

Peppertree Quarry

Environmental Monitoring Report

February 2019

Date Published: 8th April 2019



This monitoring report is to satisfy the requirements of Section 66 (6) of the Protection of the Environment and Operations Act 1997, to make available, within 14 days of request, any monitoring data that relates to pollution under an Environment Protection Licence.

The monitoring of pollutants provided in this report is undertaken as per the requirements of Environment Protection Licence 13088 (EPL 13088 – Boral Peppertree Quarry)

This report provides environmental monitoring data for Peppertree Quarry for the period $\mathbf{1}^{st}$ $\mathbf{28}^{th}$ February 2019.

Peppertree Quarry Information							
Premise Details	Boral – Peppertree Quarry						
Address	843 Marulan South Road, Marulan						
Licensee	Boral Resources (NSW) PTY LTD						
EPL N°	13088						
EPL Location	http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.asp x?DOCID=33060&SYSUID=1&LICID=13088						

Monitoring data in this report relates to the monitoring undertaken in March 2019 for the following environmental pollutants:

- Deposited Dust
- Dust PM10
- Dust TSP
- Noise
- Blasting

1. Air Quality

Air Quality Monitoring is conducted as per condition M2 of EPL 13088. The air quality results for the reporting period are tabled below.

1.1 Deposited Dust

Deposited Dust (g/m²/month) results for February 2019.

Sample Period: February 2019
Date received: 18/3/2019

Licensee: Peppertree Quarry

Licensee Address: 843 Marulan South Road, Marulan, NSW 2579

EPL No: 13088

Qualifications related to Dust

Frequency of monitoring - Monthly

Air Emissions Monitoring - Dust Deposition Gauge

Results February 2019										
<u>Location</u>	Ash g/m²/month	Insoluble solids g/m²/month	Soluble Solids g/m²/month	Running Annual Average - ASH g/m²/month	Running Annual Average Insoluble Solids g/m²/month					
Monitoring Point 1 (D1)	2.03	3.66	1.52	4.27	7.75					
Monitoring Point 2 (D2)	3.22	4.68	2.02	2.90	4.14					
Monitoring Point 3 (D3)	2.53	4.56	1.86	2.61	4.79					

The deposited dust data for the reporting period indicates that the deposited dust results range from $3.66 \text{ g/m}^2/\text{month}$ of insoluble solids at Monitoring Point 1 to $4.68 \text{ g/m}^2/\text{month}$ of insoluble solids at Monitoring Point 2.

However, Ash content is considered a better indicator for the quarries contribution to local dust levels, as it is the material remaining after combustibles are removed from the insoluble solids. Ash levels are in the range from 2.03 to 2.53 g/m2/month.

The running annual average for insoluble solids is above the criteria when measured at the gauge location, however it is below the criteria when extrapolated to the boundary as required by the EPL. Todoroski Air Sciences have provided a review of data from 2012-2018 stating "the data shows that the interpolated D1 dust levels at and beyond the boundary would have been well below the criterion level of 4g/m2/month for each of the years with estimated levels ranging from 0.52g/m2/month to 1.65g/m2/month. The interpolated D3 dust levels would also have been below the criterion at the nearest receptors, ranging from 1.48g/m2/month to 3.05g/m2 /month."

A level of 7.75 (the highest annual average insoluble solid measured at D1) extrapolated to the nearest receiver is well below the criteria.

Historical results

<u>Location</u>	Ash g/m²/month	Insoluble solids g/m²/month	Soluble Solids g/m²/month	Running Annual Average - ASH g/m²/month	Running Annual Average Insoluble Solids g/m²/month
January 2019					
Monitoring Point 1 (D1)	5.15	9.68	5.09	4.40	8.01
Monitoring Point 2 (D2)	3.97	5.95	1.35	1.35	4.04
Monitoring Point 3 (D3)	3.49	9.14	3.21	3.21	4.93
December 2018					
Monitoring Point 1 (D1)	8.45	17.03	5.42	4.31	7.81
Monitoring Point 2 (D2)	4.33	6.25	0.93	0.93	3.89
Monitoring Point 3 (D3)	3.42	5.84	2.37	2.37	4.54
November 2018					
Monitoring Point 1 (D1)	2.88	4.49	1.77	3.96	6.91
Monitoring Point 2 (D2)	3.35	4.47	0.72	0.72	3.57
Monitoring Point 3 (D3)	2.56	7.82	2.16	2.16	4.53
October 2018					
Monitoring Point 1 (D1)	2.31	3.22	2.15	4.44	8.88
Monitoring Point 2 (D2)	2.84	3.98	2.27	2.51	3.51
Monitoring Point 3 (D3)	1.74	3.26	2.70	2.34	4.12
September 2018					
Monitoring Point 1 (D1)	4.32	7.13	4.07	4.51	9.11
Monitoring Point 2 (D2)	2.62	1.15	3.82	2.21	3.52
Monitoring Point 3 (D3)	1.99	3.52	2.2	2.05	4.10
August 2018					
Monitoring Point 1 (D1)	2.03	2.9	1.38	4.30	9.11
Monitoring Point 2 (D2)	1.89	2.46	0.62	2.19	3.43
Monitoring Point 3 (D3)	4.04	5.19	2.77	2.05	4.09
July 2018					
Monitoring Point 1 (D1)	2.35	2.98	2.01	4.27	8.68
Monitoring Point 2 (D2)	2.19	2.77	1.31	2.30	3.38
Monitoring Point 3 (D3)	2.99	3.43	0.98	2.16	3.82
June 2018					
Monitoring Point 1 (D1)	4.90	8.63	9.57	4.27	8.77
Monitoring Point 2 (D2)	2.37	3.21	0.36	2.31	3.33
Monitoring Point 3 (D3)	2.24	3.61	2.21	2.09	3.89
May 2018					
Monitoring Point 1 (D1)	4.58	8.41	4.57	4.11	8.39
Monitoring Point 2 (D2)	1.73	2.7	1.2	2.34	3.4
Monitoring Point 3 (D3)	1.94	3.35	2.59	2.07	3.88
April 2018	ı		T	,	
Monitoring Point 1 (D1)	9.07	19.58	8.93	3.86	7.88
Monitoring Point 2 (D2)	3.18	4.81	0.88	2.35	3.39
Monitoring Point 3 (D3)	2.28	3.92	2.28	1.99	3.75
March 2018			Γ	·	
Monitoring Point 1 (D1)	3.22	5.24	5.13	3.29	6.51
Monitoring Point 2 (D2)	3.12	4.54	3.29	2.29	3.27
Monitoring Point 3 (D3)	2.11	3.82	2.95	1.96	3.80

<u>Location</u>	Ash g/m²/month	Insoluble solids g/m²/month	Soluble Solids g/m²/month	Running Annual Average - ASH g/m²/month	Running Annual Average Insoluble Solids g/m²/month
February 2018					
Monitoring Point 1 (D1)	3.59	6.83	2.72	3.17	6.24
Monitoring Point 2 (D2)	2.51	3.52	0.53	2.13	2.99
Monitoring Point 3 (D3)	2.35	6.3	3.42	1.94	3.84
January 2018			l	•	
Monitoring Point 1 (D1)	4.07	7.27	5.74	3.09	6.06
Monitoring Point 2 (D2)	3.28	4.09	2.20	2.15	3.05
Monitoring Point 3 (D3)	2.36	4.36	3.45	1.93	3.92
December 2017			57.10	00	
Monitoring Point 1 (D1)	4.2	6.21	4.1	3.00	5.88
Monitoring Point 2 (D2)	1.95	2.47	1.01	2.19	3.21
Monitoring Point 3 (D3)	2.42	5.77	3.88	2.13	4.82
November 2017	2.72	5.77	3.00	2.13	
Monitoring Point 1(D1)	8.59	28.18	97.33	2.88	5.65
Monitoring Point 2 (D2)	2.46	3.71	1.49	2.18	3.33
Monitoring Point 3 (D3)	1.56	2.89	1.25	2.14	5.06
October 2017	1.50	2.03	1.23	2.17	3.00
Monitoring Point 1	3.2	5.94	4.32	2.02	3.19
Monitoring Point 2	2.73	4.18	2.09	2.05	3.42
Monitoring Point 3	1.78	3.01	2.35	2.10	4.95
September 2017	1.70	5.01	2.55	2.10	4.55
Monitoring Point 1	1.82	2.76	0.65	1.88	2.91
Monitoring Point 2	1.64	2.69	1.38	1.91	3.25
Monitoring Point 3	1.97	3.37	2.23	2.05	4.94
August 2017	1.57	3.37	2.23	2.03	7.57
Monitoring Point 1	1.62	2.17	0.85	1.83	2.85
Monitoring Point 2	1.16	1.82	0.80	1.87	3.21
Monitoring Point 3	1.35	2.05	1.5	1.97	4.84
July 2017	1.33	2.03	1.5	1.57	4.04
Monitoring Point 1	2.36	3.99	1.65	1.86	2.88
Monitoring Point 1	1.61	2.23	0.54	1.87	3.24
Monitoring Point 3	2.72	4.21	1.1	1.95	4.85
June 2017	2.12	4.41	1.1	1.33	4.03
Monitoring Point 1	3.01	4.09	0.9	1.88	3
Monitoring Point 1	2.73	4.09	0.72	1.85	3.26
Monitoring Point 3	2.73	3.53	2.35	1.84	4.74
May 2017	2.04	ა.აა	2.33	1.04	7./4
Monitoring Point 1	1.6	2.28	0.58	1.81	2.97
Monitoring Point 1	1.83	2.28	0.58	1.73	3.1
Monitoring Point 3	0.9	1.81	1.49	1.74	4.56
April 2017	0.3	1.01	1.43	1.74	7.50
Monitoring Point 1	2.14	3.11	1.76	1.79	2.91
Monitoring Point 1 Monitoring Point 2	2.14	3.30	1.76	1.62	2.91
-					4.55
Monitoring Point 3 March 2017	1.9	4.42	2.14	1.75	4.33
	1 70	2.00	2 77	1 70	2 05
Monitoring Point 1	1.79	2.09	2.77	1.78	2.85

<u>Location</u>	Ash g/m²/month	Insoluble solids g/m²/month	Soluble Solids g/m²/month	Running Annual Average - ASH g/m²/month	Running Annual Average Insoluble Solids g/m²/month
Monitoring Point 2	1.20	1.28	1.80	1.57	2.86
Monitoring Point 3	1.88	4.38	3.24	1.69	4.36
February 2017			<u> </u>		
Monitoring Point 1	2.62	4.61	4.14	1.73	2.82
Monitoring Point 2	2.70	4.17	0.83	1.59	2.94
Monitoring Point 3	2.22	7.21	4.17	1.63	4.33
January 2017	-			1	
Monitoring Point 1	1.33	2.79	2.33	1.64	2.58
Monitoring Point 2	2.33	4.89	2.80	1.49	2.77
Monitoring Point 3	4.34	14.17	5.45	1.59	4.2
December 2016		<u> </u>	<u>. </u>		
Monitoring Point 1	1.27	2.49	1.33	1.58	2.43
Monitoring Point 2	2.04	4.98	1.91	1.41	2.53
Monitoring Point 3	2.29	8.36	4.41	1.35	3.5
November 2016		0.00		1.00	
Monitoring Point 1	1.46	1.98	1.56	1.64	2.49
Monitoring Point 2	2.20	4.81	3.05	1.45	2.41
Monitoring Point 3	1.78	2.88	2.37	1.37	4.02
October 2016			,	2.07	
Monitoring Point 1	1.56	2.56		1.61	2.57
Monitoring Point 2	1.00	2.21	0.80	1.38	2.21
Monitoring Point 3	1.18	2.94	1.21	1.30	4.13
September 2016				2.00	
Monitoring Point 1	1.24	2.06	0.4	2.32	4.24
Monitoring Point 2	1.13	2.24	1.01	1.49	2.33
Monitoring Point 3	1.03	2.06	1.32	1.33	4.13
August 2016	2.00		2.02	2.00	
Monitoring Point 1	1.94	2.5	0.12	2.33	4.19
Monitoring Point 2	1.21	2.11	1.26	1.47	2.23
Monitoring Point 3	1.13	2.23	1.34	1.27	4.01
July 2016				/	
Monitoring Point 1	2.56	5.41	4.2	2.27	4.14
Monitoring Point 2	1.31	2.49	0.50	1.43	2.12
Monitoring Point 3	1.38	2.88	0.47	1.30	4.05
June 2016					
Monitoring Point 1	2.23	3.81	1.41	3.07	5.22
Monitoring Point 2	1.37	2.05	0.95	1.42	2.07
Monitoring Point 3	0.9	1.37	1.27	1.31	4.04
May 2016					
Monitoring Point 1	1.37	1.46	0.49	3.02	5.08
Monitoring Point 2	0.43	0.69	0.28	1.52	2.25
Monitoring Point 3	0.93	1.7	0.61	1.32	4.10
April 2016	1 0.55		1 0.01		
Monitoring Point 1	2.03	2.41	0.45	3.86	6.94
Monitoring Point 2	1.86	2.35	0.85	1.63	2.43
	1.00	2.55	0.05	1.34	

<u>Location</u>	Ash g/m²/month	Insoluble solids g/m²/month	Soluble Solids g/m²/month	Running Annual Average - ASH g/m²/month	Running Annual Average Insoluble Solids g/m²/month
March 2016	1				
Monitoring Point 1	1.09	1.72	0.18	3.82	6.97
Monitoring Point 2	1.51	2.26	0.15	1.57	2.44
Monitoring Point 3	1.16	4.06	2.57	1.33	4.25
February 2016					
Monitoring Point 1	1.56	1.77	3.53	3.97	7.17
Monitoring Point 2	1.54	2.15	3.32	1.62	2.53
Monitoring Point 3	1.8	5.66	5.45	1.36	4.21
January 2016		3.55	01.0	2.00	
Monitoring Point 1	0.61	1.01	0.5	4.01	7.3
Monitoring Point 2	1.36	1.98	0.55	1.63	2.53
Monitoring Point 3	1.49	5.71	3.29	1.34	4.03
December 2015					
Monitoring Point 1	2.04	3.17	3.95	4.14	7.62
Monitoring Point 2	2.52	3.56	1.75	1.65	2.57
Monitoring Point 3	2.44	14.58	11.38	1.32	3.94
November 2015					
Monitoring Point 1	1.14	2.94	0.46	4.21	7.72
Monitoring Point 2	1.30	2.41	0.59	1.60	2.44
Monitoring Point 3	1.05	4.21	1.29	1.27	3.02
October 2015					
Monitoring Point 1	10.06	22.62	9.01	4.28	7.68
Monitoring Point 2	2.33	3.62	0.94	1.51	2.29
Monitoring Point 3	1.48	2.96	2.03	1.27	3.07
September 2015					
Monitoring Point 1	1.38	1.5	9.25	3.57	6.08
Monitoring Point 2	0.87	1.04	2.61	1.45	2.2
Monitoring Point 3	0.26	0.59	3.72	1.27	3.13
August 2015	0.20	0.33	3.72	1.27	3.13
Monitoring Point 1	1.16	1.9	1.02	3.55	6.10
Monitoring Point 2	0.80	0.84	0.74	1.45	2.2
Monitoring Point 3	1.51	2.75	0.32	1.33	3.21
July 2015	1.51	2.73	0.52	1.55	3.21
Monitoring Point 1	12.2	18.27	5.41	3.61	6.18
Monitoring Point 2	1.15	1.88	0.54	1.47	2.26
Monitoring Point 3	1.48	2.72	0.34	1.29	3.15
June 2015	1.70	2.12	0.0	1.23	3.13
Monitoring Point 1	1.57	2.16	2.28	2.70	4.77
Monitoring Point 1	2.57	4.22	4.55	1.46	2.23
Monitoring Point 3	1.03	2.12	4.28	1.31	3.12
May 2015	1.03	۷.1۷	4.20	1.51	3.12
Monitoring Point 1	11.52	23.81	8.13	2.65	4.74
Monitoring Point 2	11.52	23.81	0.93	1.32	1.96
	1.70	2.87	1.31	1.32	3.02
Monitoring Point 3 April 2015	1.23	2.13	1.31	1.20	3.02
•	1 40	2.76	1.05	1 77	2.98
Monitoring Point 1	1.49	2.76	1.05	1.77	2.98

<u>Location</u>	Ash g/m²/month	Insoluble solids g/m²/month	Soluble Solids g/m²/month	Running Annual Average - ASH g/m²/month	Running Annual Average Insoluble Solids g/m²/month
Monitoring Point 2	1.17	2.43	1.95	1.25	1.83
Monitoring Point 3	1	3.53	1.78	1.28	3.06
March 2015					
Monitoring Point 1	2.96	4.17	2.73	1.84	3.26
Monitoring Point 2	2.13	3.36	0.44	1.25	1.81
Monitoring Point 3	1.56	3.56	2.33	1.26	2.99
February 2015					
Monitoring Point 1	2.01	3.29	3.67	1.86	3.73
Monitoring Point 2	1.71	2.12	1.81	1.15	1.61
Monitoring Point 3	1.52	3.42	4.05	1.22	3.03
January 2015					
Monitoring Point 1	2.13	4.88	3.99	1.93	4.24
Monitoring Point 2	1.57	2.54	0.23	1.18	1.72
Monitoring Point 3	1.27	4.65	3.32	1.20	2.99

1.2 PM10

PM10 (μg/m³) results for the month of February 2019

Sample Period: February 2019
Date Received: 11/3/2019

Licensee: Peppertree Quarry

Licensee

Address: 843 Marulan south Road, Marulan NSW 2579

EPL No: 13088

Qualifications related to Dust:

* Air Emissions Monitoring - High Volume Air Sampler Sampling Frequency is collection of samples over a 24hr period, every 6 days. Protocols are contained in the Air Quality Man $\mu g/m^3$ agement Plan found on this website. Twenty Four (24) hour criteria is 50 $\mu g/m^3$. Annual average criteria is 30

Results						
Location	<u>Date</u>	<u>Pollutant</u>	Measurement	Rolling Annual Average	<u>Limit</u> <u>annual</u> <u>average</u>	<u>Unit</u>
Monitoring Point 2	1/3/19	PM10	18.3	24.13	30	μg/m³
Monitoring Point 2	23/2/19	PM10	76.2	24.03	30	μg/m³
Monitoring Point 2	17/2/19	PM10	32.06	23.38	30	μg/m³
Monitoring Point 2	13/2/19	PM10	20.23	23.12	30	μg/m³
Monitoring Point 2	11/2/19	PM10	9.6	23.45	30	μg/m³
Monitoring Point 2	7/2/19	PM10	no sample	23.71	30	μg/m³
Monitoring Point 2	5/2/19	PM10	27.77	23.71	30	ug/m³

The PM10 data indicates that during the sampling period the rolling annual average data range was between $23.12 \mu g/m^3$ and $24.13 \mu g/m^3$. Twenty four hour results ranged from 9.6 and $76.2 \mu g/m^3$. The annual rolling average results continue to be below the long term criteria.

Historical results

Location	Date	Pollutant	Measurement	Rolling Annual Average	Limit annual average	Unit
January 2019				Average	uverage	
Monitoring Point 2	30/1/19	PM10	39.3	23.96	30	μg/m³
Monitoring Point 2	24/1/19	PM10	no sample	25.21	30	μg/m³
Monitoring Point 2	18/1/19	PM10	no sample	25.21	30	μg/m³
Monitoring Point 2	15/1/19	PM10	40.3	25.21	30	μg/m³
Monitoring Point 2	12/1/19	PM10	18.21	25.39	30	μg/m³
Monitoring Point 2	6/1/19	PM10	no sample	25.73	30	μg/m³
December 2018	5, -, -5		, , , , , , , , , , , , , , , , , , ,			F-0/
Monitoring Point 2	31/12/18	PM10	46.78	25.73	30	μg/m³
Monitoring Point 2	25/12/18	PM10	99.62	25.69	30	μg/m³
Monitoring Point 2	19/12/18	PM10	22.41	25.65	30	μg/m³
Monitoring Point 2	13/12/18	PM10	15.32	26.62	30	μg/m³
Monitoring Point 2	7/12/18	PM10	37.08	26.92	30	μg/m³
Monitoring Point 2	1/12/18	PM10	14.75	26.69	30	μg/m³
November 2018			1			
Monitoring Point 2	25/11/18	PM10	10.23	26.76	30	μg/m³
Monitoring Point 2	19/11/18	PM10	35.31	26.92	30	μg/m³
Monitoring Point 2	13/11/18	PM10	86.01	27.03	30	μg/m³
Monitoring Point 2	7/11/18	PM10	38.23	25.70	30	μg/m³
Monitoring Point 2	1/11/18	PM10	35.33	25.16	30	μg/m³
October 2018					•	
Monitoring Point 2	26/10/18	PM10	19.43	24.98	30	μg/m³
Monitoring Point 2	20/10/18	PM10	17.74	25.08	30	μg/m³
Monitoring Point 2	14/10/18	PM10	5.39	25.21	30	μg/m³
Monitoring Point 2	8/10/18	PM10	13.00	25.42	30	μg/m³
Monitoring Point 2	2/10/18	PM10	50.98	25.38	30	μg/m³
September 2018						
Monitoring Point 2	26/9/18	PM10	9.35	24.92	30	μg/m³
Monitoring Point 2	20/9/18	PM10	27.02	24.88	30	μg/m³
Monitoring Point 2	15/9/18	PM10	18.30	24.84	30	μg/m³
Monitoring Point 2	8/9/18	PM10	7.00	24.61	30	μg/m³
Monitoring Point 2	4/9/18	PM10	32.76	24.94	30	μg/m³
August 2018			,			
Monitoring Point 2	27/8/18	PM10	23.14	24.65	30	μg/m³
Monitoring Point 2	21/8/18	PM10	1.99	24.69	30	μg/m³
Monitoring Point 2	15/8/18	PM10	3.25	25.12	30	μg/m³
Monitoring Point 2	9/8/18	PM10	14.93	25.27	30	μg/m³
Monitoring Point 2	3/8/18	PM10	38.99	25.23	30	μg/m³
July 2018					_	1
Monitoring Point 2	28/07/18	PM10	13.38	24.97	30	μg/m³
Monitoring Point 2	25/07/18	PM10	3.36	24.83	30	μg/m³
Monitoring Point 2	16/07/18	PM10	4.77	25.3	30	μg/m³
Monitoring Point 2	10/07/18	PM10	7.09	25.32	30	μg/m³
Monitoring Point 2	4/7/18	PM10	13.79	25.62	30	μg/m³
June 2018	T .		Ţ		T	Т
Monitoring Point 2	28/6/18	PM10	10.81	25.44	30	μg/m³
Monitoring Point 2	22/6/18	PM10	6.90	25.4	30	μg/m³
Monitoring Point 2	16/6/18	PM10	0.13	25.43	30	μg/m³

				Rolling	Limit	
Location	Date	Pollutant	Measurement	Annual	annual	Unit
				Average	average	
Monitoring Point 2	10/6/18	PM10	1.58	25.93	30	μg/m³
Monitoring Point 2	4/6/18	PM10	11.7	26.42	30	μg/m³
May 2018						
Monitoring Point 2	29/5/18	PM10	49.09	26.21	30	μg/m³
Monitoring Point 2	23/5/18	PM10	19.87	25.74	30	μg/m³
Monitoring Point 2	22/5/18	PM10	17.18	25.41	30	μg/m³
Monitoring Point 2	11/5/18	PM10	1.53	25.23	30	μg/m³
April 2018						•
Monitoring Point 2	30/4/18	PM10	11.86	26.03	30	
Monitoring Point 2	24/4/18	PM10	76.31	25.93	30	μg/m³
Monitoring Point 2	17/4/18	PM10	50.83	24.44	30	μg/m³
Monitoring Point 2	12/4/18	PM10	38.61	23.76	30	μg/m³
Monitoring Point 2	9/4/18	PM10	59.28	23.54	30	μg/m³
March 2018	-				•	
Monitoring Point 2	30/3/18	PM10	26.72	22.46	30	μg/m³
Monitoring Point 2	24/3/18	PM10	39.56	22.2	30	μg/m³
Monitoring Point 2	21/3/18	PM10	13.99	21.47	30	μg/m³
Monitoring Point 2	12/3/18	PM10	16.77	21.54	30	μg/m³
Monitoring Point 2	6/3/18	PM10	24.61	21.31	30	1 0,
February 2018						
Monitoring Point 2	28/2/18	PM10	12.18	20.96	30	μg/m³
Monitoring Point 2	22/2/18	PM10	37.31	20.89	30	μg/m³
Monitoring Point 2	19/2/18	PM10	16.64	21.11	30	μg/m³
Monitoring Point 2	10/2/18	PM10	40.06	21.18	30	μg/m³
Monitoring Point 2	4/2/18	PM10	24.79	20.47	30	μg/m³
January 2018	., _, =		, 5		1	F6/ · · ·
Monitoring Point 2	29/1/18	PM10	43.09	20.39	30	μg/m³
Monitoring Point 2	23/1/18	PM10	114.45	19.77	30	μg/m³
Monitoring Point 2	17/1/18	PM10	51.02	17.53	30	μg/m³
Monitoring Point 2	11/1/18	PM10	38.41	16.53	30	μg/m³
Monitoring Point 2	5/1/18	PM10	44.1	16.14	30	μg/m³
December 2017	3/1/10	1 10110	77.1	10.14	30	μ6/111
Monitoring Point 2	30/12/17	PM10	17.47	15.35	30	μg/m³
Monitoring Point 2	28/12/17	PM10	80.86	15.05	30	μg/m ³
Monitoring Point 2	27/12/18	PM10	33.15	14.64	30	μg/m ³
Monitoring Point 2	22/12/17	PM10	23.36	14.51	30	μg/m ³
Monitoring Point 2	20/12/17	PM10	18.88	14.81	30	μg/m ³
Monitoring Point 2	15/12/17	PM10	19.66	15.49	30	μg/m ³
Monitoring Point 2	13/12/17	PM10	41.99	16.41	30	μg/m³
Monitoring Point 2	7/12/17	PM10	6.27	16.45	30	μg/m³
Monitoring Point 2	6/12/17	PM10	5.6	17	30	μg/m ³
November 2017	0/12/1/	1 14110	5.0	1/	1 30	<u>μ</u> 8/ ¹¹¹
Monitoring Point 2	30/11/17	PM10	0	17	30	μg/m³
Monitoring Point 2	24/11/17	PM10	0	017	30	μg/m³
Monitoring Point 2	18/11/17	PM10	0	17	30	μg/m³
Monitoring Point 2	12/11/18	PM10	17.47	18.44	30	μg/m³
Monitoring Point 2	7/11/18	PM10	10.62	18.35	30	μg/m³
Monitoring Point 2	6/11/18	PM10	0	18.35	30	μg/m³
Monitoring Point 2			+		30	
October 2017	3/11/18	PM10	7.12	18.78	30	μg/m³
October 2017						

				Rolling	Limit	
Location	Date	Pollutant	Measurement	Annual	annual	Unit
				Average	average	
Monitoring Point 2	31/10/17	PM10	0	18.78	30	μg/m³
Monitoring Point 2	26/10/17	PM10	5.48	19.05	30	μg/m³
Monitoring Point 2	25/10/17	PM10	0	19.05	30	μg/m³
Monitoring Point 2	19/10/17	PM10	17.2	19.97	30	μg/m³
Monitoring Point 2	16/10/17	PM10	25.4	19.99	30	μg/m³
Monitoring Point 2	13/10/17	PM10	0	19.99	30	μg/m³
Monitoring Point 2	7/10/17	PM10	11.18	20.02	30	μg/m³
Monitoring Point 2	3/10/17	PM10	13.15	20.12	30	μg/m³
Monitoring Point 2	1/10/17	PM10	0	20.15	30	μg/m³
September 2017	. ,		l l		- I	1 0,
Monitoring Point 2	25/9/17	PM10	6.12	19.96	30	μg/m³
Monitoring Point 2	22/9/17	PM10	44.27	19.92	30	μg/m³
Monitoring Point 2	19/9/17	PM10	8.92	19.18	30	μg/m³
Monitoring Point 2	14/9/17	PM10	5.83	19.16	30	μg/m³
Monitoring Point 2	13/9/17	PM10	0	19.12	30	μg/m³
Monitoring Point 2	6/9/17	PM10	1.67	18.91	30	μg/m³
Monitoring Point 2	1/9/17	PM10	8.66	19.1	30	μg/m³
August 2017	_/ 5/ _ :	20	0.00			F-6/ ···
Monitoring Point 2	29/8/17	PM10	8.76	19.21	30	μg/m³
Monitoring Point 2	26/8/17	PM10	0	19.45	30	μg/m³
Monitoring Point 2	20/8/17	PM10	0	19.27	30	μg/m ³
Monitoring Point 2	17/8/17	PM10	1.23	19.02	30	μg/m ³
Monitoring Point 2	14/8/17	PM10	0	19.43	30	μg/m ³
Monitoring Point 2	8/8/17	PM10	3.87	19.23	30	μg/m ³
Monitoring Point 2	2/8/17	PM10	8.04	19.42	30	μg/m ³
July 2017	2,0,1,	111120	0.01	13.12	30	μ6/
Monitoring Point 2	27/7/17	PM10	26.88	19.32	30	μg/m³
Monitoring Point 2	21/7/17	PM10	15.97	18.93	30	μg/m³
Monitoring Point 2	15/7/17	PM10	6.73	18.69	30	μg/m³
Monitoring Point 2	9/7/17	PM10	3.15	18.64	30	μg/m³
Monitoring Point 2	3/7/17	PM10	17.7	18.76	30	μg/m³
June 2017	3,7,17	111120		10.70		μ6/ …
Monitoring Point 2	27/6/17	PM10	27.67	18.54	30	μg/m³
Monitoring Point 2	21/6/17	PM10	6.5	18.25	30	μg/m ³
Monitoring Point 2	15/6/17	PM10	14.01	18.18	30	μg/m ³
Monitoring Point 2	9/6/17	PM10	3.53	18.2	30	μg/m ³
Monitoring Point 2	3/6/17	PM10	17.58	18.15	30	μg/m ³
May 2017	3, 3, 1,	111120	17.55	10.13		μ6/ …
Monitoring Point 2	28/5/17	PM10	5.69	17.96	30	μg/m³
Monitoring Point 2	22/5/17	PM10	7.26	17.9	30	μg/m ³
Monitoring Point 2	16/5/17	PM10	8.9	18.74	30	μg/m ³
Monitoring Point 2	10/5/17	PM10	47.86	18.75	30	μg/m ³
Monitoring Point 2	4/5/17	PM10	20.45	18.01	30	μg/m³
April 2017	,-,					
Monitoring Point 2	28/4/17	PM10	5.22	17.79	30	μg/m³
Monitoring Point 2	22/4/17	PM10	20.7	18.09	30	μg/m³
Monitoring Point 2	16/4/17	PM10	12.83	18.01	30	μg/m³
Monitoring Point 2	10/4/17	PM10	4.77	18.27	30	μg/m³
Monitoring Point 2	4/4/17	PM10	2.02	18.68	30	μg/m³
March 2017	, ,		<u> 1</u>	-		100
1						

				Rolling	Limit	
Location	Date	Pollutant	Measurement	Annual	annual	Unit
				Average	average	
Monitoring Point 2	29/3/17	PM10	18.92	19	30	μg/m³
Monitoring Point 2	23/3/17	PM10	5.44	18.96	30	μg/m³
Monitoring Point 2	17/3/17	PM10	2.74	18.94	30	μg/m³
Monitoring Point 2	11/3/17	PM10	61.15	19.06	30	μg/m³
Monitoring Point 2	5/3/17	PM10	26.36	18.87	30	μg/m³
February 2017	T		T			1
Monitoring Point 2	27/2/17	PM10	38.37	19	30	μg/m³
Monitoring Point 2	21/2/17	PM10	52.19	18.53	30	μg/m³
Monitoring Point 2	15/2/17	PM10	64.66	17.95	30	μg/m³
Monitoring Point 2	9/2/17	PM10	43.81	17.52	30	μg/m³
Monitoring Point 2	3/2/17	PM10	33.17	17.37	30	μg/m³
January 2017						
Monitoring Point 2	28/1/17	PM10	32.54	17.24	30	μg/m³
Monitoring Point 2	22/1/17	PM10	27.25	17.04	30	μg/m³
Monitoring Point 2	16/1/17	PM10	51.24	16.91	30	μg/m³
Monitoring Point 2	10/1/17	PM10	20.87	16.17	30	μg/m³
Monitoring Point 2	4/1/17	PM10	12.44	16.43	30	μg/m³
December 2016						
Monitoring Point 2	29/12/16	PM10	17.81	16.78	30	μg/m³
Monitoring Point 2	23/12/16	PM10	34.22	17.22	30	μg/m³
Monitoring Point 2	17/12/16	PM10	13.18	17.39	30	μg/m³
Monitoring Point 2	11/12/16	PM10	27.27	18.22	30	μg/m³
Monitoring Point 2	5/12/16	PM10	50.68	19.02	30	μg/m³
November 2016	1		1		•	=
Monitoring Point 2	29/11/16	PM10	24.14	20.78	30	μg/m³
Monitoring Point 2	23/11/16	PM10	18.51	20.72	30	μg/m³
Monitoring Point 2	17/11/16	PM10	23.2	22.08	30	μg/m³
Monitoring Point 2	11/11/16	PM10	23.98	22.03	30	μg/m³
Monitoring Point 2	5/11/16	PM10	16.36	22.22	30	μg/m³
October 2016					•	•
Monitoring Point 2	30/10/16	PM10	15.24	22.16	30	μg/m³
Monitoring Point 2	24/10/16	PM10	9.09	22.72	30	μg/m³
Monitoring Point 2	18/10/16	PM10	3.96	22.96	30	μg/m³
Monitoring Point 2	12/10/16	PM10	2.23	23.25	30	μg/m³
Monitoring Point 2	6/10/16	PM10	7.61	23.36	30	μg/m³
September 2016					•	•
Monitoring Point 2	30/9/16	PM10	3.34	23.6	30	μg/m³
Monitoring Point 2	24/9/16	PM10	6.93	23.88	30	μg/m³
Monitoring Point 2	18/9/16	PM10	12.76	23.94	30	μg/m³
Monitoring Point 2	12/9/16	PM10	15.06	23.88	30	μg/m³
Monitoring Point 2	6/9/16	PM10	22.52	23.8	30	μg/m³
August 2016	· · ·	•			•	
Monitoring Point 2	31/8/16	PM10	9.1	23.51	30	μg/m³
Monitoring Point 2	25/8/16	PM10	4.46	23.46	30	μg/m³
Monitoring Point 2	19/8/16	PM10	25.42	23.41	30	μg/m³
Monitoring Point 2	13/8/16	PM10	7.38	23.33	30	μg/m³
Monitoring Point 2	7/8/16	PM10	15.59	23.26	30	μg/m³
Monitoring Point 2	1/8/16	PM10	1.83	23.12	30	μg/m³
July 2016						<u></u>
Monitoring Point 2	26/7/16	PM10	2.78	23.11	30	μg/m³

				Rolling	Limit	
Location	Date	Pollutant	Measurement	Annual	annual	Unit
				Average	average	
Monitoring Point 2	20/7/16	PM10	1.75	23.11	30	μg/m³
Monitoring Point 2	14/7/16	PM10	3.41	23.15	30	μg/m³
Monitoring Point 2	8/7/16	PM10	10.5	23.78	30	μg/m³
Monitoring Point 2	2/7/16	PM10	4.61	26.11	30	μg/m³
June 2016					1	
Monitoring Point 2	26/6/16	PM10	10.05	26.08	30	μg/m³
Monitoring Point 2	20/6/16	PM10	1.86	26	30	μg/m³
Monitoring Point 2	14/6/16	PM10	15.04	26.01	30	μg/m³
Monitoring Point 2	8/6/16	PM10	1.01	26.08	30	μg/m³
Monitoring Point 2	2/6/16	PM10	5.66	26.13	30	μg/m³
May 2016					•	
Monitoring Point 2	27/5/16	PM10	2.28	26.11	30	μg/m³
Monitoring Point 2	21/5/16	PM10	58.18	26.26	30	μg/m³
Monitoring Point 2	15/5/16	PM10	9.68	25.35	30	μg/m³
Monitoring Point 2	9/5/16	PM10	2.96	25.36	30	μg/m³
Monitoring Point 2	3/5/16	PM10	6.69	25.38	30	μg/m³
April 2016		1			.	
Monitoring Point 2	29/4/16	PM10	23.33	25.32	30	μg/m³
Monitoring Point 2	21/4/16	PM10	16.16	24.99	30	μg/m³
Monitoring Point 2	15/4/16	PM10	28.66	24.76	30	μg/m³
Monitoring Point 2	9/4/16	PM10	29.43	24.57	30	μg/m³
Monitoring Point 2	3/4/16	PM10	21.54	24.3	30	μg/m³
March 2016			1			1 0,
Monitoring Point 2	28/3/16	PM10	16.95	24.1	30	μg/m³
Monitoring Point 2	22/3/16	PM10	3.92	24.19	30	μg/m³
Monitoring Point 2	16/3/16	PM10	10.48	24.45	30	μg/m³
Monitoring Point 2	10/3/16	PM10	49.13	24.81	30	μg/m³
Monitoring Point 2	4/3/16	PM10	34.41	24.55	30	μg/m³
February 2016						
Monitoring Point 2	27/2/16	PM10	9.83	24.5	30	μg/m³
Monitoring Point 2	21/2/16	PM10	16.97	24.61	30	μg/m³
Monitoring Point 2	15/2/16	PM10	38.28	24.82	30	μg/m³
Monitoring Point 2	9/2/16	PM10	34.7	24.29	30	μg/m³
Monitoring Point 2	3/2/16	PM10	25.18	23.83	30	μg/m³
January 2016						
Monitoring Point 2	28/1/16	PM10	19.94	23.87	30	μg/m³
Monitoring Point 2	22/1/16	PM10	19.44	23.72	30	μg/m³
Monitoring Point 2	16/1/16	PM10	6.13	23.4	30	μg/m³
Monitoring Point 2	10/1/16	PM10	36.94	23.3	30	μg/m³
Monitoring Point 2	4/1/16	PM10	33.85	22.69	30	μg/m³
December 2015						
Monitoring Point 2	29/12/15	PM10	44.31	22.14	30	μg/m³
Monitoring Point 2	23/12/15	PM10	44.76	21.41	30	μg/m³
Monitoring Point 2	17/12/15	PM10	63.88	20.68	30	μg/m³
Monitoring Point 2	11/12/15	PM10	76.01	19.63	30	μg/m³
Monitoring Point 2	5/12/15	PM10	158.27	18.39	30	μg/m³
November 2015					•	
Monitoring Point 2	29/11/15	PM10	20.35	15.79	30	μg/m³
Monitoring Point 2	23/11/15	PM10	101.65	15.46	30	μg/m³
Monitoring Point 2	17/11/15	PM10	20.00	13.79	30	μg/m³

Location	Date	Pollutant	Measurement	Rolling Annual	Limit annual	Unit
Monitoring Point 2	11/11/15	PM10	35.78	Average 13.46	average 30	11g/m3
Monitoring Point 2	11/11/15 5/11/15	PM10	12.33	13.46	30	μg/m³
Monitoring Point 2 October 2015	3/11/13	PIVITO	12.55	15.22	30	μg/m³
	20/10/15	DN410	40.63	12.05	20	a/m3
Monitoring Point 2	30/10/15	PM10	49.62	13.85	30	μg/m³
Monitoring Point 2 Monitoring Point 2	24/10/15	PM10	23.79 21.32	13.21 13.34	30 30	μg/m³ μg/m³
Monitoring Point 2	18/10/15	PM10 PM10	8.98	13.34	30	
Monitoring Point 2	12/10/15 6/10/15	PM10	22.53	13.36	30	μg/m³ μg/m³
September 2015	6/10/13	PIVITO	22.55	15.50	30	μg/III
Monitoring Point 2	30/9/15	PM10	20.47	13.11	30	ug/m³
Monitoring Point 2	24/9/15	PM10	10.68	13.11	30	μg/m³ μg/m³
Monitoring Point 2	18/9/15	PM10	8.89	13.34	30	μg/m³
Monitoring Point 2	12/9/15	PM10	10.08	13.26	30	μg/m³
Monitoring Point 2	6/9/15	PM10	4.76	13.27	30	μg/m³
August 2015	0/3/13	110110	4.70	13.27] 30	μ6/111
Monitoring Point 2	31/8/15	PM10	6.39	13.25	30	μg/m³
Monitoring Point 2	25/8/15	PM10	1.37	13.33	30	μg/m³
Monitoring Point 2	19/8/15	PM10	20.65	13.55	30	μg/m³
Monitoring Point 2	13/8/15	PM10	3.02	13.4	30	μg/m³
Monitoring Point 2	7/8/15	PM10	6.84	14.07	30	μg/m³
Monitoring Point 2	1/8/15	PM10	1.38	14.23	30	μg/m³
July 2015	1/0/13	1 10110	1.50	14.23		μ6/111
Monitoring Point 2	26/7/15	PM10	2.4	14.42	30	μg/m³
Monitoring Point 2	20/7/15	PM10	4.4	14.61	30	μg/m³
Monitoring Point 2	14/7/15	PM10	42.03	14.79	30	μg/m³
Monitoring Point 2	8/7/15	PM10	152.41	14.1	30	μg/m³
Monitoring Point 2	2/7/15	PM10	3.02	11.68	30	μg/m³
June 2015	_,,,	20	0.02			P6/ · · ·
Monitoring Point 2	26/6/15	PM10	4.98	11.72	30	μg/m³
Monitoring Point 2	20/6/15	PM10	2.35	11.7	30	μg/m³
Monitoring Point 2	14/6/15	PM10	19.19	11.7	30	μg/m³
Monitoring Point 2	8/6/15	PM10	4.51	11.53	30	μg/m³
Monitoring Point 2	2/6/15	PM10	4.38	11.65	30	μg/m³
May 2015	, ,				I	1 0,
Monitoring Point 2	27/5/15	PM10	11.42	11.72	30	μg/m³
Monitoring Point 2	21/5/15	PM10	2.7	11.53	30	μg/m³
Monitoring Point 2	15/5/15	PM10	10.05	11.49	30	μg/m³
Monitoring Point 2	9/5/15	PM10	4.5	11.58	30	μg/m³
Monitoring Point 2	3/5/15	PM10	2.54	11.87	30	μg/m³
April 2015					U.	
Monitoring Point 2	27/4/15	PM10	3.18	12.17	30	μg/m³
Monitoring Point 2	21/4/15	PM10	2.34	12.57	30	μg/m³
Monitoring Point 2	15/4/15	PM10	17.38	12.89	30	μg/m³
Monitoring Point 2	9/4/15	PM10	12.84	13.3	30	μg/m³
Monitoring Point 2	3/4/15	PM10	8.94	13.42	30	μg/m³
March 2015					•	
Monitoring Point 2	28/3/15	PM10	22.57	13.98	30	μg/m³
Monitoring Point 2	22/3/15	PM10	20.06	13.8	30	μg/m³
Monitoring Point 2	16/3/15	PM10	32.41	13.81	30	μg/m³
Monitoring Point 2	10/3/15	PM10	33.22	13.53	30	μg/m³

Location	Date	Pollutant	Measurement	Rolling Annual Average	Limit annual average	Unit			
Monitoring Point 2	4/3/15	PM10	31.49	13.24	30	μg/m³			
February 2015									
Monitoring Point 2	26/2/15	PM10	16.44	13.05	30	μg/m³			
Monitoring Point 2	20/2/15	PM10	29.64	13.2	30	μg/m³			
Monitoring Point 2	14/2/15	PM10	5.88	13.04	30	μg/m³			
Monitoring Point 2	8/2/15	PM10	6.92	13.55	30	μg/m³			
Monitoring Point 2	2/2/15	PM10	27.6	14.21	30	μg/m³			
January 2015									
Monitoring Point 2	27/1/15	PM10	10.62	14.45	30	μg/m³			
Monitoring Point 2	21/1/15	PM10	0	14.42	30	μg/m³			
Monitoring Point 2	15/1/15	PM10	0	14.66	30	μg/m³			
Monitoring Point 2	9/1/15	PM10	0	15.14	30	μg/m³			
Monitoring Point 2	3/1/15	PM10	0	15.42	30	μg/m³			

1.3 TSP

TSP (µg/m³) results for the month of February 2019

Sample Period: February 2019
Date Received: 11 / 3/2019
Licensee: Peppertree Quarry

Licensee

Address: 843 Marulan south Road, Marulan NSW 2579

EPL No: 13088

Qualifications related to Dust:

* Air Emissions Monitoring - High Volume Air Sampler Sampling Frequency is collection of samples over a 24hr period, every 6 days. Protocols are contained in the Air Quality Management Plan found on this website.

Results								
Location Date		Pollutant	Measurement	Rolling Annual Average	Limit	Unit		
Monitoring Point 1	1/3/19	TSP	104.01	56.02	90	μg/m³		
Monitoring Point 1	23/2/19	TSP	191.2	55.62	90	μg/m³		
Monitoring Point 1	17/2/19	TSP	100.59	52.97	90	μg/m³		
Monitoring Point 1	13/2/19	TSP	157.37	52.71	90	μg/m³		
Monitoring Point 1	11/2/19	TSP	no sample	52.58	90	μg/m³		
Monitoring Point 1	5/2/19	TSP	33.13	52.58	90	μg/m³		

The TSP data indicates that during the sampling period the data range was between $33.13 \mu g/m^3$ and $191.2 \mu g/m^3$. The rolling annual average data range was between $51.58 \mu g/m^3$ and $56.02 \mu g/m^3$, well below the long term criteria.

Historical results

Location	Date	Pollutant	Measurement	Rolling Annual Average	Limit annual average	Unit
January 2019				Average	average	
Monitoring Point 1	30/1/19	TSP	98.95	52.08	90	μg/m³
Monitoring Point 1	24/1/19	TSP	69.03	51.34	90	μg/m³
Monitoring Point 1	18/1/19	TSP	118.61	51.53	90	μg/m³
Monitoring Point 1	12/1/19	TSP	29.9	52.42	90	μg/m³
Monitoring Point 1	6/1/19	TSP	23.02	53.68	90	μg/m³
December 2018	0/1/13	131	25.02	33.00	1 30	μ6/111
Monitoring Point 1	31/12/18	TSP	93.28	54.42	90	μg/m³
Monitoring Point 1	25/12/18	TSP	34.31	53.89	90	μg/m³
Monitoring Point 1	19/12/18	TSP	51.86	53.94	90	μg/m³
Monitoring Point 1	13/12/18	TSP	33.06	53.64	90	μg/m³
Monitoring Point 1	7/12/18	TSP	112.35	54.26	90	μg/m³
Monitoring Point 1		TSP	30.51	53.61	90	μg/m³
November 2018	1/12/18	131	30.31	55.01] 30	μ6/ 111
Monitoring Point 1	25/11/18	TSP	22.44	53.22	90	μg/m³
Monitoring Point 1	22/11/18	TSP	81	54.62	90	μg/m³
Monitoring Point 1	19/11/18	TSP	100.43	54.14	90	μg/m³
Monitoring Point 1		TSP	no sample	53.11	90	μg/m³
Monitoring Point 1	13/11/18 7/11/18	TSP	10.84	53.11	90	μg/m³
Monitoring Point 1	-	TSP	75.86	53.84	90	
October 2018	1/11/18	134	75.80	33.04	90	μg/m³
Monitoring Point 1	26/10/18	TSP	51.3	52.82	90	μg/m³
Monitoring Point 1	20/10/18	TSP	51.33	52.82	90	μg/m³
	14/10/18	TSP	13.24	52.32	90	
Monitoring Point 1 Monitoring Point 1	8/10/18	TSP	20.55	52.71	90	μg/m³ μg/m³
Monitoring Point 1	2/10/18	TSP	108.68	53.10	90	μg/m³
September 2018	2/10/16	134	100.00	33.10	90	µg/111
Monitoring Point 1	26/0/19	TSP	44.96	52.04	90	μg/m³
	26/9/18 20/9/18	TSP	66.65	51.75	90	μg/m³
Monitoring Point 1		TSP	+			
Monitoring Point 1	14/9/18	TSP	41.95	50.93 50.68	90	μg/m ³
Monitoring Point 1	8/9/18		19.63			μg/m ³
Monitoring Point 1	2/9/18	TSP	11.65	50.39	90	μg/m³
August 2018 Monitoring Point 1	27/0/10	TSP	74.96	50.95	90	ug/m3
	27/8/18	TSP	3.03	50.93	90	μg/m ³
Monitoring Point 1	21/8/18	TSP	15.9	50.85	90	μg/m ³
Monitoring Point 1	15/8/18		44.1		1	μg/m ³
Monitoring Point 1	9/8/18	TSP	+	50.90	90	μg/m ³
Monitoring Point 1	3/8/18	TSP	79.75	50.22	90	μg/m³
July 2018 Monitoring Point 1	20/7/40	TCD	ד דר	40.24	00	11a/m3
	28/7/18	TSP	27.7	49.24	90	μg/m ³
Monitoring Point 1	22/7/18	TSP	3.53	49.14	90	μg/m ³
Monitoring Point 1	16/7/18	TSP	5.9	49.57	90	μg/m ³
Monitoring Point 1	10/7/18	TSP	15.74	49.53	90	μg/m ³
Monitoring Point 1	4/7/18	TSP	42.6	49.31	90	μg/m³
June 2018	20/0/40	TCD	36.00	40.40	00	110-10-3
Monitoring Point 1	28/6/18	TSP	36.88	49.19	90	μg/m ³
Monitoring Point 1	22/6/18	TSP	12.52	49.96	90	μg/m ³
Monitoring Point 1	16/6/18	TSP	0.77	50.09	90	μg/m³

Location	Date	Pollutant	Measurement	Rolling Annual Average	Limit annual average	Unit	
Monitoring Point 1	10/6/18	TSP	1.77	50.59	90	μg/m³	
Monitoring Point 1	4/6/18	TSP	56.8	50.6	90	μg/m³	
May 2018	, -, -		L			1 0,	
Monitoring Point 1	29/5/18	TSP	111.63	50.62	90	μg/m³	
Monitoring Point 1	23/5/18	TSP	68.46	48.95	90	μg/m³	
Monitoring Point 1	17/5/18	TSP	17.58	48.32	90	μg/m³	
Monitoring Point 1	11/5/18	TSP	2.87	48.39	90	μg/m³	
April 2018	, _,		,	.0.00		P0/ · · ·	
Monitoring Point 1	30/4/18	TSP	24.89	51.57	90	μg/m³	
Monitoring Point 1	23/4/18	TSP	121.08	51.42	90	μg/m³	
Monitoring Point 1	17/4/18	TSP	144.84	50.33	90	μg/m³	
Monitoring Point 1	11/4/18	TSP	79.1	48.04	90	μg/m³	
Monitoring Point 1	5/4/18	TSP	126.5	46.93	90	μg/m³	
March 2018	0, ., 20		120.0	.0.50	1 30	P6/ · · ·	
Monitoring Point 1	30/03/18	TSP	50.30	44.91	90	μg/m³	
Monitoring Point 1	24/3/18	TSP	61.09	44.72	90	μg/m³	
Monitoring Point 1	21/3/18	TSP	11.68	43.79	90	μg/m ³	
Monitoring Point 1	12/3/18	TSP	112.18	43.77	90	μg/m ³	
Monitoring Point 1	6/3/18	TSP	80.22	43.5	90	μg/m ³	
February 2018	0/3/10	131	00.22	73.5	30	µ6/ III	
Monitoring Point 1	28/2/18	TSP	32.38	42.97	90	μg/m³	
Monitoring Point 1	22/2/18	TSP	84.95	43.46	90	μg/m ³	
Monitoring Point 1	19/2/18	TSP	89.4	44.2	90	μg/m ³	
Monitoring Point 1	10/2/18	TSP	62.9	44.92	90	μg/m ³	
Monitoring Point 1	4/2/18	TSP	54.57	44.96	90	μg/m ³	
January 2018	4/2/18	131	34.37	44.30] 30	μβ/ΙΙΙ	
Monitoring Point 1	29/1/18	TSP	80.56	45.5	90	μg/m³	
Monitoring Point 1	23/1/18	TSP	172.05	45.16	90	μg/m ³	
Monitoring Point 1	17/1/18	TSP	105.41	43.20	90	μg/m ³	
Monitoring Point 1	11/1/18	TSP	67.29	42.98	90	μg/m ³	
_	5/1/18	TSP	61.79	42.35	90		
Monitoring Point 1 December 2017	3/1/16	135	01.79	42.33	90	μg/m³	
Monitoring Point 1	30/12/17	TSP	37.34	41.89	90	ua/m3	
Monitoring Point 1	24/12/17	TSP		41.77	90	μg/m ³	
Monitoring Point 1	18/12/17	TSP	33.99	42.26	90	μg/m ³	
		TSP	70.11 73.51	41.52	90	μg/m ³	
Monitoring Point 1	12/12/17	TSP			90	μg/m³	
Monitoring Point 1 November 2017	6/12/17	134	7.08	41.52	90	μg/m³	
	20/11/17	TCD	100.44	42.11	00		
Monitoring Point 1	30/11/17	TSP TSP	106.44	43.11	90	μg/m ³	
Monitoring Point 1	24/11/17		51.84	42.53	90	μg/m ³	
Monitoring Point 1	18/11/17	TSP	38.92	42.46	90	μg/m ³	
Monitoring Point 1	12/11/18	TSP	54.43	42.71	90	μg/m ³	
Monitoring Point 1 6/11/18 TSP 15 42.7 90 μg/m ³							
October 2017	24/40/47	TCD	24.05	42.04	00		
Monitoring Point 1	31/10/17	TSP	21.95	43.04	90	μg/m ³	
Monitoring Point 1	25/10/17	TSP	56.58	43.16	90	μg/m ³	
Monitoring Point 1	19/10/17	TSP	46.25	42.53	90	μg/m³	
Monitoring Point 1	13/10/17	TSP	36.61	41.97	90	μg/m ³	
Monitoring Point 1	7/10/17	TSP	44.45	41.55	90	μg/m³	
Monitoring Point 1	1/10/17	TSP	44.27	41.07	90	μg/m³	

Location	Date	Pollutant	Measurement	Rolling Annual Average	Limit annual average	Unit
September 2017				, trei age	average	
Monitoring Point 1	25/9/17	TSP	27.29	40.54	90	μg/m³
Monitoring Point 1	19/9/17	TSP	16.49	40.4	90	μg/m³
Monitoring Point 1	13/9/17	TSP	26.54	40.83	90	μg/m³
Monitoring Point 1	6/9/17	TSP	2.01	41.14	90	μg/m³
Monitoring Point 1	1/9/17	TSP	46.01	41.52	90	μg/m³
August 2017	, -,				L	F-0/
Monitoring Point 1	26/8/17	TSP	21.1	40.95	90	μg/m³
Monitoring Point 1	20/8/17	TSP	50.93	40.78	90	μg/m³
Monitoring Point 1	14/8/17	TSP	18.5	41	90	μg/m³
Monitoring Point 1	8/8/17	TSP	2.65	40.87	90	μg/m³
Monitoring Point 1	2/8/17	TSP	20.08	41.51	90	μg/m ³
July 2017	2/3/1/		20.00	11.51		μ6/ …
Monitoring Point 1	27/7/17	TSP	21.95	41.26	90	μg/m³
Monitoring Point 1	21/7/17	TSP	29.23	40.98	90	μg/m³
Monitoring Point 1	15/7/17	TSP	4	40.63	90	μg/m³
Monitoring Point 1	9/7/17	TSP	1.96	40.58	90	μg/m³
Monitoring Point 1	3/7/17	TSP	35.64	40.70	90	μg/m³
June 2017	, ,					1 0,
Monitoring Point 1	27/6/17	TSP	83.61	40.22	90	μg/m³
Monitoring Point 1	21/6/17	TSP	20.64	39.07	90	μg/m³
Monitoring Point 1	15/6/17	TSP	30.78	38.79	90	μg/m³
Monitoring Point 1	9/6/17	TSP	2.79	38.72	90	μg/m³
Monitoring Point 1	3/6/17	TSP	57.96	38.7	90	μg/m³
May 2017	, ,					1 0,
Monitoring Point 1	28/5/17	TSP	9.59	37.85	90	μg/m³
Monitoring Point 1	22/5/17	TSP	30.22	37.81	90	μg/m³
Monitoring Point 1	16/5/17	TSP	21.84	39.21	90	μg/m³
Monitoring Point 1	10/5/17	TSP	138.25	39.13	90	μg/m³
Monitoring Point 1	4/5/17	TSP	63.66	37.03	90	μg/m³
April 2017					•	
Monitoring Point 1	28/4/17	TSP	15.58	36.22	90	μg/m³
Monitoring Point 1	22/4/17	TSP	54.52	36.9	90	μg/m³
Monitoring Point 1	16/4/17	TSP	5.18	36.72	90	μg/m³
Monitoring Point 1	10/4/17	TSP	11.65	37.81	90	μg/m³
Monitoring Point 1	4/4/17	TSP	3.21	38.88	90	μg/m³
March 2017						
Monitoring Point 1	29/3/17	TSP	38.89	39.72	90	μg/m³
Monitoring Point 1	23/3/17	TSP	3.96	40.26	90	μg/m³
Monitoring Point 1	17/3/17	TSP	10.7	40.73	90	μg/m³
Monitoring Point 1	11/3/17	TSP	95.51	41.04	90	μg/m³
Monitoring Point 1	5/3/17	TSP	48.22	41.37	90	μg/m³
February 2017	-		,		1	T
Monitoring Point 1	27/2/17	TSP	62.22	41.97	90	μg/m³
Monitoring Point 1	21/2/17	TSP	129.86	41.5	90	μg/m³
Monitoring Point 1	15/2/17	TSP	133.48	40.19	90	μg/m³
Monitoring Point 1	9/2/17	TSP	65.23	39.26	90	μg/m³
Monitoring Point 1	3/2/17	TSP	87.53	39.72	90	μg/m³
January 2017			,		1	T
Monitoring Point 1	28/1/17	TSP	59.99	39.26	90	μg/m³

Rolling Limit								
Location	Date	Pollutant	Measurement	Annual	annual	Unit		
				Average	average			
Monitoring Point 1	22/1/17	TSP	52.3	39.11	90	μg/m³		
Monitoring Point 1	16/1/17	TSP	91.92	39	90	μg/m³		
Monitoring Point 1	10/1/17	TSP	29.07	37.82	90	μg/m³		
Monitoring Point 1	4/1/17	TSP	33.78	38.6	90	μg/m³		
December 2016			1		1			
Monitoring Point 1	29/12/16	TSP	29.63	38.79	90	μg/m³		
Monitoring Point 1	23/12/16	TSP	64.25	39.85	90	μg/m³		
Monitoring Point 1	17/12/16	TSP	24.69	40.58	90	μg/m³		
Monitoring Point 1	11/12/16	TSP	73.5	42.34	90	μg/m³		
Monitoring Point 1	5/12/16	TSP	104.36	43.1	90	μg/m³		
November 2016	, ,		ı		1	1 0,		
Monitoring Point 1	29/11/16	TSP	71.14	42.61	90	μg/m³		
Monitoring Point 1	23/11/16	TSP	47.44	42.23	90	μg/m³		
Monitoring Point 1	17/11/16	TSP	54.04	43.37	90	μg/m³		
Monitoring Point 1	11/11/16	TSP	53.96	43.31	90	μg/m³		
Monitoring Point 1	5/11/16	TSP	35.42	44.4	90	μg/m³		
October 2016			1		1			
Monitoring Point 1	30/10/16	TSP	29.77	44.46	90	μg/m³		
Monitoring Point 1	24/10/16	TSP	18.07	45.98	90	μg/m³		
Monitoring Point 1	18/10/16	TSP	11.73	46.78	90	μg/m³		
Monitoring Point 1	12/10/16	TSP	11.08	47.36	90	μg/m³		
Monitoring Point 1	6/10/16	TSP	15.33	47.63	90	μg/m³		
September 2016			1		1			
Monitoring Point 1	30/9/16	TSP	12.16	48.12	90	μg/m³		
Monitoring Point 1	24/9/16	TSP	18.25	48.89	90	μg/m³		
Monitoring Point 1	18/9/16	TSP	43.14	49.18	90	μg/m³		
Monitoring Point 1	12/9/16	TSP	45.55	48.85	90	μg/m³		
Monitoring Point 1	6/9/16	TSP	24.82	48.48	90	μg/m³		
August 2016					•			
Monitoring Point 1	31/8/16	TSP	11.29	48.45	90	μg/m³		
Monitoring Point 1	25/8/16	TSP	9.81	48.48	90	μg/m³		
Monitoring Point 1	19/8/16	TSP	65.49	48.37	90	μg/m³		
Monitoring Point 1	13/8/16	TSP	10.2	48.26	90	μg/m³		
Monitoring Point 1	7/8/16	TSP	42.03	48.17	90	μg/m³		
Monitoring Point 1	1/8/16	TSP	4.88	47.56	90	μg/m³		
July 2016								
Monitoring Point 1	26/7/16	TSP	4.53	47.67	90	μg/m³		
Monitoring Point 1	20/7/16	TSP	8.15	47.72	90	μg/m³		
Monitoring Point 1	14/7/16	TSP	0.93	47.81	90	μg/m³		
Monitoring Point 1	8/7/16	TSP	9.31	48.04	90	μg/m³		
Monitoring Point 1	2/7/16	TSP	6.2	49.93	90	μg/m³		
June 2016								
Monitoring Point 1	26/6/16	TSP	13.55	49.91	90	μg/m³		
Monitoring Point 1	20/6/16	TSP	3.38	50.13	90	μg/m³		
Monitoring Point 1	14/6/16	TSP	26.58	50.15	90	μg/m³		
Monitoring Point 1	8/6/16	TSP	1.39	52.44	90	μg/m³		
Monitoring Point 1	2/6/16	TSP	6.46	52.54	90	μg/m³		
May 2016								
Monitoring Point 1	27/5/16	TSP	6.76	52.58	90	μg/m³		
Monitoring Point 1	21/5/16	TSP	115.99	52.76	90	μg/m³		

Landing	Data	Ballista ist		Rolling	Limit	1124
Location	Date	Pollutant	Measurement	Annual	annual	Unit
Manitarina Daint 1	45 /5 /46	TCD	17.01	Average	average	
Monitoring Point 1	15/5/16	TSP	17.01	51.01	90	μg/m ³
Monitoring Point 1	9/5/16	TSP	10.38	51.12	90	μg/m³
Monitoring Point 1	3/5/16	TSP	13.9	51.23	90	μg/m³
April 2016	20/4/46	TCD		54.44	1 00	/ 2
Monitoring Point 1	29/4/16	TSP	57.1	51.14	90	μg/m³
Monitoring Point 1	21/4/16	TSP	43.81	50.31	90	μg/m ³
Monitoring Point 1	15/4/16	TSP	71.37	49.66	90	μg/m³
Monitoring Point 1	9/4/16	TSP	77.16	49.04	90	μg/m³
Monitoring Point 1	3/4/16	TSP	54.12	48.25	90	μg/m³
March 2016	20/2/46	TCD	72.4	47.0	00	
Monitoring Point 1	28/3/16	TSP	72.1	47.8	90	μg/m³
Monitoring Point 1	22/3/16	TSP	32.4	47.63	90	μg/m³
Monitoring Point 1	16/3/16	TSP	29.6	47.93	90	μg/m³
Monitoring Point 1	10/3/16	TSP	115.53	48.65	90	μg/m³
Monitoring Point 1	4/3/16	TSP	85.2	47.98	90	μg/m³
February 2016					1	
Monitoring Point 1	27/2/16	TSP	33.44	47.76	90	μg/m³
Monitoring Point 1	21/2/16	TSP	50.04	47.81	90	μg/m³
Monitoring Point 1	15/2/16	TSP	76.75	47.99	90	μg/m³
Monitoring Point 1	9/2/16	TSP	93.03	47.81	90	μg/m³
Monitoring Point 1	3/2/16	TSP	59.44	47.38	90	μg/m³
January 2016						
Monitoring Point 1	28/1/16	TSP	51.24	47.07	90	μg/m³
Monitoring Point 1	22/1/16	TSP	45.26	46.55	90	μg/m³
Monitoring Point 1	16/1/16	TSP	19.87	46.56	90	μg/m³
Monitoring Point 1	10/1/16	TSP	76.68	46.96	90	μg/m³
Monitoring Point 1	4/1/16	TSP	45.33	46.38	90	μg/m³
December 2015					1	
Monitoring Point 1	29/12/15	TSP	94.46	46.6	90	μg/m³
Monitoring Point 1	23/12/15	TSP	108.57	45.39	90	μg/m³
Monitoring Point 1	17/12/15	TSP	132.01	44.45	90	μg/m³
Monitoring Point 1	11/12/15	TSP	120.32	43.99	90	μg/m³
Monitoring Point 1	5/12/15	TSP	74.44	42.24	90	μg/m³
November 2015						
Monitoring Point 1	29/11/15	TSP	47.73	41.41	90	μg/m³
Monitoring Point 1	23/11/15	TSP	122.91	41.45	90	μg/m³
Monitoring Point 1	17/11/15	TSP	44.6	40.46	90	μg/m³
Monitoring Point 1	11/11/15	TSP	120.58	40.15	90	μg/m³
Monitoring Point 1	5/11/15	TSP	38.57	39.32	90	μg/m³
October 2015						
Monitoring Point 1	30/10/15	TSP	122.73	40.48	90	μg/m³
Monitoring Point 1	24/10/15	TSP	67.06	38.89	90	μg/m³
Monitoring Point 1	18/10/15	TSP	47.17	38.85	90	μg/m³
Monitoring Point 1	12/10/15	TSP	27.05	38.69	90	μg/m³
Monitoring Point 1	6/10/15	TSP	45.75	38.74	90	μg/m³
September 2015						
Monitoring Point 1	30/9/15	TSP	58.64	38.4	90	μg/m³
Monitoring Point 1	24/9/15	TSP	36.25	38.31	90	μg/m³
Monitoring Point 1	18/9/15	TSP	22.87	38.63	90	μg/m³

Location	Date	Pollutant	Measurement	Rolling Annual Average	Limit annual average	Unit		
Monitoring Point 1	12/9/15	TSP	22.99	38.39	90	μg/m³		
Monitoring Point 1	6/9/15	TSP	23.05	38.29	90	μg/m³		
August 2015	0/3/13	131	25.05	30.23	30	μ6/ 111		
Monitoring Point 1	31/8/15	TSP	13.26	38.1	90	μg/m³		
Monitoring Point 1	25/8/15	TSP	3.02	38.51	90	μg/m³		
Monitoring Point 1	19/8/15	TSP	58.67	38.89	90	μg/m³		
Monitoring Point 1	13/8/15	TSP	4.73	38.27	90	μg/m³		
Monitoring Point 1	7/8/15	TSP	4.98	39.36	90	μg/m³		
Monitoring Point 1	1/8/15	TSP	11.69	39.69	90	μg/m³		
July 2015	1/0/13		11.03	33.03		μ6/ …		
Monitoring Point 1	26/7/15	TSP	7.24	39.97	90	μg/m³		
Monitoring Point 1	20/7/15	TSP	13.48	40.23	90	μg/m³		
Monitoring Point 1	14/7/15	TSP	15.47	40.63	90	μg/m³		
Monitoring Point 1	8/7/15	TSP	124.63	40.68	90	μg/m³		
Monitoring Point 2	2/7/15	TSP	4.89	38.66	90	μg/m³		
June 2015	_,,,			30.00	1 30	P6/ ···		
Monitoring Point 1	26/6/15	TSP	26.76	38.66	90	μg/m³		
Monitoring Point 1	20/6/15	TSP	4.57	38.34	90	μg/m³		
Monitoring Point 1	14/6/15	TSP	166.17	38.37	90	μg/m³		
Monitoring Point 1	8/6/15	TSP	7.93	35.95	90	μg/m³		
Monitoring Point 1	2/6/15	TSP	8.88	36.13	90	μg/m³		
May 2015	2/0/10		0.00	30.13	1 30	μ6/ …		
Monitoring Point 1	27/5/15	TSP	17.38	36.18	90	μg/m³		
Monitoring Point 1	21/5/15	TSP	9.13	36.65	90	μg/m³		
Monitoring Point 1	15/5/15	TSP	23.73	36.96	90	μg/m³		
Monitoring Point 1	9/5/15	TSP	17.29	37.01	90	μg/m³		
Monitoring Point 1	3/5/15	TSP	8.63	37.65	90	μg/m³		
April 2015	-, -, -					1-0/		
Monitoring Point 1	27/4/15	TSP	6.27	38.05	90	μg/m³		
Monitoring Point 1	21/4/15	TSP	4.23	38.92	90	μg/m³		
Monitoring Point 1	15/4/15	TSP	33.39	39.42	90	μg/m³		
Monitoring Point 1	9/4/15	TSP	29.35	39.62	90	μg/m³		
Monitoring Point 1	3/4/15	TSP	26.25	39.79	90	μg/m³		
March 2015	5, 1, 25					P-0/ ···		
Monitoring Point 1	28/3/15	TSP	61.75	39.79	90	μg/m³		
Monitoring Point 1	22/3/15	TSP	50.67	39.05	90	μg/m³		
Monitoring Point 1	16/3/15	TSP	73.64	38.86	90	μg/m³		
Monitoring Point 1	10/3/15	TSP	74.9	38.1	90	μg/m³		
Monitoring Point 1	4/3/15	TSP	71.58	37.56	90	μg/m³		
February 2015			-		1	, , 5,		
Monitoring Point 1	26/2/15	TSP	36.44	37.08	90	μg/m³		
Monitoring Point 1	20/2/15	TSP	61.3	37.19	90	μg/m³		
Monitoring Point 1	14/2/15	TSP	65.34	36.79	90	μg/m³		
Monitoring Point 1	8/2/15	TSP	66.82	37.15	90	μg/m³		
Monitoring Point 1	2/2/15	TSP	40.95	37.9	90	μg/m³		
January 2015								
Monitoring Point 1	27/1/15	TSP	18.98	38.99	90	μg/m³		
Monitoring Point 1	21/1/15	TSP	45.9	39.19	90	μg/m³		
Monitoring Point 1	15/1/15	TSP	44.78	39.54	90	μg/m³		
Monitoring Point 1	9/1/15	TSP	41.31	39.97	90	μg/m³		

Location	Date	Pollutant	Measurement	Rolling Annual Average	Limit annual average	Unit
Monitoring Point 1	3/1/15	TSP	58.28	40.27	90	μg/m³

2. Blasting

Blast monitoring is conducted as per condition L7 of EPL 13088. The blasting monitoring results for the month of February 2019 are summarised below.

Sample Period: February 2019
Licensee: Peppertree Quarry

Licensee Address: 843 Marulan south road, Marulan NSW 2579

EPL No: 13088

Qualifications related to noise:

- * The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time
- * The overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) for more than 5% of the total number of blasts over each reporting period
- * Ground vibration peak particle vector from the blasting operations at the premises must not exceed 10mm/sec at any time
- * Ground vibration peak particle vector from the blasting operations at the premises must not exceed 5mm/sec for more than 5% of the total number of blasts over each reporting period
- * Blast monitoring overpressure and ground vibration is measured at the 4 locations. North west, north east, Pace and managers residence

Measurements are online and can be obtained within 15minutes of the blast however blast reports with the data are submitted with 48 hours of each blast

Results					
	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result			Compliant
North West Boundary	28 th February 2019	no trigger	YES	no trigger	YES
North East Boundary	28 th February 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	28 th February 2019	no trigger	YES	no trigger	YES
Residence	28 th February 2019	no trigger	YES	no trigger	YES
North West Boundary	26 th February 2019	0.34	YES	99.2	YES
North East Boundary	26 th February 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	26 th February 2019	no trigger	YES	no trigger	YES
Residence	26 th February 2019	0.43	YES	100.1	YES
North West Boundary	21 st February 2019	0.84	YES	106.8	YES
North East Boundary	21 st February 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	21 st February 2019	no trigger	YES	no trigger	YES
Residence	21 st February 2019	1.18	YES	101.7	YES
North West Boundary	14 th February 2019	0.29	YES	97.7	YES
North East Boundary	14 th February 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	14 th February 2019	no trigger	YES	no trigger	YES
Residence	14 th February 2019	0.28	YES	101.7	YES
North West Boundary	11 th February 2019	0.57	YES	104.3	YES
North East Boundary	11 th February 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	11 th February 2019	no trigger	YES	no trigger	YES
Residence	11 th February 2019	0.7	YES	100.2	YES

North West Boundary	7 th February 2019	0.87	YES	106.6	YES
North East Boundary	7 th February 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	7 th February 2019	0.22	YES	102	YES
Residence	7 th February 2019	1.19	YES	100.1	YES

The blast data indicates that results are below the trigger levels for both Ground Vibration and Overpressure for all blasts conducted in February 2019.

Historical results

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result			Compliant
North West Boundary	31 st January 2019	1.24	YES	99	YES
North East Boundary	31 st January 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	31 st January 2019	no trigger	YES	no trigger	YES
Residence	31 st January 2019	0.91	YES	104.8	YES
North West Boundary	24th January 2019	1.26	YES	108.7	YES
North East Boundary	24 th January 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	24th January 2019	no trigger	YES	no trigger	YES
Residence	24th January 2019	1.66	YES	105.7	YES
North West Boundary	17 th January 2019	0.41	YES	112.4	YES
North East Boundary	17th January 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	17th January 2019	no trigger	YES	no trigger	YES
Residence	17th January 2019	0.6	YES	106.6	YES
North West Boundary	11 th January 2019	1.29	YES	107.3	YES
North East Boundary	11th January 2019	no trigger	YES	no trigger	YES
683 Marulan South Road	11th January 2019	no trigger	YES	no trigger	YES
Residence	11th January 2019	1.18	YES	104.8	YES
North West Boundary	20 th December 2018	0.89	YES	107.3	YES
North East Boundary	20 th December 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	20 th December 2018	no trigger	YES	no trigger	YES
Residence	20 th December 2018	0.96	YES	104.2	YES
North West Boundary	18th December 2018	1.23	YES	104.7	YES
North East Boundary	18th December 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	18th December 2018	no trigger	YES	no trigger	YES
Residence	18th December 2018	1.01	YES	104.8	YES
North West Boundary	12th December 2018	no trigger	YES	no trigger	YES
North East Boundary	12th December 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	12th December 2018	no trigger	YES	no trigger	YES
Residence	12th December 2018	no trigger	YES	no trigger	YES
North West Boundary	7 th December 2018	1.39	YES	109	YES
North East Boundary	7 th December 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	7 th December 2018	no trigger	YES	no trigger	YES
Residence	7 th December 2018	0.84	YES	104.2	YES

Location	Blast Date	Ground Vibration Result	GV Compliant	Overpressure Result	OP Compliant
North West Boundary	29 th November 2018	1.02	YES	108.0	YES
North East Boundary	29 th November 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	29 th November 2018	no trigger	YES	no trigger	YES
Residence	29 th November 2018	1.12	YES	100.1	YES
North West Boundary	24 th November 2018	0.81	YES	101.1	YES
North East Boundary	24 th November 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	24 th November 2018	no trigger	YES	no trigger	YES
Residence	24 th November 2018	0.9	YES	100.1	YES
	th				
North West Boundary	16 th November 2018	1.3	YES	108	YES
North East Boundary	16 th November 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	16 th November 2018	no trigger	YES	no trigger	YES
Residence	16 th November 2018	1.0	YES	105.5	YES
North West Boundary	12 th November 2018	1.52	YES	107.3	YES
North East Boundary	12 th November 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	12 th November 2018	no trigger	YES	no trigger	YES
Residence	12 th November 2018	0.89	YES	114.4	YES
Residence			1.2		
North West Boundary	31 st October 2018	0.52	YES	105.8	YES
North East Boundary	31 st October 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	31 st October 2018	0.11	YES	100.4	YES
Residence	31 st October 2018	0.91	YES	102.8	YES
North West Boundary	25 th October 2018	0.62	YES	103.8	YES
North East Boundary	25 th October 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	25 th October 2018	0.11	YES	100.3	YES
Residence	25 th October 2018	0.57	YES	101.8	YES
	th				
North West Boundary	18 th October 2018	0.65	YES	105.4	YES
North East Boundary	18 th October 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	18 th October 2018	no trigger	YES	no trigger	YES
Residence	18 th October 2018	0.9	YES	103.2	YES
North West Boundary	11 th October 2018	0.57	YES	109.8	YES
North East Boundary	11 th October 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	11 th October 2018	0.13	YES	100.1	YES
Residence	11 th October 2018	0.73	YES	106.9	YES
	th -				
North West Boundary	20 th September 2018	no trigger	YES	no trigger	YES
North East Boundary	20 th September 2018	0.3	YES	110.3	YES
683 Marulan South Road	20 th September 2018	no trigger	YES	100.5	YES
Residence	20 th September 2018	0.8	YES	104.4	YES
North West Boundary	12 th September 2018	no trigger	YES	no trigger	YES
North East Boundary	12 th September 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	12 th September 2018	no trigger	YES	no trigger	YES
Residence	12 September 2018	no trigger	YES	no trigger	YES
RESIDENCE	12 September 2010	110 015501	123	110 (11660)	123

Location	Blast Date	Ground Vibration Result	GV Compliant	Overpressure Result	OP Compliant
North West Boundary	6 th September 2018	1.05	YES	105.6	YES
North East Boundary	6 th September 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	6 th September 2018	no trigger	YES	no trigger	YES
Residence	6 th September 2018	0.6	YES	105.9	YES
			-		
North West Boundary	5 th September 2018	1.04	YES	109.8	YES
North East Boundary	5 th September 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	5 th September 2018	0.23	YES	104.2	YES
Residence	5 th September 2018	1.56	YES	108.9	YES
	'				
North West Boundary	30 th August 2018	1.34	YES	113	YES
North East Boundary	30 th August 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	30 th August 2018	0.2	YES	99.4	YES
Residence	30 th August 2018	1.31	YES	106.5	YES
Residence			1.2		
North West Boundary	21st August 2018	1.07	YES	109.9	YES
North East Boundary	21st August 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	21st August 2018	0.11	YES	99.2	YES
Residence	21st August 2018	1.14	YES	108.2	YES
Residence	213071080302010	1111	1.23	100.2	5
North West Boundary	9 th August 2018	1.17	YES	107.3	YES
North East Boundary	9 th August 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	9 th August 2018	no trigger	YES	no trigger	YES
Residence	9 th August 2018	0.7	YES	110.3	YES
Residence	5 //ugust 2010	0.7	123	110.5	123
North West Boundary	2nd August 2018	0.88	YES	103	YES
North East Boundary	2nd August 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	2nd August 2018	no trigger	YES	no trigger	YES
Residence	2nd August 2018	0.59	YES	107.3	YES
Residence	2110 7106031 2010	0.55	123	107.5	123
North West Boundary	26 th July 2018	0.73	YES	no trigger	YES
North East Boundary	26 th July 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	26 th July 2018	no trigger	YES	no trigger	YES
Residence	26 th July 2018	1.13	YES	102.5	YES
Nesidefice	20 July 2010	1.13	123	102.5	11.5
North West Boundary	20 th July 2018	no trigger	YES	no trigger	YES
North East Boundary	20 th July 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	20 th July 2018	no trigger	YES	no trigger	YES
	20 July 2018	no data	YES	no data	YES
Residence	20 July 2016	110 data	TES	110 uata	1123
North Wost Poundary	12 th July 2018	0.94	YES	104.9	YES
North West Boundary	12 July 2018 12 th July 2018	no trigger	YES	no trigger	YES
North East Boundary 683 Marulan South Road	12 July 2018 12 th July 2018		YES		YES
	12 July 2018 12 th July 2018	no trigger 0.82	YES	no trigger	YES
Residence	12 July 2018	0.82	TES	105	115
AL	E th 1 204.0	1 1 1	VEC	110.1	VEC
North West Boundary	5 th July 2018	1.14	YES	110.1	YES
North East Boundary	5 th July 2018 5 th July 2018	no trigger	YES	no trigger	YES
	1.5 THIV 2018	no trigger	YES	no trigger	YES
683 Marulan South Road Residence	5 th July 2018	0.65	YES	106.9	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	ОР
Location	2011 1 2040	Result	VEC	405.4	Compliant
North West Boundary	28th June 2018	0.98	YES	105.4	YES
North East Boundary	28th June 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	28th June 2018	0.21	YES	100.9	YES
Residence	28th June 2018	1.64	YES	103.2	YES
North West Boundary	22 nd June 2018	0.88	YES	107.3	YES
North East Boundary	22 nd June 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	22 nd June 2018	0.15	YES	101.7	YES
Residence	22 nd June 2018	no trigger	YES	no trigger	YES
North West Davidson	14 th June 2018	1.53	YES	110	YES
North West Boundary	14 June 2018				
North East Boundary	14 June 2018 14 th June 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	14 June 2018 14 th June 2018	0.14	YES	100.5	YES
Residence	14 June 2018	no trigger	YES	no trigger	YES
North West Boundary	6 th June 2018	1.32	YES	108.8	YES
North East Boundary	6 th June 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	6 th June 2018	0.21	YES	99.7	YES
Residence	6 th June 2018	no trigger	YES	no trigger	YES
North West Boundary	21 ct May 2019	0.0	VEC	100 1	VEC
North West Boundary	31st May 2018	0.9	YES	108.1	YES
North East Boundary	31st May 2018	no trigger 0.14	YES	no trigger	YES
683 Marulan South Road	31st May 2018		YES	99.6	YES
Residence	31st May 2018	no trigger	YES	no trigger	YES
North West Boundary	24 th May 2018	0.49	YES	104.9	YES
North East Boundary	24 th May 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	24 th May 2018	no trigger	YES	no trigger	YES
Residence	24 th May 2018	0.63	YES	102.5	YES
North West Boundary	17th May 2018	0.73	YES	105.9	YES
North East Boundary	17th May 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	17th May 2018	0.11	YES	100.9	YES
Residence	17th May 2018	0.79	YES	106.7	YES
North West Boundary	10 May 2018	no trigger	YES	no trigger	YES
North East Boundary	10 May 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	10 May 2018	no trigger	YES	no trigger	YES
Residence	10 May 2018	0.04	YES	112.1	YES
Nouth Mest Day	2 May 2019		VEC	no tuina	VEC
North West Boundary	3 May 2018	no trigger	YES	no trigger	YES
North East Boundary	3 May 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	3 May 2018	no trigger	YES	no trigger	YES
Residence	3 May 2018	0.63	YES	103.6	YES
North West Boundary	19 April 2018	0.95	YES	108.9	YES
North East Boundary	19 April 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	19 April 2018	0.12	YES	100.8	YES
Residence	19 April 2018	no trigger	YES	no trigger	YES
					

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result			Compliant
North West Boundary	12 April 2018	no data available	YES	no data available	YES
North East Boundary	12 April 2018	no data available	YES	no data available	YES
683 Marulan South Road	12 April 2018	no data available	YES	no data available	YES
Residence	12 April 2018	no data available	YES	no data available	YES
North West Boundary	22nd March 2018	1.05	YES	110	YES
North East Boundary	22nd March 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	22nd March 2018	0.14	YES	108.2	YES
Residence	22nd March 2018	0.98	YES	114.9	YES
	45 1 2040	1.1	VEC	00.2	VEC
North West Boundary	15 march 2018	1.1	YES	99.3	YES
North East Boundary	15 march 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	15 march 2018	0.1	YES	99.2	YES
Residence	15 march 2018	1.45	YES	98.5	YES
North West Boundary	12 march 2018	1.9	YES	108.4	YES
North East Boundary	12 march 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	12 march 2018	0.17	YES	100.3	YES
Residence	12 march 2018	1.2	YES	103.2	YES
North West Boundary	1st March 2018	1.3	YES	106.4	YES
North East Boundary	1st March 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	1st March 2018	no trigger	YES	no trigger	YES
Residence	1st March 2018	1.6	YES	105	YES
North West Boundary	20 February 2018	1.2	YES	110.5	YES
North East Boundary	20 February 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	20 February 2018	0.1	YES	102.4	YES
Residence	20 February 2018	1.75	YES	109.9	YES
Residence	201001001	1.73	1.23	103.3	
North West Boundary	16 February 2018	4.1	YES	109.1	YES
North East Boundary	16 February 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	16 February 2018	0.17	YES	106.4	YES
Residence	16 February 2018	1.3	YES	110.5	YES
North West Boundary	8 February 2018	no trigger	YES	no trigger	YES
North East Boundary	8 February 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	8 February 2018	no trigger	YES	no trigger	YES
Residence	8 February 2018	no trigger	YES	no trigger	YES
Residence	8 Tebruary 2018	no trigger	TES	no trigger	ILS
North West Boundary	1 February 2018	1.1	YES	103.8	YES
North East Boundary	1 February 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	1 February 2018	no trigger	YES	no trigger	YES
Residence	1 February 2018	0.65	YES	103.5	YES
Nowth Most Davidson	2E January 2010	no trigger	VEC	no triage:	VEC
North West Boundary	25 January 2018	no trigger	YES	no trigger	YES
North East Boundary	25 January 2018	no trigger	YES	no trigger	YES
	25 January 2018	no trigger	YES	no trigger	YES
683 Marulan South Road Residence	25 January 2018	0.6	YES	111.9	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result	•	•	Compliant
North West Boundary	11 January 2018	0.85	YES	98.4	YES
North East Boundary	11 January 2018	no trigger	YES	no trigger	YES
683 Marulan South Road	11 January 2018	0.13	YES	100	YES
Residence	11 January 2018	1.35	YES	99.5	YES
North West Boundary	21 December 2017	0.95	YES	108.9	YES
North East Boundary	21 December 2017	no trigger	YES	no trigger	YES
683 Marulan South Road	21 December 2017	0.09	YES	101.2	YES
Residence	21 December 2017	0.8	YES	108.3	YES
North West Boundary	14 December 2017	no trigger	YES		YES
North East Boundary	14 December 2017	no trigger	YES	no trigger	YES
683 Marulan South Road	14 December 2017	no trigger	YES	no trigger	YES
Residence	14 December 2017	no trigger	YES		YES
North West Boundary	8 December 2017	1.15	YES	102	YES
North East Boundary	8 December 2017	no trigger	YES	no trigger	YES
683 Marulan South Road	8 December 2017	no trigger	YES	no trigger	YES
Residence	8 December 2017	0.85	YES	106.2	YES
Residence		0.00			
North West Boundary	4 December 2017	1.16	YES		YES
North East Boundary	4 December 2017	no trigger	YES	no trigger	YES
683 Marulan South Road	4 December 2017	no trigger	YES	no trigger	YES
Residence	4 December 2017	1.65	YES	110 (118861	YES
Nesidefice	4 December 2017	1.03	123		11.5
North West Boundary	16 November 2017	0.65	YES	105.7	YES
North East Boundary	16 November 2017	no trigger	YES	no trigger	YES
683 Marulan South Road	16 November 2017	0.1	YES	no trigger	YES
Residence	16 November 2017	0.7	YES	106.5	YES
Nesidefice	10 14040111501 2017	0.7	123	100.5	123
North West Boundary	13 November 2017	0.8	YES	105.8	YES
North East Boundary	13 November 2017	no trigger	YES	no trigger	YES
683 Marulan South Road	13 November 2017	no trigger	YES	no trigger	YES
Residence	13 November 2017	0.7	YES	107.1	YES
residence	13 November 2017	0.7	11.5	107.1	11.3
North West Poundary	2 November 2017	0.75	YES	100.3	YES
North West Boundary	2 November 2017	no trigger	YES	no trigger	YES
North East Boundary 683 Marulan South Road	2 November 2017	0.11	YES		YES
	2 November 2017	0.8	YES	no trigger 100.2	YES
Residence	2 November 2017	0.6	153	100.2	163
North West Davidson	24 October 2017	0.5	VEC	101	VEC
North Vest Boundary	24 October 2017	0.5	YES	101	YES
North East Boundary	24 October 2017	no trigger	YES	no trigger	YES
683 Marulan South Road	24 October 2017	no trigger	YES	no trigger	YES
Residence	24 October 2017	0.6	YES	100.7	YES
N	42 Octob == 2047	4.25	VEC	400.3	VEC
North West Boundary	13 October 2017	1.25	YES	100.3	YES
North East Boundary	13 October 2017	no trigger	YES	no trigger	YES
683 Marulan South Road	13 October 2017	0.9	YES	no trigger	YES
Residence	13 October 2017	0.85	YES	105.1	YES
	24.0 / 1				
orth West Boundary	21 September 2017	0.8	YES	102.4	YES

Location	Blast Date	Ground Vibration Result	GV Compliant	Overpressure Result	OP Compliant
North East Boundary	21 September 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	21 September 2017	0.17	YES	98.1	YES
Residence	21 September 2017	1.28	YES	108	YES
			-		
North West Boundary	11 September 2017	No trigger	YES	No trigger	YES
North East Boundary	11 September 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	11 September 2017	0.8	YES	98.9	YES
Residence	11 September 2017	No trigger	YES	No trigger	YES
Namba Masa Davidani	21 August 2017	1.55	YES	102.4	YES
North West Boundary	31 August 2017		YES		YES
North East Boundary	31 August 2017	No trigger		No trigger	
683 Marulan South Road	31 August 2017	0.22	YES	97	YES
Residence	31 August 2017	1.45	YES	102.9	YES
North West Boundary	17 August 2017	1.6	YES	106.6	YES
North East Boundary	17 August 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	17 August 2017	0.24	YES	112.9	YES
Residence	17 August 2017	1.75	YES	102.9	YES
nesidence	17 // (1843) 2017	1.75	123	102.3	123
North West Boundary	11 August 2017	1.15	YES	108.6	YES
North East Boundary	11 August 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	11 August 2017	0.12	YES	101.1	YES
Residence	11 August 2017	1.00	YES	102.3	YES
	<u> </u>				
North West Boundary	4 August 2017	0.9	YES	104.1	YES
North East Boundary	4 August 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	4 August 2017	0.12	YES	103	YES
Residence	4 August 2017	0.8	YES	105.3	YES
	27 1.1. 2047	0.04	VEC	400.0	VEC
North West Boundary	27 July 2017	0.91	YES	108.8	YES
North East Boundary	27 July 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	27 July 2017	No trigger	YES	No trigger	YES
Residence	27 July 2017	0.68	YES	109	YES
North West Boundary	20 July 2017	1.07	YES	109.3	YES
North East Boundary	20 July 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	20 July 2017	0.12	YES	103.5	YES
Residence	20 July 2017	1.29	YES	117.4	YES
nesidence	20 3017 2017	1.23	123	117.4	11.5
North West Boundary	6 July 2017	1.02	YES	106.4	YES
North East Boundary	6 July 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	6 July 2017	0.18	YES	98.1	YES
Residence	6 July 2017	1.31	YES	105.8	YES
					•
North West Boundary	29 June 2017	2.00	YES	103.6	YES
North East Boundary	29 June 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	29 June 2017	0.33	YES	97.3	YES
Residence	29 June 2017	2.45	YES	103.1	YES
	00.1	0 ==	V=-	100.5	\/
North West Boundary	23 June 2017	0.75	YES	100.6	YES

North East Boundary 683 Marulan South Road Residence North West Boundary North East Boundary 683 Marulan South Road Residence	23 June 2017 23 June 2017 23 June 2017	Result No trigger 0.24 0.75	YES YES	No trigger	Compliant YES
683 Marulan South Road Residence North West Boundary North East Boundary 683 Marulan South Road	23 June 2017	0.24	VEC	00	
North West Boundary North East Boundary 683 Marulan South Road		0.75	ILS	96.4	YES
North East Boundary 683 Marulan South Road	15 June 2017	0.73	YES	101.5	YES
North East Boundary 683 Marulan South Road	1E June 2017				
683 Marulan South Road	15 June 2017	No trigger	YES	No trigger	YES
	15 June 2017	No trigger	YES	No trigger	YES
Residence	15 June 2017	No trigger	YES	No trigger	YES
	15 June 2017	No trigger	YES	No trigger	YES
North West Dougland	9 June 2017	0.7	YES	102.9	YES
North West Boundary North East Boundary	9 June 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	9 June 2017	0.24	YES	98.7	YES
Residence	9 June 2017	1.35	YES	101.7	YES
nesidence	3 34116 2017	1.55	123	101.7	123
North West Boundary	6 June 2017	0.7	YES	No trigger	YES
North East Boundary	6 June 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	6 June 2017	0.15	YES	96.1	YES
Residence	6 June 2017	0.7	YES	105.6	YES
North West Boundary	26 may 2017	0.75	YES	No trigger	YES
North East Boundary	26 may 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	26 may 2017	0.8	YES	105.3	YES
Residence	26 may 2017	0.9	YES	105.8	YES
North West Boundary	18 may 2017	0.55	YES	104.7	YES
North East Boundary	18 may 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	18 may 2017	0.27	YES	100	YES
Residence	18 may 2017	1.00	YES	105.3	YES
North West Boundary	11 May 2017	No trigger	YES	No trigger	YES
North East Boundary	11 May 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	11 May 2017	0.85	YES	105.8	YES
Residence	11 May 2017	0.09	YES	102.3	YES
North West Boundary	4 May 2017	No trigger	YES	No trigger	YES
North East Boundary	4 May 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	4 May 2017	1.05	YES	104.2	YES
Residence	4 May 2017	0.17	YES	97.2	YES
nesidence	+ Way 2017	0.17	123	37.2	1123
North West Boundary	20 April 2017	No trigger	YES	No trigger	YES
North East Boundary	20 April 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	20 April 2017	No trigger	YES	No trigger	YES
Residence	20 April 2017	No trigger	YES	No trigger	YES
	40.4 11.55.5				
North West Boundary	13 April 2017	No trigger	YES	No trigger	YES
North East Boundary	13 April 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	13 April 2017	0.8	YES	105.3	YES
Residence	13 April 2017	0.13	YES	96.9	YES
North West Boundary	6 April 2017	No trigger	YES	No trigger	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result			Compliant
North East Boundary	6 April 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	6 April 2017	1.1	YES	105.4	YES
Residence	6 April 2017	0.24	YES	99.1	YES
North West Boundary	23 March 2017	1.25	YES	105.5	YES
North East Boundary	23 March 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	23 March 2017	0.14	YES	105	YES
Residence	23 March 2017	1.1	YES	108.6	YES
North West Boundary	9 March 2017	0.88	YES	102.4	YES
North East Boundary	9 March 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	9 March 2017	0.19	YES	99.7	YES
Residence	9 March 2017	0.9	YES	104.8	YES
Namble Wast Davis dam.	22 Fobruary 2017	115.6	YES	0.65	YES
North West Boundary	23 February 2017 23 February 2017		YES		YES
North East Boundary 683 Marulan South Road	23 February 2017 23 February 2017	No trigger 99.2	YES	No trigger 0.14	YES
	23 February 2017	111.1	YES	0.14	YES
Residence	25 February 2017	111.1	153	0.75	153
North West Boundary	16 February 2017	100.3	YES	0.9	YES
North East Boundary	16 February 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	16 February 2017	96.9	YES	0.16	YES
Residence	16 February 2017	101.9	YES	1.75	YES
Residence	10 rebruary 2017	101.9	11.3	1.75	ILS
North West Boundary	9 February 2017	100.3	YES	0.75	YES
North East Boundary	9 February 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	9 February 2017	98.6	YES	0.33	YES
Residence	9 February 2017	99.8	YES	1.6	YES
	,				
North West Boundary	2 February 2017	No trigger	YES	0.87	YES
North East Boundary	2 February 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	2 February 2017	105.6	YES	0.19	YES
Residence	2 February 2017	106.2	YES	2.15	YES
North West Boundary	23 January 2017	106	YES	0.81	YES
North East Boundary	23 January 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	23 January 2017	100.8	YES	0.13	YES
Residence	23 January 2017	105.8	YES	0.75	YES
North West Boundary	12 January 2017	110.4	YES	1.06	YES
North East Boundary	12 January 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	12 January 2017	100.8	YES	0.25	YES
Residence	12 January 2017	No trigger	YES	2.01	YES
North West Boundary	9 January 2017	No trigger	YES	No trigger	YES
North West Boundary North East Boundary	9 January 2017	No trigger	YES	No trigger	YES
•	9 January 2017	95.6	YES	0.13	YES
683 Marulan South Road	9 January 2017 9 January 2017		YES	0.13	YES
Residence	January 2017	No trigger	IES	0.02	1123

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result			Compliant
North East Boundary	5 January 2017	No trigger	YES	No trigger	YES
683 Marulan South Road	5 January 2017	No trigger	YES	No trigger	YES
Residence	5 January 2017	No trigger	YES	No trigger	YES
North West Boundary	20 December 2016	101.5	YES	0.45	YES
North East Boundary	20 December 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	20 December 2016	No trigger	YES	No trigger	YES
Pace Residence	20 December 2016	No trigger	YES	0.7	YES
North West Boundary	15 December 2016	104.4	YES	0.95	YES
North East Boundary	15 December 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	15 December 2016	102.4	YES	0.4	YES
Residence	15 December 2016	No trigger	YES	1.9	YES
North West Boundary	8th December 2016	96.3	YES	0.75	YES
North East Boundary	8th December 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	8th December 2016	112.5	YES	0.16	YES
Residence	8th December 2016	98.2	YES	1.3	YES
North West Boundary	1st December 2016	105.6	YES	1.1	YES
North East Boundary	1st December 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	1st December 2016	104.4	YES	0.21	YES
Residence	1st December 2016	106.6	YES	2.05	YES
North West Boundary	28th November 2016	104.7	YES	0.8	YES
North East Boundary	28th November 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	28th November 2016	103.1	YES	0.18	YES
Residence	28th November 2016	108.3	YES	1.6	YES
North West Boundary	24th November 2016	107.3	YES	3.25	YES
North East Boundary	24th November 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	24th November 2016	99.1	YES	0.49	YES
Residence	24th November 2016	109.9	YES	3.35	YES
North West Boundary	17th November 2016	No trigger	YES	No trigger	YES
North East Boundary	17th November 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	17th November 2016	No trigger	YES	No trigger	YES
Residence	17th November 2016	No trigger	YES	No trigger	YES
North West Boundary	10th November 2016	1.25	YES	100.9	YES
North East Boundary	10th November 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	10th November 2016	0.14	YES	103.1	YES
Pace Residence	10th November 2016	1.00	YES	101.7	YES
North West Boundary	8th November 2016	1.00	YES	100.1	YES
North East Boundary	8th November 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	8th November 2016	0.14	YES	101.9	YES
Residence	8th November 2016	0.85	YES	104.4	YES
North West Boundary	27th October 2016	1.5	Yes	107.3	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result			Compliant
North East Boundary	27th October 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	27th October 2016	0.26	Yes	100.8	YES
Residence	27th October 2016	2.30	YES	105.8	YES
North West Boundary	18th October 2016	1.2	YES	106.1	YES
North East Boundary	18th October 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	18th October 2016	No trigger	YES	No trigger	YES
Residence	18th October 2016	No trigger	YES	No trigger	YES
North West Boundary	14th October 2016	1.8	YES	100.9	YES
North East Boundary	14th October 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	14th October 2016	0.21	YES	100.8	YES
Residence	14th October 2016	No trigger	YES	No trigger	YES
North West Boundary	6th October 2016	1.5	YES	100.9	YES
North East Boundary	6th October 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	6th October 2016	0.14	YES	98.1	YES
Residence	6th October 2016	No trigger	YES	No trigger	YES
		1 1 00 1			
North West Boundary	22nd September2016	1.15	YES	104.1	YES
North East Boundary	22nd September2016	No trigger	YES	No trigger	YES
683 Marulan South Road	22nd September2016	No trigger	YES	No trigger	YES
Pace Residence	22nd September2016	No trigger	YES	No trigger	YES
race residence	22nd September 2010	140 trigger	123	140 tribber	123
North West Boundary	21st September 2016	1.45	YES	103.6	YES
North East Boundary	21st September 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	21st September 2016	No trigger	YES	No trigger	YES
Pace Residence	21st September 2016	No trigger	YES	No trigger	YES
North West Boundary	15th Sept 2016	1.05	YES	110.9	YES
North East Boundary	15th Sept 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	15th Sept 2016	0.2	YES	97.5	YES
Pace Residence	15th Sept 2016	No trigger	YES	No trigger	YES
North West Boundary	5th September 2016	0.85	YES	105.6	YES
North East Boundary	5th September 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	5th September 2016	No trigger	YES	No trigger	YES
Pace Residence	5th September 2016	No trigger	YES	No trigger	YES
North West Boundary	30 august 2016	No trigger	YES	No trigger	YES
North East Boundary	30 august 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	30 august 2016	No trigger	YES	No trigger	YES
Pace Residence	30 august 2016	0.9	YES	103.2	YES
North West Boundary	25 august 2016	No trigger	YES	No trigger	YES
North East Boundary	25 august 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	25 august 2016	No trigger	YES	No trigger	YES
Pace Residence	25 august 2016	1.7	YES	104.2	YES
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North West Boundary	18th August 2016	No trigger	YES	No trigger	YES

Laastian	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP Commissed
Location	10th August 2016	Result	VEC	No triagor	Compliant
North East Boundary	18th August 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	18th August 2016	No trigger	YES	No trigger	YES
Pace Residence	18th August 2016	0.75	YES	101.1	YES
North West Boundary	11th August 2016	No trigger	YES	No trigger	YES
North East Boundary	11th August 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	11th August 2016	No trigger	YES	No trigger	YES
Pace Residence	11th August 2016	0.9	YES	101.6	YES
Tace Residence	110171080012010	0.5	123	101.0	1.23
North West Boundary	4 august 2016	No trigger	YES	No trigger	YES
North East Boundary	4 august 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	4 august 2016	No trigger	YES	No trigger	YES
Pace Residence	4 august 2016	1.6	YES	103	YES
North West Boundary	21st July 2016	No trigger	YES	No trigger	YES
North East Boundary	21st July 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	21st July 2016	No trigger	YES	No trigger	YES
Pace Residence	21st July 2016	0.95	YES	101.7	YES
North West Boundary	15th July 2016	1.40	YES	102.4	YES
North East Boundary	15th July 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	15th July 2016	No trigger	YES	No trigger	YES
Pace Residence	15th July 2016	1.15	YES	101.3	YES
North West Boundary	30th June 2016	No trigger	YES	No trigger	YES
North East Boundary	30th June 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	30th June 2016	No trigger	YES	No trigger	YES
Pace Residence	30th June 2016	No trigger	YES	No trigger	YES
Namb Mast Davidson	16th I 2016	No trigger	VEC	No trigger	VEC
North West Boundary	16th June 2016	No trigger	YES	No trigger	YES
North East Boundary	16th June 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	16th June 2016	No trigger	YES	No trigger	YES
Pace Residence	16th June 2016	No trigger	YES	No trigger	YES
North West Boundary	2nd June 2016	No trigger	YES	No trigger	YES
North East Boundary	2nd June 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	2nd June 2016	No trigger	YES	No trigger	YES
Pace Residence	2nd June 2016	No trigger	YES	No trigger	YES
North West Boundary	26th May 2016	No trigger	YES	No trigger	YES
North East Boundary	26th May 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	26th May 2016	No trigger	YES	No trigger	YES
Pace Residence	26th May 2016	No trigger	YES	No trigger	YES
_					
North West Boundary	19th May 2016	No trigger	YES	No trigger	YES
North East Boundary	19th May 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	19th May 2016	No trigger	YES	No trigger	YES
Pace Residence	19th May 2016	No trigger	YES	No trigger	YES
North West Boundary	12th May 2016	No trigger	YES	No trigger	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	ОР
Location		Result			Compliant
North East Boundary	12th May 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	12th May 2016	No trigger	YES	No trigger	YES
Pace Residence	12th May 2016	No trigger	YES	No trigger	YES
North West Boundary	6th May 2016	No trigger	YES	No trigger	YES
North East Boundary	6th May 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	6th May 2016	No trigger	YES	No trigger	YES
Pace Residence	6th May 2016	No trigger	YES	No trigger	YES
North West Boundary	28th April 2016	No trigger	YES	No trigger	YES
North East Boundary	28th April 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	28th April 2016	No trigger	YES	No trigger	YES
Pace Residence	28th April 2016	No trigger	YES	No trigger	YES
North West Boundary	21st April 2016	No trigger	YES	No trigger	YES
North East Boundary	21st April 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	21st April 2016	No trigger	YES	No trigger	YES
Pace Residence	21st April 2016	No trigger	YES	No trigger	YES
North West Boundary	14th April 2016	No trigger	YES	No trigger	YES
North East Boundary	14th April 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	14th April 2016	No trigger	YES	No trigger	YES
Pace Residence	14th April 2016	No trigger	YES	No trigger	YES
North West Boundary	8th April 2016	No trigger	YES	No trigger	YES
North East Boundary	8th April 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	8th April 2016	No trigger	YES	No trigger	YES
Pace Residence	8th April 2016	No trigger	YES	No trigger	YES
North West Boundary	31st March 2016	No trigger	YES	No trigger	YES
North East Boundary	31st March 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	31st March 2016	No trigger	YES	No trigger	YES
Pace Residence	31st March 2016	No trigger	YES	No trigger	YES
North West Boundary	24th March 2016	No trigger	YES	No trigger	YES
North East Boundary	24th March 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	24th March 2016	No trigger	YES	No trigger	YES
Pace Residence	24th March 2016	No trigger	YES	No trigger	YES
North West Boundary	18th March 2016	No trigger	YES	No trigger	YES
North East Boundary	18th March 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	18th March 2016	0.1	YES	111.2	YES
Pace Residence	18th March 2016	No trigger	YES	No trigger	YES
North West Boundary	11th March 2016	No trigger	YES	No trigger	YES
North East Boundary	11th March 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	11th March 2016	No trigger	YES	No trigger	YES
Pace Residence	11th March 2016	No trigger	YES	No trigger	YES
North West Boundary	3rd March 2016	No trigger	YES	No trigger	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result			Compliant
North East Boundary	3rd March 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	3rd March 2016	No trigger	YES	No trigger	YES
Pace Residence	3rd March 2016	No trigger	YES	No trigger	YES
North West Boundary	25th February 2016	0.1	YES	102.3	YES
North East Boundary	25th February 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	25th February 2016	No trigger	YES	No trigger	YES
Pace Residence	25th February 2016	No trigger	YES	No trigger	YES
North West Boundary	22nd February 2016	No trigger	YES	No trigger	YES
North East Boundary	22nd February 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	22nd February 2016	No trigger	YES	No trigger	YES
Pace Residence	22nd February 2016	No trigger	YES	No trigger	YES
North West Boundary	11th February 2016	0.05	YES	103.6	YES
North East Boundary	11th February 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	11th February 2016	No trigger	YES	No trigger	YES
Pace Residence	11th February 2016	No trigger	YES	No trigger	YES
North West Boundary	4th February 2016	0.05	YES	104.7	YES
North East Boundary	4th February 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	4th February 2016	No trigger	YES	No trigger	YES
Pace Residence	4th February 2016	No trigger	YES	No trigger	YES
North West Boundary	28th January 2016	0.05	YES	103.6	YES
North East Boundary	28th January 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	28th January 2016	No trigger	YES	No trigger	YES
Pace Residence	28th January 2016	No trigger	YES	No trigger	YES
North West Boundary	21 January 2016	No trigger	YES	No trigger	YES
North East Boundary	21 January 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	21 January 2016	No trigger	YES	No trigger	YES
Pace Residence	21 January 2016	No trigger	YES	No trigger	YES
North West Boundary	16th January 2016	No trigger	YES	No trigger	YES
North East Boundary	16th January 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	16th January 2016	No trigger	YES	No trigger	YES
Pace Residence	16th January 2016	0.1	YES	100.9	YES
North West Boundary	12 January 2016	No trigger	YES	No trigger	YES
North East Boundary	12 January 2016	No trigger	YES	No trigger	YES
683 Marulan South Road	12 January 2016	No trigger	YES	No trigger	YES
Pace Residence	12 January 2016	0.95	YES	5	YES
North West Boundary	18th December 2015	No trigger	YES	No trigger	YES
North East Boundary	18th December 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	18th December 2015	No trigger	YES	No trigger	YES
Pace Residence	18th December 2015	No trigger	YES	No trigger	YES
North West Boundary	10th December2015	No trigger	YES	No trigger	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result			Compliant
North East Boundary	10th December2015	No trigger	YES	No trigger	YES
683 Marulan South Road	10th December2015	No trigger	YES	No trigger	YES
Pace Residence	10th December2015	No trigger	YES	No trigger	YES
North West Boundary	4th December 2015	No trigger	YES	No trigger	YES
North East Boundary	4th December 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	4th December 2015	0.21	YES	97.80	YES
Pace Residence	4th December 2015	0.85	YES	No trigger	YES
North West Boundary	3rd December 2015	No trigger	YES	No trigger	YES
North East Boundary	3rd December 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	3rd December 2015	No trigger	YES	No trigger	YES
Pace Residence	3rd December 2015	No trigger	YES	No trigger	YES
Tace Residence	Sid December 2013	No trigger	123	No trigger	123
North West Boundary	30th November 2015	No trigger	YES	No trigger	YES
North East Boundary	30th November 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	30th November 2015	No trigger	YES	No trigger	YES
Pace Residence	30th November 2015	1.10	YES	No trigger	YES
North West Boundary	27th November 2015	No trigger	YES	No trigger	YES
North East Boundary	27th November 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	27th November 2015	No trigger	YES	No trigger	YES
Pace Residence	27th November 2015	1.05	YES	No trigger	YES
North West Boundary	20th November2015	No trigger	YES	No trigger	YES
North East Boundary	20th November2015	No trigger	YES	No trigger	YES
683 Marulan South Road	20th November2015	No trigger	YES	No trigger	YES
Pace Residence	20th November2015	0.85	YES	No trigger	YES
North West Boundary	19th November 2015	No trigger	YES	No trigger	YES
North East Boundary	19th November2015	No trigger	YES	No trigger	YES
683 Marulan South Road	19th November2015	No trigger	YES	No trigger	YES
Pace Residence	19th November2015	No trigger	YES	No trigger	YES
N	424 N 1 2045	No tuinnou	VEC	No triange	VEC
North West Boundary	13th November 2015	No trigger	YES	No trigger	YES
North East Boundary	13th November2015	No trigger	YES	No trigger	YES
683 Marulan South Road	13th November2015	00.18	YES	96.0	YES
Pace Residence	13th November2015	No trigger	YES	No trigger	YES
North West Boundary	9th November 2015	No trigger	YES	No trigger	YES
North East Boundary	9th November 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	9th November 2015	No trigger	YES	No trigger	YES
Pace Residence	9th November 2015	No trigger	YES	No trigger	YES
	2 2 102 2020			1980.	
North West Boundary	5th November 2015	No trigger	YES	No trigger	YES
North East Boundary	5th November 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	5th November 2015	0.37	YES	109	YES
Pace Residence	5th November 2015	1.4	YES	112	YES
North West Boundary	30th October 2015	No trigger	YES	No trigger	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result		, , , , , , , , , , , , , , , , , , ,	Compliant
North East Boundary	30th October 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	30th October 2015	No trigger	YES	No trigger	YES
Pace Residence	30th October 2015	No trigger	YES	No trigger	YES
North West Boundary	29th October 2015	No trigger	YES	No trigger	YES
North East Boundary	29th October 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	29th October 2015	No trigger	YES	No trigger	YES
Pace Residence	29th October 2015	0.95	YES	103.8	YES
North West Boundary	23rd October 2015	No trigger	YES	No trigger	YES
North East Boundary	23rd October 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	23rd October 2015	No trigger	YES	No trigger	YES
Pace Residence	23rd October 2015	No trigger	YES	No trigger	YES
North West Boundary	9th October 2015	No trigger	YES	No trigger	YES
North East Boundary	9th October 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	9th October 2015	0.18	YES	96.2	YES
Pace Residence	9th October 2015	0.95	YES	98.3	YES
North West Boundary	28th September2015	1.2	YES	101	YES
North East Boundary	28th September2015	No trigger	YES	No trigger	YES
683 Marulan South Road	28th September2015	0.18	YES	98.6	YES
Pace Residence	28th September2015	1.25	YES	103.2	YES
North West Boundary	23rd September2015	No trigger	YES	No trigger	YES
North East Boundary	23rd September2015	No trigger	YES	No trigger	YES
683 Marulan South Road	23rd September2015	No trigger	YES	No trigger	YES
Pace Residence	23rd September2015	No trigger	YES	No trigger	YES
North West Boundary	21st September2015	No trigger	YES	No trigger	YES
North East Boundary	21st September2015	No trigger	YES	No trigger	YES
683 Marulan South Road	21st September2015	No trigger	YES	No trigger	YES
Pace Residence	21st September2015	1.15	YES	100.9	YES
North West Boundary	16th September2015	No trigger	YES	No trigger	YES
North East Boundary	16th September2015	No trigger	YES	No trigger	YES
683 Marulan South Road	16th September2015	No trigger	YES	No trigger	YES
Pace Residence	16th September2015	1.2	YES	102.5	YES
Tuce Residence	2011.0000000000000000000000000000000000	1.2	. = 3	102.5	
North West Boundary	11th September2015	No trigger	YES	No trigger	YES
North East Boundary	11th September2015	No trigger	YES	No trigger	YES
683 Marulan South Road	11th September2015	No trigger	YES	No trigger	YES
Pace Residence	11th September2015	No trigger	YES	No trigger	YES
		- 55	-	- 55	
North West Boundary	9th September 2015	No trigger	YES	No trigger	YES
North East Boundary	9th September 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	9th September 2015	0.23	YES	98.7	YES
Pace Residence	9th September 2015	0.95	YES	103.2	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result	•	•	Compliant
North West Boundary	19th August 2015	No trigger	YES	No trigger	YES
North East Boundary	19th August 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	19th August 2015	No trigger	YES	No trigger	YES
Pace Residence	19th August 2015	1.3	YES	103.2	YES
North West Boundary	7th August 2015	1.00	YES	101.8	YES
North East Boundary	7th August 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	7th August 2015	No trigger	YES	No trigger	YES
Pace Residence	7th August 2015	1.25	YES	101.6	YES
North West Boundary	29th July 2015	No trigger	YES	No trigger	YES
North East Boundary	29th July 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	29th July 2015	0.16	YES	No trigger	YES
Pace Residence	29th July 2015	No trigger	YES	No trigger	YES
North West Boundary	20th July 2015	No trigger	YES	No trigger	YES
North East Boundary	20th July 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	20th July 2015	0.26	YES	100.1	YES
Pace Residence	20th July 2015	1.35	YES	105.5	YES
North West Boundary	15th July 2015	No trigger	YES	No trigger	YES
North East Boundary	15th July 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	15th July 2015	0.30	YES	106	YES
Pace Residence	15th July 2015	1.00	YES	110.7	YES
North West Boundary	12th July 2015	No trigger	YES	No trigger	YES
North East Boundary	12th July 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	12th July 2015	0.18	YES	100.2	YES
Pace Residence	12th July 2015	No trigger	YES	No trigger	YES
North West Boundary	2nd July 2015	No trigger	YES	No trigger	YES
North East Boundary	2nd July 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	2nd July 2015	0.38	YES	102.9	YES
Pace Residence	2nd July 2015	1.65	YES	101.6	YES
North West Boundary	26th June 2015	No trigger	YES	No trigger	YES
North East Boundary	26th June 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	26th June 2015	No trigger	YES	No trigger	YES
Pace Residence	26th June 2015	0.8	YES	103.4	YES
North West Boundary	19th June 2015	No trigger	YES	No trigger	YES
North East Boundary	19th June 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	19th June 2015	0.19	YES	106.7	YES
Pace Residence	19th June 2015	No trigger	YES	No trigger	YES
North West Boundary	16th June 2015	No trigger	YES	No trigger	YES
North East Boundary	16th June 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	16th June 2015	0.19	YES	98.7	YES
Pace Residence	16th June 2015	No trigger	YES	No trigger	YES

Location	Blast Date	Ground Vibration Result	GV Compliant	Overpressure Result	OP Compliant
North West Boundary	5th June 2015	No trigger	YES	No trigger	YES
North East Boundary	5th June 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	5th June 2015	1.4	YES	104.4	YES
Pace Residence	5th June 2015	0.33	YES	101.5	YES
T dee Nesidence		0.33	1.2	101.3	
North West Boundary	28th May 2015	No trigger	YES	No trigger	YES
North East Boundary	28th May 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	28th May 2015	1.95	YES	105	YES
Pace Residence	28th May 2015	0.47	YES	101.6	YES
T doc recordence	, , , , ,	5	-	101.0	
North West Boundary	21st May 2015	No trigger	YES	No trigger	YES
North East Boundary	21st May 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	21st May 2015	1.35	YES	108.4	YES
Pace Residence	21st May 2015	0.32	YES	102	YES
	1 1 1 1	0.02	-		
North West Boundary	14th May 2015	1.6	YES	109.4	YES
North East Boundary	14th May 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	14th May 2015	1.8	YES	108.4	YES
Pace Residence	14th May 2015	0.25	YES	101.1	YES
	,	0.20			
North West Boundary	8th May 2015	1.05	YES	108.4	YES
North East Boundary	8th May 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	8th May 2015	1	YES	101.7	YES
Pace Residence	8th May 2015	No trigger	YES	No trigger	YES
	,				
North West Boundary	5th May 2015	No trigger	YES	No trigger	YES
North East Boundary	5th May 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	5th May 2015	0.95	YES	105.7	YES
Pace Residence	5th May 2015	0.17	YES	97.9	YES
North West Boundary	1st May 2015	1.75	YES	110	YES
North East Boundary	1st May 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	1st May 2015	1.4	YES	112.3	YES
Pace Residence	1st May 2015	0.38	YES	109	YES
North West Boundary	24th April 2015	1.5	YES	103.3	YES
North East Boundary	24th April 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	24th April 2015	0.16	YES	100.3	YES
Pace Residence	24th April 2015	1.4	YES	103.9	YES
North West Boundary	17th April 2015	No trigger	YES	No trigger	YES
North East Boundary	17th April 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	17th April 2015	No trigger	YES	No trigger	YES
Pace Residence	17th April 2015	No trigger	YES	No trigger	YES
North West Boundary	13th April 2015	No trigger	YES	No trigger	YES
North East Boundary	13th April 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	13th April 2015	No trigger	YES	No trigger	YES
Pace Residence	13th April 2015	1.05	YES	No trigger	YES

	Blast Date	Ground Vibration	GV Compliant	Overpressure Result	OP
Location		Result	·	•	Compliant
North West Boundary	30th March 2015	No trigger	YES	No trigger	YES
North East Boundary	30th March 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	30th March 2015	No trigger	YES	No trigger	YES
Pace Residence	30th March 2015	1.05	YES	No trigger	YES
North West Boundary	27th March 2015	No trigger	YES	No trigger	YES
North East Boundary	27th March 2015	No trigger	YES	113.6	YES
683 Marulan South Road	27th March 2015	No trigger	YES	No trigger	YES
Pace Residence	27th March 2015	No trigger	YES	No trigger	YES
North West Boundary	23rd March 2015	No trigger	YES	No trigger	YES
North East Boundary	23rd March 2015	No trigger	YES	100	YES
683 Marulan South Road	23rd March 2015	No trigger	YES	No trigger	YES
Pace Residence	23rd March 2015	No trigger	YES	No trigger	YES
North West Boundary	20th March 2015	No trigger	YES	No trigger	YES
North East Boundary	20th March 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	20th March 2015	No trigger	YES	No trigger	YES
Pace Residence	20th March 2015	No trigger	YES	No trigger	YES
North West Boundary	5th March 2015	No trigger	YES	No trigger	YES
North East Boundary	5th March 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	5th March 2015	No trigger	YES	No trigger	YES
Pace Residence	5th March 2015	2.1	YES	No trigger	YES
North West Boundary	25 February 2015	1.55	YES	108.8	YES
North East Boundary	25 February 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	25 February 2015	No trigger	YES	No trigger	YES
Pace Residence	25 February 2015	2.5	YES	105.8	YES
North West Boundary	10th February 2015	No trigger	YES	No trigger	YES
North East Boundary	10th February 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	10th February 2015	No trigger	YES	No trigger	YES
Pace Residence	10th February 2015	1.6	YES	104.2	YES
North West Boundary	29th January 2015	No trigger	YES	No trigger	YES
North East Boundary	29th January 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	29th January 2015	No trigger	YES	No trigger	YES
Pace Residence	29th January 2015	1.1	YES	109	YES
North West Boundary	20 January 2015	No trigger	YES	No trigger	YES
North East Boundary	20 January 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	20 January 2015	No trigger	YES	No trigger	YES
Pace Residence	20 January 2015	1.10	YES	105.3	YES
North West Boundary	8th January 2015	2.00	YES	101.6	YES
North East Boundary	8th January 2015	No trigger	YES	No trigger	YES
683 Marulan South Road	8th January 2015	No trigger	YES	No trigger	YES
Pace Residence	8th January 2015	1.35	YES	102.3	YES

3.0 Noise Monitoring

Noise monitoring is conducted as per condition L6 of EPL 13088. The results for the reporting period, monitored in February 2019 are below.

The next round of monitoring will be conducted April 2019.

Sample Period: January 2019 Licensee: Peppertree Quarry

Licensee Address: 843 Marulan south road, Marulan NSW 2579

EPL No: 13088

Qualifications related to noise:

Noise is measured quarterly

The identified noise emission limits apply under meteorological conditions of wind speed 3m/s at 10 meters above ground level, and temp inversion conditions. Monitoring protocols are contained within the Noise and Blasting Management Plan found on this website.

Noise monitoring is measured at the 5 residential receiver locations. – R2, R3, R4, R8, R17 since approval of Modification 4 in August 2016.

Results

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
R8	13/2/2019	20.9	41
R8	13/2/2019	22.2	41
R8	13/2/2019	24.1	41
R4	13/2/2019	22.4	35
R8	13/2/2019	29.2	41
R4	13/2/2019	22.6	35
R8	13/2/2019	26	41
R4	13/2/2019	23	35
R4	13/2/2019	22.9	35
R3	13/2/2019	26.4	35
R3	13/2/2019	26.5	35
R17	13/2/2019	20.3	35
R3	13/2/2019	26.3	35
R17	13/2/2019	19.2	35
R3	13/2/2019	29.5	35
R17	13/2/2019	20.5	35
R3	13/2/2019	24.3	35
R3	13/2/2019	23.8	35
R2	13/2/2019	26.8	35
R2	13/2/2019	26.6	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	evening
R17	13/2/2019	23.1	35
R17	13/2/2019	13.7	35
R17	13/2/2019	13.8	35
R3	13/2/2019	26	35
R3	13/2/2019	28.5	35
R3	13/2/2019	23	35
R2	14/2/2019	16.5	35
R2	14/2/2019	13	35
R2	14/2/2019	11.7	35
R4	14/2/2019	23.8	35
R4	14/2/2019	25.9	35
R4	14/2/2019	27.1	35
R8	14/2/2019	31.5	35
R8	14/2/2019	29.6	35
R8	14/2/2019	33.1	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R17	13/2/2019	23.1	45
R17	13/2/2019	13.5	45
R17	13/2/2019	13.6	45
R3	13/2/2019	31.7	45
R3	13/2/2019	32.5	45
R3	14/2/2019	31.8	45
R2	14/2/2019	19.7	45
R2	14/2/2019	13	45
R2	14/2/2019	18.1	45
R4	14/2/2019	24.1	45
R4	14/2/2019	30.6	45
R4	14/2/2019	36.3	45
R8	14/2/2019	38.7	45
R8	14/2/2019	38.1	45
R8	14/2/2019	37.4	45

Historical Results

Receiver	Date Site Noise Level Contribution		Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
R17	27/11/18	22	35
R2	27/11/18	32	35
R3	27/11/18	19	35
R4	27/11/18	33	35
R8	27/11/18	35	41
R17	29/11/18	26	35
R17	29/11/18	24	35
R3	29/11/18	31	35
R3	29/11/18	31	35
R2	29/11/18	27	35
R2	29/11/18	26	35
R8	29/11/18	33	41
R8	29/11/18	29	41
R4	29/11/18	31	35
R4	29/11/18	33	35

Receiver	Date	Date Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	evening
R3	29/11/18	30	35
R2	29/11/18	32	35
R8	29/11/18	25	41
R4	29/11/18	33	35
R17	29/11/18	21	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R3	29/11/18	30	45
R3	29/11/18	32	45
R8	29/11/18	25	45
R8	29/11/18	33	45
R17	29/11/18	21	45

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
R3	31/7/18	31.2	35
R8	31/7/18	31.0	41
R8	31/7/18	31.0	41
R3	31/7/18	31.5	35
R2	31/7/18	32.0	35
R2	31/7/18	29.7	35
R17	31/7/18	27.7	35
R17	31/7/18	26.1	35
R4	31/7/18	31.9	35
R4	31/7/18	29.6	35
R2	1/8/18	25.9	35
R2	1/8/18	27.1	35
R17	1/8/18	24.9	35
R17	1/8/18	23.8	35
R3	1/8/18	24.1	35
R3	1/8/18	28.8	35
R8	1/8/18	28.7	41
R8	1/8/18	29.3	41
R4	1/8/18	28.2	35
R4	1/8/18	27.3	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening / night
R2	1/8/18	26.3	35
R2	1/8/18	24.9	35
R17	1/8/18	17.1	35
R17	1/8/18	20.0	35
R3	1/8/18	33.3	35
R3	1/8/18	31.3	35
R8	1/8/18	33.3	35
R8	1/8/18	33.6	35
R17	1/8/18	15.2	35
R4	1/8/18	31.4	35
R4	1/8/18	27.2	35
R8	1/8/18	14.9	35
R3	2/8/18	30.4	35
R33	2/8/18	26.8	35
R8	2/8/18	31.2	35
R2	2/8/18	18.1	35
R8	2/8/18	29.0	35

R2	2/8/18	23.8	35
R8	2/8/18	31.6	35
R3	2/8/18	33.5	35
R8	2/8/18	31.5	35
R3	2/8/18	35.0	35
R17	2/8/18	12.8	35
R4	2/8/18	32.5	35
R4	2/8/18	32.5	35
R17	2/8/18	13.4	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R3	1/8/18	38.3	45
R3	1/8/18	36.3	45
R8	1/8/18	38.3	45
R8	1/8/18	38.6	45
R17	1/8/18	15.2	45
R4	1/8/18	41.4	45
R4	1/8/18	37.2	45
R8	1/8/18	14.9	45
R3	2/8/18	35.4	45
R3	2/8/18	36.8	45
R8	2/8/18	31.2	45
R2	2/8/18	18.1	45
R8	2/8/18	29.0	45
R2	2/8/18	23.8	45
R8	2/8/18	31.6	45
R3	2/8/18	38.5	45
R8	2/8/18	31.5	45
R3	2/8/18	40.0	45
R17	2/8/18	17.8	45
R4	2/8/18	37.5	45
R4	2/8/18	37.5	45
R17	2/8/18	18.4	45

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
R17	1/5/2018	<30	35
R2	1/5/2018	<30	35
R3	1/5/2018	<30	35
R8	1/5/2018	31	41
R4	1/5/2018	31	35
R17	2/5/2018	31	35

R2	2/5/2018	31	35
R3	2/5/2018	<30	35
R8	2/5/2018	33	41
R4	2/5/2018	<30	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening / night
R17	2/5/2018	<30	35
R17	2/5/2018	32	35
R2	2/5/2018	32	35
R2	3/5/2018	33	35
R8	3/5/2018	<30	35
R8	3/5/2018	<30	35
R4	3/5/2018	<30	35
R4	3/5/2018	<30	35
R3	3/5/2018	<30	35
R3	3/5/2018	<30	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R2	2/5/2018	32	45
R2	3/5/2018	33	45
R8	3/5/2018	<30	45
R8	3/5/2018	<30	45
R17	2/5/2018	<30	45
R17	2/5/2018	32	45
R4	3/5/2018	<30	45
R4	3/5/2018	<30	45
R3	3/5/2018	<30	45
R3	3/5/2018	<30	45
EPL ID		LAeq, 15 minute (dB(A))	daytime
R2	30/01/2018	26	35
R2	30/01/2018	26	35
R2	31/01/2018	16	35
R2	31/01/2018	18	35
R8	30/01/2018	24	41
R8	30/01/2018	22	41
R8	31/01/2018	25	41
R8	31/01/2018	35	41
R17	30/01/2018	22	35
R17	30/01/2018	24	35
R17	31/01/2018	15	35
R17	31/01/2018	11	35
R4	30/01/2018	19	35

R4	30/01/2018	22	35
R4	31/01/2018	28	35
R4	31/01/2018	29	35
R3	30/01/2018	23	35
R3	30/01/2018	25	35
R3	31/01/2018	31	35
R3	31/01/2018	30	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening / night
R2	1/02/2018	19	35
R2	1/02/2018	20	35
R8	31/01/2018	30	35
R8	31/01/2018	30	35
R17	1/02/2018	15	35
R17	1/02/2018	18	35
R4	31/01/2018	27	35
R4	31/01/2018	28	35
R3	1/02/2018	24	35
R3	1/02/2018	24	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R2	1/02/2018	19	45
R2	1/02/2018	20	45
R8	31/01/2018	33	45
R8	31/01/2018	33	45
R17	1/02/2018	17	45
R17	1/02/2018	19	45
R4	31/01/2018	28	45
R4	31/01/2018	29	45
R3	1/02/2018	25	45
R3	1/02/2018	26	45

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
R17	12-Dec-17	20	35
R17	12-Dec-17	19	35
R2	12-Dec-17	23	35
R2	12-Dec-17	23	35
R3	12-Dec-17	25	35
R3	12-Dec-17	25	35

R4	12-Dec-17	30	35
R4	12-Dec-17	23	35
R17	13-Dec-17	27	35
R2	13-Dec-17	30	35
R3	13-Dec-17	25	35
R8	13-Dec-17	26	35
R4	13-Dec-17	26	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening / night
R8	12-Dec-2017	21	35
R8	12-Dec-2017	18	35
R8	13-Dec-2017	31	35
R8	13-Dec-2017	29	35
R4	13-Dec-2017	27	35
R4	13-Dec-17	27	35
R3	13-Dec-17	30	35
R3	13-Dec-17	30	35
R3	14-Dec-17	29	35
R3	14-Dec-17	29	35
R2	14-Dec-17	30	35
R2	14-Dec-17	28	35
R17	14-Dec-17	22	35
R17	14-Dec-17	21	35
R17	14-Dec-17	20	35
R8	14-Dec-17	26	35
R8	14-Dec-17	28	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R4	13-Dec-17	31	45
R4	13-Dec-17	34	45
R3	13-Dec-17	34	45
R3	13-Dec-17	33	45
R3	14-Dec-17	33	45
R3	14-Dec-17	34	45
R2	14-Dec-17	32	45
R2	14-Dec-17	26	45
R17	14-Dec-17	25	45
R17	14-Dec-17	24	45
R17	14-Dec-17	30	45
R8	14-Dec-17	32	45
R8	14-Dec-17	31	45

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
R8	11 th July 2017	27	41
R4	11 th July 2017	27	35
R17	11 th July 2017	16	35
R2	11 th July 2017	25	35
R3	11 th July 2017	29	35
R8	12 th July 2017	28	41
R4	12 th July 2017	28	35
R17	12 th July 2017	23	35
R2	12 th July 2017	33	35
R3	12 th July 2017	38*	35
R3	12 th July 2017	43*	35
R3	12 th July 2017	26	35
Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening
R8	13 th July 2017	31	35
R8	13 th July 2017	32	35
R4	13 th July 2017	35	35
R4	13 th July 2017	27	35
R4	13 th July 2017	35	35
R17	12 th July 2017	16	35
R17	12 th July 2017	18	35
R2	13 th June 2017	27	35
R2	13 th June 2017	29	35
R3	12 th July 2017	32	35
R3	12 th July 2017	33	35
R3	12 th July 2017	33	35
113	13 th July 2017		

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R8	12 th July 2017	35	45
R8	12 th July 2017	36	45
R4	13 th July 2017	31	45
R4	13 th July 2017	39	45
R4	13 th July 2017	39	45
R17	12 th July 2017	20	45
R17	12 th July 2017	22	45
R2	13 th July 2017	31	45
R2	13 th July 2017	33	45
R3	12 th July 2017	36	45
R3	12 th July 2017	37	45

R3	13 th July 2017	39	45
R3	13 th July 2017	38	45

Note *two results were over the operational criteria however inversion conditions were in place and therefore the readings are not valid.

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
R8	16 th May 2017	16	41
R4	16 th May 2017	26	35
R17	16 th May 2017	17	35
R2	16 th May 2017	26	35
R3	16 th May 2017	21	35
R8	17 [™] May 2017	19	41
R8	17 [™] May 2017	17	41
R4	17 [™] May 2017	17	35
R4	17 [™] May 2017	17	35
R17	17 [™] May 2017	11	35
R17	17 [™] May 2017	9	35
R2	17 [™] May 2017	24	35
R2	17 [™] May 2017	23	35
R3	17 [™] May 2017	27	35
R3	17 [™] May 2017	19	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R8	18 TH May 2017	35	45
R8	18 TH May 2017	34	45
R4	18 TH May 2017	26	45
R4	18 TH May 2017	27	45
R17	18 TH May 2017	13	45
R17	18 TH May 2017	14	45
R2	18 TH May 2017	27	45
R2	18 TH May 2017	28	45
R3	18 TH May 2017	42	45
R3	18 TH May 2017	25	45

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening
R8	17 TH May 2017	33	35
R8	17 TH May 2017	32	35

R4	17 [™] May 2017	26	35
R4	17 [™] May 2017	27	35
R17	18 TH May 2017	13	35
R17	18 TH May 2017	14	35
R2	18 TH May 2017	27	35
R2	18 TH May 2017	28	35
R3	18 TH May 2017	33	35
R3	18 TH May 2017	24	35

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
R17	9th February 2017	23	35
R17	9th February 2017	22	35
R3	9th February 2017	28	35
R3	9th February 2017	29	35
R2	9th February 2017	27	35
R2	9th February 2017	27	35
R4	9th February 2017	22	35
R4	9th February 2017	21	35
R17	9th February 2017	21	35
R8	9th February 2017	26	41
R8	9th February 2017	27	41
R17	9th February 2017	20	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening
R3	10th February 2017	29	35
R3	10th February 2017	30	35
R2	10th February 2017	26	35
R2	10th February 2017	25	35
R17	9th February 2017	16	35
R17	9th February 2017	17	35
R17	9th February 2017	19	35
R17	9th February 2017	23	35
R17	9th February 2017	24	35
R17	9th February 2017	22	35
R17	9th February 2017	21	35
R4	10th February 2017	26	35
R4	10th February 2017	27	35
R4	10th February 2017	27	35
R17	10th February 2017	23	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R4	9th February 2017	26	45
R4	9th February 2017	27	45
R4	9th February 2017	27	45
R17	9th February 2017	23	45
R17	9th February 2017	23	45
R17	9th February 2017	26	45
R17	9th February 2017	26	45
R17	9th February 2017	33	45
R17	9th February 2017	34	45
R17	9th February 2017	32	45
R17	9th February 2017	26	45
R3	9th February 2017	34	45
R2	9th February 2017	35	45
R2	9th February 2017	31	45
R2	9th February 2017	30	45

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
R17	26th October 2016	17	35
R17	26th October 2016	15	35
R3	26th October 2016	21	35
R3	26th October 2016	22	35
R2	26th October 2016	28	35
R2	26th October 2016	30	35
R4	26th October 2016	25	35
R4	26th October 2016	25	35
R8	26th October 2016	26	41
R8	26th October 2016	28	41
R3	25th October 2016	27	35
R2	25th October 2016	31	35
R17	25th October 2016	23	35
R4	25th October 2016	22	35
R8	25th October 2016	26	41

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
R17	26 th October 2016	26	45
R17	26 th October 2016	25	45

R3	26 th October 2016	28	45
R3	27 th October 2016	28	45
R2	27 th October 2016	31	45
R2	27 th October 2016	31	45
R4	27 th October 2016	26	45
R4	27 th October 2016	26	45
R8	27 th October 2016	24	45
R8	27 th October 2016	34	45
R17	27 th October 2016	23	45
R17	27 th October 2016	22	45

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	evening
R17	26th October 2016	26	35
R17	26th October 2016	25	35
R3	26th October 2016	28	35
R3	27th October 2016	28	35
R2	27th October 2016	31	35
R2	27th October 2016	31	35
R4	27th October 2016	26	35
R4	27th October 2016	26	35
R8	27th October 2016	24	35
R8	27th October 2016	25	35
R17	27th October 2016	23	35
R17	27th October 2016	22	35

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
16	16th August 2016	22	41
6	16th August 2016	29	35
2	16th August 2016	24	39
5	16th August 2016	32	35
16	17th August 2016	25	41
6	17th August 2016	30	35
2	17th August 2016	25	39
5	17th August 2016	30	35
16	17th August 2016	25	41
6	17th August 2016	31	35
2	17th August 2016	26	39
5	17th August 2016	32	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
5	17 th August 2016	34	45
5	17 th August 2016	33	45
5	18 th August 2016	21	45
5	18 th August 2016	20	45
6	17 th August 2016	34	45
6	17 th August 2016	34	45

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	evening
2	18th August 2016	32	35
5	18th August 2016	21	35
2	18th August 2016	33	35
2	18th August 2016	24	35
5	18th August 2016	20	35
6	17th August 2016	34	35
5	17th August 2016	34	35
6	17th August 2016	34	35
5	17th August 2016	33	35

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
16	10th May 2016	30	41
6	10th May 2016	31	35
2	10th May 2016	31	39
5	10th May 2016	26	35
16	10th May 2016	23	41
6	11th May 2016	33	35
2	11th May 2016	28	39
5	11th May 2016	25	35
16	11th May 2016	23	41
6	11th May 2016	32	35
2	11th May 2016	23	39
5	11th May 2016	26	35
16	11th May 2016	20	41

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
2	12 th May 2016	28	45
5	12 th May 2016	24	45
5	12 th May 2016	30	45
16	12 th May 2016	26	45
6	12 th May 2016	26	45

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening
2	11th may 2016	28	35
16	11th may 2016	24	35
5	12th May 2016	26	35
6	12th May 2016	30	35
5	12th May 2016	26	35

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
16	2 nd February 2016	24	41
6	2 nd February 2016	22	35
2	2 nd February 2016	22	39
5	2 nd February 2016	21	35
16	3rd February 2016	25	41
6	3rd February 2016	24	35
2	3rd February 2016	17	39
5	3rd February 2016	19	35
16	3rd February 2016	31	41
6	3rd February 2016	28	35
2	3rd February 2016	20	39
5	3rd February 2016	18	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening
2	3rd February 2016	27	35
5	3rd February 2016	34	35
2	3rd February 2016	26	35
5	3rd February 2016	33	35
6	4th February 2016	28	35
5	4th February 2016	31	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
2	4th February 2016	29	45
2	4th February 2016	28	45
5	4th February 2016	31	45
5	4th February 2016	38	45
5	4th February 2016	36	45
6	4th February 2016	29	45

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
16	20 th October 2015	<32	41
6	20 th October 2015	<30	35
2	20 th October 2015	<30	39
5	20 th October 2015	<30	35
16	21st October 2015 th	<31	41
6	21st October 2015 th	<30	35
2	21st October 2015 th	<30	39
5	21st October 2015 th	<30	35

Receiver	Receiver Date		Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening
2	21st October 2015 th	<30	35
5	21st October 2015 th	31	35
2	21st October 2015 th	<33	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
2	21st October 2015 th	<30	45
5	21st October 2015 th	<33	45
2	21st October 2015 th	<35	45

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
16	21 st July 2015	<22	41
6	21 st July 2015	<33	35
2	21 st July 2015	<27	39
5	21 st July 2015	<26	35
16	22 nd July 2015	<27	41
16	22 nd July 2015	<29	41
2	22 nd July 2015	<35	39
2	22 nd July 2015	<32	39
2	22 nd July 2015	<28	39
6	22 nd July 2015	<30	35
6	22 nd July 2015	<31	35
5	22 nd July 2015	<22	35
5	22 nd July 2015	<22	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening
6	22nd July 2015	<33	35
6	23 rd July 2015	<25	35
5	23 rd July 2015	<30	35
16	23 rd July 2015	<31	35
16	23 rd July 2015	<30	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
6	23 rd July 2015	<33	45
6	23 rd July 2015	<25	45
5	23 rd July 2015	<35	45
16	23 rd July 2015	<36	45
16	23 rd July 2015	<36	45

Receiver	Date	Predicted Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
16	8th April 2015	<30	41
6	8th April 2015	<30	35
2	8th April 2015	<30	39
5	8th April 2015	<30	35
16	9th April 2015	<30	41
16	9th April 2015	<30	41
2	9th April 2015	<30	39
2	9th April 2015	<30	39

6	9th April 2015	<30	35
5	9th April 2015	<30	35

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening
2	10 th April2015	<30	35
5	10 th April2015	31	35
6	10 th April2015	<30	35
16	10 th April2015	<30	35

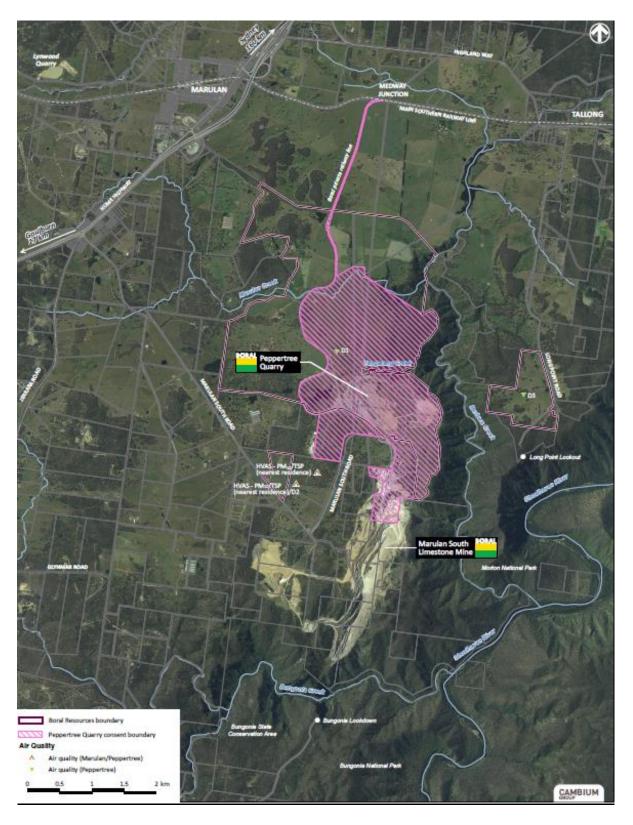
Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
2	10 th April2015	<30	45
5	10 th April2015	39	45
6	10 th April2015	<30	45
16	10 th April2015	<30	45

Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LAeq, 15 minute (dB(A))	daytime
16	3rd February 2015	28	41
6	3rd February 2015	25	35
2	3rd February 2015	25	39
5	3rd February 2015	27	35
2	4 th February 2015	29	39
2	4 th February 2015	29	39
5	4 th February 2015	27	35
5	4 th February 2015	27	35
6	4 th February 2015	<25	35
6	4 th February 2015	<25	35
16	4 th February 2015	32	41
16	4 th February 2015	32	41
Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		Leq, 15 minute (dB(A))	evening
2	4th February 2015	28	35
2	4th February 2015	25	35
5	5th February 2015	<25	35
5	5th February 2015	<25	35
6	5th February 2015	<25	35
6	5th February 2015	<25	35
16	4 th February 2015	28	35
16	5 th February 2015	29	35

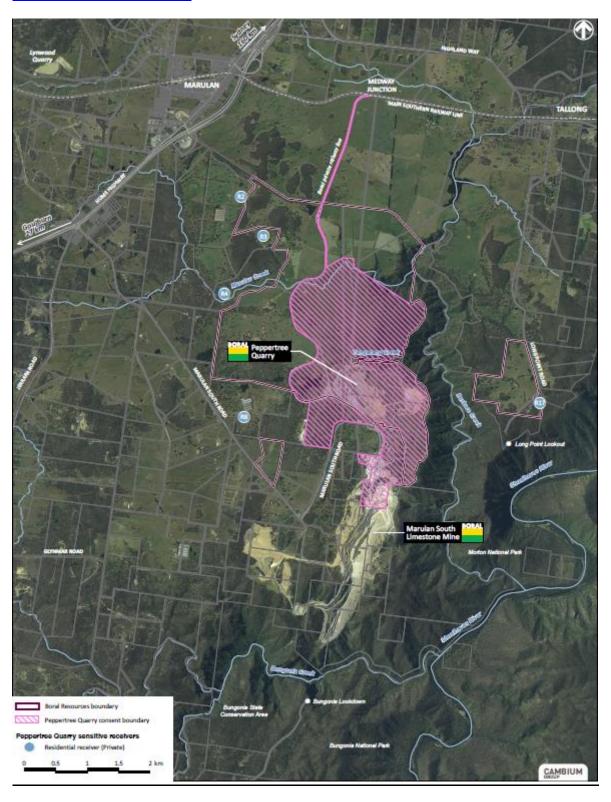
Receiver	Date	Site Noise Level Contribution	Operational Criteria (dB(A))
EPL ID		LA1, 1 minute (dB(A))	evening
2	4 th February 2015	31	45
2	4 th February 2015	27	45
5	5 th February 2015	29	45
5	5 th February 2015	27	45
6	5 th February 2015	27	45
6	5 th February 2015	27	45
16	4 th February 2015	33	45
16	5 th February 2015	33	45

Peppertree Quarry Monitoring Locations.

Deposited Dust, TSP and PM10 Monitoring Locations



Noise Monitoring Locations



Blast Monitoring Locations

