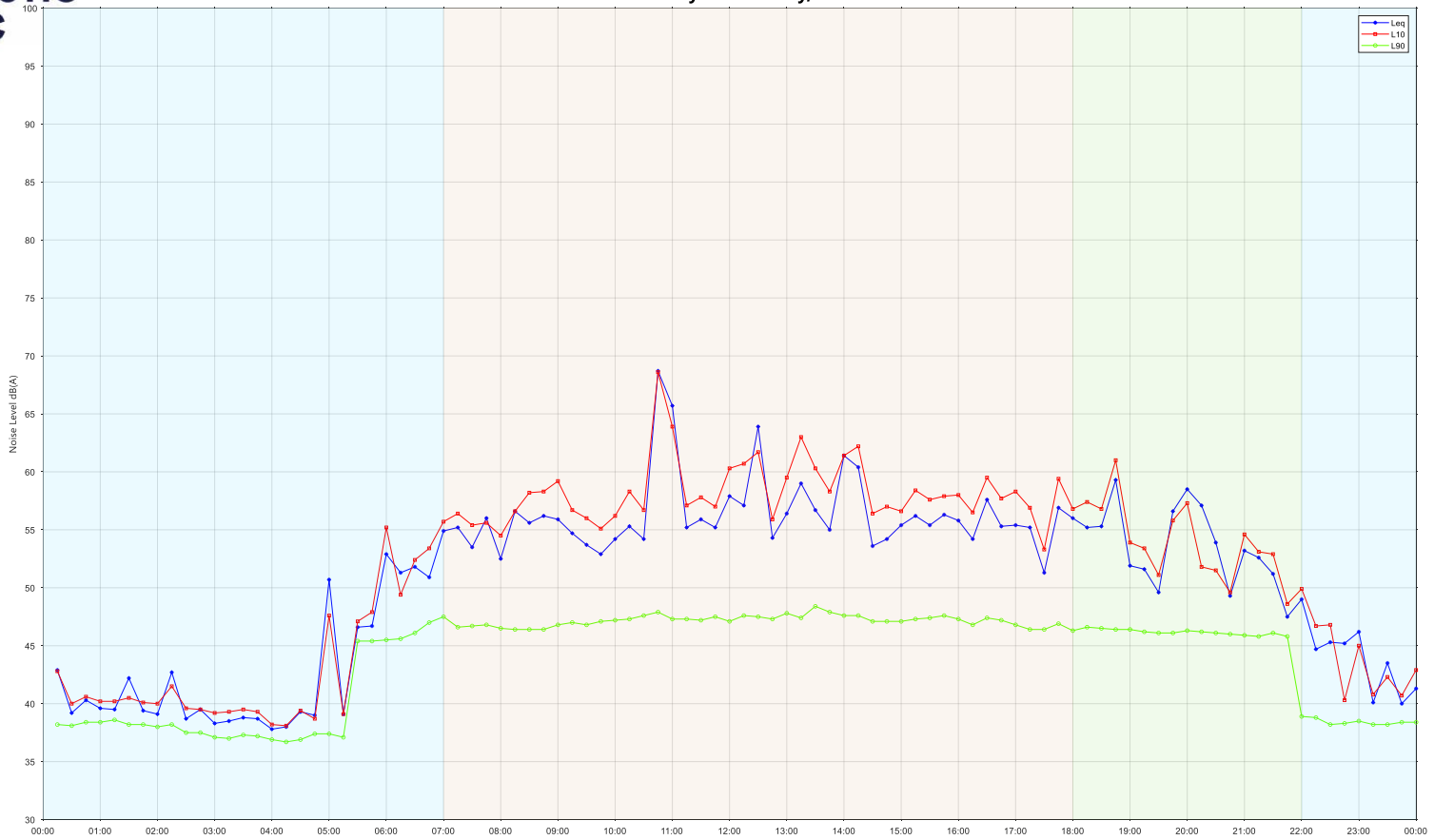
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Level 2 Waiting Area
Tuesday 06 February, 2024



ACOUSTIC LOGIC

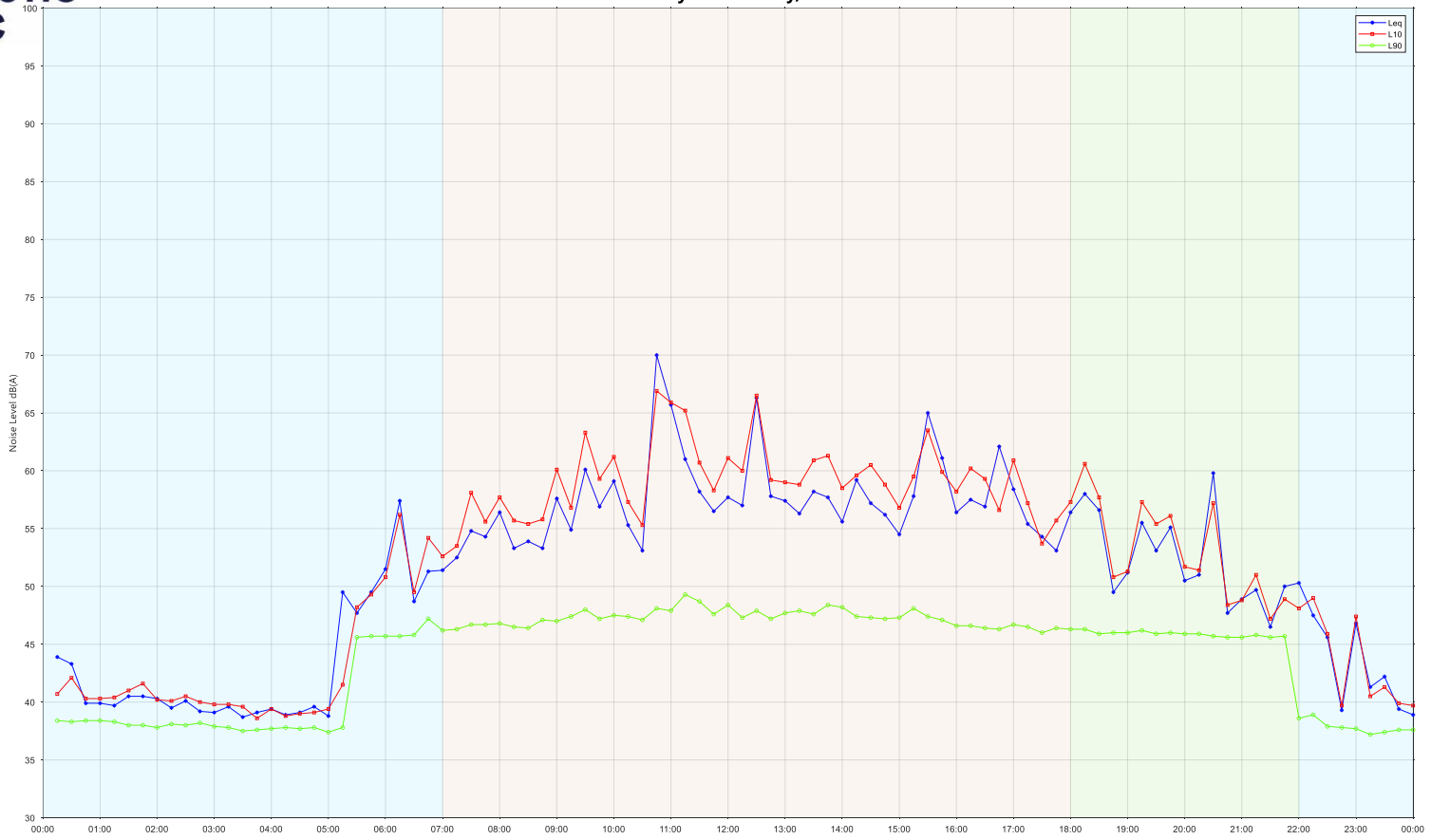
Nepean Hospital Stage 2 - Level 2 Waiting Area
Wednesday 07 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

ACOUSTIC LOGIC

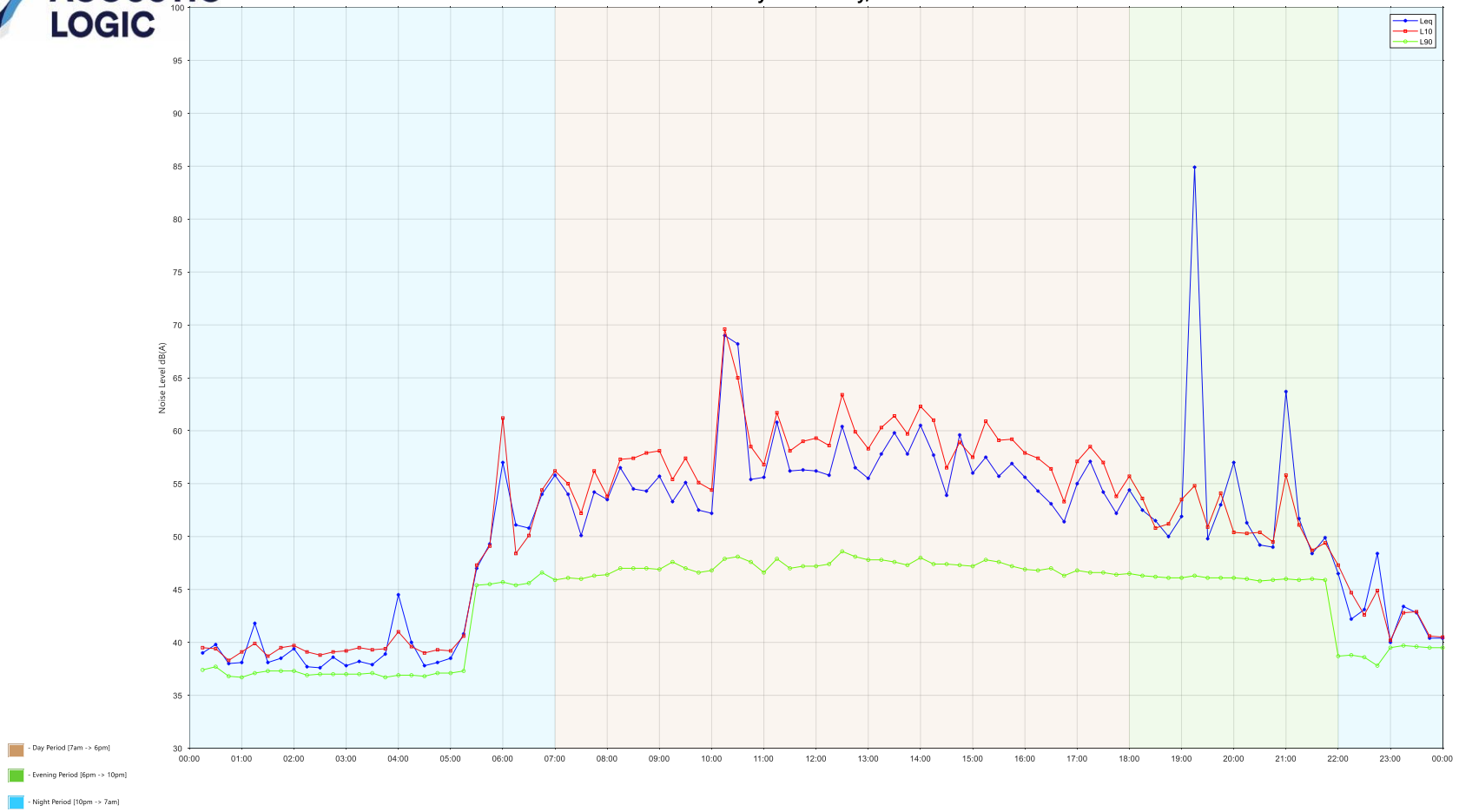
Nepean Hospital Stage 2 - Level 2 Waiting Area
Thursday 08 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

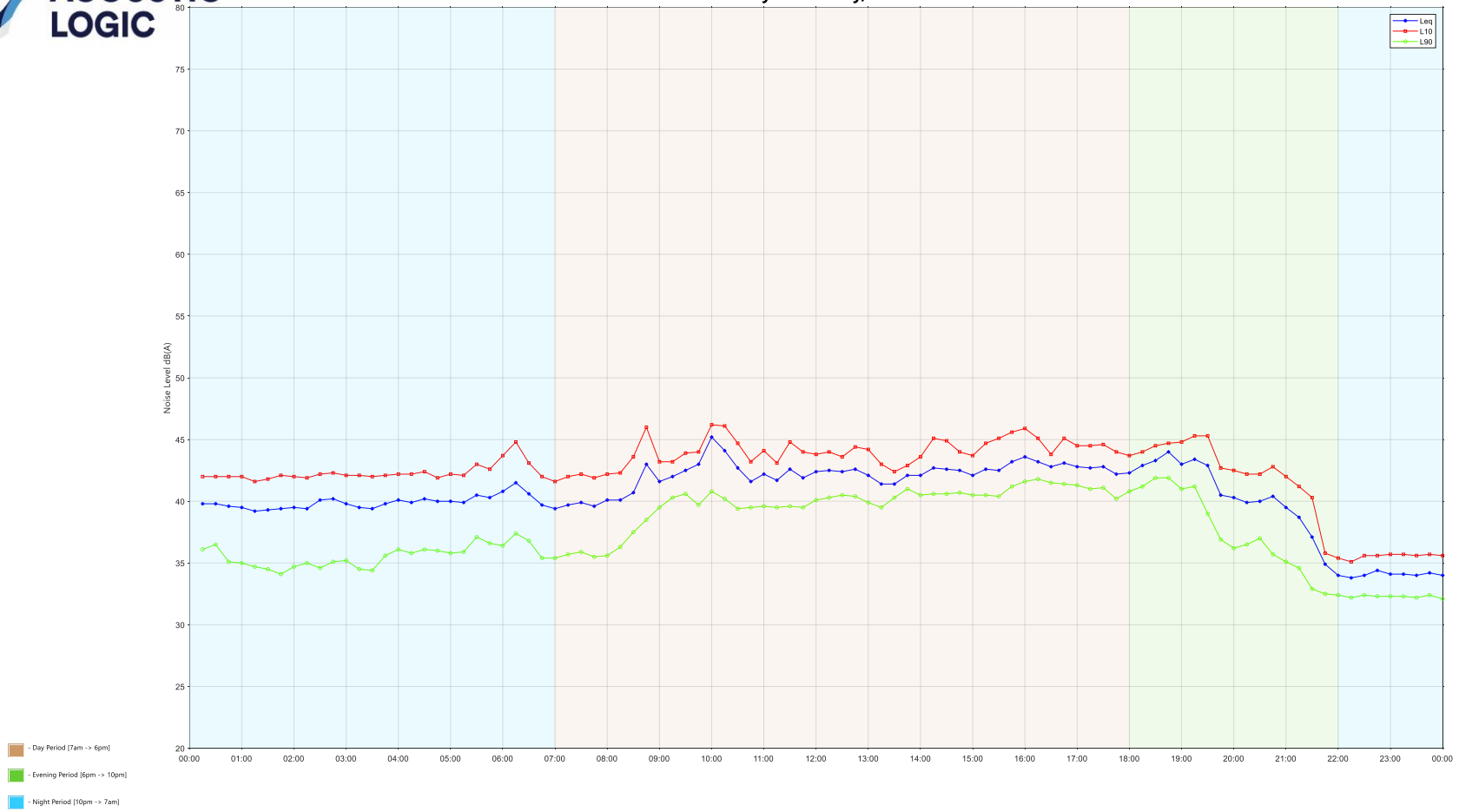
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Level 2 Waiting Area
Friday 09 February, 2024



ACOUSTIC LOGIC

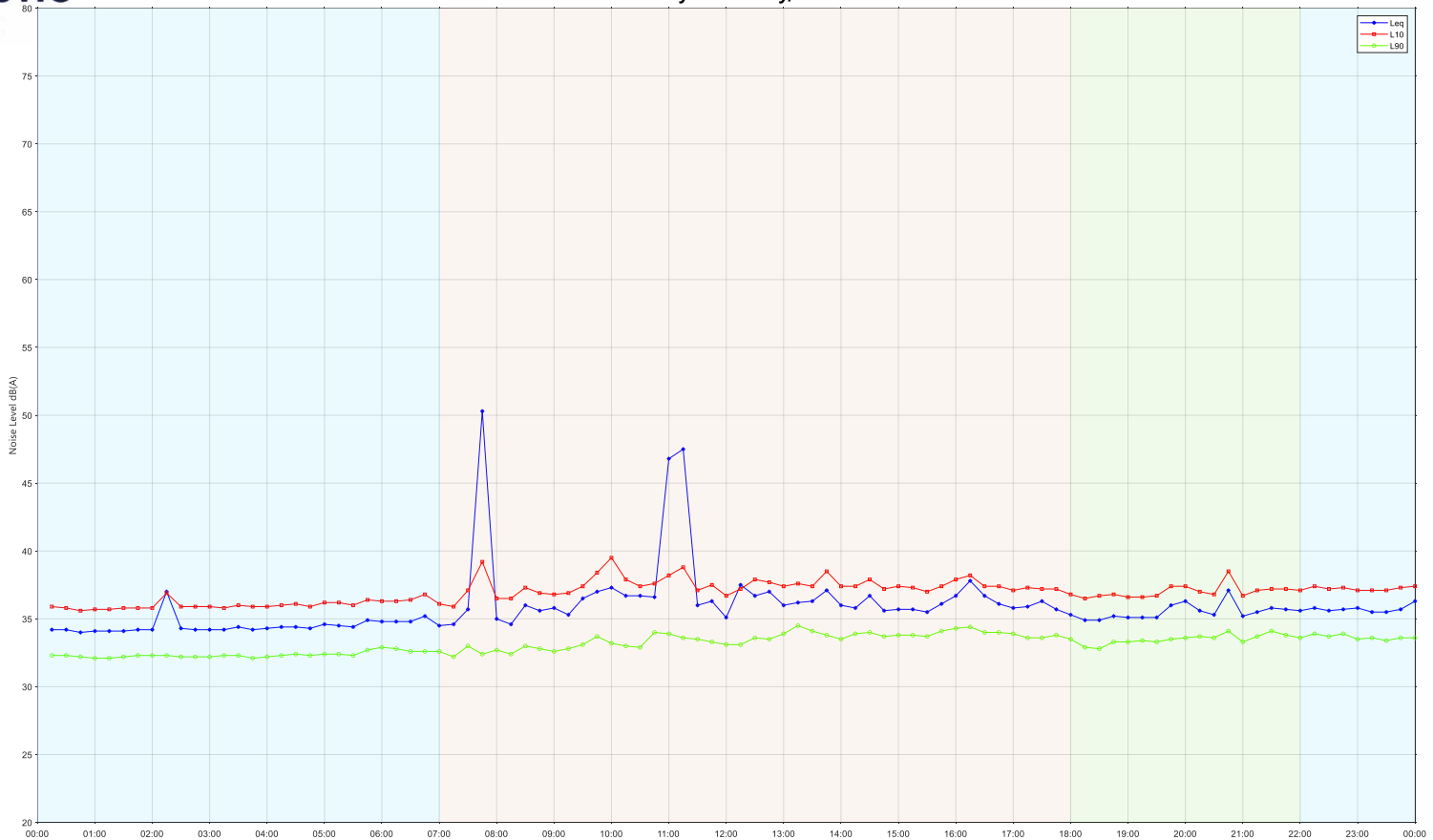
Nepean Hospital Stage 2 - TB1 Corridor
Friday 26 January, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

ACOUSTIC LOGIC

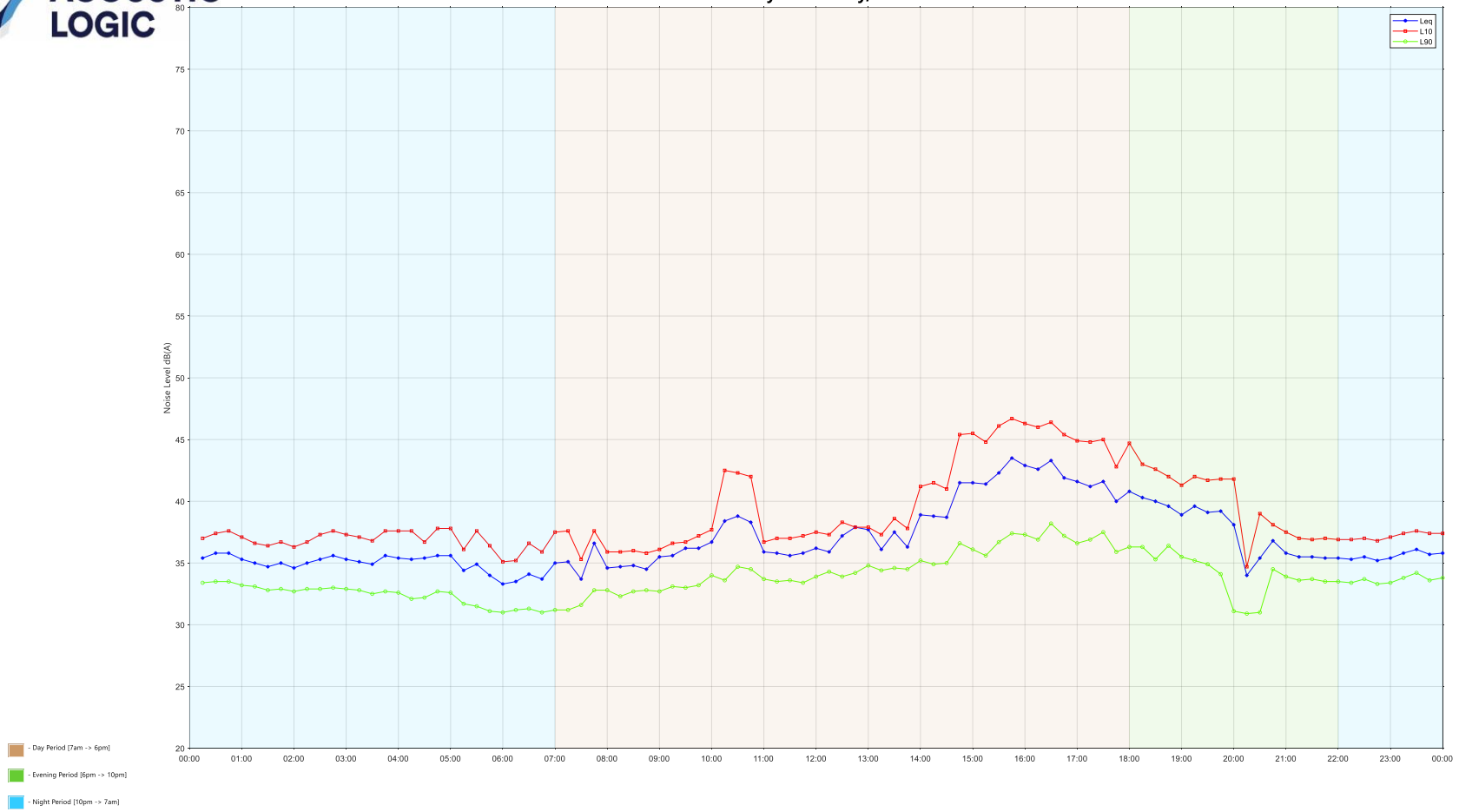
Nepean Hospital Stage 2 - TB1 Corridor
Saturday 27 January, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

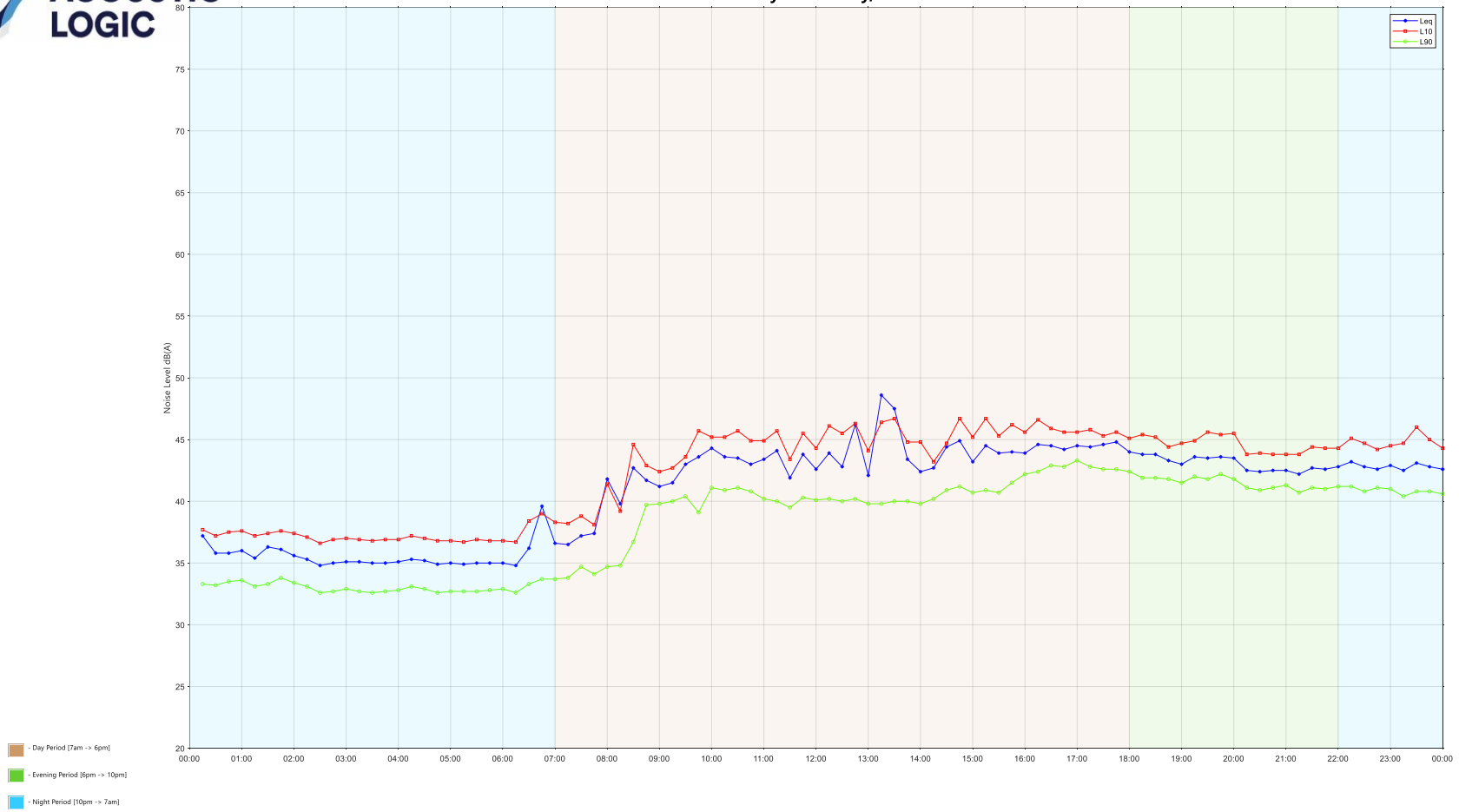
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - TB1 Corridor
Sunday 28 January, 2024



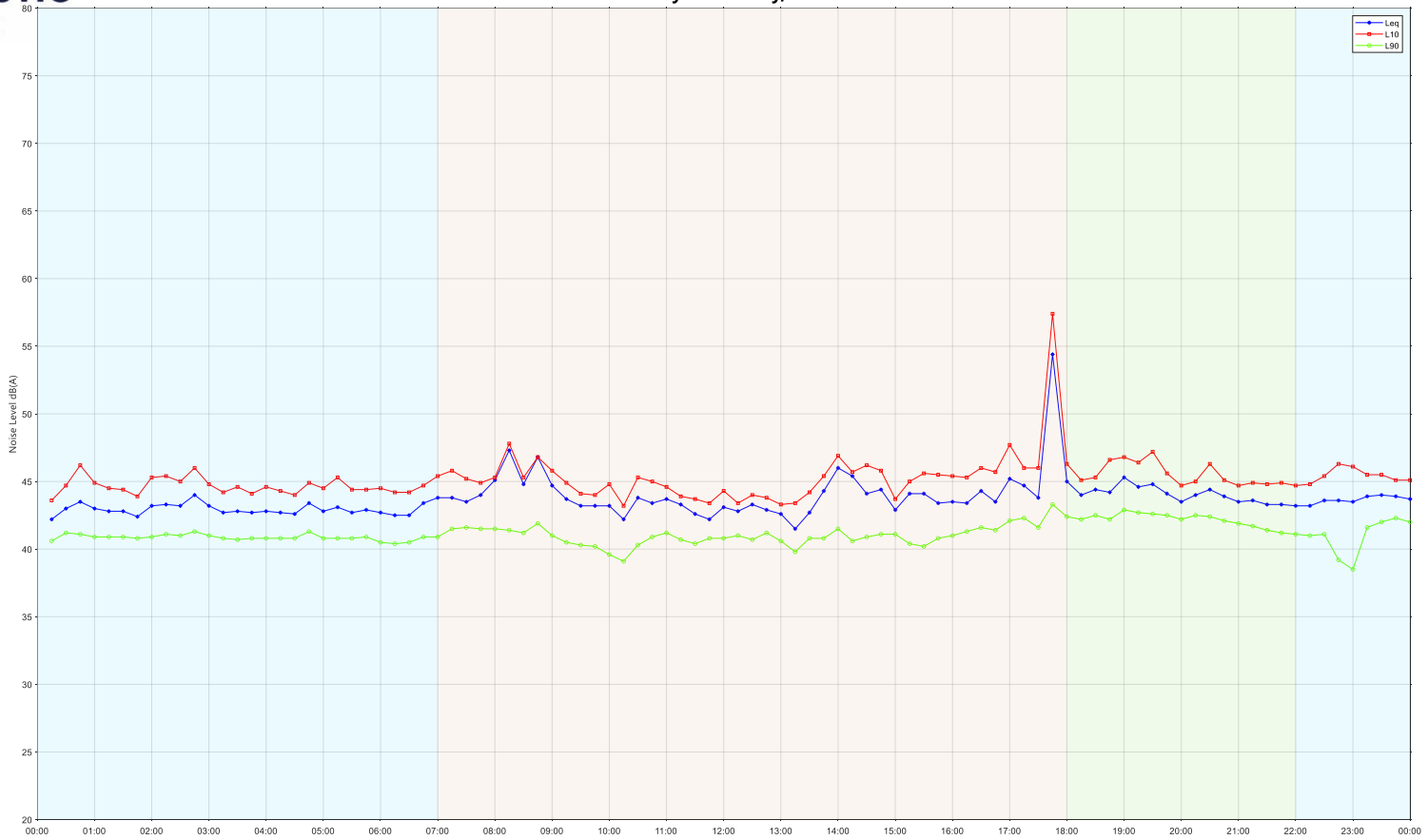
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - TB1 Corridor
Monday 29 January, 2024



ACOUSTIC LOGIC

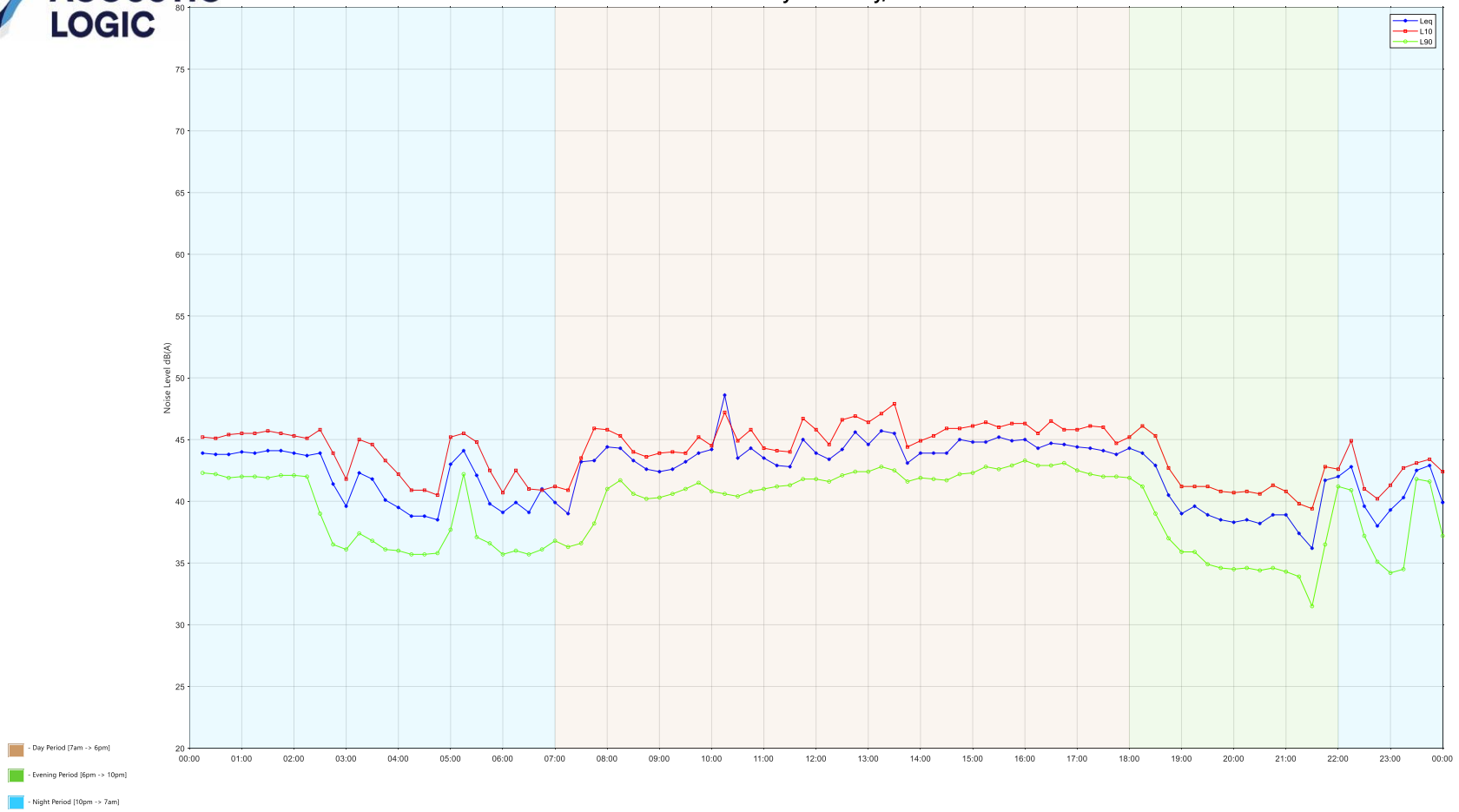
Nepean Hospital Stage 2 - TB1 Corridor
Tuesday 30 January, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

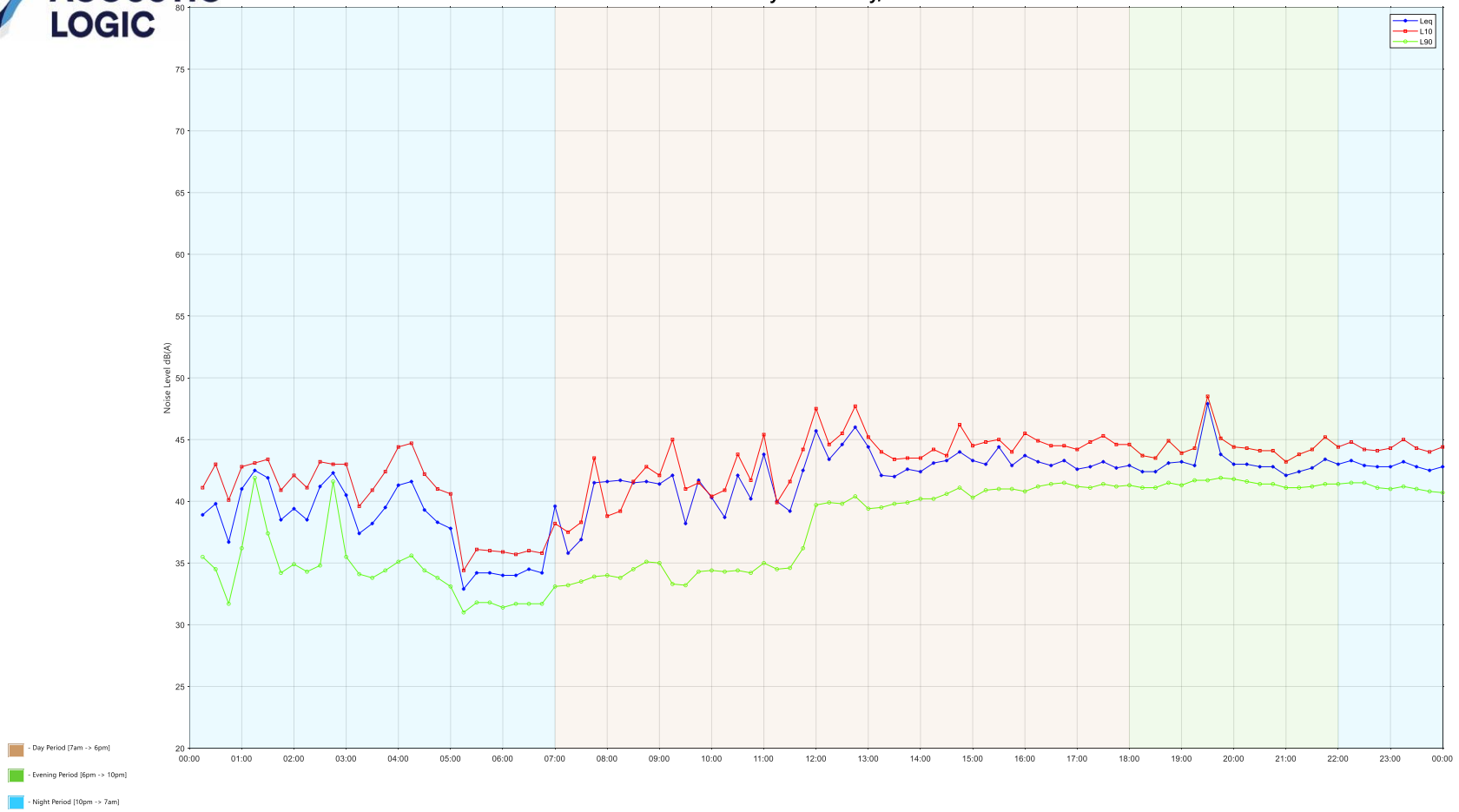
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - TB1 Corridor
Wednesday 31 January, 2024



ACOUSTIC LOGIC

Nepean Hospital Stage 2 - TB1 Corridor
Thursday 01 February, 2024

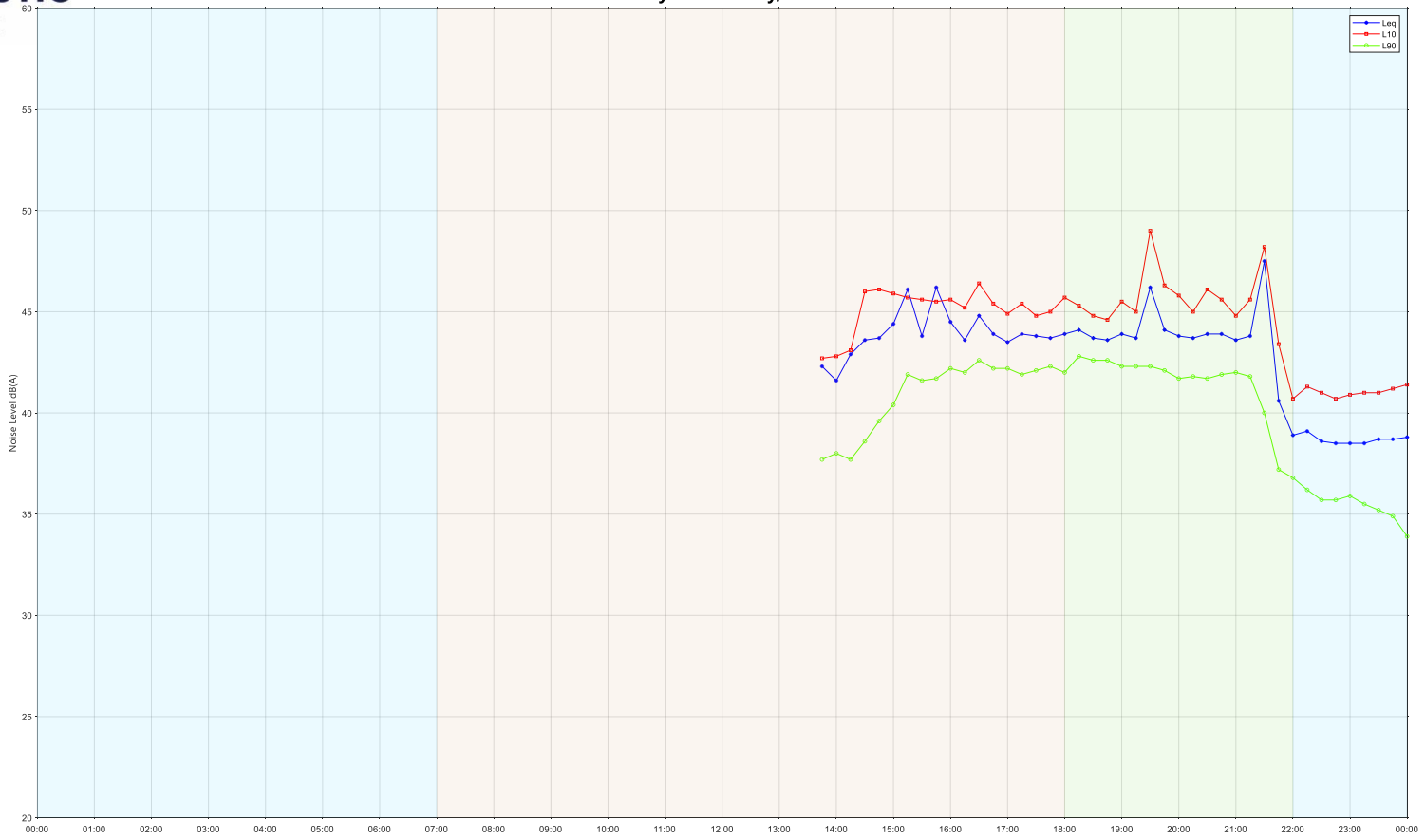


ACOUSTIC LOGIC

Nepean Hospital Stage 2 - TB1 Corridor
Friday 02 February, 2024

ACOUSTIC LOGIC

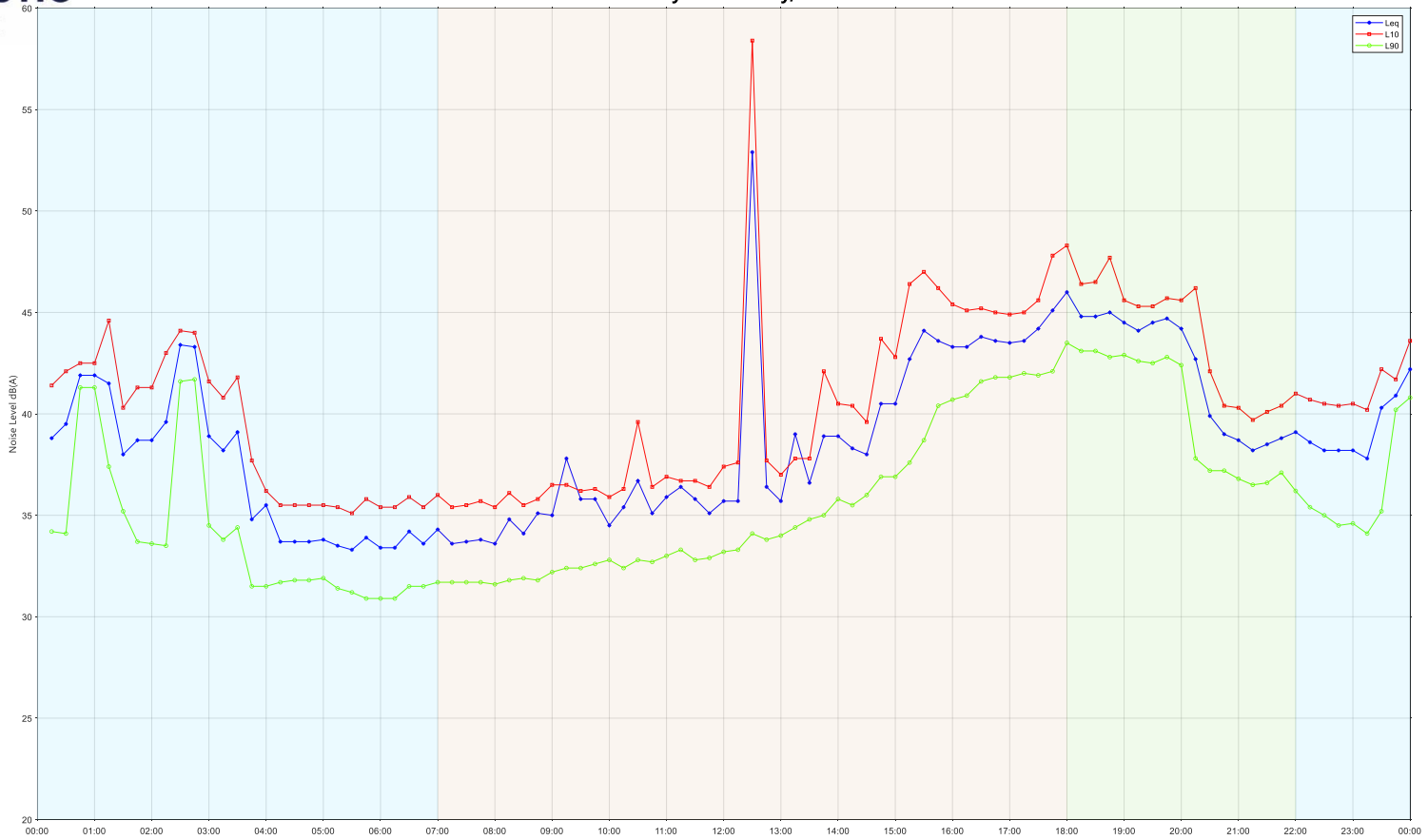
Nepean Hospital Stage 2 - TB1 Corridor
Friday 02 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

ACOUSTIC LOGIC

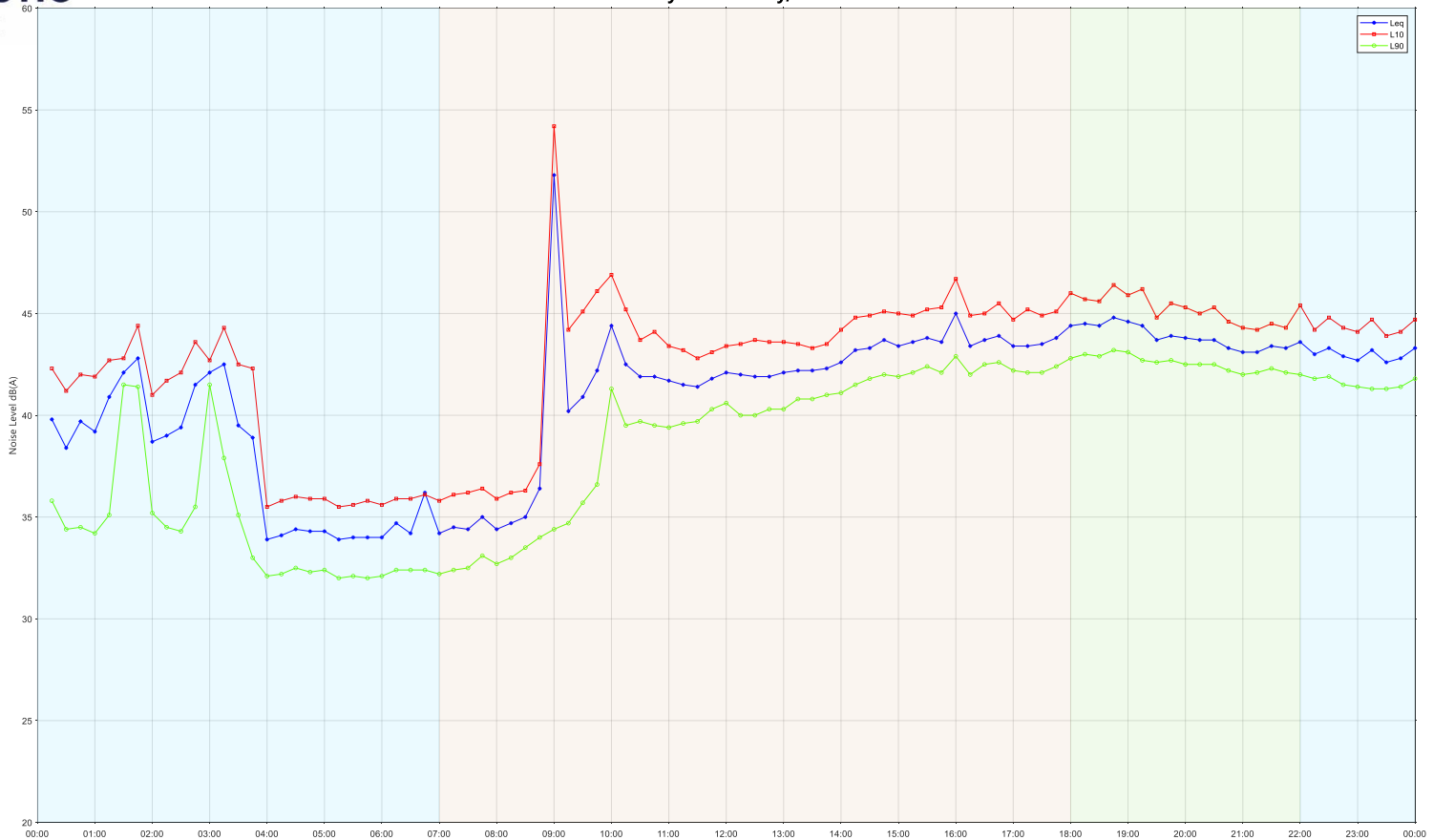
Nepean Hospital Stage 2 - TB1 Corridor
Saturday 03 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

ACOUSTIC LOGIC

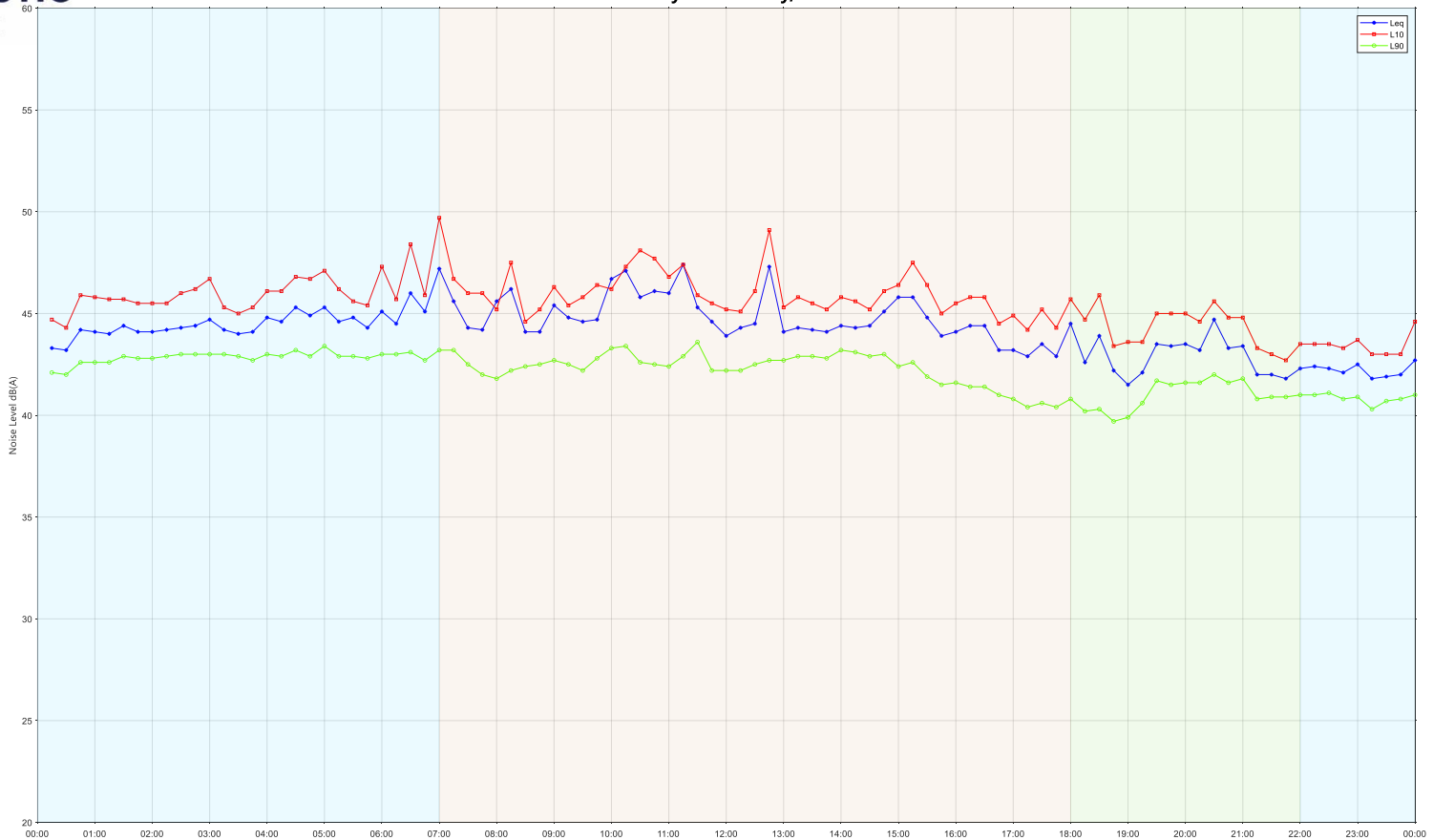
Nepean Hospital Stage 2 - TB1 Corridor
Sunday 04 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

ACOUSTIC LOGIC

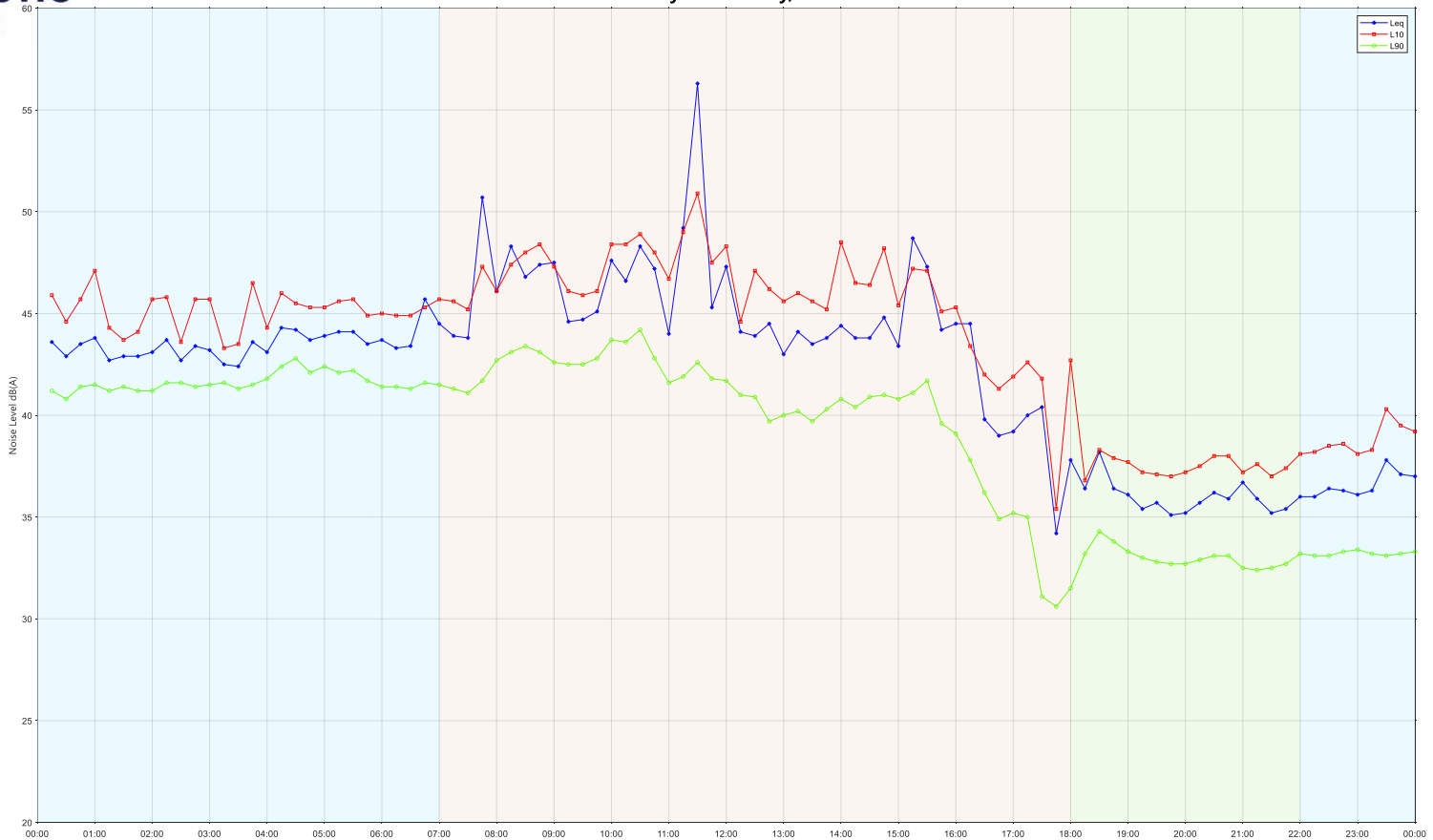
Nepean Hospital Stage 2 - TB1 Corridor
Monday 05 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

ACOUSTIC LOGIC

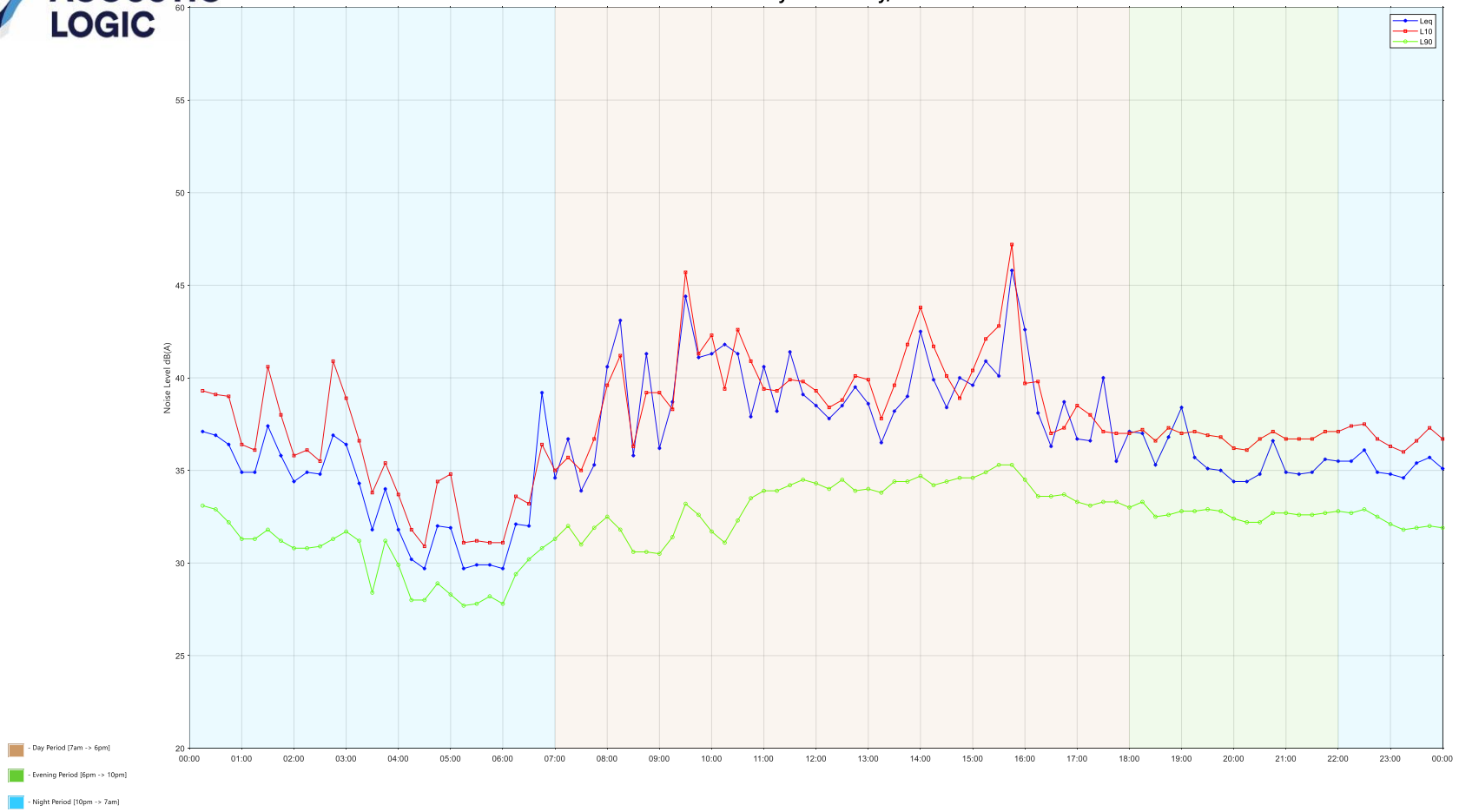
Nepean Hospital Stage 2 - TB1 Corridor
Tuesday 06 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

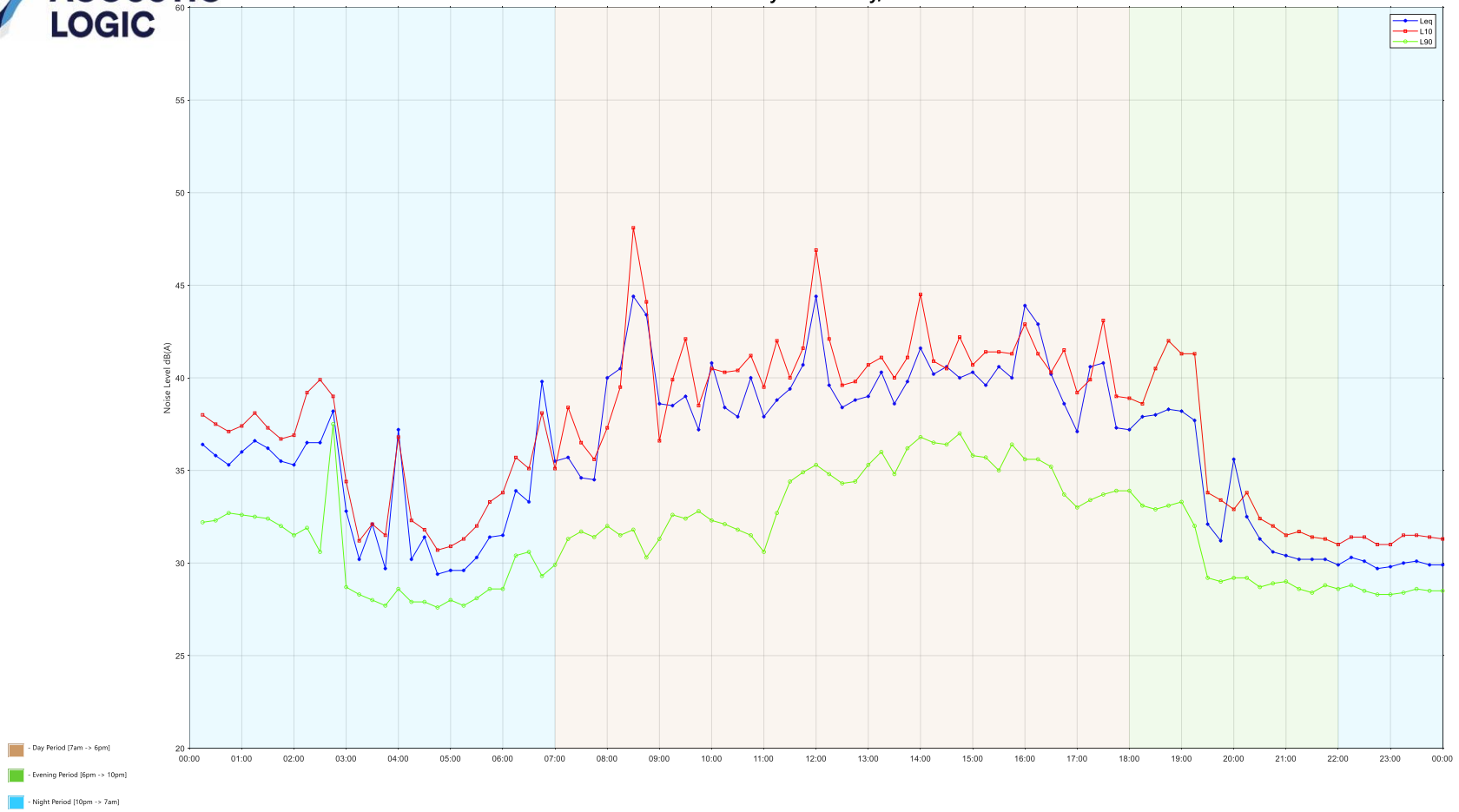
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - TB1 Corridor
Wednesday 07 February, 2024



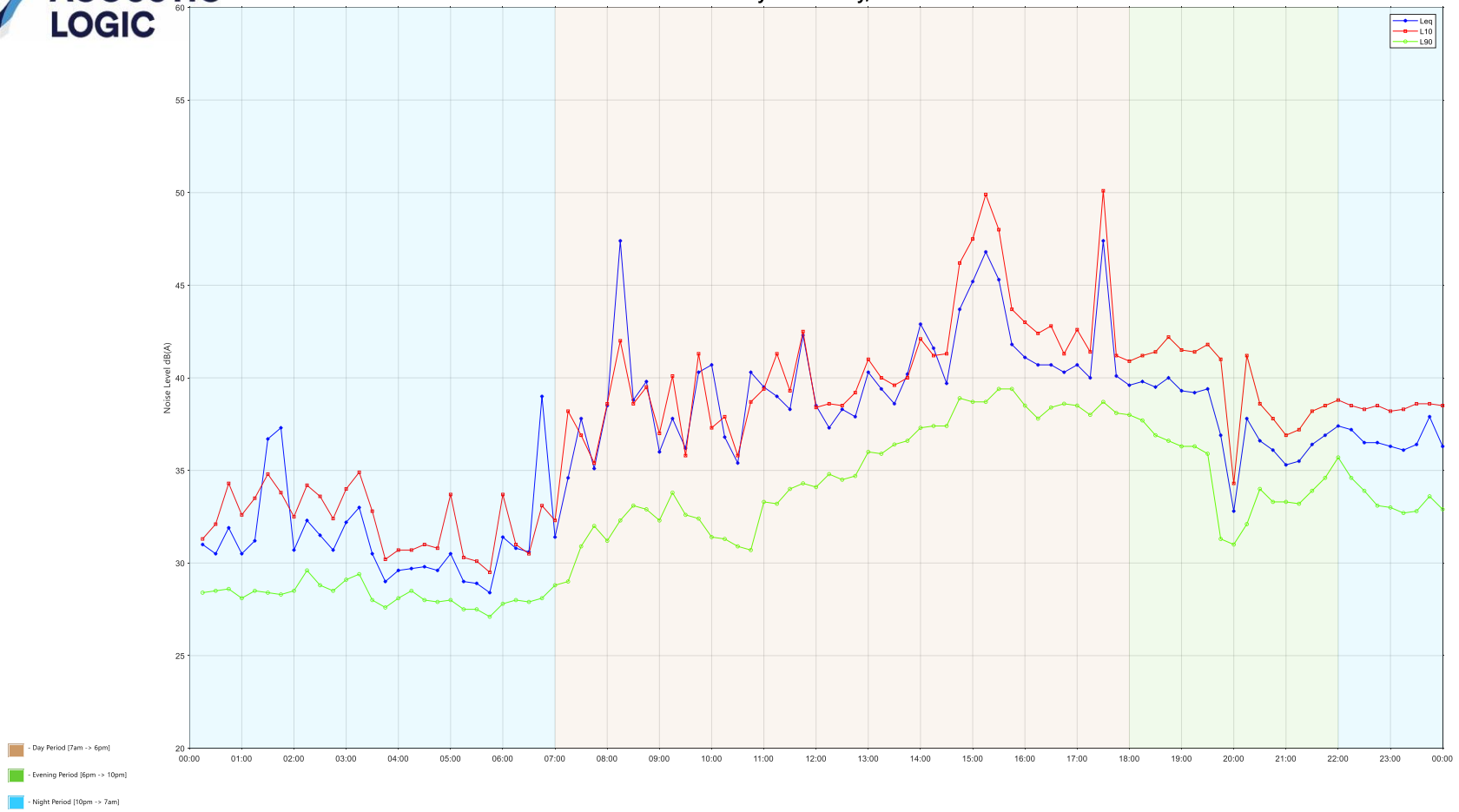
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - TB1 Corridor
Thursday 08 February, 2024



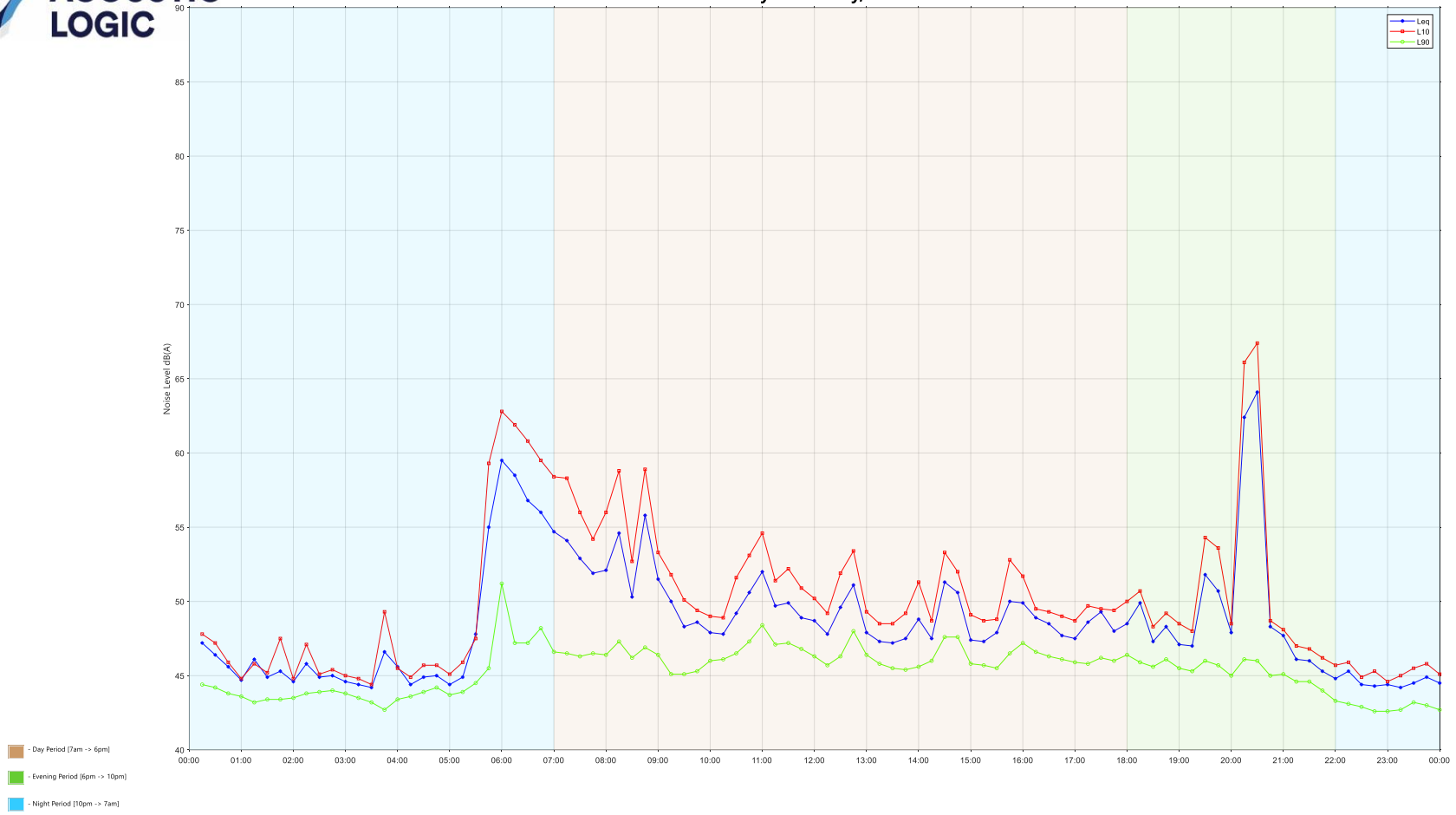
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - TB1 Corridor
Friday 09 February, 2024



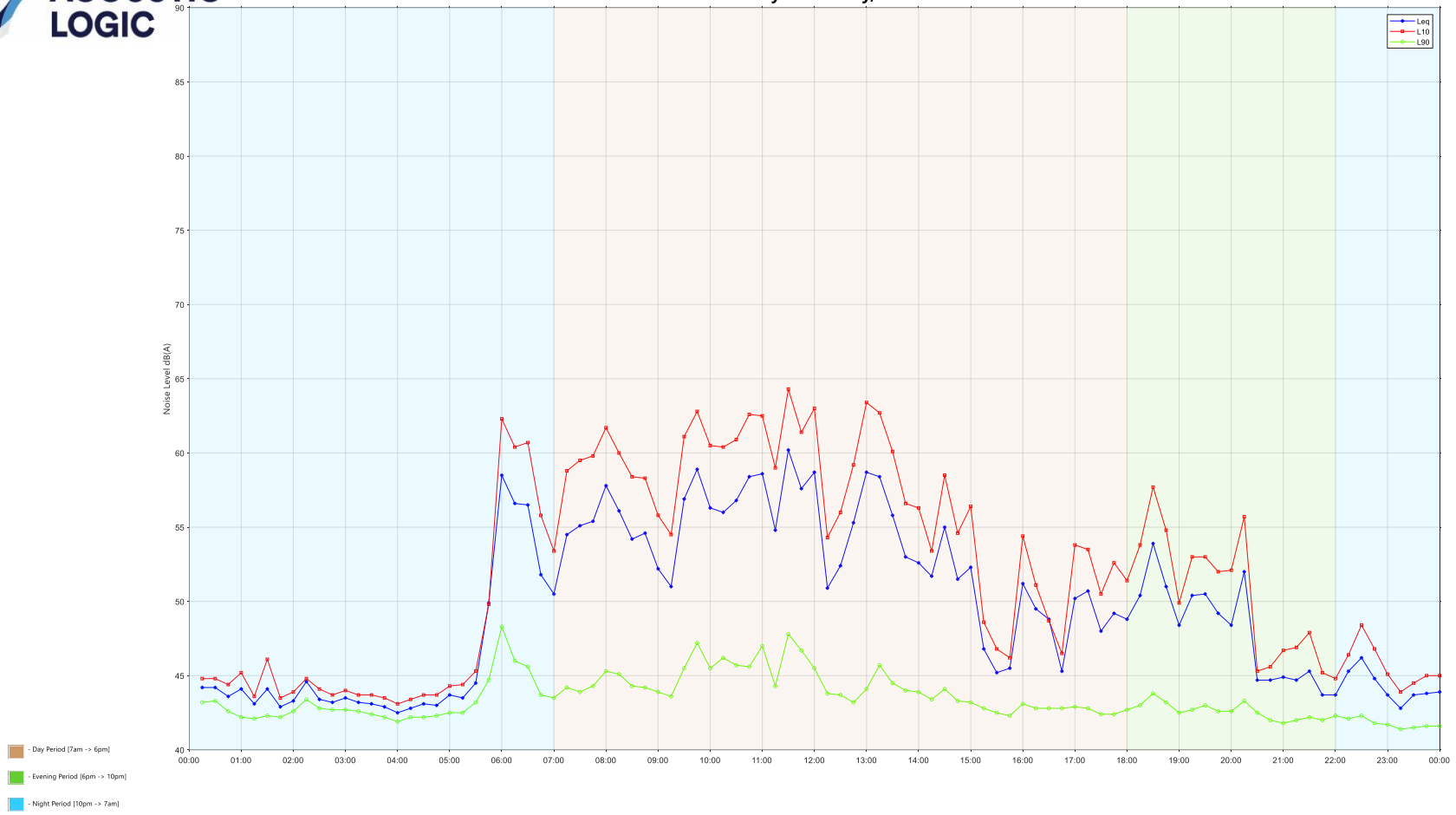
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Tresillian Building
Friday 26 January, 2024



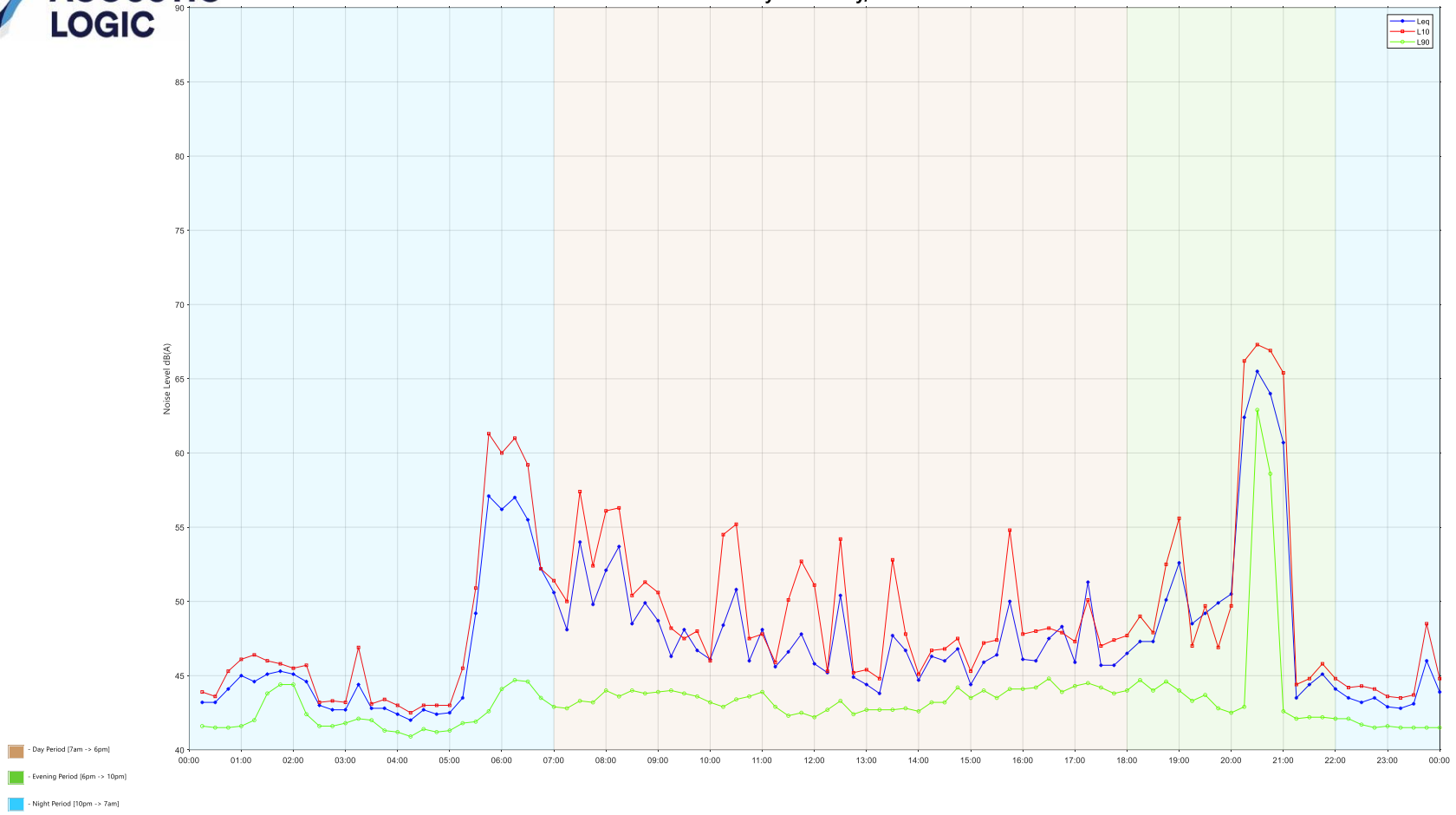
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Tresillian Building
Saturday 27 January, 2024



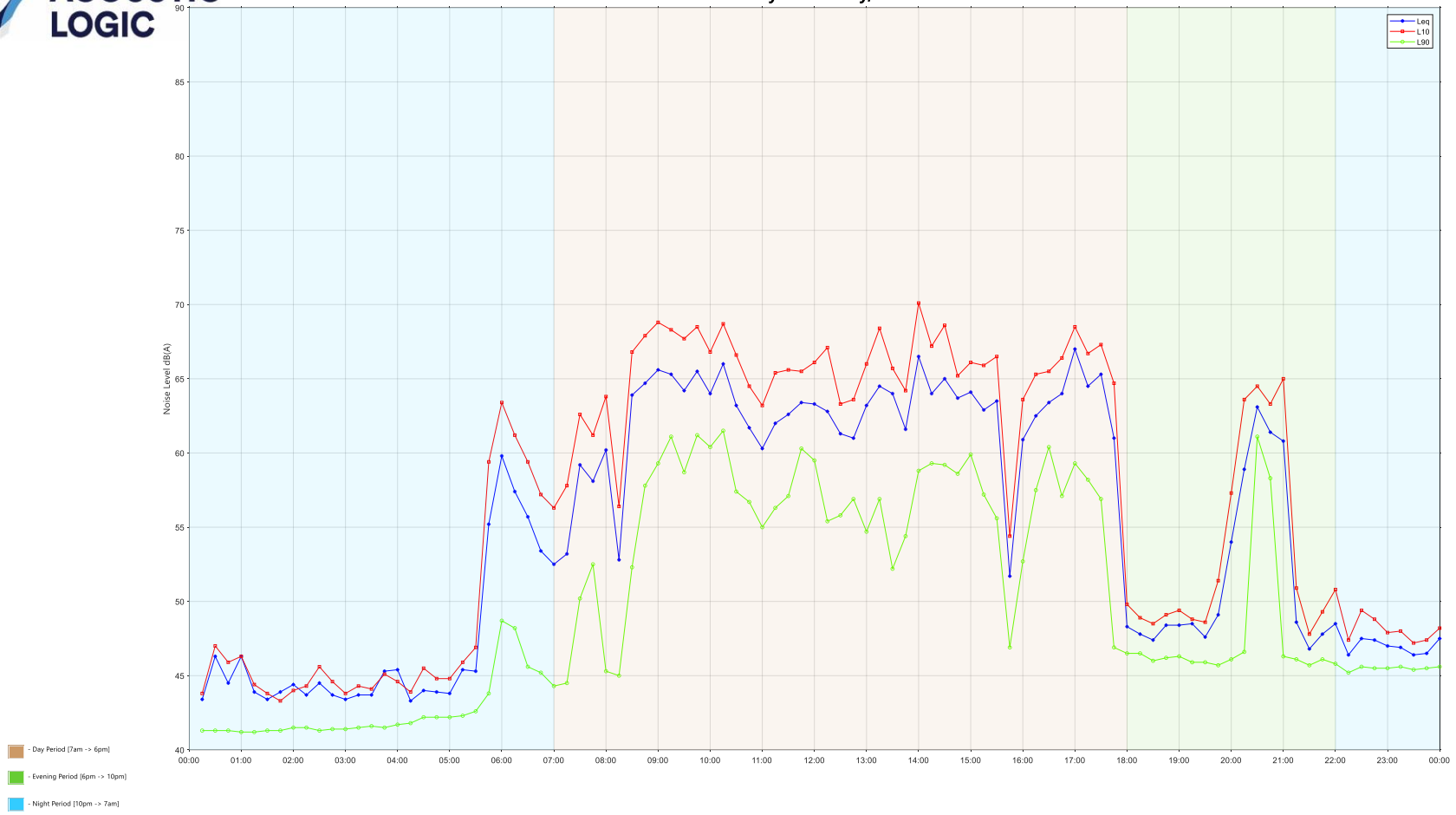
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Tresillian Building
Sunday 28 January, 2024



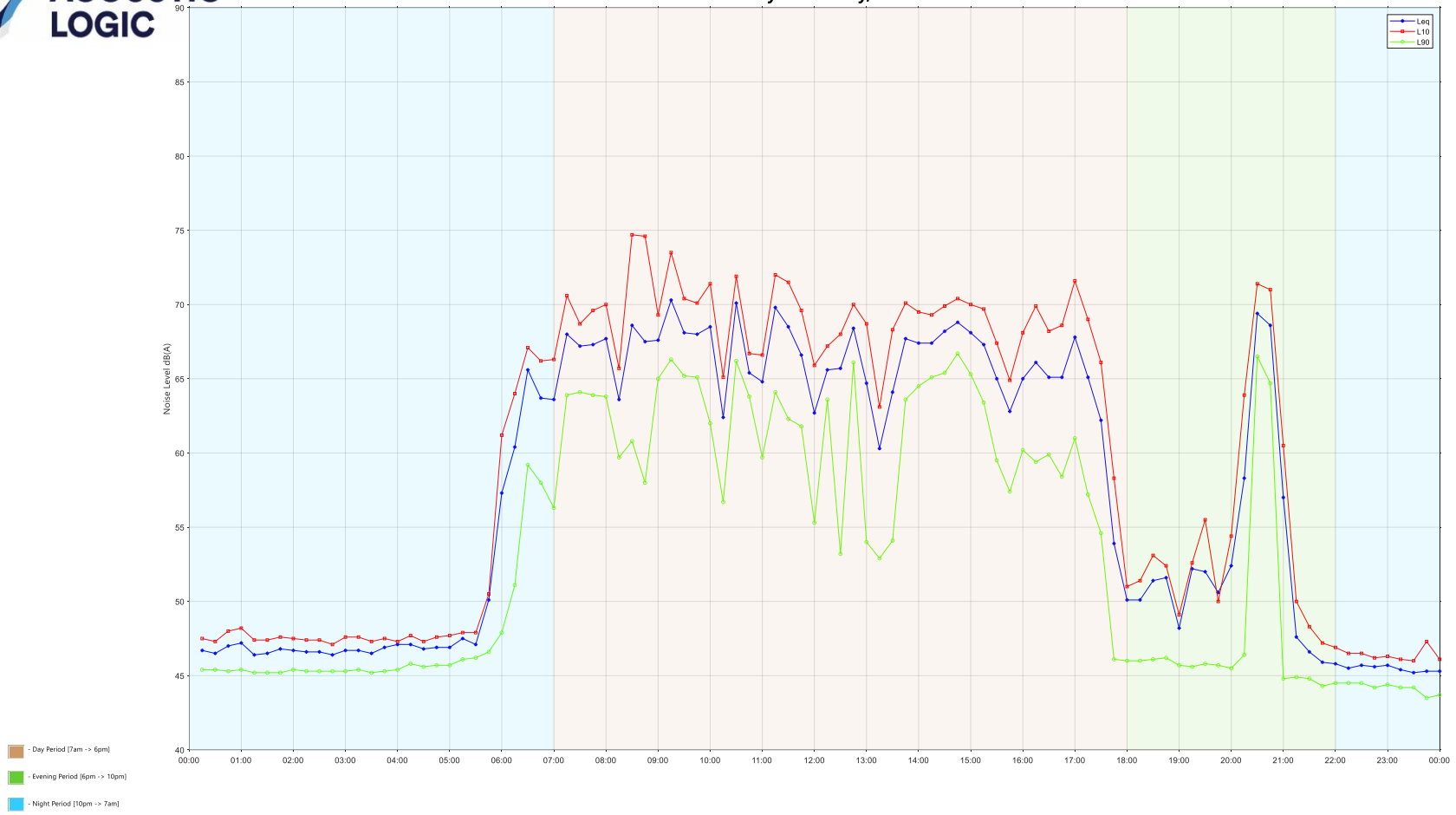
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Tresillian Building
Monday 29 January, 2024



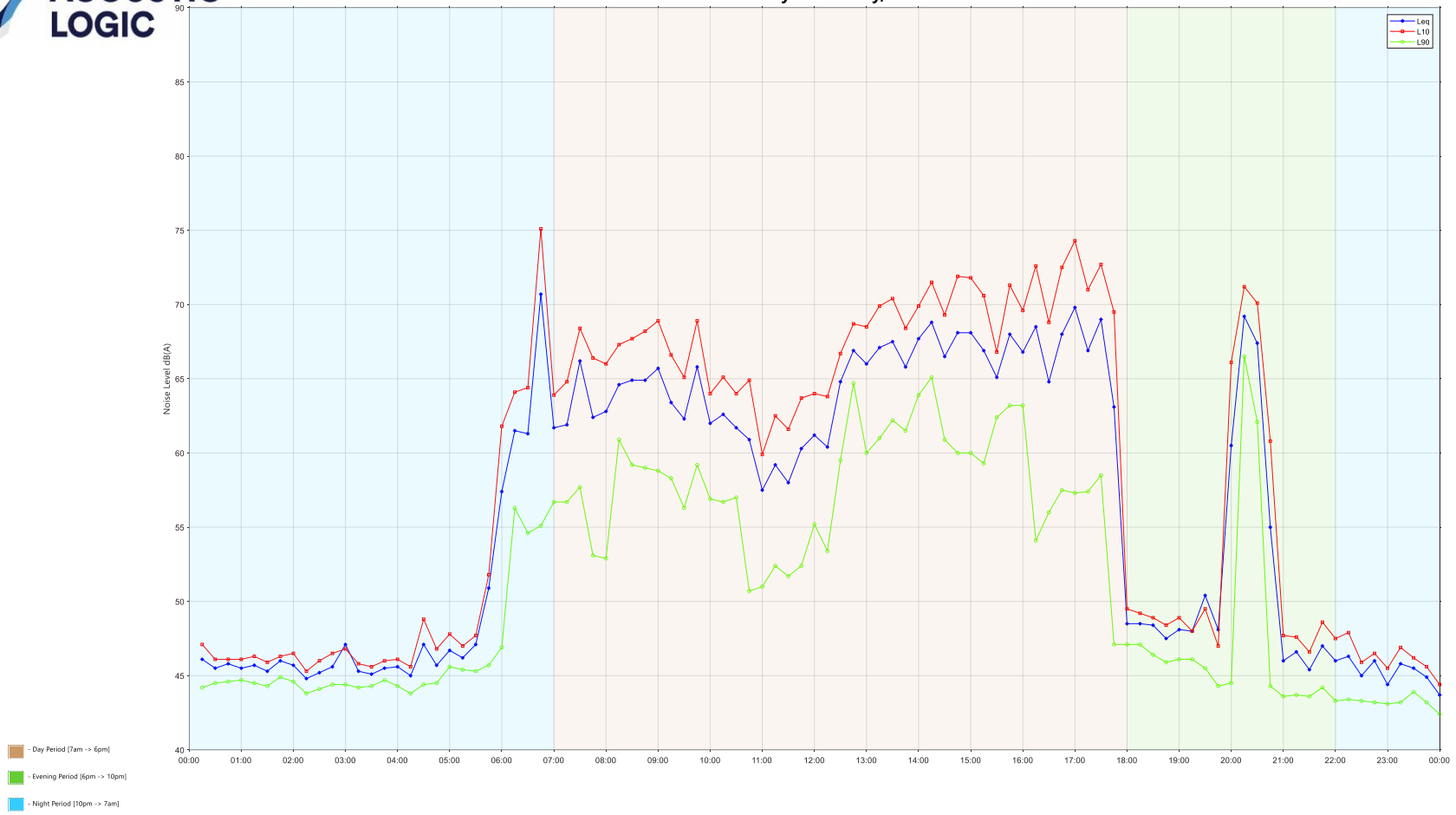
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Tresillian Building
Tuesday 30 January, 2024



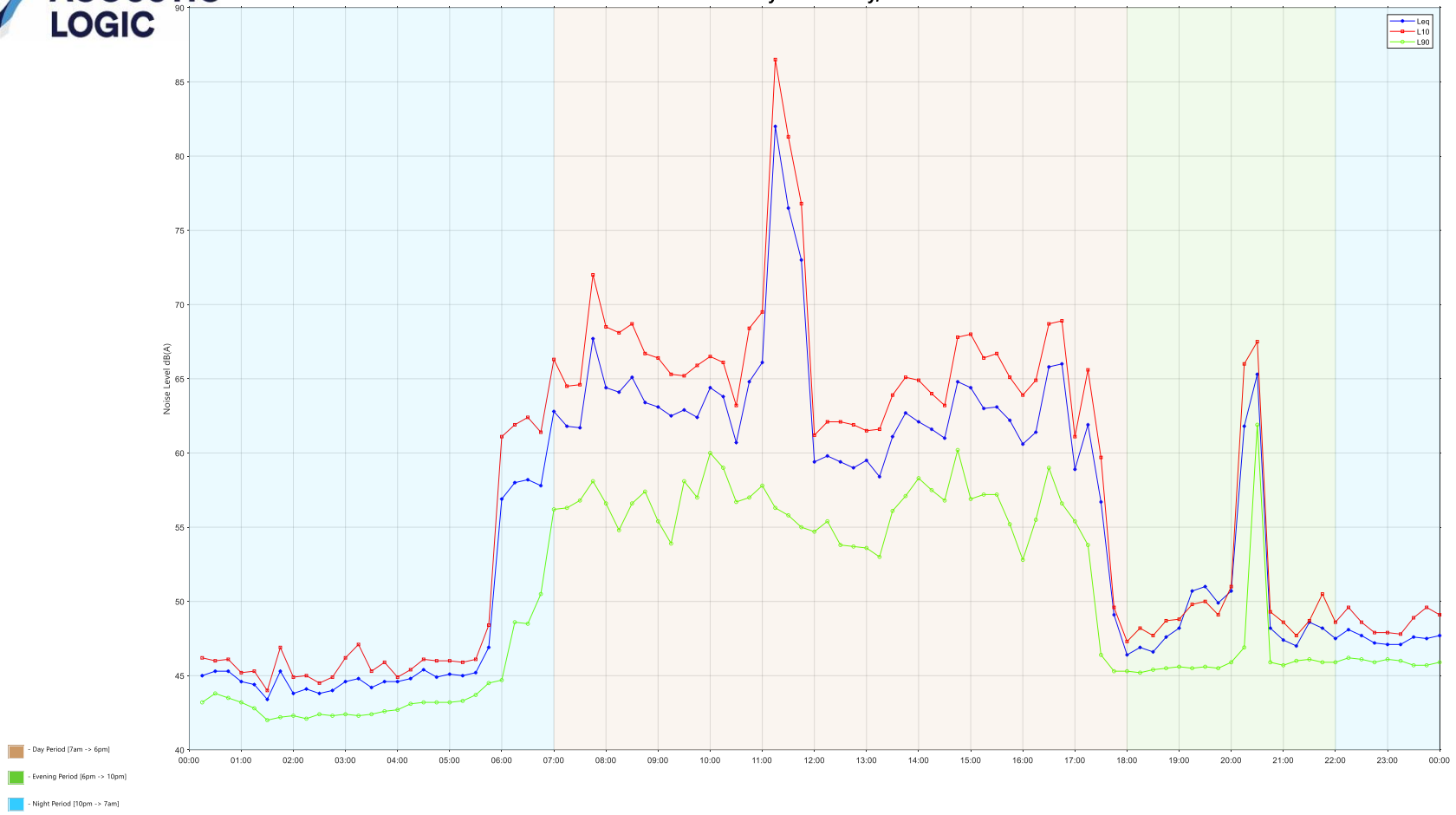
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Tresillian Building
Wednesday 31 January, 2024

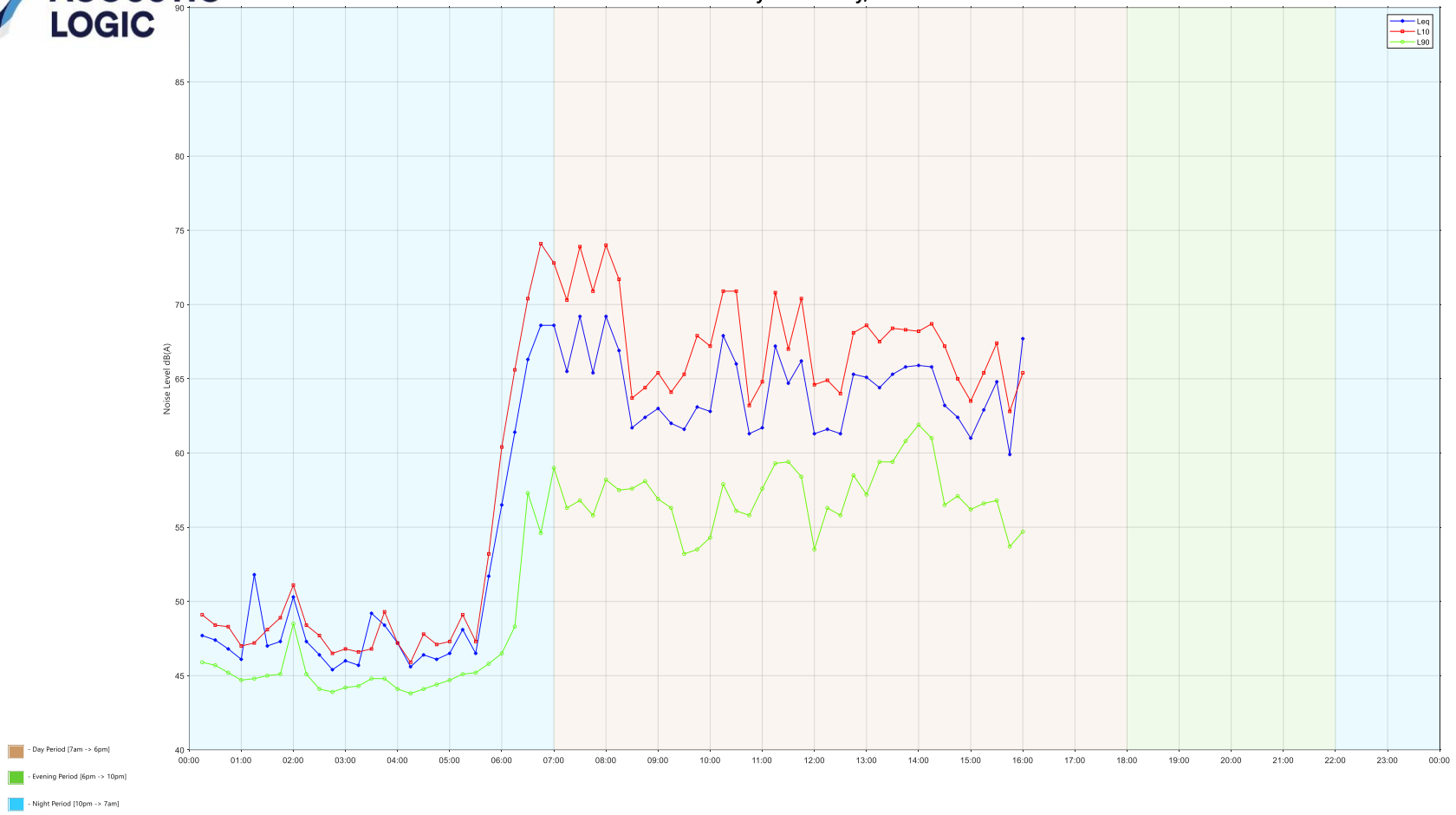


ACOUSTIC LOGIC

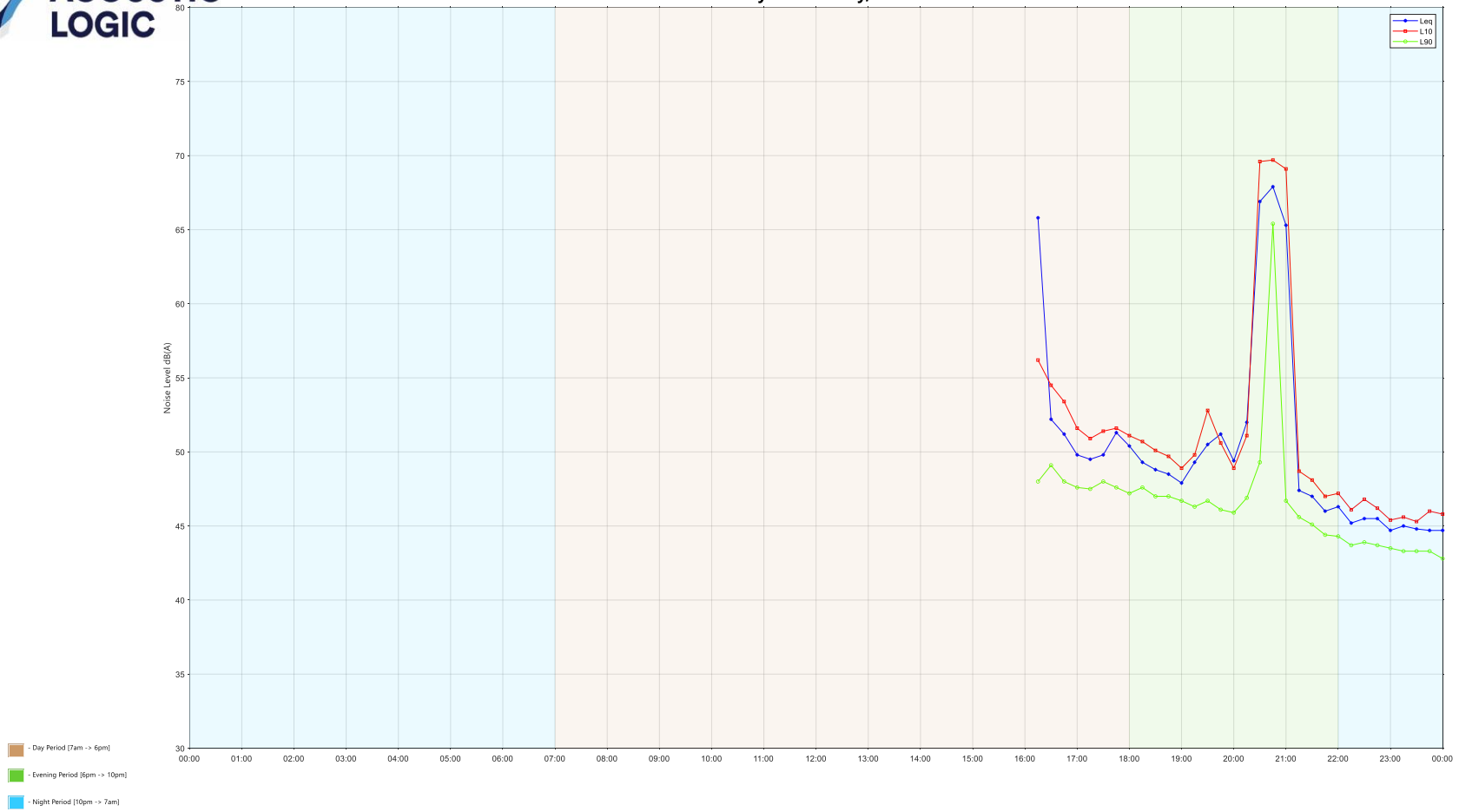
Nepean Hospital Stage 2 - Tresillian Building
Thursday 01 February, 2024



Nepean Hospital Stage 2 - Tresillian Building
Friday 02 February, 2024

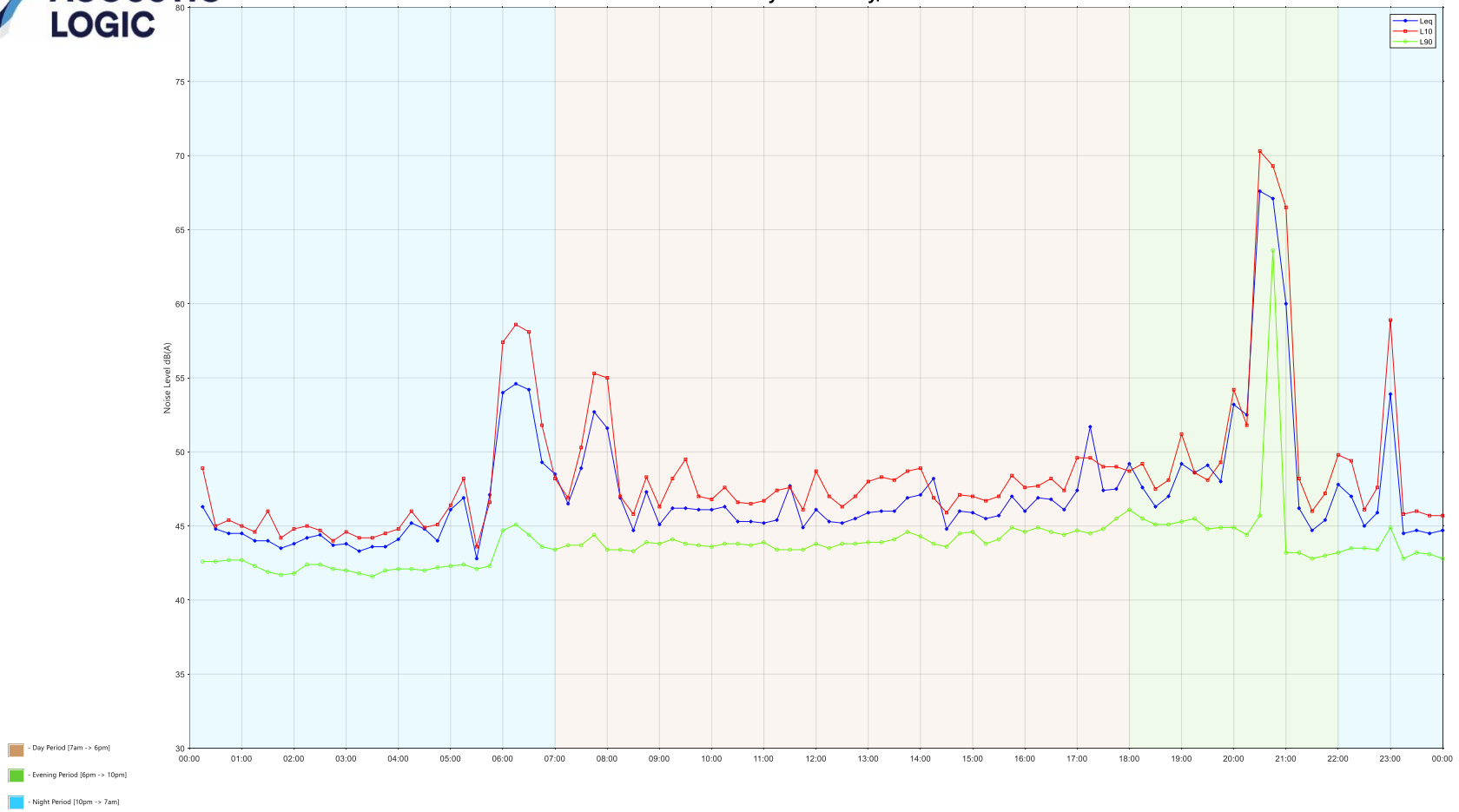


Nepean Hospital Stage 2 - Tresillian Building
Friday 02 February, 2024

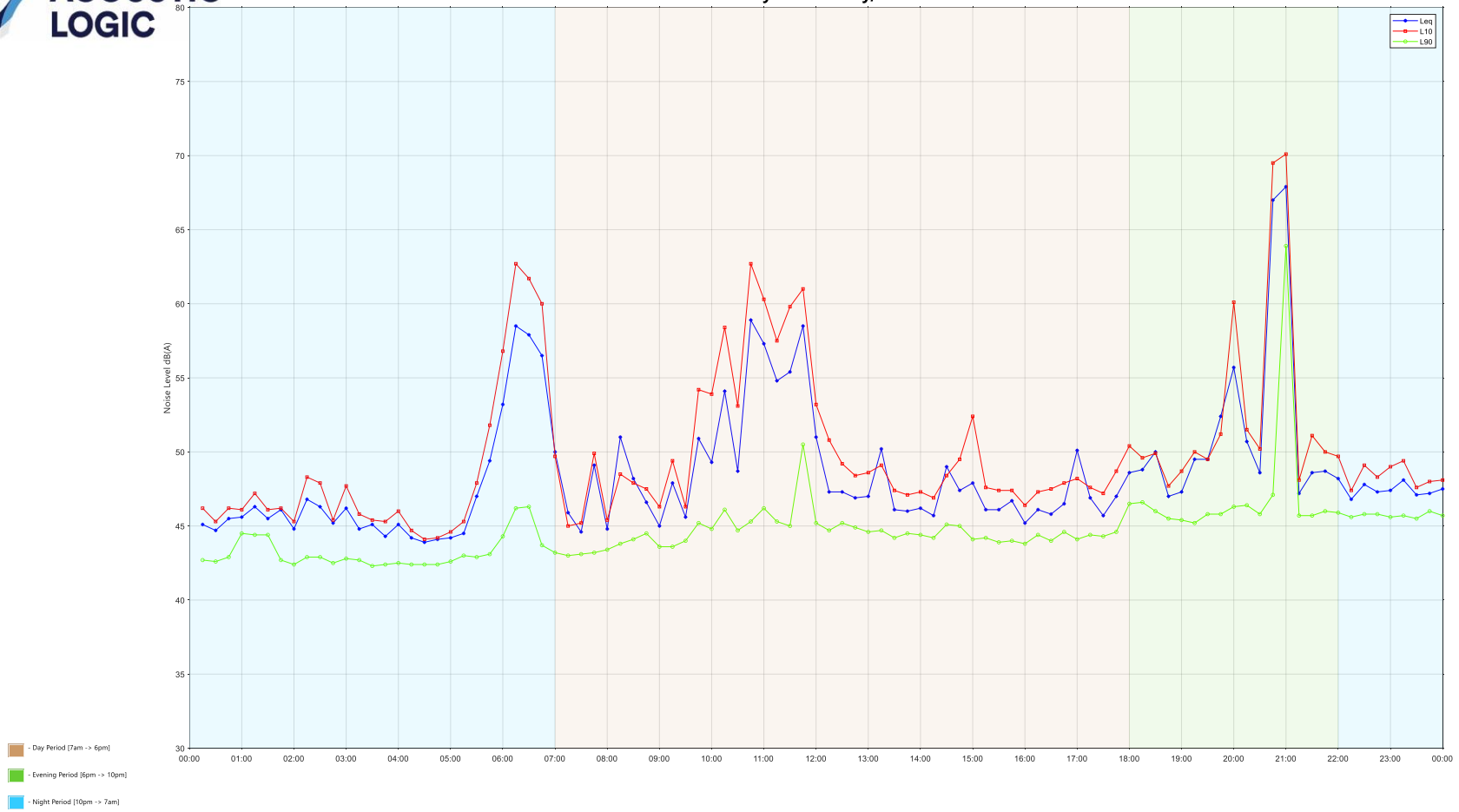


ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Tresillian Building
Saturday 03 February, 2024

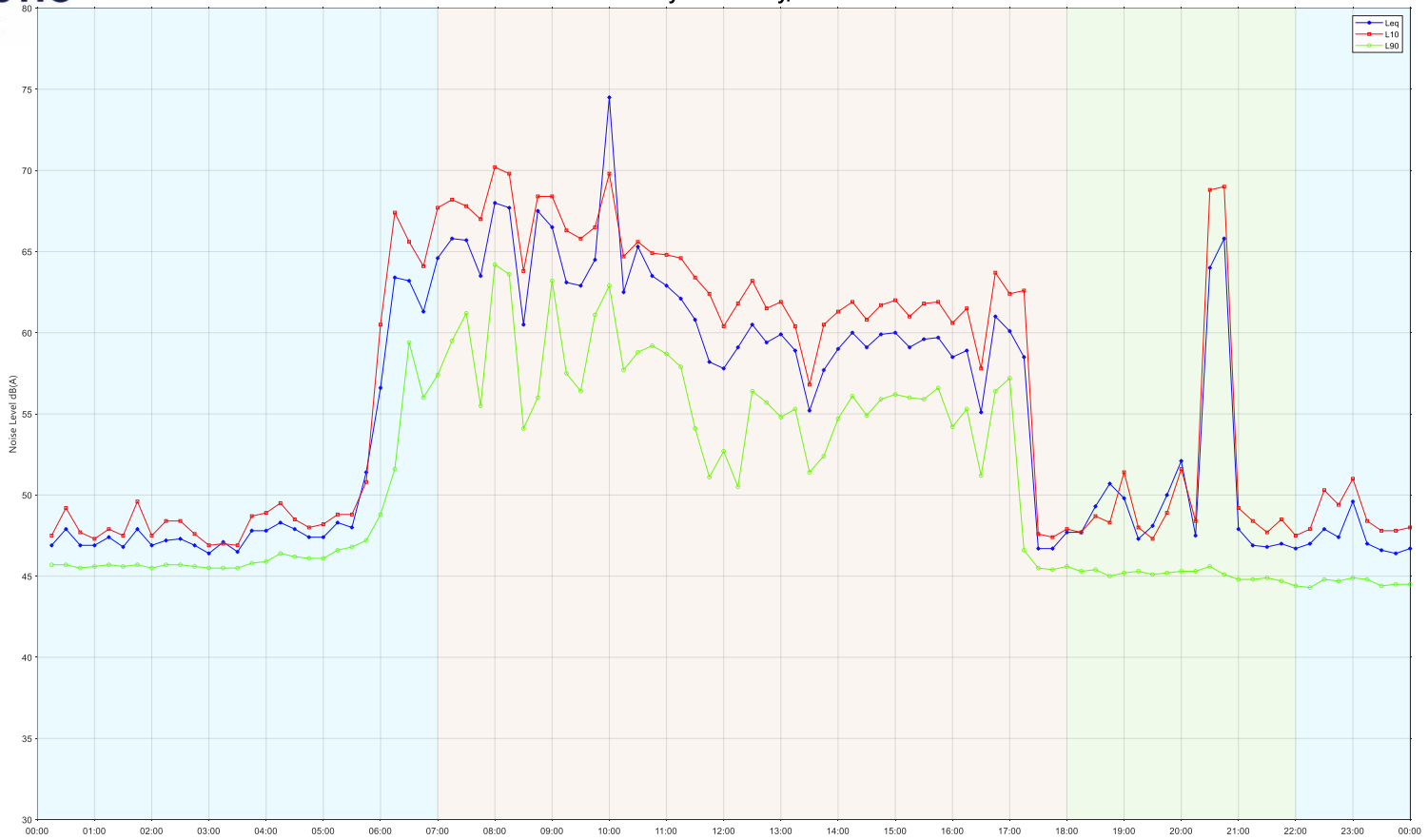


Nepean Hospital Stage 2 - Tresillian Building
Sunday 04 February, 2024



ACOUSTIC LOGIC

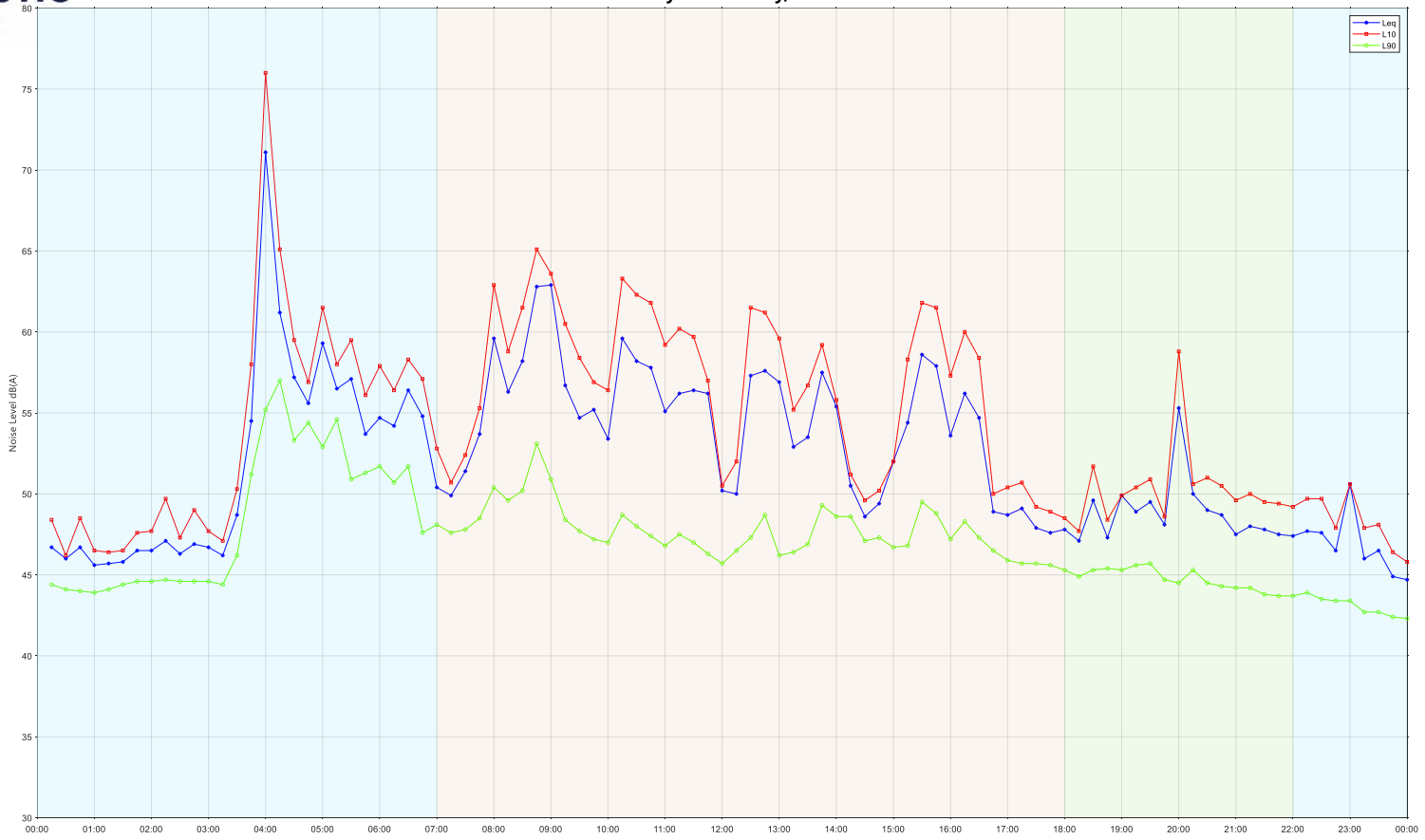
Nepean Hospital Stage 2 - Tresillian Building
Monday 05 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

ACOUSTIC LOGIC

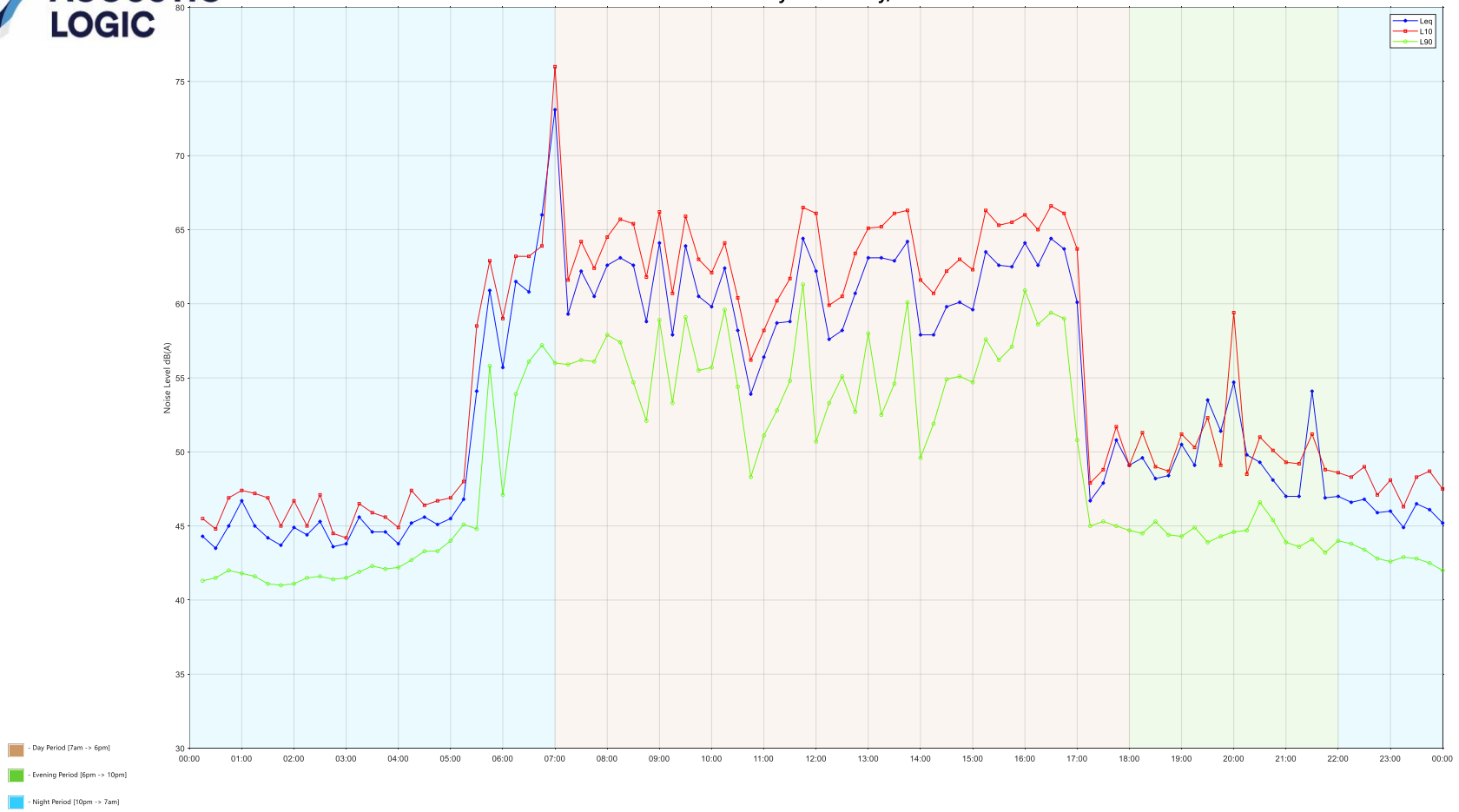
Nepean Hospital Stage 2 - Tresillian Building
Tuesday 06 February, 2024



- Day Period [7am -> 6pm]
- Evening Period [6pm -> 10pm]
- Night Period [10pm -> 7am]

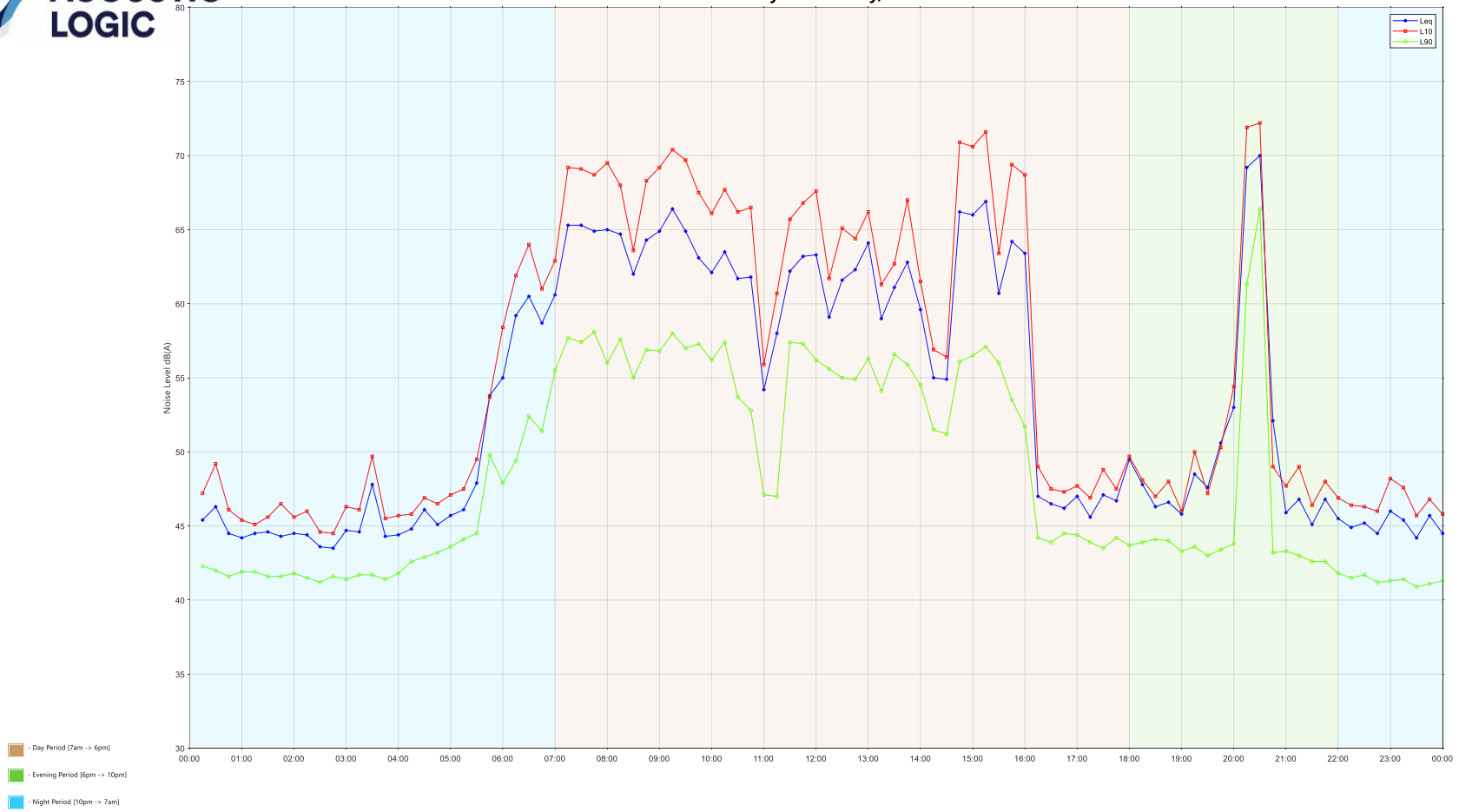
ACOUSTIC LOGIC

Nepean Hospital Stage 2 - Tresillian Building
Wednesday 07 February, 2024



ACOUSTIC LOGIC

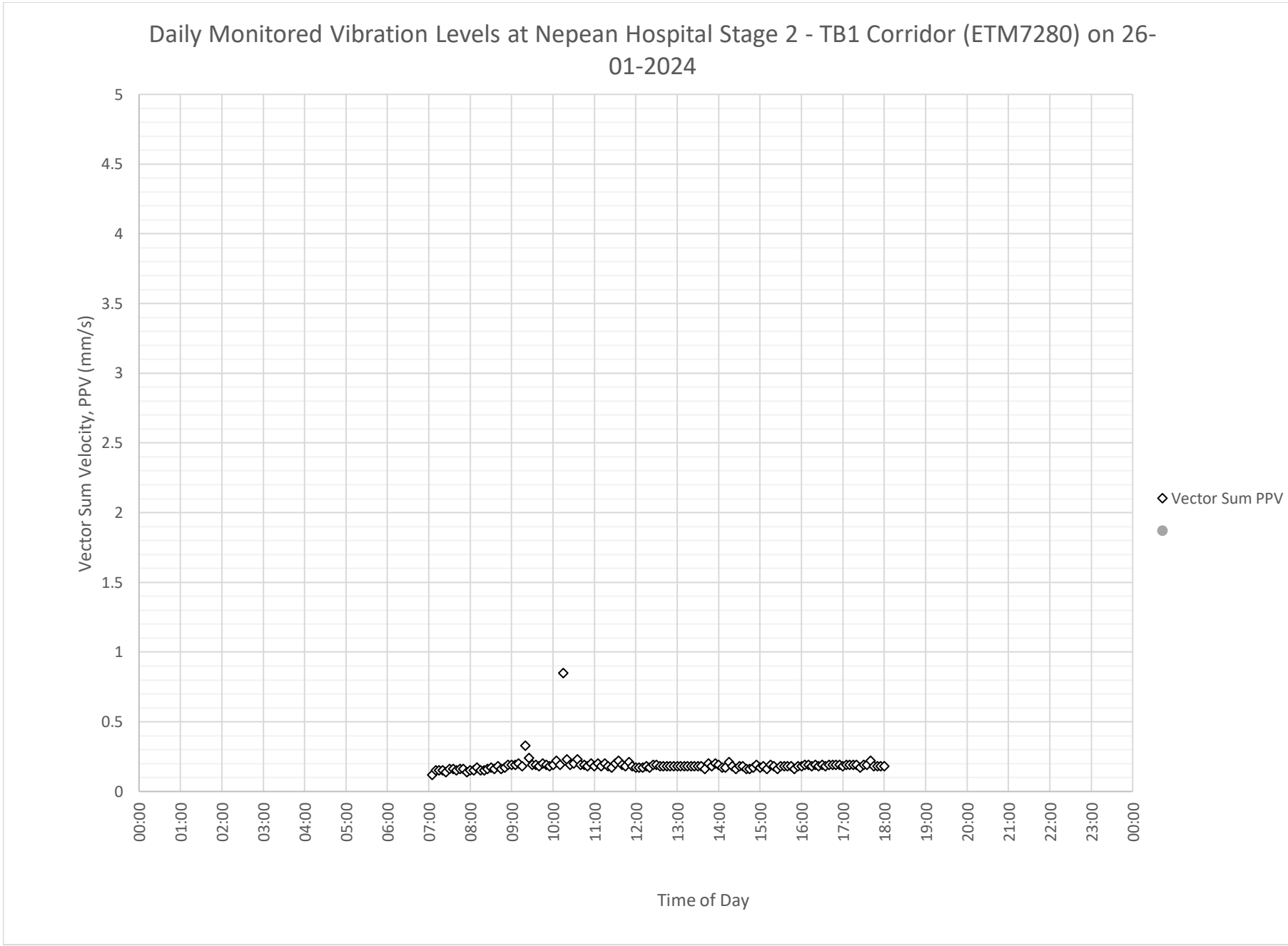
Nepean Hospital Stage 2 - Tresillian Building
Thursday 08 February, 2024

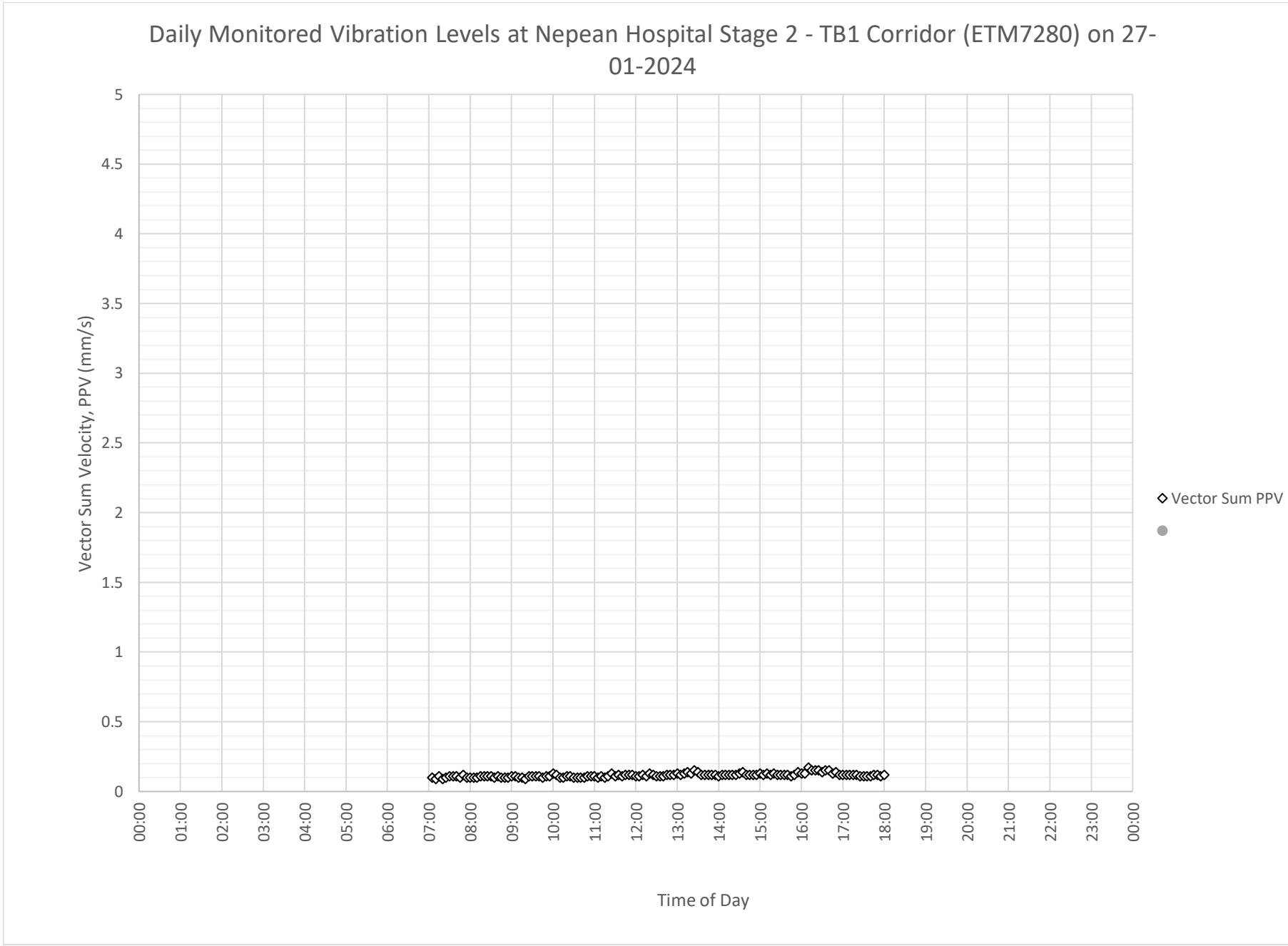


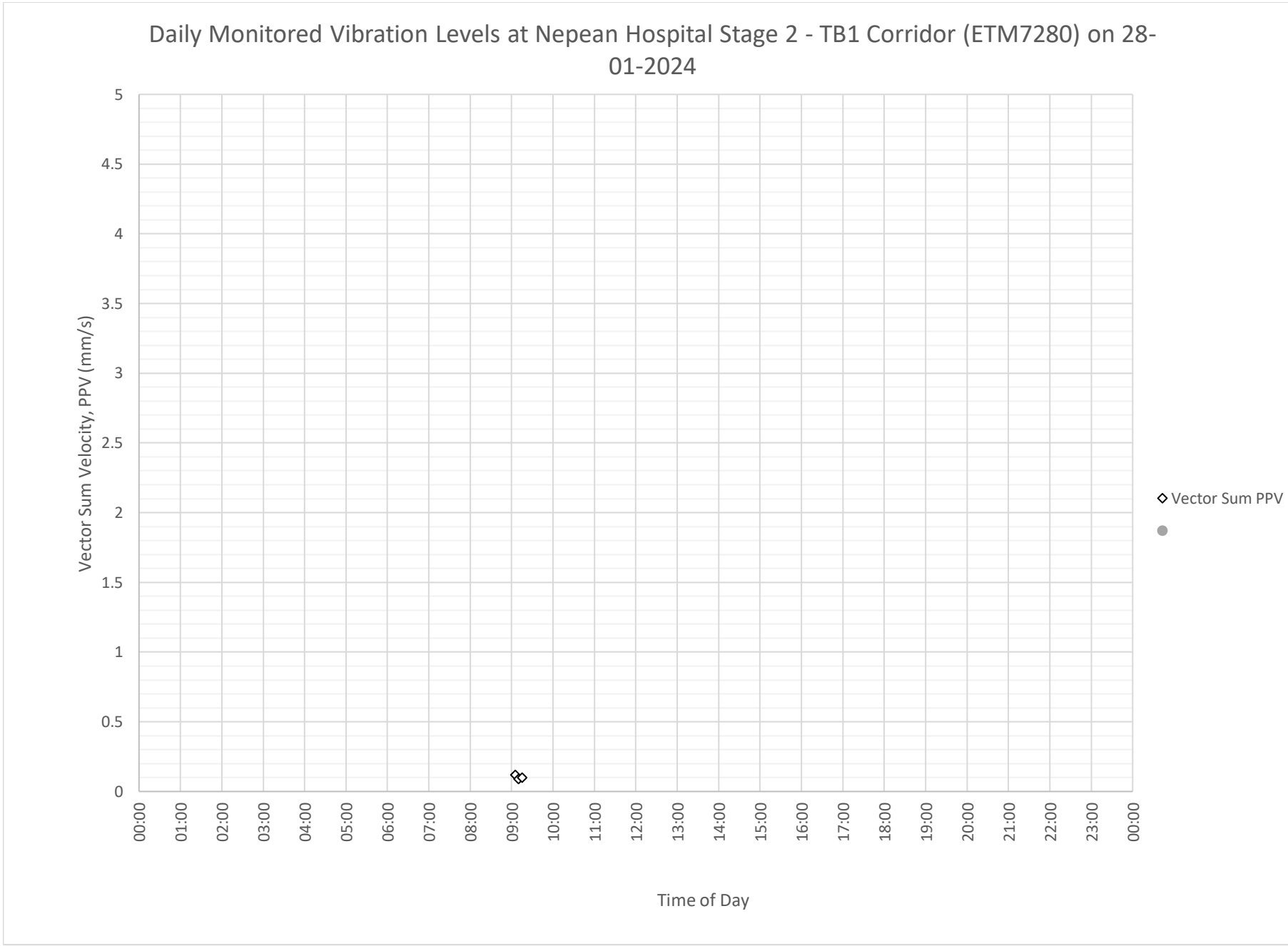
ACOUSTIC LOGIC

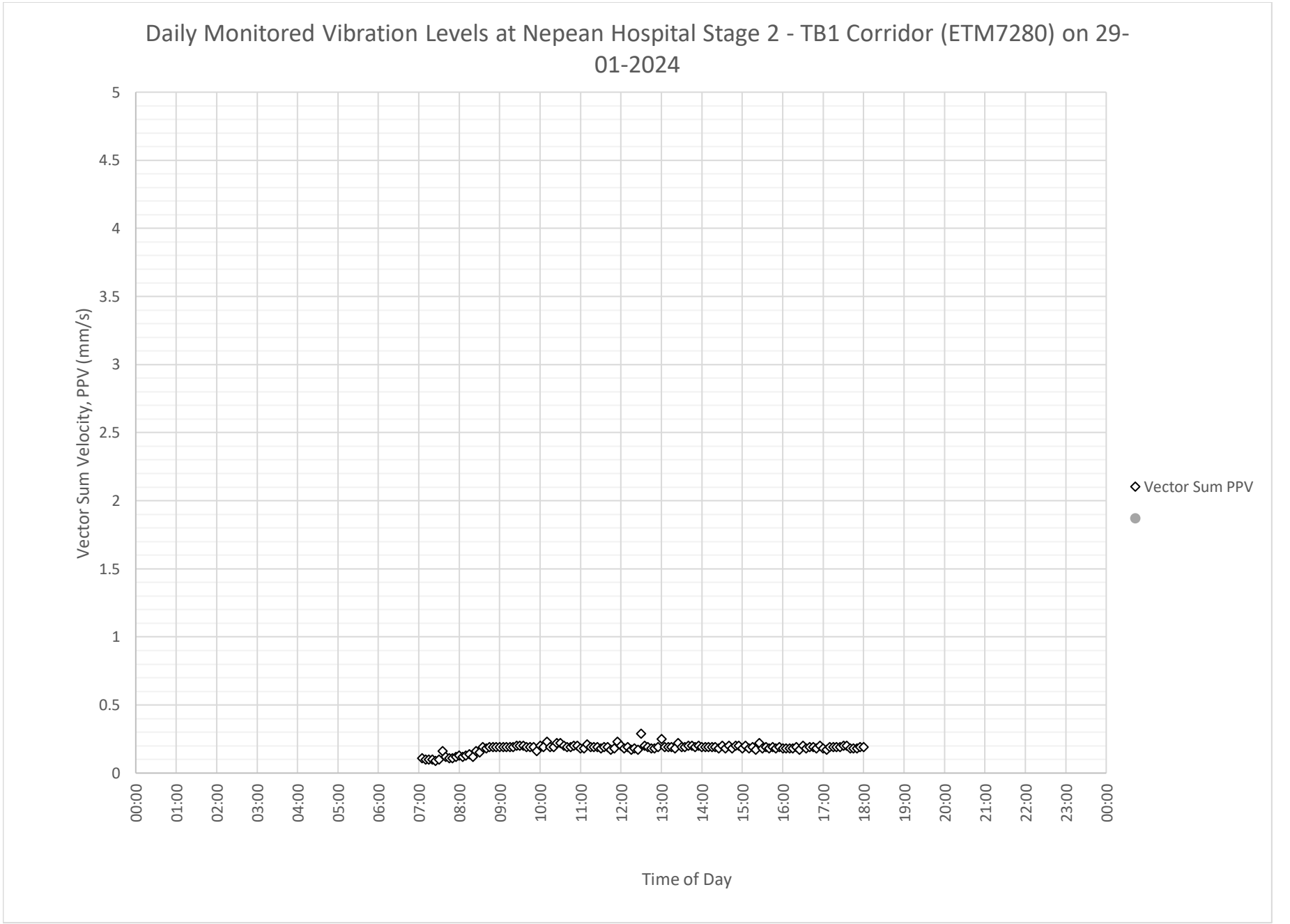
Nepean Hospital Stage 2 - Tresillian Building
Friday 09 February, 2024

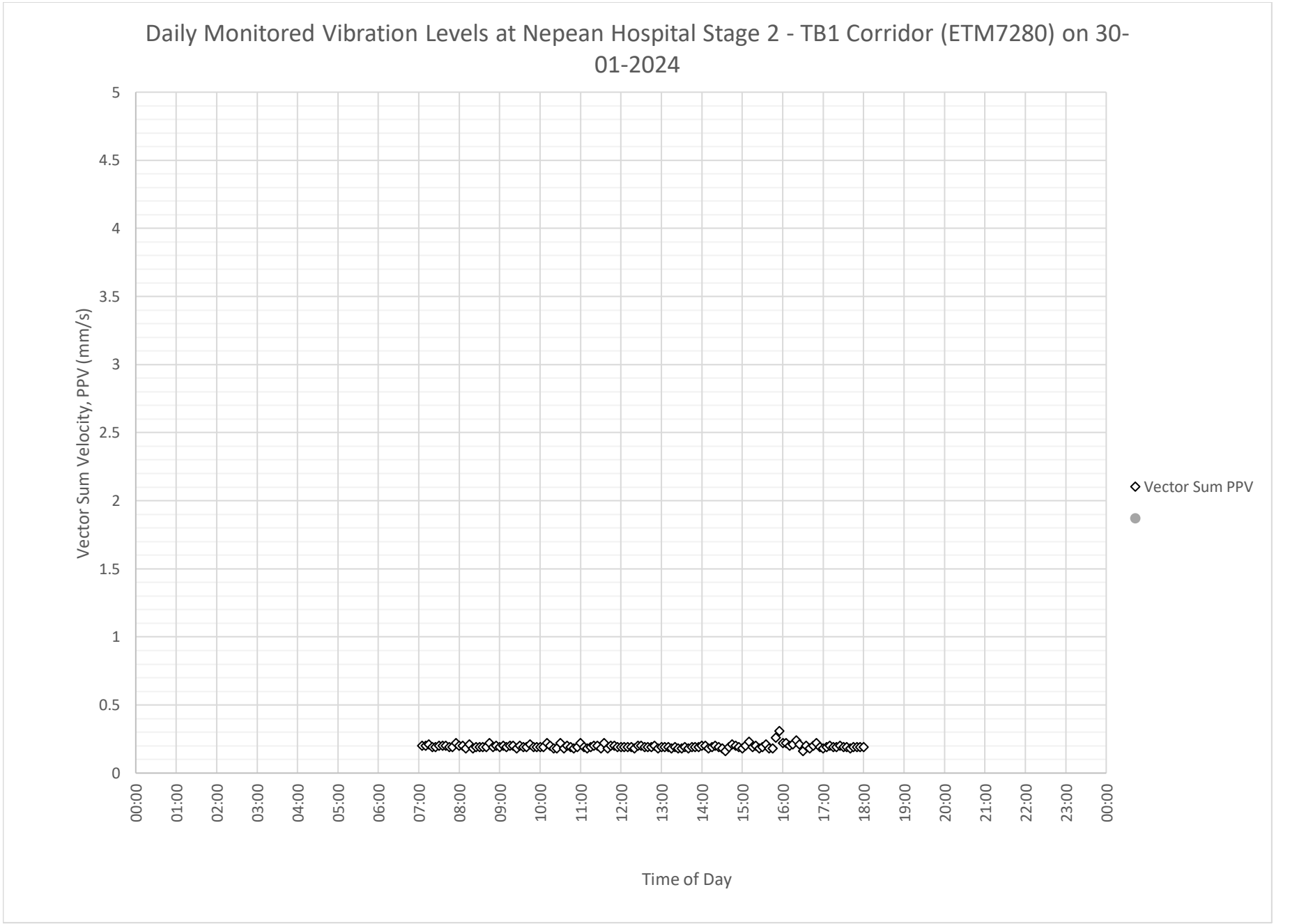
APPENDIX B – VIBRATION MONITORING DATA

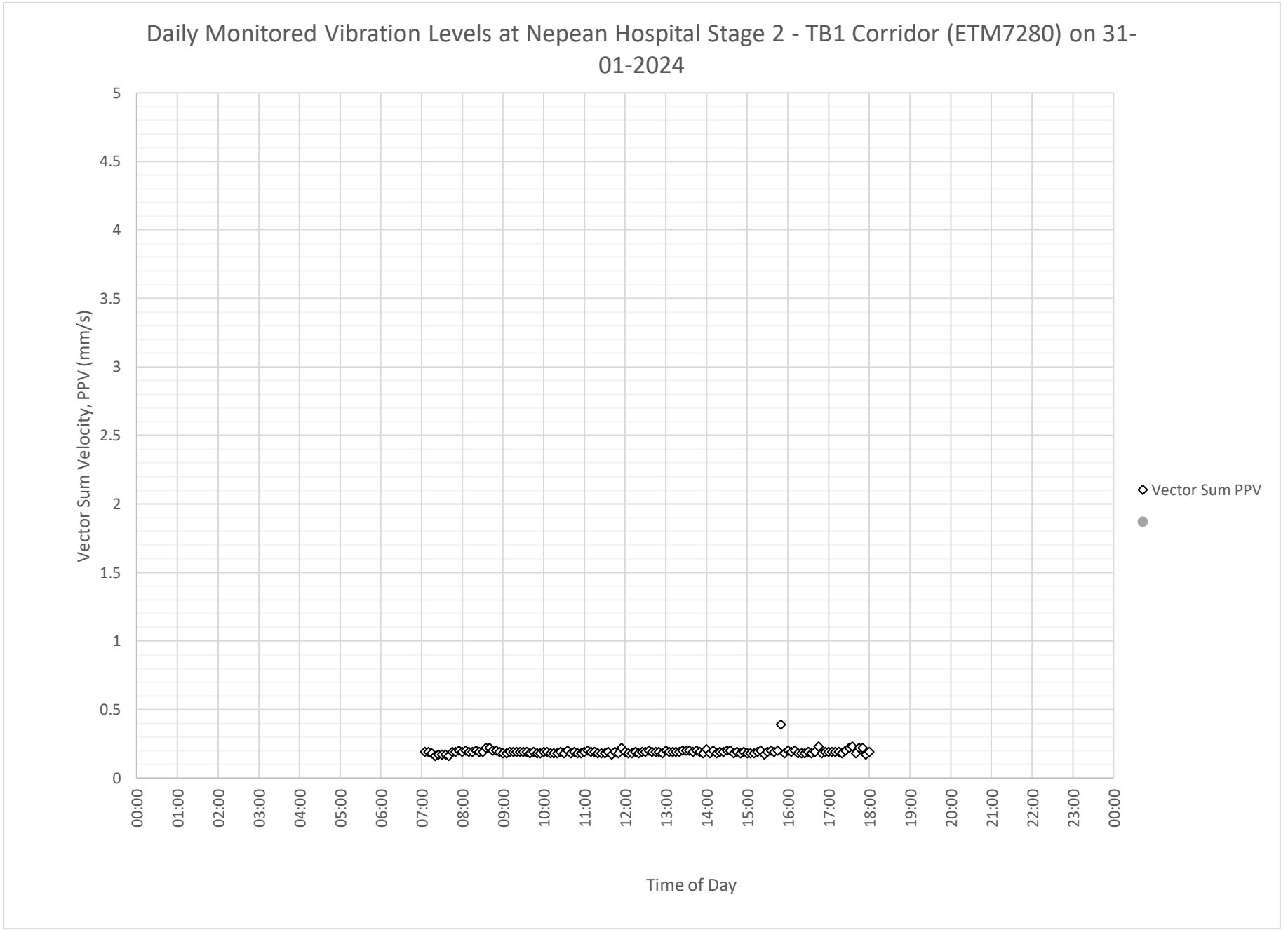

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 26-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV

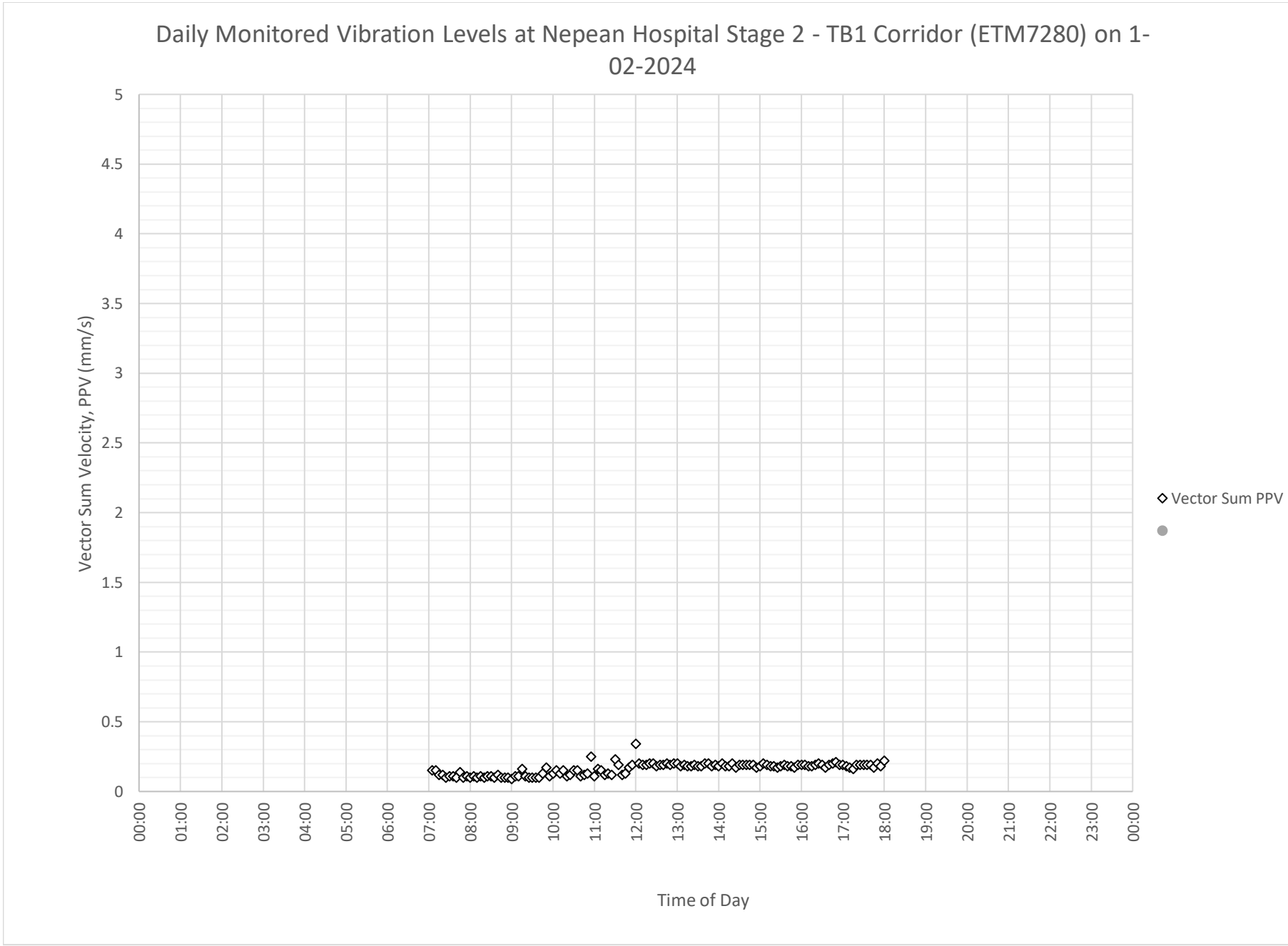

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 27-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 28-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 29-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 30-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 31-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 1-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
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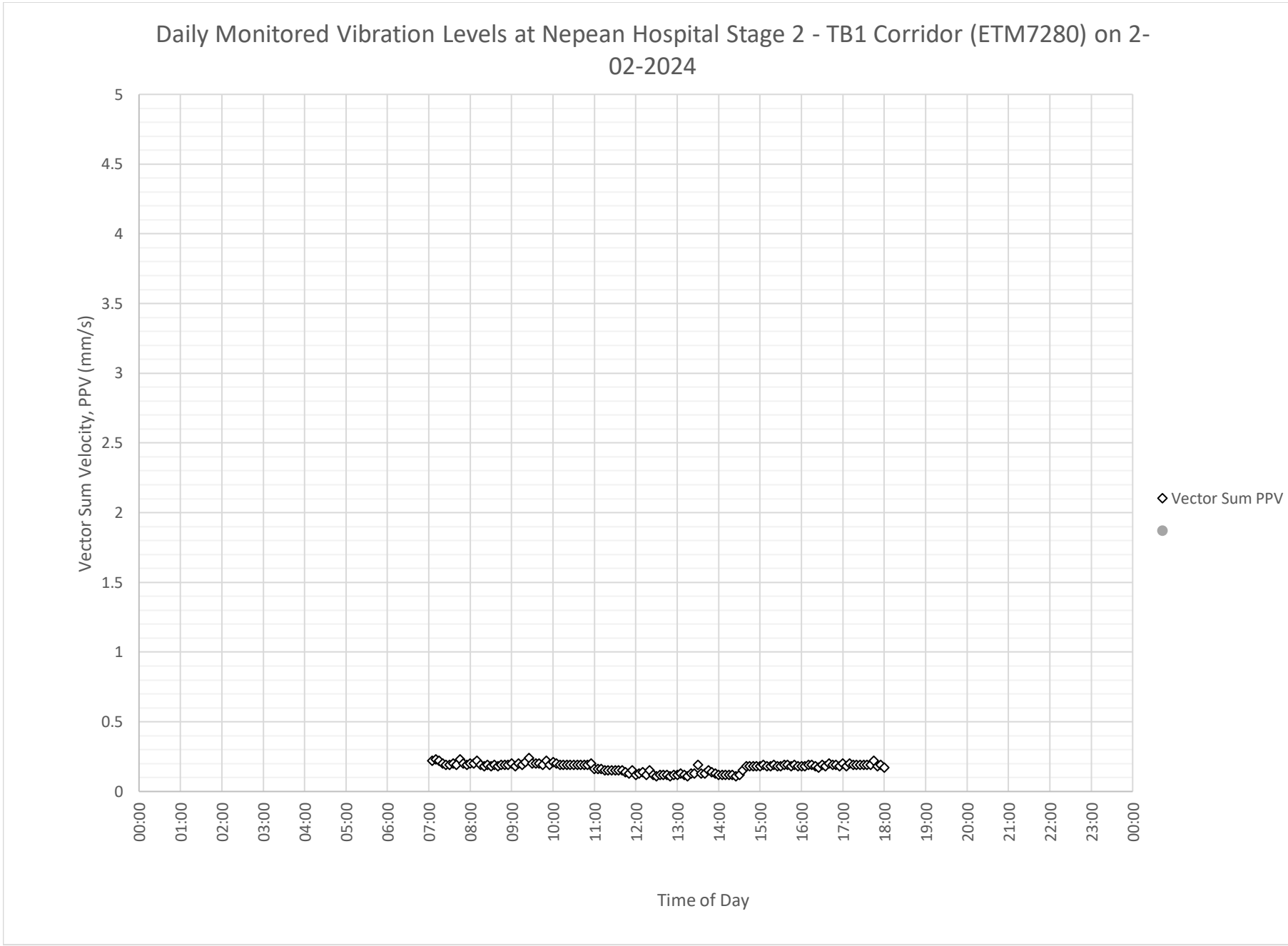
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 2-02-2024
Vector Sum Velocity, PPV (mm/s)
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4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
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16:00
17:00
18:00
19:00
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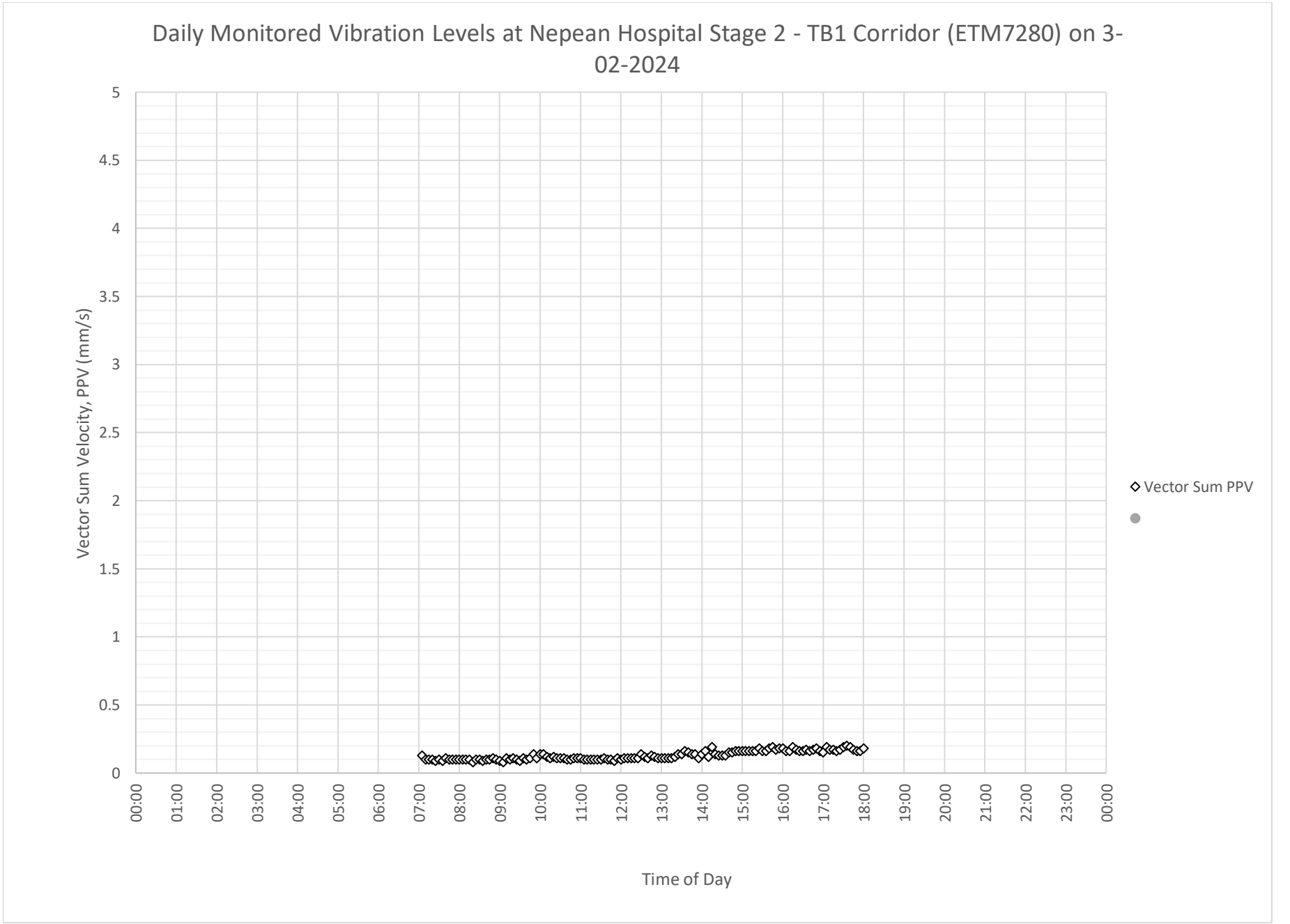
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 3-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
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18:00
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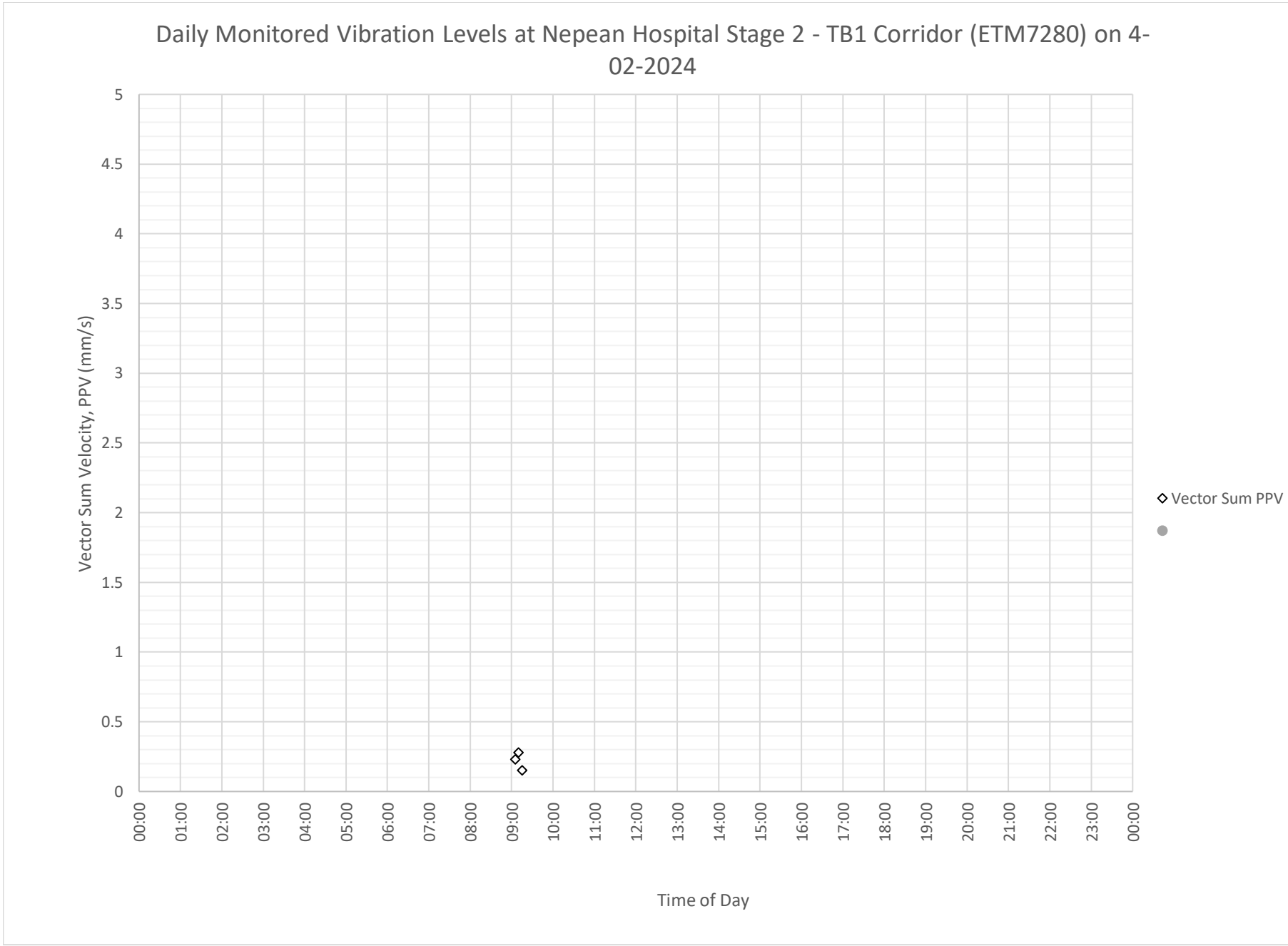
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 4-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
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22:00
23:00
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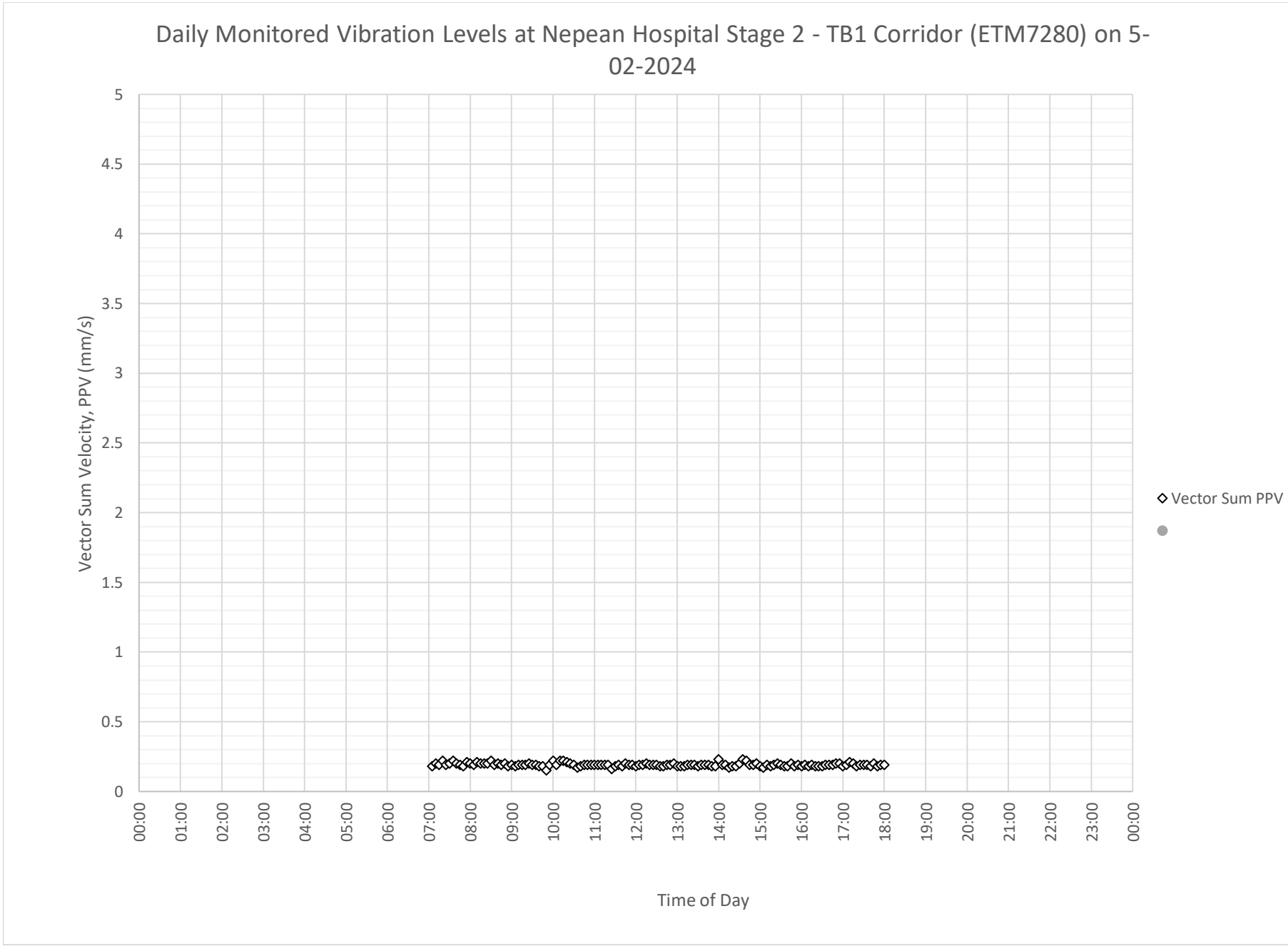
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 5-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
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04:00
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13:00
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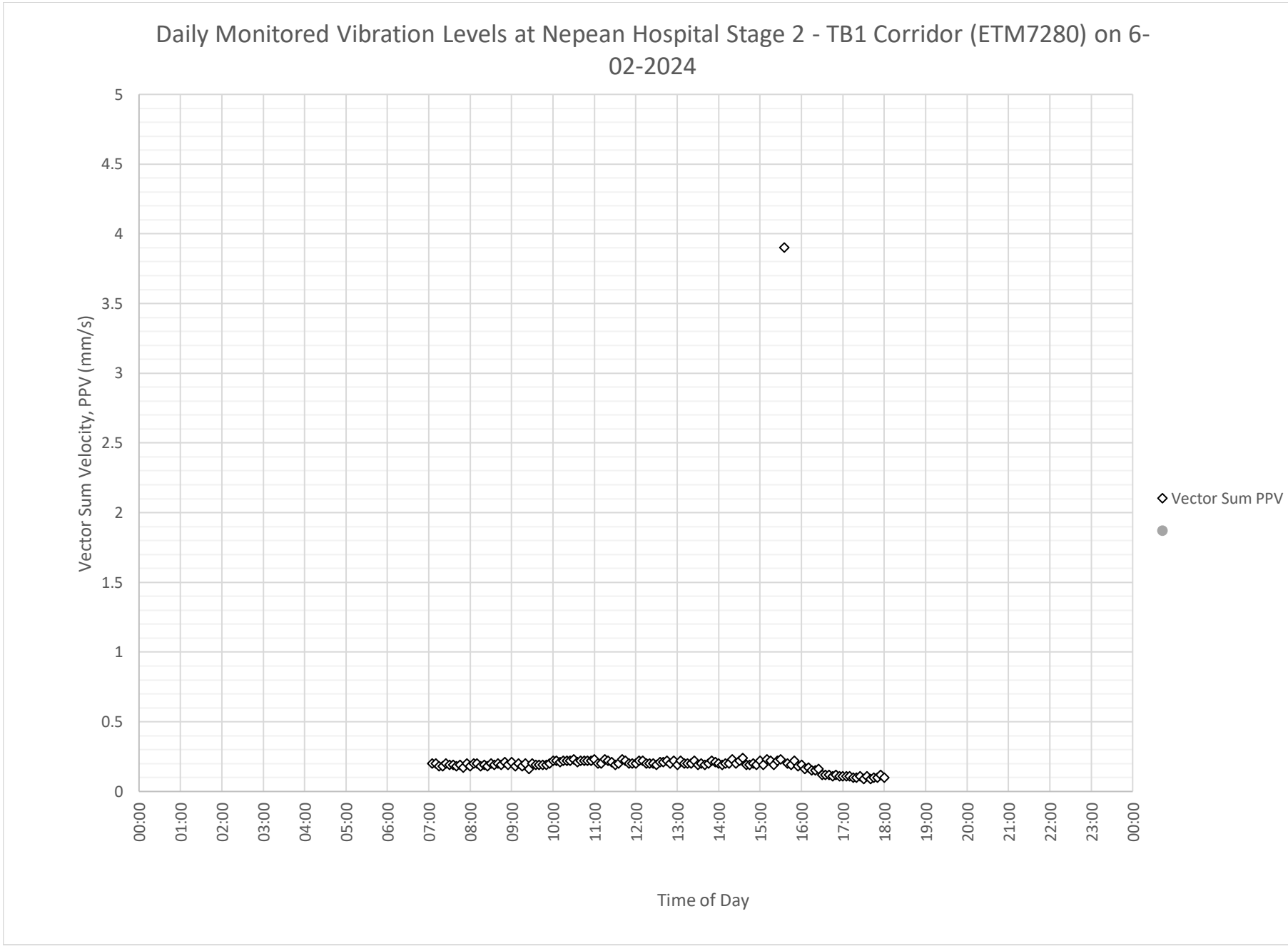
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 6-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
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23:00
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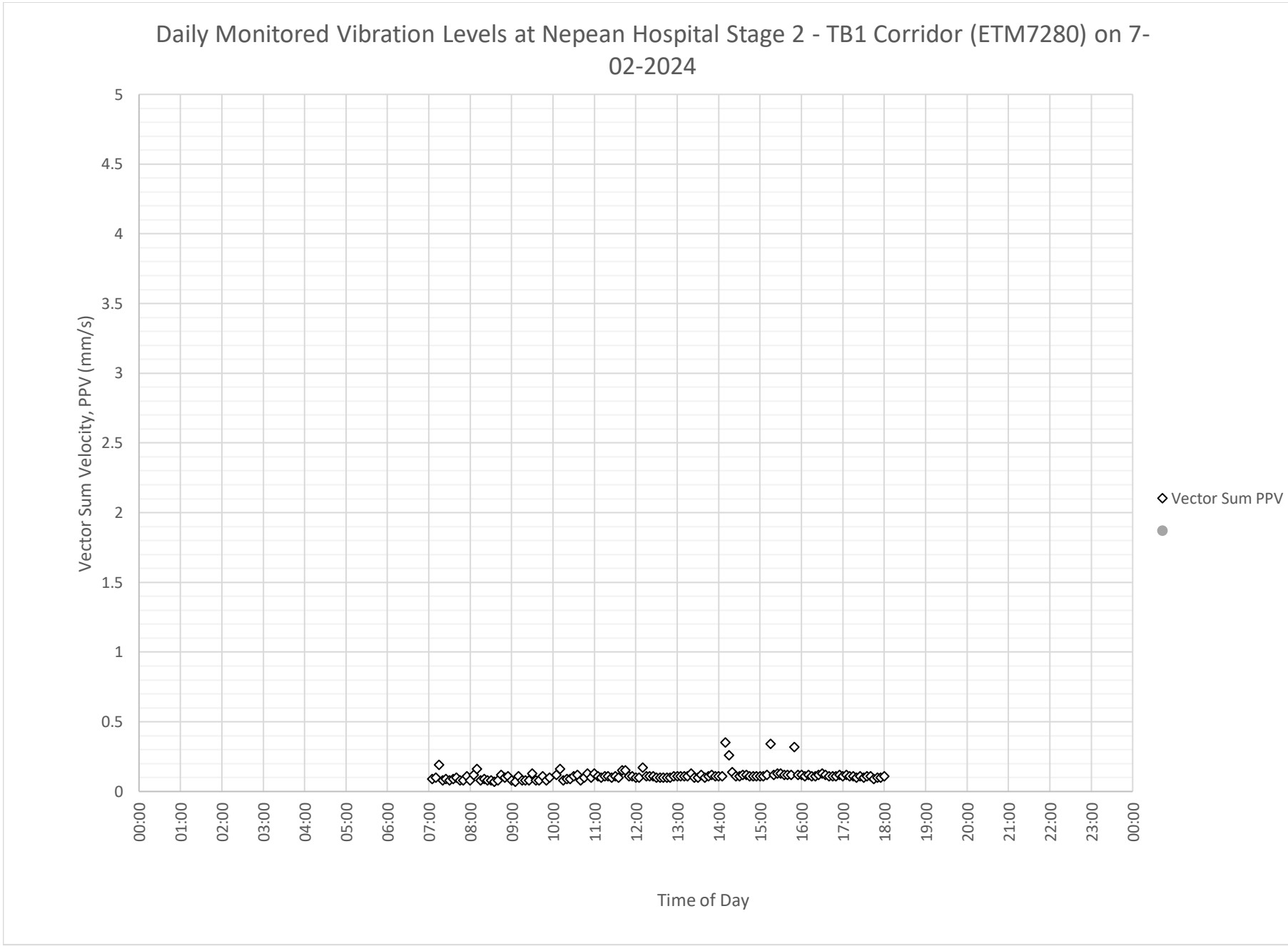
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 7-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
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22:00
23:00
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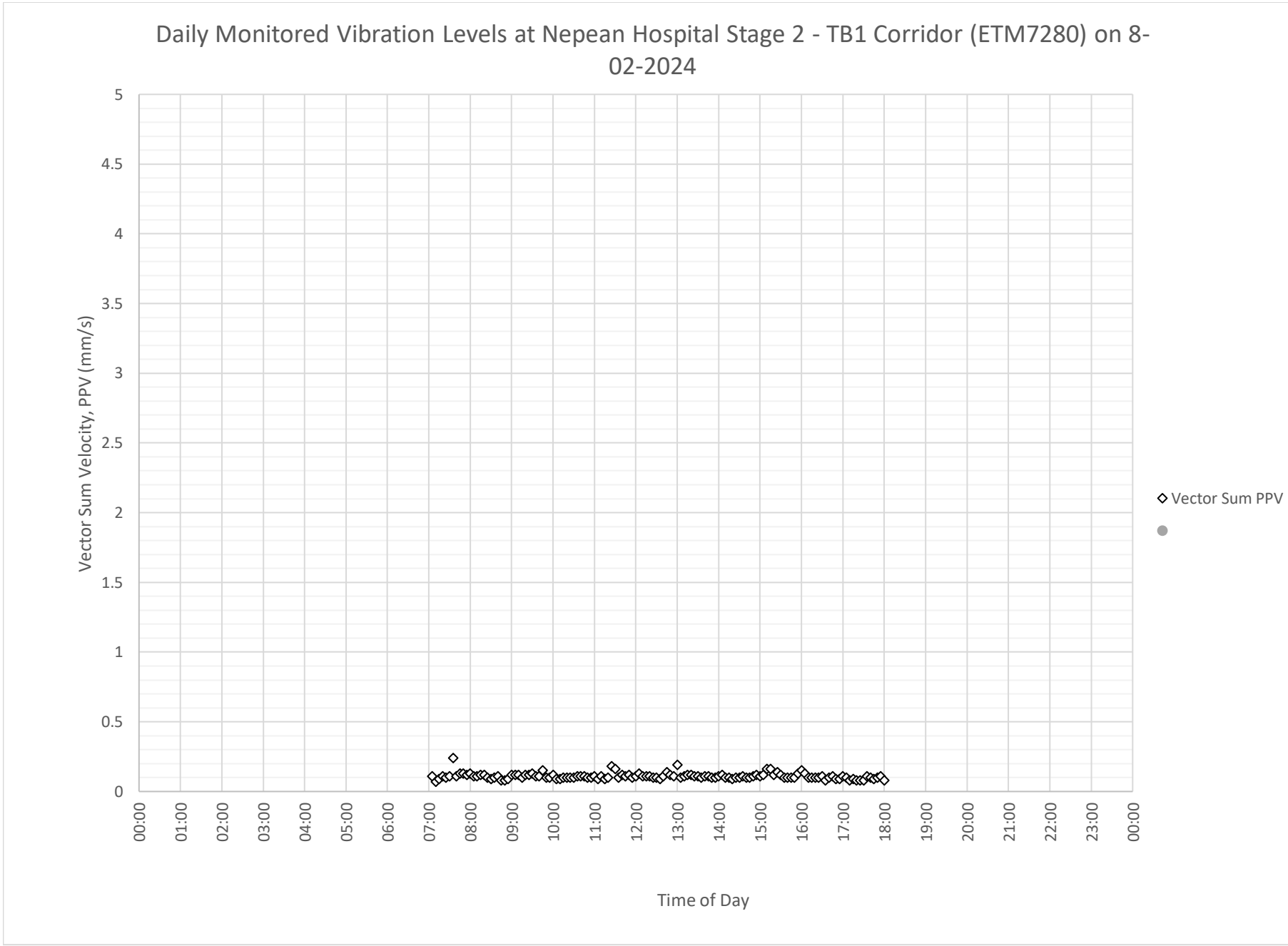
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 8-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
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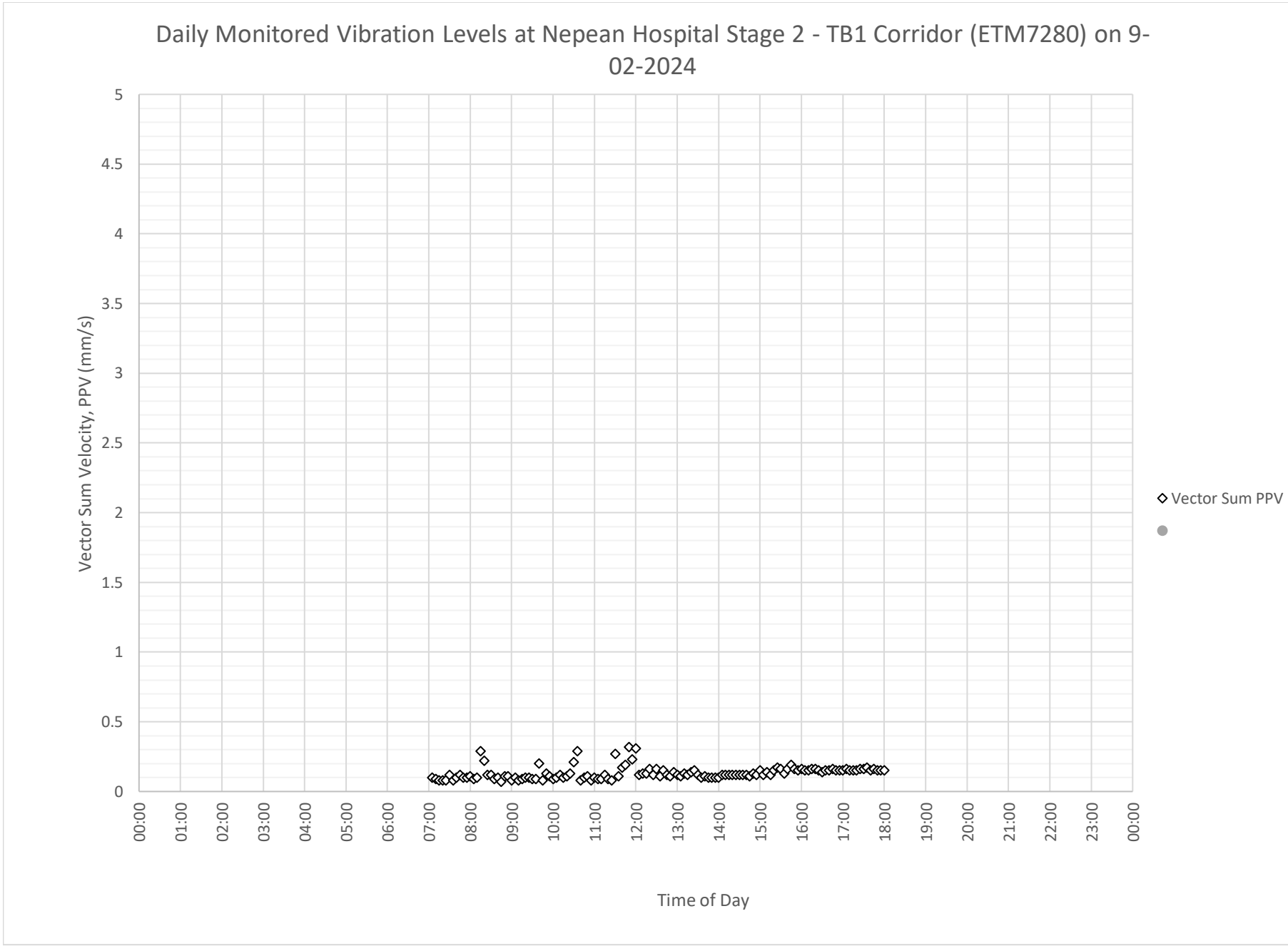
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - TB1 Corridor (ETM7280) on 9-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
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21:00
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23:00
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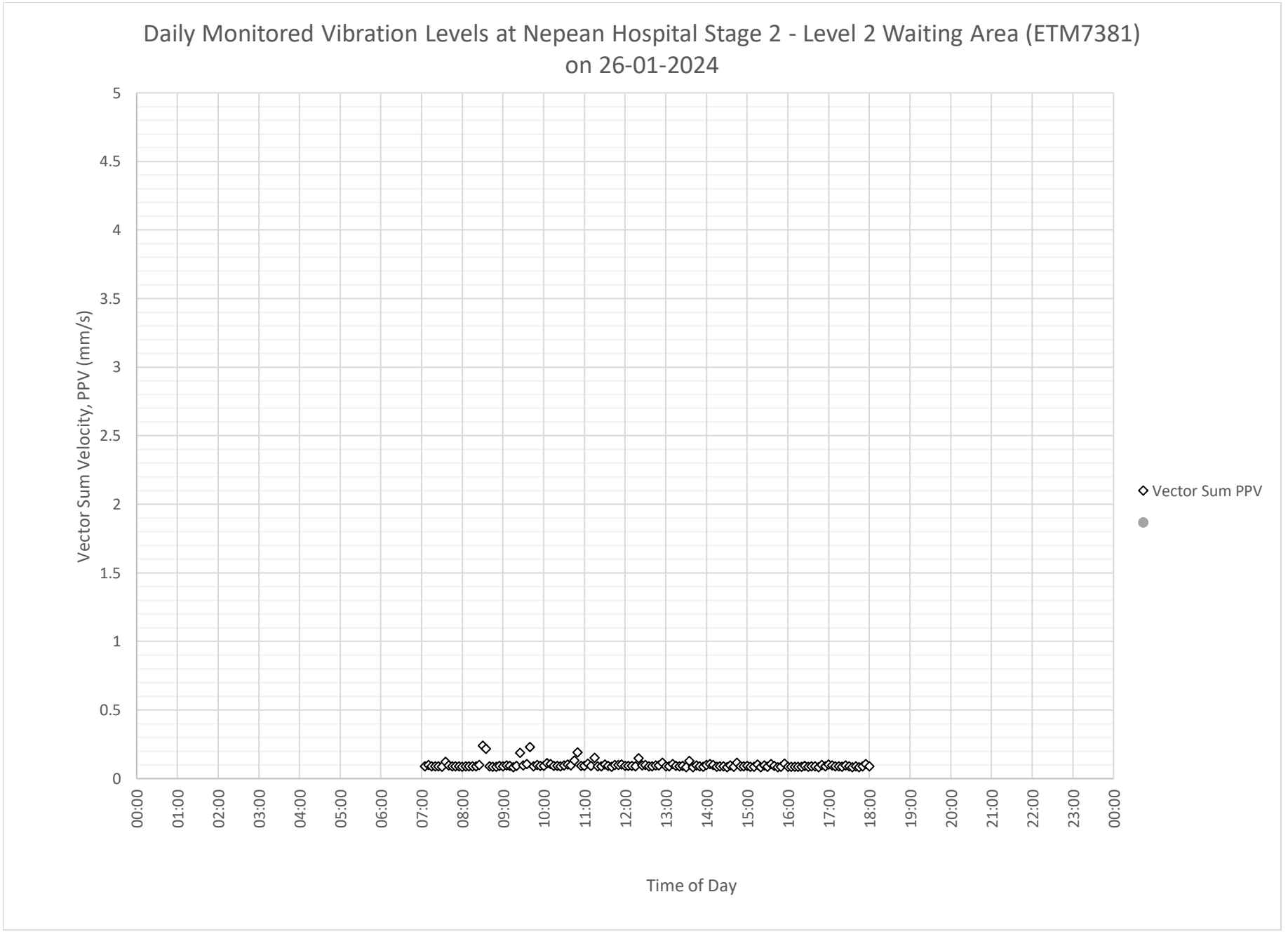
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 26-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
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23:00
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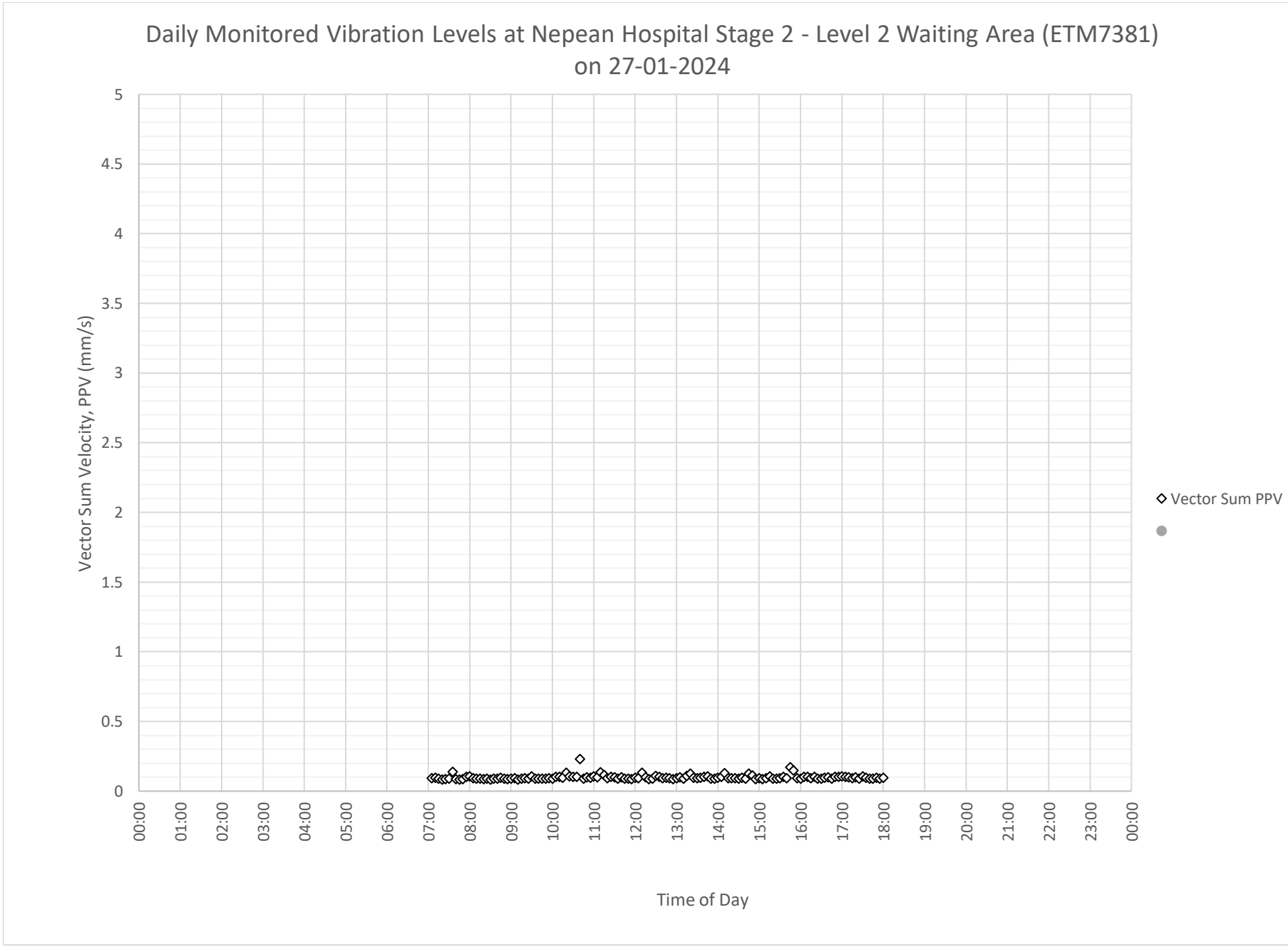
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 27-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
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01:00
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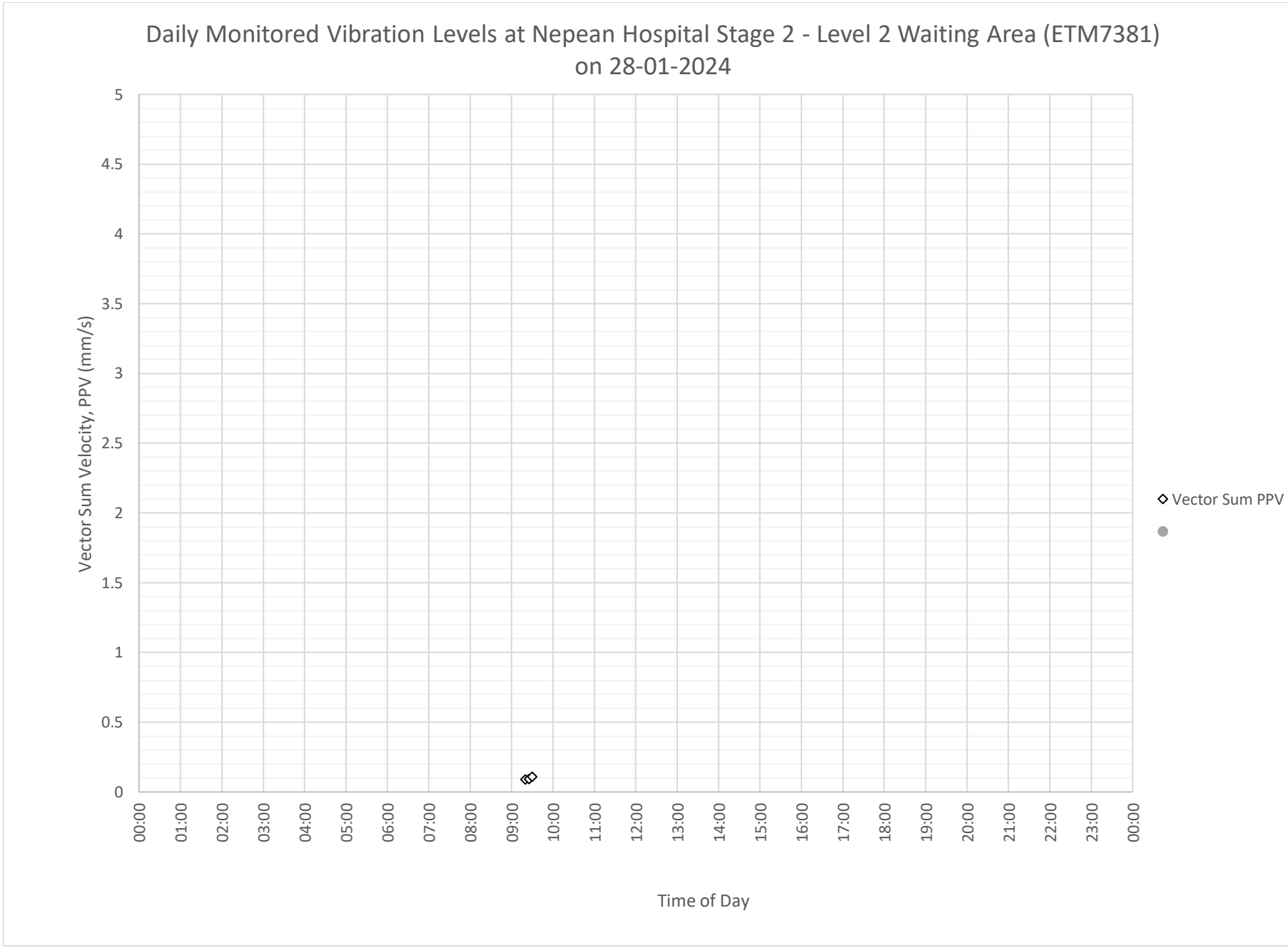
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 28-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
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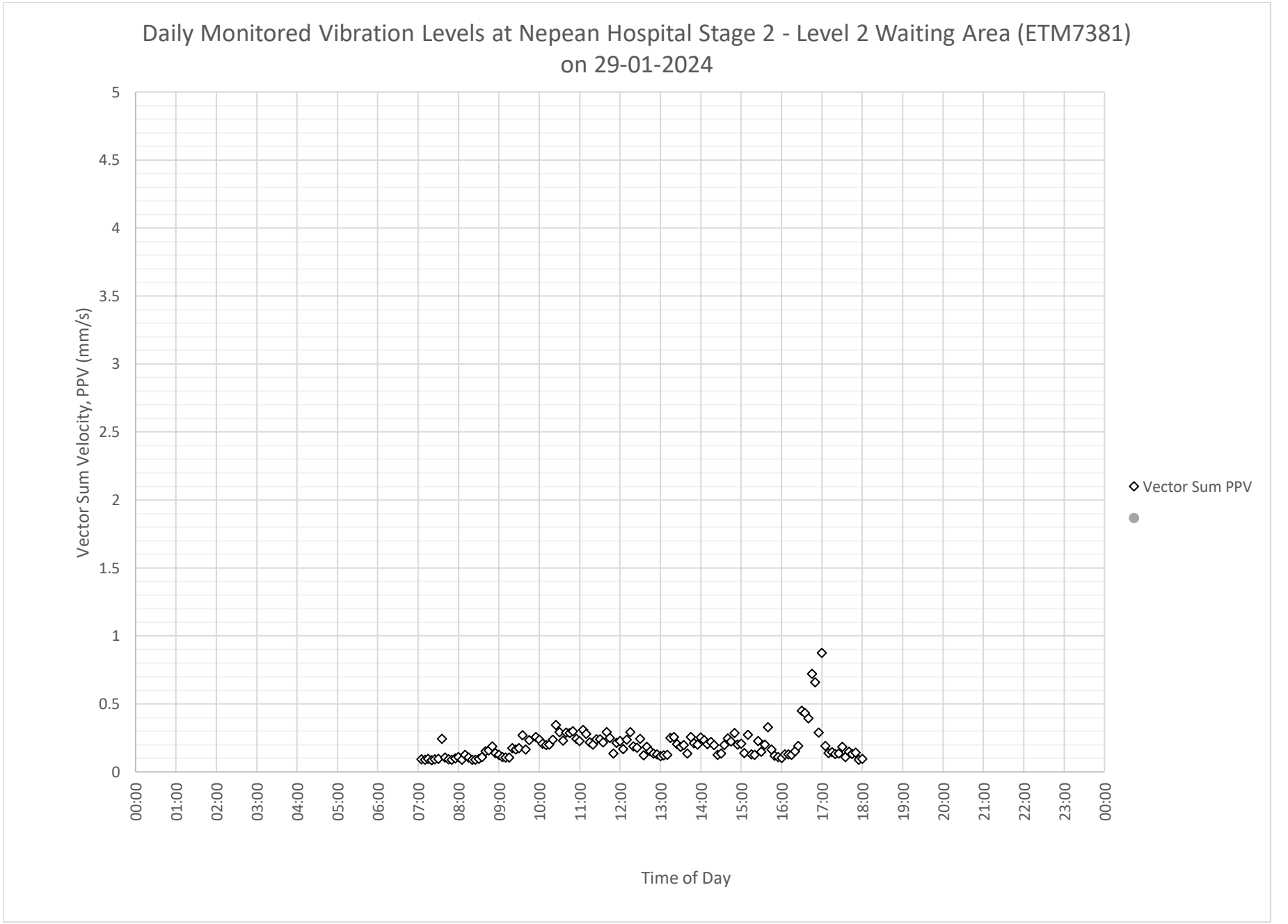
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 29-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
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01:00
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23:00
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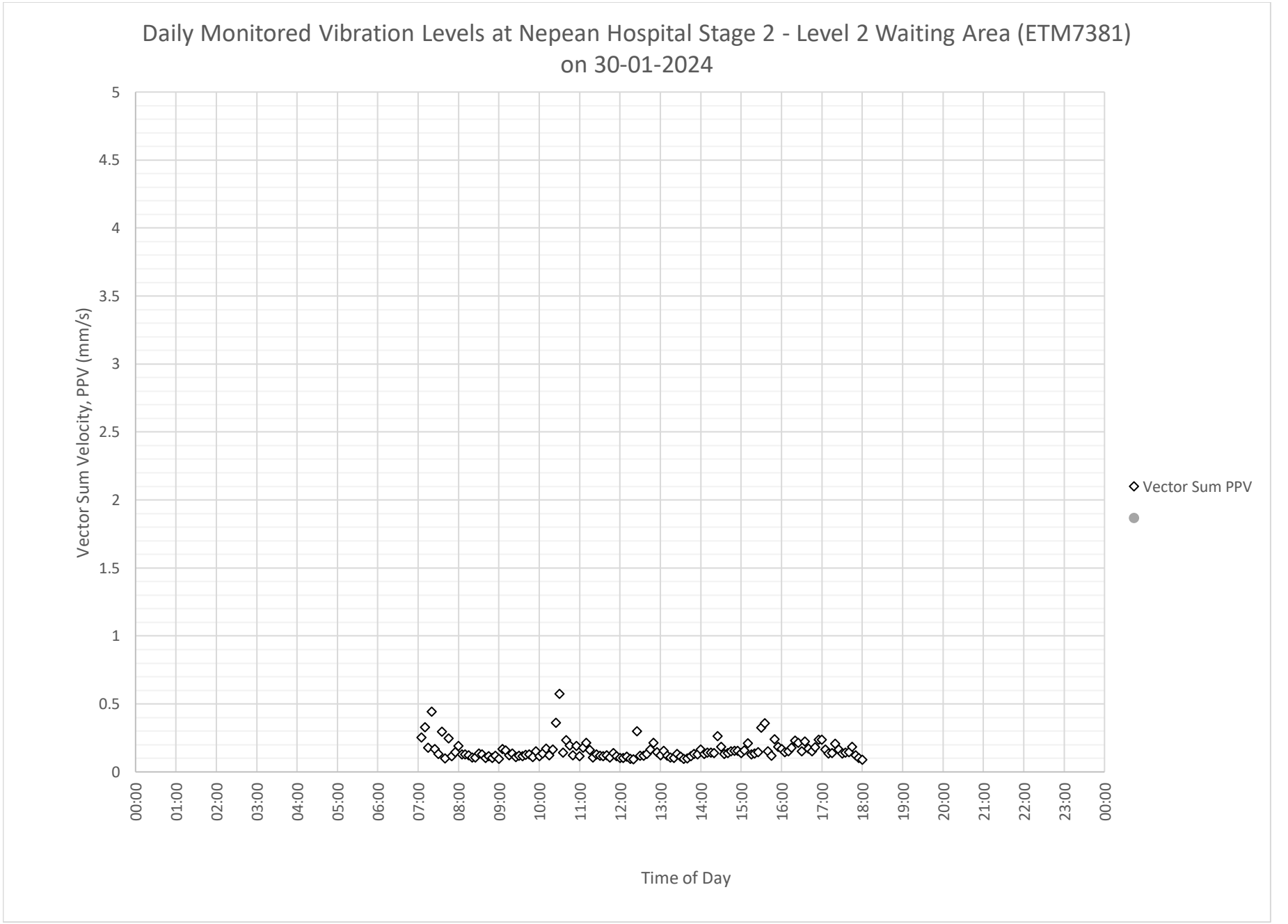
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 30-01-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
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23:00
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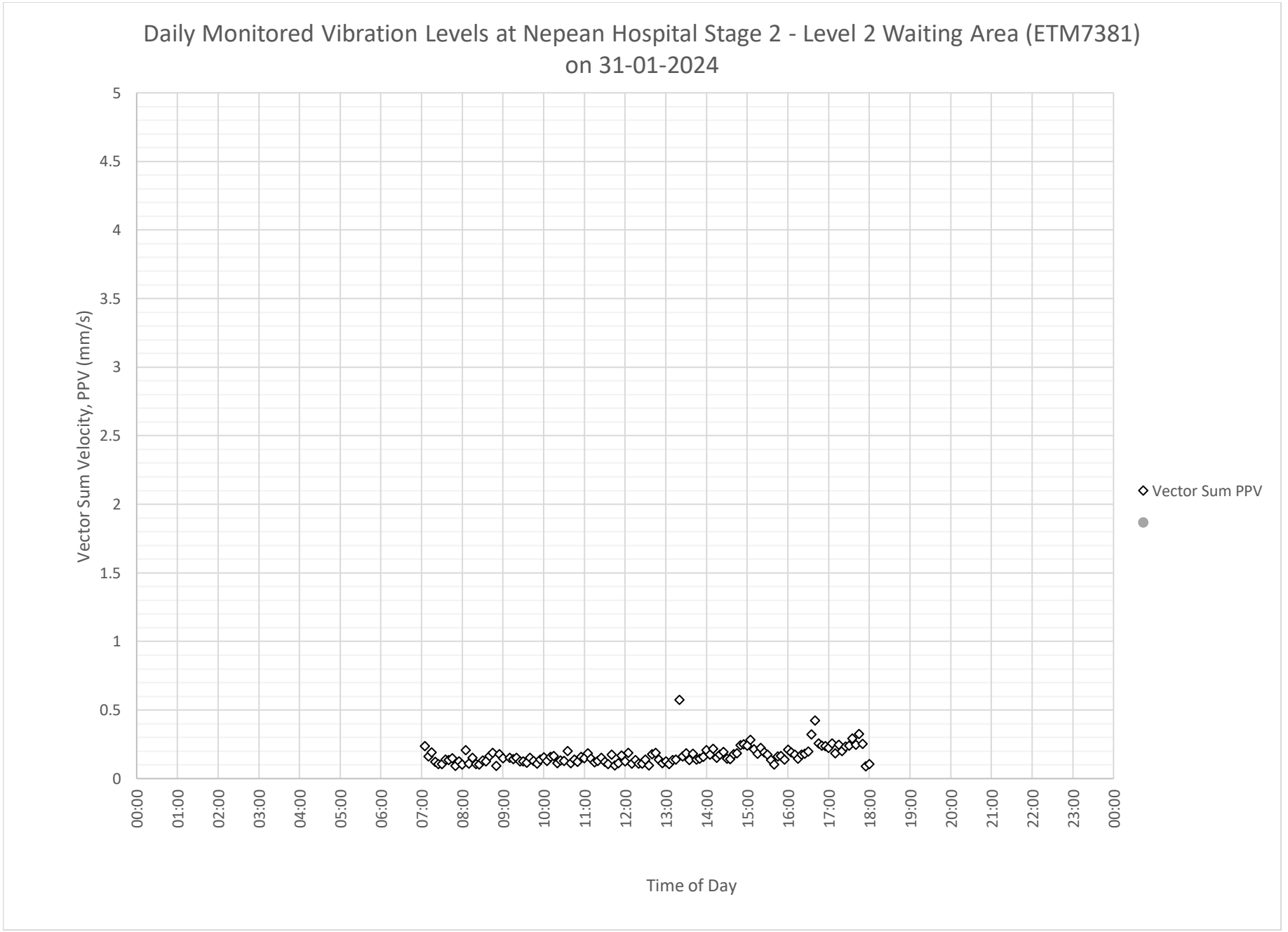
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 31-01-2024
Vector Sum Velocity, PPV (mm/s)
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4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
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22:00
23:00
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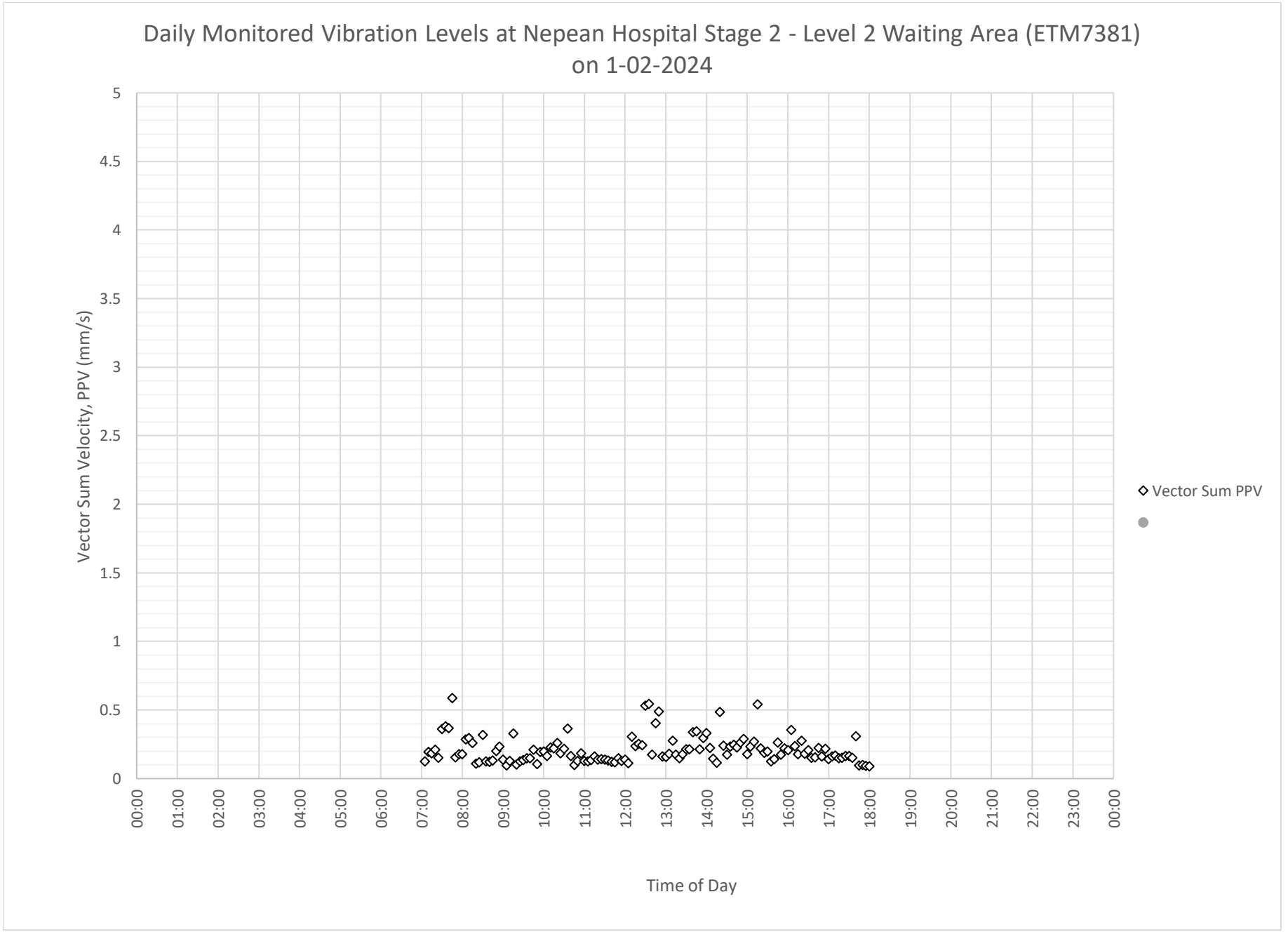
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 1-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
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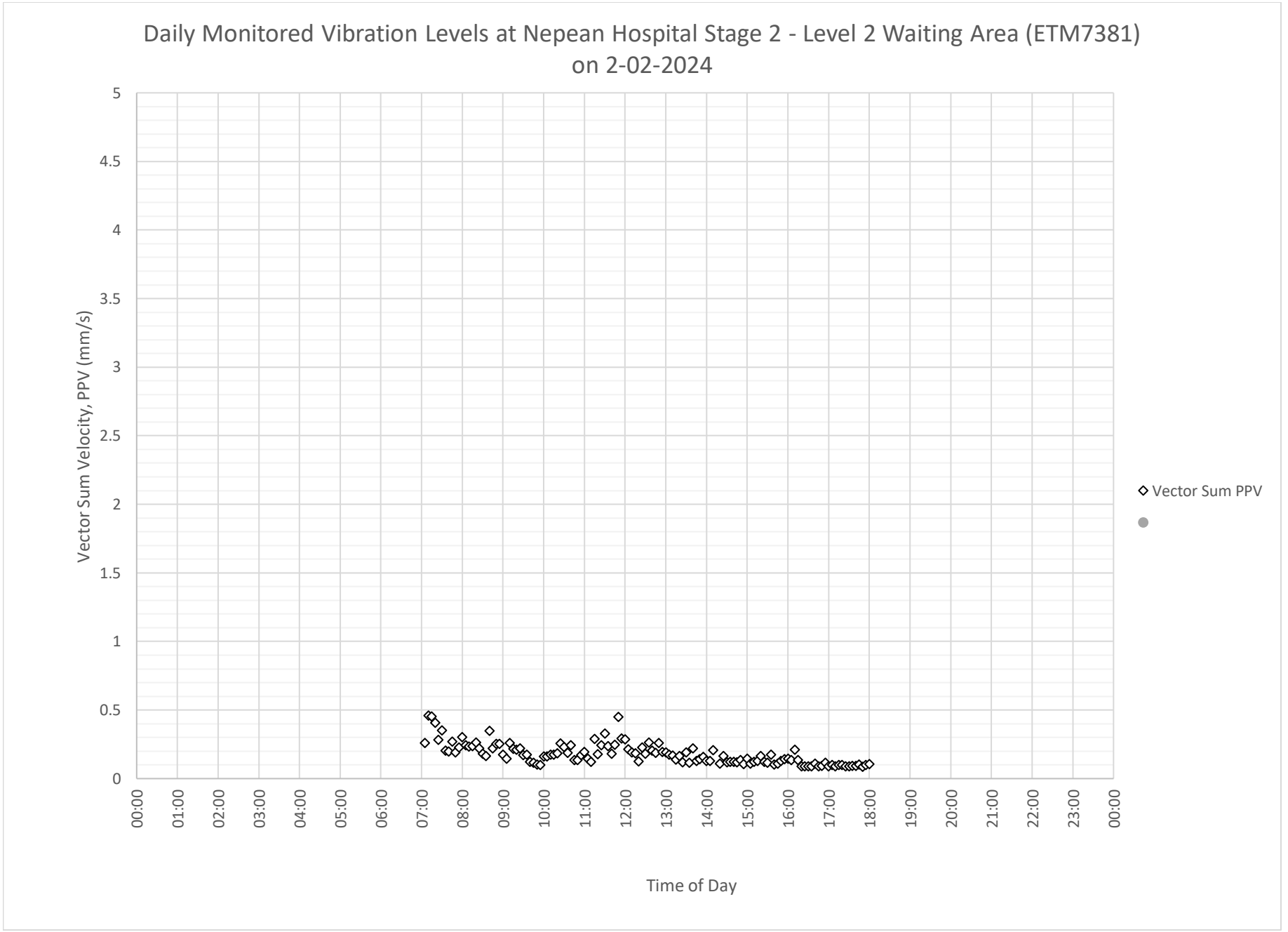
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 2-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
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03:00
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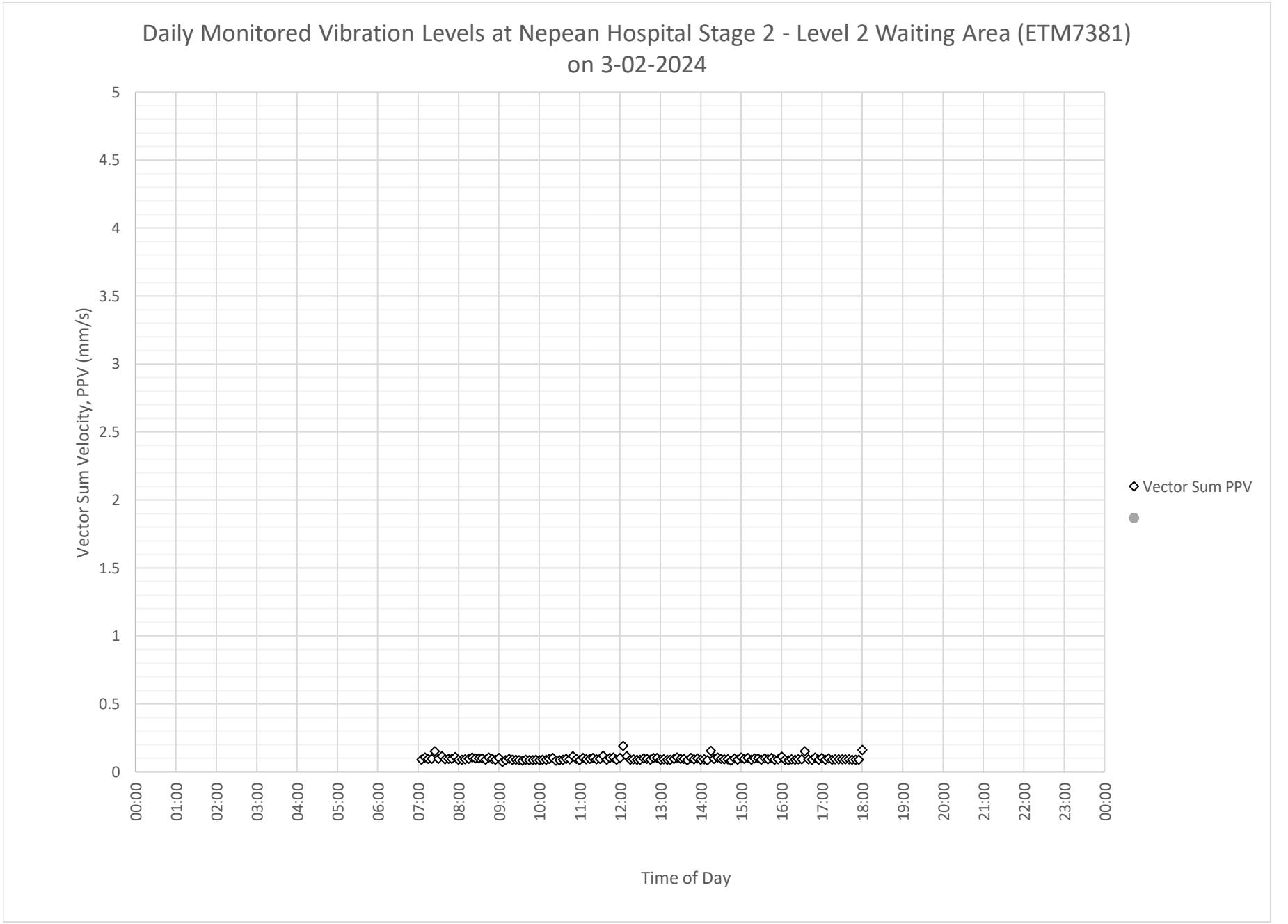
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 3-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
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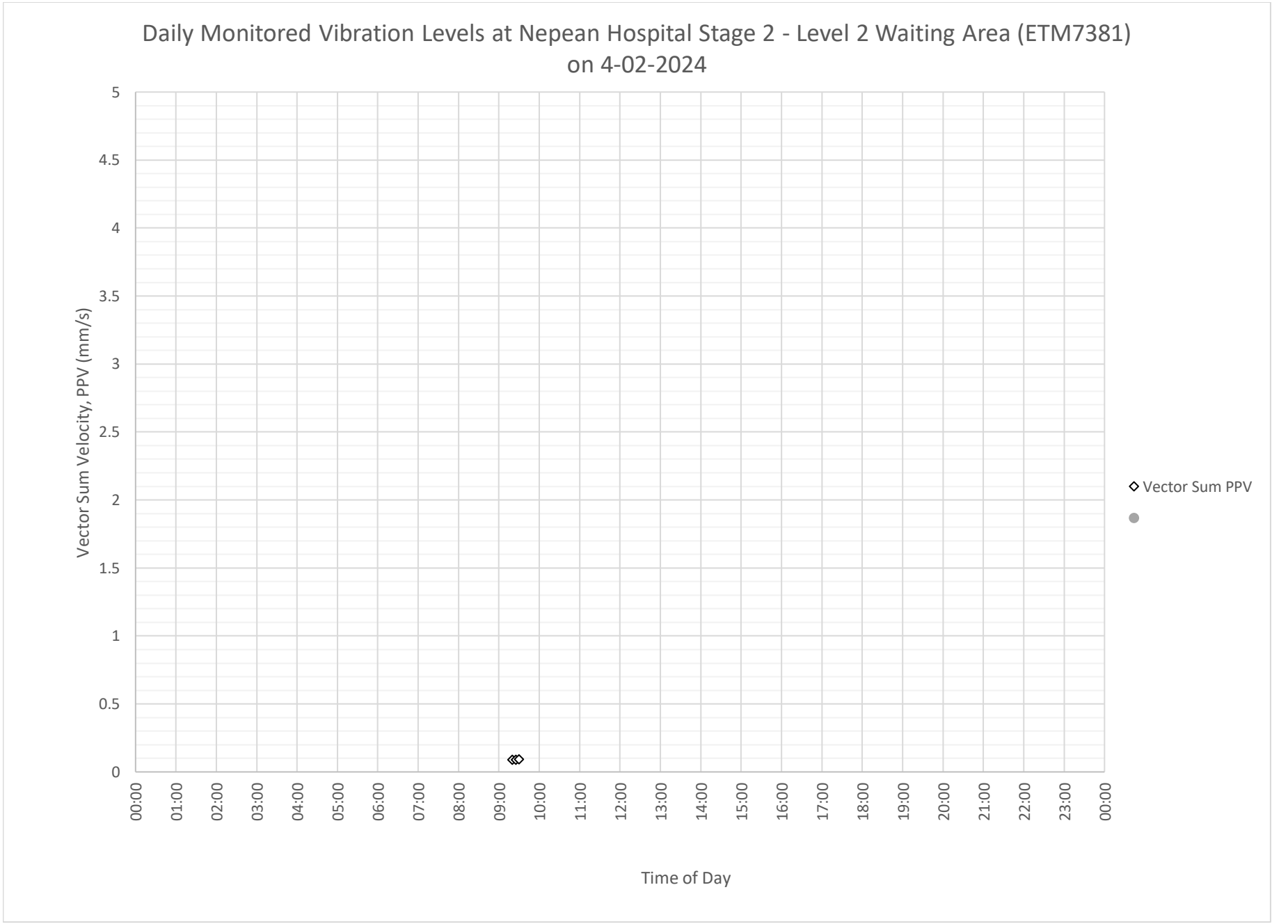
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 4-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
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21:00
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23:00
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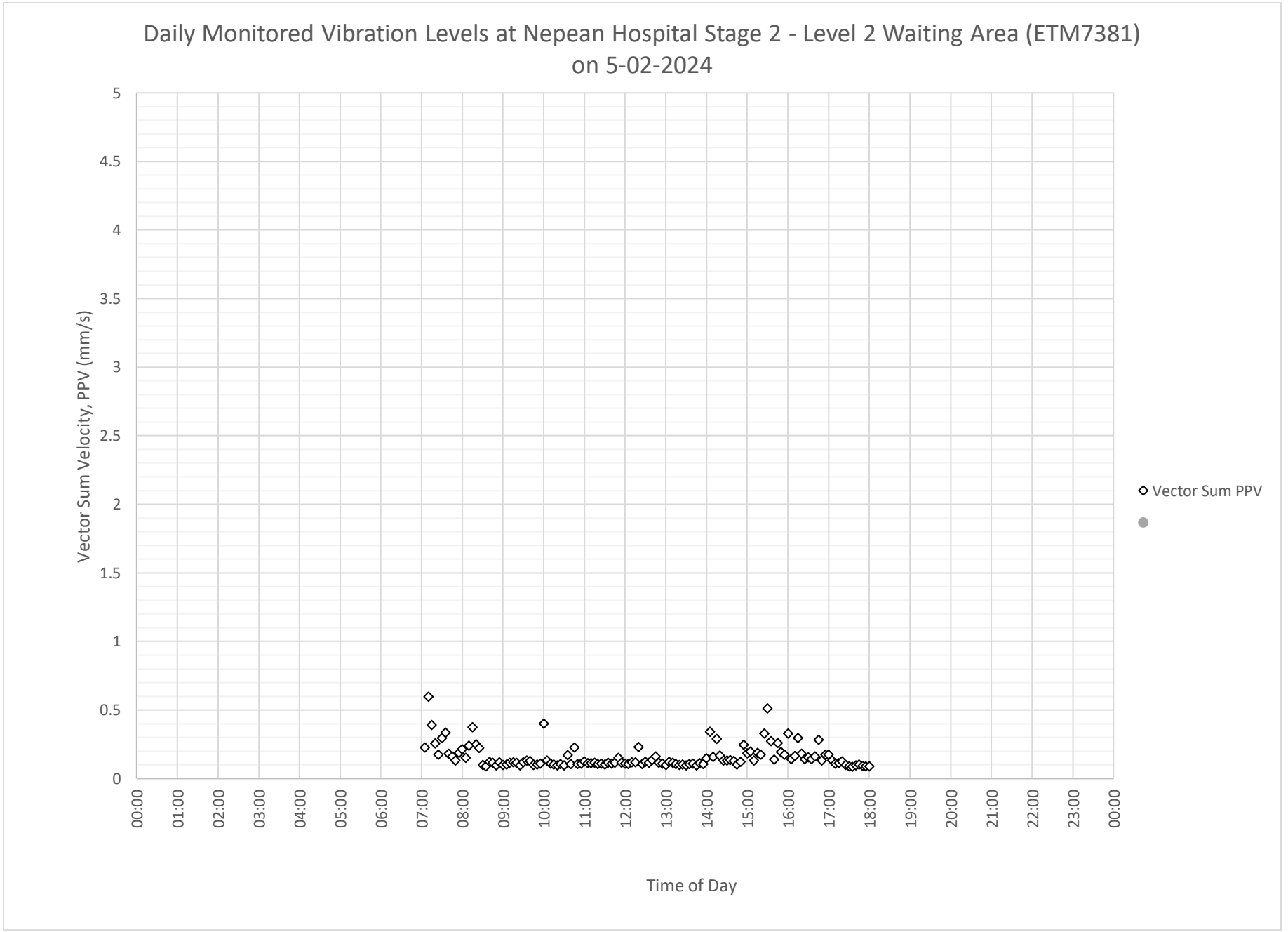
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 5-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
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01:00
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20:00
21:00
22:00
23:00
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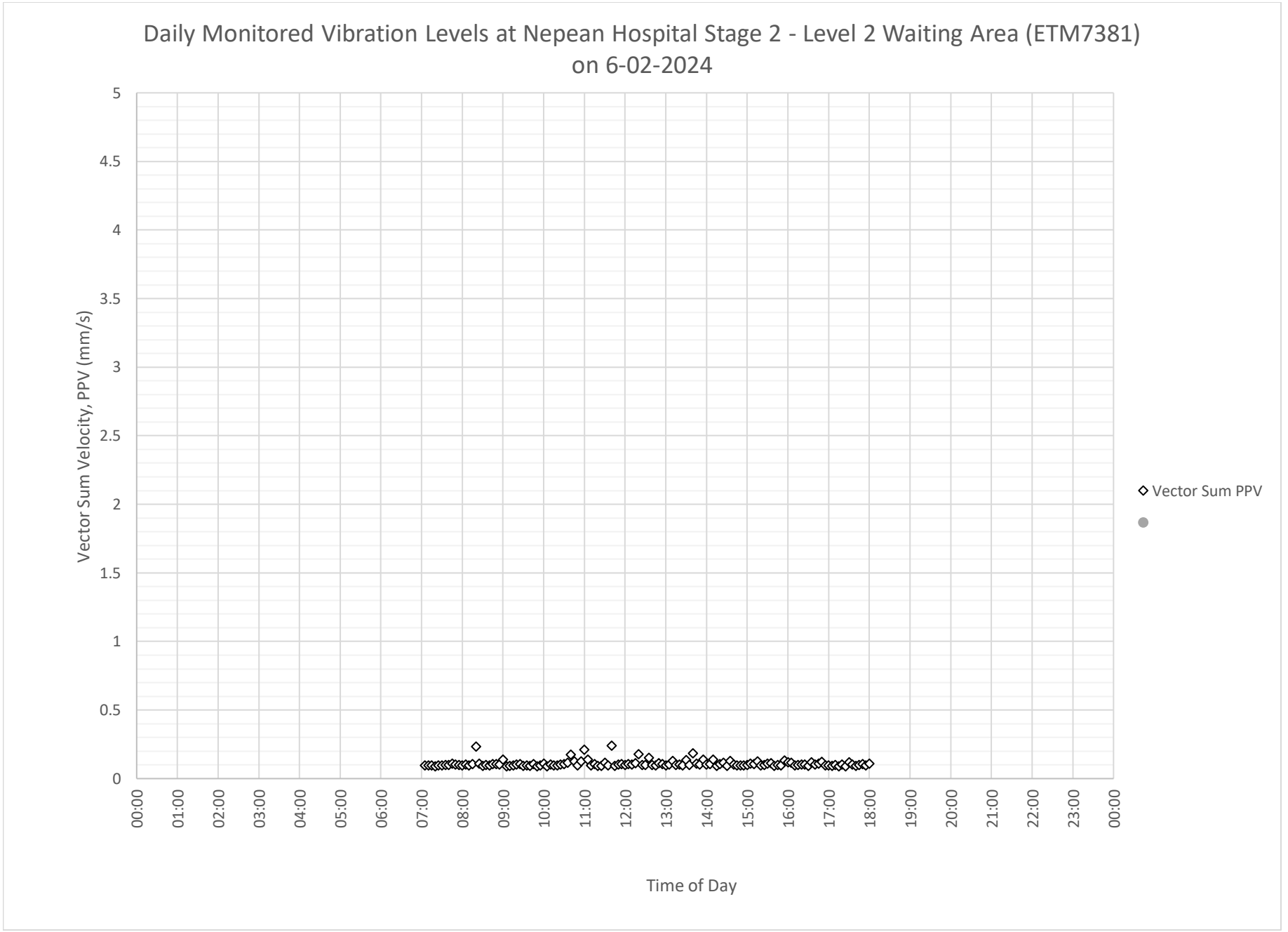
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 6-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
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01:00
02:00
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23:00
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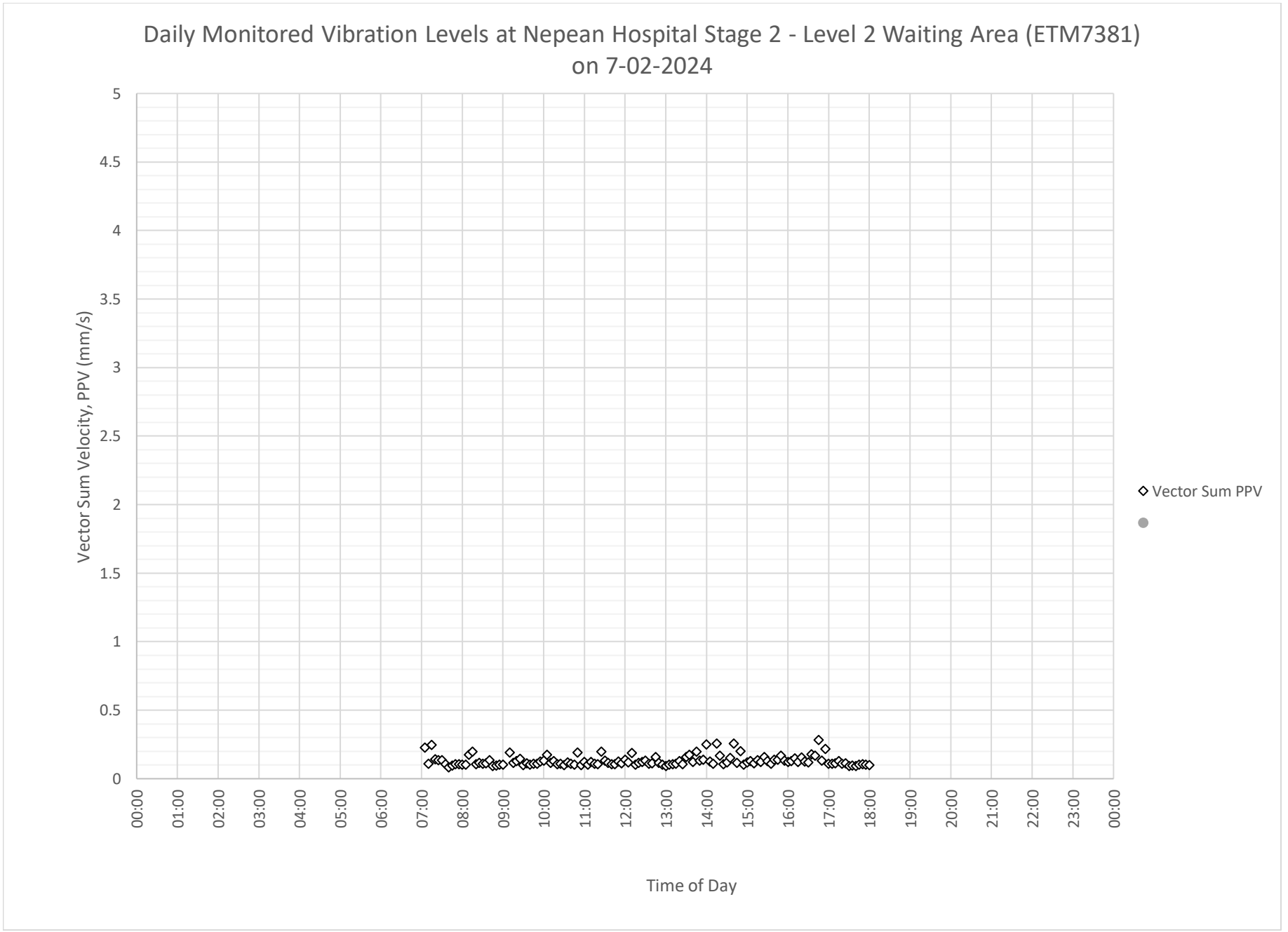
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 7-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
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16:00
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22:00
23:00
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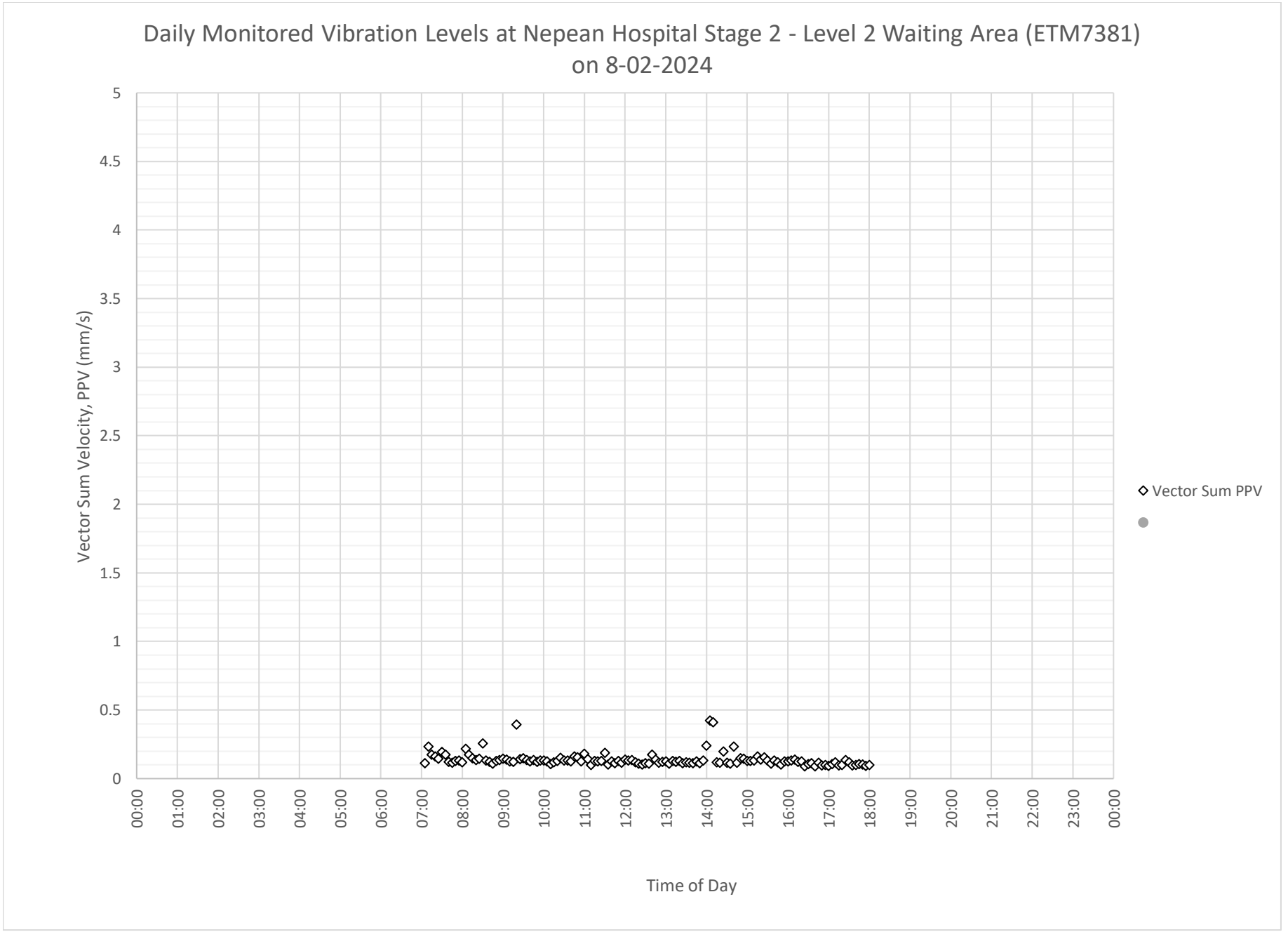
Time of Day
Vector Sum PPV


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 8-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
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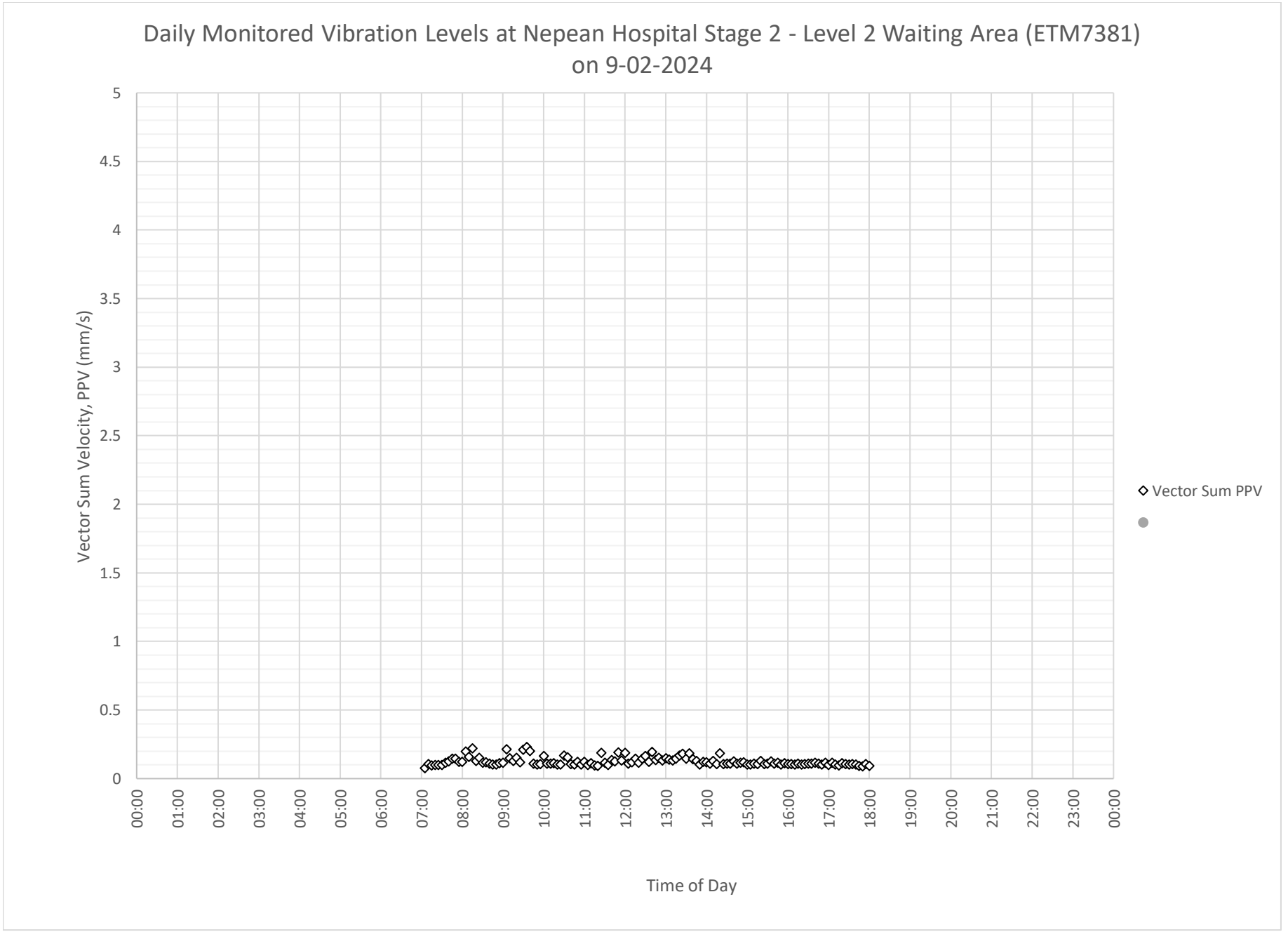
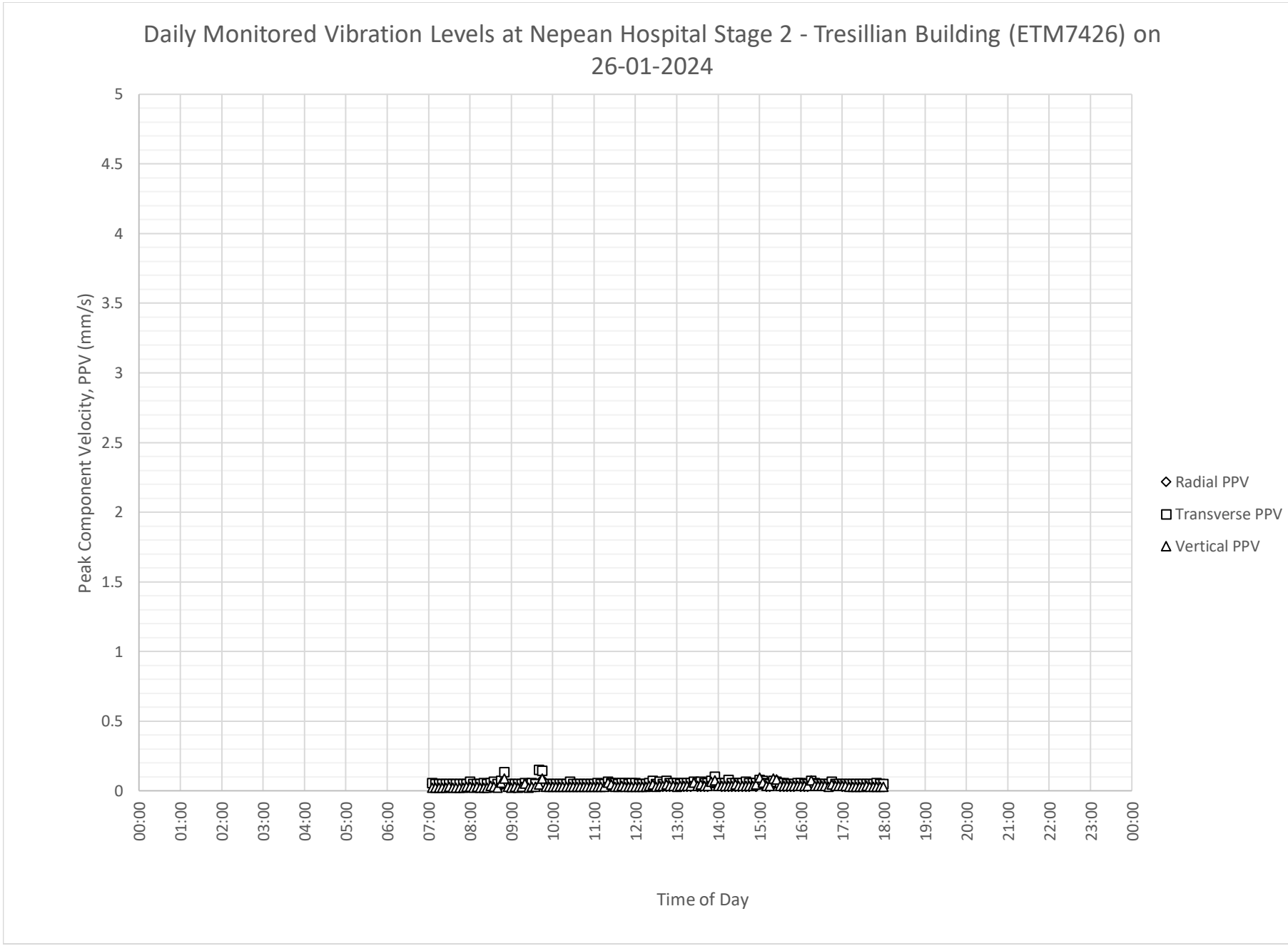
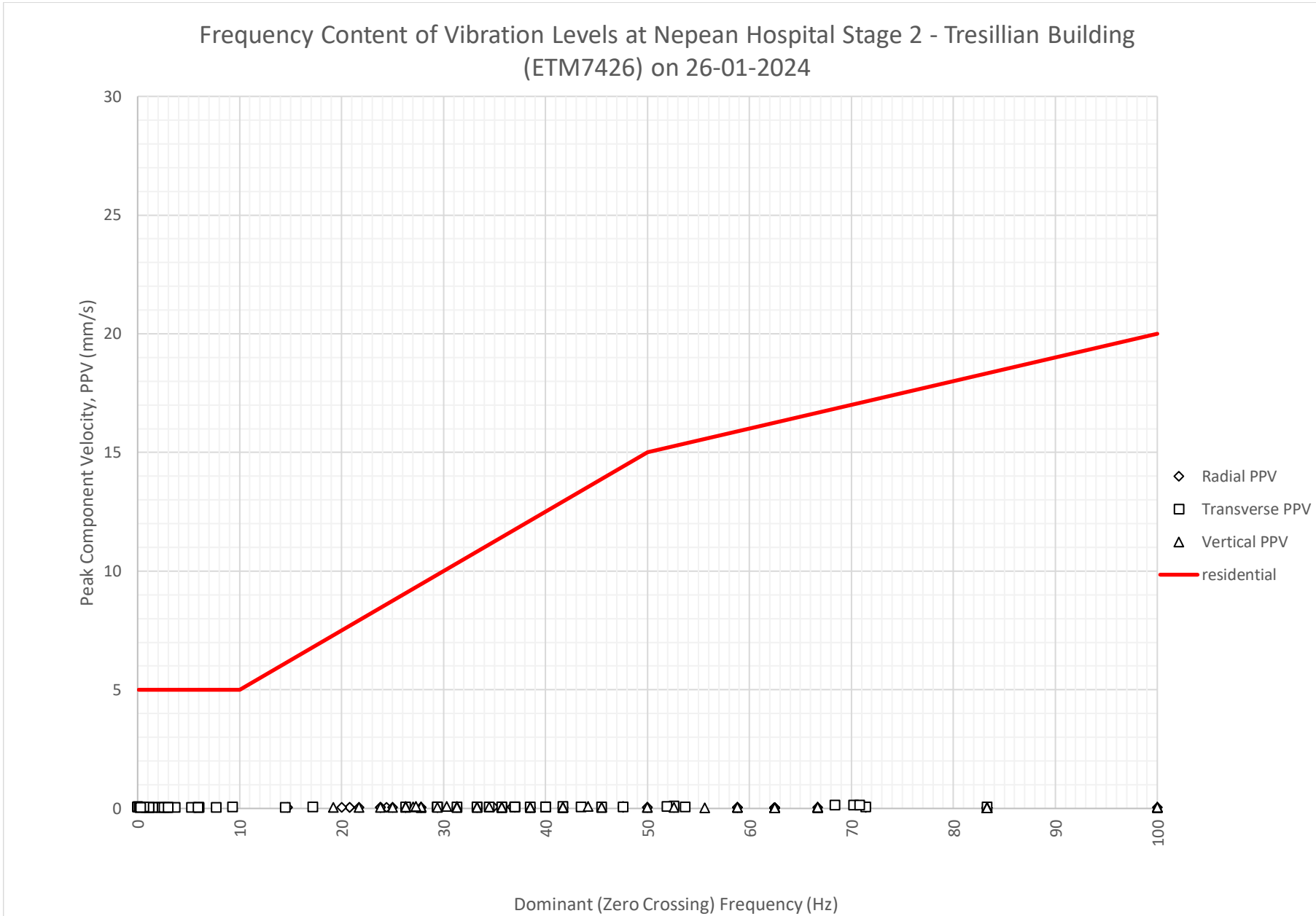
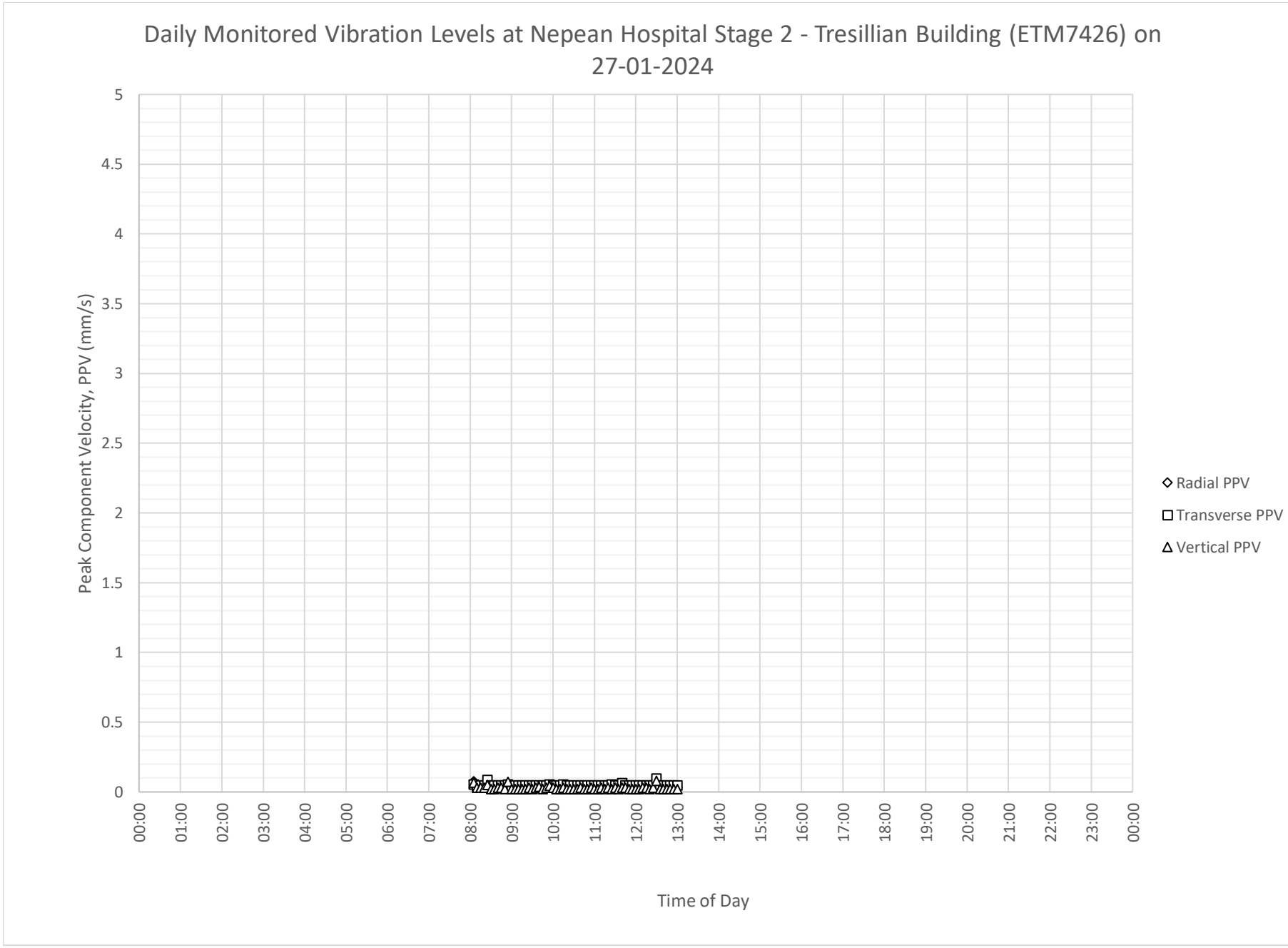
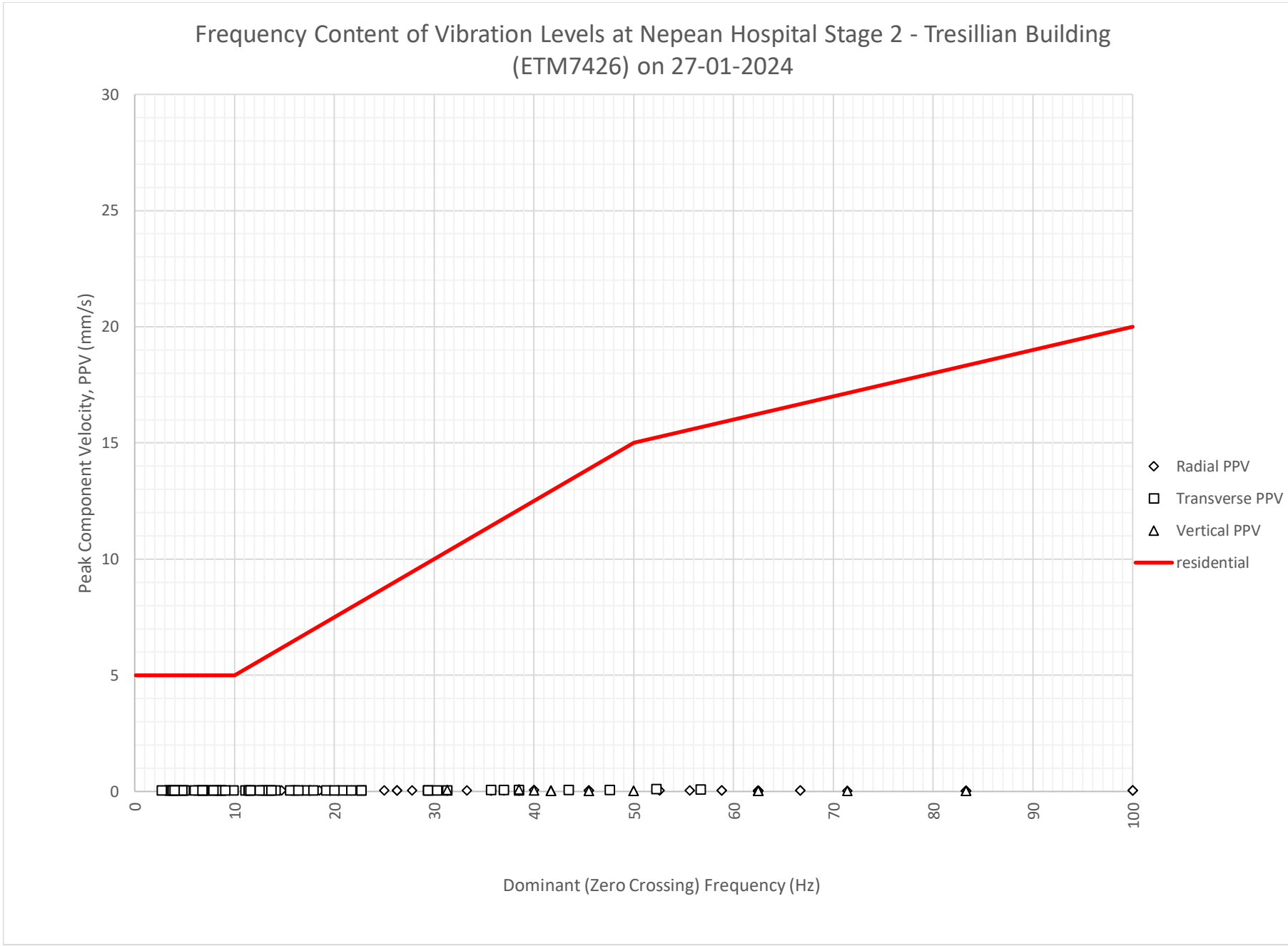
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV

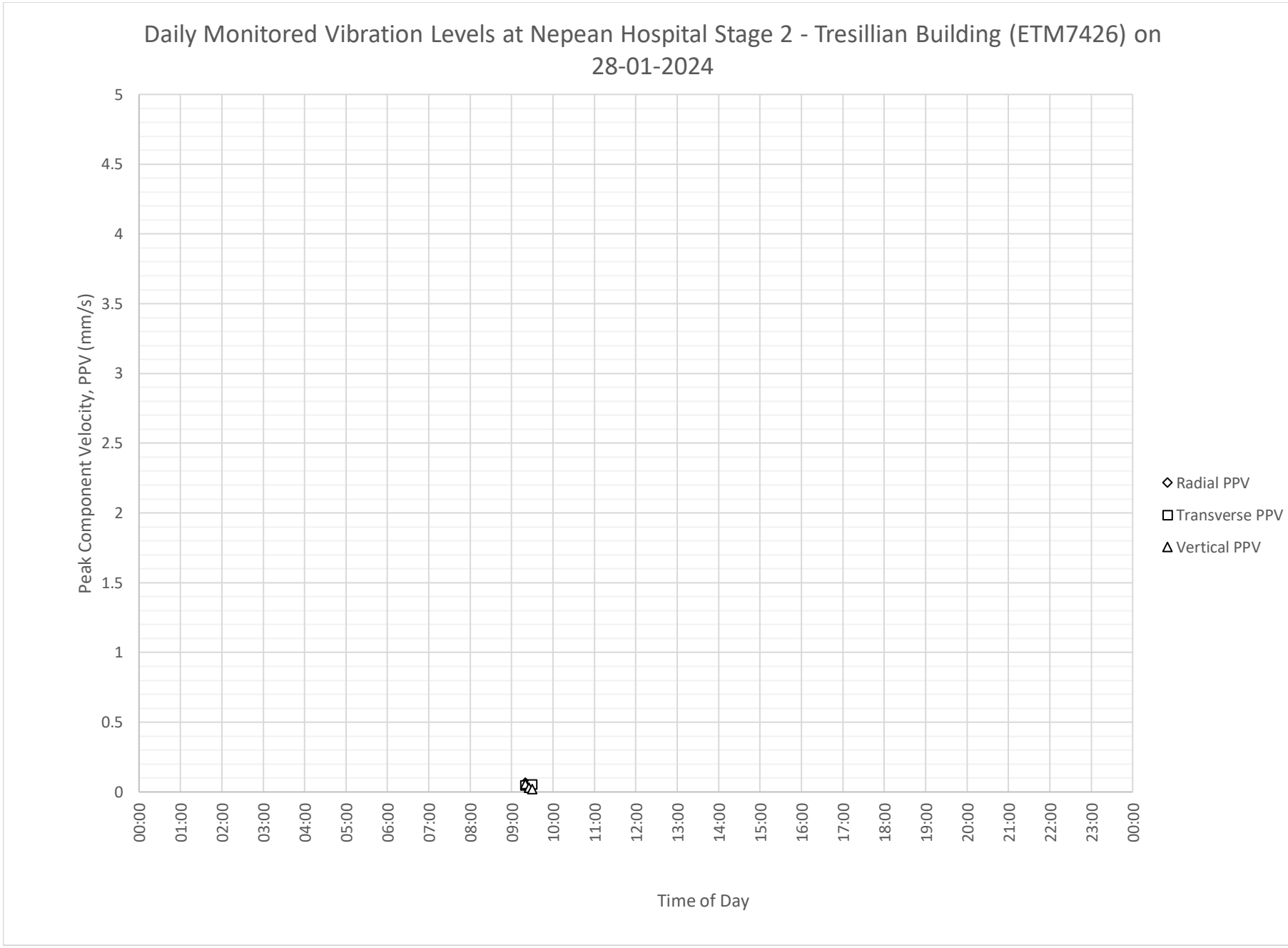

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Level 2 Waiting Area (ETM7381) on 9-02-2024
Vector Sum Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Vector Sum PPV

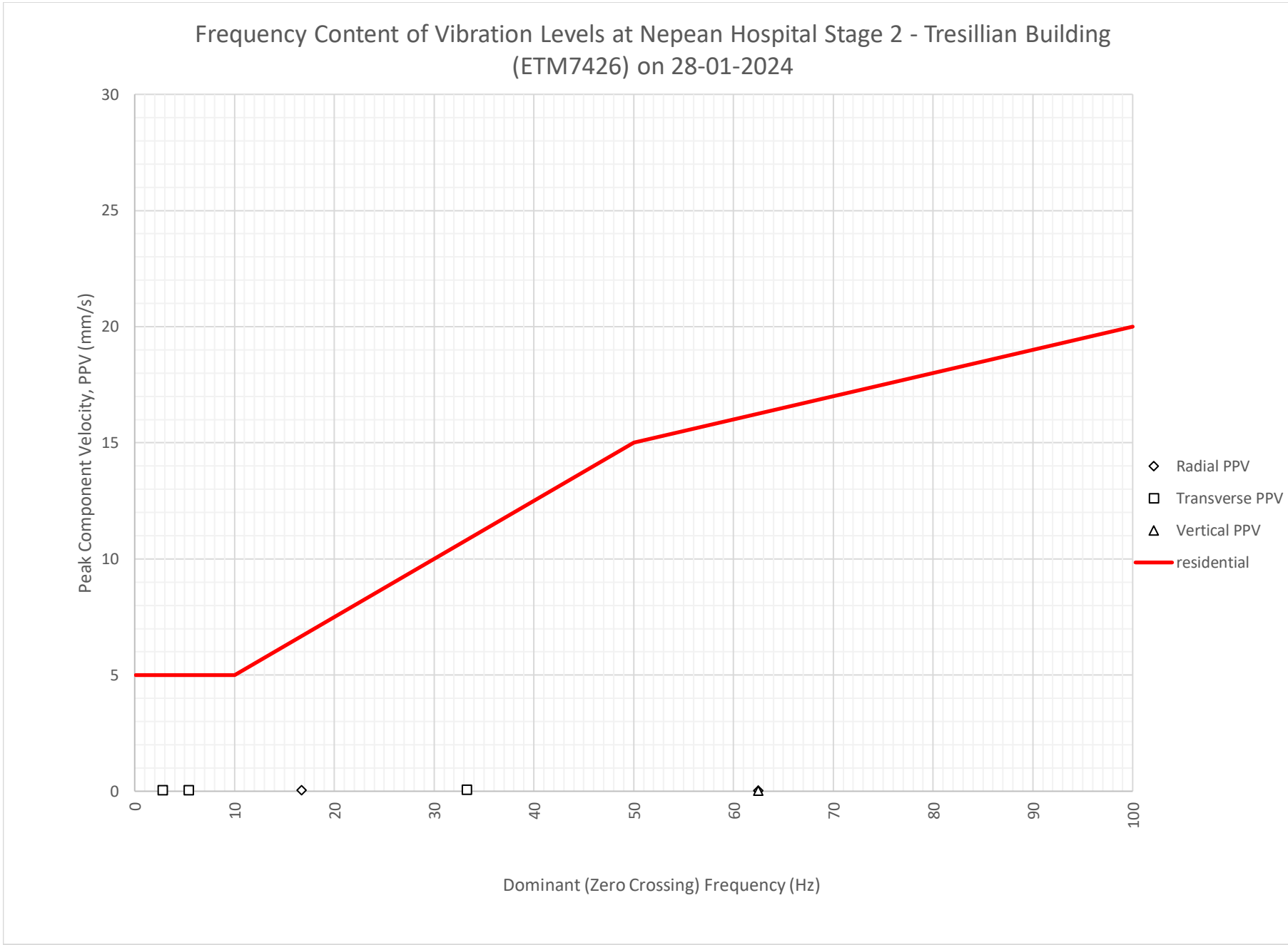

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 26-01-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

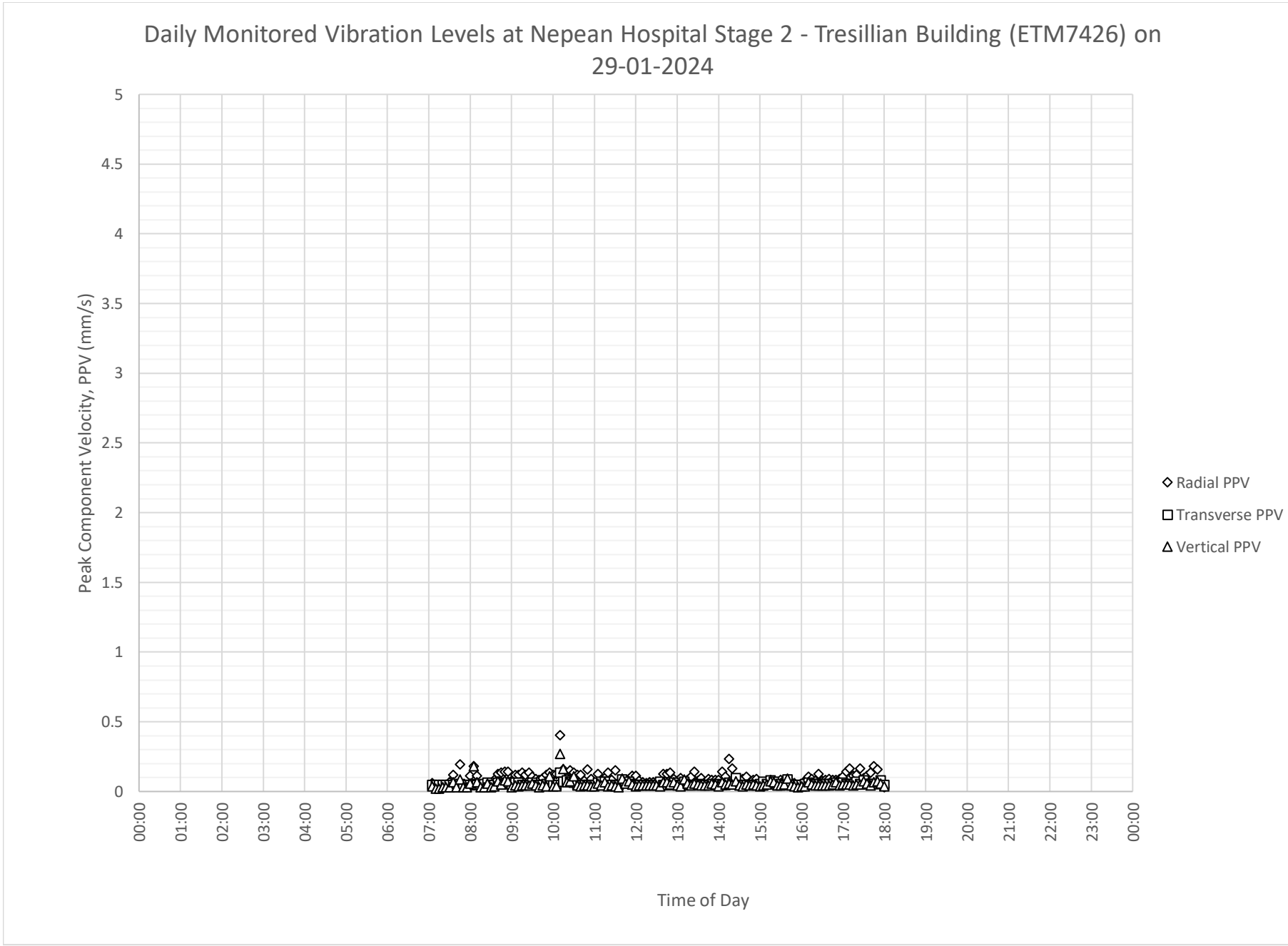

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 26-01-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

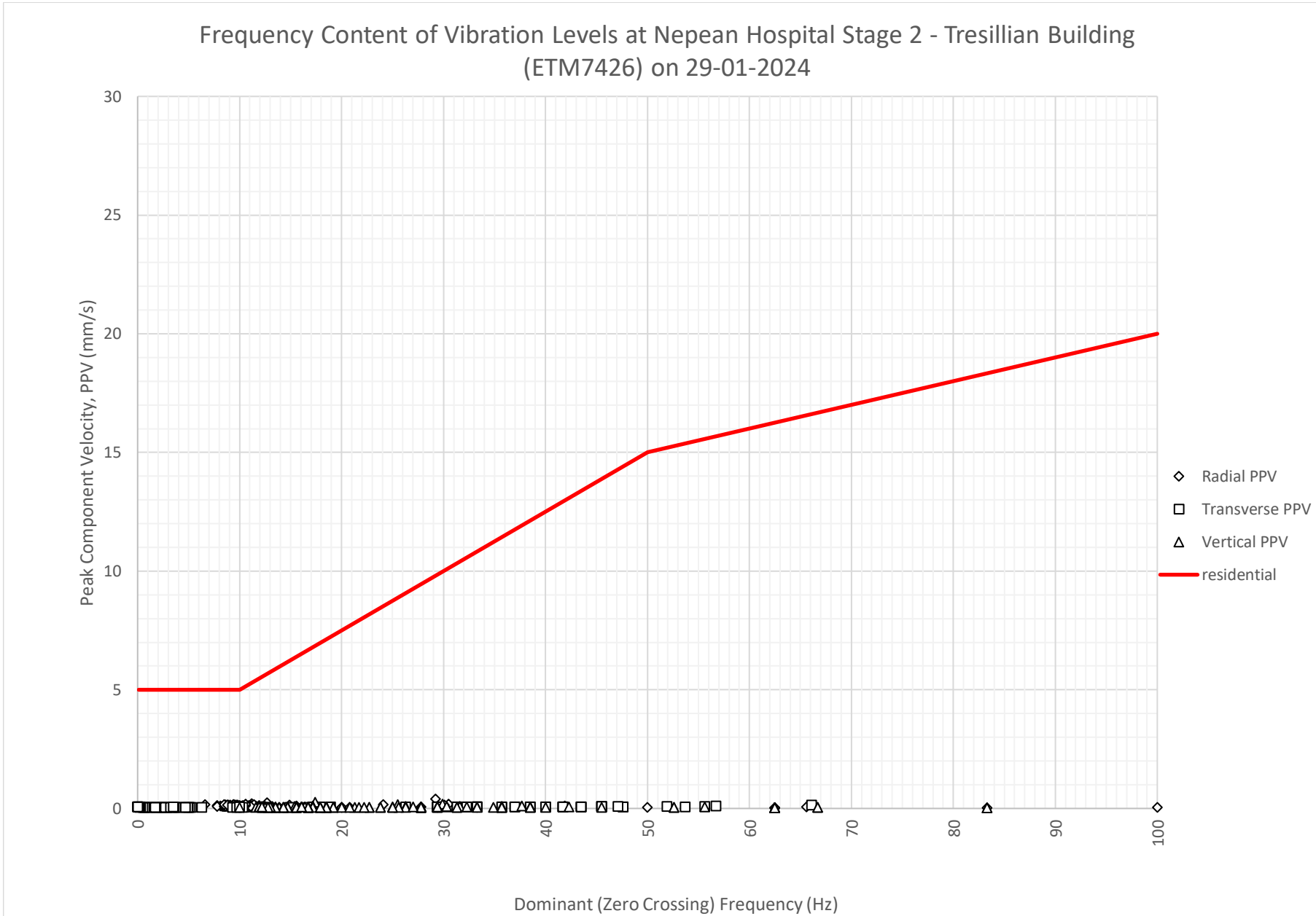

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 27-01-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

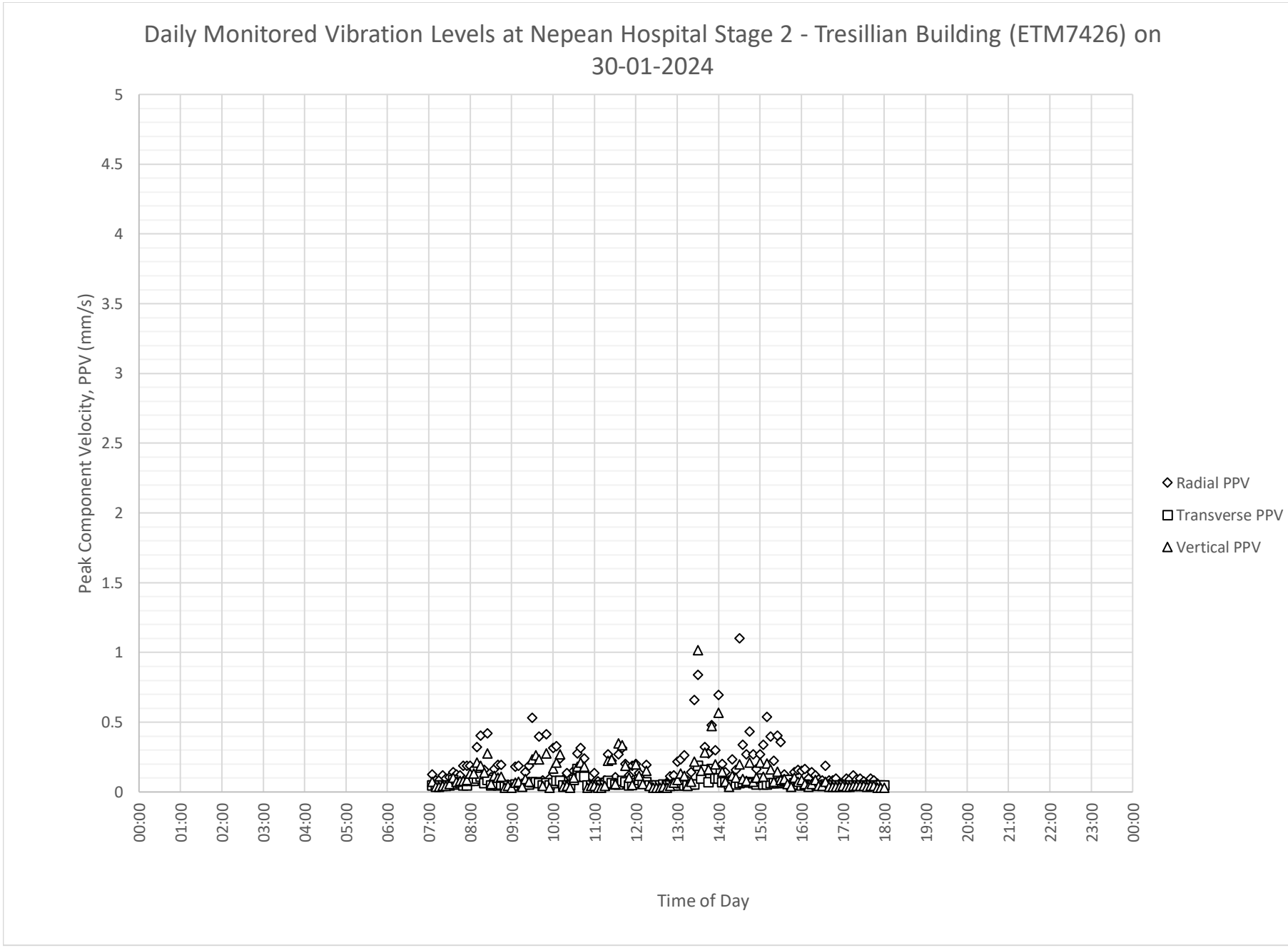

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 27-01-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

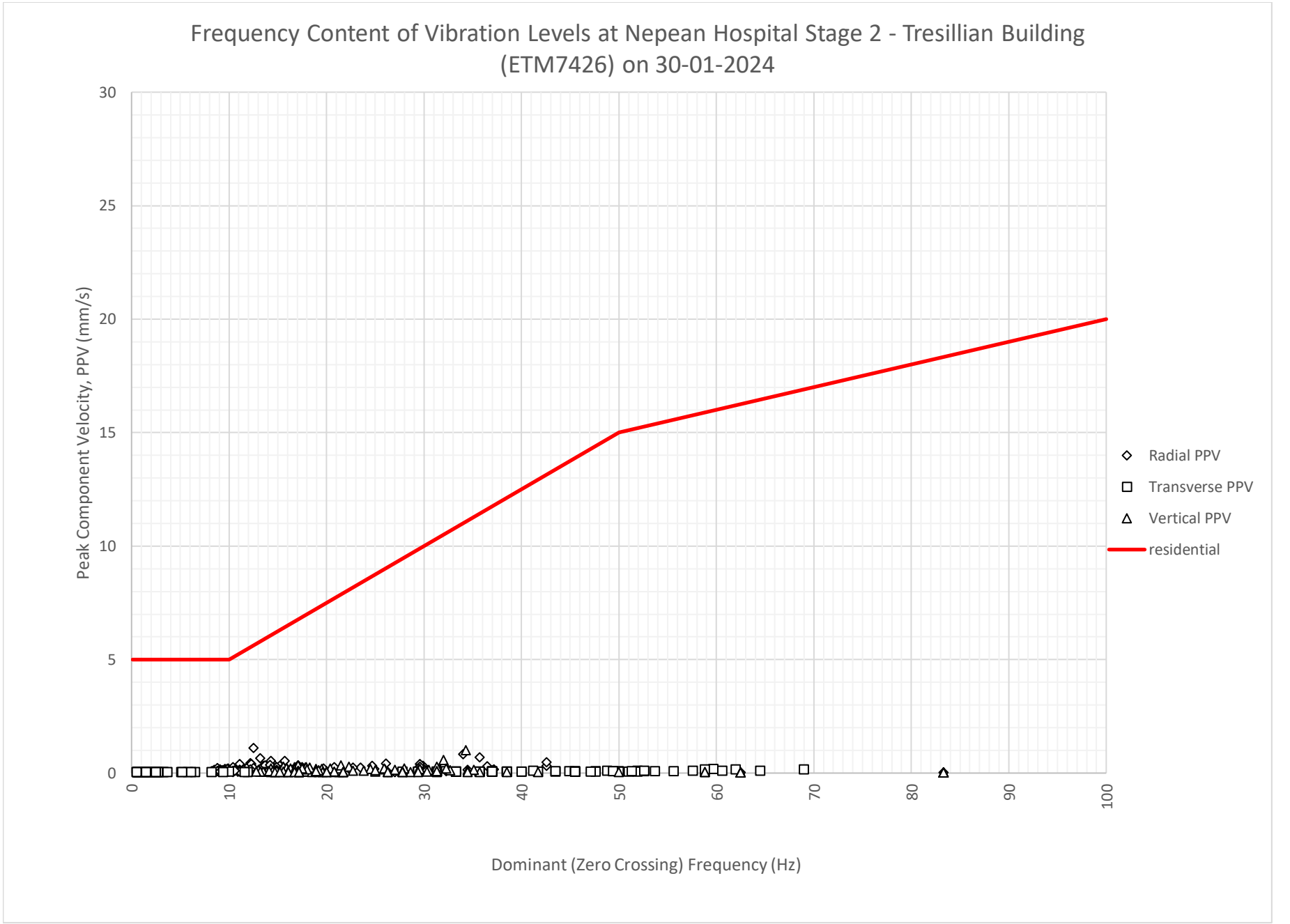

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 28-01-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

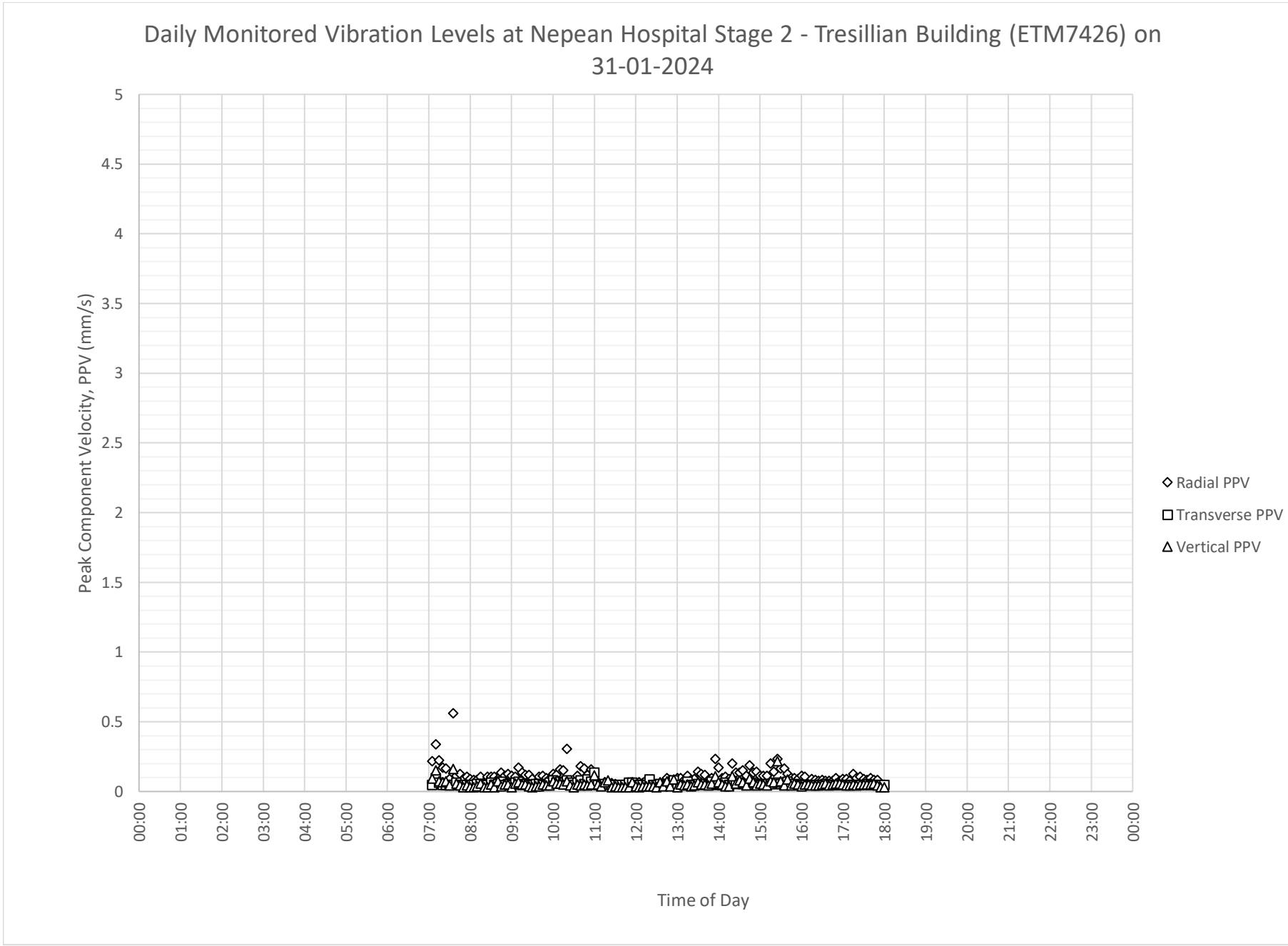

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 28-01-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

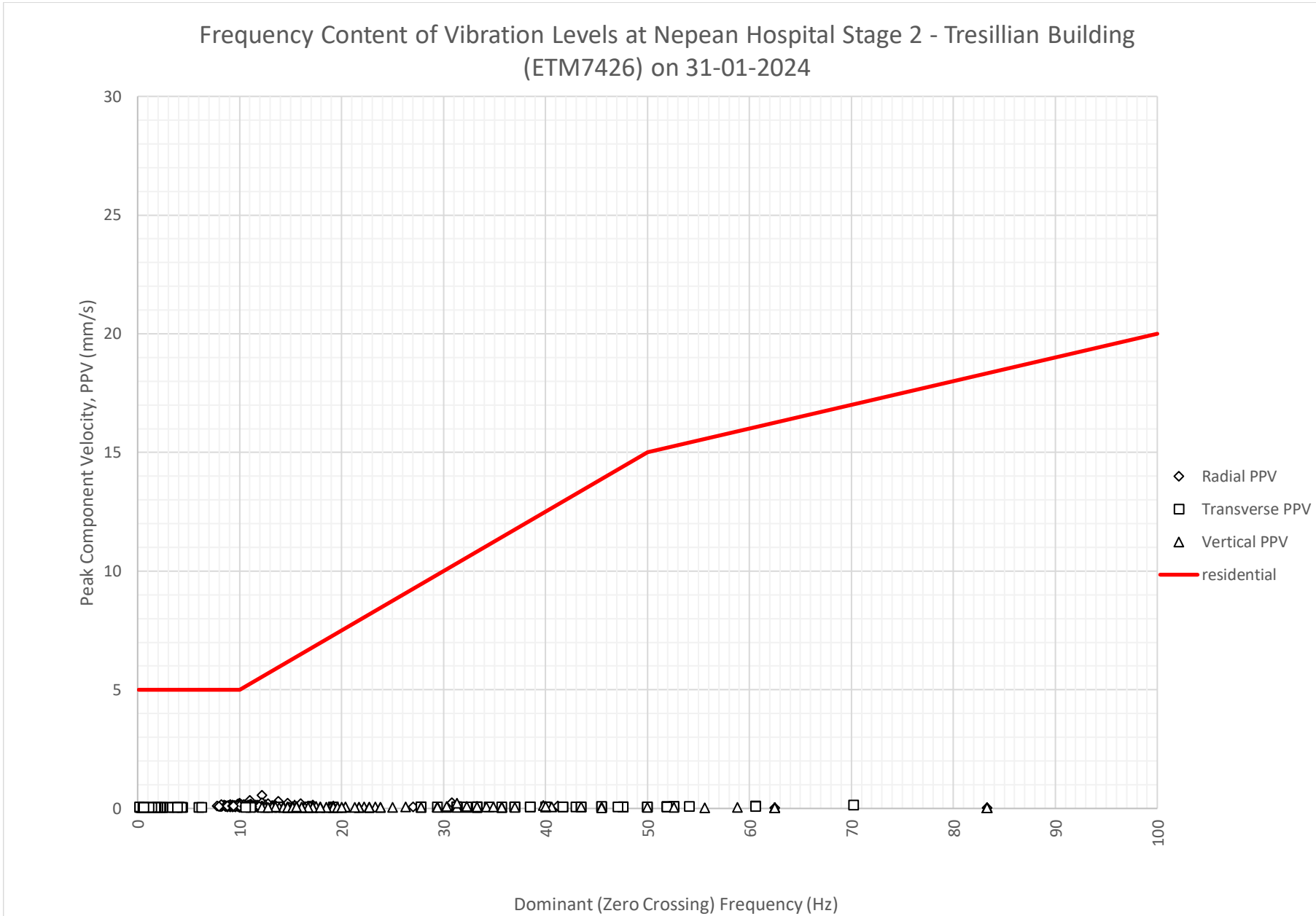

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 29-01-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

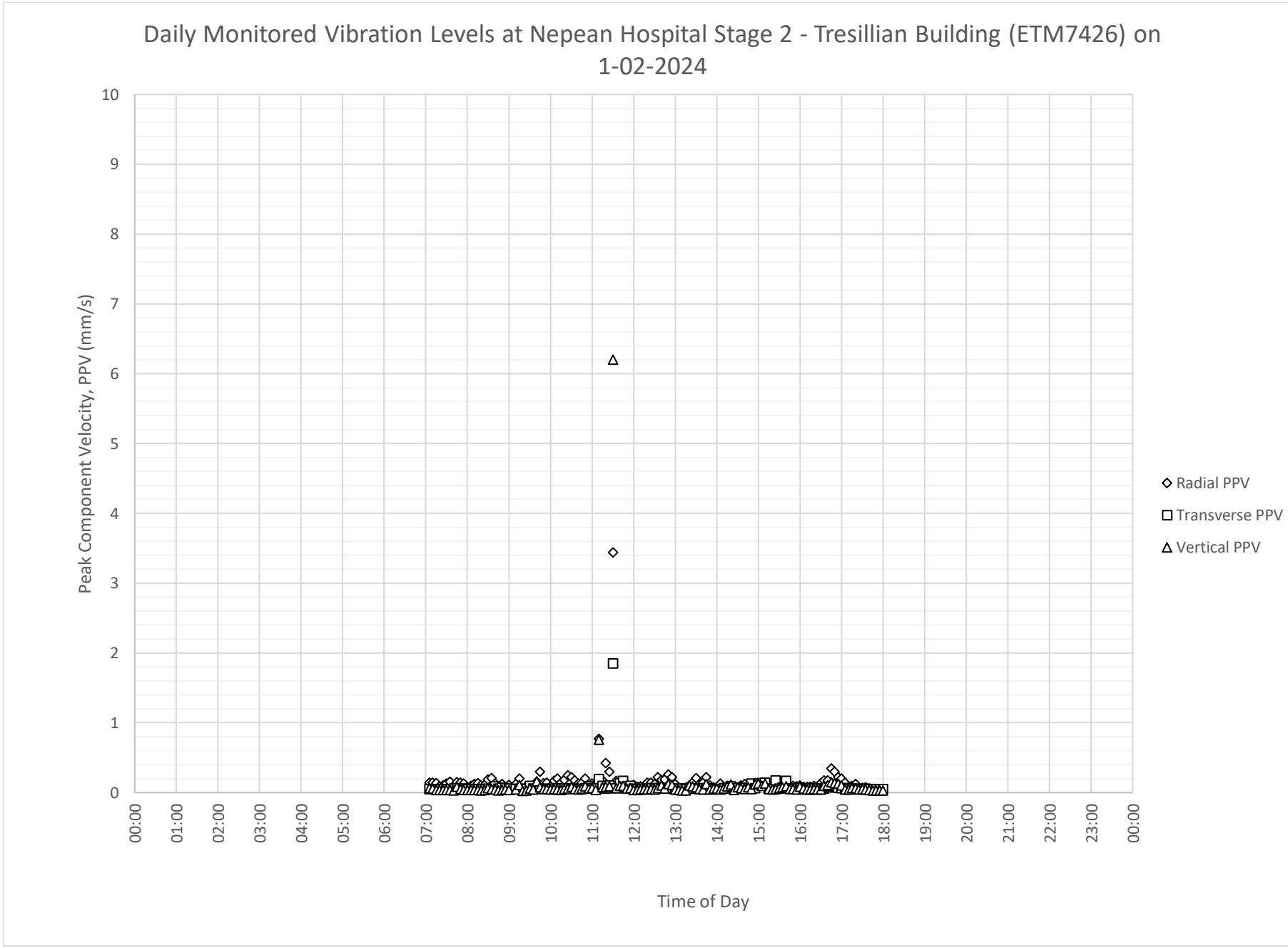

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 29-01-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

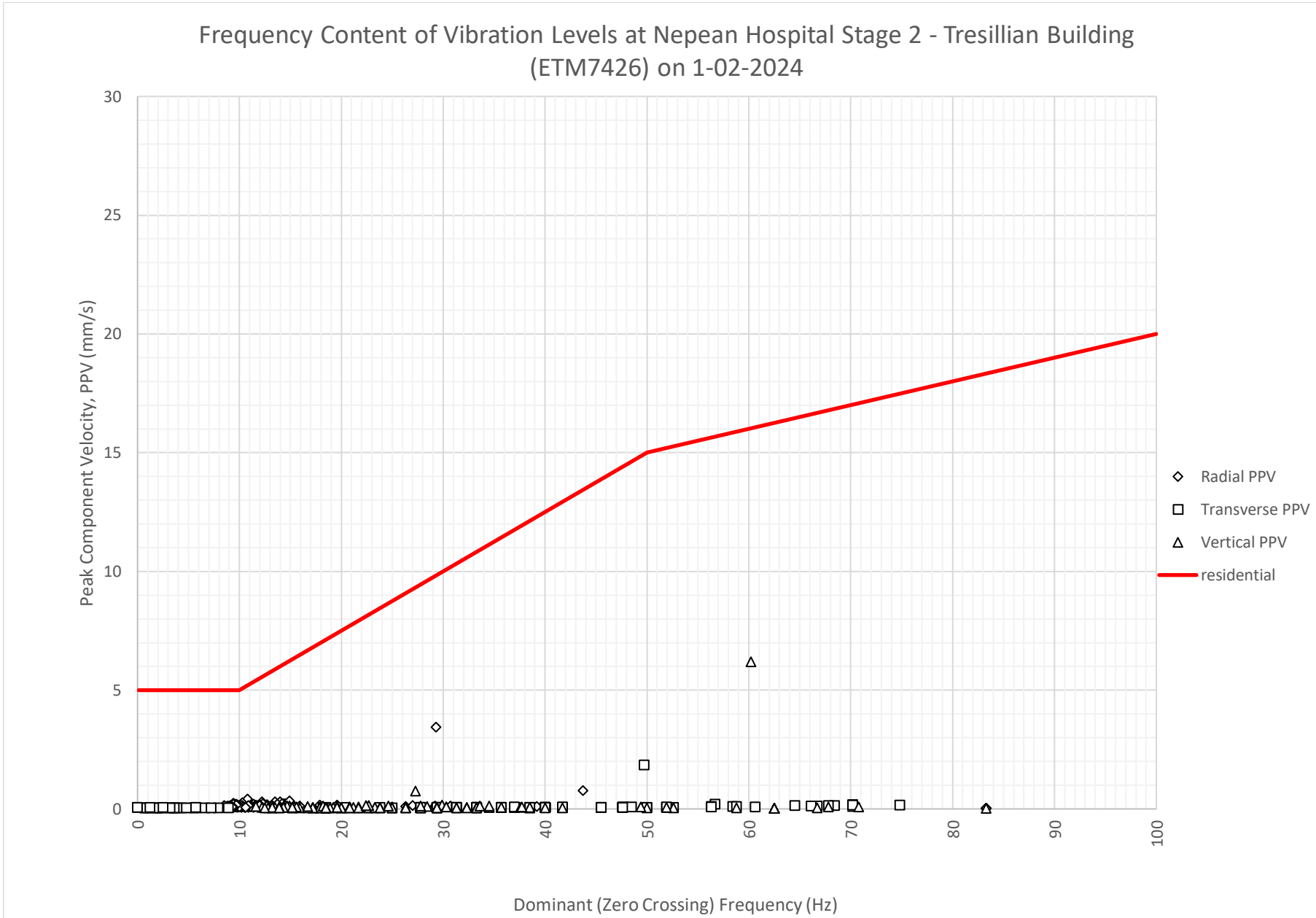

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 30-01-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

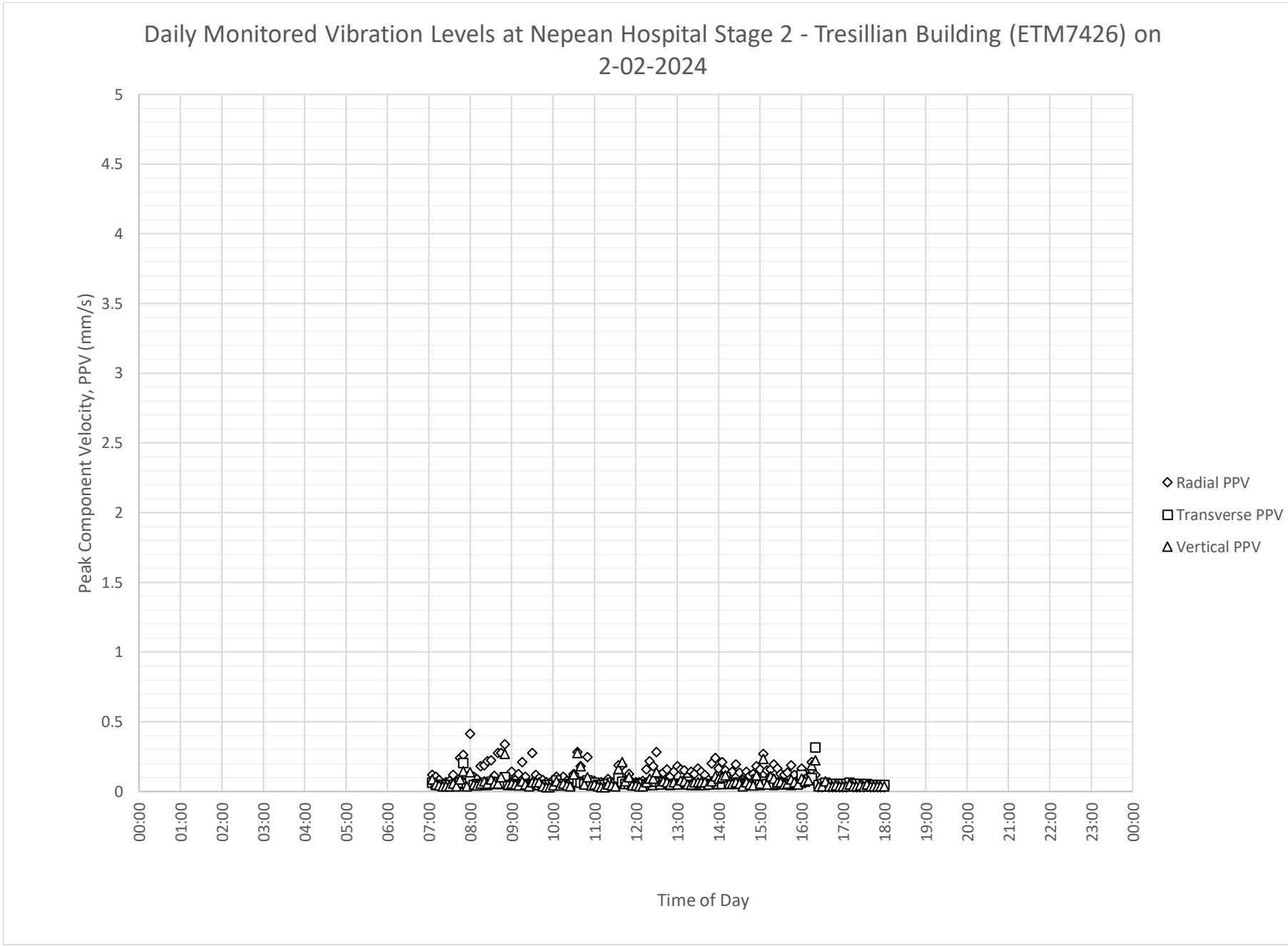

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 30-01-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

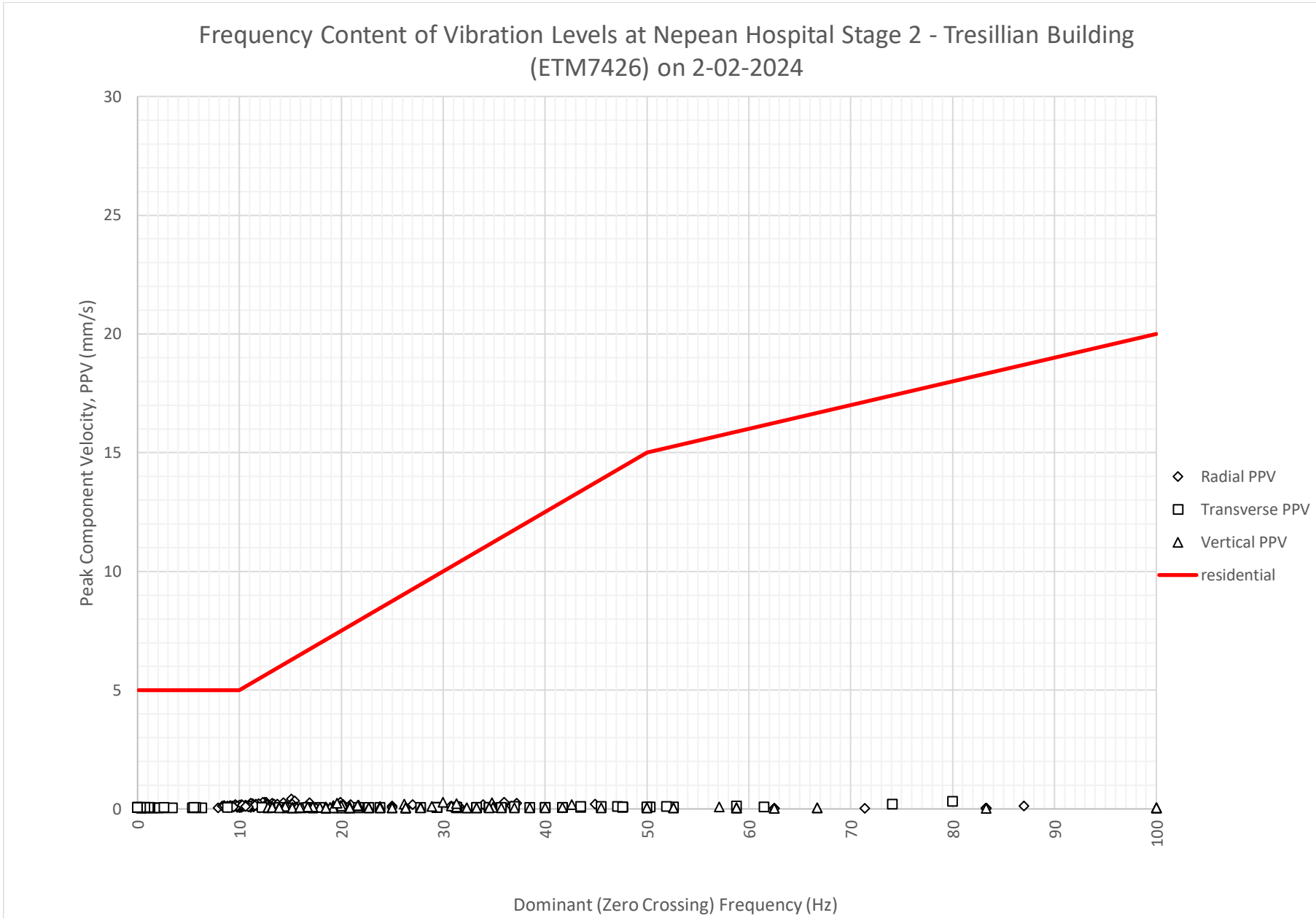

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 31-01-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

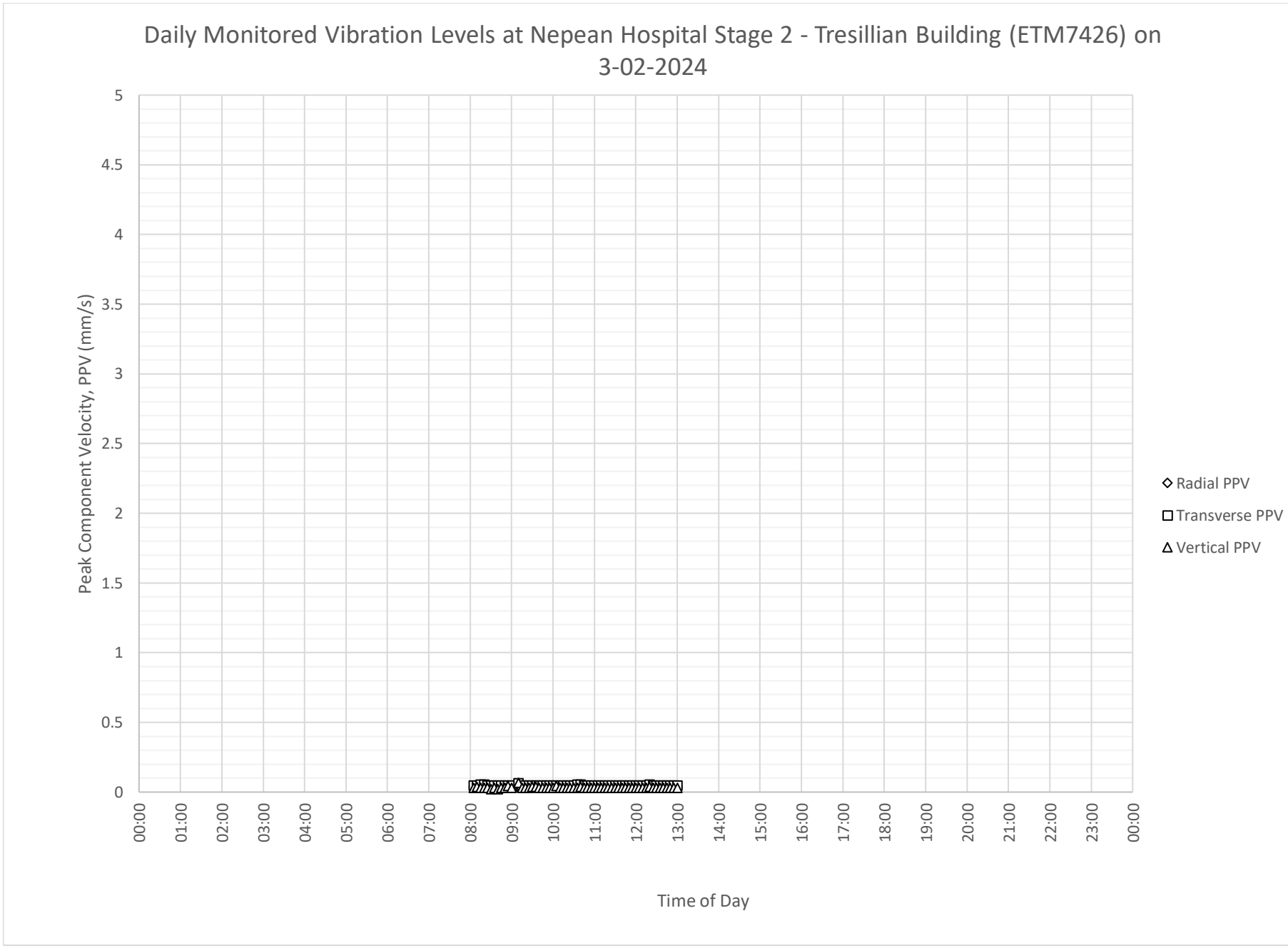

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 31-01-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

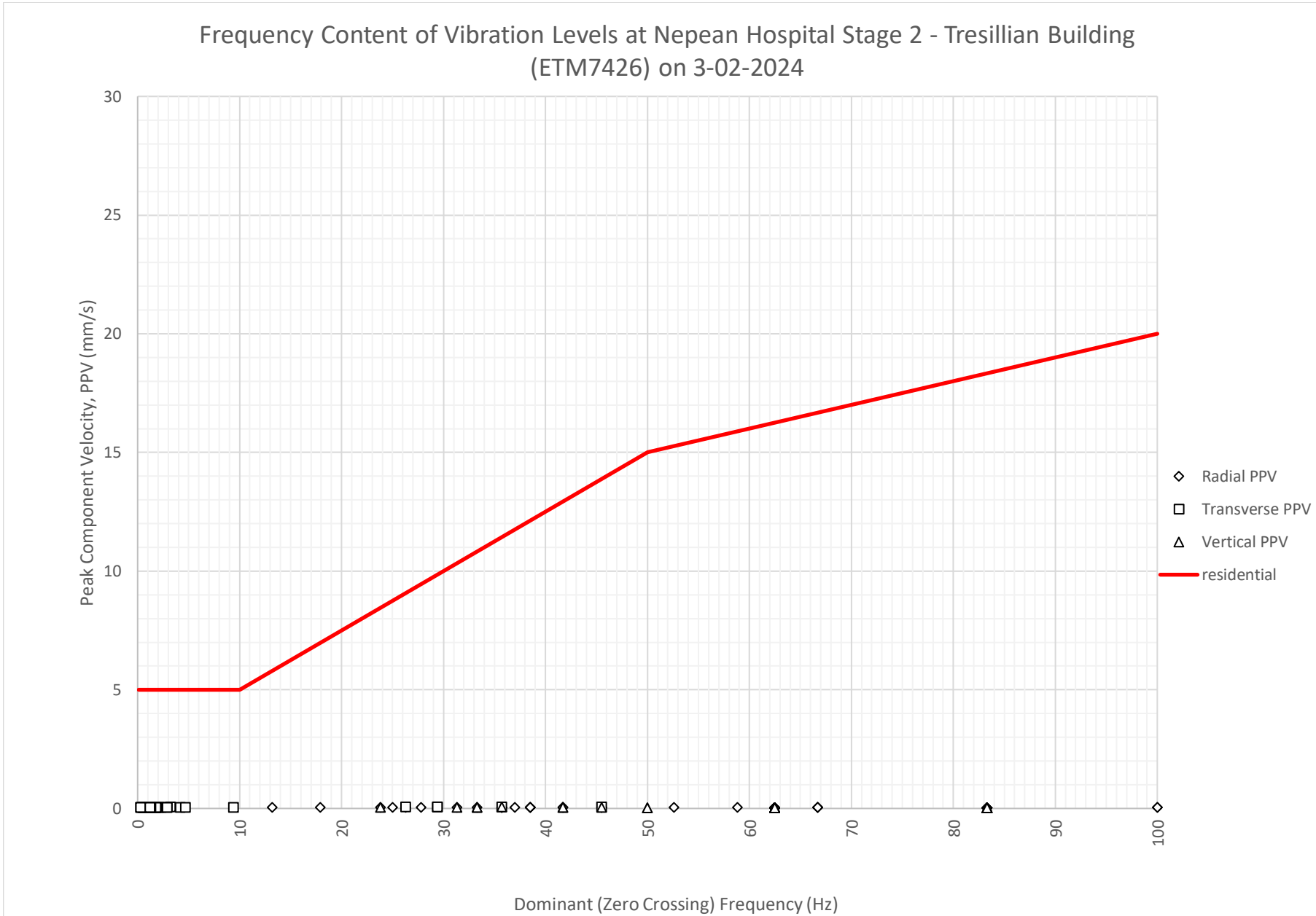

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 1-02-2024
Peak Component Velocity, PPV (mm/s)
10
9
8
7
6
5
4
3
2
1
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

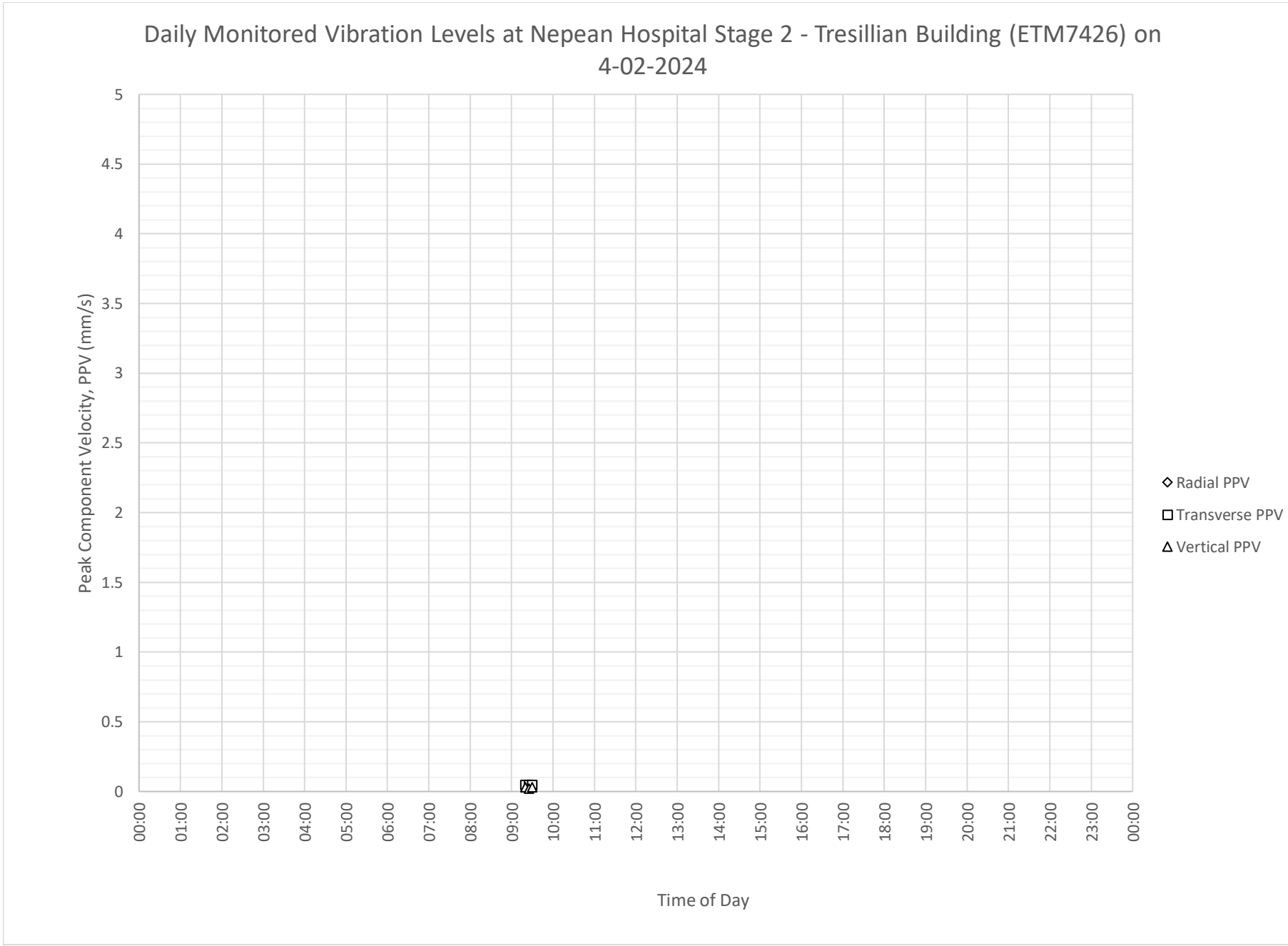

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 1-02-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 2-02-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

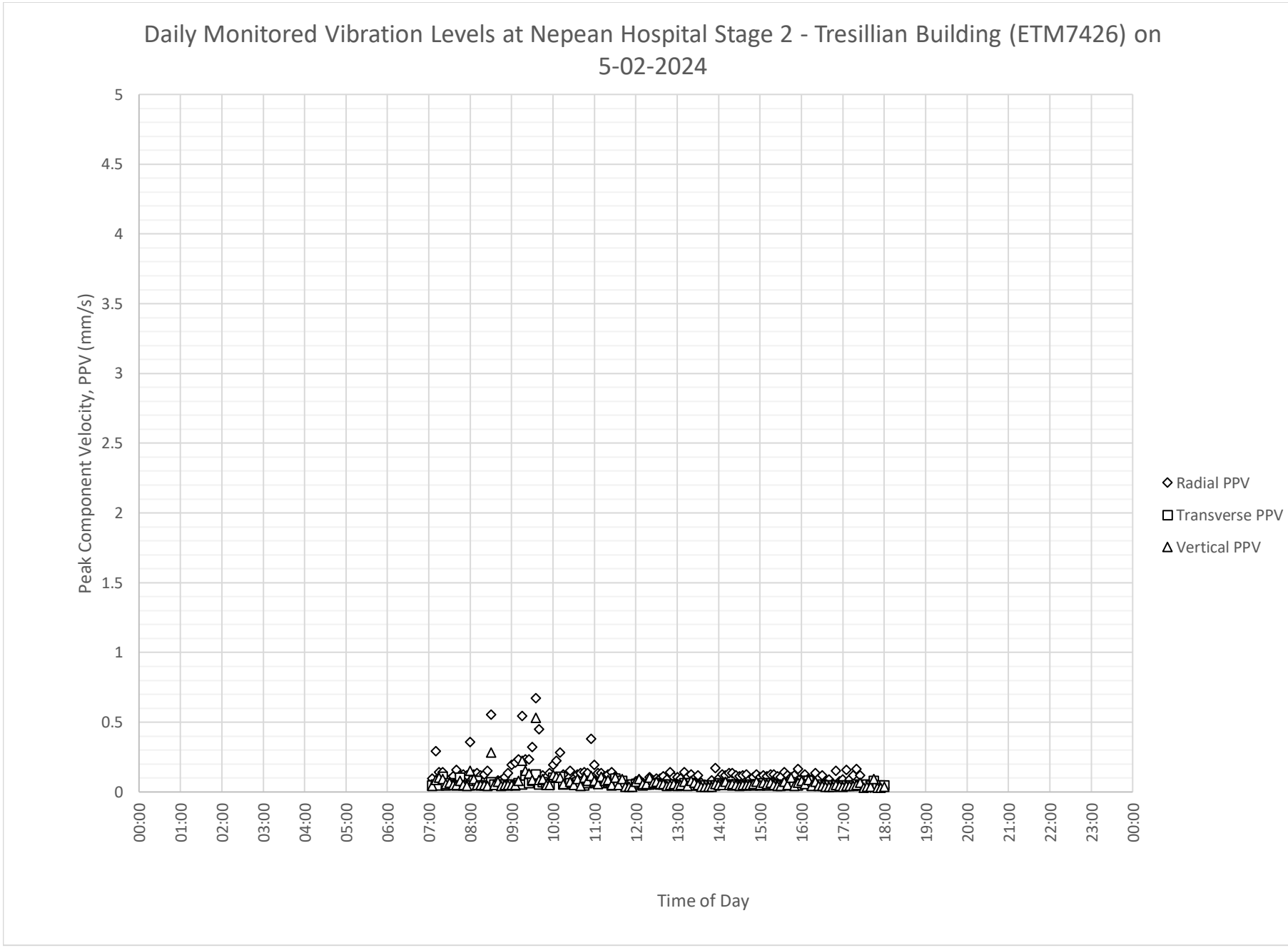

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 2-02-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

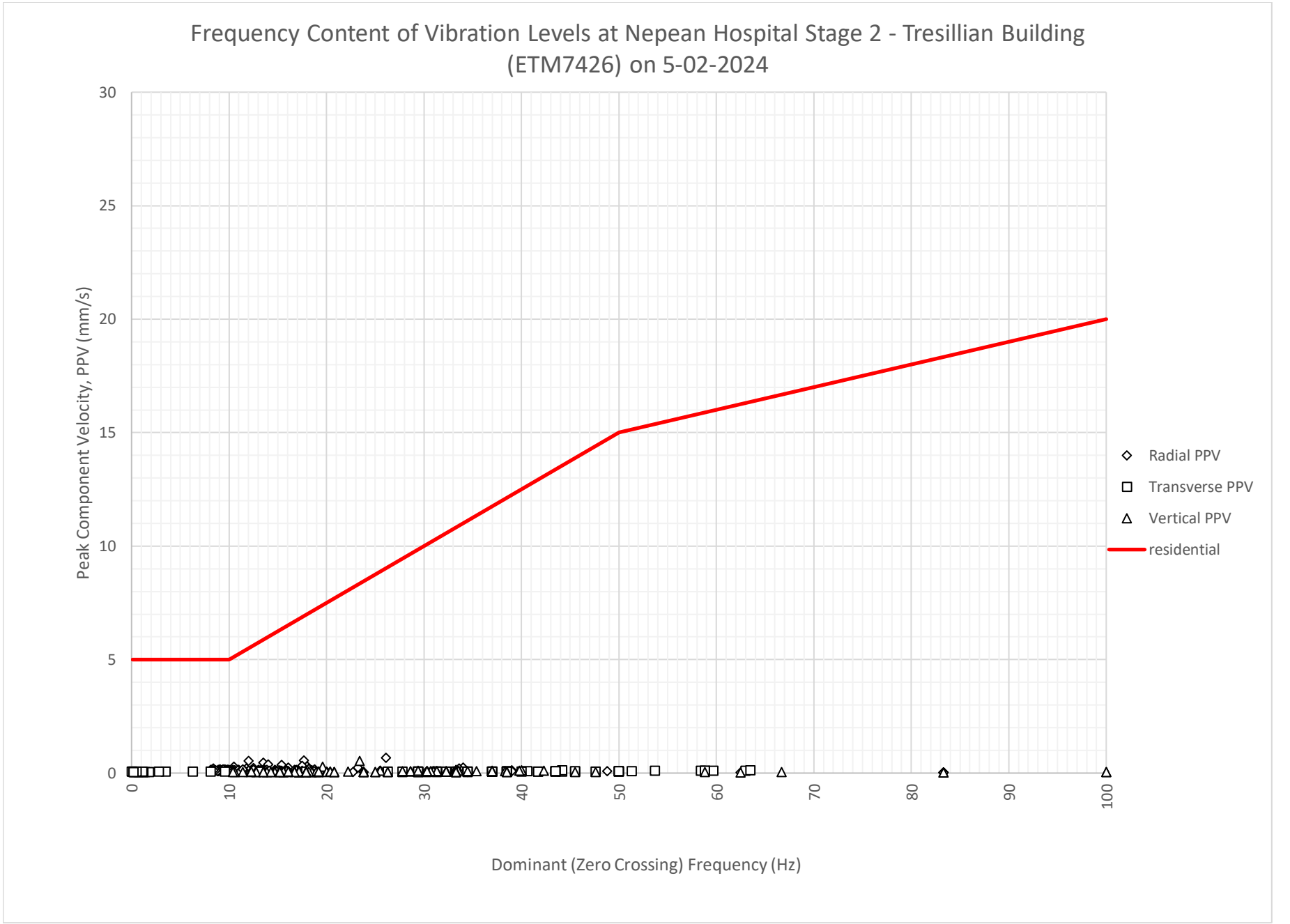

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 3-02-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

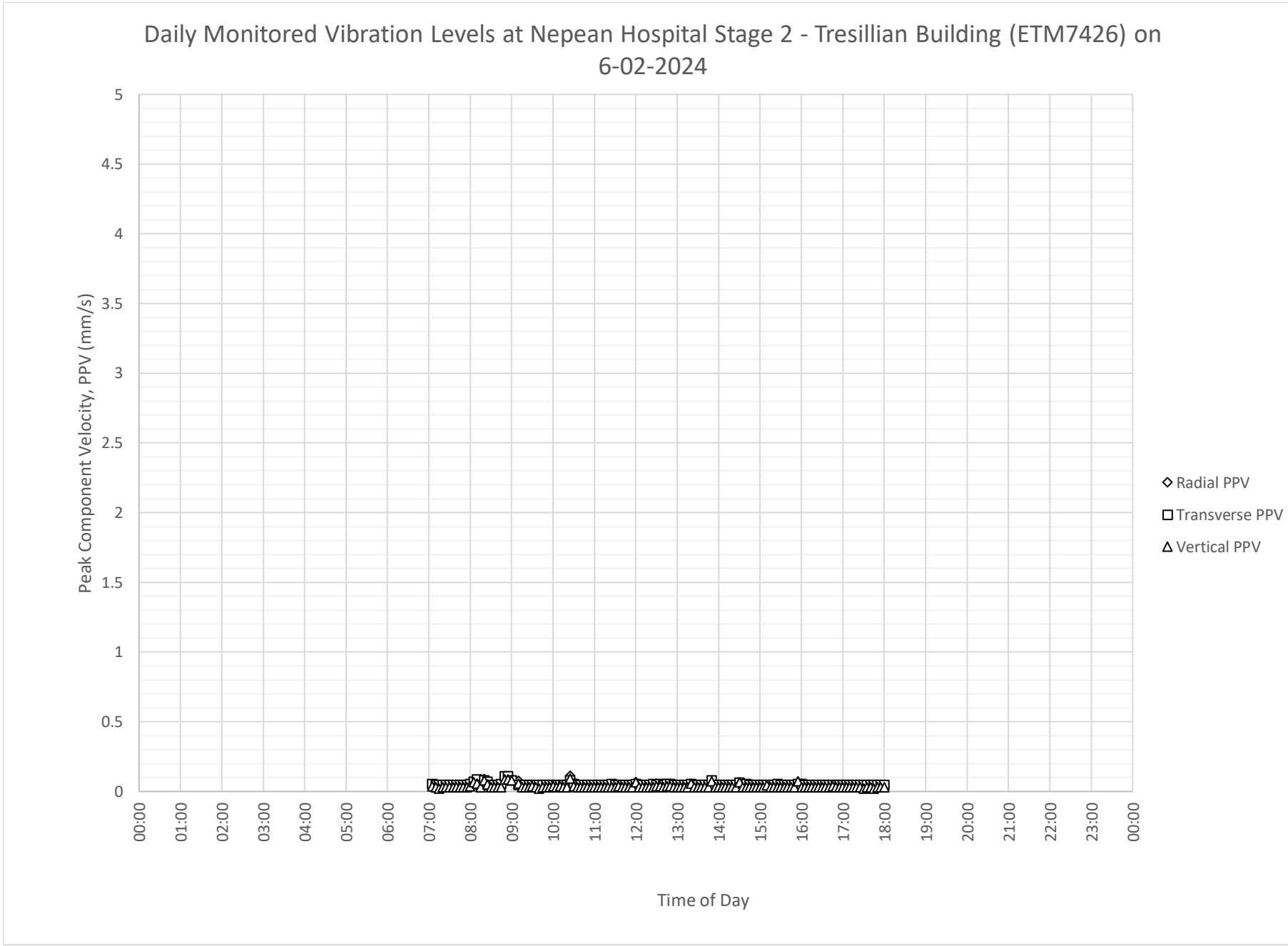

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 3-02-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

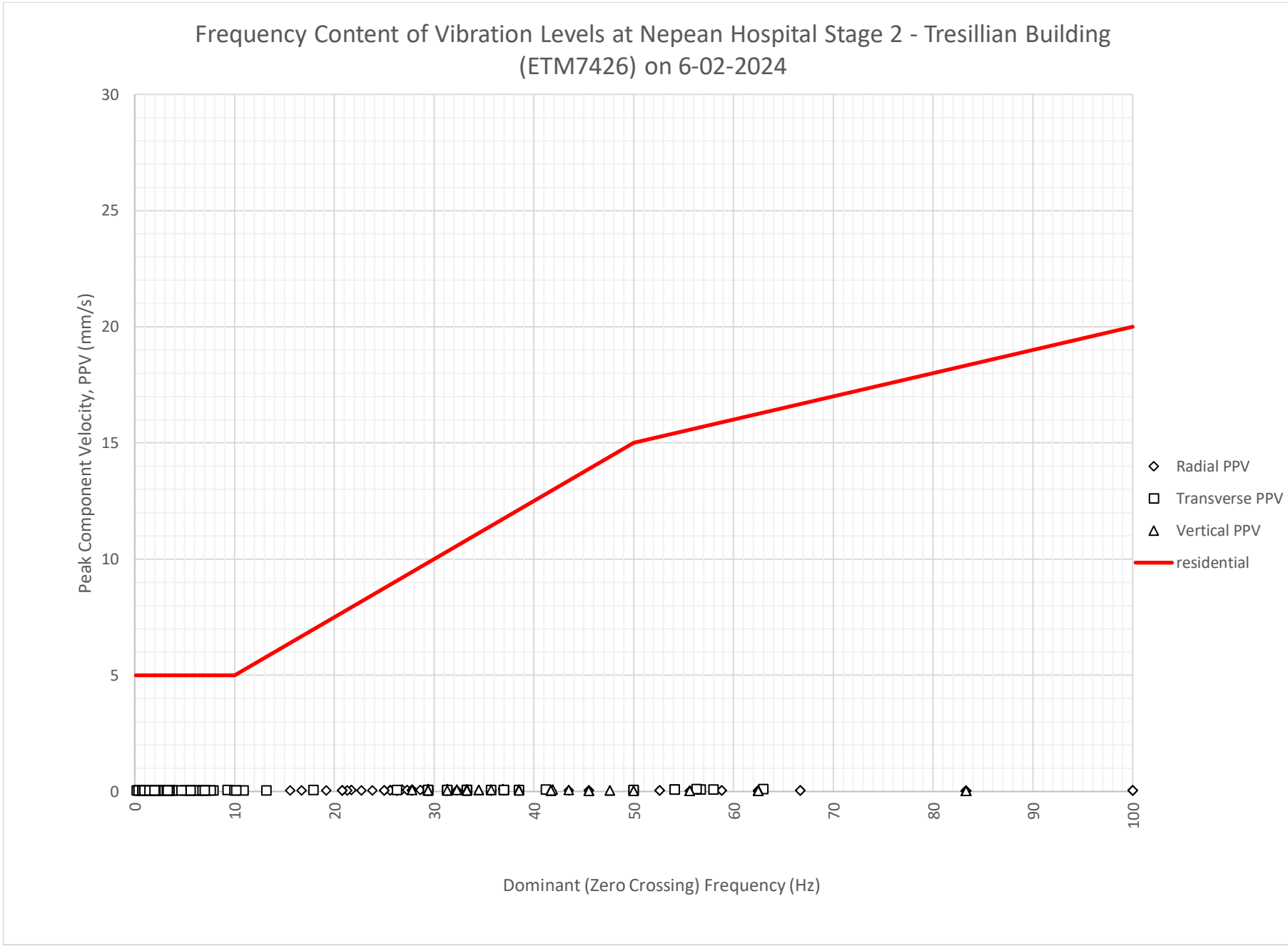

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 4-02-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

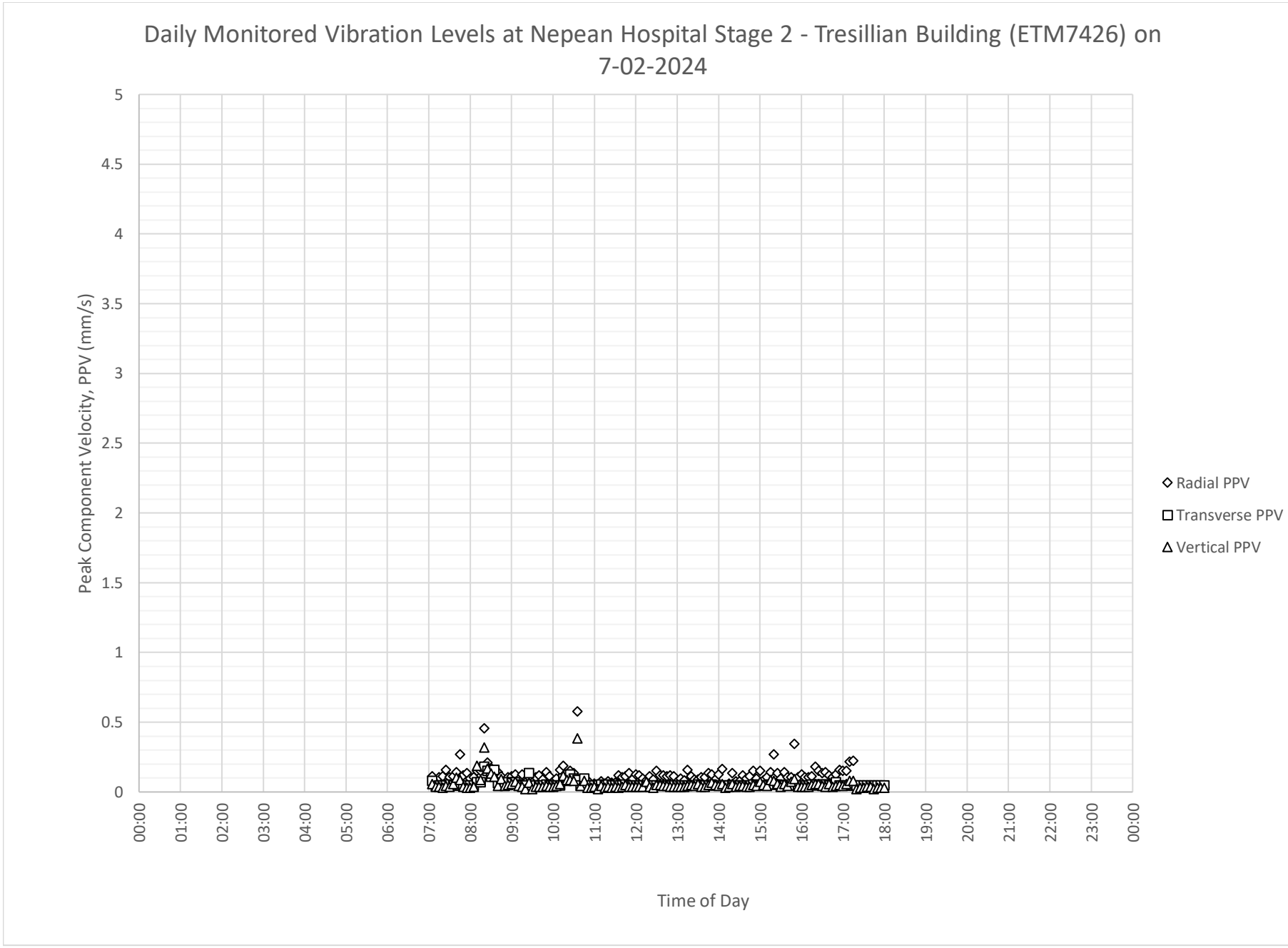

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 4-02-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

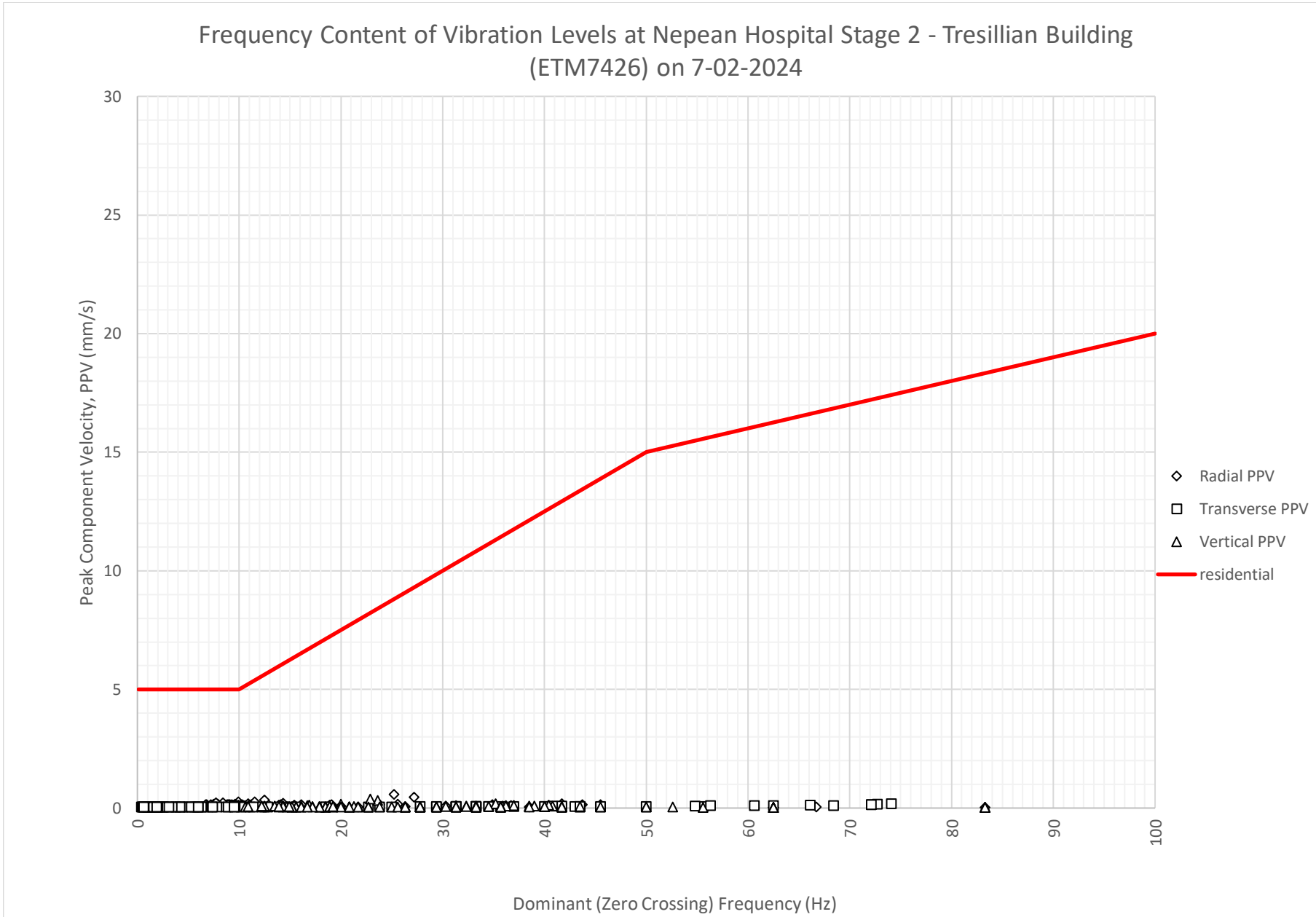

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 5-02-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

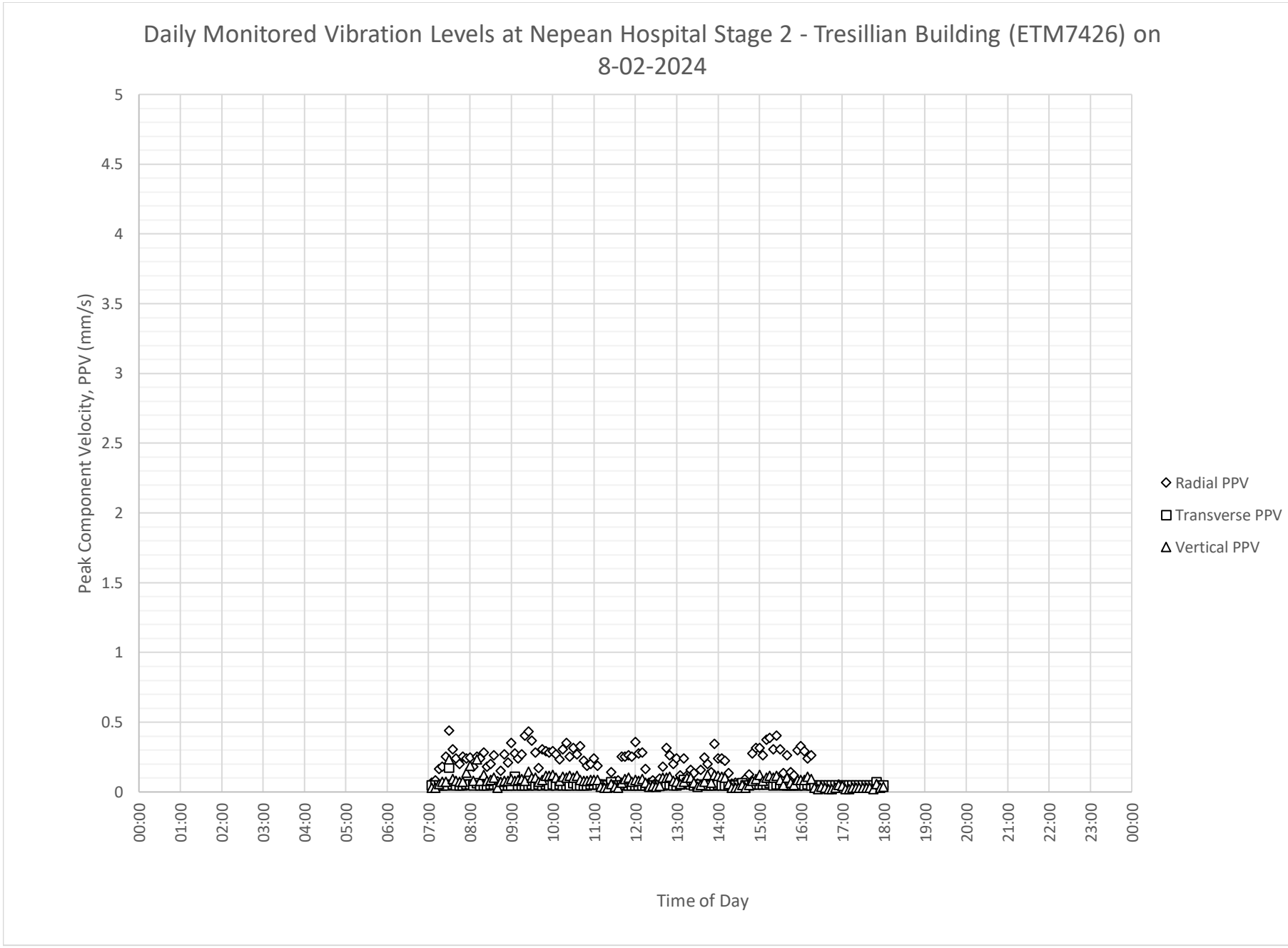

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 5-02-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

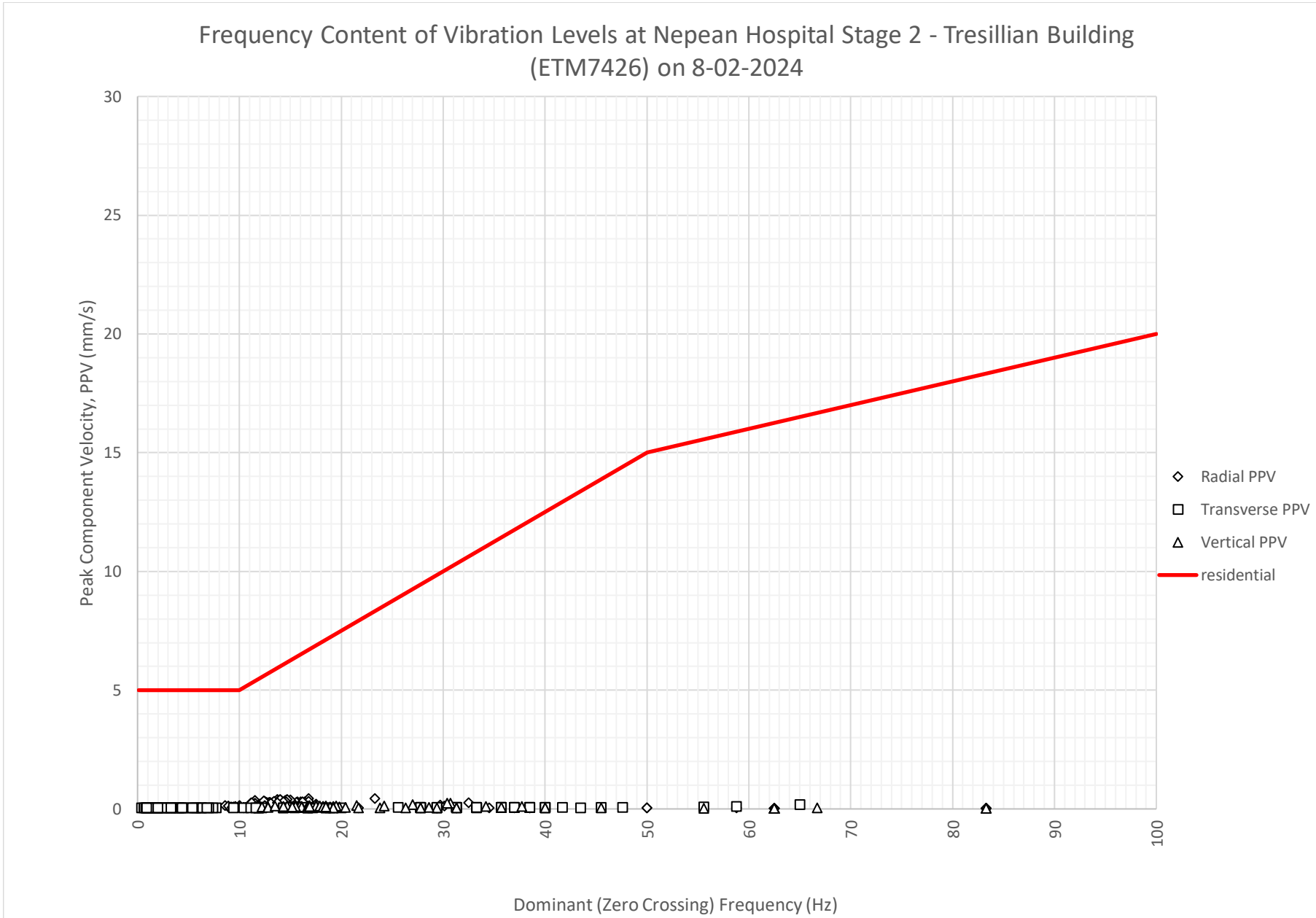

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 6-02-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV

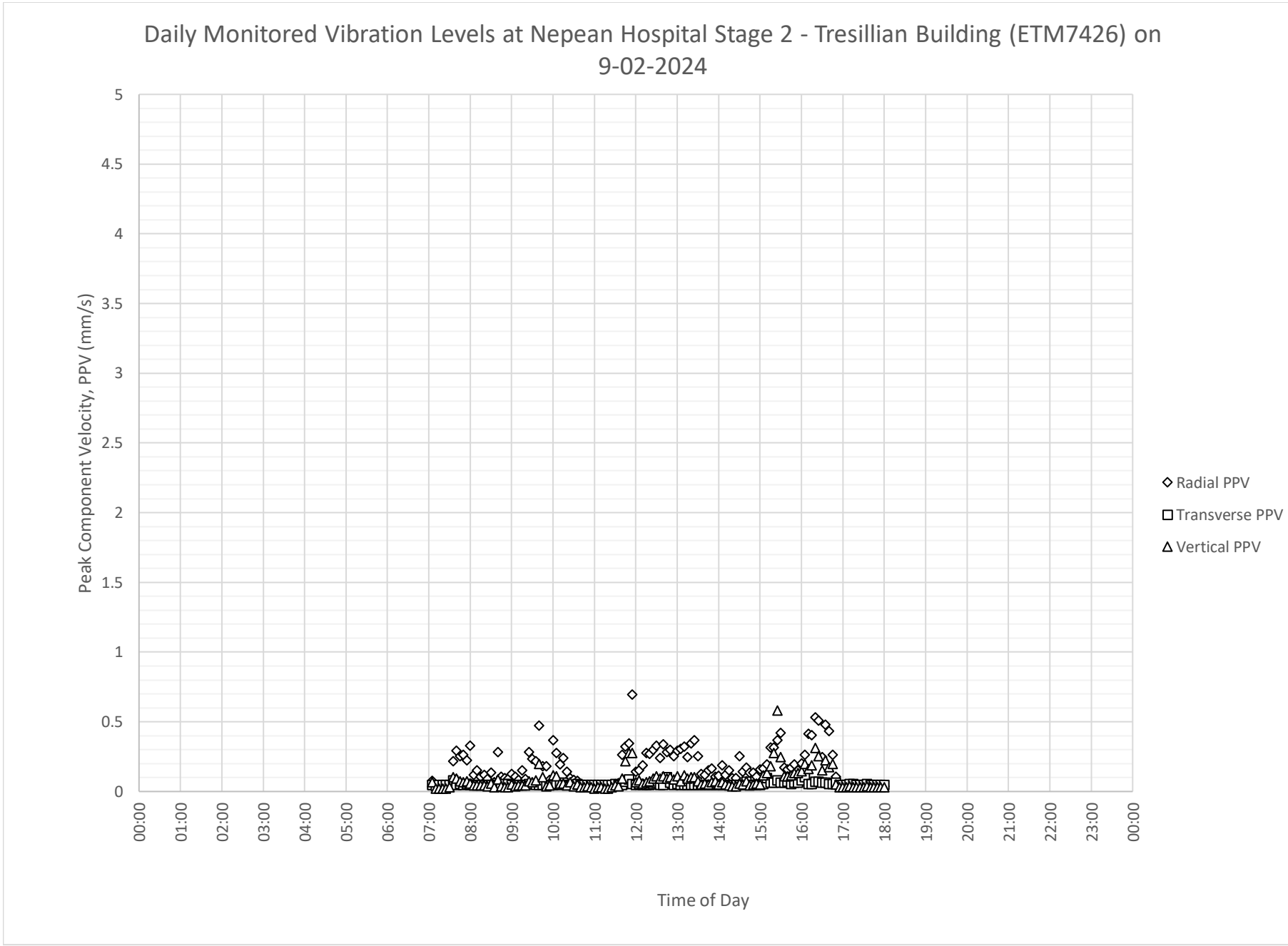

Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 6-02-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential

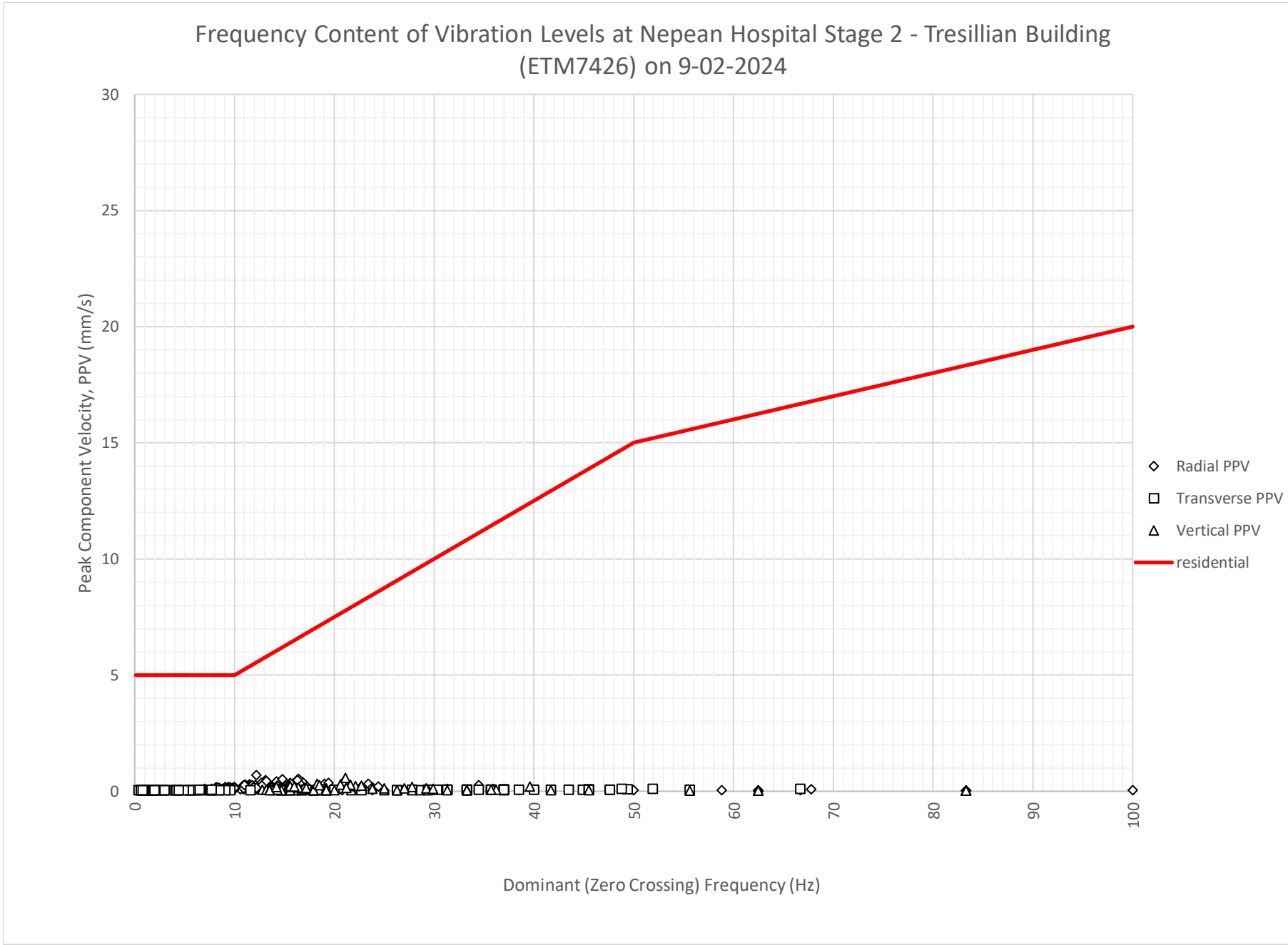

Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 7-02-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV


Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 7-02-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 8-02-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV


Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 8-02-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential


Daily Monitored Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 9-02-2024
Peak Component Velocity, PPV (mm/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
Time of Day
Radial PPV
Transverse PPV
Vertical PPV


Frequency Content of Vibration Levels at Nepean Hospital Stage 2 - Tresillian Building (ETM7426) on 9-02-2024
Peak Component Velocity, PPV (mm/s)
30
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
90
100
Dominant (Zero Crossing) Frequency (Hz)
Radial PPV
Transverse PPV
Vertical PPV
residential