

**HUNTER VALLEY**  
OPERATIONS

# **EPL 640 MONITORING DATA – JANUARY 2026**

**DOCUMENT NUMBER**  
HVOOC-1797567310-5530

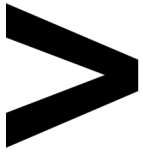
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**EFFECTIVE**  
16/04/2026

**REVIEW**  
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**OWNER**  
Superintendent - Environment and Community



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## 1 | OVERVIEW

<b>Environmental Protection Licence Number:</b>	640
<b>Licence Holder:</b>	HV Operations Pty Ltd (HVO)
<b>Address of Premises:</b>	Hunter Valley Operations, Lemington Road, Singleton, NSW, 2330
<b>Licence Holder Postal Address:</b>	PO Box 315, Singleton, NSW, 2330
<b>EPA Public Register Link:</b>	<a href="https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=640&amp;id=640&amp;option=licence&amp;searchrange=licence&amp;range=POEO%20licence&amp;prp=no&amp;status=Issued">https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=640&amp;id=640&amp;option=licence&amp;searchrange=licence&amp;range=POEO%20licence&amp;prp=no&amp;status=Issued</a>

The locations of each sampling or monitoring point number identified in EPL 640 are displayed in Figure 1.

## 2 | DEFINITIONS

Abbreviation	Explanation
DNR	Data Not Received
mm/s	Millimetres per Second
dB	Decibels
g/m <sup>2</sup> /month	Grams per Metre Square per Month
µg/m <sup>3</sup>	Micrograms per Cubic Meter of Air
µS/cm	Microsiemens per Centimetre
pH	A measure of the acidity or alkalinity of a solution
mg/L	Milligrams per Litre
NTU	Nephelometric Turbidity Units
ML/day	Megalitres per Day (1ML = 1,000,000L)
KL/day	Kilolitres per Day
PM10	Particulate Matter of 10 Microns in diameter or smaller
HVAS	High Volume Air Sampler
TEOM	Tapered Element Oscillating Microbalance
TSP	Total Suspended Particles
TSS	Total Suspended Solids
t	tonnes
YTD	Year To Date - rolling 12 month average

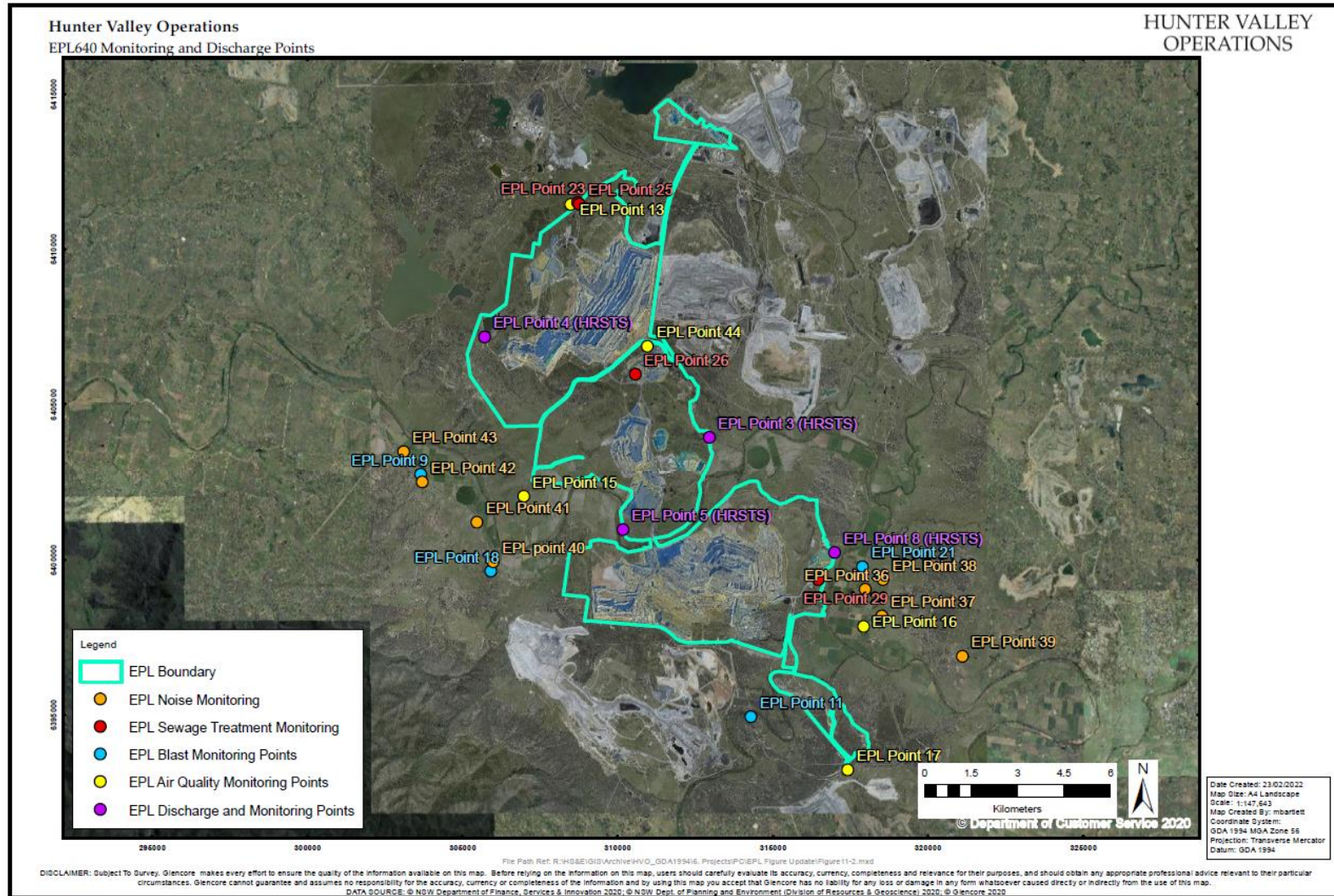
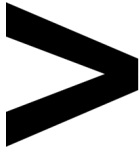


Figure 1: EPL 640 Monitoring Location

## 3 | AIR QUALITY

**Date Last Sampled:** 31/01/2026

**Date Obtained:** 17/03/2026

*Table 1 - Particulate Matter Monitoring (<10µm)*

Date	Unit of Measure	Monitoring Frequency & Capture	Monitoring Point				
			EPL ID 13 (Howick)	EPL ID 15 (Wandewoi)	EPL ID 16 (Knodlers Lane)	EPL ID 17 (Golden Highway)	EPL ID 44 (West Pit)
1/01/2026	µg/m <sup>3</sup>	Continuous	28.5	20.2	26.2	23.9	30.0
2/01/2026	µg/m <sup>3</sup>		27.3	19.6	17.2	15.4	18.9
3/01/2026	µg/m <sup>3</sup>		22.9	24.3	16.9	19.2	40.0
4/01/2026	µg/m <sup>3</sup>		11.2	13.4	18.3	17.6	28.1
5/01/2026	µg/m <sup>3</sup>		21.8	22.7	*	20.0	27.0
6/01/2026	µg/m <sup>3</sup>		29.9	27.6	*	24.1	24.2
7/01/2026	µg/m <sup>3</sup>		30.5	29.3	*	19.2	20.5
8/01/2026	µg/m <sup>3</sup>		34.6	41.8	*	29.4	55.0
9/01/2026	µg/m <sup>3</sup>		28.7	28.2	28.1	29.3	106.0
10/01/2026	µg/m <sup>3</sup>		25.9	35.5	44.3	50.2	108.0
11/01/2026	µg/m <sup>3</sup>		*	41.6	34.5	40.7	43.8
12/01/2026	µg/m <sup>3</sup>		*	16.9	11.3	14.1	12.8
13/01/2026	µg/m <sup>3</sup>		24.5	26.0	14.6	20.9	16.6
14/01/2026	µg/m <sup>3</sup>		20.7	17.6	11.2	13.7	21.4
15/01/2026	µg/m <sup>3</sup>		20.2	18.4	10.7	16.4	13.0

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16/01/2026	µg/m <sup>3</sup>		17.8	14.9	7.9	17.5	12.3
17/01/2026	µg/m <sup>3</sup>		18.9	13.4	9.4	19.2	13.7
18/01/2026	µg/m <sup>3</sup>		11.6	11.5	6.2	10.7	7.5
19/01/2026	µg/m <sup>3</sup>		18.7	15.9	8.4	17.3	9.9
20/01/2026	µg/m <sup>3</sup>		19.7	18.5	10.6	18.5	13.3
21/01/2026	µg/m <sup>3</sup>		24.0	22.8	13.3	23.9	35.5
22/01/2026	µg/m <sup>3</sup>		34.2	26.6	20.2	36.7	54.4
23/01/2026	µg/m <sup>3</sup>		32.4	26.5	20.9	29.8	25.4
24/01/2026	µg/m <sup>3</sup>		30.4	37	19.7	27.4	35.6
25/01/2026	µg/m <sup>3</sup>		38.5	51.2	27.0	47.5	82.9
26/01/2026	µg/m <sup>3</sup>		52.7	46.1	33.9	46.5	41.1
27/01/2026	µg/m <sup>3</sup>		38.4	27.9	19.6	24.5	28.7
28/01/2026	µg/m <sup>3</sup>		49.3	47.3	25.9	29.6	52.7
29/01/2026	µg/m <sup>3</sup>		41.4	34.2	31.1	21.5	31.2
30/01/2026	µg/m <sup>3</sup>		52.2	52.9	43.3	31.7	40.2
31/01/2026	µg/m <sup>3</sup>		97.1	84.2	*	67.4	97.3
<b>Monthly Meaningful Data</b>							
January	µg/m <sup>3</sup>	<b>Minimum</b>	11.2	11.5	6.2	10.7	7.5
	µg/m <sup>3</sup>	<b>Mean</b>	31.2	29.5	20.4	26.6	37.0
	µg/m <sup>3</sup>	<b>Maximum</b>	97.1	84.2	44.3	67.4	108.0
	µg/m <sup>3</sup>	<b>Median</b>	28.5	26.5	19.0	23.9	28.7

\* Less than 75% 24-hour data capture



## 4 | SURFACE WATER MONITORING DATA

No discharges under the HRSTS occurred during the reporting period.

*Table 2 - HRSTS Discharge Monitoring*

Discharge Point	Pollutant	Unit of Measure	Licence Limits	No. Samples Required by Licence	No. Samples Collected and Analysed
EPL ID 3 (Dam 11N)	pH	pH	6.5-9.5	0	0
	Total Suspended Solids	Milligrams per Litre	120	0	0
EPL ID 4 (Dam 9W)	pH	pH	6.5-9.5	0	0
	Total Suspended Solids	Milligrams per Litre	120	0	0
EPL ID 8 (Dam 15S)	pH	pH	6.5-9.5	0	0
	Total Suspended Solids	Milligrams per Litre	120	0	0

## 5 | BLAST MONITORING DATA

**Date Last Sampled:** 31/01/2026

**Date Obtained:** 02/02/2026

*Table 3 – Blast Monitoring (Air Blast Overpressure)*

Blast ID	Date & Time	Unit of Measure	Monitoring Frequency & Capture	EPL Limits		Monitoring Point			
				95% of Blasts	100% of Blasts	Moses Crossing EPL ID 18	Jerrys Plains EPL ID 9	Maison Dieu EPL ID 21	Warkworth EPL ID 11
WT10LDU104A	2/01/2026 11:38	dB(L)	All Blasts 100%	115	120	101.70	103.06	107.46	93.12
P210PCF106B	2/01/2026 13:32	dB(L)		115	120	106.26	105.09	104.62	95.47
P102N1003A	2/01/2026 13:34	dB(L)		115	120	102.51	106.48	102.40	93.58
WS15BAY101A	5/01/2026 13:14	dB(L)		115	120	92.03	93.21	92.88	94.74
P102N2501A	6/01/2026 12:31	dB(L)		115	120	97.93	96.42	96.33	96.83
WT12BAY04A	6/01/2026 14:12	dB(L)		115	120	89.57	88.51	96.31	93.85

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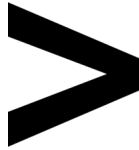
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Blast ID	Date & Time	Unit of Measure	Monitoring Frequency & Capture	EPL Limits			Monitoring Point		
				95% of Blasts	100% of Blasts	Moses Crossing EPL ID 18	Jerrys Plains EPL ID 9	Maison Dieu EPL ID 21	Warkworth EPL ID 11
P210WKW909A	7/01/2026 11:03	dB(L)	All Blasts 100%	115	120	103.00	93.31	99.58	99.90
WT11ARLP01A	7/01/2026 13:19	dB(L)		115	120	82.39	93.69	94.75	87.58
P102N10P02A_02A_M3P03A	8/01/2026 13:19	dB(L)		115	120	95.00	85.23	90.85	90.78
WS49BAR01A	9/01/2026 13:07	dB(L)		115	120	100.25	102.36	91.98	89.81
WT12BAY05A	10/01/2026 13:30	dB(L)		115	120	109.95	113.32	104.24	97.86
WT11ARU105A	12/01/2026 12:59	dB(L)		115	120	98.15	92.02	102.51	88.84
P102FCL04A	14/01/2026 13:02	dB(L)		115	120	98.15	98.63	113.10	100.95
WT10LDU105A	15/01/2026 12:54	dB(L)		115	120	92.97	86.60	92.57	90.27
P210B6P02A	16/01/2026 12:51	dB(L)		115	120	92.93	96.08	84.11	96.18

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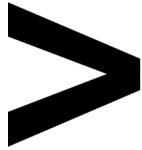
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Blast ID	Date & Time	Unit of Measure	Monitoring Frequency & Capture	EPL Limits			Monitoring Point		
				95% of Blasts	100% of Blasts	Moses Crossing EPL ID 18	Jerrys Plains EPL ID 9	Maison Dieu EPL ID 21	Warkworth EPL ID 11
WT11ARU106A	20/01/2026 12:12	dB(L)	All Blasts 100%	115	120	96.13	102.34	98.90	82.73
P210BRN601A_P210B6P02B	21/01/2026 13:10	dB(L)		115	120	95.67	87.20	96.16	96.16
P101BRN604A	23/01/2026 12:50	dB(L)		115	120	97.04	101.04	96.77	99.51
P102N1004A	23/01/2026 12:52	dB(L)		115	120	103.16	102.96	104.73	101.37
WS15017502A	28/01/2026 11:32	dB(L)		115	120	95.40	94.95	93.07	99.24
P210BRN602A	28/01/2026 13:16	dB(L)		115	120	90.16	94.69	94.28	91.89
P210BRN303A	28/01/2026 13:20	dB(L)		115	120	98.28	100.77	91.73	92.71
WT12BAY06A	30/01/2026 12:59	dB(L)		115	120	89.90	93.93	86.53	84.52
WT11ARU107A	31/01/2026 13:09	dB(L)		115	120	83.94	83.14	94.66	84.94

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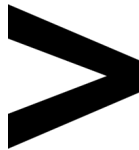
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Blast ID	Date & Time	Unit of Measure	Monitoring Frequency & Capture	EPL Limits		Monitoring Point			
				95% of Blasts	100% of Blasts	Moses Crossing EPL ID 18	Jerrys Plains EPL ID 9	Maison Dieu EPL ID 21	Warkworth EPL ID 11
<i>Monthly Meaningful Data</i>									
January		dB(L)	Minimum	115	120	82.39	83.14	84.11	82.73
		dB(L)	Mean	115	120	96.35	96.46	97.11	93.45
		dB(L)	Maximum	115	120	109.95	113.32	113.10	101.37
		dB(L)	Median	115	120	96.59	95.52	96.24	93.72

*Table 4 – Blast Monitoring (Ground Vibration)*

Blast ID	Date & Time	Unit of Measure	Monitoring Frequency & Capture	EPL Limits		Monitoring Point			
				95% of Blasts	100% of Blasts	Moses Crossing EPL ID 18	Jerrys Plains EPL ID 9	Maison Dieu EPL ID 21	Warkworth EPL ID 11
WT10LDU104A	2/01/2026 11:38	mm/s	All Blasts 100%	5	10	0.16	0.14	0.16	0.07
P210PCF106B	2/01/2026 13:32	mm/s		5	10	0.09	0.08	0.14	0.11
P102N1003A	2/01/2026 13:34	mm/s		5	10	0.23	0.11	0.14	0.23



Blast ID	Date & Time	Unit of Measure	Monitoring Frequency & Capture	EPL Limits			Monitoring Point		
				95% of Blasts	100% of Blasts	Moses Crossing EPL ID 18	Jerrys Plains EPL ID 9	Maison Dieu EPL ID 21	Warkworth EPL ID 11
WS15BAY101A	5/01/2026 13:14	mm/s	All Blasts 100%	5	10	0.24	0.20	0.14	0.91
P102N2501A	6/01/2026 12:31	mm/s		5	10	0.14	0.12	0.17	0.36
WT12BAY04A	6/01/2026 14:12	mm/s		5	10	0.25	0.26	0.10	0.50
P210WKW909A	7/01/2026 11:03	mm/s		5	10	0.14	0.14	0.25	0.41
WT11ARLP01A	7/01/2026 13:19	mm/s		5	10	0.16	0.18	0.12	0.10
P102N10P02A_02A_M3P03A	8/01/2026 13:19	mm/s		5	10	0.43	0.21	0.23	1.02
WS49BAR01A	9/01/2026 13:07	mm/s		5	10	0.30	0.32	0.32	0.44
WT12BAY05A	10/01/2026 13:30	mm/s		5	10	0.23	0.20	0.11	0.09
WT11ARU105A	12/01/2026 12:59	mm/s		5	10	0.22	0.19	0.20	0.24

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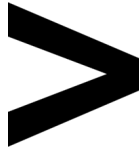
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Blast ID	Date & Time	Unit of Measure	Monitoring Frequency & Capture	EPL Limits			Monitoring Point		
				95% of Blasts	100% of Blasts	Moses Crossing EPL ID 18	Jerrys Plains EPL ID 9	Maison Dieu EPL ID 21	Warkworth EPL ID 11
P102FCL04A	14/01/2026 13:02	mm/s	All Blasts 100%	5	10	0.07	0.09	0.09	0.35
WT10LDU105A	15/01/2026 12:54	mm/s		5	10	0.20	0.14	0.18	0.09
P210B6P02A	16/01/2026 12:51	mm/s		5	10	0.10	0.09	0.24	0.54
WT11ARU106A	20/01/2026 12:12	mm/s		5	10	0.28	0.23	0.25	0.10
P210BRN601A_P210B6P02B	21/01/2026 13:10	mm/s		5	10	0.30	0.16	0.97	1.32
P101BRN604A	23/01/2026 12:50	mm/s		5	10	0.15	0.11	0.30	0.48
P102N1004A	23/01/2026 12:52	mm/s		5	10	1.65	0.45	0.34	1.13
WS15017502A	28/01/2026 11:32	mm/s		5	10	0.10	0.10	0.09	0.29
P210BRN602A	28/01/2026 13:16	mm/s		5	10	0.13	0.12	0.18	0.25

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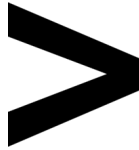
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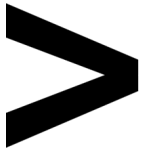
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Blast ID	Date & Time	Unit of Measure	Monitoring Frequency & Capture	EPL Limits		Monitoring Point			
				95% of Blasts	100% of Blasts	Moses Crossing EPL ID 18	Jerrys Plains EPL ID 9	Maison Dieu EPL ID 21	Warkworth EPL ID 11
P210BRN303A	28/01/2026 13:20	mm/s	All Blasts 100%	5	10	0.15	0.13	0.33	0.51
WT12BAY06A	30/01/2026 12:59	mm/s		5	10	0.19	0.18	0.11	0.06
WT11ARU107A	31/01/2026 13:09	mm/s		5	10	0.29	0.22	0.21	0.10
<i>Monthly Meaningful Data</i>									
January		mm/s	Minimum	5	10	0.07	0.08	0.09	0.06
		mm/s	Mean	5	10	0.26	0.17	0.22	0.40
		mm/s	Maximum	5	10	1.65	0.45	0.97	1.32
		mm/s	Median	5	10	0.20	0.15	0.18	0.32



## 6 | SEWAGE TREATMENT PLANT MONITORING DATA

Sewage treatment plant monitoring results are provided on a quarterly basis. Results will be provided in the March 2026 report.

## 7 | NOISE MONITORING DATA

**Date Sampled: 28-29/01/2026**

**Date Obtained: 25/02/2026**

*Table 6 – Night  $L_{Aeq,15minute}$  and  $L_{A1,1minute}$  Generated by HVO Against EPL Criteria*

Location	Start date and time	Wind		Stability class	Very enhancing? <sup>1</sup>	EPL limits, dB <sup>1</sup>		HVO levels, dB <sup>2,3</sup>		Exceedances, dB	
		Speed m/s	Direction <sup>4</sup>			$L_{Aeq,15minute}$	$L_{A1,1min}$	$L_{Aeq,15minute}$ <sup>2</sup>	$L_{A1,1min}$	$L_{Aeq,15minute}$	$L_{A1,1min}$
Shearers Lane	28/01/2026 22:00	4.6	146	D	Yes	46	51	IA	IA	Nil	Nil
Knodlers Lane	28/01/2026 22:41	4.3	155	D	Yes	45	51	IA	IA	Nil	Nil
Maison Dieu	28/01/2026 22:20	4.5	142	D	Yes	44	51	IA	IA	Nil	Nil
Long Point (Dights Crossing)	28/01/2026 23:11	6.2	145	D	Yes	42	51	IA	IA	Nil	Nil
Moses Crossing	29/01/2026 00:05	6.5	135	D	Yes	44	51	IA	IA	Nil	Nil
Jerrys Plains East	28/01/2026 23:43	6.8	132	D	Yes	44	51	IA	IA	Nil	Nil
Jerrys Plains Village	28/01/2026 22:22	4.5	142	D	Yes	45	51	31	33	Nil	Nil
Jerrys Plains West	28/01/2026 22:00	4.6	146	D	Yes	45	51	28	30	Nil	Nil

**Notes:**

- Noise limits are adjusted by +5 dB during 'very noise-enhancing meteorological conditions' in accordance with the NPfl.
- Site-only  $L_{Aeq,15minute}$ , includes modifying factor penalties if applicable.
- Site-only  $L_{A1,1minute}$  based on measured site-only  $L_{Amax}$  as detailed in Section 3.2.
- Degrees magnetic north, "-" indicates calm conditions.

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