

Site Information

EPL No.: 12290

EPA Website Link: <u>http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=31280&SYSUID=1&LICID=12290</u>

Licensee: Werris Creek Coal Pty Limited

Premises: Werris Creek Coal, 1435 Werris Creek Road, WERRIS CREEK NSW 2341

EPL Monitoring Points: See figure at end of document

Sampling Period: March 2019

Obtained Date: 29th April 2019

Publication Date: 13 May 2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
28	PM10	μg/m³	Every 6 days	5	27/3/2019	8/4/2019	7.0	16.1	16.5	27.4
28	Solid Particles	g/m²/month	Continuous	1	21/3/2019	29/3/2019	8.5*	8.5*	8.5*	8.5*
29	PM10	µg/m³	Every 6 days	5	27/3/2019	8/4/2019	15.1	25.7	24.3	42.2
29	Solid Particles	g/m²/month	Continuous	1	21/3/2019	29/3/2019	1.6	1.6	1.6	1.6
30	PM10	µg/m³	Continuous	Continuous	31/3/2019	1/4/2019	6.5	17.2	14.0	60.3
50	Solid Particles	g/m²/month	Continuous	1	21/3/2019	29/3/2019	1.4	1.4	1.4	1.4
	Conductivity	μS/cm	Special Frequency 1	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0	-	-	-	-	-	-
10	Nitrogen (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Conductivity	μS/cm	Special Frequency 1	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0	-	-	-	-	-	-
12	Nitrogen (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0	-	-	-	-	-	-
14	Conductivity	μS/cm	Special Frequency 1	0	-	-	-	-	-	-
14	Nitrate	mg/L	Special Frequency 1	0	-	-	-	-	-	-



EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Nitrogen (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Conductivity	μS/cm	Special Frequency 1	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 1	0	-	-	-	-	-	-
32	рН	рН	Special Frequency 1	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Conductivity	μS/cm	Special Frequency 2	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 2	0	-	-	-	-	-	-
23	рН	рН	Special Frequency 2	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Conductivity	μS/cm	Special Frequency 2	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
24	Oil and Grease	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	рН	pН	Special Frequency 2	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0	-	-	-	-	-	-



EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Total Suspended Solids	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Conductivity	μS/cm	Special Frequency 2	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 2	0	-	-	-	-	-	-
25	рН	рН	Special Frequency 2	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Conductivity	μS/cm	Special Frequency 2	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 2	0	-	-	-	-	-	-
26	рН	рН	Special Frequency 2	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Aluminium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Arsenic (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
33*	Barium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
22.	Beryllium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	BOD	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Cadmium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Chromium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-



EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Cobalt (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Copper (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Iron (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Lead (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Magnesium	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Manganese (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Nickel (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Potassium	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Selenium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Sodium	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Total dissolved solids	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Aluminium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Arsenic (dissolved)	mg/L	Special Frequency 3	0	-	-	-	I	-	-
	Barium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Beryllium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	BOD	mg/L	Special Frequency 3	0	-	-	-	-	-	-
34	Cadmium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Chromium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Cobalt (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Copper (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Iron (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Lead (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Magnesium	mg/L	Special Frequency 3	0	-	-	-	-	-	-



EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Manganese (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Nickel (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Potassium	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Selenium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Sodium	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Total dissolved solids	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Aluminium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Arsenic (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Barium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Beryllium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	BOD	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Cadmium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	I	-	-
	Chromium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Cobalt (dissolved)	mg/L	Special Frequency 3	0	-	-	-	I	-	-
35	Copper (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Iron (dissolved)	mg/L	Special Frequency 3	0	-	-	-	I	-	-
	Lead (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Magnesium	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Manganese (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Nickel (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Potassium	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Selenium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Sodium	mg/L	Special Frequency 3	0	-	-	-	-	-	-



EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Total dissolved solids	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-

*Dust gauge sample contaminated with glass. Broken funnel noted on field sheet.

No. of EPL Units of Monitoring samples Date Date Min Max 100%ile Exceedance Pollutant Sampled (Yes/No) ID Frequency for the Obtained Value Value Limit Measure Month **Total Suspended Solids** mg/L Special Frequency 1 50* 0 ----No mg/L **Special Frequency 1** 0 10 Oil and Grease 10 No ---pН **Special Frequency 1** pН 0 6.5-8.5 No _ ---**Total Suspended Solids** mg/L **Special Frequency 1** No 0 50* _ -_ _ **Oil and Grease** mg/L **Special Frequency 1** 0 12 10 No ---_ pН **Special Frequency 1** 0 6.5-8.5 pН No ---_ 50* **Total Suspended Solids** mg/L **Special Frequency 1** 0 No --_ _ 14 **Oil and Grease** mg/L **Special Frequency 1** 0 No 10 --_ pН **Special Frequency 1** 0 6.5-8.5 pН No _ _ _ -**Special Frequency 1 Total Suspended Solids** mg/L 0 50* No ----32 **Oil and Grease** mg/L **Special Frequency 1** 0 10 No ---pН pН **Special Frequency 1** 0 6.5-8.5 -No -2 1/3/2019 1/3/2019 **Electrical Conductivity Special Frequency 4** 1250 mg/L 1260 2000 No 18/3/2019 18/3/2019 33* **Oil and Grease** mg/L **Special Frequency 3** 0 _ -_ 10 No _ 2 1/3/2019 1/3/2019 pН pН **Special Frequency 4** 8.2 8.4 9 No 18/3/2019 18/3/2019 **Electrical Conductivity** mg/L **Special Frequency 4** 34 0 2000 No ----

Table 2 - Pollutant Limits Apply



EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)
	Oil and Grease	mg/L	Special Frequency 3	0	-	-	-	-	10	No
	рН	рН	Special Frequency 4	0	-	-	-	-	9	No
	Electrical Conductivity	mg/L	Special Frequency 4	0	-	-	-	-	2000	No
35	Oil and Grease	mg/L	Special Frequency 3	0	-	-	-	-	10	No
	рН	рН	Special Frequency 4	0	-	-	-	-	9	No

* EPL ID Point 33 is the point of discharge for discharge sampling

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Conductivity	μS/cm	Every 3 Months	0	-	-	-	-	-	-
	Nitrate	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Oil and Grease	mg/L	Every 3 Months	0	-	-	-	-	-	-
16	рН	рН	Every 3 Months	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Conductivity	μS/cm	Every 3 Months	0	-	-	-	-	-	-
	Nitrate	mg/L	Every 3 Months	0	-	-	-	-	-	-
27	Nitrogen (Total)	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Oil and Grease	mg/L	Every 3 Months	0	-	-	-	-	-	-
	рН	рН	Every 3 Months	0	-	-	-	-	-	-

Table 3 – Monitoring (Quarterly & 6 monthly – no limits apply)



EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	Phosphorus (Total)	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Conductivity	μS/cm	Every 6 Months	0	7/3/2019	21/3/2019	Dry	Dry	Dry	Dry
	Nitrate	mg/L	Every 6 Months	0	7/3/2019	21/3/2019	Dry	Dry	Dry	Dry
	Nitrogen (Total)	mg/L	Every 6 Months	0	7/3/2019	21/3/2019	Dry	Dry	Dry	Dry
17	рН	рН	Every 6 Months	0	7/3/2019	21/3/2019	Dry	Dry	Dry	Dry
	Phosphorus (Total)	mg/L	Every 6 Months	0	7/3/2019	21/3/2019	Dry	Dry	Dry	Dry
	Reactive Phosphorus	mg/L	Every 6 Months	0	7/3/2019	21/3/2019	Dry	Dry	Dry	Dry
	Standing Water Level	Metres	Every 6 Months	0	7/3/2019	21/3/2019	Dry	Dry	Dry	Dry
	Conductivity	μS/cm	Every 6 Months	1	7/3/2019	21/3/2019	308	308	308	308
	Nitrate	mg/L	Every 6 Months	1	7/3/2019	21/3/2019	<0.01	<0.01	<0.01	<0.01
	Nitrogen (Total)	mg/L	Every 6 Months	1	7/3/2019	21/3/2019	<0.1	<0.1	<0.1	<0.1
18	рН	рН	Every 6 Months	1	7/3/2019	21/3/2019	7.7	7.7	7.7	7.7
	Phosphorus (Total)	mg/L	Every 6 Months	1	7/3/2019	21/3/2019	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 6 Months	1	7/3/2019	21/3/2019	< 0.01	<0.01	<0.01	<0.01
	Standing Water Level	Metres	Every 6 Months	1	7/3/2019	21/3/2019	53.28	53.28	53.28	53.28
	Conductivity	μS/cm	Every 6 Months	1	6/3/2019	21/3/2019	2510	2510	2510	2510
	Nitrate	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	14	14	14	14
	Nitrogen (Total)	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	15.4	15.4	15.4	15.4
19	рН	рН	Every 6 Months	1	6/3/2019	21/3/2019	7.81	7.81	7.81	7.81
	Phosphorus (Total)	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	0.24	0.24	0.24	0.24
	Reactive Phosphorus	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	0.24	0.24	0.24	0.24
	Standing Water Level	Metres	Every 6 Months	1	6/3/2019	21/3/2019	20.42	20.42	20.42	20.42
	Conductivity	μS/cm	Every 6 Months	1	6/3/2019	21/3/2019	1070	1070	1070	1070
20	Nitrate	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	3.32	3.32	3.32	3.32
	Nitrogen (Total)	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	3.6	3.6	3.6	3.6



EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Period	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
	рН	рН	Every 6 Months	1	6/3/2019	21/3/2019	7.97	7.97	7.97	7.97
	Phosphorus (Total)	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	0.09	0.09	0.09	0.09
	Reactive Phosphorus	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	0.04	0.04	0.04	0.04
	Standing Water Level	Metres	Every 6 Months	1	6/3/2019	21/3/2019	18.54	18.54	18.54	18.54
	Conductivity	μS/cm	Every 6 Months	1	6/3/2019	21/3/2019	2070	2070	2070	2070
	Nitrate	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	0.76	0.76	0.76	0.76
	Nitrogen (Total)	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	0.8	0.8	0.8	0.8
21	рН	рН	Every 6 Months	1	6/3/2019	21/3/2019	7.55	7.55	7.55	7.55
	Phosphorus (Total)	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	<0.01	< 0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 6 Months	1	6/3/2019	21/3/2019	<0.01	< 0.01	<0.01	<0.01
	Standing Water Level	Metres	Every 6 Months	1	6/3/2019	21/3/2019	13.54	13.54	13.54	13.54
	Conductivity	μS/cm	Every 6 Months	0	6/3/2019	21/3/2019	TLTS	TLTS	TLTS	TLTS
	Nitrate	mg/L	Every 6 Months	0	6/3/2019	21/3/2019	TLTS	TLTS	TLTS	TLTS
	Nitrogen (Total)	mg/L	Every 6 Months	0	6/3/2019	21/3/2019	TLTS	TLTS	TLTS	TLTS
22	рН	рН	Every 6 Months	0	6/3/2019	21/3/2019	TLTS	TLTS	TLTS	TLTS
	Phosphorus (Total)	mg/L	Every 6 Months	0	6/3/2019	21/3/2019	TLTS	TLTS	TLTS	TLTS
	Reactive Phosphorus	mg/L	Every 6 Months	0	6/3/2019	21/3/2019	TLTS	TLTS	TLTS	TLTS
	Standing Water Level	Metres	Every 6 Months	0	6/3/2019	21/3/2019	TLTS	TLTS	TLTS	TLTS

TLTS - Too low to sample



Location	Date	Measurement Period	Start Time		ed levels – 3(A)	Limit(s)	Weather (inversion	Observations	(Potential) Non-	Date Obtained
				LA1, 1 Minute	LAeq, 15 Minute		oC/100m, wind m/s & °)		compliance /breach	
R24	27 and 28/3/2019	60 minutes	12:45 pm	N/A	52	Day 37	Na, 4.0m/s, 92 degrees	Cars (52), traffic (38), WCC (<20)	No	29/4/2019
R12	27 and 28/3/2019	60 minutes	3:50 pm	N/A	37	Day 38	NA, 2.9m/s, 85 degrees	Traffic (35), wind (31), WCC (<20)	No	29/4/2019
R96	27 and 28/3/2019	60 minutes	12:42 pm	N/A	33	Day 38	NA, 4.0m/s, 92 degrees	Insects (30), train (30), WCC (<20)	No	29/4/2019
R98	27 and 28/3/2019	60 minutes	1:52 pm	N/A	41	Day 36	NA, 2.9m/s, 111 degrees	Wind (41), WCC (<20)	No	29/4/2019
R57	27 and 28/3/2019	60 minutes	9:00 am	N/A	51	Day 35	NA, 1.8m/s, 182 degrees	Traffic (51), birds (34), WCC (<20)	No	29/4/2019
R24	27/3/2019	60 minutes	7:43 pm	<20	44	Night 37	-1.5 °/100m, 3.1m/s, 102 degrees	Traffic (44), insects (26), WCC (<20)	No	29/4/2019
R12	27/3/2019	60 minutes	9:43 pm	<20	33	Night 38	+0.2 °/100m, Calm	Traffic (30), insects (29), WCC (<20)	No	29/4/2019
R96	27/3/2019	60 minutes	7:04 pm	<20	35	Night 38	-1.4 º/100m , 4.4m/s, 98 degrees	Insects (32), birds (30), WCC (<20)	No	29/4/2019
R98	27/3/2019	60 minutes	8:08 pm	<20	35	Night 38	-1.4 º/100m, 3.0m/s, 76 degrees	Generator (33), wind (29), WCC (24)	No	29/4/2019
R57	27/3/2019	60 minutes	10:00 pm	<20	34	Night 35	+1.0º/100m, 2.9m/s, 151 degrees	Traffic (29), insects (30), wind (28), WCC (<20)	No	29/4/2019

Table 4 – Monitoring (Noise – Limits Apply)

NM = Not Measurable. This denotes noise from the mine was audible at low levels however cannot be quantified.

IA = Inaudible.



Table 5 – Monitoring (Blasts – Limits Apply)

Location	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max Value	100%ile Limit	(Potential) Non- compliance /breach	Date Obtained
D11	Blast Noise	dB (Lin Peak)	Every Blast	8	99.3	101.8	120.0	No	1/4/2019
R11	Blast Vibration	mm/s	Every Blast	8	0.11	0.25	10.0	No	1/4/2019
R98	Blast Noise	dB (Lin Peak)	Every Blast	8	101.5	112.0	120.0	No	1/4/2019
K90	Blast Vibration	mm/s	Every Blast	8	0.69	1.02	10.0	No	1/4/2019
R62	Blast Noise	dB (Lin Peak)	Every Blast	8	103.2	107.6	120.0	No	1/4/2019
ROZ	Blast Vibration	mm/s	Every Blast	8	0.40	0.59	10.0	No	1/4/2019
R92	Blast Noise	dB (Lin Peak)	Every Blast	8	100.4	110.6	120.0	No	1/4/2019
R92	Blast Vibration	mm/s	Every Blast	8	0.23	0.37	10.0	No	1/4/2019



