

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: JANUARY 2021

Obtained Date: 22/02/2021

Publication Date: 22/02/2021

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 ³	Every 6 days	5	27/01/2021	09/02/2021	4.0	8.0	7.4	14.4
	Solid Particles	g/m ² /month	Continuous	1	19/01/2021	08/02/2021	0.6	0.6	0.6	0.6
29	PM10	µg/m ³	Every 6 days	5	27/01/2021	09/02/2021	5.5	10.1	8.9	18.7
	Solid Particles	g/m ² /month	Continuous	1	19/01/2021	08/02/2021	0.6	0.6	0.6	0.6
30	PM10	µg/m ³	Continuous	Continuous	31/01/2021	01/02/2021	2.1	9.0	10.4	16.2
	Solid Particles	g/m ² /month	Continuous	1	19/01/2021	08/02/2021	0.4	0.4	0.4	0.4
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*	-	-	-	-	-	-



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	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*	-	-	-	-	-	-
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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-

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	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
26	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
33*	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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

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



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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

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	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
33^	Electrical Conductivity	mg/L	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
34	Electrical Conductivity	mg/L	Special Frequency 4	0*	-	-	-	-	2000	No

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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
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No
35	Electrical Conductivity	mg/L	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)

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

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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*	-	-	-	-	-	-

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	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*	-	-	-	-	-	-

*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 & °)	Observations	(Potential) Non-compliance /breach	Date Obtained
				LA1, 1 Minute	L _{Aeq} , 15 Minute					
R24	29 January 2021	60 minutes	10:00am	N/A	44	Day 37	4.4m/s, 16 degrees	Traffic (43), insects (36), trains (30), WCC (<20)	No	22/02/2021
R12	29 January 2021	60 minutes	11:05am	N/A	47	Day 38	3.1m/s, 347 degrees	Traffic (46), insects (38), WCC (23)	No	22/02/2021
R96	29 January 2021	60 minutes	12:11pm	N/A	38	Day 38	1.2m/s, 284 degrees	Insects (35), birds (34), WCC (26)	No	22/02/2021
R98	29 January 2021	60 minutes	1:18pm	N/A	43	Day 36	4.4m/s, 225 degrees	Birds (42), dog (35), WCC (24)	No	22/02/2021
R57	29 January 2021	60 minutes	3:07pm	N/A	46	Day 35	2.4m/s, 169 degrees	Traffic (45), birds (39), residential (25), WCC (<20)	No	22/02/2021
R24	29 January 2021	60 minutes	7:59pm	<20	41	Night 37	Lapse, 2.9m/s, 182 degrees	Traffic (39), insects (36), WCC (<20)	No	22/02/2021
R12	29 January 2021	60 minutes	9:04pm	<20	49	Night 38	+1.3°C/100, 2.9m/s, 193 degrees	Insects (49), Traffic (39), WCC (<20)	No	22/02/2021
R96	29 January 2021	60 minutes	10:14pm	<20	47	Night 38	+0.5°C/100, 1.7m/s, 164 degrees	Insects (47), traffic (23), aeroplanes (22), WCC (<20)	No	22/02/2021
R98	29 January 2021	60 minutes	11:24pm	<20	52	Night 38	Lapse, 2.1m/s, 78 degrees	Insects (52), WCC (<20)	No	22/02/2021
R57	30 January 2021	60 minutes	1:13am	27	46	Night 35	Lapse, 2.2m/s, 32 degrees	Insects (44), traffic (42), trains (30), WCC (23)	No	22/02/2021

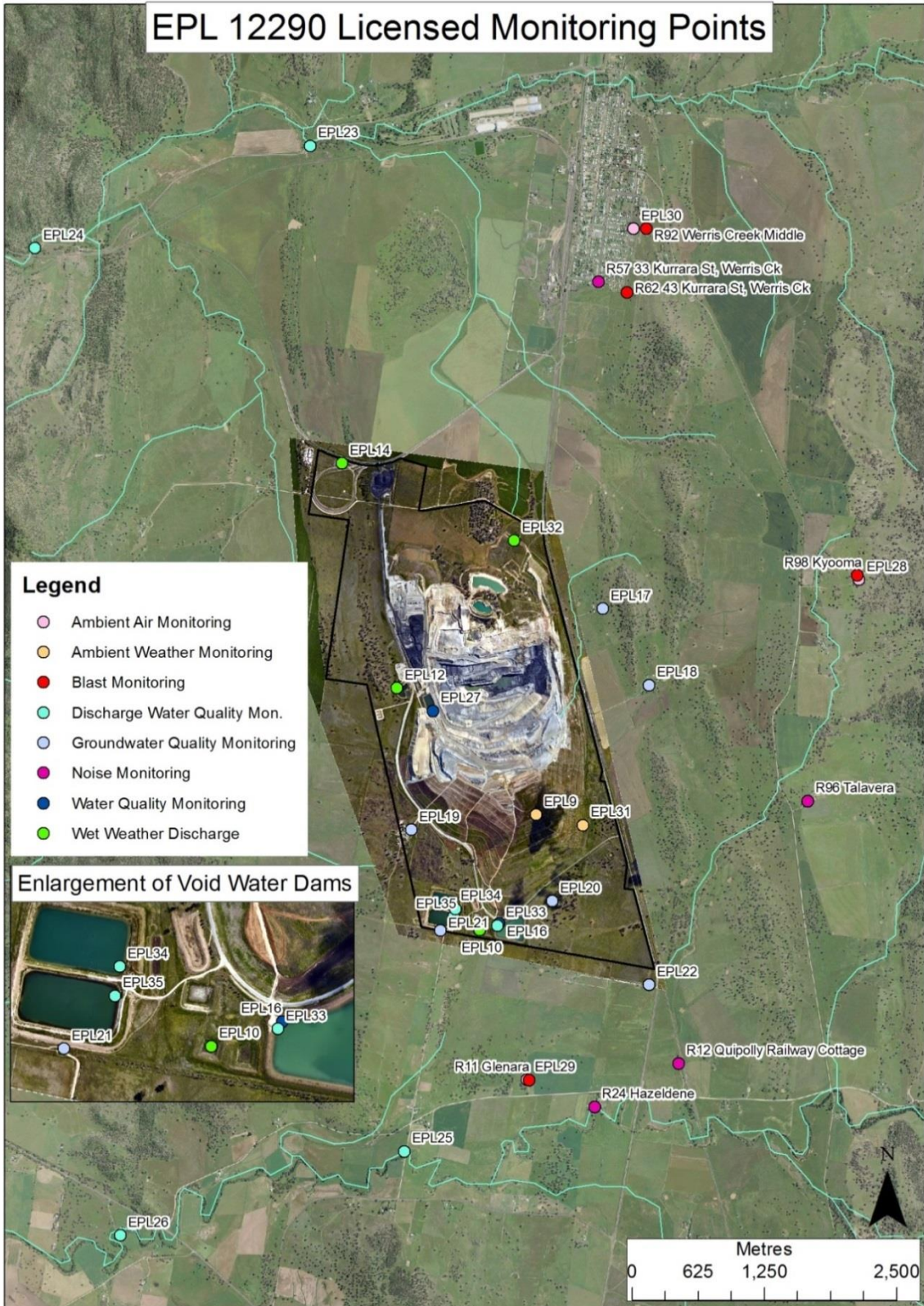
NM = Not Measurable. This denotes noise from the mine was audible at low levels however cannot be quantified.

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	4	97.3	103.7	120.0	No	31/01/2021
	Blast Vibration	mm/s	Every Blast	4	0.08	0.09	10.0	No	31/01/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	4	99.4	104.2	120.0	No	31/01/2021
	Blast Vibration	mm/s	Every Blast	4	0.55	0.74	10.0	No	31/01/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	4	101.0	109.5	120.0	No	31/01/2021
	Blast Vibration	mm/s	Every Blast	4	0.44	0.59	10.0	No	31/01/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	4	99.1	105.7	120.0	No	31/01/2021
	Blast Vibration	mm/s	Every Blast	4	0.27	0.37	10.0	No	31/01/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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: FEBRUARY 2021

Obtained Date: 25/03/2021

Publication Date: 25/03/2021

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 ³	Every 6 days	5	26/02/2021	11/03/2021	2.2	6.3	7.4	8.6
	Solid Particles	g/m ² /month	Continuous	1	19/02/2021	02/03/2021	0.8	0.8	0.8	0.8
29	PM10	µg/m ³	Every 6 days	5	26/02/2021	11/03/2021	4.4	7.7	7.8	10.7
	Solid Particles	g/m ² /month	Continuous	1	19/02/2021	02/03/2021	0.5	0.5	0.5	0.5
30	PM10	µg/m ³	Continuous	Continuous	28/02/2021	01/03/2021	5.3	10.1	9.8	16.8
	Solid Particles	g/m ² /month	Continuous	1	19/02/2021	02/03/2021	0.4	0.4	0.4	0.4
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*	-	-	-	-	-	-



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
	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*	-	-	-	-	-	-
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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	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
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
26	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
33*	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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

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



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 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

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	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
33^	Electrical Conductivity	mg/L	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
34	Electrical Conductivity	mg/L	Special Frequency 4	0*	-	-	-	-	2000	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)
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No
35	Electrical Conductivity	mg/L	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)

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*	11/02/2021	04/03/2021	1760	1760	1760	1760
	Nitrate	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	0.27	0.27	0.27	0.27
	Nitrogen (Total)	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	0.3	0.3	0.3	0.3
	Oil and Grease	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	<5	<5	<5	<5
	pH	pH	Every 3 Months	0*	11/02/2021	04/03/2021	7.61	7.61	7.61	7.61
	Phosphorus (Total)	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	5	5	5	5
27	Conductivity	µS/cm	Every 3 Months	0*	11/02/2021	04/03/2021	1740	1740	1740	1740
	Nitrate	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	0.14	0.14	0.14	0.14
	Nitrogen (Total)	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	0.1	0.1	0.1	0.1
	Oil and Grease	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	<5	<5	<5	<5
	pH	pH	Every 3 Months	0*	11/02/2021	04/03/2021	7.54	7.54	7.54	7.54
	Phosphorus (Total)	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	0*	11/02/2021	04/03/2021	<5	<5	<5	<5
17	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*	-	-	-	-	-	-

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*	-	-	-	-	-	-

*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	23 February 2021	60 minutes	10:07am	N/A	42	Day 37	1.7 / 136	Traffic (41), insects (35), trains (24), WCC (<20)	No	22/03/2021
R12	23 February 2021	60 minutes	11:12am	N/A	48	Day 38	2.0 / 073	Traffic (48), insects (33), WCC (<20)	No	22/03/2021
R96	23 February 2021	60 minutes	12:18pm	N/A	39	Day 38	2.2 / 105	Insects (38), birds (32), WCC (<20)	No	22/03/2021
R98	23 February 2021	60 minutes	1:25pm	N/A	46	Day 36	1.9 / 079	Birds (45), dog (38), WCC (22)	No	22/03/2021
R57	23 February 2021	60 minutes	3:14pm	N/A	46	Day 35	3.4 / 167	Traffic (46), birds (34), residential (28), WCC (<20)	No	22/03/2021
R24	23 February 2021	60 minutes	8:04pm	<20	43	Night 37	Lapse / 4.7 / 163	Traffic (43), insects (32), WCC (<20)	No	22/03/2021
R12	23 February 2021	60 minutes	9:09pm	<20	51	Night 38	Lapse / 2.9 / 181	Insects (51), Traffic (40), WCC (<20)	No	22/03/2021
R96	23 February 2021	60 minutes	10:19pm	<20	45	Night 38	Lapse / 3.5 / 172	Insects (45), traffic (22), WCC (<20)	No	22/03/2021
R98	23 February 2021	60 minutes	11:29pm	<20	47	Night 38	Lapse / 3.9 / 164	Insects (47), WCC (<20)	No	22/03/2021
R57	24 February 2021	60 minutes	1:18am	27	46	Night 35	Lapse / 4.6 / 152	Insects (45), traffic (35), trains (27), WCC (<20)	No	22/03/2021

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	5	97.1	106.7	120.0	No	28/02/2021
	Blast Vibration	mm/s	Every Blast	5	0.12	0.19	10.0	No	28/02/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	96.1	99.7	120.0	No	28/02/2021
	Blast Vibration	mm/s	Every Blast	5	0.72	0.81	10.0	No	28/02/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	98.6	102.8	120.0	No	28/02/2021
	Blast Vibration	mm/s	Every Blast	5	0.52	0.88	10.0	No	28/02/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	97.0	106.0	120.0	No	28/02/2021
	Blast Vibration	mm/s	Every Blast	5	0.33	0.45	10.0	No	28/02/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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: MARCH 2021

Obtained Date: 26/04/2021

Publication Date: 26/04/2021

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 ³	Every 6 days	5	28/03/2021	14/04/2021	2.0	5.1	3.8	9.5
	Solid Particles	g/m ² /month	Continuous	1	19/03/2021	14/04/2021	0.8	0.8	0.8	0.8
29	PM10	µg/m ³	Every 6 days	5	28/03/2021	14/04/2021	2.0	10.4	8.2	25.2
	Solid Particles	g/m ² /month	Continuous	1	19/03/2021	14/04/2021	1.7	1.7	1.7	1.7
30	PM10	µg/m ³	Continuous	Continuous	31/03/2021	01/04/2021	1.1	8.1	7.0	16.8
	Solid Particles	g/m ² /month	Continuous	1	19/03/2021	14/04/2021	0.7	0.7	0.7	0.7
10	Conductivity	µS/cm	Special Frequency 1	1	19/03/2021	30/03/2021	530	530	530	530
	Nitrate	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<0.01	<0.01	<0.01	<0.01
	Nitrogen (Total)	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	0.7	0.7	0.7	0.7
	Phosphorus (Total)	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	0.06	0.06	0.06	0.06
	Reactive Phosphorus	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<0.01	<0.01	<0.01	<0.01
10	Conductivity	µS/cm	Special Frequency 1	1	29/03/2021	12/04/2021	320	320	320	320
	Nitrate	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	0.04	0.04	0.04	0.04
	Nitrogen (Total)	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	0.6	0.6	0.6	0.6
	Phosphorus (Total)	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	0.17	0.17	0.17	0.17
	Reactive Phosphorus	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	0.12	0.12	0.12	0.12
12	Conductivity	µS/cm	Special Frequency 1	1	19/03/2021	30/03/2021	560	560	560	560

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
	Nitrate	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	1.69	1.69	1.69	1.69
	Nitrogen (Total)	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	2.3	2.3	2.3	2.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	0.05	0.05	0.05	0.05
	Reactive Phosphorus	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<0.01	<0.01	<0.01	<0.01
12	Conductivity	µS/cm	Special Frequency 1	1	29/03/2021	12/04/2021	490	490	490	490
	Nitrate	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	0.14	0.14	0.14	0.14
	Nitrogen (Total)	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	3.3	3.3	3.3	3.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	0.22	0.22	0.22	0.22
	Reactive Phosphorus	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	<0.01	<0.01	<0.01	<0.01
14	Conductivity	µS/cm	Special Frequency 1	1	19/03/2021	30/03/2021	730	730	730	730
	Nitrate	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	0.52	0.52	0.52	0.52
	Nitrogen (Total)	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	0.8	0.8	0.8	0.8
	Phosphorus (Total)	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<0.01	<0.01	<0.01	<0.01
14	Conductivity	µS/cm	Special Frequency 1	1	24/03/2021	07/04/2021	130	130	130	130
	Nitrate	mg/L	Special Frequency 1	1	24/03/2021	07/04/2021	1.19	1.19	1.19	1.19
	Nitrogen (Total)	mg/L	Special Frequency 1	1	24/03/2021	07/04/2021	3	3	3	3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	24/03/2021	07/04/2021	0.6	0.6	0.6	0.6
	Reactive Phosphorus	mg/L	Special Frequency 1	1	24/03/2021	07/04/2021	0.55	0.55	0.55	0.55
14	Conductivity	µS/cm	Special Frequency 1	1	29/03/2021	12/04/2021	270	270	270	270
	Nitrate	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	0.65	0.65	0.65	0.65
	Nitrogen (Total)	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	1.3	1.3	1.3	1.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	0.22	0.22	0.22	0.22
	Reactive Phosphorus	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	0.21	0.21	0.21	0.21
32	Conductivity	µS/cm	Special Frequency 1	1	19/03/2021	30/03/2021	660	660	660	660
	Nitrate	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	0.88	0.88	0.88	0.88
	Nitrogen (Total)	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	2	2	2	2
	Oil and Grease	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<5	<5	<5	<5

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
	pH	pH	Special Frequency 1	1	19/03/2021	30/03/2021	8.1	8.1	8.1	8.1
	Phosphorus (Total)	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	0.08	0.08	0.08	0.08
	Reactive Phosphorus	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	24	24	24	24
32	Conductivity	µS/cm	Special Frequency 1	1	29/03/2021	12/04/2021	320	320	320	320
	Nitrate	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	1.09	1.09	1.09	1.09
	Nitrogen (Total)	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	1.5	1.5	1.5	1.5
	Oil and Grease	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 1	1	29/03/2021	12/04/2021	8.3	8.3	8.3	8.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	<0.01	<0.01	<0.01	<0.01
Total Suspended Solids	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	8	8	8	8	
23	Conductivity	µS/cm	Special Frequency 2	1	19/03/2021	30/03/2021	830	830	830	830
	Nitrate	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	1.08	1.08	1.08	1.08
	Nitrogen (Total)	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	1.9	1.9	1.9	1.9
	Oil and Grease	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	19/03/2021	30/03/2021	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	0.2	0.2	0.2	0.2
	Reactive Phosphorus	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	0.2	0.2	0.2	0.2
Total Suspended Solids	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	20	20	20	20	
23	Conductivity	µS/cm	Special Frequency 2	1	24/03/2021	07/04/2021	200	200	200	200
	Nitrate	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	0.57	0.57	0.57	0.57
	Nitrogen (Total)	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	1.7	1.7	1.7	1.7
	Oil and Grease	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	24/03/2021	07/04/2021	8	8	8	8

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
	Phosphorus (Total)	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	0.3	0.3	0.3	0.3
	Reactive Phosphorus	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	0.21	0.21	0.21	0.21
	Total Suspended Solids	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	78	78	78	78
23	Conductivity	µS/cm	Special Frequency 2	1	29/03/2021	12/04/2021	560	560	560	560
	Nitrate	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.48	0.48	0.48	0.48
	Nitrogen (Total)	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.9	0.9	0.9	0.9
	Oil and Grease	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	29/03/2021	12/04/2021	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.15	0.15	0.15	0.15
	Reactive Phosphorus	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.15	0.15	0.15	0.15
24	Total Suspended Solids	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	3	3	3	3
	Conductivity	µS/cm	Special Frequency 2	1	19/03/2021	30/03/2021	720	720	720	720
	Nitrate	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	1.82	1.82	1.82	1.82
	Nitrogen (Total)	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	3.2	3.2	3.2	3.2
	Oil and Grease	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	19/03/2021	30/03/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	0.5	0.5	0.5	0.5
24	Reactive Phosphorus	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	0.38	0.38	0.38	0.38
	Total Suspended Solids	mg/L	Special Frequency 2	1	19/03/2021	30/03/2021	103	103	103	103
	Conductivity	µS/cm	Special Frequency 2	1	24/03/2021	07/04/2021	210	210	210	210
	Nitrate	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	1.33	1.33	1.33	1.33
	Nitrogen (Total)	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	3.3	3.3	3.3	3.3
	Oil and Grease	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	<5	<5	<5	<5
24	pH	pH	Special Frequency 2	1	24/03/2021	07/04/2021	8.1	8.1	8.1	8.1
	Phosphorus (Total)	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	0.76	0.76	0.76	0.76

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
	Reactive Phosphorus	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	0.5	0.5	0.5	0.5
	Total Suspended Solids	mg/L	Special Frequency 2	1	24/03/2021	07/04/2021	308	308	308	308
24	Conductivity	µS/cm	Special Frequency 2	1	29/03/2021	12/04/2021	560	560	560	560
	Nitrate	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.48	0.48	0.48	0.48
	Nitrogen (Total)	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.9	0.9	0.9	0.9
	Oil and Grease	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	29/03/2021	12/04/2021	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.16	0.16	0.16	0.16
	Reactive Phosphorus	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.15	0.15	0.15	0.15
25	Total Suspended Solids	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	3	3	3	3
	Conductivity	µS/cm	Special Frequency 2	1	29/03/2021	12/04/2021	330	330	330	330
	Nitrate	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.03	0.03	0.03	0.03
	Nitrogen (Total)	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	1.5	1.5	1.5	1.5
	Oil and Grease	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	29/03/2021	12/04/2021	8.6	8.6	8.6	8.6
	Phosphorus (Total)	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.13	0.13	0.13	0.13
26	Reactive Phosphorus	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.04	0.04	0.04	0.04
	Total Suspended Solids	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	12	12	12	12
	Conductivity	µS/cm	Special Frequency 2	1	29/03/2021	12/04/2021	400	400	400	400
	Nitrate	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	<0.01	<0.01	<0.01	<0.01
	Nitrogen (Total)	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	1.7	1.7	1.7	1.7
	Oil and Grease	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	29/03/2021	12/04/2021	8	8	8	8
Phosphorus (Total)	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.21	0.21	0.21	0.21	
Reactive Phosphorus	mg/L	Special Frequency 2	1	29/03/2021	12/04/2021	0.07	0.07	0.07	0.07	

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	1	29/03/2021	12/04/2021	19	19	19	19
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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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

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
	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*	-	-	-	-	-	-

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	19/03/2021	30/03/2021	30	30	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	19/03/2021	30/03/2021	8.5	8.5	6.5-8.5	No
10	Total Suspended Solids	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	12	12	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	29/03/2021	12/04/2021	8.2	8.2	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	10	10	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<5	<5	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 1	1	19/03/2021	30/03/2021	7.6	7.6	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	18	18	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	29/03/2021	12/04/2021	7.5	7.5	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	13	13	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	19/03/2021	30/03/2021	7.7	7.7	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	24/03/2021	07/04/2021	92	92	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	24/03/2021	07/04/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	24/03/2021	07/04/2021	7.5	7.5	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	9	9	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	29/03/2021	12/04/2021	7.8	7.8	6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	24	24	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	19/03/2021	30/03/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	19/03/2021	30/03/2021	8.1	8.1	6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	8	8	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	29/03/2021	12/04/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	29/03/2021	12/04/2021	8.3	8.3	6.5-8.5	No
33^	Electrical Conductivity	mg/L	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
34	Electrical Conductivity	mg/L	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	mg/L	Special Frequency 4	0*	-	-	-	-	2000	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)
	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)

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

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*	-	-	-	-	-	-

*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	4 March 2021	60 minutes	10:05am	N/A	50	Day 37	2.4 / 317	Traffic (50), birds (38), insects (30), WCC (<20)	No	22/04/2021
R12	4 March 2021	60 minutes	11:09am	N/A	55	Day 38	2.0 / 019	Traffic (55), train (42), birds (38), WCC (<20)	No	22/04/2021
R96	4 March 2021	60 minutes	12:04pm	N/A	38	Day 38	2.7 / 278	Birds (37), insects (31), WCC (<20)	No	22/04/2021
R98	4 March 2021	60 minutes	1:12pm	N/A	56	Day 36	2.8 / 187	Birds (54), dogs (51), insects (42), WCC (<20)	No	22/04/2021
R57	4 March 2021	60 minutes	2:44pm	N/A	54	Day 35	1.6 / 191	Traffic (54), birds (38), residential (32), WCC (<20)	No	22/04/2021
R24	4 March 2021	60 minutes	8:01pm	<20	46	Night 37	+3.1 / 2.1 / 177	Traffic (45), frogs (38), insects (32), WCC (<20)	No	22/04/2021
R12	4 March 2021	60 minutes	9:06pm	<20	39	Night 38	+5.1 / 2.3 / 147	Traffic (37), frogs (34), insects (30), WCC (<20)	No	22/04/2021
R96	4 March 2021	60 minutes	10:14pm	<20	36	Night 38	+6.4 / 1.5 / 130	Frogs (34), insects (31), birds (26), train (23), WCC (<20)	No	22/04/2021
R98	4 March 2021	60 minutes	11:28pm	<20	33	Night 38	+5.1 / 0.6 / 302	Frogs (30), insects (29), WCC (<20)	No	22/04/2021
R57	5 March 2021	60 minutes	1:04am	<20	44	Night 35	+4.9 / 0.5 / 294	Frogs (42), insects (38), traffic (27), WCC (<20)	No	22/04/2021

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	6	98.4	102.5	120.0	No	31/03/2021
	Blast Vibration	mm/s	Every Blast	6	0.14	0.24	10.0	No	31/03/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	6	103.0	114.7	120.0	No	31/03/2021
	Blast Vibration	mm/s	Every Blast	6	0.74	0.98	10.0	No	31/03/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	6	100.6	104.1	120.0	No	31/03/2021
	Blast Vibration	mm/s	Every Blast	6	0.45	0.60	10.0	No	31/03/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	6	98.5	103.0	120.0	No	31/03/2021
	Blast Vibration	mm/s	Every Blast	6	0.28	0.35	10.0	No	31/03/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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: APRIL 2021

Obtained Date: 24/05/2021

Publication Date: 24/05/2021

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 ³	Every 6 days	5	27/04/2021	12/05/2021	1.6	8.6	9.7	12.4
	Solid Particles	g/m ² /month	Continuous	1	19/04/2021	11/05/2021	0.4	0.4	0.4	0.4
29	PM10	µg/m ³	Every 6 days	5	27/04/2021	12/05/2021	6.4	15.2	16.3	19.9
	Solid Particles	g/m ² /month	Continuous	1	19/04/2021	14/04/2021	0.9	0.9	0.9	0.9
30	PM10	µg/m ³	Continuous	Continuous	30/04/2021	01/05/2021	3.0	10.5	10.0	24.4
	Solid Particles	g/m ² /month	Continuous	1	19/04/2021	14/04/2021	0.3	0.3	0.3	0.3
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*	-	-	-	-	-	-



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

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

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



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 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

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	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
33^	Electrical Conductivity	mg/L	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
34	Electrical Conductivity	mg/L	Special Frequency 4	0*	-	-	-	-	2000	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)
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No
35	Electrical Conductivity	mg/L	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)

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	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*	-	-	-	-	-	-
17	Conductivity	µS/cm	Every 6 Months	0	29/03/2021	16/04/2021	Dry	Dry	Dry	Dry
	Nitrate	mg/L	Every 6 Months	0	29/03/2021	16/04/2021	Dry	Dry	Dry	Dry
	Nitrogen (Total)	mg/L	Every 6 Months	0	29/03/2021	16/04/2021	Dry	Dry	Dry	Dry
	pH	pH	Every 6 Months	0	29/03/2021	16/04/2021	Dry	Dry	Dry	Dry
	Phosphorus (Total)	mg/L	Every 6 Months	0	29/03/2021	16/04/2021	Dry	Dry	Dry	Dry
	Reactive Phosphorus	mg/L	Every 6 Months	0	29/03/2021	16/04/2021	Dry	Dry	Dry	Dry

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	29/03/2021	16/04/2021	Dry	Dry	Dry	Dry
18	Conductivity	µS/cm	Every 6 Months	1	29/03/2021	16/04/2021	360	360	360	360
	Nitrate	mg/L	Every 6 Months	1	29/03/2021	16/04/2021	0.64	0.64	0.64	0.64
	Nitrogen (Total)	mg/L	Every 6 Months	1	29/03/2021	16/04/2021	0.7	0.7	0.7	0.7
	pH	pH	Every 6 Months	1	29/03/2021	16/04/2021	7.8	7.8	7.8	7.8
	Phosphorus (Total)	mg/L	Every 6 Months	1	29/03/2021	16/04/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 6 Months	1	29/03/2021	16/04/2021	<0.01	<0.01	<0.01	<0.01
	Standing Water Level	Metres	Every 6 Months	1	29/03/2021	16/04/2021	52.9	52.9	52.9	52.9
19	Conductivity	µS/cm	Every 6 Months	1	10/03/2021	16/04/2021	2930	2930	2930	2930
	Nitrate	mg/L	Every 6 Months	1	10/03/2021	16/04/2021	17.6	17.6	17.6	17.6
	Nitrogen (Total)	mg/L	Every 6 Months	1	10/03/2021	16/04/2021	20.3	20.3	20.3	20.3
	pH	pH	Every 6 Months	1	10/03/2021	16/04/2021	7.93	7.93	7.93	7.93
	Phosphorus (Total)	mg/L	Every 6 Months	1	10/03/2021	16/04/2021	0.29	0.29	0.29	0.29
	Reactive Phosphorus	mg/L	Every 6 Months	1	10/03/2021	16/04/2021	0.23	0.23	0.23	0.23
	Standing Water Level	Metres	Every 6 Months	1	10/03/2021	16/04/2021	20.54	20.54	20.54	20.54
20	Conductivity	µS/cm	Every 6 Months	1	8/03/2021	16/04/2021	1030	1030	1030	1030
	Nitrate	mg/L	Every 6 Months	1	8/03/2021	16/04/2021	4.73	4.73	4.73	4.73
	Nitrogen (Total)	mg/L	Every 6 Months	1	8/03/2021	16/04/2021	5.5	5.5	5.5	5.5
	pH	pH	Every 6 Months	1	8/03/2021	16/04/2021	8.09	8.09	8.09	8.09
	Phosphorus (Total)	mg/L	Every 6 Months	1	8/03/2021	16/04/2021	0.09	0.09	0.09	0.09
	Reactive Phosphorus	mg/L	Every 6 Months	1	8/03/2021	16/04/2021	0.09	0.09	0.09	0.09
	Standing Water Level	Metres	Every 6 Months	1	8/03/2021	16/04/2021	19.91	19.91	19.91	19.91
21	Conductivity	µS/cm	Every 6 Months	1	10/03/2021	16/04/2021	2020	2020	2020	2020
	Nitrate	mg/L	Every 6 Months	1	10/03/2021	16/04/2021	0.75	0.75	0.75	0.75
	Nitrogen (Total)	mg/L	Every 6 Months	1	10/03/2021	16/04/2021	1	1	1	1
	pH	pH	Every 6 Months	1	10/03/2021	16/04/2021	7.73	7.73	7.73	7.73
	Phosphorus (Total)	mg/L	Every 6 Months	1	10/03/2021	16/04/2021	0.02	0.02	0.02	0.02

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	1	10/03/2021	16/04/2021	<0.01	<0.01	<0.01	<0.01
	Standing Water Level	Metres	Every 6 Months	1	10/03/2021	16/04/2021	13.25	13.25	13.25	13.25
22	Conductivity	µS/cm	Every 6 Months	0	8/03/2021	16/04/2021	TLTS	TLTS	TLTS	TLTS
	Nitrate	mg/L	Every 6 Months	0	8/03/2021	16/04/2021	TLTS	TLTS	TLTS	TLTS
	Nitrogen (Total)	mg/L	Every 6 Months	0	8/03/2021	16/04/2021	TLTS	TLTS	TLTS	TLTS
	pH	pH	Every 6 Months	0	8/03/2021	16/04/2021	TLTS	TLTS	TLTS	TLTS
	Phosphorus (Total)	mg/L	Every 6 Months	0	8/03/2021	16/04/2021	TLTS	TLTS	TLTS	TLTS
	Reactive Phosphorus	mg/L	Every 6 Months	0	8/03/2021	16/04/2021	TLTS	TLTS	TLTS	TLTS
	Standing Water Level	Metres	Every 6 Months	1	8/03/2021	16/04/2021	16.47	16.47	16.47	16.47

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	26 April 2021	60 minutes	10:16am	N/A	44	Day 37	1.4 / 325	Traffic (43), birds (37), residential (23), WCC (<20)	No	13/05/02021
R12	26 April 2021	60 minutes	11:07am	N/A	37	Day 38	1.8 / 295	Birds (35), traffic (33), WCC (<20)	No	13/05/02021
R96	26 April 2021	60 minutes	12:00pm	N/A	41	Day 38	0.7 / 010	Traffic (41), insects (32), WCC (<20)	No	13/05/02021
R98	26 April 2021	60 minutes	1:10pm	N/A	35	Day 36	3.1 / 191	Birds (35), WCC (<22)	No	13/05/02021
R57	26 April 2021	60 minutes	3:00pm	N/A	46	Day 35	1.5 / 185	Traffic (45), trains (37), birds (34), WCC (<20)	No	13/05/02021
R24	26 April 2021	60 minutes	7:55pm	<20	51	Night 37	Neutral / 2.8 / 145	Insects (49), traffic (47), WCC (<20)	No	13/05/02021
R12	26 April 2021	60 minutes	9:02pm	<20	39	Night 38	Lapse / 2.0 / 155	Train (37), traffic (34), insects (22), WCC (<20)	No	13/05/02021
R96	26 April 2021	60 minutes	10:13pm	<20	31	Night 38	Lapse / 0.6 / 141	Insects (29), train (27), WCC (<20)	No	13/05/02021
R98	26 April 2021	60 minutes	11:23pm	<20	34	Night 38	Lapse / 0.5 / 096	Insects (33), wind (27), WCC (<20)	No	13/05/02021
R57	27 April 2021	60 minutes	1:11am	<20	45	Night 35	Lapse / 1.0 / 131	Insects (43), trains (39), traffic (36), WCC (<20)	No	13/05/02021

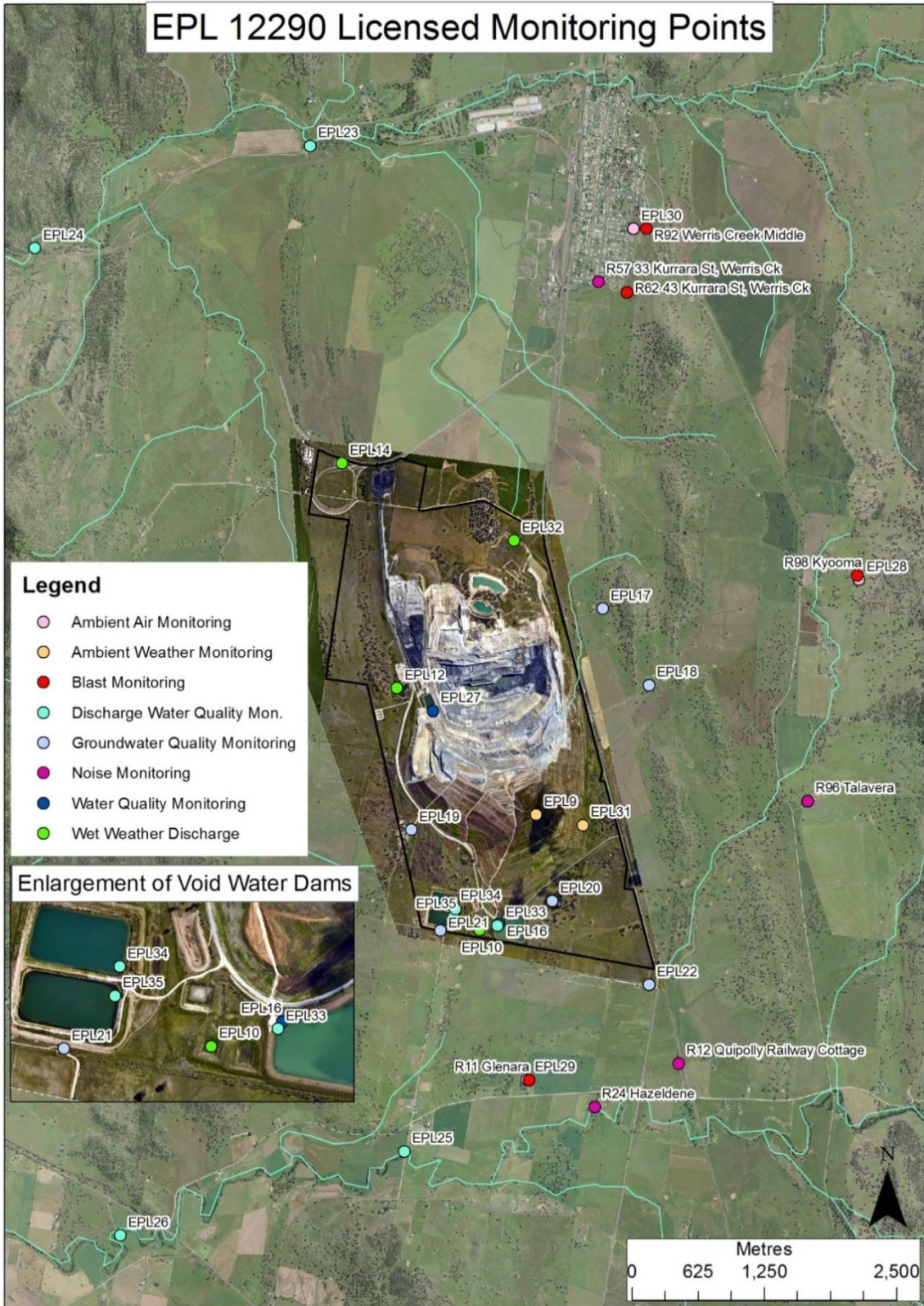
NM = Not Measurable. This denotes noise from the mine was audible at low levels however cannot be quantified.

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	5	99.2	100.4	120.0	No	30/04/2021
	Blast Vibration	mm/s	Every Blast	5	0.11	0.17	10.0	No	30/04/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	99.6	105.6	120.0	No	30/04/2021
	Blast Vibration	mm/s	Every Blast	5	0.58	0.72	10.0	No	30/04/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	100.7	105.1	120.0	No	30/04/2021
	Blast Vibration	mm/s	Every Blast	5	0.50	0.67	10.0	No	30/04/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	102.2	107.4	120.0	No	30/04/2021
	Blast Vibration	mm/s	Every Blast	5	0.31	0.41	10.0	No	30/04/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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: MAY 2021

Obtained Date: 15/06/2021

Publication Date: 15/06/2021

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 ³	Every 6 days	5	27/05/2021	10/06/2021	2.9	3.9	4.5	4.6
	Solid Particles	g/m ² /month	Continuous	1	20/05/2021	10/06/2021	0.2	0.2	0.2	0.2
29	PM10	µg/m ³	Every 6 days	5	27/05/2021	10/06/2021	3.5	8.3	6.2	20.8
	Solid Particles	g/m ² /month	Continuous	1	20/05/2021	10/06/2021	NR	NR	NR	NR
30	PM10	µg/m ³	Continuous	Continuous	31/05/2021	01/06/2021	5.6	10.1	10.1	18.2
	Solid Particles	g/m ² /month	Continuous	1	20/05/2021	10/06/2021	0.4	0.4	0.4	0.4
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*	-	-	-	-	-	-



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



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

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



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 dissolved solids	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-

*NR (EPL ID 28, 29 and 30) = sample contaminated with high level of organic matter (insects, vegetation, bird droppings, etc)

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	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
33^	Electrical Conductivity	mg/L	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	mg/L	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	mg/L	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)

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	1	06/05/2021	14/05/2021	1650	1650	1650	1650
	Nitrate	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	0.38	0.38	0.38	0.38
	Nitrogen (Total)	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	0.4	0.4	0.4	0.4
	Oil and Grease	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	06/05/2021	14/05/2021	7.98	7.98	7.98	7.98
	Phosphorus (Total)	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	<5	<5	<5	<5
27	Conductivity	µS/cm	Every 3 Months	1	06/05/2021	14/05/2021	1620	1620	1620	1620
	Nitrate	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	0.19	0.19	0.19	0.19
	Nitrogen (Total)	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	0.2	0.2	0.2	0.2
	Oil and Grease	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	06/05/2021	14/05/2021	8.05	8.05	8.05	8.05
	Phosphorus (Total)	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	06/05/2021	14/05/2021	18	18	18	18
17	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*	-	-	-	-	-	-

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	19 May 2021	60 minutes	10:00am	N/A	53	Day 37	1.4 / 324	Birds (53), traffic (43), WCC (22)	No	11/06/2021
R12	19 May 2021	60 minutes	11:08am	N/A	39	Day 38	1.5 / 338	Traffic (38), birds (32), WCC (26)	No	11/06/2021
R96	19 May 2021	60 minutes	12:15pm	N/A	38	Day 38	2.8 / 267	Tractor (35), birds (35), WCC (<20)	No	11/06/2021
R98	19 May 2021	60 minutes	1:22pm	N/A	42	Day 36	2.1 / 242	Tractor (40), birds (36), dogs (30), WCC (26)	No	11/06/2021
R57	19 May 2021	60 minutes	3:15pm	N/A	52	Day 35	0.9 / 179	Traffic (51), trains (42), birds (42), WCC (<20)	No	11/06/2021
R24	19 May 2021	60 minutes	9:18pm	25	56	Night 37	+4.8 / 0.7 / 014	Traffic (55), train (49), WCC (23)	No	11/06/2021
R12	19 May 2021	60 minutes	10:27pm	27	43	Night 38	+5.4 / 0.5 / 117	Traffic (42), frogs (29), WCC (23)	No	11/06/2021
R96	19 May 2021	60 minutes	11:41pm	38	45	Night 38	+4.4 / 1.1 / 278	Birds (44), WCC (36)	No	11/06/2021
R98	20 May 2021	60 minutes	12:49am	39	47	Night 38	+3.5 / 0.0 / 149	Dog (45), birds (39), WCC (37) , insects (33)	No	11/06/2021
R57	19 May 2021	60 minutes	7:02pm	33	48	Night 35	+5.8 / 0.2 / 296	Traffic (48), insects (36), WCC (28)	No	11/06/2021

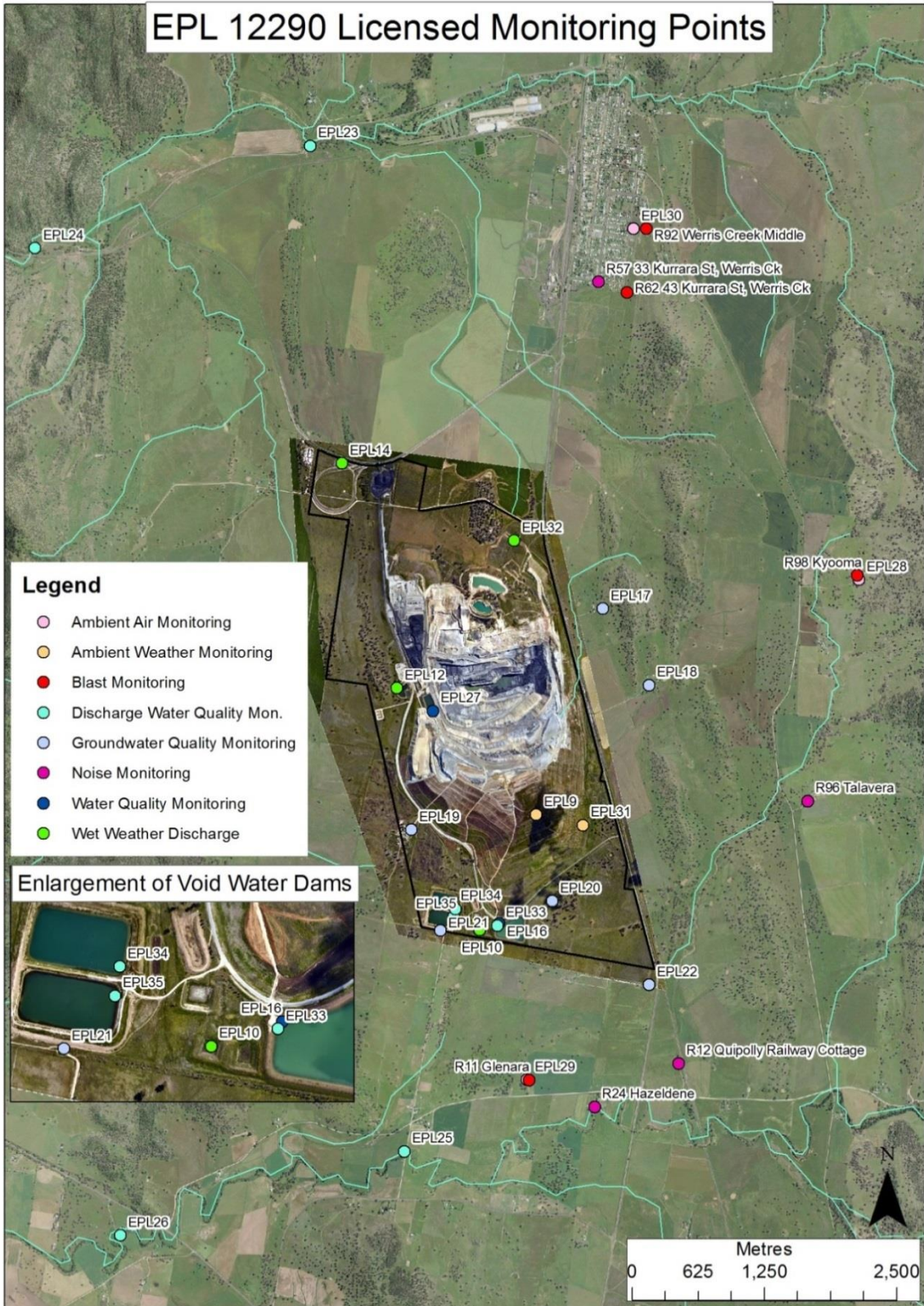
NM = Not Measurable. This denotes noise from the mine was audible at low levels however cannot be quantified.

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	5	105.3	115.3	120.0	No	31/05/2021
	Blast Vibration	mm/s	Every Blast	5	0.09	0.14	10.0	No	31/05/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	101.4	110.3	120.0	No	31/05/2021
	Blast Vibration	mm/s	Every Blast	5	0.45	0.53	10.0	No	31/05/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	104.2	115.9	120.0	No	31/05/2021
	Blast Vibration	mm/s	Every Blast	5	0.29	0.40	10.0	No	31/05/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	104.0	110.9	120.0	No	31/05/2021
	Blast Vibration	mm/s	Every Blast	5	0.20	0.31	10.0	No	31/05/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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: JUNE 2021

Obtained Date: 20/07/2021

Publication Date: 20/07/2021

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 ³	Every 6 days	5	26/06/2021	08/07/2021	0.4	3.1	0.9	10.4
	Solid Particles	g/m ² /month	Continuous	1	18/06/2021	13/07/2021	0.4	0.4	0.4	0.4
29	PM10	µg/m ³	Every 6 days	5	26/06/2021	08/07/2021	0.8	9.9	1.6	40.7
	Solid Particles	g/m ² /month	Continuous	1	18/06/2021	13/07/2021	0.8	0.8	0.8	0.8
30	PM10	µg/m ³	Continuous	Continuous	30/6/2021	01/07/2021	-3.8	6.0	7.1	18.4
	Solid Particles	g/m ² /month	Continuous	1	18/06/2021	13/07/2021	0.3	0.3	0.3	0.3
10	Conductivity	µS/cm	Special Frequency 1	1	15/06/2021	28/06/2021	390	390	390	390
	Nitrate	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	1.56	1.56	1.56	1.56
	Nitrogen (Total)	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	3.4	3.4	3.4	3.4
	Phosphorus (Total)	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	0.05	0.05	0.05	0.05
	Reactive Phosphorus	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	0.03	0.03	0.03	0.03
12	Conductivity	µS/cm	Special Frequency 1	1	15/06/2021	28/06/2021	600	600	600	600
	Nitrate	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	2.94	2.94	2.94	2.94
	Nitrogen (Total)	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	4.4	4.4	4.4	4.4
	Phosphorus (Total)	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	0.15	0.15	0.15	0.15
	Reactive Phosphorus	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	<0.01	<0.01	<0.01	<0.01
14	Conductivity	µS/cm	Special Frequency 1	1	11/06/2021	24/06/2021	220	220	220	220

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
	Nitrate	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	1.5	1.5	1.5	1.5
	Nitrogen (Total)	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	3.3	3.3	3.3	3.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	0.63	0.63	0.63	0.63
	Reactive Phosphorus	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	0.6	0.6	0.6	0.6
14	Conductivity	µS/cm	Special Frequency 1	1	16/6/2021	28/06/2021	420	420	420	420
	Nitrate	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	1.21	1.21	1.21	1.21
	Nitrogen (Total)	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	2	2	2	2
	Phosphorus (Total)	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	0.24	0.24	0.24	0.24
	Reactive Phosphorus	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	0.14	0.14	0.14	0.14
32	Conductivity	µS/cm	Special Frequency 1	1	16/6/2021	28/06/2021	460	460	460	460
	Nitrate	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	1.27	1.27	1.27	1.27
	Nitrogen (Total)	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	2	2	2	2
	Oil and Grease	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 1	1	16/6/2021	28/06/2021	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	0.16	0.16	0.16	0.16
	Reactive Phosphorus	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	0.06	0.06	0.06	0.06
23	Total Suspended Solids	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	11	11	11	11
	Conductivity	µS/cm	Special Frequency 2	1	11/06/2021	24/06/2021	260	260	260	260
	Nitrate	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	2.57	2.57	2.57	2.57
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	4.8	4.8	4.8	4.8
	Oil and Grease	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	11/06/2021	24/06/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	0.78	0.78	0.78	0.78
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	0.31	0.31	0.31	0.31
23	Total Suspended Solids	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	70	70	70	70
23	Conductivity	µS/cm	Special Frequency 2	1	16/6/2021	28/06/2021	460	460	460	460



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
	Nitrate	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	1.15	1.15	1.15	1.15
	Nitrogen (Total)	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	1.8	1.8	1.8	1.8
	Oil and Grease	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	16/6/2021	28/06/2021	8.1	8.1	8.1	8.1
	Phosphorus (Total)	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	0.24	0.24	0.24	0.24
	Reactive Phosphorus	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	0.13	0.13	0.13	0.13
	Total Suspended Solids	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	9	9	9	9
24	Conductivity	µS/cm	Special Frequency 2	1	11/06/2021	24/06/2021	220	220	220	220
	Nitrate	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	1.28	1.28	1.28	1.28
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	2.5	2.5	2.5	2.5
	Oil and Grease	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	11/06/2021	24/06/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	0.42	0.42	0.42	0.42
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	0.32	0.32	0.32	0.32
	Total Suspended Solids	mg/L	Special Frequency 2	1	11/06/2021	24/06/2021	43	43	43	43
24	Conductivity	µS/cm	Special Frequency 2	1	16/6/2021	28/06/2021	700	700	700	700
	Nitrate	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	1.35	1.35	1.35	1.35
	Nitrogen (Total)	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	2	2	2	2
	Oil and Grease	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	16/6/2021	28/06/2021	8.1	8.1	8.1	8.1
	Phosphorus (Total)	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	0.25	0.25	0.25	0.25
	Reactive Phosphorus	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	0.18	0.18	0.18	0.18
	Total Suspended Solids	mg/L	Special Frequency 2	1	16/6/2021	28/06/2021	9	9	9	9
25	Conductivity	µS/cm	Special Frequency 2	1	15/06/2021	28/06/2021	300	300	300	300
	Nitrate	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.39	0.39	0.39	0.39

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
	Nitrogen (Total)	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	1.6	1.6	1.6	1.6
	Oil and Grease	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	15/06/2021	28/06/2021	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.17	0.17	0.17	0.17
	Reactive Phosphorus	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.1	0.1	0.1	0.1
	Total Suspended Solids	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	7	7	7	7
26	Conductivity	µS/cm	Special Frequency 2	1	15/06/2021	28/06/2021	330	330	330	330
	Nitrate	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.41	0.41	0.41	0.41
	Nitrogen (Total)	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	1.7	1.7	1.7	1.7
	Oil and Grease	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	15/06/2021	28/06/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.18	0.18	0.18	0.18
	Reactive Phosphorus	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	0.1	0.1	0.1	0.1
33*	Total Suspended Solids	mg/L	Special Frequency 2	1	15/06/2021	28/06/2021	8	8	8	8
	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*	-	-	-	-	-	-	

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

*NR (EPL ID 28, 29 and 30) = sample contaminated with high level of organic matter (insects, vegetation, bird droppings, etc)

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	15/06/2021	28/06/2021	4	4	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	9	9	10	No
	pH	pH	Special Frequency 1	1	15/06/2021	28/06/2021	8.2	8.2	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	10	10	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	15/06/2021	28/06/2021	6	6	10	No
	pH	pH	Special Frequency 1	1	15/06/2021	28/06/2021	7.9	7.9	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	76	76	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	11/06/2021	24/06/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	11/06/2021	24/06/2021	7.5	7.5	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	6	6	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	16/6/2021	28/06/2021	8	8	6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	11	11	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	16/6/2021	28/06/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	16/6/2021	28/06/2021	8.2	8.2	6.5-8.5	No
33^	Electrical Conductivity	mg/L	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
34	Electrical Conductivity	mg/L	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	mg/L	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

~ 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)

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

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	23 June 2021	60 minutes	10:03am	N/A	51	Day 37	8.1 / 006	Traffic (51), birds (37), WCC (<20)	No	07/07/2021
R12	23 June 2021	60 minutes	11:08am	N/A	46	Day 38	8.0 / 009	Traffic (46), WCC (24)	No	07/07/2021
R96	23 June 2021	60 minutes	12:19pm	N/A	51	Day 38	7.3 / 002	Birds (51), WCC (23)	No	07/07/2021
R98	23 June 2021	60 minutes	1:26pm	N/A	48	Day 36	6.5 / 352	Birds (48), traffic (31), WCC (<20)	No	07/07/2021
R57	23 June 2021	60 minutes	3:19pm	N/A	48	Day 35	10.3 / 001	Trains (45), traffic (43), birds (39), residential (37), WCC (<20)	No	07/07/2021
R24	23 June 2021	60 minutes	9:15pm	27	53	Night 37	Lapse / 3.2 / 005	Insects (50), traffic (47), trains (46), WCC (23)	No	07/07/2021
R12	23 June 2021	60 minutes	10:23pm	28	47	Night 38	Lapse / 3.6 / 002	Traffic (47), WCC (25)	No	07/07/2021
R96	23 June 2021	60 minutes	11:39pm	29	35	Night 38	Lapse / 4.0 / 008	Traffic (34), WCC (25)	No	07/07/2021
R98	24 June 2021	60 minutes	12:46am	34	35	Night 38	Lapse / 5.1 / 016	Dogs (33), WCC (31)	No	07/07/2021
R57	23 June 2021	60 minutes	7:03pm	<20	54	Night 35	Lapse / 1.8 / 321	Traffic (53), train (44), insects (40), WCC (<20)	No	07/07/2021

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

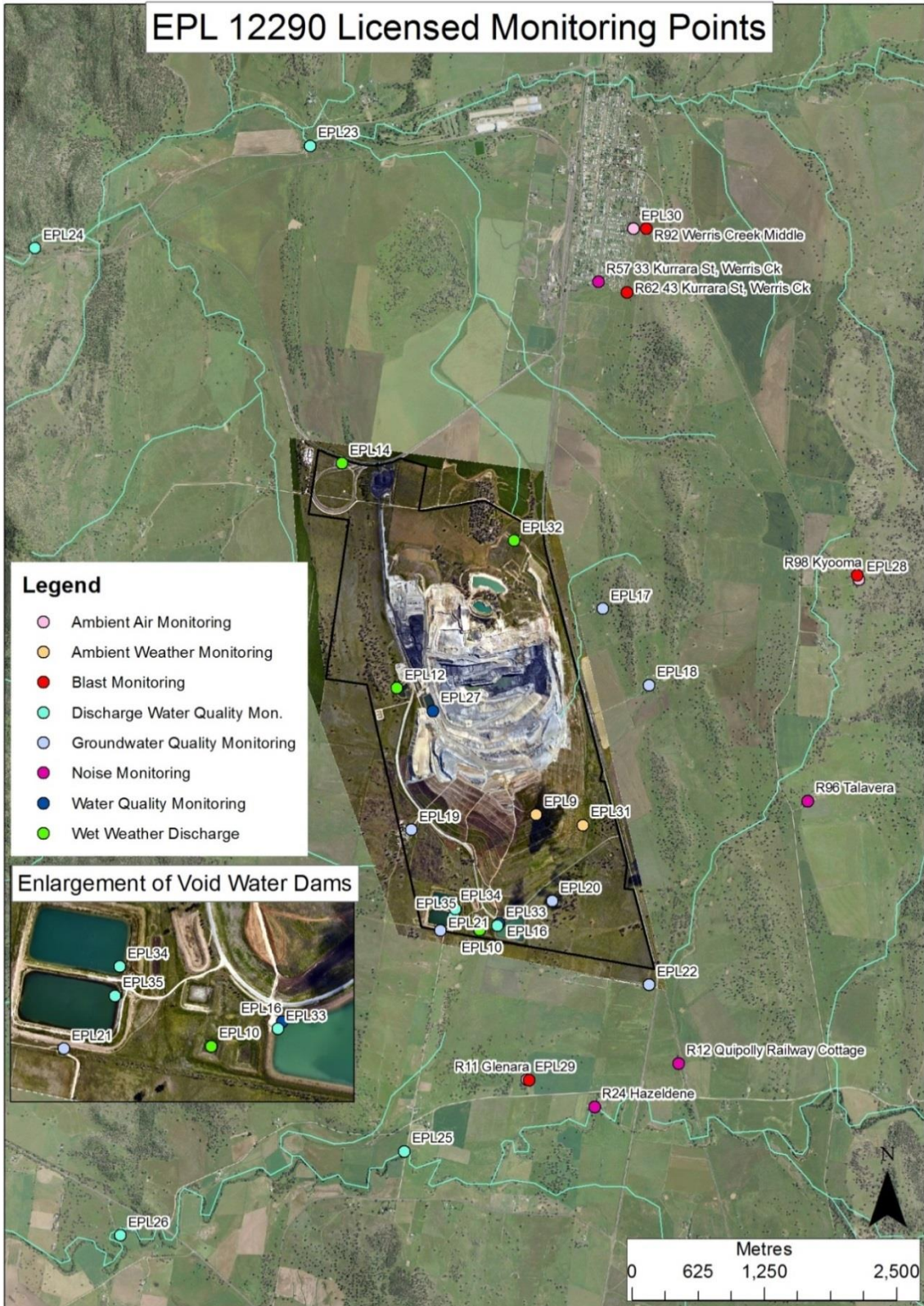
IA = Inaudible.

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	5	100.1	103.0	120.0	No	30/06/2021
	Blast Vibration	mm/s	Every Blast	5	0.13	0.23	10.0	No	30/06/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	99.2	102.4	120.0	No	30/06/2021
	Blast Vibration	mm/s	Every Blast	5	1.06	1.98	10.0	No	30/06/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	103.1	111.9	120.0	No	30/06/2021
	Blast Vibration	mm/s	Every Blast	5	0.49	0.76	10.0	No	30/06/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	101.3	107.8	120.0	No	30/06/2021
	Blast Vibration	mm/s	Every Blast	5	0.35	0.79	10.0	No	30/06/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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 2021

Obtained Date: 20/08/2021

Publication Date: 20/08/2021

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 ³	Every 6 days	5	26/07/2021	05/08/2021	0.9	3.0	2.7	5.8
	Solid Particles	g/m ² /month	Continuous	1	19/07/2021	29/07/2021	0.3	0.3	0.3	0.3
29	PM10	µg/m ³	Every 6 days	5	26/07/2021	05/08/2021	1.0	4.5	5.1	8.8
	Solid Particles	g/m ² /month	Continuous	1	19/07/2021	29/07/2021	0.7	0.7	0.7	0.7
30	PM10	µg/m ³	Continuous	Continuous	31/07/2021	01/08/2021	5.5	12.0	11.4	19.7
	Solid Particles	g/m ² /month	Continuous	1	19/07/2021	29/07/2021	0.1	0.1	0.1	0.1
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*	-	-	-	-	-	-



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
	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*	-	-	-	-	-	-
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) Reactive Phosphorus	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
24	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) Oil and Grease	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
Phosphorus (Total)	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
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
26	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
33*	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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

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



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 dissolved solids	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-

*NR (EPL ID 28, 29 and 30) = sample contaminated with high level of organic matter (insects, vegetation, bird droppings, etc)

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	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			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	mg/L	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	mg/L	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	mg/L	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)

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

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	21 July 2021	60 minutes	8:46am	N/A	42	Day 37	0.7 / 227	Traffic (41), birds (32), WCC (23)	No	06/08/2021
R12	21 July 2021	60 minutes	10:58am	N/A	38	Day 38	1.4 / 283	Traffic (37), birds (31), WCC (27)	No	06/08/2021
R96	21 July 2021	60 minutes	12:06pm	N/A	35	Day 38	1.9 / 308	Birds (34), traffic (24), WCC (22)	No	06/08/2021
R98	21 July 2021	60 minutes	1:13pm	N/A	37	Day 36	2.2 / 314	Birds (34), residential (34), WCC (<20)	No	06/08/2021
R57	21 July 2021	60 minutes	2:42pm	N/A	45	Day 35	5.1 / 353	Traffic (43), birds (41), residential (26), WCC (<20)	No	06/08/2021
R24	21 July 2021	60 minutes	8:09pm	<20	43	Night 37	+0.9 / 1.5 / 000	Traffic (43), birds (32), cows (23), WCC (<20)	No	06/08/2021
R12	21 July 2021	60 minutes	9:14pm	<20	37	Night 38	+0.9 / 0.0 / 238	Traffic (36), frogs (31), WCC (<20)	No	06/08/2021
R96	21 July 2021	60 minutes	9:57pm	33	35	Night 38	+1.1 / 1.2 / 334	Traffic (34), WCC (28) , frogs (22)	No	06/08/2021
R98	21 July 2021	60 minutes	8:27pm	42	36	Night 38	+0.1 / 0.9 / 202	WCC (34) , frogs (32)	No	06/08/2021
R57	21 July 2021	60 minutes	7:09pm	39	47	Night 35	Lapse / 2.8 / 212	Trains (44), traffic (43), insects (32), WCC (30)	No	06/08/2021

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

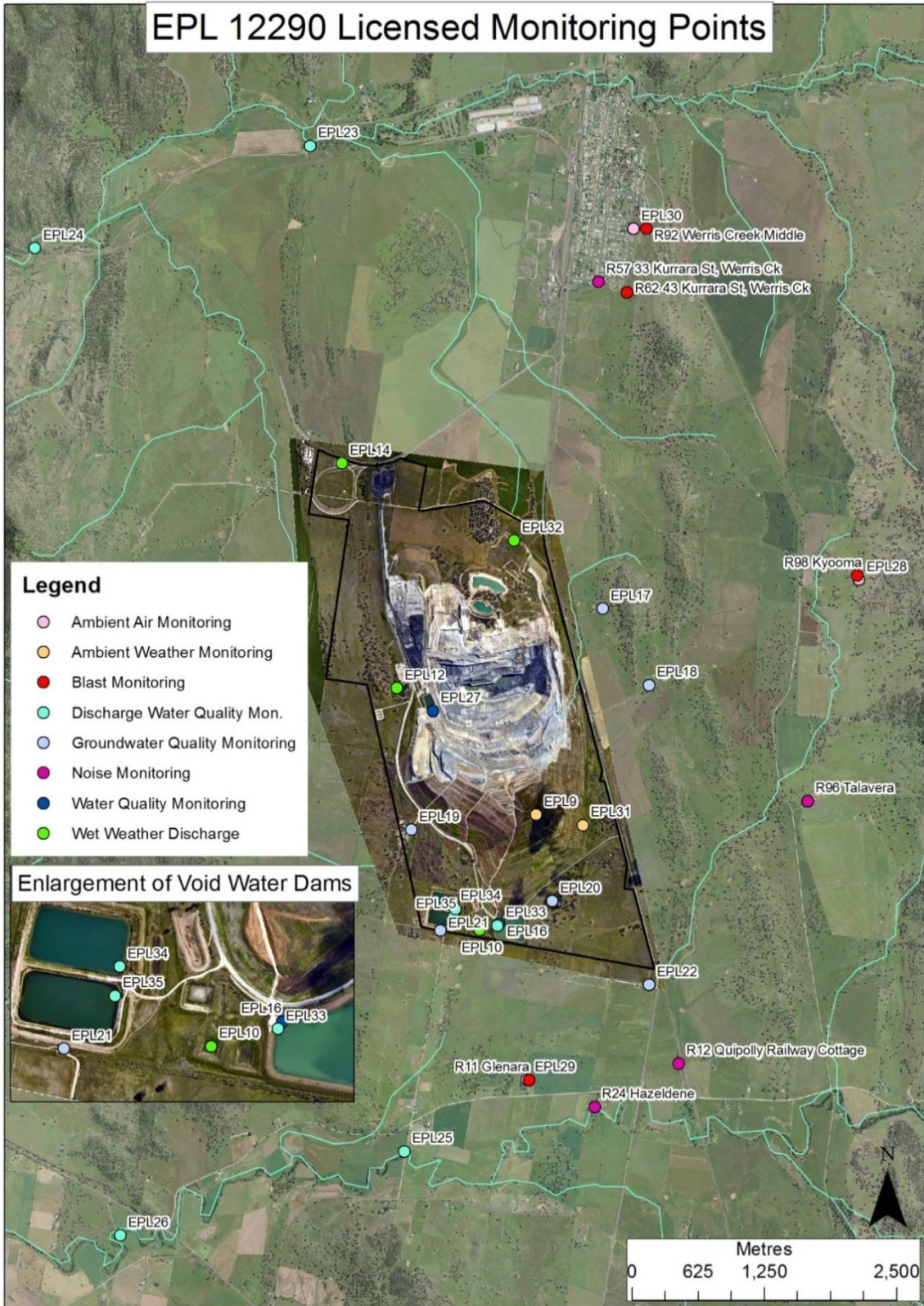
IA = Inaudible.

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	4	100.8	107.6	120.0	No	30/07/2021
	Blast Vibration	mm/s	Every Blast	4	0.15	0.22	10.0	No	30/07/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	4	103.6	107.9	120.0	No	30/07/2021
	Blast Vibration	mm/s	Every Blast	4	0.85	1.72	10.0	No	30/07/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	4	106.0	115.0	120.0	No	30/07/2021
	Blast Vibration	mm/s	Every Blast	4	0.49	0.55	10.0	No	30/07/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	4	102.9	111.7	120.0	No	30/07/2021
	Blast Vibration	mm/s	Every Blast	4	0.33	0.35	10.0	No	30/07/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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 2021

Obtained Date: 24/09/2021

Publication Date: 24/09/2021

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 ³	Every 6 days	6	31/08/2021	16/09/2021	2.1	5.7	5.8	9.0
	Solid Particles	g/m ² /month	Continuous	1	18/08/2021	14/09/2021	1.3	1.3	1.3	1.3
29	PM10	µg/m ³	Every 6 days	6	31/08/2021	16/09/2021	2.0	8.5	8.5	15.9
	Solid Particles	g/m ² /month	Continuous	1	18/08/2021	14/09/2021	0.3	0.3	0.3	0.3
30	PM10	µg/m ³	Continuous	Continuous	31/08/2021	01/09/2021	6.5	11	10.6	15.6
	Solid Particles	g/m ² /month	Continuous	1	18/08/2021	14/09/2021	0.1	0.1	0.1	0.1
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*	-	-	-	-	-	-



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
	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*	-	-	-	-	-	-
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) Reactive Phosphorus	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
24	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) Oil and Grease	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
Phosphorus (Total)	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
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
26	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
33*	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-	

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

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



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 dissolved solids	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-

*NR (EPL ID 28, 29 and 30) = sample contaminated with high level of organic matter (insects, vegetation, bird droppings, etc)

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	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			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	mg/L	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	mg/L	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	mg/L	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)

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	1	30/08/2021	07/09/2021	1580	1580	1580	1580
	Nitrate	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	0.32	0.32	0.32	0.32
	Nitrogen (Total)	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	0.3	0.3	0.3	0.3
	Oil and Grease	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	30/08/2021	07/09/2021	7.62	7.62	7.62	7.62
	Phosphorus (Total)	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	14	14	14	14
27	Conductivity	µS/cm	Every 3 Months	1	30/08/2021	07/09/2021	1610	1610	1610	1610
	Nitrate	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	0.25	0.25	0.25	0.25
	Nitrogen (Total)	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	0.2	0.2	0.2	0.2
	Oil and Grease	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	30/08/2021	07/09/2021	7.8	7.8	7.8	7.8
	Phosphorus (Total)	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	30/08/2021	07/09/2021	16	16	16	16
17	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*	-	-	-	-	-	-

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	30 August 2021	60 minutes	1:45 pm	N/A	40	Day 37	2.2 / 296	Traffic (38), birds (35), WCC (<20)	No	13/09/2021
R12	30 August 2021	60 minutes	3:37 pm	N/A	32	Day 38		Traffic (32), birds (24), WCC (<20)	No	13/09/2021
R96	30 August 2021	60 minutes	12:38 pm	N/A	35	Day 38	2.5 / 343	Birds (35), traffic (28), WCC (21)	No	13/09/2021
R98	30 August 2021	60 minutes	1:36 pm	N/A	37	Day 36	3.1 / 282	Birds (37), WCC (23)	No	13/09/2021
R57	30 August 2021	60 minutes	3:27 pm	N/A	51	Day 35	1.9 / 279	Traffic (50), birds (42), residential (28), WCC (<20)	No	13/09/2021
R24	30 August 2021	60 minutes	7:02 pm	<20	41	Night 37	+1.4 / 1.0 / 003	Traffic (41), birds (32), WCC (<20)	No	13/09/2021
R12	30 August 2021	60 minutes	10:13 pm	<20	43	Night 38	+0.4 / 1.9 / 338	Traffic (40), frogs (38), trains (36) WCC (<20)	No	13/09/2021
R96	30 August 2021	60 minutes	7:04 pm	31	33	Night 38	+1.4 / 1.0 / 003	Frogs (31), WCC (27) , traffic (24)	No	13/09/2021
R98	30 August 2021	60 minutes	8:13 pm	29	36	Night 38	+1.0 / 1.2 / 264	Frogs (32), WCC (26)	No	13/09/2021
R57	30 August 2021	60 minutes	10:06 pm	<20	40	Night 35	Lapse / 2.5 / 310	Trains (37), traffic (37), frogs (34), WCC (<20)	No	13/09/2021

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

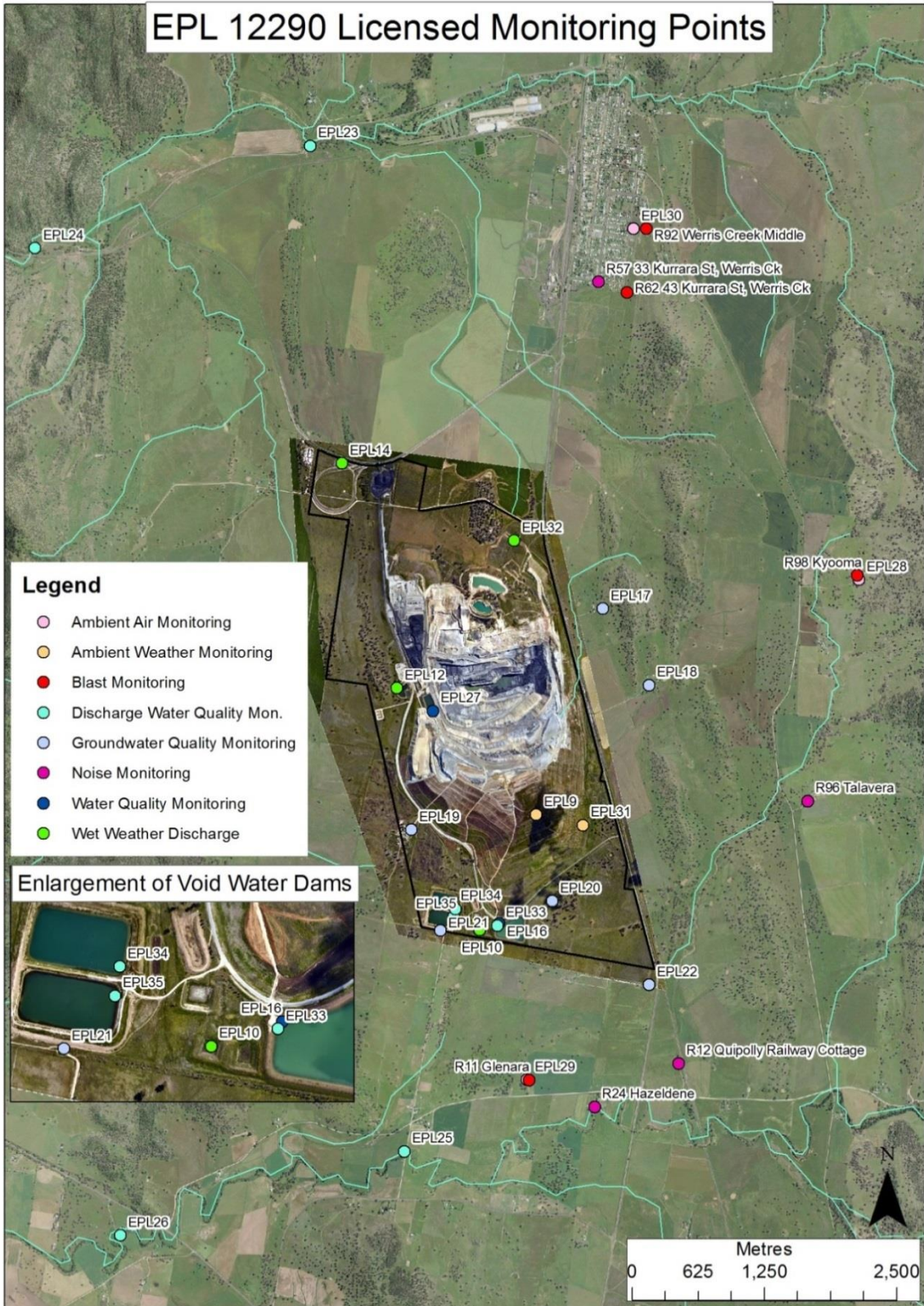
IA = Inaudible.

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	5	98.3	106.3	120.0	No	31/08/2021
	Blast Vibration	mm/s	Every Blast	5	0.13	0.16	10.0	No	31/08/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	100.0	105.7	120.0	No	31/08/2021
	Blast Vibration	mm/s	Every Blast	5	1.05	1.45	10.0	No	31/08/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	100.0	105.8	120.0	No	31/08/2021
	Blast Vibration	mm/s	Every Blast	5	0.63	1.14	10.0	No	31/08/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	99.7	100.9	120.0	No	31/08/2021
	Blast Vibration	mm/s	Every Blast	5	0.50	1.13	10.0	No	31/08/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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: SEPTEMBER 2021

Obtained Date: 29/10/2021

Publication Date: 29/10/2021

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 ³	Every 6 days	5	30/09/2021	14/10/2021	1.2	9.3	6.5	25
	Solid Particles	g/m ² /month	Continuous	1	17/09/2021	12/10/2021	1.0	1.0	1.0	1.0
29	PM10	µg/m ³	Every 6 days	5	30/09/2021	14/10/2021	3.6	10.4	11.5	20.4
	Solid Particles	g/m ² /month	Continuous	1	17/09/2021	12/10/2021	2.0	2.0	2.0	2.0
30	PM10	µg/m ³	Continuous	Continuous	30/09/2021	01/10/2021	5.2	10.4	9.5	17
	Solid Particles	g/m ² /month	Continuous	1	17/09/2021	12/10/2021	0.5	0.5	0.5	0.5
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*	-	-	-	-	-	-



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
	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*	-	-	-	-	-	-
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) Reactive Phosphorus	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
24	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) Oil and Grease	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-	

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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
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
26	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
33*	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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

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



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 dissolved solids	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-

*NR (EPL ID 28, 29 and 30) = sample contaminated with high level of organic matter (insects, vegetation, bird droppings, etc)

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	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			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	mg/L	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	mg/L	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	mg/L	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)

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	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*	-	-	-	-	-	-
17	Conductivity	µS/cm	Every 6 Months	1	28/09/2021	05/10/2021	Dry	Dry	Dry	Dry
	Nitrate	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	Dry	Dry	Dry	Dry
	Nitrogen (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	Dry	Dry	Dry	Dry
	pH	pH	Every 6 Months	1	28/09/2021	05/10/2021	Dry	Dry	Dry	Dry
	Phosphorus (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	Dry	Dry	Dry	Dry
	Reactive Phosphorus	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	Dry	Dry	Dry	Dry

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	1	28/09/2021	05/10/2021	Dry	Dry	Dry	Dry
18	Conductivity	µS/cm	Every 6 Months	1	28/09/2021	05/10/2021	393	393	393	393
	Nitrate	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	0.43	0.43	0.43	0.43
	Nitrogen (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	0.5	0.5	0.5	0.5
	pH	pH	Every 6 Months	1	28/09/2021	05/10/2021	6.67	6.67	6.67	6.67
	Phosphorus (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	0.01	0.01	0.01	0.01
	Reactive Phosphorus	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	<0.01	<0.01	<0.01	<0.01
	Standing Water Level	Metres	Every 6 Months	1	28/09/2021	05/10/2021	49.26	49.26	49.26	49.26
19	Conductivity	µS/cm	Every 6 Months	1	28/09/2021	05/10/2021	2510	2510	2510	2510
	Nitrate	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	10.4	10.4	10.4	10.4
	Nitrogen (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	11.2	11.2	11.2	11.2
	pH	pH	Every 6 Months	1	28/09/2021	05/10/2021	7.47	7.47	7.47	7.47
	Phosphorus (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	0.02	0.02	0.02	0.02
	Reactive Phosphorus	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	0.02	0.02	0.02	0.02
	Standing Water Level	Metres	Every 6 Months	1	28/09/2021	05/10/2021	19.18	19.18	19.18	19.18
20	Conductivity	µS/cm	Every 6 Months	1	28/09/2021	05/10/2021	1050	1050	1050	1050
	Nitrate	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	3.84	3.84	3.84	3.84
	Nitrogen (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	4.4	4.4	4.4	4.4
	pH	pH	Every 6 Months	1	28/09/2021	05/10/2021	8.08	8.08	8.08	8.08
	Phosphorus (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	0.09	0.09	0.09	0.09
	Reactive Phosphorus	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	0.09	0.09	0.09	0.09
	Standing Water Level	Metres	Every 6 Months	1	28/09/2021	05/10/2021	18.62	18.62	18.62	18.62
21	Conductivity	µS/cm	Every 6 Months	1	28/09/2021	05/10/2021	2060	2060	2060	2060
	Nitrate	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	0.95	0.95	0.95	0.95
	Nitrogen (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	1	1	1	1
	pH	pH	Every 6 Months	1	28/09/2021	05/10/2021	7.72	7.72	7.72	7.72
	Phosphorus (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	0.02	0.02	0.02	0.02

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	1	28/09/2021	05/10/2021	0.02	0.02	0.02	0.02
	Standing Water Level	Metres	Every 6 Months	1	28/09/2021	05/10/2021	11.4	11.4	11.4	11.4
22	Conductivity	µS/cm	Every 6 Months	1	28/09/2021	05/10/2021	TLTS	TLTS	TLTS	TLTS
	Nitrate	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	TLTS	TLTS	TLTS	TLTS
	Nitrogen (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	TLTS	TLTS	TLTS	TLTS
	pH	pH	Every 6 Months	1	28/09/2021	05/10/2021	TLTS	TLTS	TLTS	TLTS
	Phosphorus (Total)	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	TLTS	TLTS	TLTS	TLTS
	Reactive Phosphorus	mg/L	Every 6 Months	1	28/09/2021	05/10/2021	TLTS	TLTS	TLTS	TLTS
	Standing Water Level	Metres	Every 6 Months	1	28/09/2021	05/10/2021	16.21	16.21	16.21	16.21

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	16 September 2021	60 minutes	1:49 pm	N/A	40	Day 37	1.8 / 189	Traffic (39), birds (33), WCC (<20)	No	14/10/2021
R12	16 September 2021	60 minutes	3:32 pm	N/A	35	Day 38	2.6 / 187	Traffic (34), birds (27), WCC (<20)	No	14/10/2021
R96	16 September 2021	60 minutes	12:34 pm	N/A	33	Day 38	1.4 / 229	Birds (32), traffic (24), WCC (23)	No	14/10/2021
R98	16 September 2021	60 minutes	1:33 pm	N/A	38	Day 40 ¹	1.2 / 194	Birds (37), dogs (29), WCC (25)	No	14/10/2021
R57	16 September 2021	60 minutes	3:22 pm	N/A	49	Day 35	2.3 / 192	Traffic (48), birds (39), residential (31), WCC (<20)	No	14/10/2021
R24	16 September 2021	60 minutes	7:04 pm	<20	47	Night 37	+1.8 / 2.0 / 136	Traffic (46), birds (38), WCC (<20)	No	14/10/2021
R12	16 September 2021	60 minutes	10:13 pm	<20	41	Night 38	+1.0 / 1.5 / 172	Frogs (38), traffic (36), trains (32) WCC (<20)	No	14/10/2021
R96	16 September 2021	60 minutes	7:01 pm	30	34	Night 37	+1.8 / 2.0 / 136	Frogs (32), birds (28), WCC (26)	No	14/10/2021
R98	16 September 2021	60 minutes	8:12 pm	27	35	Night 40 ¹	+0.9 / 1.5 / 138	Frogs (34), WCC (24) , dogs (21)	No	14/10/2021
R57	16 September 2021	60 minutes	10:04 pm	<20	39	Night 35	+0.8 / 1.7 / 174	Trains (37), traffic (32), frogs (27), WCC (<20)	No	14/10/2021

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

IA = Inaudible.

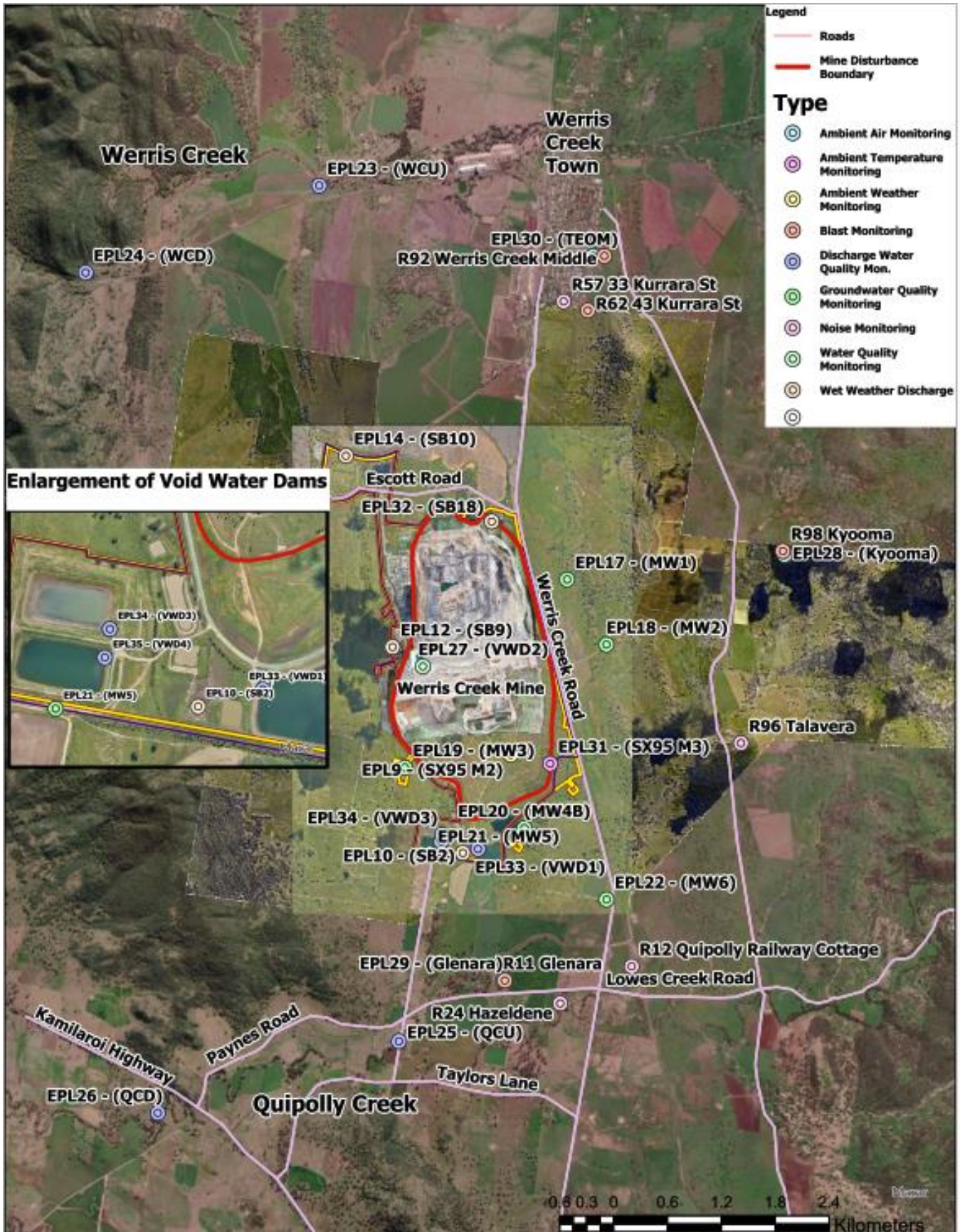
¹ **Private Agreement in place**

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	6	101.8	106.9	120.0	No	30/09/2021
	Blast Vibration	mm/s	Every Blast	6	0.13	0.15	10.0	No	30/09/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	6	103.1	106.4	120.0	No	30/09/2021
	Blast Vibration	mm/s	Every Blast	6	1.18	2.72	10.0	No	30/09/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	6	102.9	107.2	120.0	No	30/09/2021
	Blast Vibration	mm/s	Every Blast	6	0.52	0.72	10.0	No	30/09/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	6	99.5	104.2	120.0	No	30/09/2021
	Blast Vibration	mm/s	Every Blast	6	0.33	0.44	10.0	No	30/09/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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: OCTOBER 2021

Obtained Date: 16/11/2021

Publication Date: 16/11/2021

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 ³	Every 6 days	5	30/10/2021	15/11/2021	1.7	5.8	6.4	9.0
	Solid Particles	g/m ² /month	Continuous	1	19/10/2021	11/11/2021	1.0	1.0	1.0	1.0
29	PM10	µg/m ³	Every 6 days	5	30/10/2021	15/11/2021	1.5	6.6	8.1	9.8
	Solid Particles	g/m ² /month	Continuous	1	19/10/2021	11/11/2021	1.1	1.1	1.1	1.1
30	PM10	µg/m ³	Continuous	Continuous	31/10/2021	01/11/2021	-0.3	8.2	8.1	16.9
	Solid Particles	g/m ² /month	Continuous	1	19/10/2021	11/11/2021	0.5	0.5	0.5	0.5
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*	-	-	-	-	-	-



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
	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*	-	-	-	-	-	-
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) Reactive Phosphorus	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
24	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) Oil and Grease	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
Phosphorus (Total)	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
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
26	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
33*	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-



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

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



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 dissolved solids	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-

*NR (EPL ID 28, 29 and 30) = sample contaminated with high level of organic matter (insects, vegetation, bird droppings, etc)

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	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-			50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-			10	No
	pH	pH	Special Frequency 1	0*	-	-			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	mg/L	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	mg/L	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	mg/L	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)

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

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	28 October 2021	60 minutes	12:05pm	N/A	55	Day 37	1.4 / 249	Traffic (55), birds (34), WCC (<20)	No	09/11/2021
R12	28 October 2021	60 minutes	1:09pm	N/A	40	Day 38	1.9 / 238	Traffic (37), birds (36), insects (28), WCC (<20)	No	09/11/2021
R96	28 October 2021	60 minutes	3:05pm	N/A	36	Day 38	2.8 / 259	Traffic (35), birds (26), insects (25), WCC (<20)	No	09/11/2021
R98	28 October 2021	60 minutes	2:12pm	N/A	43	Day 40 ¹	0.4 / 309	Insects (43), residential (31), train (24), aeroplanes (22), WCC (<20) WCC	No	09/11/2021
R57	28 October 2021	60 minutes	10:14am	N/A	51	Day 35	6.2 / 000	Traffic (50), birds (43), residential (40), WCC (<20)	No	09/11/2021
R24	29 October 2021	60 minutes	12:30am	<20	53	Night 37	+2.5 / 4.7 / 345	Traffic (51), insects (47), trains (47), WCC (<20)	No	09/11/2021
R12	28 October 2021	60 minutes	11:26pm	24	43	Night 38	+0.9 / 3.3 / 349	Insects (43), traffic (31), WCC (20)	No	09/11/2021
R96	28 October 2021	60 minutes	10:14pm	<20	42	Night 37	+2.1 / 1.1 / 349	Insects (42), traffic (23). WCC (<20)	No	09/11/2021
R98	28 October 2021	60 minutes	9:02pm	26	43	Night 40 ¹	+2.1 / 0.9 / 181	Insects (42), dogs (37), WCC (23)	No	09/11/2021
R57	28 October 2021	60 minutes	7:00pm	28	50	Night 35	Lapse / 1.3 / 256	Traffic (47), residential (46), birds (42), WCC (25)	No	09/11/2021

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

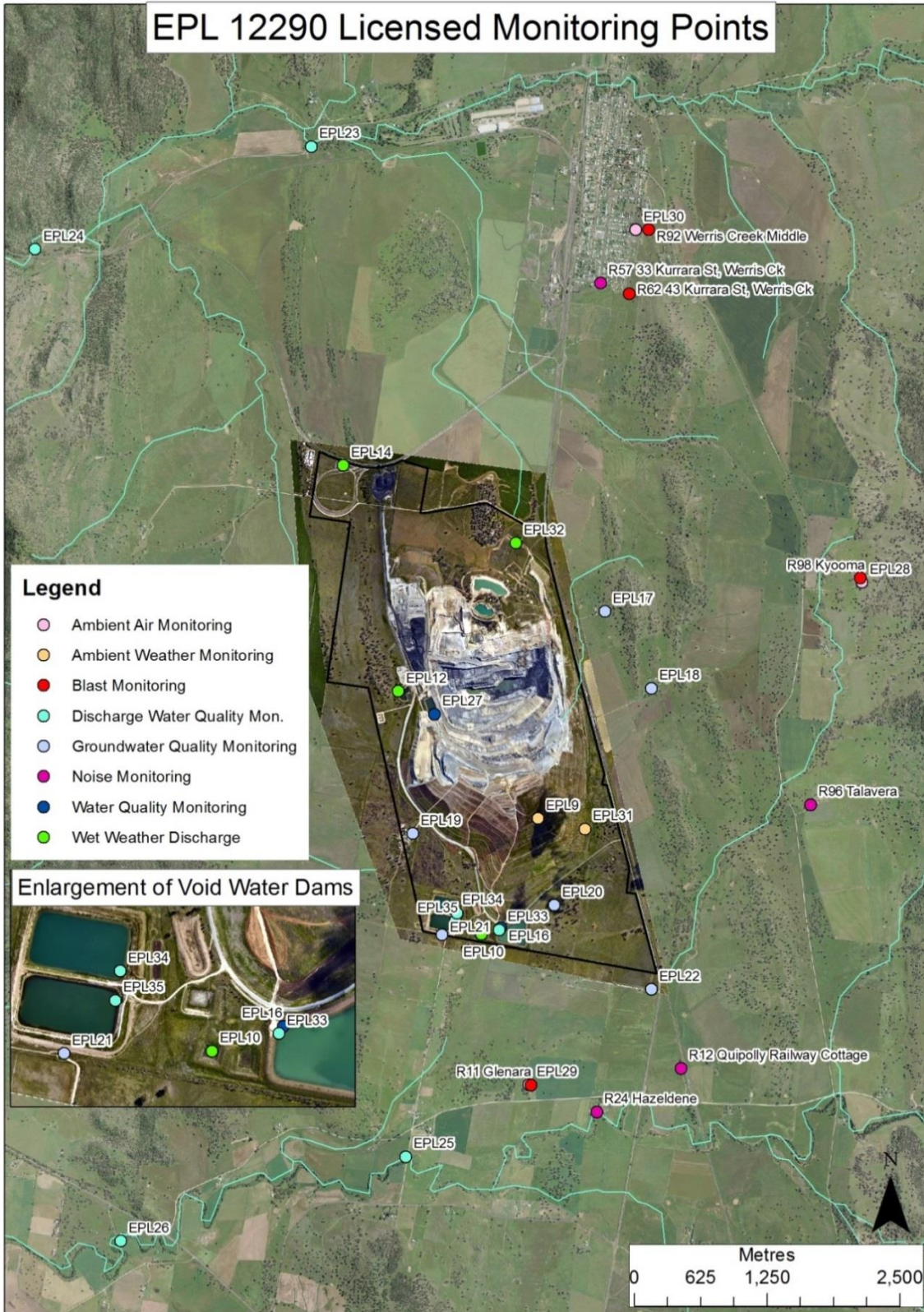
IA = Inaudible.

¹ Private Agreement in place

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	3	100.7	102.6	120.0	No	01/11/2021
	Blast Vibration	mm/s	Every Blast	3	0.18	0.21	10.0	No	01/11/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	3	103.9	105.9	120.0	No	01/11/2021
	Blast Vibration	mm/s	Every Blast	3	1.43	1.77	10.0	No	01/11/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	3	103.6	105.6	120.0	No	01/11/2021
	Blast Vibration	mm/s	Every Blast	3	1.00	1.30	10.0	No	01/11/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	3	100.7	101.9	120.0	No	01/11/2021
	Blast Vibration	mm/s	Every Blast	3	0.45	0.61	10.0	No	01/11/2021

WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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: NOVEMBER 2021

Obtained Date: 15/12/2020

Publication Date: 20/21/2020

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 ³	Every 6 days	5	29/11/2021	14/12/2021	2.8	4.3	4.2	5.5
	Solid Particles	g/m ² /month	Continuous	1	17/11/2021	29/11/2021	1.2	1.2	1.2	1.2
29	PM10	µg/m ³	Every 6 days	5	29/11/2021	14/12/2021	5.0	6.3	5.7	8.5
	Solid Particles	g/m ² /month	Continuous	1	17/11/2021	29/11/2021	0.6	0.6	0.6	0.6
30	PM10	µg/m ³	Continuous	Continuous	30/11/2021	01/12/2021	-2.2	6.1	4.1	28.7
	Solid Particles	g/m ² /month	Continuous	1	17/11/2021	29/11/2021	0.6	0.6	0.6	0.6
10	Conductivity	µS/cm	Special Frequency 1	1	04/11/2021	11/11/2021	550	550	550	550
	Nitrate	mg/L	Special Frequency 1	1	04/11/2021	11/11/2021	2.17	2.17	2.17	2.17
	Nitrogen (Total)	mg/L	Special Frequency 1	1	04/11/2021	11/11/2021	3.5	3.5	3.5	3.5
	Phosphorus (Total)	mg/L	Special Frequency 1	1	04/11/2021	11/11/2021	0.08	0.08	0.08	0.08
	Reactive Phosphorus	mg/L	Special Frequency 1	1	04/11/2021	11/11/2021	<0.01	<0.01	<0.01	<0.01
10	Conductivity	µS/cm	Special Frequency 1	1	18/11/2021	30/11/2021	1040	1040	1040	1040
	Nitrate	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	<0.01	<0.01	<0.01	<0.01
	Nitrogen (Total)	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	0.9	0.9	0.9	0.9
	Phosphorus (Total)	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	0.16	0.16	0.16	0.16
	Reactive Phosphorus	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	0.05	0.05	0.05	0.05
10	Conductivity	µS/cm	Special Frequency 1	1	24/11/2021	06/12/2021	380	380	380	380



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
	Nitrate	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	2.11	2.11	2.11	2.11
	Nitrogen (Total)	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	3.2	3.2	3.2	3.2
	Phosphorus (Total)	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	0.14	0.14	0.14	0.14
	Reactive Phosphorus	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	0.03	0.03	0.03	0.03
10	Conductivity	µS/cm	Special Frequency 1	1	26/11/2021	08/12/2021	200	200	200	200
	Nitrate	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	0.43	0.43	0.43	0.43
	Nitrogen (Total)	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	3.1	3.1	3.1	3.1
	Phosphorus (Total)	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	1.19	1.19	1.19	1.19
	Reactive Phosphorus	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	0.18	0.18	0.18	0.18
10	Conductivity	µS/cm	Special Frequency 1	1	29/11/2021	08/12/2021	170	170	170	170
	Nitrate	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	<0.01	<0.01	<0.01	<0.01
	Nitrogen (Total)	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	1.3	1.3	1.3	1.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	0.2	0.2	0.2	0.2
	Reactive Phosphorus	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	0.12	0.12	0.12	0.12
12	Conductivity	µS/cm	Special Frequency 1	1	18/11/2021	30/11/2021	510	510	510	510
	Nitrate	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	1.74	1.74	1.74	1.74
	Nitrogen (Total)	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	2.3	2.3	2.3	2.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	0.05	0.05	0.05	0.05
	Reactive Phosphorus	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	<0.01	<0.01	<0.01	<0.01
12	Conductivity	µS/cm	Special Frequency 1	1	24/11/2021	06/12/2021	410	410	410	410
	Nitrate	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	3.14	3.14	3.14	3.14
	Nitrogen (Total)	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	4.1	4.1	4.1	4.1
	Phosphorus (Total)	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	0.02	0.02	0.02	0.02
	Reactive Phosphorus	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	<0.01	<0.01	<0.01	<0.01
12	Conductivity	µS/cm	Special Frequency 1	1	26/11/2021	08/12/2021	300	300	300	300
	Nitrate	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	2.09	2.09	2.09	2.09
	Nitrogen (Total)	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	2.9	2.9	2.9	2.9
	Phosphorus (Total)	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	0.07	0.07	0.07	0.07

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
	Reactive Phosphorus	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	<0.01	<0.01	<0.01	<0.01
12	Conductivity	µS/cm	Special Frequency 1	1	29/11/2021	08/12/2021	380	380	380	380
	Nitrate	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	0.68	0.68	0.68	0.68
	Nitrogen (Total)	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	1.4	1.4	1.4	1.4
	Phosphorus (Total)	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	0.11	0.11	0.11	0.11
	Reactive Phosphorus	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	0.04	0.04	0.04	0.04
14	Conductivity	µS/cm	Special Frequency 1	1	22/11/2021	30/11/2021	150	150	150	150
	Nitrate	mg/L	Special Frequency 1	1	22/11/2021	30/11/2021	0.24	0.24	0.24	0.24
	Nitrogen (Total)	mg/L	Special Frequency 1	1	22/11/2021	30/11/2021	2.5	2.5	2.5	2.5
	Phosphorus (Total)	mg/L	Special Frequency 1	1	22/11/2021	30/11/2021	0.66	0.66	0.66	0.66
	Reactive Phosphorus	mg/L	Special Frequency 1	1	22/11/2021	30/11/2021	0.39	0.39	0.39	0.39
14	Conductivity	µS/cm	Special Frequency 1	1	24/11/2021	06/12/2021	310	310	310	310
	Nitrate	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	2.07	2.07	2.07	2.07
	Nitrogen (Total)	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	3.2	3.2	3.2	3.2
	Phosphorus (Total)	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	0.21	0.21	0.21	0.21
	Reactive Phosphorus	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	0.11	0.11	0.11	0.11
14	Conductivity	µS/cm	Special Frequency 1	1	26/11/2021	08/12/2021	110	110	110	110
	Nitrate	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	0.06	0.06	0.06	0.06
	Nitrogen (Total)	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	1.5	1.5	1.5	1.5
	Phosphorus (Total)	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	0.49	0.49	0.49	0.49
	Reactive Phosphorus	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	0.32	0.32	0.32	0.32
14	Conductivity	µS/cm	Special Frequency 1	1	29/11/2021	08/12/2021	330	330	330	330
	Nitrate	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	0.39	0.39	0.39	0.39
	Nitrogen (Total)	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	1.5	1.5	1.5	1.5
	Phosphorus (Total)	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	0.2	0.2	0.2	0.2
	Reactive Phosphorus	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	0.12	0.12	0.12	0.12
32	Conductivity	µS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-



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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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
23	Conductivity	µS/cm	Special Frequency 2	1	22/11/2021	30/11/2021	190	190	190	190
	Nitrate	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	0.17	0.17	0.17	0.17
	Nitrogen (Total)	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	2.1	2.1	2.1	2.1
	Oil and Grease	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	22/11/2021	30/11/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	0.49	0.49	0.49	0.49
	Reactive Phosphorus	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	0.18	0.18	0.18	0.18
Total Suspended Solids	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	162	162	162	162	
23	Conductivity	µS/cm	Special Frequency 2	1	24/11/2021	06/12/2021	360	360	360	360
	Nitrate	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.31	0.31	0.31	0.31
	Nitrogen (Total)	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	1	1	1	1
	Oil and Grease	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	24/11/2021	06/12/2021	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.19	0.19	0.19	0.19
	Reactive Phosphorus	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.11	0.11	0.11	0.11
Total Suspended Solids	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	24	24	24	24	
23	Conductivity	µS/cm	Special Frequency 2	1	26/11/2021	08/12/2021	150	150	150	150
	Nitrate	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.14	0.14	0.14	0.14
	Nitrogen (Total)	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	1.7	1.7	1.7	1.7

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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
	Oil and Grease	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	26/11/2021	08/12/2021	8.1	8.1	8.1	8.1
	Phosphorus (Total)	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.76	0.76	0.76	0.76
	Reactive Phosphorus	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.3	0.3	0.3	0.3
	Total Suspended Solids	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	535	535	535	535
23	Conductivity	µS/cm	Special Frequency 2	1	29/11/2021	08/12/2021	420	420	420	420
	Nitrate	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.35	0.35	0.35	0.35
	Nitrogen (Total)	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	1	1	1	1
	Oil and Grease	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	29/11/2021	08/12/2021	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.17	0.17	0.17	0.17
	Reactive Phosphorus	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.11	0.11	0.11	0.11
	Total Suspended Solids	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	25	25	25	25
24	Conductivity	µS/cm	Special Frequency 2	1	22/11/2021	30/11/2021	190	190	190	190
	Nitrate	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	0.17	0.17	0.17	0.17
	Nitrogen (Total)	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	2.2	2.2	2.2	2.2
	Oil and Grease	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	6	6	6	6
	pH	pH	Special Frequency 2	1	22/11/2021	30/11/2021	8.1	8.1	8.1	8.1
	Phosphorus (Total)	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	0.69	0.69	0.69	0.69
	Reactive Phosphorus	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	0.18	0.18	0.18	0.18
	Total Suspended Solids	mg/L	Special Frequency 2	1	22/11/2021	30/11/2021	681	681	681	681
24	Conductivity	µS/cm	Special Frequency 2	1	24/11/2021	06/12/2021	360	360	360	360
	Nitrate	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.32	0.32	0.32	0.32
	Nitrogen (Total)	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	1	1	1	1
	Oil and Grease	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	<5	<5	<5	<5

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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	
	pH	pH	Special Frequency 2	1	24/11/2021	06/12/2021	8.2	8.2	8.2	8.2	
	Phosphorus (Total)	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.2	0.2	0.2	0.2	
	Reactive Phosphorus	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.11	0.11	0.11	0.11	
	Total Suspended Solids	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	36	36	36	36	
24	Conductivity	µS/cm	Special Frequency 2	1	26/11/2021	08/12/2021	160	160	160	160	
	Nitrate	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.61	0.61	0.61	0.61	
	Nitrogen (Total)	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	4	4	4	4	
	Oil and Grease	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	<5	<5	<5	<5	
	pH	pH	Special Frequency 2	1	26/11/2021	08/12/2021	8.2	8.2	8.2	8.2	
	Phosphorus (Total)	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	2	2	2	2	
	Reactive Phosphorus	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.39	0.39	0.39	0.39	
24	Total Suspended Solids	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	2305	2305	2305	2305	
	Conductivity	µS/cm	Special Frequency 2	1	29/11/2021	08/12/2021	310	310	310	310	
	Nitrate	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.61	0.61	0.61	0.61	
	Nitrogen (Total)	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	1.5	1.5	1.5	1.5	
	Oil and Grease	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	<5	<5	<5	<5	
	pH	pH	Special Frequency 2	1	29/11/2021	08/12/2021	8.2	8.2	8.2	8.2	
	Phosphorus (Total)	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.17	0.17	0.17	0.17	
24	Reactive Phosphorus	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.04	0.04	0.04	0.04	
	Total Suspended Solids	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	57	57	57	57	
	25	Conductivity	µS/cm	Special Frequency 2	1	04/11/2021	11/11/2021	1120	1120	1120	1120
		Nitrate	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	3.19	3.19	3.19	3.19
		Nitrogen (Total)	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	3.7	3.7	3.7	3.7
		Oil and Grease	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	<5	<5	<5	<5
		pH	pH	Special Frequency 2	1	04/11/2021	11/11/2021	7.1	7.1	7.1	7.1

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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
	Phosphorus (Total)	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	0.09	0.09	0.09	0.09
	Reactive Phosphorus	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	0.05	0.05	0.05	0.05
	Total Suspended Solids	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	<2	<2	<2	<2
25	Conductivity	µS/cm	Special Frequency 2	1	18/11/2021	30/11/2021	700	700	700	700
	Nitrate	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	1.6	1.6	1.6	1.6
	Nitrogen (Total)	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	2.2	2.2	2.2	2.2
	Oil and Grease	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	18/11/2021	30/11/2021	7.2	7.2	7.2	7.2
	Phosphorus (Total)	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	0.15	0.15	0.15	0.15
	Reactive Phosphorus	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	0.1	0.1	0.1	0.1
25	Total Suspended Solids	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	<2	<2	<2	<2
	Conductivity	µS/cm	Special Frequency 2	1	24/11/2021	06/12/2021	310	310	310	310
	Nitrate	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.07	0.07	0.07	0.07
	Nitrogen (Total)	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	1	1	1	1
	Oil and Grease	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	6	6	6	6
	pH	pH	Special Frequency 2	1	24/11/2021	06/12/2021	8.1	8.1	8.1	8.1
	Phosphorus (Total)	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.19	0.19	0.19	0.19
25	Reactive Phosphorus	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.12	0.12	0.12	0.12
	Total Suspended Solids	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	16	16	16	16
	Conductivity	µS/cm	Special Frequency 2	1	26/11/2021	08/12/2021	190	190	190	190
	Nitrate	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.09	0.09	0.09	0.09
	Nitrogen (Total)	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	1.5	1.5	1.5	1.5
	Oil and Grease	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	26/11/2021	08/12/2021	7.9	7.9	7.9	7.9
25	Phosphorus (Total)	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.45	0.45	0.45	0.45

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	Reactive Phosphorus	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.3	0.3	0.3	0.3
	Total Suspended Solids	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	256	256	256	256
25	Conductivity	µS/cm	Special Frequency 2	1	29/11/2021	08/12/2021	250	250	250	250
	Nitrate	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.1	0.1	0.1	0.1
	Nitrogen (Total)	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	1.1	1.1	1.1	1.1
	Oil and Grease	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	29/11/2021	08/12/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.22	0.22	0.22	0.22
	Reactive Phosphorus	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.14	0.14	0.14	0.14
26	Total Suspended Solids	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	16	16	16	16
	Conductivity	µS/cm	Special Frequency 2	1	04/11/2021	11/11/2021	990	990	990	990
	Nitrate	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	0.08	0.08	0.08	0.08
	Nitrogen (Total)	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	0.5	0.5	0.5	0.5
	Oil and Grease	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	04/11/2021	11/11/2021	7.8	7.8	7.8	7.8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	0.14	0.14	0.14	0.14
	Reactive Phosphorus	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	0.06	0.06	0.06	0.06
26	Total Suspended Solids	mg/L	Special Frequency 2	1	04/11/2021	11/11/2021	16	16	16	16
	Conductivity	µS/cm	Special Frequency 2	1	18/11/2021	30/11/2021	540	540	540	540
	Nitrate	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	0.21	0.21	0.21	0.21
	Nitrogen (Total)	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	0.8	0.8	0.8	0.8
	Oil and Grease	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	18/11/2021	30/11/2021	7.7	7.7	7.7	7.7
	Phosphorus (Total)	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	0.17	0.17	0.17	0.17
Reactive Phosphorus	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	0.11	0.11	0.11	0.11	

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	Total Suspended Solids	mg/L	Special Frequency 2	1	18/11/2021	30/11/2021	8	8	8	8
26	Conductivity	µS/cm	Special Frequency 2	1	24/11/2021	06/12/2021	320	320	320	320
	Nitrate	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.09	0.09	0.09	0.09
	Nitrogen (Total)	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	1.2	1.2	1.2	1.2
	Oil and Grease	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	24/11/2021	06/12/2021	8	8	8	8
	Phosphorus (Total)	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.2	0.2	0.2	0.2
	Reactive Phosphorus	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	0.14	0.14	0.14	0.14
	Total Suspended Solids	mg/L	Special Frequency 2	1	24/11/2021	06/12/2021	20	20	20	20
26	Conductivity	µS/cm	Special Frequency 2	1	26/11/2021	08/12/2021	140	140	140	140
	Nitrate	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.18	0.18	0.18	0.18
	Nitrogen (Total)	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	1.8	1.8	1.8	1.8
	Oil and Grease	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	26/11/2021	08/12/2021	7.2	7.2	7.2	7.2
	Phosphorus (Total)	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.87	0.87	0.87	0.87
	Reactive Phosphorus	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	0.7	0.7	0.7	0.7
	Total Suspended Solids	mg/L	Special Frequency 2	1	26/11/2021	08/12/2021	84	84	84	84
26	Conductivity	µS/cm	Special Frequency 2	1	29/11/2021	08/12/2021	270	270	270	270
	Nitrate	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.1	0.1	0.1	0.1
	Nitrogen (Total)	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	1.2	1.2	1.2	1.2
	Oil and Grease	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	29/11/2021	08/12/2021	7.9	7.9	7.9	7.9
	Phosphorus (Total)	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.23	0.23	0.23	0.23
	Reactive Phosphorus	mg/L	Special Frequency 2	1	29/11/2021	08/12/2021	0.15	0.15	0.15	0.15

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	1	29/11/2021	08/12/2021	23	23	23	23
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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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

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
	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*	-	-	-	-	-	-

*NR (EPL ID 28, 29 and 30) = sample contaminated with high level of organic matter (insects, vegetation, bird droppings, etc)

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	04/11/2021	11/11/2021	11	11	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	04/11/2021	11/11/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	04/11/2021	11/11/2021	8	8	6.5-8.5	No
10	Total Suspended Solids	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	14	14	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	18/11/2021	30/11/2021	8	8	6.5-8.5	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)
10	Total Suspended Solids	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	18	18	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	24/11/2021	06/12/2021	8.2	8.2	6.5-8.5	No
10	Total Suspended Solids	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	2980	2980	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	26/11/2021	08/12/2021	7.9	7.9	6.5-8.5	No
10	Total Suspended Solids	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	6	6	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	29/11/2021	08/12/2021	7.6	7.6	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	4	4	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	18/11/2021	30/11/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	18/11/2021	30/11/2021	7.9	7.9	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	14	14	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	24/11/2021	06/12/2021	8.1	8.1	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	77	77	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	26/11/2021	08/12/2021	7.9	7.9	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	35	35	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	29/11/2021	08/12/2021	7.9	7.9	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	22/11/2021	30/11/2021	148	148	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	22/11/2021	30/11/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	22/11/2021	30/11/2021	7.5	7.5	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	34	34	50~	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)
	Oil and Grease	mg/L	Special Frequency 1	1	24/11/2021	06/12/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	24/11/2021	06/12/2021	7.8	7.8	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	231	231	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	26/11/2021	08/12/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	26/11/2021	08/12/2021	7.3	7.3	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	32	32	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	29/11/2021	08/12/2021	<5	<5	10	No
	pH	pH	Special Frequency 1	1	29/11/2021	08/12/2021	7.9	7.9	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	mg/L	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
34	Electrical Conductivity	mg/L	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	mg/L	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.



WERRIS CREEK COAL EPL – MONTHLY SUMMARY

- 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)

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	1	10/11/2021	18/11/2021	1520	1520	1520	1520
	Nitrate	mg/L	Every 3 Months	1	10/11/2021	18/11/2021	<0.01	<0.01	<0.01	<0.01
	Nitrogen (Total)	mg/L	Every 3 Months	1	10/11/2021	18/11/2021	0.1	0.1	0.1	0.1
	Oil and Grease	mg/L	Every 3 Months	1	10/11/2021	18/11/2021	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	10/11/2021	18/11/2021	8.08	8.08	8.08	8.08
	Phosphorus (Total)	mg/L	Every 3 Months	1	10/11/2021	18/11/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	10/11/2021	18/11/2021	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	10/11/2021	18/11/2021	<5	<5	<5	<5
27	Conductivity	µS/cm	Every 3 Months	1	11/11/2021	19/11/2021	1420	1420	1420	1420
	Nitrate	mg/L	Every 3 Months	1	11/11/2021	19/11/2021	<0.01	<0.01	<0.01	<0.01
	Nitrogen (Total)	mg/L	Every 3 Months	1	11/11/2021	19/11/2021	0.1	0.1	0.1	0.1
	Oil and Grease	mg/L	Every 3 Months	1	11/11/2021	19/11/2021	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	11/11/2021	19/11/2021	7.94	7.94	7.94	7.94
	Phosphorus (Total)	mg/L	Every 3 Months	1	11/11/2021	19/11/2021	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	11/11/2021	19/11/2021	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	11/11/2021	19/11/2021	<5	<5	<5	<5
17	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*	-	-	-	-	-	-

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	16 November 2021	60 minutes	10:02am	51	55	Day 37	2.6 / 037	Traffic (51), birds (34), WCC (<20)	No	23/11/2021
R12	16 November 2021	60 minutes	11:18am	45	40	Day 38	2.8 / 234	Traffic (45), birds (34), WCC (<20)	No	23/11/2021
R96	16 November 2021	60 minutes	12:02pm	44	36	Day 38	2.5 / 259	Birds (43), traffic (37), train (28), WCC (25)	No	23/11/2021
R98	16 November 2021	60 minutes	1:10pm	45	43	Day 40 ¹	3.8 / 272	Birds (45), residential (32), WCC (23)	No	23/11/2021
R57	16 November 2021	60 minutes	2:41pm	45	51	Day 35	4.4 / 245	Traffic (43), birds (36), trains (35), residential (34), WCC (<20)	No	23/11/2021
R24	16 November 2021	60 minutes	8:08pm	<20	52	Night 37	Lapse / 3.4 / 152	Traffic (52), insects (39), cows (26), WCC (<20)	No	23/11/2021
R12	16 November 2021	60 minutes	11:59pm	<20	39	Night 38	+1.3 / 1.9 / 176	Traffic (39), insects (24), WCC (<20)	No	23/11/2021
R96	16 November 2021	60 minutes	10:47pm	23	32	Night 37	+3.1 / 0.4 / 138	Insects (32), traffic (23), WCC (21)	No	23/11/2021
R98	16 November 2021	60 minutes	9:36pm	28	47	Night 40 ¹	+3.0 / 2.1 / 134	Insects (47), frogs (29), WCC (24)	No	23/11/2021
R57	16 November 2021	60 minutes	8:02pm	<20	47	Night 35	Lapse / 2.2 / 169	Insects (43), traffic (42), birds (39), trains (38), residential (34), WCC (<20)	No	23/11/2021

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

IA = Inaudible.

¹ Private Agreement in place

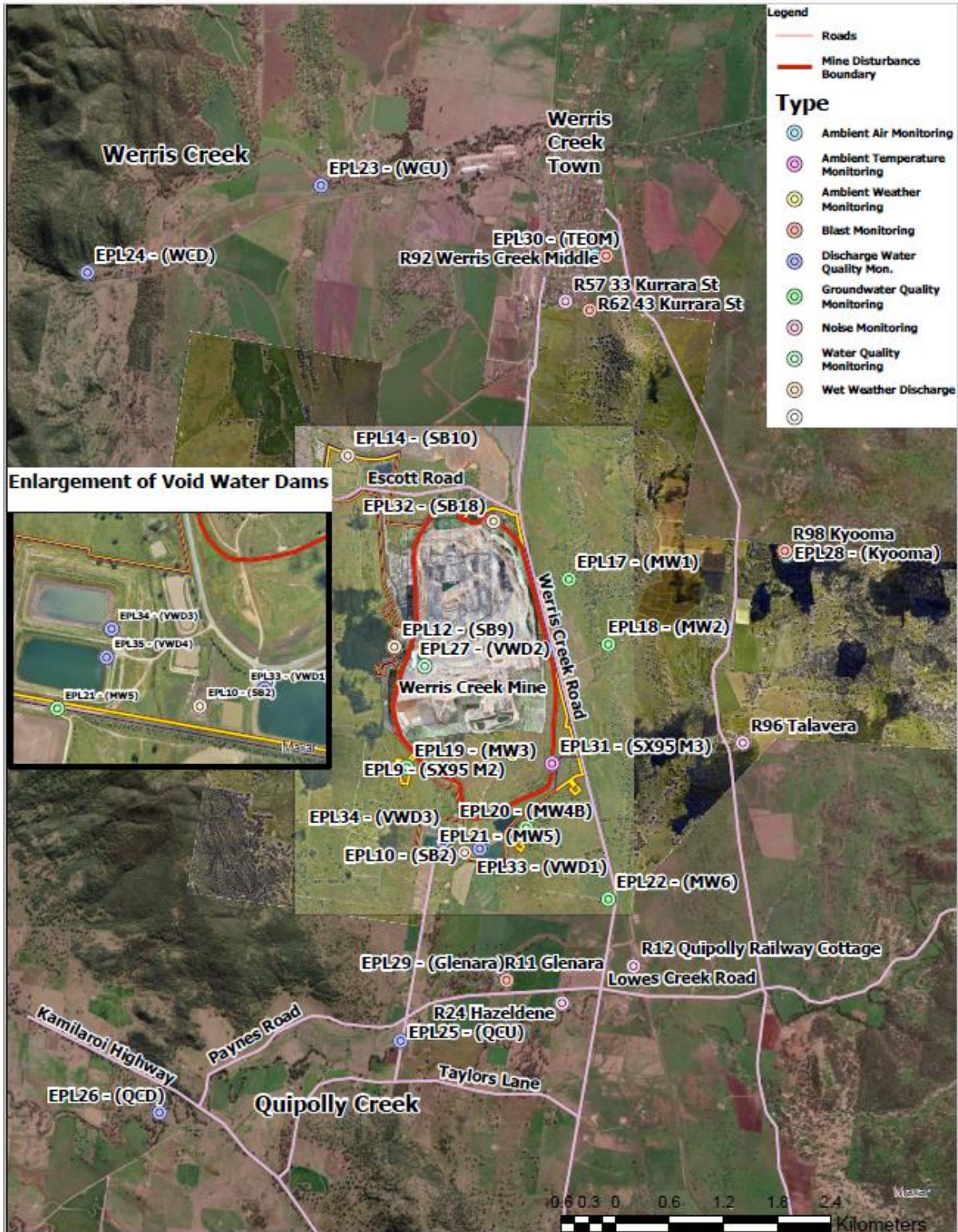
WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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	5	108.4	99.9	120.0	No	01/12/2021
	Blast Vibration	mm/s	Every Blast	5	0.16	0.12	10.0	No	01/12/2021
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	104.0	100.9	120.0	No	01/12/2021
	Blast Vibration	mm/s	Every Blast	5	0.74	0.83	10.0	No	01/12/2021
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	111.9	102.3	120.0	No	01/12/2021
	Blast Vibration	mm/s	Every Blast	5	0.65	0.52	10.0	No	01/12/2021
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	103.8	100.4	120.0	No	01/12/2021
	Blast Vibration	mm/s	Every Blast	5	0.26	0.32	10.0	No	01/12/2021



WERRIS CREEK COAL EPL – MONTHLY SUMMARY



Datum: MGA Zone 56
Date: 09-Nov-2021

Author: K.Sammons
Size/Scale:

Werris Creek EPL12290 Licensed Monitoring Points



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: DECEMBER 2021

Obtained Date: 01/03/2022

Publication Date: 1/03/2022

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 ³	Every 6 days	5	29/12/2021	17/01/2022	1.2	4.0	3.8	8.6
	Solid Particles	g/m ² /month	Continuous	1	17/12/2021	07/01/2022	2.1	2.1	2.1	2.1
29	PM10	µg/m ³	Every 6 days	5	29/12/2021	17/01/2022	4.4	9.1	5.6	23.3
	Solid Particles	g/m ² /month	Continuous	1	17/12/2021	07/01/2022	0.4	0.4	0.4	0.4
30	PM10	µg/m ³	Continuous	Continuous	1/12/2021	01/01/2022	1.1	11.6	9.7	23.8
	Solid Particles	g/m ² /month	Continuous	1	17/12/2021	07/01/2022	0.5	0.5	0.5	0.5
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*	-	-	-	-	-	-



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
	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*	-	-	-	-	-	-
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) Reactive Phosphorus	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
24	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) Oil and Grease	mg/L mg/L	Special Frequency 2 Special Frequency 2	0* 0*	- -	- -	- -	- -	- -	- -
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
Phosphorus (Total)	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
	Reactive Phosphorus	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	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*	-	-	-	-	-	-
26	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*	-	-	-	-	-	-
	pH	pH	Special Frequency 2	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
33*	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*	-	-	-	-	-	-
	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*	-	-	-	-	-	-

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

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



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 dissolved solids	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Vanadium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Zinc (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-

*NR (EPL ID 28, 29 and 30) = sample contaminated with high level of organic matter (insects, vegetation, bird droppings, etc)

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	0*	-	-	-	-	50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 1	0*	-	-	-	-	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 1	0*	-	-	-	-	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	50~	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 1	0*	-	-	-	-	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	mg/L	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	mg/L	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	mg/L	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)

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

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	20 December 2021	60 minutes	10:02am	N/A	47	Day 37	3.9 / 359	Traffic (44), birds (44), WCC (26)	No	1/03/2022
R12	20 December 2021	60 minutes	11:07am	N/A	47	Day 38	6.6 / 299	Insects (43), birds (42), traffic (41), WCC (<20)	No	1/03/2022
R96	20 December 2021	60 minutes	12:18pm	N/A	43	Day 38	6.4 / 305	Road works* (42), birds (36), insects (31), WCC (<20)	No	1/03/2022
R98	20 December 2021	60 minutes	1:24pm	N/A	47	Day 40	7.1 / 283	Birds (46), dog (36), residential (32), WCC (21)	No	1/03/2022
R57	20 December 2021	60 minutes	3:17pm	N/A	49	Day 35	5.2 / 273	Traffic (48), birds (40), residential (27), WCC (24)	No	1/03/2022
R24	20 December 2021	60 minutes	7:13pm	<20	48	Night 37	Lapse / 3.3 / 312	Traffic (48), birds (36), insects (26), WCC (<20)	No	1/03/2022
R12	20 December 2021	60 minutes	8:25pm	<20	40	Night 38	+0.5 / 1.8 / 219	Traffic (39), birds (30), insects (21), WCC (<20)	No	1/03/2022
R96	20 December 2021	60 minutes	9:33pm	<20	46	Night 37	+3.8 / 1.2 / 340	Traffic (44), birds (42), insects (27), WCC (<20)	No	1/03/2022
R98	20 December 2021	60 minutes	10:45pm	<20	49	Night 40	+2.1 / 1.3 / 178	Insects (48), birds (42), WCC (<20)	No	1/03/2022
R57	21 December 2021	60 minutes	12:49am	32	44	Night 35	+0.9 / 1.8 / 341	Birds (41), traffic (40), residential (30), WCC (28)	No	1/03/2022

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	5	98.1	99.9	120.0	No	01/01/2022
	Blast Vibration	mm/s	Every Blast	5	0.12	0.16	10.0	No	01/01/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	100.6	104.5	120.0	No	01/01/2022
	Blast Vibration	mm/s	Every Blast	5	0.80	1.26	10.0	No	01/01/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	102.1	106.1	120.0	No	01/01/2022
	Blast Vibration	mm/s	Every Blast	5	0.50	0.74	10.0	No	01/01/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	96.9	102.9	120.0	No	01/01/2022
	Blast Vibration	mm/s	Every Blast	5	0.30	0.44	10.0	No	01/01/2022



WERRIS CREEK COAL EPL – MONTHLY SUMMARY

