

Hanson Bass Point Quarry

Environmental Monitoring Report - EPL Requirements

Environment Protection Licence information	
Licensee	Hanson Construction Materials Pty Ltd Locked Bag 5260 Parramatta, NSW 2124
EPL Number	2193
Premises	Boollwarroo Parade Shellharbour, NSW 2529 LOT 16 DP 627783, LOT 78 DP 751290, LOT 22 DP 1010797
EPL Location (Public Register)	https://apps.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=189795&SYSUID=1&LICID=2193

The environmental monitoring report is to satisfy the requirements of Section 66(6) of the *Protection of Environment and Operations Act 1997*, whereby an EPL holder must make pollution monitoring data available within 14 days of obtaining that monitoring data.

The monitoring of pollutants provided in this report is undertaken as per the requirements of Environment Protection Licence 2193 (EPL 2193 – Bass Point Quarry).

This report provides environmental monitoring data for Bass Point Quarry for the period 1 July 2014 to the date of publication (i.e. since commencement of Project Approval MP 08_0143). Monitoring of some parameters commenced later, depending on monitoring requirements under regulatory approvals.

Monitoring data in this report relates to the monitoring undertaken in the reporting period for the following environmental pollutants and/or parameters:

- Airblast overpressure and ground vibration associated with blasting activities (during each production blast)
- Deposited Dust (monthly monitoring)
- Surface water quality (daily during discharge)

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Monitoring Points			
Air			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
4	Dust deposition monitoring		West of the premises and labelled as "DDG 1" on aerial photo titled 'BASS POINT QUARRY Monitoring Location - EPA' dated 11 June 2020.
5	Dust deposition monitoring		North-West of the premises and labelled as "DDG 2" on aerial photo titled 'BASS POINT QUARRY Monitoring Location - EPA' dated 11 June 2020.
Water and land			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Discharge to waters Water quality monitoring	Discharge to waters Water quality monitoring	Upstream end of the Spillway pipe on the drop cut dam (Southern side of the quarry) and labelled as "DP1" on aerial photo titled 'BASS POINT QUARRY Monitoring Location - EPA' dated 11 June 2020.
2	Discharge to waters Water quality monitoring	Discharge to waters Water quality monitoring	Eastern end of the quarry and labelled as "DP 2" on aerial photo titled 'BASS POINT QUARRY Monitoring Location - EPA' dated 11 June 2020.
3	Discharge to waters Water quality monitoring	Discharge to waters Water quality monitoring	Northern side of the quarry and labelled as "DP 3" on aerial photo titled 'BASS POINT QUARRY Monitoring Location - EPA' dated 11 June 2020.

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Premises location map including Monitoring Points



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Airblast overpressure and ground vibration - blast monitoring

The quarry must monitor and record ground vibration peak particle velocity (mm/s) and airblast overpressure level (dB(Lin Peak)), as well as other supporting information, for each production blast. The monitoring must be conducted at the approved monitoring locations: Monitoring Point A (Rangoon Avenue, Shell Cove) and Monitoring Point B (Killalea Drive, Shell Cove).

Blast Monitoring Requirements (condition L3.1, L3.2)			
Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Monitoring Point A	120	10	0%
Monitoring Point B	115	5	5% of the total blasts over a period of 12 months

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
2021											
19/01/2021	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	102.8	115	120	Yes	0.860	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.371	5	10	Yes	
27/01/2021	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	105.5	115	120	Yes	2.700	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	1.150	5	10	Yes	
3/02/2021	11:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.5	115	120	Yes	3.511	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	1.393	5	10	Yes	
12/02/2021	10:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	2.643	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	0.861	5	10	Yes	
19/02/2021	11:33	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.0	115	120	Yes	0.885	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.8	115	120	Yes	0.319	5	10	Yes	
26/02/2021	11:11	Monitoring Point A (Rangoon Avenue, Shell Cove)	103.5	115	120	Yes	2.153	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.924	5	10	Yes	
5/03/2021	11:05	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	2.836	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.955	5	10	Yes	
12/03/2021	11:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	3.032	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.9	115	120	Yes	0.776	5	10	Yes	
19/03/2021	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	1.061	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.374	5	10	Yes	
30/03/2021	12:06	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.5	115	120	Yes	3.147	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	1.190	5	10	Yes	
1/04/2021	13:07	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.5	115	120	Yes	0.558	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.8	115	120	Yes	0.332	5	10	Yes	
9/04/2021	11:05	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.0	115	120	Yes	4.225	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	1.826	5	10	Yes	
23/04/2021	11:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	2.675	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.0	115	120	Yes	1.260	5	10	Yes	
30/04/2021	11:35	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.2	115	120	Yes	1.136	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.9	115	120	Yes	0.529	5	10	Yes	
7/05/2021	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	113.8	115	120	Yes	1.644	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	1.027	5	10	Yes	
17/05/2021	10:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	105.5	115	120	Yes	2.460	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	1.132	5	10	Yes	
24/05/2021	10:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.5	115	120	Yes	1.487	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.5	115	120	Yes	0.580	5	10	Yes	
31/05/2021	9:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	1.378	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.5	115	120	Yes	0.500	5	10	Yes	
4/06/2021	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.0	115	120	Yes	0.572	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.8	115	120	Yes	1.957	5	10	Yes	
11/06/2021	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	103.5	115	120	Yes	2.721	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	1.417	5	10	Yes	
21/06/2021	11:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	102.8	115	120	Yes	2.083	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.841	5	10	Yes	
25/06/2021	11:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.0	115	120	Yes	1.565	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	113.8	115	120	Yes	1.173	5	10	Yes	
7/07/2021	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.0	115	120	Yes	1.432	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	< 88.0	115	120	Yes	0.390	5	10	Yes	
14/07/2021	11:04	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.0	115	120	Yes	2.976	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.8	115	120	Yes	1.760	5	10	Yes	
28/07/2021	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	102.8	115	120	Yes	1.891	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	1.192	5	10	Yes	
4/08/2021	11:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	<115.0	115	120	Yes	0.962	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.623	5	10	Yes	
2020											
17/01/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.6	115	120	Yes	2.537	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	1.051	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
24/01/2020	10:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.8	115	120	Yes	3.551	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	2.078	5	10	Yes	
7/02/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	113.1	115	120	Yes	3.078	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	1.087	5	10	Yes	
14/02/2020	10:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	DNM	115	120	N/A	DNM	5	10	N/A	Monitoring equipment not in position on time.
		Monitoring Point B (Killalea Drive, Shell Cove)	DNM	115	120	N/A	DNM	5	10	N/A	Monitoring equipment not in position on time.
21/02/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	117.4	115	120	Yes	1.375	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.2	115	120	Yes	0.700	5	10	Yes	
28/02/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.4	115	120	Yes	2.410	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.5	115	120	Yes	0.966	5	10	Yes	
6/03/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	112.0	115	120	Yes	2.181	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	2.050	5	10	Yes	
10/03/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.2	115	120	Yes	0.242	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.5	115	120	Yes	0.144	5	10	Yes	
13/03/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	97.5	115	120	Yes	0.237	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	0.614	5	10	Yes	
18/03/2020	11:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	105.5	115	120	Yes	0.784	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.985	5	10	Yes	
27/03/2020	10:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	112.8	115	120	Yes	2.118	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.9	115	120	Yes	0.764	5	10	Yes	
9/04/2020	11:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.9	115	120	Yes	2.767	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.9	115	120	Yes	1.240	5	10	Yes	
1/05/2020	11:22	Monitoring Point A (Rangoon Avenue, Shell Cove)	105.5	115	120	Yes	4.436	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.9	115	120	Yes	1.831	5	10	Yes	
27/05/2020	11:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.2	115	120	Yes	0.986	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.5	115	120	Yes	0.312	5	10	Yes	
12/06/2020	11:13	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.9	115	120	Yes	3.651	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	1.920	5	10	Yes	
18/06/2020	11:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	3.064	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.1	115	120	Yes	1.410	5	10	Yes	
29/06/2020	11:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	3.060	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	88.8	115	120	Yes	1.430	5	10	Yes	
3/07/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	2.507	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	1.010	5	10	Yes	
9/07/2020	11:04	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.9	115	120	Yes	1.937	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.898	5	10	Yes	
24/07/2020	11:06	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.9	115	120	Yes	2.337	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	1.303	5	10	Yes	
31/07/2020	11:05	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.6	115	120	Yes	1.449	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.981	5	10	Yes	
19/08/2020	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.9	115	120	Yes	3.063	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.325	5	10	Yes	
28/08/2020	11:04	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.4	115	120	Yes	1.338	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	1.003	5	10	Yes	
4/09/2020	11:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.0	115	120	Yes	2.443	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	1.364	5	10	Yes	
10/09/2020	10:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	91.5	115	120	Yes	0.272	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.0	115	120	Yes	0.175	5	10	Yes	
15/09/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.5	115	120	Yes	2.086	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.864	5	10	Yes	
18/09/2020	11:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	3.405	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.5	115	120	Yes	0.947	5	10	Yes	
2/10/2020	12:10	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	0.548	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	0.808	5	10	Yes	
9/10/2020	11:04	Monitoring Point A (Rangoon Avenue, Shell Cove)	111.8	115	120	Yes	0.741	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	> 88.0 < 115.0	115	120	Yes	1.958	5	10	Yes	Airblast overpressure associated with another source.

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
16/10/2020	13:40	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.0	115	120	Yes	2.607	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	1.171	5	10	Yes	
30/10/2020	10:55	Monitoring Point A (Rangoon Avenue, Shell Cove)	111.2	115	120	Yes	1.474	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.794	5	10	Yes	
6/11/2020	11:31	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.2	115	120	Yes	1.714	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	1.204	5	10	Yes	
12/11/2020	10:26	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.2	115	120	Yes	1.155	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	0.883	5	10	Yes	
23/11/2020	11:06	Monitoring Point A (Rangoon Avenue, Shell Cove)	102.8	115	120	Yes	3.130	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	< 88.0	115	120	Yes	0.170	5	10	Yes	Monitoring result lower than blast monitor trigger.
27/11/2020	11:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.2	115	120	Yes	1.190	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.750	5	10	Yes	
2/12/2020	11:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.5	115	120	Yes	2.472	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.5	115	120	Yes	1.301	5	10	Yes	
9/12/2020	11:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	103.5	115	120	Yes	1.336	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	4.093	5	10	Yes	
16/12/2020	11:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.0	115	120	Yes	2.822	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.5	115	120	Yes	0.956	5	10	Yes	
2019											
17/04/2016	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.9	115	120	Yes	1.617	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.0	115	120	Yes	1.921	5	10	Yes	
9/01/2019	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	113.5	115	120	Yes	0.286	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.463	5	10	Yes	
11/01/2019	13:32	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.4	115	120	Yes	2.280	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	2.329	5	10	Yes	
16/01/2019	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.5	115	120	Yes	1.750	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.755	5	10	Yes	
18/01/2019	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	100.0	115	120	Yes	0.627	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.412	5	10	Yes	Airblast overpressure associated with another source.
23/01/2019	13:07	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.2	115	120	Yes	2.189	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.808	5	10	Yes	Airblast overpressure associated with another source.
25/01/2019	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	98.8	115	120	Yes	0.484	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	113.3	115	120	Yes	0.189	5	10	Yes	
30/01/2019	13:05	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.8	115	120	Yes	0.628	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	0.714	5	10	Yes	
1/02/2019	13:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.4	115	120	Yes	1.311	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.796	5	10	Yes	
6/02/2019	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	112.6	115	120	Yes	0.905	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.6	115	120	Yes	0.843	5	10	Yes	
8/02/2019	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.0	115	120	Yes	0.745	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	112.0	115	120	Yes	0.198	5	10	Yes	
13/02/2019	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.9	115	120	Yes	1.947	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	1.088	5	10	Yes	
15/02/2019	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	111.2	115	120	Yes	0.716	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	0.786	5	10	Yes	
20/02/2019	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	100.0	115	120	Yes	0.422	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	94.0	115	120	Yes	0.321	5	10	Yes	
22/02/2019	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.367	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.679	5	10	Yes	Airblast overpressure associated with another source.
27/02/2019	12:55	Monitoring Point A (Rangoon Avenue, Shell Cove)	114.6	115	120	Yes	0.809	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.8	115	120	Yes	0.613	5	10	Yes	
1/03/2019	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.0	115	120	Yes	0.431	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	0.272	5	10	Yes	
6/03/2019	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.0	115	120	Yes	0.749	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.406	5	10	Yes	
11/03/2019	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.2	115	120	Yes	0.879	5	10	Yes	

Hanson Bass Point Quarry

Environmental Monitoring Report - EPL Requirements

Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
		Monitoring Point B (Killalea Drive, Shell Cove)	> 88.0 < 115.0	115	120	Yes	1.080	5	10	Yes	Airblast overpressure associated with another source.
13/03/2019	13:30	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	0.384	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	105.5	115	120	Yes	0.355	5	10	Yes	
15/03/2019	13:05	Monitoring Point A (Rangoon Avenue, Shell Cove)	114.6	115	120	Yes	2.085	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	105.5	115	120	Yes	0.355	5	10	Yes	
22/03/2019	14:55	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.2	115	120	Yes	1.542	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	1.549	5	10	Yes	
3/04/2019	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	115.0	115	120	Yes	0.424	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.2	115	120	Yes	0.570	5	10	Yes	
5/04/2019	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	114.0	115	120	Yes	1.063	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	112.0	115	120	Yes	1.890	5	10	Yes	
10/04/2019	15:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	111.5	115	120	Yes	1.311	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.3	115	120	Yes	0.700	5	10	Yes	
12/04/2019	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	100.0	115	120	Yes	0.492	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.7	115	120	Yes	0.490	5	10	Yes	
1/05/2019	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.0	115	120	Yes	1.105	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.5	115	120	Yes	0.318	5	10	Yes	
3/05/2019	11:35	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.0	115	120	Yes	1.130	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.5	115	120	Yes	0.416	5	10	Yes	
8/05/2019	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	97.5	115	120	Yes	0.767	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.406	5	10	Yes	Airblast overpressure associated with another source.
10/05/2019	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	91.5	115	120	Yes	0.223	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
15/05/2019	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	114.0	115	120	Yes	1.587	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.0	115	120	Yes	1.441	5	10	Yes	
17/05/2019	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.0	115	120	Yes	0.529	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.5	115	120	Yes	0.401	5	10	Yes	
22/05/2019	13:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	0.297	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.286	5	10	Yes	Airblast overpressure associated with another source.
24/05/2019	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	98.8	115	120	Yes	0.653	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.5	115	120	Yes	0.383	5	10	Yes	
29/05/2019	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	105.5	115	120	Yes	0.621	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	114.2	115	120	Yes	0.352	5	10	Yes	
5/06/2019	11:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	113.8	115	120	Yes	1.087	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	1.083	5	10	Yes	
12/06/2019	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.8	115	120	Yes	1.473	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.815	5	10	Yes	
1/07/2019	12:54	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.9	115	120	Yes	2.461	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.725	5	10	Yes	
2/07/2019	15:07	Monitoring Point A (Rangoon Avenue, Shell Cove)	114.6	115	120	Yes	2.137	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	1.086	5	10	Yes	
5/07/2019	10:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	119.7	115	120	Yes	1.163	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	112.0	115	120	Yes	1.014	5	10	Yes	
10/07/2019	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.0	115	120	Yes	0.701	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.336	5	10	Yes	
18/07/2019	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	103.5	115	120	Yes	2.705	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	1.262	5	10	Yes	
24/07/2019	13:23	Monitoring Point A (Rangoon Avenue, Shell Cove)	112.8	115	120	Yes	1.593	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	113.3	115	120	Yes	0.924	5	10	Yes	
31/07/2019	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.5	115	120	Yes	2.090	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.0	115	120	Yes	0.576	5	10	Yes	
7/08/2019	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	102.6	115	120	Yes	2.980	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	1.243	5	10	Yes	
14/08/2019	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	0.676	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	0.412	5	10	Yes	
23/08/2019	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	111.5	115	120	Yes	0.436	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.410	5	10	Yes	
28/08/2019	10:27	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	1.603	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	105.5	115	120	Yes	0.999	5	10	Yes	
6/09/2019	11:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.2	115	120	Yes	2.078	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	0.911	5	10	Yes	
11/09/2019	10:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.5	115	120	Yes	2.189	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.959	5	10	Yes	
24/09/2019	10:55	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.0	115	120	Yes	0.455	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	0.309	5	10	Yes	
27/09/2019	10:55	Monitoring Point A (Rangoon Avenue, Shell Cove)	112.0	115	120	Yes	2.798	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	1.247	5	10	Yes	
2/10/2019	11:38	Monitoring Point A (Rangoon Avenue, Shell Cove)	102.8	115	120	Yes	0.397	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.286	5	10	Yes	
11/10/2019	11:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	2.543	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	1.620	5	10	Yes	
23/10/2019	10:23	Monitoring Point A (Rangoon Avenue, Shell Cove)	97.5	115	120	Yes	1.338	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.888	5	10	Yes	
30/10/2019	11:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.8	115	120	Yes	1.873	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	1.159	5	10	Yes	
11/11/2019	11:05	Monitoring Point A (Rangoon Avenue, Shell Cove)	113.3	115	120	Yes	3.088	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	1.300	5	10	Yes	
13/11/2019	10:06	Monitoring Point A (Rangoon Avenue, Shell Cove)	103.5	115	120	Yes	3.026	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	1.151	5	10	Yes	
20/11/2019	10:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.9	115	120	Yes	2.606	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	2.255	5	10	Yes	
27/11/2019	11:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	0.462	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.252	5	10	Yes	
4/12/2019	11:09	Monitoring Point A (Rangoon Avenue, Shell Cove)	< 105.0	115	120	Yes	3.049	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	1.776	5	10	Yes	
2018											
10/01/2018	12:54	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.5	115	120	Yes	0.401	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.243	5	10	Yes	
12/01/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.715	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.351	5	10	Yes	
19/01/2018	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	102.8	115	120	Yes	0.723	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	1.183	5	10	Yes	
24/01/2018	13:06	Monitoring Point A (Rangoon Avenue, Shell Cove)	< 88.0	115	120	Yes	0.233	5	10	Yes	Monitoring result lower than blast monitor trigger.
		Monitoring Point B (Killalea Drive, Shell Cove)	< 88.0	115	120	Yes	0.160	5	10	Yes	Monitoring result lower than blast monitor trigger.
25/01/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.0	115	120	Yes	1.301	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	1.134	5	10	Yes	
31/01/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.9	115	120	Yes	0.303	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.8	115	120	Yes	0.158	5	10	Yes	
2/02/2018	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	0.214	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
8/02/2018	13:05	Monitoring Point A (Rangoon Avenue, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.497	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.413	5	10	Yes	Airblast overpressure associated with another source.
14/02/2018	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	103.5	115	120	Yes	0.253	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	112.3	115	120	Yes	0.709	5	10	Yes	
16/02/2018	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.0	115	120	Yes	1.564	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.0	115	120	Yes	1.308	5	10	Yes	
21/02/2018	12:54	Monitoring Point A (Rangoon Avenue, Shell Cove)	102.8	115	120	Yes	0.821	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.285	5	10	Yes	
28/02/2018	13:22	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	0.659	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	115.0	115	120	Yes	0.298	5	10	Yes	
7/03/2018	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.9	115	120	Yes	0.304	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.217	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
9/03/2018	12:51	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.0	115	120	Yes	0.389	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	95.9	115	120	Yes	0.226	5	10	Yes	
14/03/2018	14:32	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.9	115	120	Yes	0.243	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.303	5	10	Yes	
21/03/2018	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	103.5	115	120	Yes	0.482	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.2	115	120	Yes	0.773	5	10	Yes	
23/03/2018	13:05	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.0	115	120	Yes	1.482	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.9	115	120	Yes	0.720	5	10	Yes	
28/03/2018	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	112.8	115	120	Yes	0.458	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
6/04/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	112.3	115	120	Yes	0.704	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	1.216	5	10	Yes	
11/04/2018	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.0	115	120	Yes	0.787	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	> 88.0 < 115.0	115	120	Yes	0.207	5	10	Yes	Airblast overpressure associated with another source.
13/04/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.8	115	120	Yes	0.734	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.2	115	120	Yes	0.256	5	10	Yes	
18/04/2018	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.0	115	120	Yes	0.639	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	< 88.0	115	120	Yes	0.447	5	10	Yes	Monitoring result lower than blast monitor trigger.
23/04/2018	13:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	102.8	115	120	Yes	0.443	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	95.9	115	120	Yes	0.337	5	10	Yes	
27/04/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.9	115	120	Yes	0.331	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	0.627	5	10	Yes	
2/05/2018	12:54	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.9	115	120	Yes	0.498	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
8/05/2018	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	0.942	5	10	Yes	
11/05/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	< 115.0	115	120	Yes	0.541	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	114.8	115	120	Yes	0.280	5	10	Yes	
16/05/2018	12:55	Monitoring Point A (Rangoon Avenue, Shell Cove)	111.5	115	120	Yes	0.709	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.588	5	10	Yes	
18/05/2018	12:52	Monitoring Point A (Rangoon Avenue, Shell Cove)	105.5	115	120	Yes	0.508	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	91.5	115	120	Yes	0.445	5	10	Yes	
25/05/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	103.5	115	120	Yes	0.406	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	0.643	5	10	Yes	
30/05/2018	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	112.6	115	120	Yes	0.480	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.319	5	10	Yes	
6/06/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.0	115	120	Yes	0.683	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.489	5	10	Yes	
8/06/2018	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.0	115	120	Yes	0.831	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.5	115	120	Yes	0.583	5	10	Yes	
13/06/2018	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.2	115	120	Yes	0.407	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	95.9	115	120	Yes	0.394	5	10	Yes	
20/06/2018	12:17	Monitoring Point A (Rangoon Avenue, Shell Cove)	114.4	115	120	Yes	0.630	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.884	5	10	Yes	
22/06/2018	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	0.452	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.593	5	10	Yes	
27/06/2018	16:14	Monitoring Point A (Rangoon Avenue, Shell Cove)	106.5	115	120	Yes	2.715	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.462	5	10	Yes	
29/06/2018	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	101.9	115	120	Yes	0.498	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	95.9	115	120	Yes	0.259	5	10	Yes	
4/07/2018	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.0	115	120	Yes	0.431	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.424	5	10	Yes	
6/07/2018	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	100.0	115	120	Yes	0.615	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	105.5	115	120	Yes	2.922	5	10	Yes	
11/07/2018	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	105.5	115	120	Yes	0.292	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	0.256	5	10	Yes	

Hanson Bass Point Quarry

Environmental Monitoring Report - EPL Requirements

Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
13/07/2018	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.5	115	120	Yes	0.461	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.330	5	10	Yes	
18/07/2018	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.2	115	120	Yes	0.620	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.577	5	10	Yes	
20/07/2018	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	119.3	115	120	Yes	1.224	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	122.3	115	120	Yes	0.478	5	10	Yes	Airblast overpressure associated with another source.
25/07/2018	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.0	115	120	Yes	1.302	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.575	5	10	Yes	
27/07/2018	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	0.484	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.348	5	10	Yes	
3/08/2018	12:56	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.0	115	120	Yes	2.216	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.7	115	120	Yes	1.040	5	10	Yes	
10/08/2018	13:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	119.0	115	120	Yes	0.775	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.5	115	120	Yes	0.550	5	10	Yes	
15/08/2018	13:02	Monitoring Point A (Rangoon Avenue, Shell Cove)	119.7	115	120	Yes	2.213	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	114.8	115	120	Yes	0.513	5	10	Yes	
22/08/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	105.5	115	120	Yes	0.508	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	114.2	115	120	Yes	0.243	5	10	Yes	
31/08/2018	13:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	111.2	115	120	Yes	0.646	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	0.293	5	10	Yes	
7/09/2018	13:01	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	1.404	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.2	115	120	Yes	1.084	5	10	Yes	
12/09/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	112.8	115	120	Yes	1.839	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.8	115	120	Yes	0.379	5	10	Yes	
19/09/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	113.1	115	120	Yes	1.531	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	116.9	115	120	Yes	2.256	5	10	Yes	
26/09/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	104.2	115	120	Yes	0.807	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	95.9	115	120	Yes	0.410	5	10	Yes	
5/10/2018	13:20	Monitoring Point A (Rangoon Avenue, Shell Cove)	118.3	115	120	Yes	4.190	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	1.806	5	10	Yes	
10/10/2018	12:57	Monitoring Point A (Rangoon Avenue, Shell Cove)	119.3	115	120	Yes	0.629	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	0.526	5	10	Yes	
17/10/2018	12:54	Monitoring Point A (Rangoon Avenue, Shell Cove)	109.2	115	120	Yes	0.552	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.340	5	10	Yes	
24/10/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	98.8	115	120	Yes	0.316	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.9	115	120	Yes	0.351	5	10	Yes	
26/10/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.0	115	120	Yes	1.273	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	0.441	5	10	Yes	
1/11/2018	13:04	Monitoring Point A (Rangoon Avenue, Shell Cove)	111.5	115	120	Yes	0.473	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.9	115	120	Yes	0.517	5	10	Yes	
2/11/2018	13:03	Monitoring Point A (Rangoon Avenue, Shell Cove)	98.8	115	120	Yes	1.674	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	1.280	5	10	Yes	
9/11/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	< 115.0	115	120	Yes	0.949	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	< 115.0	115	120	Yes	0.272	5	10	Yes	Airblast overpressure associated with another source.
14/11/2018	13:04	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.5	115	120	Yes	0.415	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	105.5	115	120	Yes	0.593	5	10	Yes	
21/11/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	107.0	115	120	Yes	0.803	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.401	5	10	Yes	
23/11/2018	12:55	Monitoring Point A (Rangoon Avenue, Shell Cove)	< 115.0	115	120	Yes	1.700	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
28/11/2018	13:04	Monitoring Point A (Rangoon Avenue, Shell Cove)	< 115.0	115	120	Yes	1.237	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	111.2	115	120	Yes	0.413	5	10	Yes	
30/11/2018	13:06	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.4	115	120	Yes	0.538	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.284	5	10	Yes	
5/12/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	100.0	115	120	Yes	0.634	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	95.9	115	120	Yes	0.324	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
7/12/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	< 115.0	115	120	Yes	2.698	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	1.343	5	10	Yes	
10/12/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.6	115	120	Yes	0.485	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	0.502	5	10	Yes	
12/12/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	105.5	115	120	Yes	1.176	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	< 115.0	115	120	Yes	0.591	5	10	Yes	Airblast overpressure associated with another source.
14/12/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	103.5	115	120	Yes	0.600	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	95.9	115	120	Yes	0.573	5	10	Yes	
17/12/2018	13:00	Monitoring Point A (Rangoon Avenue, Shell Cove)	98.8	115	120	Yes	0.612	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	0.261	5	10	Yes	
19/12/2018	12:59	Monitoring Point A (Rangoon Avenue, Shell Cove)	108.4	115	120	Yes	1.064	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.290	5	10	Yes	
20/12/2018	12:58	Monitoring Point A (Rangoon Avenue, Shell Cove)	110.9	115	120	Yes	0.325	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	< 115.0	115	120	Yes	0.254	5	10	Yes	Airblast overpressure associated with another source.
2017											
12/01/2017	12:51	Monitoring Point A (Shallows Drive, Shell Cove)	104.2	115	120	Yes	0.599	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.463	5	10	Yes	
20/01/2017	12:51	Monitoring Point A (Shallows Drive, Shell Cove)	102.8	115	120	Yes	0.292	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.290	5	10	Yes	
25/01/2017	12:51	Monitoring Point A (Shallows Drive, Shell Cove)	107.5	115	120	Yes	0.569	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.427	5	10	Yes	
7/02/2017	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	104.2	115	120	Yes	1.040	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.302	5	10	Yes	
8/02/2017	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	122.8	115	120	No	0.625	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	115.0	115	120	Yes	1.037	5	10	Yes	
17/02/2017	16:12	Monitoring Point A (Shallows Drive, Shell Cove)	102.8	115	120	Yes	0.343	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.402	5	10	Yes	
22/02/2017	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	118.5	115	120	Yes	0.472	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	116.4	115	120	Yes	0.508	5	10	Yes	
24/02/2017	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	106.0	115	120	Yes	0.659	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	105.5	115	120	Yes	0.382	5	10	Yes	
1/03/2017	12:54	Monitoring Point A (Shallows Drive, Shell Cove)	110.6	115	120	Yes	0.973	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.331	5	10	Yes	
3/03/2017	13:44	Monitoring Point A (Shallows Drive, Shell Cove)	119.2	115	120	Yes	0.569	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	116.9	115	120	Yes	1.176	5	10	Yes	
10/03/2017	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	100.0	115	120	Yes	0.526	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.467	5	10	Yes	
15/03/2017	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	109.5	115	120	Yes	0.370	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.2	115	120	Yes	0.232	5	10	Yes	
23/03/2017	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	99.0	115	120	Yes	1.320	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	91.5	115	120	Yes	0.356	5	10	Yes	
5/04/2017	13:54	Monitoring Point A (Shallows Drive, Shell Cove)	110.2	115	120	Yes	0.424	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.5	115	120	Yes	0.242	5	10	Yes	
7/04/2017	10:02	Monitoring Point A (Shallows Drive, Shell Cove)	97.5	115	120	Yes	0.207	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	95.9	115	120	Yes	0.140	5	10	Yes	
12/04/2017	13:57	Monitoring Point A (Shallows Drive, Shell Cove)	98.8	115	120	Yes	0.321	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	91.5	115	120	Yes	0.079	5	10	Yes	
19/04/2017	12:57	Monitoring Point A (Shallows Drive, Shell Cove)	95.9	115	120	Yes	0.424	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.790	5	10	Yes	
27/04/2017	14:02	Monitoring Point A (Shallows Drive, Shell Cove)	104.9	115	120	Yes	0.420	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.5	115	120	Yes	0.233	5	10	Yes	
3/05/2017	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	95.9	115	120	Yes	0.390	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	105.5	115	120	Yes	0.475	5	10	Yes	
5/05/2017	12:58	Monitoring Point A (Shallows Drive, Shell Cove)	109.5	115	120	Yes	0.840	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	0.805	5	10	Yes	
10/05/2017	14:12	Monitoring Point A (Shallows Drive, Shell Cove)	107.5	115	120	Yes	0.558	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.432	5	10	Yes	
19/05/2017	13:14	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	1.265	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	97.5	115	120	Yes	0.603	5	10	Yes	
24/05/2017	13:45	Monitoring Point A (Shallows Drive, Shell Cove)	107.0	115	120	Yes	0.539	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.403	5	10	Yes	
26/05/2017	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	110.9	115	120	Yes	0.918	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.970	5	10	Yes	
2/06/2017	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	109.5	115	120	Yes	0.417	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.372	5	10	Yes	
7/06/2017	14:59	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	0.970	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.5	115	120	Yes	0.420	5	10	Yes	
9/06/2017	12:56	Monitoring Point A (Shallows Drive, Shell Cove)	109.2	115	120	Yes	1.606	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.0	115	120	Yes	0.581	5	10	Yes	
16/06/2017	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	101.9	115	120	Yes	0.845	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.526	5	10	Yes	
21/06/2017	13:24	Monitoring Point A (Shallows Drive, Shell Cove)	104.2	115	120	Yes	0.620	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	115.0	115	120	Yes	0.456	5	10	Yes	
30/06/2017	13:05	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	1.201	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	98.8	115	120	Yes	0.766	5	10	Yes	
7/07/2017	13:28	Monitoring Point A (Shallows Drive, Shell Cove)	112.3	115	120	Yes	0.444	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.375	5	10	Yes	
14/07/2017	12:58	Monitoring Point A (Shallows Drive, Shell Cove)	103.5	115	120	Yes	0.431	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.677	5	10	Yes	
21/07/2017	13:15	Monitoring Point A (Shallows Drive, Shell Cove)	105.5	115	120	Yes	0.626	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.9	115	120	Yes	3.204	5	10	Yes	
26/07/2017	12:58	Monitoring Point A (Shallows Drive, Shell Cove)	115.0	115	120	Yes	0.438	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	113.1	115	120	Yes	0.449	5	10	Yes	
28/07/2017	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	113.5	115	120	Yes	0.400	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.9	115	120	Yes	0.259	5	10	Yes	
2/08/2017	13:58	Monitoring Point A (Shallows Drive, Shell Cove)	115.9	115	120	Yes	0.327	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.5	115	120	Yes	0.421	5	10	Yes	
4/08/2017	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	112.3	115	120	Yes	0.371	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.2	115	120	Yes	0.779	5	10	Yes	
9/08/2017	12:56	Monitoring Point A (Shallows Drive, Shell Cove)	100.0	115	120	Yes	1.248	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.5	115	120	Yes	1.848	5	10	Yes	
16/08/2017	12:50	Monitoring Point A (Shallows Drive, Shell Cove)	111.8	115	120	Yes	0.671	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	0.496	5	10	Yes	
23/08/2017	12:54	Monitoring Point A (Shallows Drive, Shell Cove)	111.8	115	120	Yes	0.360	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	112.0	115	120	Yes	0.310	5	10	Yes	
25/08/2017	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	107.5	115	120	Yes	0.561	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
30/08/2017	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	100.0	115	120	Yes	0.433	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.315	5	10	Yes	
8/09/2017	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	108.0	115	120	Yes	0.357	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	113.5	115	120	Yes	0.873	5	10	Yes	
13/09/2017	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	109.9	115	120	Yes	0.333	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.2	115	120	Yes	0.254	5	10	Yes	
20/09/2017	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	106.0	115	120	Yes	0.403	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.350	5	10	Yes	
27/09/2017	12:58	Monitoring Point A (Shallows Drive, Shell Cove)	108.5	115	120	Yes	0.588	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	0.273	5	10	Yes	
6/10/2017	12:58	Monitoring Point A (Shallows Drive, Shell Cove)	112.3	115	120	Yes	0.408	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.8	115	120	Yes	0.588	5	10	Yes	
11/10/2017	13:04	Monitoring Point A (Shallows Drive, Shell Cove)	114.0	115	120	Yes	0.635	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	0.963	5	10	Yes	
16/10/2017	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	107.0	115	120	Yes	0.997	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
		Monitoring Point B (Killalea Drive, Shell Cove)	110.6	115	120	Yes	0.917	5	10	Yes	
20/10/2017	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	102.8	115	120	Yes	0.409	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	119.3	115	120	Yes	0.295	5	10	Yes	
24/10/2017	10:01	Monitoring Point A (Shallows Drive, Shell Cove)	101.9	115	120	Yes	0.615	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	112.0	115	120	Yes	0.213	5	10	Yes	
25/10/2017	12:55	Monitoring Point A (Shallows Drive, Shell Cove)	97.5	115	120	Yes	0.403	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	0.240	5	10	Yes	
31/10/2017	10:01	Monitoring Point A (Shallows Drive, Shell Cove)	102.8	115	120	Yes	0.259	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	113.8	115	120	Yes	0.263	5	10	Yes	
1/11/2017	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	106.0	115	120	Yes	0.187	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.354	5	10	Yes	
2/11/2017	13:04	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	0.375	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.416	5	10	Yes	
10/11/2017	12:56	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	0.414	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	0.270	5	10	Yes	
15/11/2017	12:57	Monitoring Point A (Shallows Drive, Shell Cove)	107.5	115	120	Yes	1.546	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	122.6	115	120	Yes	1.018	5	10	Yes	Airblast overpressure associated with another source.
17/11/2017	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	108.4	115	120	Yes	0.359	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	119.0	115	120	Yes	0.826	5	10	Yes	
22/11/2017	12:52	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	0.626	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.304	5	10	Yes	
24/11/2017	13:17	Monitoring Point A (Shallows Drive, Shell Cove)	105.5	115	120	Yes	0.492	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	120.1	115	120	Yes	0.214	5	10	Yes	Airblast overpressure associated with another source.
28/11/2017	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	93.5	115	120	Yes	0.310	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	112.3	115	120	Yes	0.272	5	10	Yes	
29/11/2017	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
7/12/2017	12:50	Monitoring Point A (Shallows Drive, Shell Cove)	107.5	115	120	Yes	1.165	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	114.6	115	120	Yes	0.305	5	10	Yes	
8/12/2017	12:53	Monitoring Point A (Shallows Drive, Shell Cove)	121.9	115	120	Yes	0.239	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	0.312	5	10	Yes	
13/12/2017	13:06	Monitoring Point A (Shallows Drive, Shell Cove)	118.2	115	120	Yes	0.680	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	0.694	5	10	Yes	
20/12/2017	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	105.5	115	120	Yes	0.426	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	121.9	115	120	Yes	0.461	5	10	Yes	Airblast overpressure associated with another source.
2016											
11/01/2016	15:01	Monitoring Point A (Shallows Drive, Shell Cove)	109.5	115	120	Yes	0.386	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
13/01/2016	13:10	Monitoring Point A (Shallows Drive, Shell Cove)	< 117.6	115	120	Yes	0.525	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	101.3	115	120	Yes	0.410	5	10	Yes	
18/01/2016	13:59	Monitoring Point A (Shallows Drive, Shell Cove)	115.6	115	120	Yes	0.228	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.5	115	120	Yes	0.430	5	10	Yes	
20/01/2016	12:53	Monitoring Point A (Shallows Drive, Shell Cove)	109.5	115	120	Yes	0.386	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
27/01/2016	11:59	Monitoring Point A (Shallows Drive, Shell Cove)	112.6	115	120	Yes	0.543	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	114.4	115	120	Yes	0.580	5	10	Yes	
1/02/2016	13:48	Monitoring Point A (Shallows Drive, Shell Cove)	109.5	115	120	Yes	0.547	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
3/02/2016	10:35	Monitoring Point A (Shallows Drive, Shell Cove)	108.0	115	120	Yes	0.764	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	10.0	115	120	Yes	0.217	5	10	Yes	
8/02/2016	13:14	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	0.180	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
10/02/2016	13:10	Monitoring Point A (Shallows Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
15/02/2016	13:22	Monitoring Point A (Shallows Drive, Shell Cove)	107.0	115	120	Yes	0.430	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.5	115	120	Yes	0.228	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
17/02/2016	13:17	Monitoring Point A (Shallows Drive, Shell Cove)	112.6	115	120	Yes	0.302	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
22/02/2016	13:23	Monitoring Point A (Shallows Drive, Shell Cove)	111.2	115	120	Yes	0.480	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
23/02/2016	11:42	Monitoring Point A (Shallows Drive, Shell Cove)	105.5	115	120	Yes	0.321	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
29/02/2016	12:41	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	0.140	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	0.293	5	10	Yes	
2/03/2016	13:07	Monitoring Point A (Shallows Drive, Shell Cove)	< 117.8	115	120	Yes	0.841	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	113.8	115	120	Yes	0.526	5	10	Yes	
3/03/2016	12:07	Monitoring Point A (Shallows Drive, Shell Cove)	124.3	115	120	Yes	0.554	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	114.4	115	120	Yes	0.302	5	10	Yes	
7/03/2016	15:23	Monitoring Point A (Shallows Drive, Shell Cove)	102.8	115	120	Yes	0.549	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	0.262	5	10	Yes	
9/03/2016	13:46	Monitoring Point A (Shallows Drive, Shell Cove)	114.6	115	120	Yes	0.880	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
11/03/2016	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	112.6	115	120	Yes	0.967	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.294	5	10	Yes	
14/03/2016	16:29	Monitoring Point A (Shallows Drive, Shell Cove)	105.5	115	120	Yes	0.717	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.261	5	10	Yes	
14/03/2016	16:29	Monitoring Point A (Shallows Drive, Shell Cove)	105.5	115	120	Yes	0.717	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.261	5	10	Yes	
16/03/2016	11:18	Monitoring Point A (Shallows Drive, Shell Cove)	108.0	115	120	Yes	0.340	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	105.5	115	120	Yes	0.209	5	10	Yes	
17/03/2016	14:25	Monitoring Point A (Shallows Drive, Shell Cove)	108.0	115	120	Yes	0.973	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	0.603	5	10	Yes	
21/03/2016	13:33	Monitoring Point A (Shallows Drive, Shell Cove)	108.0	115	120	Yes	0.310	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.0	115	120	Yes	0.217	5	10	Yes	
23/03/2016	12:06	Monitoring Point A (Shallows Drive, Shell Cove)	107.5	115	120	Yes	0.602	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.8	115	120	Yes	0.302	5	10	Yes	
30/03/2016	12:07	Monitoring Point A (Shallows Drive, Shell Cove)	115.7	115	120	Yes	0.506	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
31/03/2016	12:00	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	0.458	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.8	115	120	Yes	0.296	5	10	Yes	
4/04/2016	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	110.2	115	120	Yes	0.360	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	105.5	115	120	Yes	0.458	5	10	Yes	
6/04/2016	11:02	Monitoring Point A (Shallows Drive, Shell Cove)	104.9	115	120	Yes	0.321	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	119.7	115	120	Yes	0.277	5	10	Yes	Airblast overpressure associated with another source.
11/04/2016	12:50	Monitoring Point A (Shallows Drive, Shell Cove)	97.5	115	120	Yes	0.638	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.5	115	120	Yes	0.287	5	10	Yes	
13/04/2016	12:00	Monitoring Point A (Shallows Drive, Shell Cove)	101.9	115	120	Yes	0.783	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	1.681	5	10	Yes	
20/04/2016	13:07	Monitoring Point A (Shallows Drive, Shell Cove)	103.5	115	120	Yes	0.569	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.430	5	10	Yes	
22/04/2016	12:28	Monitoring Point A (Shallows Drive, Shell Cove)	110.2	115	120	Yes	0.128	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	0.182	5	10	Yes	
27/04/2016	16:10	Monitoring Point A (Shallows Drive, Shell Cove)	117.4	115	120	Yes	0.363	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	113.5	115	120	Yes	0.202	5	10	Yes	
29/04/2016	12:04	Monitoring Point A (Shallows Drive, Shell Cove)	104.2	115	120	Yes	1.178	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.665	5	10	Yes	
2/05/2016	11:34	Monitoring Point A (Shallows Drive, Shell Cove)	104.2	115	120	Yes	0.500	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	0.543	5	10	Yes	
4/05/2016	14:04	Monitoring Point A (Shallows Drive, Shell Cove)	106.5	115	120	Yes	0.186	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	102.8	115	120	Yes	0.275	5	10	Yes	
11/05/2016	13:12	Monitoring Point A (Shallows Drive, Shell Cove)	101.9	115	120	Yes	0.470	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	113.3	115	120	Yes	0.277	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
30/05/2016	13:40	Monitoring Point A (Shallows Drive, Shell Cove)	105.5	115	120	Yes	1.325	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.9	115	120	Yes	0.727	5	10	Yes	
1/06/2016	11:59	Monitoring Point A (Shallows Drive, Shell Cove)	94.0	115	120	Yes	0.209	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
7/06/2016	12:58	Monitoring Point A (Shallows Drive, Shell Cove)	106.5	115	120	Yes	0.374	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.8	115	120	Yes	0.156	5	10	Yes	
8/06/2016	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	100.0	115	120	Yes	0.615	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.2	115	120	Yes	0.393	5	10	Yes	
16/06/2016	12:57	Monitoring Point A (Shallows Drive, Shell Cove)	117.1	115	120	Yes	0.728	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	115.0	115	120	Yes	2.199	5	10	Yes	
22/06/2016	13:04	Monitoring Point A (Shallows Drive, Shell Cove)	97.5	115	120	Yes	0.895	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	122.8	115	120	Yes	0.301	5	10	Yes	Airblast overpressure associated with another source.
28/06/2016	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	107.5	115	120	Yes	0.236	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	108.0	115	120	Yes	0.470	5	10	Yes	
12/07/2016	14:25	Monitoring Point A (Shallows Drive, Shell Cove)	110.2	115	120	Yes	1.815	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
20/07/2016	13:13	Monitoring Point A (Shallows Drive, Shell Cove)	102.8	115	120	Yes	0.270	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.9	115	120	Yes	0.542	5	10	Yes	
27/07/2016	13:08	Monitoring Point A (Shallows Drive, Shell Cove)	112.3	115	120	Yes	0.209	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	0.369	5	10	Yes	
28/07/2016	12:52	Monitoring Point A (Shallows Drive, Shell Cove)	109.2	115	120	Yes	0.935	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.2	115	120	Yes	0.539	5	10	Yes	
5/08/2016	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	107.0	115	120	Yes	0.283	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	0.321	5	10	Yes	
8/08/2016	12:56	Monitoring Point A (Shallows Drive, Shell Cove)	105.5	115	120	Yes	0.371	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	103.5	115	120	Yes	0.457	5	10	Yes	
17/08/2016	12:54	Monitoring Point A (Shallows Drive, Shell Cove)	105.4	115	120	Yes	0.517	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	101.0	115	120	Yes	0.280	5	10	Yes	
24/08/2016	12:52	Monitoring Point A (Shallows Drive, Shell Cove)	112.8	115	120	Yes	0.776	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	113.3	115	120	Yes	0.620	5	10	Yes	
30/08/2016	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	101.9	115	120	Yes	0.285	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.8	115	120	Yes	0.340	5	10	Yes	
31/08/2016	12:54	Monitoring Point A (Shallows Drive, Shell Cove)	101.9	115	120	Yes	0.489	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	< 88.0	115	120	Yes	0.405	5	10	Yes	Monitoring result lower than blast monitor trigger.
7/09/2016	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	101.9	115	120	Yes	0.815	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.9	115	120	Yes	0.355	5	10	Yes	
9/09/2016	13:04	Monitoring Point A (Shallows Drive, Shell Cove)	112.3	115	120	Yes	0.266	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.2	115	120	Yes	0.225	5	10	Yes	
14/09/2016	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	108.0	115	120	Yes	0.536	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	93.6	115	120	Yes	0.340	5	10	Yes	
21/09/2016	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	101.9	115	120	Yes	0.759	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	86.7	115	120	Yes	0.360	5	10	Yes	
22/09/2016	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	108.8	115	120	Yes	0.393	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	90.7	115	120	Yes	0.390	5	10	Yes	
27/09/2016	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	109.5	115	120	Yes	1.265	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	100.0	115	120	Yes	1.499	5	10	Yes	
28/09/2016	13:06	Monitoring Point A (Shallows Drive, Shell Cove)	110.9	115	120	Yes	0.843	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	104.2	115	120	Yes	0.515	5	10	Yes	
4/10/2016	13:04	Monitoring Point A (Shallows Drive, Shell Cove)	115.4	115	120	Yes	0.420	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Killalea Drive, Shell Cove)	107.0	115	120	Yes	0.625	5	10	Yes	
5/10/2016	15:12	Monitoring Point A (Shallows Drive, Shell Cove)	101.9	115	120	Yes	1.751	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	93.9	115	120	Yes	0.585	5	10	Yes	
12/10/2016	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	106.0	115	120	Yes	0.506	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	110.2	115	120	Yes	0.841	5	10	Yes	
19/10/2016	12:56	Monitoring Point A (Shallows Drive, Shell Cove)	111.5	115	120	Yes	0.332	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	0.337	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
25/10/2016	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	108.4	115	120	Yes	0.790	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	114.6	115	120	Yes	0.461	5	10	Yes	
26/10/2016	12:58	Monitoring Point A (Shallows Drive, Shell Cove)	107.5	115	120	Yes	0.570	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	0.324	5	10	Yes	
2/11/2016	12:56	Monitoring Point A (Shallows Drive, Shell Cove)	108.4	115	120	Yes	1.086	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	109.5	115	120	Yes	0.335	5	10	Yes	
11/11/2016	13:06	Monitoring Point A (Shallows Drive, Shell Cove)	108.0	115	120	Yes	0.380	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	111.2	115	120	Yes	0.379	5	10	Yes	
17/11/2016	13:05	Monitoring Point A (Shallows Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
18/11/2016	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	109.2	115	120	Yes	1.173	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	112.8	115	120	Yes	0.540	5	10	Yes	
25/11/2016	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	114.0	115	120	Yes	0.513	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	121.5	115	120	Yes	0.569	5	10	Yes	Airblast overpressure associated with another source.
29/11/2016	13:17	Monitoring Point A (Shallows Drive, Shell Cove)	107.0	115	120	Yes	0.201	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	112.6	115	120	Yes	0.706	5	10	Yes	
29/11/2016	13:17	Monitoring Point A (Shallows Drive, Shell Cove)	115.4	115	120	Yes	0.450	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	119.8	115	120	Yes	0.108	5	10	Yes	Airblast overpressure associated with another source.
30/11/2016	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	107.0	115	120	Yes	1.135	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.5	115	120	Yes	0.263	5	10	Yes	
7/12/2016	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	98.8	115	120	Yes	0.703	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	0.340	5	10	Yes	
14/12/2016	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	113.3	115	120	Yes	0.541	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	116.4	115	120	Yes	0.371	5	10	Yes	Airblast overpressure associated with another source.
16/12/2016	13:08	Monitoring Point A (Shallows Drive, Shell Cove)	104.9	115	120	Yes	0.270	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	115.7	115	120	Yes	0.581	5	10	Yes	
2015											
13/01/2015	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	113.1	115	120	Yes	0.731	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	106.0	115	120	Yes	0.885	5	10	Yes	
21/01/2015	13:09	Monitoring Point A (Shallows Drive, Shell Cove)	110.6	115	120	Yes	1.080	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	107.0	115	120	Yes	0.438	5	10	Yes	
28/01/2015	13:28	Monitoring Point A (Shallows Drive, Shell Cove)	115.9	115	120	Yes	0.921	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	109.5	115	120	Yes	0.467	5	10	Yes	
4/02/2015	0:43	Monitoring Point A (Shallows Drive, Shell Cove)	113.8	115	120	Yes	0.664	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	104.0	115	120	Yes	0.679	5	10	Yes	
11/02/2015	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	103.5	115	120	Yes	0.237	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	108.4	115	120	Yes	0.854	5	10	Yes	
27/02/2015	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	108.4	115	120	Yes	0.641	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	103.5	115	120	Yes	0.237	5	10	Yes	
4/03/2015	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	114.0	115	120	Yes	0.749	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	108.8	115	120	Yes	0.364	5	10	Yes	
18/03/2015	12:59	Monitoring Point A (Shallows Drive, Shell Cove)	114.4	115	120	Yes	0.511	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	109.9	115	120	Yes	0.435	5	10	Yes	
1/04/2015	13:15	Monitoring Point A (Shallows Drive, Shell Cove)	106.5	115	120	Yes	0.875	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	97.5	115	120	Yes	0.306	5	10	Yes	
15/04/2015	13:16	Monitoring Point A (Shallows Drive, Shell Cove)	109.2	115	120	Yes	0.499	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	101.0	115	120	Yes	0.480	5	10	Yes	
29/04/2015	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	109.9	115	120	Yes	1.250	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	104.2	115	120	Yes	0.474	5	10	Yes	
11/05/2015	12:58	Monitoring Point A (Shallows Drive, Shell Cove)	105.5	115	120	Yes	0.700	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	106.0	115	120	Yes	0.506	5	10	Yes	
20/05/2015	13:02	Monitoring Point A (Shallows Drive, Shell Cove)	108.8	115	120	Yes	0.815	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	102.8	115	120	Yes	0.285	5	10	Yes	
27/05/2015	13:01	Monitoring Point A (Shallows Drive, Shell Cove)	104.9	115	120	Yes	0.668	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	97.5	115	120	Yes	0.741	5	10	Yes	
10/06/2015	13:03	Monitoring Point A (Shallows Drive, Shell Cove)	117.6	115	120	Yes	0.822	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
		Monitoring Point B (Mary Street, Shellharbour)	110.6	115	120	Yes	0.672	5	10	Yes	
18/06/2015	13:00	Monitoring Point A (Shallows Drive, Shell Cove)	110.2	115	120	Yes	0.966	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	103.5	115	120	Yes	0.344	5	10	Yes	
1/07/2015	10:35	Monitoring Point A (Shallows Drive, Shell Cove)	98.8	115	120	Yes	0.451	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	106.1	115	120	Yes	0.400	5	10	Yes	
8/07/2015	13:10	Monitoring Point A (Shallows Drive, Shell Cove)	112.6	115	120	Yes	1.110	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	
22/07/2015	11:37	Monitoring Point A (Shallows Drive, Shell Cove)	108.2	115	120	Yes	0.972	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	101.2	115	120	Yes	0.950	5	10	Yes	
5/08/2015	12:46	Monitoring Point A (Shallows Drive, Shell Cove)	113.5	115	120	Yes	0.645	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
12/08/2015	11:33	Monitoring Point A (Shallows Drive, Shell Cove)	104.9	115	120	Yes	0.671	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
20/08/2015	11:34	Monitoring Point A (Shallows Drive, Shell Cove)	103.5	115	120	Yes	1.490	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	101.7	115	120	Yes	0.610	5	10	Yes	
1/09/2015	11:36	Monitoring Point A (Shallows Drive, Shell Cove)	107.0	115	120	Yes	N/A	5	10	N/A	Ground vibration not accurate due to uncompacted soil.
		Monitoring Point B (Mary Street, Shellharbour)	100.5	115	120	Yes	0.380	5	10	Yes	
9/09/2015	11:30	Monitoring Point A (Shallows Drive, Shell Cove)	106.5	115	120	Yes	1.140	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	100.6	115	120	Yes	0.620	5	10	Yes	
16/09/2015	10:59	Monitoring Point A (Shallows Drive, Shell Cove)	109.2	115	120	Yes	0.940	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	99.3	115	120	Yes	0.930	5	10	Yes	
23/09/2015	9:58	Monitoring Point A (Shallows Drive, Shell Cove)	114.0	115	120	Yes	1.130	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	105.3	115	120	Yes	0.430	5	10	Yes	
30/09/2015	11:05	Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	0.754	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	102.3	115	120	Yes	0.540	5	10	Yes	
7/10/2015	10:58	Monitoring Point A (Shallows Drive, Shell Cove)	108.4	115	120	Yes	0.756	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	107.3	115	120	Yes	0.400	5	10	Yes	
15/10/2015	11:00	Monitoring Point A (Shallows Drive, Shell Cove)	107.0	115	120	Yes	1.080	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	102.8	115	120	Yes	0.540	5	10	Yes	
21/10/2015	12:07	Monitoring Point A (Shallows Drive, Shell Cove)	94.0	115	120	Yes	0.802	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	94.6	115	120	Yes	0.410	5	10	Yes	
28/10/2015	12:03	Monitoring Point A (Shallows Drive, Shell Cove)	110.9	115	120	Yes	0.362	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
6/11/2015	11:20	Monitoring Point A (Shallows Drive, Shell Cove)	95.9	115	120	Yes	0.510	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	97.1	115	120	Yes	0.310	5	10	Yes	
11/11/2015	13:48	Monitoring Point A (Shallows Drive, Shell Cove)	102.8	115	120	Yes	0.980	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	110.8	115	120	Yes	0.700	5	10	Yes	
18/11/2015	13:12	Monitoring Point A (Shallows Drive, Shell Cove)	104.2	115	120	Yes	0.496	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	
20/11/2015	11:03	Monitoring Point A (Shallows Drive, Shell Cove)	106.5	115	120	Yes	0.672	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	
25/11/2015	12:05	Monitoring Point A (Shallows Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	
26/11/2015	12:14	Monitoring Point A (Shallows Drive, Shell Cove)	110.2	115	120	Yes	0.268	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	
2/12/2015	13:30	Monitoring Point A (Shallows Drive, Shell Cove)	116.4	115	120	Yes	0.773	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	108.4	115	120	Yes	0.470	5	10	Yes	
7/12/2015	12:06	Monitoring Point A (Shallows Drive, Shell Cove)	102.8	115	120	Yes	0.323	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
9/12/2015	12:00	Monitoring Point A (Shallows Drive, Shell Cove)	108.0	115	120	Yes	0.932	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
14/12/2015	13:25	Monitoring Point A (Shallows Drive, Shell Cove)	108.0	115	120	Yes	0.815	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
18/12/2015	12:15	Monitoring Point A (Shallows Drive, Shell Cove)	114.2	115	120	Yes	0.485	5	10	Yes	
		Monitoring Point B (Killalea Drive, Shell Cove)	106.0	115	120	Yes	0.290	5	10	Yes	

2014

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
15/01/2014		Monitoring Point A (Shallows Drive, Shell Cove)	116.9	115	120	Yes	1.150	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
23/01/2014		Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	0.048	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
29/01/2014		Monitoring Point A (Shallows Drive, Shell Cove)	DNT	115	120	Yes	DNT	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
12/02/2014		Monitoring Point A (Shallows Drive, Shell Cove)	102.8	115	120	Yes	0.079	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	101.1	115	120	Yes	0.980	5	10	Yes	
26/02/2014		Monitoring Point A (Shallows Drive, Shell Cove)	114.6	115	120	Yes	1.140	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	104.4	115	120	Yes	0.550	5	10	Yes	
6/03/2014		Monitoring Point A (Shallows Drive, Shell Cove)	100.0	115	120	Yes	0.083	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
11/03/2014		Monitoring Point A (Shallows Drive, Shell Cove)	108.8	115	120	Yes	2.390	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
1/04/2014		Monitoring Point A (Shallows Drive, Shell Cove)	111.8	115	120	Yes	1.300	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	102.7	115	120	Yes	0.310	5	10	Yes	
4/04/2014		Monitoring Point A (Shallows Drive, Shell Cove)	100.0	115	120	Yes	0.630	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	77.6	115	120	Yes	0.800	5	10	Yes	
30/04/2014		Monitoring Point A (Shallows Drive, Shell Cove)	110.6	115	120	Yes	2.320	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	101.6	115	120	Yes	0.690	5	10	Yes	
7/05/2014		Monitoring Point A (Shallows Drive, Shell Cove)	109.5	115	120	Yes	0.794	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	
16/05/2014		Monitoring Point A (Shallows Drive, Shell Cove)	107.0	115	120	Yes	0.170	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
29/05/2014		Monitoring Point A (Shallows Drive, Shell Cove)	113.5	115	120	Yes	0.630	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	110.2	115	120	Yes	0.720	5	10	Yes	
6/06/2014		Monitoring Point A (Shallows Drive, Shell Cove)	115.0	115	120	Yes	1.550	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	112.6	115	120	Yes	0.380	5	10	Yes	
13/06/2014		Monitoring Point A (Shallows Drive, Shell Cove)	107.9	115	120	Yes	0.670	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	107.8	115	120	Yes	0.380	5	10	Yes	
26/06/2014		Monitoring Point A (Shallows Drive, Shell Cove)	107.5	115	120	Yes	0.630	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	107.5	115	120	Yes	0.380	5	10	Yes	
3/07/2014		Monitoring Point A (Shallows Drive, Shell Cove)	106.0	115	120	Yes	0.960	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
9/07/2014		Monitoring Point A (Shallows Drive, Shell Cove)	101.0	115	120	Yes	2.540	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	96.6	115	120	Yes	1.350	5	10	Yes	
17/07/2014		Monitoring Point A (Shallows Drive, Shell Cove)	<120.0	115	120	Yes	1.050	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Mary Street, Shellharbour)	106.5	115	120	Yes	0.470	5	10	Yes	
31/07/2014		Monitoring Point A (Shallows Drive, Shell Cove)	114.6	115	120	Yes	0.805	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	104.8	115	120	Yes	0.380	5	10	Yes	
6/08/2014		Monitoring Point A (Shallows Drive, Shell Cove)	104.9	115	120	Yes	2.400	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	97.6	115	120	Yes	0.850	5	10	Yes	
21/08/2014		Monitoring Point A (Shallows Drive, Shell Cove)	109.5	115	120	Yes	0.730	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
29/08/2014		Monitoring Point A (Shallows Drive, Shell Cove)	108.8	115	120	Yes	0.067	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
3/09/2014		Monitoring Point A (Shallows Drive, Shell Cove)	113.5	115	120	Yes	2.530	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	102.3	115	120	Yes	2.370	5	10	Yes	
12/09/2014		Monitoring Point A (Shallows Drive, Shell Cove)	108.4	115	120	Yes	0.536	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	111.7	115	120	Yes	0.410	5	10	Yes	
19/09/2014		Monitoring Point A (Shallows Drive, Shell Cove)	115.0	115	120	Yes	1.010	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	114.6	115	120	Yes	0.393	5	10	Yes	
30/09/2014		Monitoring Point A (Shallows Drive, Shell Cove)	111.8	115	120	Yes	0.578	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	105.0	115	120	Yes	0.410	5	10	Yes	
30/09/2014		Monitoring Point A (Shallows Drive, Shell Cove)	111.8	115	120	Yes	0.578	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	105.0	115	120	Yes	0.410	5	10	Yes	

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Date	Time	Blast Monitor location	Airblast overpressure (dB(Lin Peak))	Airblast overpressure lower limit (dB(Lin Peak))	Airblast overpressure upper limit (dB(Lin Peak))	Airblast overpressure compliant (Yes / No)	Ground vibration (mm/sec)	Ground vibration lower limit (mm/sec)	Ground vibration upper limit (mm/sec)	Ground vibration compliant (Yes / No)	Comments
21/10/2014		Monitoring Point A (Shallows Drive, Shell Cove)	111.8	115	120	Yes	0.578	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	106.5	115	120	Yes	0.079	5	10	Yes	
29/10/2014		Monitoring Point A (Shallows Drive, Shell Cove)	112.3	115	120	Yes	0.570	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	106.5	115	120	Yes	0.210	5	10	Yes	
4/11/2014		Monitoring Point A (Shallows Drive, Shell Cove)	DNT	115	120	Yes	0.476	5	10	Yes	Airblast overpressure associated with another source.
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Monitoring result lower than blast monitor trigger.
18/11/2014		Monitoring Point A (Shallows Drive, Shell Cove)	115.0	115	120	Yes	0.960	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	107.0	115	120	Yes	0.303	5	10	Yes	
27/11/2014		Monitoring Point A (Shallows Drive, Shell Cove)	110.9	115	120	Yes	0.984	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	107.0	115	120	Yes	0.437	5	10	Yes	
3/12/2014		Monitoring Point A (Shallows Drive, Shell Cove)	112.8	115	120	Yes	0.718	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	104.2	115	120	Yes	0.740	5	10	Yes	
18/12/2014		Monitoring Point A (Shallows Drive, Shell Cove)	104.9	115	120	Yes	0.557	5	10	Yes	
		Monitoring Point B (Mary Street, Shellharbour)	DNT	115	120	Yes	DNT	5	10	Yes	Need to verify deployment via blast monitor logbook

DNM = Did not Monitor

DNT = Did not Trigger (i.e. monitoring result lower than blast monitor trigger)

"Airblast overpressure associated with another source" means that analysis of the blast event waveform indicates that the Peak Sound Pressure Level (PSPL) is not associated with the blast event. Potential other sources include wind, cars driving past, nearby animals and/or people, etc.

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Environmental Monitoring Report - EPL Requirements

Dust deposition monitoring

The quarry monitors two (2) Dust Deposition Gauges (DDGs): DDG 1 (west of the premises, Monitoring Point 4) and DDG 2 (north-west of the premises, Monitoring Point 5).

Air Monitoring Requirements (condition M2.3)		
Pollutant	Units of measure	Sampling Method
Insoluble solids	grams per square metre per month	AS/NZS 3580.10.1:2016

DDG 1 (Monitoring Point 4)					
Annual Summary - Total Insoluble Matter					
Reporting period (15/06 - 14/06, as per EPL 2193 Annual Return)	No. of samples required	No. of samples collected and analysed	Lowest sample value (g/m ² /month)	Mean of sample (g/m ² /month)	Highest sample value (g/m ² /month)
2020 - 2021	13	13	0.6	1.6	4.0
2019 - 2020	12	12	0.5	2.8	11.0
2018 - 2019	12	12	0.8	2.0	3.6
2017 - 2018	12	12	0.3	2.8	7.8
2016 - 2017	12	12	0.5	1.9	3.9
2015 - 2016	12	12	0.6	2.8	5.6
2014 - 2015	6	6	2.4	4.5	9.9

Annual Summary - Total Insoluble Matter		
Month and Year	Total Insoluble Matter (g/m ² /month)	Comments
2021		
July 2021	2.6	
June 2021	1.8	
May 2021	1.8	
April 2021	4.0	
March 2021	1.5	
February 2021	1.8	
January 2021	1.1	
2020		
December 2020	1.7	
November 2020	2.0	
October 2020	1.5	
September 2020	1.2	
August 2020	1.1	
July 2020	0.7	
June 2020	0.6	Low ash content; sample contaminated by organic material
May 2020	1.9	

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Environmental Monitoring Report - EPL Requirements

Annual Summary - Total Insoluble Matter		
Month and Year	Total Insoluble Matter (g/m²/month)	Comments
<i>April 2020</i>	2.1	
<i>March 2020</i>	1.4	
<i>February 2020</i>	11.0	
<i>January 2020</i>	4.4	
2019		
<i>December 2019</i>	5.8	
<i>November 2019</i>	2.3	
<i>October 2019</i>	1.9	
<i>September 2019</i>	0.8	
<i>August 2019</i>	0.5	
<i>July 2019</i>	1.0	
<i>June 2019</i>	1.4	
<i>May 2019</i>	1.2	
<i>April 2019</i>	2.1	
<i>March 2019</i>	3.5	
<i>February 2019</i>	2.1	
<i>January 2019</i>	3.6	
2018		
<i>December 2018</i>	1.8	
<i>November 2018</i>	3.1	
<i>October 2018</i>	1.5	
<i>September 2018</i>	1.6	
<i>August 2018</i>	0.8	
<i>July 2018</i>	1.0	
<i>June 2018</i>	1.3	
<i>May 2018</i>	5.0	
<i>April 2018</i>	7.8	
<i>March 2018</i>	3.0	
<i>February 2018</i>	1.4	
<i>January 2018</i>	3.0	
2017		
<i>December 2017</i>	2.7	
<i>November 2017</i>	3.3	
<i>October 2017</i>	4.7	Low ash content; sample contaminated by organic material
<i>September 2017</i>	0.3	
<i>August 2017</i>	1.0	
<i>July 2017</i>	0.4	
<i>June 2017</i>	2.1	
<i>May 2017</i>	1.6	
<i>April 2017</i>	2.1	
<i>March 2017</i>	2.8	
<i>February 2017</i>	3.9	
<i>January 2017</i>	1.8	
2016		

Hanson Bass Point Quarry

Environmental Monitoring Report - EPL Requirements

Annual Summary - Total Insoluble Matter		
Month and Year	Total Insoluble Matter (g/m²/month)	Comments
<i>December 2016</i>	2.9	
<i>November 2016</i>	2.3	
<i>October 2016</i>	0.6	
<i>September 2016</i>	1.5	
<i>August 2016</i>	0.9	
<i>July 2016</i>	0.5	
<i>June 2016</i>	1.4	
<i>May 2016</i>	0.6	
<i>April 2016</i>	1.9	
<i>March 2016</i>	2.1	
<i>February 2016</i>	2.3	
<i>January 2016</i>	N/A	Gauge damaged by earthworks
2015		
<i>December 2015</i>	4.8	Result likely affected by marina works
<i>November 2015</i>	4.8	Result likely affected by marina works
<i>October 2015</i>	5.6	Result likely affected by marina works
<i>September 2015</i>	3.9	Result likely affected by marina works
<i>August 2015</i>	4.2	Result likely affected by marina works
<i>July 2015</i>	1.5	Result likely affected by marina works
<i>June 2015</i>	5.0	Result likely affected by marina works
<i>May 2015</i>	2.4	Result likely affected by marina works
<i>April 2015</i>	2.7	Result likely affected by marina works
<i>March 2015</i>	4.5	Result likely affected by marina works
<i>February 2015</i>	2.9	Result likely affected by marina works
<i>January 2015</i>	4.1	Result likely affected by marina works
2014		
<i>December 2014</i>	8.7	Result likely affected by marina works
<i>November 2014</i>	9.9	Result likely affected by marina works
<i>October 2014</i>	6.6	Result likely affected by marina works
<i>September 2014</i>	2.6	Result likely affected by marina works
<i>August 2014</i>	2.8	Result likely affected by marina works
<i>July 2014</i>	2.8	Result likely affected by marina works

Hanson Bass Point Quarry

Environmental Monitoring Report - EPL Requirements

DDG 2 (Monitoring Point 5)					
Annual Summary - Total Insoluble Matter					
Reporting period (15/06 - 14/06, as per EPL 2193 Annual Return)	No. of samples required	No. of samples collected and analysed	Lowest sample value (g/m²/month)	Mean of sample (g/m²/month)	Highest sample value (g/m²/month)
2020 - 2021	13	13	0.5	5.3	11.4
2019 - 2020	12	12	1.8	9.6	27.3
2018 - 2019	12	12	2.1	5.5	8.8
2017 - 2018	12	12	1.1	5.2	9.3
2016 - 2017	12	12	2.6	5.1	11.7
2015 - 2016	12	12	1.0	4.0	9.5
2014 - 2015	6	6	1.2	2.4	4.0

Annual Summary - Total Insoluble Matter		
Month and Year	Total Insoluble Matter (g/m²/month)	Comments
2021		
July 2021	1.2	
June 2021	1.6	
May 2021	2.6	
April 2021	4.4	
March 2021	8.3	
February 2021	5.1	
January 2021	10.9	
2020		
December 2020	6.0	
November 2020	4.8	
October 2020	0.5	
September 2020	0.6	
August 2020	11.4	
July 2020	4.0	
June 2020	9.3	Result likely affected by marina works and external sources
May 2020	1.9	
April 2020	3.8	
March 2020	5.0	Result likely affected by marina works and external sources
February 2020	12.0	Result likely affected by marina works and external sources
January 2020	6.5	Result likely affected by marina works and external sources
2019 [note: DDG 2 relocated to current position in June 2019]		
December 2019	9.2	Result likely affected by marina works and external sources
November 2019	3.6	
October 2019	27.3	Result likely affected by marina works
September 2019	11.9	Result likely affected by marina works
August 2019	23.3	Low ash content; sample contaminated by organic material. Result likely affected by marina works
July 2019	1.8	
June 2019	2.5	

Hanson Bass Point Quarry

Environmental Monitoring Report - EPL Requirements

Annual Summary - Total Insoluble Matter		
Month and Year	Total Insoluble Matter (g/m²/month)	Comments
May 2019	8.1	Low ash content; sample contaminated by organic material. Result likely affected by marina works
April 2019	6.2	Result likely affected by marina works
March 2019	7.9	Result likely affected by marina works
February 2019	5.7	Result likely affected by marina works
January 2019	8.8	Result likely affected by marina works
2018		
December 2018	5.4	Result likely affected by marina works
November 2018	6.9	
October 2018	5.4	
September 2018	3.1	
August 2018	2.1	
July 2018	3.3	
June 2018	6.5	
May 2018	5.8	
April 2018	6.2	
March 2018	9.3	
February 2018	8.2	
January 2018	6.8	
2017		
December 2017	6.0	Result likely affected by marina works
November 2017	6.7	
October 2017	1.6	Low ash content; sample contaminated by organic material
September 2017	1.1	
August 2017	1.9	
July 2017	2.4	
June 2017	5.2	
May 2017	7.9	
April 2017	4.2	
March 2017	8.1	
February 2017	11.7	
January 2017	1.5	
2016 [note: DDG 2 relocated in April 2016]		
December 2016	4.8	Result likely affected by marina works
November 2016	2.6	
October 2016	2.6	
September 2016	4.4	
August 2016	3.6	
July 2016	4.1	
June 2016	3.8	
May 2016	3.1	
April 2016	3.8	
March 2016	9.5	Result likely affected by marina works
February 2016	6.8	Result likely affected by marina works

Hanson Bass Point Quarry

Environmental Monitoring Report - EPL Requirements

Annual Summary - Total Insoluble Matter		
Month and Year	Total Insoluble Matter (g/m²/month)	Comments
<i>January 2016</i>	7.0	Result likely affected by marina works
2015		
<i>December 2015</i>	7.0	Result likely affected by marina works
<i>November 2015</i>	2.6	
<i>October 2015</i>	1.8	
<i>September 2015</i>	1.9	
<i>August 2015</i>	3.8	
<i>July 2015</i>	1.0	
<i>June 2015</i>	2.7	
<i>May 2015</i>	1.3	
<i>April 2015</i>	1.3	
<i>March 2015</i>	4.0	
<i>February 2015</i>	6.1	Result likely affected by marina works
<i>January 2015</i>	4.6	Result likely affected by marina works
2014		
<i>December 2014</i>	10.3	Result likely affected by marina works
<i>November 2014</i>	15.3	Result likely affected by marina works
<i>October 2014</i>	12.7	Result likely affected by marina works
<i>September 2014</i>	4.8	Result likely affected by marina works
<i>August 2014</i>	9.2	Result likely affected by marina works
<i>July 2014</i>	0.5	

Hanson Bass Point Quarry

Environmental Monitoring Report - EPL Requirements

Discharge to waters - Water quality monitoring

The quarry has three licenced discharge points: DP1 (Monitoring Point 1), DP2 (Monitoring Point 2), DP3 (Monitoring Point 3). Water quality monitoring is required daily during discharge from any of these licenced discharge points.

Water and/or Land Monitoring Requirements (condition M2.2)			
Pollutant	Units of measure	Frequency	Sampling Method
Oil and Grease	Visible	Daily during any discharge	Inspection
pH	pH	Daily during any discharge	Grab sample
Total suspended solids	Milligrams per litre	Daily during any discharge	Grab sample

Hanson Bass Point Quarry Environmental Monitoring Report - EPL Requirements

Sample description		pH				TSS				Oil/Grease			Discharge? (Yes/No)	Comments explaining non-compliances
Discharge Point	Sample Collection Date	pH (site)	pH (measured)	pH 100 percentile concentration limit	Compliant? (Yes/No)	TSS visual comparison	Measured TSS (mg/L)	TSS 100 percentile concentration limit (mg/L)	Compliant? (Yes/No)	Oil/grease visible? (visible/not visible)	Oil/grease 100 percentile concentration limit	Compliant? (Yes/No)		
DP1	5/08/2021	8.5	8.5	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	4/08/2021	8.7	8.5	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	3/08/2021	8.7	8.5	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	2/08/2021	8.4	7.8	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	30/07/2021	8.3	7.8	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	29/07/2021	8.3	7.8	6.5 - 8.5	Yes	< 50 mg/L	8	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	28/07/2021	8.4	7.8	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	27/07/2021	8.4	7.8	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	23/07/2021	8.4	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	22/07/2021	8.4	7.6	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	21/07/2021	8.2	7.7	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	16/06/2021	-	7.9	6.5 - 8.5	Yes	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	10/06/2021	8.3	7.9	6.5 - 8.5	Yes	< 50 mg/L	15	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	9/06/2021	8.4	7.9	6.5 - 8.5	Yes	< 50 mg/L	15	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	8/06/2021	8.3	7.9	6.5 - 8.5	Yes	< 50 mg/L	10	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	7/06/2021	8.4	8	6.5 - 8.5	Yes	< 50 mg/L	10	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	4/06/2021	8.4	7.9	6.5 - 8.5	Yes	< 50 mg/L	12	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	3/06/2021	8.4	8	6.5 - 8.5	Yes	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	1/06/2021	8.4	7.9	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	26/05/2021	-	8.3	6.5 - 8.5	Yes	< 50 mg/L	13	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	25/05/2021	8.4	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	21/05/2021	8.3	8.3	6.5 - 8.5	Yes	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	19/05/2021	-	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	18/05/2021	8.4	7.8	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	17/05/2021	8.4	7.9	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	14/05/2021	8.4	8	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	30/04/2021	-	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	29/04/2021	8.4	8.2	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	28/04/2021	8.4	8.2	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	27/04/2021	8.4	8.3	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	23/04/2021	8.6	8.2	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	20/04/2021	8.4	8	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	19/04/2021	8.3	8	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	16/04/2021	8.4	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	15/04/2021	8.3	8.1	6.5 - 8.5	Yes	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	13/04/2021	-	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	8/04/2021	8.3	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	7/04/2021	8.1	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	30/03/2021	-	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	29/03/2021	-	8	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	26/03/2021	7.9	8	6.5 - 8.5	Yes	< 50 mg/L	10	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	25/03/2021	8.3	8.3	6.5 - 8.5	Yes	< 50 mg/L	10	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	18/03/2021	-	7.9	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	5/03/2021	-	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	4/03/2021	8.1	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	3/03/2021	7.9	7.9	6.5 - 8.5	Yes	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	2/03/2021	7.9	7.7	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	1/03/2021	7.9	7.9	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	26/02/2021	8.2	8.1	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	16/09/2020	-	8.5	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	10/09/2020	8.6	8.5	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	9/09/2020	8.6	7.9	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	8/09/2020	-	8.21	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	3/09/2020	-	8.5	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson but not recorded
DP1	2/09/2020	8.3	8.5	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	28/08/2020	8.4	8.4	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	26/08/2020	8.4	8.4	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	25/08/2020	8.3	7.9	6.5 - 8.5	Yes	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	3/07/2020	8.4	7.65	6.5 - 8.5	Yes	< 50 mg/L	27	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	2/07/2020	8.2	7.72	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	27/06/2020	7.9	-	6.5 - 8.5	Yes	< 50 mg/L	-	50	Yes	Not Visible	Not Visible	Yes	Yes	Discharge was within 24 hrs of last sample
DP1	26/06/2020	8.2	8.4	6.5 - 8.5	Yes	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	

Hanson Bass Point Quarry Environmental Monitoring Report - EPL Requirements

Sample description		pH				TSS				Oil/Grease			Discharge? (Yes/No)	Comments explaining non-compliances
Discharge Point	Sample Collection Date	pH (site)	pH (measured)	pH 100 percentile concentration limit	Compliant? (Yes/No)	TSS visual comparison	Measured TSS (mg/L)	TSS 100 percentile concentration limit (mg/L)	Compliant? (Yes/No)	Oil/grease visible? (visible/not visible)	Oil/grease 100 percentile concentration limit	Compliant? (Yes/No)		
DP1	25/06/2020	7.9	8.4	6.5 - 8.5	Yes	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP1	24/06/2020	8.3	8.5	6.5 - 8.5	Yes	< 50 mg/L	7	50	Yes	Not Visible	Not Visible	Yes	Yes	
DP2	10/02/2020	7.0	7.6	6.5 - 8.5	Yes	> 50 mg/L	223	50	No	Not Visible	Not Visible	Yes	Yes	Heavy rainfall event; unintentional discharge
DP3	10/02/2020	6.9	7.3	6.5 - 8.5	Yes	> 50 mg/L	70	50	No	Not Visible	Not Visible	Yes	Yes	Heavy rainfall event; unintentional discharge
DP1	26/08/2019	7.6	-	6.5 - 8.5	N/A	< 50 mg/L	10	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	22/08/2019	7.9	-	6.5 - 8.5	N/A	< 50 mg/L	17	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	21/08/2019	7.5	-	6.5 - 8.5	N/A	< 50 mg/L	32	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	20/08/2019	8.0	-	6.5 - 8.5	N/A	< 50 mg/L	5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	19/08/2019	8.0	-	6.5 - 8.5	N/A	< 50 mg/L	34	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	16/08/2019	7.7	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	15/08/2019	8.3	-	6.5 - 8.5	N/A	< 50 mg/L	16	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	14/08/2019	8.0	-	6.5 - 8.5	N/A	< 50 mg/L	16	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	13/08/2019	7.3	-	6.5 - 8.5	N/A	< 50 mg/L	11	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	9/08/2019	8.0	-	6.5 - 8.5	N/A	< 50 mg/L	14	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	8/08/2019	7.4	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	6/08/2019	7.8	-	6.5 - 8.5	N/A	< 50 mg/L	8	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	5/08/2019	7.9	-	6.5 - 8.5	N/A	< 50 mg/L	10	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	2/08/2019	7.6	-	6.5 - 8.5	N/A	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	1/08/2019	7.8	-	6.5 - 8.5	N/A	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	30/07/2019	8.2	-	6.5 - 8.5	N/A	< 50 mg/L	5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	29/07/2019	7.5	-	6.5 - 8.5	N/A	< 50 mg/L	14	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	26/07/2019	7.8	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	25/07/2019	-	-	6.5 - 8.5	N/A	< 50 mg/L	5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH not tested before expiry
DP1	24/07/2019	-	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH not tested before expiry
DP1	19/07/2019	7.4	-	6.5 - 8.5	N/A	< 50 mg/L	-	50	N/A	Not Visible	Not Visible	Yes	Yes	Samples not taken to lab; TSS expired
DP1	17/07/2019	7.2	-	6.5 - 8.5	N/A	< 50 mg/L	-	50	N/A	Not Visible	Not Visible	Yes	Yes	Samples not taken to lab; TSS expired
DP1	16/07/2019	7.1	-	6.5 - 8.5	N/A	< 50 mg/L	-	50	N/A	Not Visible	Not Visible	Yes	Yes	Samples not taken to lab; TSS expired
DP1	24/05/2019	8.2	-	6.5 - 8.5	N/A	< 50 mg/L	11	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	23/05/2019	8.3	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	22/05/2019	8.2	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	21/05/2019	-	-	6.5 - 8.5	N/A	< 50 mg/L	-	50	N/A	Not Visible	Not Visible	Yes	Yes	Samples not collected
DP1	20/05/2019	8.0	-	6.5 - 8.5	N/A	< 50 mg/L	11	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	17/05/2019	8.3	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	16/05/2019	8.2	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	10/05/2019	8.2	-	6.5 - 8.5	N/A	< 50 mg/L	14	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	9/05/2019	8.2	-	6.5 - 8.5	N/A	< 50 mg/L	10	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	8/05/2019	7.9	-	6.5 - 8.5	N/A	< 50 mg/L	9	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	7/05/2019	8.5	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	6/05/2019	8.4	-	6.5 - 8.5	N/A	< 50 mg/L	6	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	9/04/2019	8.5	-	6.5 - 8.5	N/A	< 50 mg/L	<5	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	8/04/2019	8.2	-	6.5 - 8.5	N/A	< 50 mg/L	10	50	Yes	Not Visible	Not Visible	Yes	Yes	pH tested by Hanson in the field
DP1	5/04/2019	8.4	-	6.5 - 8.5	N/A	< 50 mg/L	-	50	N/A	Not Visible	Not Visible	Yes	Yes	Samples not collected
DP1	4/04/2019	7.8	-	6.5 - 8.5	N/A	< 50 mg/L	-	50	N/A	Not Visible	Not Visible	Yes	Yes	Samples not collected