



# Teven Quarry

## Environmental Monitoring Report

December 2019

Date Published: February 2020



## Teven Quarry Environmental Monitoring Report

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 obtaining 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 2261 (EPL 2261 – Boral Teven Quarry)

This report provides environmental monitoring data for Teven Quarry for the period of December 2019.

Teven Quarry Information	
Premise Details	Boral – Teven Quarry
Address	North Teven Rd, Teven NSW 2478
Licensee	Boral Resources (Country) Pty Ltd
EPL No	2261
EPL Location	<a href="http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=87699&amp;SYSUID=1&amp;LICID=2261">http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=87699&amp;SYSUID=1&amp;LICID=2261</a>

Monitoring data in this report relates to the monitoring undertaken for the following environmental parameters:

- Blast Monitoring
- Water Monitoring

## Teven Quarry Environmental Monitoring Report

### Blast Monitoring

Blast monitoring is conducted as per condition L3.1 of EPL 2261. The blasting monitoring results are summarised below.

Monitoring Period: December 2019  
 Licensee: Teven Quarry  
 Licensee Address: North Teven Rd, Teven NSW 2478  
 EPL No: 2261

#### Qualifications related to blasting:

The airblast overpressure level from blasting operations in or on the premises must not exceed:

- a) 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
- b) 120 dB (Lin Peak) at any time.

The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:

- a) 5mm/s for more than 5% of the total number of blasts carried out on the premises during each reporting period; and
- b) 10 mm/s at any time.

Airblast overpressure and ground vibration levels must be measured at most affected residence or noise sensitive location that is not owned by the licensee or subject to a private agreement between the owner of the residence or noise sensitive location and the licensee as to an alternative overpressure level.

Shot No	Date	Time	660 Teven Rd		54 Beacons Rd	
			Over pressure (dB)	Peak Vibration (mm/s)	Over pressure (dB)	Peak Vibration (mm/s)
					115	5
		9am-4pm	120	10	120	10
1922	19/12/2019	13:10	102.8	1.48	101	0.381
1921	11/12/2019	13:04	98.94	1.33	113.8	1.032
1920	6/12/2019	10:00	88	0.471	100	0.8
1919	5/12/2019	10:25	111.8	0.27	100	1.91
1918	21/11/2019	11:31	97.50	2.59	93.98	1.46
1917	20/11/2019	10:21	105.5	0.57	104.2	3.27
1916	24/10/2019	12:52	101	0.61	101	0.6
1915	17/10/2019	13:24	97.5	0.63	97.5	0.6
1914	30/9/2019	11:31	95.92	0.94	110	0.5
1913	27/9/2019	11:32	91.48	0.50	110	0.5
1912	23/9/2019	12:01	91.48	1.39	110	0.5
1911	20/9/2019	12:04	100	1.21	100	1.2
1910	29/8/2019	11:25	95.92	0.89	110	0.3
1909	28/8/2019	12:03	100	1.19	98.8	3.7
1908	2/9/2019	12:09	104.2	0.89	104.2	0.9
1907	8/8/2019	12:58	101.9	0.65	101.9	0.7
1906	8/7/2019	13:15	101.9	0.75	101.9	6.1

### Teven Quarry Environmental Monitoring Report

1905	19/6/2019	9:12	105.5	1.245	105.5	0.8
1904	31/5/2019	12:54	101.90	1.30	107	3.10
1903	15/04/2019	13:37	106	0.54	109.20	4.11
1902 A	04/03/2019	15:02	102.8	0.44	102.8	2.49
1901	31/01/2019	14:06	110	0.51	110.9	2.32
1814	20/12/2018	14:19	104.20	0.71	109.90	2.05
1813B	11/12/2018	9:14	No trigger	No trigger	108.8	2.57
1813A	11/12/2018	9:14	No trigger	No trigger	108.8	2.50
1812A	5/11/2018	15:27	95.92	0.62	107	1.40
1811	11/09/2018	10:19	100	0.54	106.5	2.40
1810	30/08/2018	13:10	94.00	0.60	107.50	3.44
1809	10/08/2018	10:25	102.80	0.69	110.60	2.21
1808	09/07/2018	14:37	98.84	0.57	112.80	2.52
1807	25/06/2018	14:49	108.0	2.10	102.8	0.81
1806	12/06/2018	10:01:23	100.0	0.794	111.2	2.29
1805	01/05/2018	12:00:00	104.20	0.84	108.40	2.38
1804	16/04/2018	12:00:00	97.5	1.03	112.6	2.1
1803	28/03/2018	10:10:00	92.5	0.62	112.3	1.4
1802	13/03/2018	9:53:00	109.5	1.31	104.9	1.1
1801	20/02/2018	9:46:00	104.9	0.43	108.8	2.1
1711	11/01/2018	11:53:00	101	0.41	111.2	2.1
1710	08/12/2017	9:42:00	105.5	2.21	111.5	1.7
1709	06/11/2017	14:37:00	104.2	0.6	108.8	1.8
1708	19/09/2017	15:00:00	95.9	0.59	101	0.6
1707	11/09/2017	12:13:00	95.9	0.56	108.4	2.3
1706	29/08/2017	12:19:00	0	0	0	0.0
TQ-1705	28/07/2017	13:08:00	93.9	0.47	111.8	1.8
TQ-1704	10/04/2017	12:52:00	88.00	0.15	101.9	2.8
TQ-1702	13/03/2017	14:45:00	93.00	0.56	112.8	2.8
TQ-1701	30/01/2017	15:14:00	102.80	1.30	114.4	0.2
TQ-1606	07/10/2016	12:25:00			<110	<0.51
TQ1605	09/09/2016	12:03:00	91.48	1.27	108.8	2.4
TQ1604	29/06/2016	12:20:00			102.8	0.7
TQ1602/03	03/05/2016	15:03:00			107.5	2.5
TQ1601	24/03/2016	11:05:00	98.80	0.89	104.9	1.1
BA 2959-07	23/10/2015	13:15:24	98.84	0.51	110.6	0.8
BA 2959-11	16/10/2015	13:32:00	97.50	0.97	107.0	2.1
BA 2959-10	01/10/2015	13:03:07	100.00	0.60	106.0	2.1
BA 2959-09	22/09/2015	13:20:50	98.80	0.51	114.4	1.5
BA 2959-08	08/09/2015	11:48:58	n/a <sup>1</sup>	n/a <sup>1</sup>	109.9	2.0
BA 2959-06	29/06/2015	14:15:00	100.0	0.952	115.9	1.29
BA 2959-05	04/06/2015	13:25:00	100.0	1.54	109.5	1.984

### Teven Quarry Environmental Monitoring Report

BA 2959-04	08/05/2015	13:53:20	104.2	0.635	103.5	0.762
BA 2959-03	02/04/2015	14:25:52	103.5	1.4	109.9	3.29
BA 2959-02	25/02/2015	14:31:09	100	1.651	107.0	2.302
BA 2959-01	24/11/2014	13:33:58	98.8	0.57	102.8	1.49
BA 2835-99	05/11/2014	14:04:00	104.2	1.49	110.9	1.64
92	22/10/2014	12:26:00			106.5	1.48
98	17/09/2014	12:52:38	91.5	0.635	116.9	3.38
97	06/08/2014	12:47:01	106.0	1.44	103.5	1.32
96	16/07/2014	11:51:58	n/a1	n/a1	112.8	1.19
95	21/05/2014	12:33:33	98.8	2.24	107.5	2.44

## Teven Quarry Environmental Monitoring Report

### Water Monitoring

Water Quality Monitoring is conducted as per condition M2.1 of EPL 2261. The water quality results for the reporting period are tabled below.

Sample Period: December 2019  
 Licensee: Teven Quarry  
 Licensee Address: North Teven Rd, Teven NSW 2478  
 EPL No: 2261

#### Qualifications related to Water

L1.3 Discharge of runoff exceeding the quality limits in L2.4 to waters from the premises is permitted when the discharge occurs solely as a result of rainfall at the premises exceeding a total of 63.2 millimetres over any consecutive five day period.

#### L2.4 Water and/or Land Concentration Limits

##### POINT 1

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
pH	pH				6.5 - 8.5
Total suspended solids	milligrams per litre				50

Monitoring Frequency – Daily During Discharge

Date	pH	Compliant?	TSS (mg/L)	Compliant?
4/7/2019	7.8	Yes	10	Yes
3/7/2019	7.63	Yes	11	Yes
2/7/2019	7.71	Yes	13	Yes
1/7/2019	7.43	Yes	11	Yes
30/6/2019	7.48	Yes	11	Yes
29/6/2019	7.78	Yes	24	Yes
28/6/2019	7.78	Yes	24	Yes
27/6/2019	7.74	Yes	26	Yes
26/6/2019	7.57	Yes	26	Yes
21/5/2019	7.99	Yes	21	Yes
20/5/2019	7.89	Yes	2	Yes
17/5/2019	7.90	Yes	2	Yes
16/5/2019	7.98	Yes	1	Yes
15/5/2019	7.90	Yes	2	Yes
5/5/2019	8.05	Yes	3	Yes
4/5/2019	8.07	Yes	2	Yes
3/5/2019	8.14	Yes	3	Yes
17/4/2019	7.60	Yes	2	Yes
16/4/2019	7.74	Yes	<1	Yes

### Teven Quarry Environmental Monitoring Report

15/4/2019	7.84	Yes	<1	Yes
12/4/2019	7.85	Yes	<1	Yes
3/4/2019	7.80	Yes	7	Yes
17/12/2018	8.40	Yes	1	Yes
23/11/2018	8.20	Yes	10	Yes
22/11/2018	8.27	Yes	8	Yes
21/11/2018	8.20	Yes	95	Yes
20/11/2018	8.15	Yes	18	Yes
27/10/2018	7.42	Yes	3	Yes
26/10/2018	7.35	Yes	2	Yes
15/10/2018	7.86	Yes	13	Yes
14/10/2018	7.84	Yes	15	Yes
13/10/2018	7.80	Yes	12	Yes
12/10/2018	7.90	Yes	13	Yes
11/10/2018	7.45	Yes	2	Yes
9/10/2018	8.23	Yes	1	Yes
5/10/2018	8.25	Yes	1	Yes
25/09/2018	8.28	Yes	2	Yes
24/09/2018	8.22	Yes	2	Yes
21/09/2018	8.10	Yes	2	Yes
06/09/2018	8.17	Yes	15	Yes
05/09/2018	8.13	Yes	36	Yes
04/09/2018	8.16	Yes	31	Yes
03/09/2018	8.11	Yes	20	Yes
28/06/2018	8.06	Yes	ND	ND
27/06/2018	8.15	Yes	ND	ND
07/06/2018	8.13	Yes	ND	ND
06/06/2018	8.06	Yes	ND	ND
5/06/2018	8.16	Yes	ND	ND
03/05/2018	7.72	Yes	16	Yes
04/05/2018	7.67	Yes	14	Yes
07/05/2018	7.92	Yes	10	Yes
08/05/2018	7.94	Yes	7	Yes
09/05/2018	7.75	Yes	11	Yes
10/05/2018	7.75	Yes	15	Yes
14/05/2018	7.85	Yes	13	Yes
15/05/2018	7.75	Yes	21	Yes
16/05/2018	7.73	Yes	16	Yes
17/05/2018	7.70	Yes	12	Yes
18/05/2018	7.87	Yes	10	Yes
28/05/2018	7.76	Yes	3	Yes
29/05/2018	8.07	Yes	9	Yes
30/04/2018	7.76	Yes	24	Yes
29/04/2018	7.85	Yes	16	Yes
28/04/2018	7.82	Yes	17	Yes
27/04/2018	7.8	Yes	7	Yes
26/04/2018	7.8	Yes	7	Yes
25/04/2018	7.9	Yes	16	Yes

### Teven Quarry Environmental Monitoring Report

24/04/2018	7.8	Yes	12	Yes
23/04/2018	7.85	Yes	18	Yes
22/04/2018	7.9	Yes	18	Yes
5/04/2018	7.82	Yes	1	Yes
4/04/2018	7.85	Yes	0.5	Yes
26/03/2018	8.1	Yes	4	Yes
23/03/2018	8.21	Yes	3	Yes
22/03/2018	8.2	Yes	2	Yes
15/03/2018	7.98	Yes	13	Yes
8/03/2018	7.55	Yes	18	Yes
7/03/2018	7.45	Yes	32	Yes
6/03/2018	7.6	Yes	38	Yes
5/03/2018	8.1	Yes	1	Yes
2/03/2018	8.1	Yes	1	Yes
1/03/2018	8.1	Yes	1	Yes
28/02/2018	8	Yes	13	Yes
27/02/2018	8.1	Yes	9	Yes
26/02/2018	8.1	Yes	11	Yes
6/02/2018	8	Yes	7	Yes
5/02/2018	7.97	Yes	12	Yes
3/02/2018	7.97	Yes	22	Yes
2/02/2018	7.85	Yes	23	Yes
5/01/2018	8.1	Yes	21	Yes
2/01/2018	8.2	Yes	12	Yes
1/01/2018	8	Yes	22	Yes
31/12/2017	8.1	Yes	23	Yes
28/12/2017	8.3	Yes	29	Yes
27/12/2017	8.2	Yes	24	Yes
26/12/2017	7.9	Yes	21	Yes
22/12/2017	8.2	Yes	22	Yes
22/11/2017	8	Yes	4	Yes
21/11/2017	8.1	Yes	5	Yes
11/11/2017	7.16	Yes	3	Yes
10/11/2017	7.24	Yes	5	Yes
9/11/2017	6.95	Yes	3	Yes
8/11/2017	7	Yes	5	Yes
7/11/2017	6.84	Yes	7	Yes
6/11/2017	6.76	Yes	16	Yes
19/10/2017	7.73	Yes	11	Yes
18/10/2017	7.68	Yes	17	Yes
17/10/2017	7.52	Yes	20	Yes
16/10/2017	7.71	Yes	10	Yes
15/10/2017	7.75	Yes	11	Yes
3/10/2017	7.2	Yes	2	Yes
11/07/2017	7.83	Yes	2	Yes
6/07/2017	7.76	Yes	2	Yes
5/07/2017	7.85	Yes	4	Yes
4/07/2017	7.78	Yes	2	Yes



### Teven Quarry Environmental Monitoring Report

3/07/2017	7.82	Yes	9	Yes
2/07/2017	7.89	Yes	9	Yes
1/07/2017	7.62	Yes	13	Yes
30/06/2017	7.9	Yes	11	Yes
29/06/2017	7.52	Yes	12	Yes
28/06/2017	7.61	Yes	13	Yes
27/06/2017	7.51	Yes	13	Yes
26/06/2017	7.74	Yes	15	Yes
25/06/2017	7.66	Yes	14	Yes
24/06/2017	7.67	Yes	16	Yes
23/06/2017	7.76	Yes	18	Yes
22/06/2017	7.78	Yes	18	Yes
21/06/2017	7.74	Yes	24	Yes
20/06/2017	7.7	Yes	12	Yes
19/06/2017	7.42	Yes	7	Yes
18/06/2017	7.21	Yes	12	Yes
17/06/2017	7.39	Yes	18	Yes
16/06/2017	7.6	Yes	9	Yes
15/06/2017	7.69	Yes	13	Yes
14/06/2017	7.76	Yes	55	Yes
13/06/2017	7.9	Yes	34	Yes
12/06/2017	7.76	Yes	25	Yes
20/05/2017	7.84	Yes	4	Yes
15/05/2017	7.45	Yes	3	Yes
7/05/2017	7.81	Yes	5	Yes
6/05/2017	7.77	Yes	13	Yes
5/05/2017	7.73	Yes	13	Yes
4/05/2017	7.9	Yes	5	Yes
24/04/2017	7.88	Yes	13	Yes
23/04/2017	7.7	Yes	2	Yes
22/04/2017	7.72	Yes	2	Yes
21/04/2017	6.62	Yes	3	Yes
20/04/2017	6.68	Yes	3	Yes
19/04/2017	7.66	Yes	3	Yes
18/04/2017	7.7	Yes	3	Yes
17/04/2017	7.65	Yes	1	Yes
16/04/2017	7.65	Yes	2	Yes
15/04/2017	7.67	Yes	2	Yes
14/04/2017	7.69	Yes	4	Yes
13/04/2017	7.7	Yes	2	Yes
12/04/2017	7.75	Yes	1	Yes
11/04/2017	7.65	Yes	7	Yes
10/04/2017	7.68	Yes	6	Yes
9/04/2017	7.6	Yes	5	Yes
8/04/2017	7.53	Yes	33	Yes
7/04/2017	7.46	Yes	10	Yes
6/04/2017	7.38	Yes	6	Yes
5/04/2017	7.31	Yes	6	Yes

### Teven Quarry Environmental Monitoring Report

4/04/2017	7.39	Yes	10	Yes
3/04/2017	7.88	Yes	2	Yes
2/04/2017	7.67	Yes	8	Yes
1/04/2017	7.63	Yes	9	Yes
31/03/2017	7.6	Yes	29	Yes
30/03/2017	7.31	Yes	1	Yes
29/03/2017	7.43	Yes	1	Yes
28/03/2017	7.51	Yes	1	Yes
27/03/2017	7.56	Yes	2	Yes
26/03/2017	7.52	Yes	1	Yes
25/03/2017	8.25	Yes	5	Yes
24/03/2017	7.35	Yes	5	Yes
23/03/2017	7.76	Yes	4	Yes
23/03/2017	8.1	Yes	19	Yes
22/03/2017	7.81	Yes	8	Yes
21/03/2017	7.48	Yes	17	Yes
20/03/2017	7.4	Yes	1	Yes
19/03/2017	7.6	Yes	5	Yes
18/03/2017	7.69	Yes	3	Yes
17/03/2017	7.54	Yes	4	Yes
16/03/2017	7.65	Yes	1	Yes
15/03/2017	7.84	Yes	1	Yes
14/03/2017	8.41	Yes	3	Yes
6/03/2017	7.72	Yes	5	Yes
3/03/2017	8.27	Yes	14	Yes
2/03/2017	8.07	Yes	32	Yes
1/03/2017	8.02	Yes	23	Yes
28/02/2017	7.98	Yes	15	Yes
9/02/2017	8.3	Yes	1	Yes
6/01/2017		ND	2	Yes
5/01/2017		ND	3	Yes
4/01/2017		ND	3	Yes
6/12/2016	8.40	Yes	11	Yes
30/11/2016	8.28	Yes	3	Yes
16/11/2016	8.34	Yes	11	Yes
15/11/2016	7.96	Yes	5	Yes
10/11/2016	8.28	Yes	5	Yes
22/09/2016	8.30	Yes	3	Yes

The site was compliant with the water quality limits in EPL 2261.

## Teven Quarry Monitoring Locations

### Blast Monitoring Location



# Teven Quarry Environmental Monitoring Report

## Water Quality Monitoring Location

