

Site Information EPL No.: 12290

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

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: September 2019

Obtained Date: Publication Date:

**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	29/9/2019	11/10/2019	5.0	10.9	11.2	14.3
28	Solid Particles	g/m²/month	Continuous	1	20/9/2019	27/9/2019	0.5	0.5	0.5	0.5
29	PM10	μg/m³	Every 6 days	5	29/9/2019	11/10/2019	11.6	19.6	21.2	22.4
29	<b>Solid Particles</b>	g/m²/month	Continuous	1	20/9/2019	27/9/2019	0.7	0.7	0.7	0.7
30	PM10	μg/m³	Continuous	Continuous	30/9/2019	1/10/2019	4.9	20.7	16.2	118.3
30	Solid Particles	g/m²/month	Continuous	1	20/9/2019	27/9/2019	0.5	0.5	0.5	0.5
	Conductivity	μS/cm	Special Frequency 1	0	-	-	-	-	-	1
	Nitrate	mg/L	Special Frequency 1	0	-	-	-	-	-	ı
10	Nitrogen (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	1
	Phosphorus (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	1
	<b>Reactive Phosphorus</b>	mg/L	Special Frequency 1	0	-	-	-	-	-	1
	Conductivity	μS/cm	Special Frequency 1	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0	-	-	-	-	-	ı
12	Nitrogen (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	1
	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	-	-	-	1	-	-
	Conductivity	μS/cm	Special Frequency 1	0	-	-	-	1	-	-
	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	-	-	-	ı	-	-
23	рН	рН	Special Frequency 2	0	-	-	-	1	-	-
	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	рН	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	-	-	-	1	-	-
25	рН	рН	Special Frequency 2	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	0	-	ı	-	1	-	-
	Total Suspended Solids	mg/L	Special Frequency 2	0	-	-	-	ı	-	-
	Conductivity	μS/cm	Special Frequency 2	0	-	ı	-	1	-	-
	Nitrate	mg/L	Special Frequency 2	0	-	ı	-	1	-	-
	Nitrogen (Total)	mg/L	Special Frequency 2	0	-	ı	-	1	-	-
	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	-	-	-	-	-	
33"	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	-	-	-	-	-	1
	Nickel (dissolved)	mg/L	Special Frequency 3	0	-	ı	-	-	-	1
	Potassium	mg/L	Special Frequency 3	0	-	ı	-	-	-	1
	Selenium (dissolved)	mg/L	Special Frequency 3	0	-	ı	-	-	-	ı
	Sodium	mg/L	Special Frequency 3	0	-	ı	-	-	-	ı
	Total dissolved solids	mg/L	Special Frequency 3	0	-	ı	-	-	-	1
	Vanadium (dissolved)	mg/L	Special Frequency 3	0	-	ı	-	-	-	1
	Zinc (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Aluminium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	ı
	Arsenic (dissolved)	mg/L	Special Frequency 3	0	-	ı	-	-	-	-
	Barium (dissolved)	mg/L	Special Frequency 3	0	-	ı	-	-	-	1
	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	-	ı	-	-	-	-
	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	-	-	-	-	-	1
	Arsenic (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Barium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Beryllium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	1
	BOD	mg/L	Special Frequency 3	0	-	-	-	-	-	1
	Cadmium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	1
	Chromium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	ı
	Cobalt (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	ı
35	Copper (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	ı
	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	-			-	-	-

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	-	-	-	-	-	-

### **Table 2 - Pollutant Limits Apply**

				Ollutalit Elli						
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)
	Total Suspended Solids	mg/L	Special Frequency 1	0	-	-	-	-	50*	No
10	Oil and Grease	mg/L	Special Frequency 1	0	-	1	-	1	10	No
	рН	рН	Special Frequency 1	0	-	-	-	-	6.5-8.5	No
	Total Suspended Solids	mg/L	Special Frequency 1	0	-	-	-	-	50*	No
12	Oil and Grease	mg/L	Special Frequency 1	0	-	-	-	1	10	No
	рН	рН	Special Frequency 1	0	-	-	-	1	6.5-8.5	No
	<b>Total Suspended Solids</b>	mg/L	Special Frequency 1	0	-	-	-	1	50*	No
14	Oil and Grease	mg/L	Special Frequency 1	0	-	-	-	-	10	No
	рН	рН	Special Frequency 1	0	-	-	-	1	6.5-8.5	No
	<b>Total Suspended Solids</b>	mg/L	Special Frequency 1	0	-	-	-	1	50*	No
32	Oil and Grease	mg/L	Special Frequency 1	0	-	-	-	1	10	No
	рН	рН	Special Frequency 1	0	-	-	-	-	6.5-8.5	No
	Electrical Conductivity	mg/L	Special Frequency 4	2	12/9/2019 19/9/2019	12/9/2019 19/9/2019	1170	1170	2000	No
33*	Oil and Grease	mg/L	Special Frequency 3	0	-	-	-	-	10	No
	рН	рН	Special Frequency 4	2	12/9/2019 19/9/2019	12/9/2019 19/9/2019	8.2	8.3	9	No
34	<b>Electrical Conductivity</b>	mg/L	Special Frequency 4	0	-	-	-	-	2000	No
34	Oil and Grease	mg/L	Special Frequency 3	0	-	-	-	-	10	No

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)
	рН	рН	Special Frequency 4	0	ı	-	-	-	9	No
	<b>Electrical Conductivity</b>	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

<sup>\*</sup> EPL ID Point 33 is the point of discharge for discharge sampling

# 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
	Conductivity	μS/cm	Every 3 Months	0	-	-	-	-	-	-
	Nitrate	mg/L	<b>Every 3 Months</b>	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	<b>Every 3 Months</b>	0	-	-	-	-	-	-
	Oil and Grease	mg/L	<b>Every 3 Months</b>	0	-	-	-	-	-	-
16	рН	рН	<b>Every 3 Months</b>	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	<b>Every 3 Months</b>	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	<b>Every 3 Months</b>	0	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Every 3 Months	0	-	-	-	-	-	ı
	Conductivity	μS/cm	<b>Every 3 Months</b>	0	-	-	-	-	-	1
	Nitrate	mg/L	<b>Every 3 Months</b>	0	-	-	-	-	-	1
27	Nitrogen (Total)	mg/L	<b>Every 3 Months</b>	0	-	-	-	-	-	-
21	Oil and Grease	mg/L	<b>Every 3 Months</b>	0	-	-	-	-	-	-
	рН	рН	<b>Every 3 Months</b>	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	<b>Every 3 Months</b>	0	-	-	-	-	-	-

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
	Reactive Phosphorus	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Conductivity	μS/cm	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	Dry	Dry	Dry	Dry
	Nitrate	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	Dry	Dry	Dry	Dry
	Nitrogen (Total)	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	Dry	Dry	Dry	Dry
17	рН	рН	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	Dry	Dry	Dry	Dry
	Phosphorus (Total)	mg/L	Every 6 Months	1	4/9/2019	9/9/2019	Dry	Dry	Dry	Dry
	Reactive Phosphorus	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	Dry	Dry	Dry	Dry
	Standing Water Level	Metres	Every 6 Months	1	4/9/2019	9/9/2019	Dry	Dry	Dry	Dry
	Conductivity	μS/cm	Every 6 Months	1	4/9/2019	9/9/2019	347	347	347	347
	Nitrate	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	0.02	0.02	0.02	0.02
	Nitrogen (Total)	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	<0.1	<0.1	<0.1	<0.1
18	рН	рН	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	7.83	7.83	7.83	7.83
	Phosphorus (Total)	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	0.02	0.02	0.02	0.02
	Reactive Phosphorus	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	<0.01	<0.01	<0.01	<0.01
	Standing Water Level	Metres	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	58.32	58.32	58.32	58.32
	Conductivity	μS/cm	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	2630	2630	2630	2630
	Nitrate	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	14.2	14.2	14.2	14.2
	Nitrogen (Total)	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	16.1	16.1	16.1	16.1
19	рН	рН	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	8.03	8.03	8.03	8.03
	Phosphorus (Total)	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	0.22	0.22	0.22	0.22
	Reactive Phosphorus	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	0.23	0.23	0.23	0.23
	Standing Water Level	Metres	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	20.78	20.78	20.78	20.78
	Conductivity	μS/cm	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	1090	1090	1090	1090
20	Nitrate	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	3.8	3.8	3.8	3.8
20	Nitrogen (Total)	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	4.1	4.1	4.1	4.1
	рН	рН	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	8.11	8.11	8.11	8.11

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 6 Months	1	4/9/2019	9/9/2019	0.25	0.25	0.25	0.25
	Reactive Phosphorus	mg/L	<b>Every 6 Months</b>	1	22/10/2019	29/10/2019	<0.01	<0.01	<0.01	<0.01
	Standing Water Level	Metres	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	19.35	19.35	19.35	19.35
	Conductivity	μS/cm	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	2120	2120	2120	2120
	Nitrate	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	0.82	0.82	0.82	0.82
	Nitrogen (Total)	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	0.9	0.9	0.9	0.9
21	рН	рН	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	7.76	7.76	7.76	7.76
	Phosphorus (Total)	mg/L	<b>Every 6 Months</b>	1	22/10/2019	29/10/2019	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	<b>Every 6 Months</b>	1	22/10/2019	29/10/2019	0.01	0.01	0.01	0.01
	Standing Water Level	Metres	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	13.76	13.76	13.76	13.76
	Conductivity	μS/cm	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	TLTS	TLTS	TLTS	TLTS
	Nitrate	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	TLTS	TLTS	TLTS	TLTS
	Nitrogen (Total)	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	TLTS	TLTS	TLTS	TLTS
22	рН	рН	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	TLTS	TLTS	TLTS	TLTS
	Phosphorus (Total)	mg/L	Every 6 Months	1	4/9/2019	9/9/2019	TLTS	TLTS	TLTS	TLTS
	Reactive Phosphorus	mg/L	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	TLTS	TLTS	TLTS	TLTS
	Standing Water Level	Metres	<b>Every 6 Months</b>	1	4/9/2019	9/9/2019	TLTS	TLTS	TLTS	TLTS

TLTS - Too low to sample



# Table 4 – Monitoring (Noise – Limits Apply)

Location	Date	Measurement	Start Time	Measure	ed levels –	Limit(s)	Weather	Observations	(Potential)	Date
	- 333	Period			B(A)		(inversion		Non-	Obtained
				LA1, 1 Minute	LAeq, 15 Minute		oC/100m, wind m/s & °)		compliance /breach	
R24	26 and 27/9/2019	60 minutes	10:00 am	N/A	50	Day 37	NA, 3.8m/s, 325 degrees	Car (50), insects (38), WCC (<20)	No	6/11/2019
R12	26 and 27/9/2019	60 minutes	11:20 am	N/A	45	Day 38	NA, 4.7m/s, 277 degrees	Traffic (44), birds (36), wind (30), <b>WCC</b> (<20)	No	6/11/2019
R96	26 and 27/9/2019	60 minutes	11:42 am	N/A	48	Day 38	NA, 5.9m/s, 291 degrees	Roadwork (47), wind (40), WCC (<20)	No	6/11/2019
R98	26 and 27/9/2019	60 minutes	12:30 pm	N/A	47	Day 36	NA, 6.8m/s, 283 degrees	Wind (43), wind (40), WCC (<20)	No	6/11/2019
R57	26 and 27/9/2019	60 minutes	2:57 pm	N/A	51	Day 35	NA, 5.8m/s, 267 degrees	Traffic (49), birds (42), wind (40), <b>WCC</b> ( <b>&lt;20</b> )	No	6/11/2019
R24	26 and 27/9/2019	60 minutes	7:00 pm	24	50	Night 37	0.9°/100m, 2.7m/s, 272 degrees	Traffic (50), horse (25), <b>WCC (22)</b>	No	6/11/2019
R12	26 and 27/9/2019	60 minutes	7:50 pm	<20	41	Night 38	4.6°/100m, 1.6 m/s, 269 degrees	Traffic (39), insects (36), WCC (<20)	No	6/11/2019
R96	26 and 27/9/2019	60 minutes	8:43 pm	<20	27	Night 38	7.6°/100m, 0.7m/s, 338 degrees	Dogs (26), plane (20), <b>WCC (&lt;20)</b>	No	6/11/2019
R98	26 and 27/9/2019	60 minutes	9:37 pm	28	28	Night 38	5.5°/100m, Calm	WCC (25), insects (24)	No	6/11/2019
R57	26 and 27/9/2019	60 minutes	10:59 pm	<20	40	Night 35	NA, 0.9m/s, 315 degrees	Train (38), traffic (34), WCC (<20)	No	6/11/2019

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	Frequency	No. of Blasts	Average	Max	100%ile	(Potential) Non-	Date
		Measure		for the Month	Value	Value	Limit	compliance /breach	Obtained
R11	Blast Noise	dB (Lin Peak)	<b>Every Blast</b>	8	100.7	111.2	120.0	No	1/10/2019
	Blast Vibration	mm/s	<b>Every Blast</b>	8	0.07	0.14	10.0	No	1/10/2019
R98	Blast Noise	dB (Lin Peak)	<b>Every Blast</b>	8	103.5	114.4	120.0	No	1/10/2019
	Blast Vibration	mm/s	<b>Every Blast</b>	8	0.17	0.53	10.0	No	1/10/2019
R62	Blast Noise	dB (Lin Peak)	<b>Every Blast</b>	8	102.6	113.7	120.0	No	1/10/2019
	Blast Vibration	mm/s	<b>Every Blast</b>	8	0.29	0.64	10.0	No	1/10/2019
R92	Blast Noise	dB (Lin Peak)	<b>Every Blast</b>	8	98.8	110.7	120.0	No	1/10/2019
	Blast Vibration	mm/s	<b>Every Blast</b>	8	0.17	0.30	10.0	No	1/10/2019



