

**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

**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:** July 2018

**Obtained Date:** 23 August 2018

**Publication Date:** 10 September 2018

**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/m <sup>3</sup>	Every 6 days	5	24/7/2018	8/8/2018	4.0	16.2	12.2	30.0
	Solid Particles	g/m <sup>2</sup> /month	Continuous	1	22/6/2018	31/7/2018	4.3*	4.3*	4.3*	4.3*
29	PM10	µg/m <sup>3</sup>	Every 6 days	5	24/7/2018	8/8/2018	8.8	25.9	22.4	47.5
	Solid Particles	g/m <sup>2</sup> /month	Continuous	1	22/6/2018	31/7/2018	0.8	0.8	0.8	0.8
30	PM10	µg/m <sup>3</sup>	Continuous	Continuous	1/8/2018	1/8/2018	8.3	18.6	18.2	30.1
	Solid Particles	g/m <sup>2</sup> /month	Continuous	1	22/6/2018	31/7/2018	1.7	1.7	1.7	1.7
10	Conductivity	µS/cm	Special Frequency 1	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0	-	-	-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1	0	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	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	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0	-	-	-	-	-	-



**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

<b>EPL ID</b>	<b>Pollutant</b>	<b>Units of Measure</b>	<b>Monitoring Frequency</b>	<b>No. of Measurements for the Month</b>	<b>Date Sampled</b>	<b>Date Obtained</b>	<b>Min Value</b>	<b>Mean Value</b>	<b>Median Value</b>	<b>Max Value</b>
	Nitrogen (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0	-	-	-	-	-	-
32	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	-	-	-	-	-	-
	pH	pH	Special Frequency 1	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0	-	-	-	-	-	-
23	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	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
24	Reactive Phosphorus	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	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0	-	-	-	-	-	-
Reactive Phosphorus	mg/L	Special Frequency 2	0	-	-	-	-	-	-	

**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

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	-	-	-	-	-	-
25	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	-	-	-	-	-	-
	pH	pH	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	-	-	-	-	-	-
26	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	-	-	-	-	-	-
	pH	pH	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	-	-	-	-	-	-
33*	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	-	-	-	-	-	-
	Chromium (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
	Cobalt (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-



**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

<b>EPL ID</b>	<b>Pollutant</b>	<b>Units of Measure</b>	<b>Monitoring Frequency</b>	<b>No. of Measurements for the Month</b>	<b>Date Sampled</b>	<b>Date Obtained</b>	<b>Min Value</b>	<b>Mean Value</b>	<b>Median Value</b>	<b>Max Value</b>
	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	-	-	-	-	-	-	
34	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	-	-	-	-	-	-
	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	-	-	-	-	-	-
	Manganese (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-
Nickel (dissolved)	mg/L	Special Frequency 3	0	-	-	-	-	-	-	



**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

<b>EPL ID</b>	<b>Pollutant</b>	<b>Units of Measure</b>	<b>Monitoring Frequency</b>	<b>No. of Measurements for the Month</b>	<b>Date Sampled</b>	<b>Date Obtained</b>	<b>Min Value</b>	<b>Mean Value</b>	<b>Median Value</b>	<b>Max Value</b>
	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	-	-	-	-	-	-
35	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	-	-	-	-	-	-
	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	-	-	-	-	-	-
	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	-	-	-	-	-	-	

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



**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

**Table 2 - Pollutant Limits Apply**

<b>EPL ID</b>	<b>Pollutant</b>	<b>Units of Measure</b>	<b>Monitoring Frequency</b>	<b>No. of samples for the Month</b>	<b>Date Sampled</b>	<b>Date Obtained</b>	<b>Min Value</b>	<b>Max Value</b>	<b>100%ile Limit</b>	<b>Exceedance (Yes/No)</b>
<b>10</b>	<b>Total Suspended Solids</b>	<b>mg/L</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>50*</b>	No
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>10</b>	No
	<b>pH</b>	<b>pH</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>6.5-8.5</b>	No
<b>12</b>	<b>Total Suspended Solids</b>	<b>mg/L</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>50*</b>	No
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>10</b>	No
	<b>pH</b>	<b>pH</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>6.5-8.5</b>	No
<b>14</b>	<b>Total Suspended Solids</b>	<b>mg/L</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>50*</b>	No
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>10</b>	No
	<b>pH</b>	<b>pH</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>6.5-8.5</b>	No
<b>32</b>	<b>Total Suspended Solids</b>	<b>mg/L</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>50*</b>	No
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>10</b>	No
	<b>pH</b>	<b>pH</b>	<b>Special Frequency 1</b>	0	-	-	-	-	<b>6.5-8.5</b>	No
<b>33</b>	<b>Electrical Conductivity</b>	<b>mg/L</b>	<b>Special Frequency 4</b>	1	9/7/2018	4/9/2018	1380	1380	<b>2000</b>	No
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 3</b>	0	-	-	-	-	<b>10</b>	No
	<b>pH</b>	<b>pH</b>	<b>Special Frequency 4</b>	1	9/7/2018	4/9/2018	8.3	8.3	<b>9</b>	No
<b>34</b>	<b>Electrical Conductivity</b>	<b>mg/L</b>	<b>Special Frequency 4</b>	0	-	-	-	-	<b>2000</b>	No
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 3</b>	0	-	-	-	-	<b>10</b>	No
	<b>pH</b>	<b>pH</b>	<b>Special Frequency 4</b>	0	-	-	-	-	<b>9</b>	No
<b>35</b>	<b>Electrical Conductivity</b>	<b>mg/L</b>	<b>Special Frequency 4</b>	0	-	-	-	-	<b>2000</b>	No
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 3</b>	0	-	-	-	-	<b>10</b>	No
	<b>pH</b>	<b>pH</b>	<b>Special Frequency 4</b>	0	-	-	-	-	<b>9</b>	No

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

**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**
**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
16	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	-	-	-	-	-	-
	pH	pH	Every 3 Months	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 3 Months	0	-	-	-	-	-	-
27	Total Suspended Solids	mg/L	Every 3 Months	0	-	-	-	-	-	-
	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	-	-	-	-	-	-
	pH	pH	Every 3 Months	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 3 Months	0	-	-	-	-	-	-
17	Reactive Phosphorus	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Every 3 Months	0	-	-	-	-	-	-
	Conductivity	µS/cm	Every 6 Months	0	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
	pH	pH	Every 6 Months	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
18	Reactive Phosphorus	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0	-	-	-	-	-	-
18	Conductivity	µS/cm	Every 6 Months	0	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0	-	-	-	-	-	-

**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

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
	Nitrogen (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
	pH	pH	Every 6 Months	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0	-	-	-	-	-	-
19	Conductivity	µS/cm	Every 6 Months	0	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
	pH	pH	Every 6 Months	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0	-	-	-	-	-	-
20	Conductivity	µS/cm	Every 6 Months	0	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
	pH	pH	Every 6 Months	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0	-	-	-	-	-	-
21	Conductivity	µS/cm	Every 6 Months	0	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
	pH	pH	Every 6 Months	0	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Every 6 Months	0	-	-	-	-	-	-
	Standing Water Level	Metres	Every 6 Months	0	-	-	-	-	-	-
22	Conductivity	µS/cm	Every 6 Months	0	-	-	-	-	-	-
	Nitrate	mg/L	Every 6 Months	0	-	-	-	-	-	-





**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

<b>EPL ID</b>	<b>Pollutant</b>	<b>Units of Measure</b>	<b>Monitoring Frequency</b>	<b>No. of Measurements for the Period</b>	<b>Date Sampled</b>	<b>Date Obtained</b>	<b>Min Value</b>	<b>Mean Value</b>	<b>Median Value</b>	<b>Max Value</b>
	<b>Nitrogen (Total)</b>	<b>mg/L</b>	<b>Every 6 Months</b>	0	-	-	-	-	-	-
	<b>pH</b>	<b>pH</b>	<b>Every 6 Months</b>	0	-	-	-	-	-	-
	<b>Phosphorus (Total)</b>	<b>mg/L</b>	<b>Every 6 Months</b>	0	-	-	-	-	-	-
	<b>Reactive Phosphorus</b>	<b>mg/L</b>	<b>Every 6 Months</b>	0	-	-	-	-	-	-
	<b>Standing Water Level</b>	<b>Metres</b>	<b>Every 6 Months</b>	0	-	-	-	-	-	-

**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

**Table 4 – Monitoring (Noise – Limits Apply)**

Location	Date	Measurement Period	Start Time	Measured levels – dB(A)		Limit(s)	Weather (inversion oC/100m, wind m/s & °)	Observations	(Potential) Non-compliance /breach	Date Obtained
				LA1, 1 Minute	L <sub>Aeq</sub> , 15 Minute					
R24	26/7/2018	60 minutes	3:12 pm	N/A	40	Day 37	NA, 3.5m/s, 266 degrees.	Birds (37), traffic (34), wind (33), <b>WCC inaudible (&lt;20)</b>	No	22/8/2018
R12	26/7/2018	60 minutes	12:48 pm	N/A	43	Day 38	NA, 2.3m/s, 270 degrees	Traffic (41), birds (35), plane (30), <b>WCC inaudible (&lt;20)</b>	No	22/8/2018
R96	26/7/2018	60 minutes	12:54 pm	N/A	36	Day 38	NA, 2.3m/s, 270 degrees	Birds (35), dogs (28), <b>WCC inaudible (&lt;20)</b>	No	22/8/2018
R98	26/7/2018	60 minutes	2:03 pm	N/A	39	Day 36	NA, 4.5m/s, 287 degrees	Wind (35), birds (34), <b>WCC (30)</b>	No	22/8/2018
R57	26/7/2018	60 minutes	3:56 pm	N/A	52	Day 35	NA, 2.8m/s, 287 degrees	Rail yard (50), birds (45), <b>WCC inaudible (&lt;20)</b>	No	22/8/2018
R24	26/7/2018	60 minutes	8:26 pm	28	45	Night 37	9.0°/100m, calm.	Traffic (45), <b>WCC (26)</b>	No	22/8/2018
R12	26/7/2018	60 minutes	9:35 pm	<20	54	Night 38	10.3°/100m, 0.8m/s, 102 degrees.	Traffic (54), <b>WCC inaudible (&lt;20)</b>	No	22/8/2018
R96	26/7/2018	60 minutes	7:19 pm	<20	27	Night 38	10.5°/100m, 0.5m/s, 23 degrees.	Traffic (26), <b>WCC (&lt;20)</b>	No	22/8/2018
R98	26/7/2018	60 minutes	8:24 pm	<20	23	Night 38	9.0°/100m, calm.	Plane (21), <b>WCC (&lt;20)</b>	No	22/8/2018
R57	26/7/2018	60 minutes	10:25 pm	<20	40	Night 35	10.5°/100m, 1.5m/s, 353 degrees.	Trains (37), traffic (36), <b>WCC inaudible (&lt;20)</b>	No	22/8/2018

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

**IA = Inaudible.**

**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

**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
R11	Blast Noise	dB (Lin Peak)	Every Blast	9	101.26	109.4	120.0	No	1/08/2018
	Blast Vibration	mm/s	Every Blast	9	0.11	0.30	10.0	No	1/08/2018
R98	Blast Noise	dB (Lin Peak)	Every Blast	9	103.1	110.8	120.0	No	1/08/2018
	Blast Vibration	mm/s	Every Blast	9	0.81	1.62	10.0	No	1/08/2018
R62	Blast Noise	dB (Lin Peak)	Every Blast	9	103.02	116.7	120.0	No	1/08/2018
	Blast Vibration	mm/s	Every Blast	9	0.37	0.69	10.0	No	1/08/2018
R92	Blast Noise	dB (Lin Peak)	Every Blast	9	98.32	109.3	120.0	No	1/08/2018
	Blast Vibration	mm/s	Every Blast	9	0.21	0.35	10.0	No	1/08/2018

**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

