

**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: AUGUST 2022

Obtained Date: 14/09/2022

Publication Date: 14/09/2022

**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	26/08/2022	06/09/2022	0.6	1.9	2.0	3.4
	Solid Particles	g/m <sup>2</sup> /month	Continuous	1	19/08/2022	08/09/2022	0.9	0.9	0.9	0.9
29	PM10	µg/m <sup>3</sup>	Every 6 days	5	26/08/2022	06/09/2022	0.6	3.3	3.0	5.7
	Solid Particles	g/m <sup>2</sup> /month	Continuous	1	19/08/2022	08/09/2022	0.7	0.7	0.7	0.7
30	PM10	µg/m <sup>3</sup>	Continuous	Continuous	31/08/2022	01/09/2022	2.6	8.0	7.2	17.3
	Solid Particles	g/m <sup>2</sup> /month	Continuous	1	19/08/2022	08/09/2022	0.4	0.4	0.4	0.4
10	Conductivity	µS/cm	Special Frequency 1	1	18/08/2022	19/08/2022	570	570	570	570
	Nitrate	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<0.005	<0.005	<0.005	<0.005
	Nitrogen (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.5	0.5	0.5	0.5
	Phosphorus (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.4	0.4	0.4	0.4
	Reactive Phosphorus	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.35	0.35	0.35	0.35
12	Conductivity	µS/cm	Special Frequency 1	1	11/08/2022	15/08/2022	650	650	650	650
	Nitrate	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	3	3	3	3

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	Nitrogen (Total)	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	4.9	4.9	4.9	4.9
	Phosphorus (Total)	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	<0.05	<0.05	<0.05	<0.05
	Reactive Phosphorus	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	<0.005	<0.005	<0.005	<0.005
12	Conductivity	µS/cm	Special Frequency 1	1	18/08/2022	19/08/2022	570	570	570	570
	Nitrate	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	3.6	3.6	3.6	3.6
	Nitrogen (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	4.8	4.8	4.8	4.8
	Phosphorus (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<0.05	<0.05	<0.05	<0.05
	Reactive Phosphorus	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<0.005	<0.005	<0.005	<0.005
14	Conductivity	µS/cm	Special Frequency 1	1	11/08/2022	15/08/2022	590	590	590	590
	Nitrate	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	0.33	0.33	0.33	0.33
	Nitrogen (Total)	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	1.3	1.3	1.3	1.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	0.5	0.5	0.5	0.5
	Reactive Phosphorus	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	0.43	0.43	0.43	0.43
14	Conductivity	µS/cm	Special Frequency 1	1	14/08/2022	15/08/2022	140	140	140	140
	Nitrate	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	2.3	2.3	2.3	2.3
	Nitrogen (Total)	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	3.6	3.6	3.6	3.6
	Phosphorus (Total)	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	0.6	0.6	0.6	0.6
	Reactive Phosphorus	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	0.52	0.52	0.52	0.52
14	Conductivity	µS/cm	Special Frequency 1	1	18/08/2022	19/08/2022	430	430	430	430
	Nitrate	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.25	0.25	0.25	0.25
	Nitrogen (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.7	0.7	0.7	0.7
	Phosphorus (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.6	0.6	0.6	0.6
	Reactive Phosphorus	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.52	0.52	0.52	0.52
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*	-	-	-	-	-	-



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	pH	pH	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*	-	-	-	-	-	-
23	Conductivity	µS/cm	Special Frequency 2	1	11/08/2022	15/08/2022	900	900	900	900
	Nitrate	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	2.6	2.6	2.6	2.6
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	4	4	4	4
	Oil and Grease	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	11/08/2022	15/08/2022	8.18	8.18	8.18	8.18
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.2	0.2	0.2	0.2
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.17	0.17	0.17	0.17
23	Total Suspended Solids	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	19	19	19	19
	Conductivity	µS/cm	Special Frequency 2	1	14/08/2022	15/08/2022	290	290	290	290
	Nitrate	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	1.5	1.5	1.5	1.5
	Nitrogen (Total)	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	3.3	3.3	3.3	3.3
	Oil and Grease	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	14/08/2022	15/08/2022	7.98	7.98	7.98	7.98
	Phosphorus (Total)	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	0.6	0.6	0.6	0.6
	Reactive Phosphorus	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	0.49	0.49	0.49	0.49
23	Total Suspended Solids	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	105	105	105	105
	Conductivity	µS/cm	Special Frequency 2	1	18/08/2022	19/08/2022	600	600	600	600
	Nitrate	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	1.6	1.6	1.6	1.6
	Nitrogen (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	1.8	1.8	1.8	1.8
	Oil and Grease	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	<5	<5	<5	<5



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	<b>pH</b>	<b>pH</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>18/08/2022</b>	<b>19/08/2022</b>	<b>7.07</b>	<b>7.07</b>	<b>7.07</b>	<b>7.07</b>
	<b>Phosphorus (Total)</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>18/08/2022</b>	<b>19/08/2022</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
	<b>Reactive Phosphorus</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>18/08/2022</b>	<b>19/08/2022</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>
	<b>Total Suspended Solids</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>18/08/2022</b>	<b>19/08/2022</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
<b>24</b>	<b>Conductivity</b>	<b>µS/cm</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>11/08/2022</b>	<b>15/08/2022</b>	<b>980</b>	<b>980</b>	<b>980</b>	<b>980</b>
	<b>Nitrate</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>11/08/2022</b>	<b>15/08/2022</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>
	<b>Nitrogen (Total)</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>11/08/2022</b>	<b>15/08/2022</b>	<b>4.4</b>	<b>4.4</b>	<b>4.4</b>	<b>4.4</b>
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>11/08/2022</b>	<b>15/08/2022</b>	<b>&lt;5</b>	<b>&lt;5</b>	<b>&lt;5</b>	<b>&lt;5</b>
	<b>pH</b>	<b>pH</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>11/08/2022</b>	<b>15/08/2022</b>	<b>8.17</b>	<b>8.17</b>	<b>8.17</b>	<b>8.17</b>
	<b>Phosphorus (Total)</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>11/08/2022</b>	<b>15/08/2022</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
	<b>Reactive Phosphorus</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>11/08/2022</b>	<b>15/08/2022</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>
<b>24</b>	<b>Conductivity</b>	<b>µS/cm</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>14/08/2022</b>	<b>15/08/2022</b>	<b>260</b>	<b>260</b>	<b>260</b>	<b>260</b>
	<b>Nitrate</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>14/08/2022</b>	<b>15/08/2022</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>
	<b>Nitrogen (Total)</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>14/08/2022</b>	<b>15/08/2022</b>	<b>5.1</b>	<b>5.1</b>	<b>5.1</b>	<b>5.1</b>
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>14/08/2022</b>	<b>15/08/2022</b>	<b>&lt;5</b>	<b>&lt;5</b>	<b>&lt;5</b>	<b>&lt;5</b>
	<b>pH</b>	<b>pH</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>14/08/2022</b>	<b>15/08/2022</b>	<b>7.88</b>	<b>7.88</b>	<b>7.88</b>	<b>7.88</b>
	<b>Phosphorus (Total)</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>14/08/2022</b>	<b>15/08/2022</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>
	<b>Reactive Phosphorus</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>14/08/2022</b>	<b>15/08/2022</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>
	<b>Total Suspended Solids</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>14/08/2022</b>	<b>15/08/2022</b>	<b>460</b>	<b>460</b>	<b>460</b>	<b>460</b>
<b>24</b>	<b>Conductivity</b>	<b>µS/cm</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>18/08/2022</b>	<b>19/08/2022</b>	<b>660</b>	<b>660</b>	<b>660</b>	<b>660</b>
	<b>Nitrate</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>18/08/2022</b>	<b>19/08/2022</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1</b>
	<b>Nitrogen (Total)</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>18/08/2022</b>	<b>19/08/2022</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Special Frequency 2</b>	<b>1</b>	<b>18/08/2022</b>	<b>19/08/2022</b>	<b>&lt;5</b>	<b>&lt;5</b>	<b>&lt;5</b>	<b>&lt;5</b>

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	pH	pH	Special Frequency 2	1	18/08/2022	19/08/2022	7.04	7.04	7.04	7.04
	Phosphorus (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.3	0.3	0.3	0.3
	Reactive Phosphorus	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.27	0.27	0.27	0.27
	Total Suspended Solids	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	28	28	28	28
25	Conductivity	µS/cm	Special Frequency 2	1	11/08/2022	15/08/2022	460	460	460	460
	Nitrate	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	1.1	1.1	1.1	1.1
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	2	2	2	2
	Oil and Grease	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	11/08/2022	15/08/2022	7.35	7.35	7.35	7.35
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.1	0.1	0.1	0.1
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.1	0.1	0.1	0.1
25	Total Suspended Solids	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	8	8	8	8
	Conductivity	µS/cm	Special Frequency 2	1	18/08/2022	19/08/2022	330	330	330	330
	Nitrate	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.24	0.24	0.24	0.24
	Nitrogen (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.9	0.9	0.9	0.9
	Oil and Grease	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	18/08/2022	19/08/2022	6.98	6.98	6.98	6.98
	Phosphorus (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.1	0.1	0.1	0.1
	Reactive Phosphorus	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.088	0.088	0.088	0.088
26	Total Suspended Solids	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	2	2	2	2
	Conductivity	µS/cm	Special Frequency 2	1	11/08/2022	15/08/2022	540	540	540	540
	Nitrate	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.46	0.46	0.46	0.46
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	1.7	1.7	1.7	1.7
26	Oil and Grease	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	<5	<5	<5	<5

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	pH	pH	Special Frequency 2	1	11/08/2022	15/08/2022	7.62	7.62	7.62	7.62
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.1	0.1	0.1	0.1
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.1	0.1	0.1	0.1
	Total Suspended Solids	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	20	20	20	20
26	Conductivity	µS/cm	Special Frequency 2	1	18/08/2022	19/08/2022	380	380	380	380
	Nitrate	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.29	0.29	0.29	0.29
	Nitrogen (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.9	0.9	0.9	0.9
	Oil and Grease	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	18/08/2022	19/08/2022	7.03	7.03	7.03	7.03
	Phosphorus (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.1	0.1	0.1	0.1
	Reactive Phosphorus	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.11	0.11	0.11	0.11
	Total Suspended Solids	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	6	6	6	6
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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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	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*	-	-	-	-	-	-
Potassium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-	
Selenium (dissolved)	mg/L	Special Frequency 3	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
	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*	-	-	-	-	-	-	



**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

**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)
10	Total Suspended Solids	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	5	5	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	18/08/2022	19/08/2022	6.99	6.99	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	13	13	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	11/08/2022	15/08/2022	7.43	7.43	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	6	6	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	18/08/2022	19/08/2022	7.09	7.09	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	11	11	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	11/08/2022	15/08/2022	7.44	7.44	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	89	89	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	14/08/2022	15/08/2022	7.26	7.26	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	35	35	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	18/08/2022	19/08/2022	7.22	7.22	6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 1	0*	-	-	-	-	9	No
33^	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No

**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

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)
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No
34	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No
35	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No

~ Total Suspended Solids permitted to exceed 50mg/L if 5 day rainfall is greater than 39.2mm prior to discharge

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

\*No Special Frequency Events occurred during Sampling Period, therefore no data has been collected.

- For the purposes of this condition, Special Frequency 1 means as soon as practicable after overflow commences and in any case not more than 12 hours after any overflow commencing.
- For the purposes of this condition, Special Frequency 2 means within 12 hours after any overflow from a storage dam(s) on the premises occurring.
- For the purposes of this condition, Special Frequency 3 means every three months. If no mine void water is planned to be provided for agricultural purposes within the three months following scheduled sampling, then sampling is not required.
- For the purposes of this condition, Special Frequency 4 means prior to, but not more than 24 hours prior to providing mine void water for agricultural purposes and then weekly thereafter, until the provision of water ceases. Samples are only required to be taken from the void water dam that is supplying water for agricultural purposes.



**WERRIS CREEK COAL EPL – MONTHLY SUMMARY**

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

<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>16</b>	<b>Conductivity</b>	<b>µS/cm</b>	<b>Every 3 Months</b>	<b>1</b>	08/24/2022	01/09/2022	1930	1930	1930	1930
	<b>Nitrate</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/24/2022	01/09/2022	0.14	0.14	0.14	0.14
	<b>Nitrogen (Total)</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/24/2022	01/09/2022	0.2	0.2	0.2	0.2
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/24/2022	01/09/2022	<5	<5	<5	<5
	<b>pH</b>	<b>pH</b>	<b>Every 3 Months</b>	<b>1</b>	08/24/2022	01/09/2022	8.19	8.19	8.19	8.19
	<b>Phosphorus (Total)</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/24/2022	01/09/2022	0.01	0.01	0.01	0.01
	<b>Reactive Phosphorus</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/24/2022	01/09/2022	<0.01	<0.01	<0.01	<0.01
	<b>Total Suspended Solids</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/24/2022	01/09/2022	<5	<5	<5	<5
<b>27</b>	<b>Conductivity</b>	<b>µS/cm</b>	<b>Every 3 Months</b>	<b>1</b>	08/25/2022	02/09/2022	1550	1550	1550	1550
	<b>Nitrate</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/25/2022	02/09/2022	0.15	0.15	0.15	0.15
	<b>Nitrogen (Total)</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/25/2022	02/09/2022	0.2	0.2	0.2	0.2
	<b>Oil and Grease</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/25/2022	02/09/2022	<5	<5	<5	<5
	<b>pH</b>	<b>pH</b>	<b>Every 3 Months</b>	<b>1</b>	08/25/2022	02/09/2022	7.9	7.9	7.9	7.9
	<b>Phosphorus (Total)</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/25/2022	02/09/2022	0.01	0.01	0.01	0.01
	<b>Reactive Phosphorus</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/25/2022	02/09/2022	<0.01	<0.01	<0.01	<0.01
	<b>Total Suspended Solids</b>	<b>mg/L</b>	<b>Every 3 Months</b>	<b>1</b>	08/25/2022	02/09/2022	<5	<5	<5	<5
<b>17</b>	<b>Conductivity</b>	<b>µS/cm</b>	<b>Every 6 Months</b>	<b>0*</b>	-	-	-	-	-	-
	<b>Nitrate</b>	<b>mg/L</b>	<b>Every 6 Months</b>	<b>0*</b>	-	-	-	-	-	-
	<b>Nitrogen (Total)</b>	<b>mg/L</b>	<b>Every 6 Months</b>	<b>0*</b>	-	-	-	-	-	-
	<b>pH</b>	<b>pH</b>	<b>Every 6 Months</b>	<b>0*</b>	-	-	-	-	-	-
	<b>Phosphorus (Total)</b>	<b>mg/L</b>	<b>Every 6 Months</b>	<b>0*</b>	-	-	-	-	-	-
	<b>Reactive Phosphorus</b>	<b>mg/L</b>	<b>Every 6 Months</b>	<b>0*</b>	-	-	-	-	-	-

**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
	Standing Water Level	Metres	Every 6 Months	0*	-	-	-	-	-	-
18	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*	-	-	-	-	-	-
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*	-	-	-	-	-	-

**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
	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

TLTS – too low to sample

\*This reporting period does not include measurements for the 6 monthly or 3 monthly monitoring as they did not occur in this period. These will be reported in their relevant periods.

**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 °C/100m & / Wind m/s / Wind Direction °)	Observations	(Potential) Non-compliance /breach	Date Obtained
				LA1, 1 Minute	LAeq, 15 Minute					
R24	18 August 2022	60 minutes	10:04am	N/A	50	Day 37	1.5 / 359	Traffic (48), train (43), birds (40), <b>WCC (&lt;20)</b>	No	12/09/2022
R12	18 August 2022	60 minutes	11:12am	N/A	48	Day 38	2.3 / 251	Traffic (48), birds (30), insects (26), <b>WCC (&lt;20)</b>	No	12/09/2022
R96	18 August 2022	60 minutes	12:34pm	N/A	43	Day 38	3.0 / 287	Birds (42), train (36), aeroplane (25), <b>WCC (&lt;20)</b>	No	12/09/2022
R98	18 August 2022	60 minutes	1:48pm	N/A	45	Day 35	4.6 / 291	Birds (43), insects (40), <b>WCC (22)</b>	No	12/09/2022
R57	18 August 2022	60 minutes	3:45pm	N/A	52	Day 35	3.4 / 293	Traffic (52), insects (40), birds (38), residential (26), <b>WCC (&lt;20)</b>	No	12/09/2022
R24	18 August 2022	60 minutes	8:01pm	29	52	Night 37	Lapse / 3.6 / 205	Traffic (51), trains (43), frogs (31), <b>WCC (26)</b>	No	12/09/2022
R12	19 August 2022	60 minutes	12:19am	30	41	Night 38	+2.6 / 1.7 / 320	Birds (38), traffic (37), frogs (30), <b>WCC (26)</b>	No	12/09/2022
R96	18 August 2022	60 minutes	10:55pm	32	42	Night 37	+4.3 / 2.7 / 008	Frogs (40), birds (36), <b>WCC (29)</b>	No	12/09/2022
R98	18 August 2022	60 minutes	9:47pm	<20	35	Night 35	+3.4 / 3.6 / 002	Birds (32), frogs (32), <b>WCC (&lt;20)</b>	No	12/09/2022
R57	18 August 2022	60 minutes	7:45pm	<20	44	Night 35	Lapse / 2.7 / 358	Traffic (43), Crawfords Freightlines (33), dogs (32), frogs (27), <b>WCC (&lt;20)</b>	No	12/09/2022

**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	100.6	109.2	120.0	No	01/09/2022
	Blast Vibration	mm/s	Every Blast	9	0.07	0.11	10.0	No	01/09/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	9	100.6	104.4	120.0	No	01/09/2022
	Blast Vibration	mm/s	Every Blast	9	0.48	0.89	10.0	No	01/09/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	9	101.1	109.1	120.0	No	01/09/2022
	Blast Vibration	mm/s	Every Blast	9	0.37	0.49	10.0	No	01/09/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	9	92.4	109.1	120.0	No	01/09/2022
	Blast Vibration	mm/s	Every Blast	9	0.24	0.31	10.0	No	01/09/2022



## WERRIS CREEK COAL EPL – MONTHLY SUMMARY

