

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 2022

Obtained Date: 01/03/2022

Publication Date: 01/03/2022

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	28/01/2022	15/02/2022	2.8	4.7	3.7	8.7
	Solid Particles	g/m ² /month	Continuous	1	18/01/2021	08/02/2022	2.6	2.6	2.6	2.6
29	PM10	µg/m ³	Every 6 days	5	28/01/2022	15/02/2022	4.7	8.2	8.4	11.0
	Solid Particles	g/m ² /month	Continuous	1	18/01/2021	08/02/2022	2.2	2.2	2.2	2.2
30	PM10	µg/m ³	Continuous	Continuous	1/31/2022	01/02/2022	6.1	10.0	9.3	18.4
	Solid Particles	g/m ² /month	Continuous	1	18/01/2021	08/02/2022	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 Phosphorus (Total)	pH mg/L	Special Frequency 2 Special Frequency 2	0* 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	17 January 2022	60 minutes	12:54 pm	N/A	40	Day 37	1.0 / 131	Traffic (39), birds (33), WCC (<20)	No	01/03/2022
R12	17 January 2022	60 minutes	3:42 pm	N/A	49	Day 38	2.0 / 217	Trains (47), birds (44), traffic (34), WCC (<20)	No	01/03/2022
R96	17 January 2022	60 minutes	12:46 pm	N/A	35	Day 38	1.9 / 201	Insects (32), traffic (29), birds (27), trains (26), WCC (<20)	No	01/03/2022
R98	17 January 2022	60 minutes	1:52 pm	N/A	37	Day 40	2.1 / 176	Birds (36), insects (28), residential (24), WCC (<20)	No	01/03/2022
R57	17 January 2022	60 minutes	3:36 pm	N/A	56	Day 35	1.9 / 202	Traffic (56), birds (41), trains (33), residential (28), WCC (<20)	No	01/03/2022
R24	17 January 2022	60 minutes	7:47 pm	<20	44	Night 37	Lapse / 3.2 / 161	Insects (43), traffic (37), WCC (<20)	No	01/03/2022
R12	17 January 2022	60 minutes	9:45 pm	<20	58	Night 38	Lapse / 2.3 / 139	Trains (58), insects (43), traffic (29), WCC (<20)	No	01/03/2022
R96	17 January 2022	60 minutes	7:09 pm	<20	37	Night 37	Lapse / 3.5 / 168	Insects (37), traffic (24), WCC (<20)	No	01/03/2022
R98	17 January 2022	60 minutes	8:02 pm	<20	51	Night 40	Lapse / 2.8 / 151	Insects (51), birds (32), frogs (29), WCC (<20)	No	01/03/2022
R57	17 January 2022	60 minutes	9:35 pm	<20	51	Night 35	Lapse / 3.0 / 138	Traffic (49), birds (46), trains (32), residential (23), WCC (<20)	No	01/03/2022

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

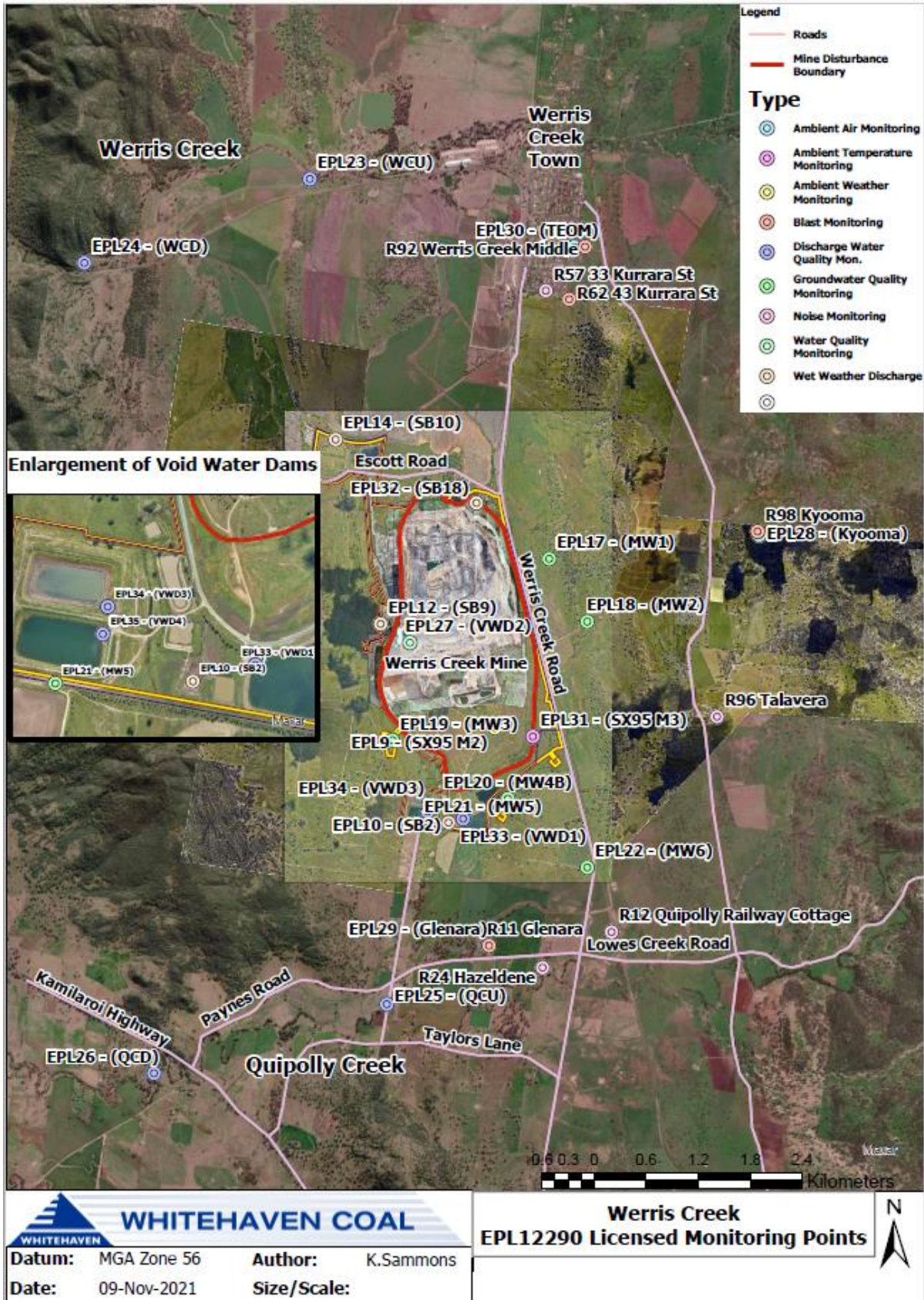
IA = Inaudible.

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	4	103.0	112.2	120.0	No	01/02/2022
	Blast Vibration	mm/s	Every Blast	4	0.20	0.24	10.0	No	01/02/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	4	100.2	102.3	120.0	No	01/02/2022
	Blast Vibration	mm/s	Every Blast	4	1.24	1.94	10.0	No	01/02/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	4	102.6	110.5	120.0	No	01/02/2022
	Blast Vibration	mm/s	Every Blast	4	0.62	0.83	10.0	No	01/02/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	4	97.8	104.7	120.0	No	01/02/2022
	Blast Vibration	mm/s	Every Blast	4	0.54	0.89	10.0	No	01/02/2022

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 2022

Obtained Date: 16/03/2022

Publication Date: 16/03/2022

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	27/02/2022	15/03/2022	2.7	4.4	4.2	7.0
	Solid Particles	g/m ² /month	Continuous	1	18/02/2021	14/03/2022	1.2	1.2	1.2	1.2
29	PM10	µg/m ³	Every 6 days	5	27/02/2022	15/03/2022	2.4	8.1	8.7	12.5
	Solid Particles	g/m ² /month	Continuous	1	18/02/2021	14/03/2022	0.6	0.6	0.6	0.6
30	PM10	µg/m ³	Continuous	Continuous	28/02/2022	01/03/2022	2.0	9.5	9.7	15.5
	Solid Particles	g/m ² /month	Continuous	1	18/02/2021	14/03/2022	0.9	0.9	0.9	0.9
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 Phosphorus (Total)	pH mg/L	Special Frequency 2 Special Frequency 2	0* 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	08/02/2022	16/02/2022	1590	1590	1590	1590
	Nitrate	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	0.16	0.16	0.16	0.16
	Nitrogen (Total)	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	0.4	0.4	0.4	0.4
	Oil and Grease	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	08/02/2022	16/02/2022	7.74	7.74	7.74	7.74
	Phosphorus (Total)	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	6	6	6	6
27	Conductivity	µS/cm	Every 3 Months	1	08/02/2022	16/02/2022	1680	1680	1680	1680
	Nitrate	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	2.35	2.35	2.35	2.35
	Nitrogen (Total)	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	2.8	2.8	2.8	2.8
	Oil and Grease	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	08/02/2022	16/02/2022	8	8	8	8
	Phosphorus (Total)	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	<0.01	<0.01	<0.01	<0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	08/02/2022	16/02/2022	<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	24 February 2022	60 minutes	11:55 am	N/A	46	Day 37	2.1 / 133	Traffic (46), birds (36), insects (24), WCC (<20)	No	15/03/2022
R12	24 February 2022	60 minutes	2:43 pm	N/A	42	Day 38	4.0 / 086	Wind (40), insects (36), birds (34), traffic (28), WCC (<20)	No	15/03/2022
R96	24 February 2022	60 minutes	11:46 am	N/A	42	Day 38	3.1 / 140	Birds (41), wind (34), insects (29), aeroplane (21), WCC (<20)	No	15/03/2022
R98	24 February 2022	60 minutes	12:53 pm	N/A	44	Day 40 ¹	2.1 / 112	Excavator nearby (43), birds (37), insects (31), WCC (<20)	No	15/03/2022
R57	24 February 2022	60 minutes	2:38 pm	N/A	49	Day 35	4.0 / 086	Traffic (47), birds (44), trains (29), WCC (<20)	No	15/03/2022
R24	24 February 2022	60 minutes	7:47 pm	<20	44	Night 37	Lapse / 3.1 / 105	Insects (42), traffic (40), WCC (<20)	No	15/03/2022
R12	24 February 2022	60 minutes	9:45 pm	<20	47	Night 38	Lapse / 1.7 / 108	Insects (46), trains (40), traffic (31), frogs (24), WCC (<20)	No	15/03/2022
R96	24 February 2022	60 minutes	7:02 pm	<20	54	Night 37	Lapse / 4.0 / 102	Insects (54), trains (22), WCC (<20)	No	15/03/2022
R98	24 February 2022	60 minutes	8:04 pm	<20	53	Night 40	Lapse / 3.4 / 107	Insects (53), birds (34), frogs (26), traffic (20), WCC (<20)	No	15/03/2022
R57	24 February 2022	60 minutes	10:35 pm	<20	47	Night 35	Lapse / 1.0 / 034	Traffic (45), dogs (40), insects (39), residential (33), birds (31) WCC (<20)	No	15/03/2022

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

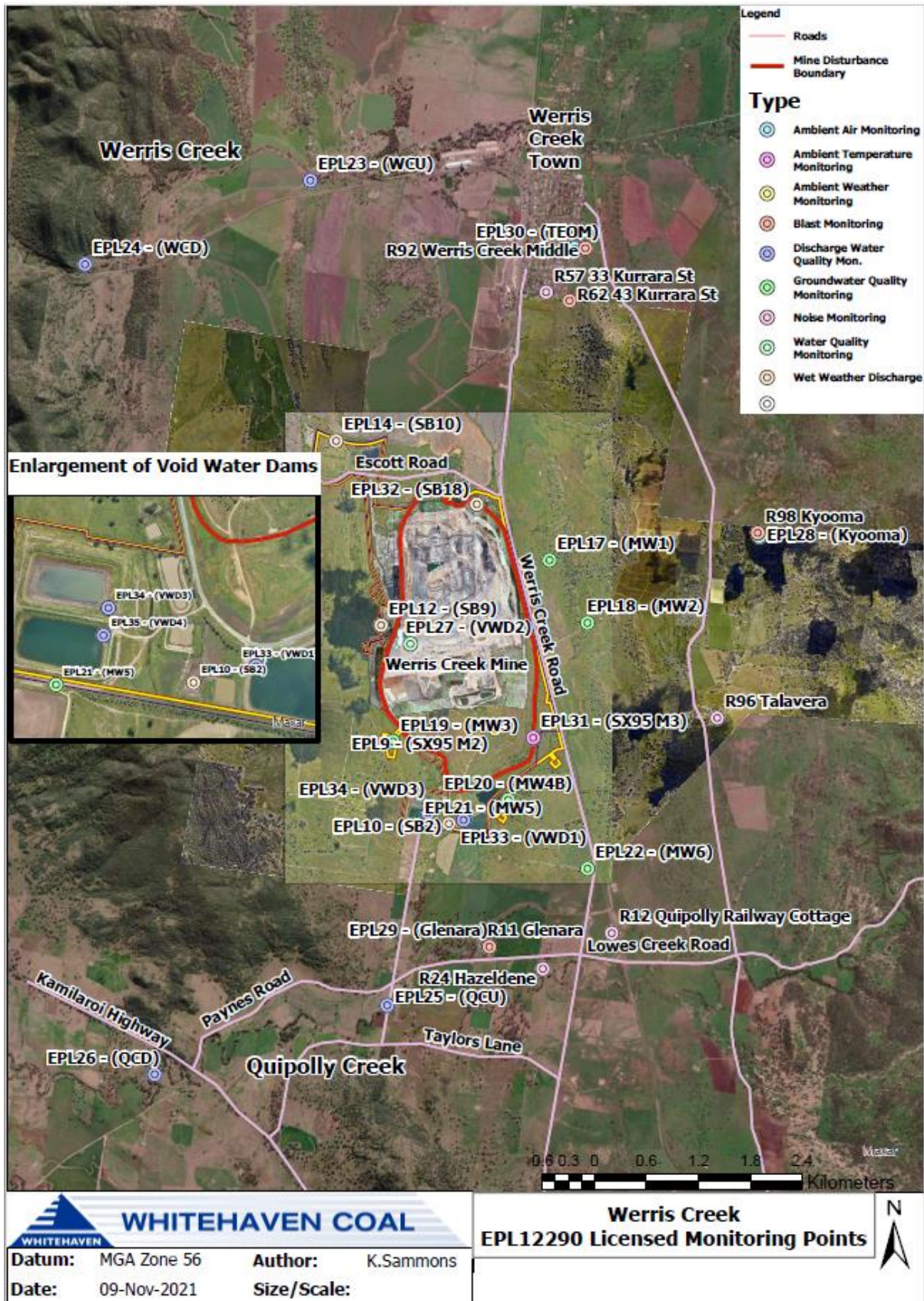
IA = Inaudible.

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	103.2	113.3	120.0	No	01/03/2022
	Blast Vibration	mm/s	Every Blast	5	0.11	0.14	10.0	No	01/03/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	101.8	115.1	120.0	No	01/03/2022
	Blast Vibration	mm/s	Every Blast	5	0.89	1.20	10.0	No	01/03/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	104.9	115.2	120.0	No	01/03/2022
	Blast Vibration	mm/s	Every Blast	5	0.54	0.76	10.0	No	01/03/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	98.2	103.5	120.0	No	01/03/2022
	Blast Vibration	mm/s	Every Blast	5	0.30	0.41	10.0	No	01/03/2022



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 2022

Obtained Date: 14/04/2022

Publication Date: 14/04/2022

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	29/03/2022	13/04/2022	4.7	6.9	5.5	13.2
	Solid Particles	g/m ² /month	Continuous	1	22/03/2021	08/04/2022	0.2	0.2	0.2	0.2
29	PM10	µg/m ³	Every 6 days	5	29/03/2022	13/04/2022	4.1	10.3	8.4	19.6
	Solid Particles	g/m ² /month	Continuous	1	22/03/2021	08/04/2022	0.1	0.1	0.1	0.1
30	PM10	µg/m ³	Continuous	Continuous	31/03/2022	01/04/2022	2.3	7.3	6.7	18.6
	Solid Particles	g/m ² /month	Continuous	1	22/03/2021	08/04/2022	0.1	0.9	0.9	0.9
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 Phosphorus (Total)	pH mg/L	Special Frequency 2 Special Frequency 2	0* 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	10/03/2022	18/03/2022	DRY	DRY	DRY	DRY
	Nitrate	mg/L	Every 6 Months	0	10/03/2022	18/03/2022	DRY	DRY	DRY	DRY
	Nitrogen (Total)	mg/L	Every 6 Months	0	10/03/2022	18/03/2022	DRY	DRY	DRY	DRY
	pH	pH	Every 6 Months	0	10/03/2022	18/03/2022	DRY	DRY	DRY	DRY
	Phosphorus (Total)	mg/L	Every 6 Months	0	10/03/2022	18/03/2022	DRY	DRY	DRY	DRY
Reactive Phosphorus	mg/L	Every 6 Months	0	10/03/2022	18/03/2022	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	10/03/2022	18/03/2022	DRY	DRY	DRY	DRY
18	Conductivity	µS/cm	Every 6 Months	1	10/03/2022	18/02/2022	378	378	378	378
	Nitrate	mg/L	Every 6 Months	1	10/03/2022	18/02/2022	0.57	0.57	0.57	0.57
	Nitrogen (Total)	mg/L	Every 6 Months	1	10/03/2022	18/02/2022	0.8	0.8	0.8	0.8
	pH	pH	Every 6 Months	1	10/03/2022	18/02/2022	7.33	7.33	7.33	7.33
	Phosphorus (Total)	mg/L	Every 6 Months	1	10/03/2022	18/02/2022	0.02	0.02	0.02	0.02
	Reactive Phosphorus	mg/L	Every 6 Months	1	10/03/2022	18/02/2022	<0.01	<0.01	<0.01	<0.01
	Standing Water Level	Metres	Every 6 Months	1	10/03/2022	18/02/2022	33.18	33.18	33.18	33.18
19	Conductivity	µS/cm	Every 6 Months	1	15/03/2022	23/03/2022	2160	2160	2160	2160
	Nitrate	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	10.8	10.8	10.8	10.8
	Nitrogen (Total)	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	12.8	12.8	12.8	12.8
	pH	pH	Every 6 Months	1	15/03/2022	23/03/2022	7.81	7.81	7.81	7.81
	Phosphorus (Total)	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	0.07	0.07	0.07	0.07
	Reactive Phosphorus	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	<0.01	<0.01	<0.01	<0.01
	Standing Water Level	Metres	Every 6 Months	1	15/03/2022	23/03/2022	17.6	17.6	17.6	17.6
20	Conductivity	µS/cm	Every 6 Months	1	15/03/2022	23/03/2022	1040	1040	1040	1040
	Nitrate	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	3.5	3.5	3.5	3.5
	Nitrogen (Total)	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	3.8	3.8	3.8	3.8
	pH	pH	Every 6 Months	1	15/03/2022	23/03/2022	8.2	8.2	8.2	8.2
	Phosphorus (Total)	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	0.1	0.1	0.1	0.1
	Reactive Phosphorus	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	0.09	0.09	0.09	0.09
	Standing Water Level	Metres	Every 6 Months	1	15/03/2022	23/03/2022	16.56	16.56	16.56	16.56
21	Conductivity	µS/cm	Every 6 Months	1	15/03/2022	23/03/2022	1930	1930	1930	1930
	Nitrate	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	1.12	1.12	1.12	1.12
	Nitrogen (Total)	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	1.1	1.1	1.1	1.1
	pH	pH	Every 6 Months	1	15/03/2022	23/03/2022	8.05	8.05	8.05	8.05
	Phosphorus (Total)	mg/L	Every 6 Months	1	15/03/2022	23/03/2022	0.05	0.05	0.05	0.05

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	15/03/2022	23/03/2022	0.04	0.04	0.04	0.04
	Standing Water Level	Metres	Every 6 Months	1	15/03/2022	23/03/2022	9.73	9.73	9.73	9.73
22	Conductivity	µS/cm	Every 6 Months	1	09/03/2022	18/03/2022	1740	1740	1740	1740
	Nitrate	mg/L	Every 6 Months	1	09/03/2022	18/03/2022	3.86	3.86	3.86	3.86
	Nitrogen (Total)	mg/L	Every 6 Months	1	09/03/2022	18/03/2022	10.1	10.1	10.1	10.1
	pH	pH	Every 6 Months	1	09/03/2022	18/03/2022	7.67	7.67	7.67	7.67
	Phosphorus (Total)	mg/L	Every 6 Months	1	09/03/2022	18/03/2022	0.59	0.59	0.59	0.59
	Reactive Phosphorus	mg/L	Every 6 Months	1	09/03/2022	18/03/2022	0.38	0.38	0.38	0.38
	Standing Water Level	Metres	Every 6 Months	1	09/03/2022	18/03/2022	15.2	15.2	15.2	15.2

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	24 March 2022	60 minutes	12:57 pm	N/A	45	Day 37	6.0 / 293	Traffic (44), birds (36), insects (31), train (24), WCC (<20)	No	14/04/2022
R12	24 March 2022	60 minutes	4:23 pm	N/A	48	Day 38	4.8 / 154	Train (47), traffic (39), insects (36) birds (30), WCC (<20)	No	14/04/2022
R96	24 March 2022	60 minutes	12:48 pm	N/A	49	Day 38	4.1 / 304	Traffic (49), insects (37), birds (28), WCC (21)	No	14/04/2022
R98	24 March 2022	60 minutes	1:53 pm	N/A	46	Day 35	4.0 / 294	Insects (45), birds (38), WCC (22)	No	14/04/2022
R57	24 March 2022	60 minutes	4:18 pm	N/A	50	Day 35	5.5 / 187	Traffic (49), dogs (36), insects (36), birds (35), WCC (<20)	No	14/04/2022
R24	24 March 2022	60 minutes	8:43 pm	<20	65	Night 37	Lapse / 1.5 / 198	Traffic (65), insects (35), train (31), frogs (24), WCC (<20)	No	14/04/2022
R12	24 March 2022	60 minutes	10:46 pm	<20	42	Night 38	Lapse / 2.0 / 180	Insects (42), traffic (27), frogs (21), WCC (<20)	No	14/04/2022
R96	24 March 2022	60 minutes	8:00 pm	<20	47	Night 37	Lapse / 2.2 / 333	Insects (47), birds (23), frogs (21), WCC (<20)	No	14/04/2022
R98	24 March 2022	60 minutes	9:02 pm	<20	54	Night 35	Lapse / 1.7 / 193	Insects (54), dogs (28), frogs (24), WCC (<20)	No	14/04/2022
R57	24 March 2022	60 minutes	11:37 pm	<20	53	Night 35	Lapse / 0.5 / 195	Insects (51), traffic (48), trains (34), frogs (31), WCC (<20)	No	14/04/2022

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

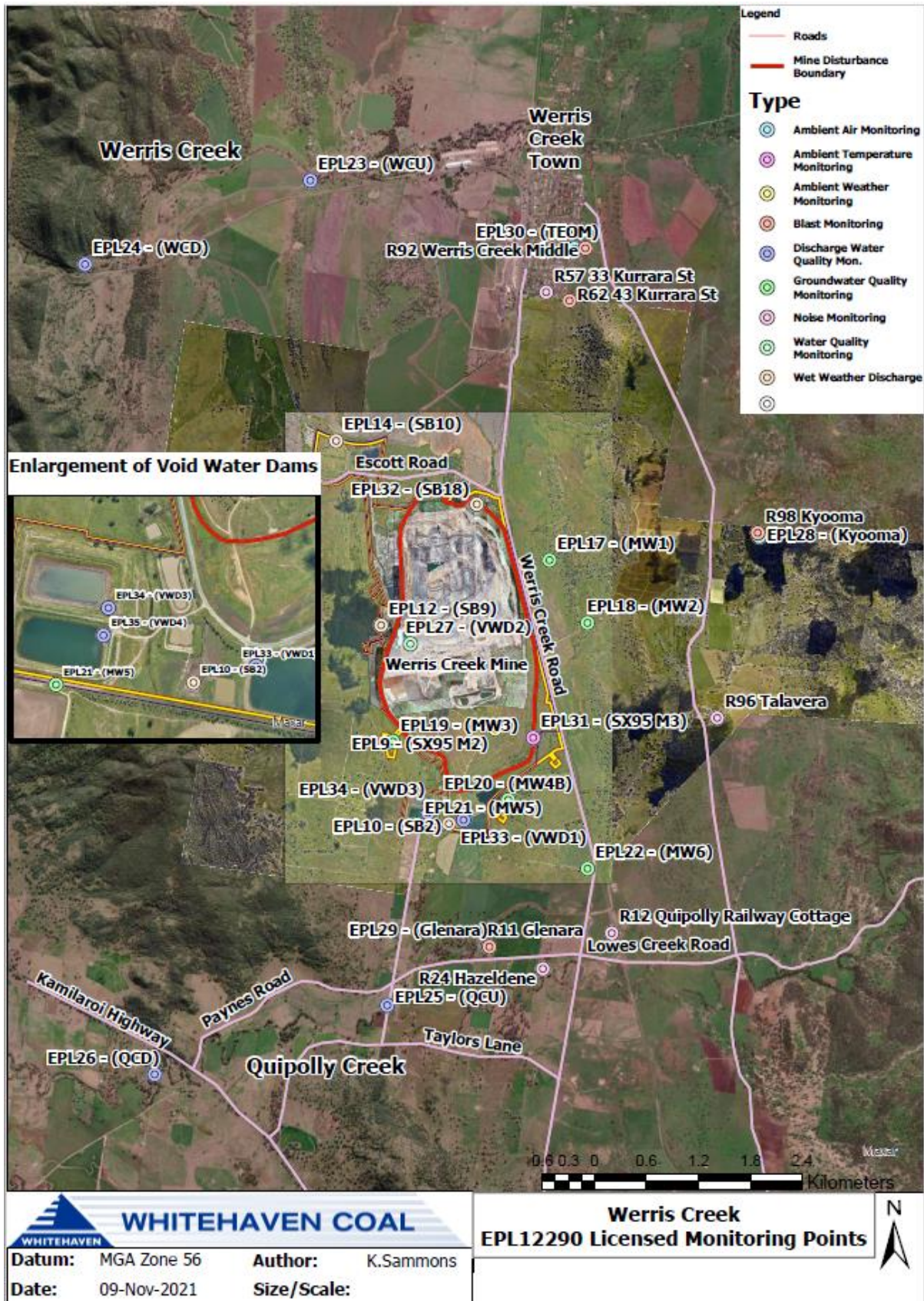
IA = Inaudible.

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	8	94.1	101.5	120.0	No	01/04/2022
	Blast Vibration	mm/s	Every Blast	8	0.08	0.17	10.0	No	01/03/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	8	99.3	108.0	120.0	No	01/03/2022
	Blast Vibration	mm/s	Every Blast	8	0.68	1.81	10.0	No	01/03/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	8	102.3	106.3	120.0	No	01/03/2022
	Blast Vibration	mm/s	Every Blast	8	0.36	0.52	10.0	No	01/03/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	8	96.4	104.1	120.0	No	01/03/2022
	Blast Vibration	mm/s	Every Blast	8	0.26	0.44	10.0	No	01/03/2022



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 2022

Obtained Date: 25/05/2022

Publication Date: 25/05/2022

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	28/04/2022	11/05/2022	1	1.8	1.7	2.7
	Solid Particles	g/m ² /month	Continuous	1	22/04/2021	24/05/2022	0.1	0.1	0.1	0.1
29	PM10	µg/m ³	Every 6 days	5	28/04/2022	11/05/2022	2.8	11.5	8.3	30.8
	Solid Particles	g/m ² /month	Continuous	1	22/04/2021	24/05/2022	0.3	0.3	0.3	0.3
30	PM10	µg/m ³	Continuous	Continuous	30/04/2022	01/05/2022	3.8	6.8	6.1	12.3
	Solid Particles	g/m ² /month	Continuous	1	22/04/2021	24/05/2022	0.2	0.2	0.2	0.2
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	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*	-	-	-	-	-	-
24	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*	-	-	-	-	-	-
	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*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 1	0*	-	-	-	-	9	No
33^	Electrical Conductivity	µS/cm	Special Frequency 4	1	11/04/2022	30/04/2022	1530	1530	2000	No
	Oil and Grease	mg/L	Special Frequency 3	1	11/04/2022	30/04/2022	<5	<5	10	No
	pH	pH	Special Frequency 4	1	11/04/2022	30/04/2022	7.9	7.9	9	No
34	Electrical Conductivity	µS/cm	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	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No

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

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

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

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

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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

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 April 2022	60 minutes	1:13 pm	N/A	50	Day 37	2.1 / 300	Traffic (50), birds (31), insects (26), WCC (<20)	No	20/05/2022
R12	28 April 2022	60 minutes	1:15 pm	N/A	46	Day 38	2.1 / 300	Traffic (45), birds (39), insects (35), WCC (<20)	No	20/05/2022
R96	28 April 2022	60 minutes	2:23 pm	N/A	51	Day 38	0.7 / 302	Insects (50), aeroplane (43), traffic (35), WCC (<20)	No	20/05/2022
R98	28 April 2022	60 minutes	3:28 pm	N/A	42	Day 35	1.0 / 166	Insects (41), birds (36), WCC (<20)	No	20/05/2022
R57	28 April 2022	60 minutes	3:11 pm	N/A	46	Day 35	1.0 / 185	Traffic (46), birds (31), dogs (29), residential (26), insects (25), WCC (<20)	No	20/05/2022
R24	28 April 2022	60 minutes	7:00 pm	<20	47	Night 37	Lapse / 1.7 / 080	Traffic (44), insects (43), WCC (<20)	No	20/05/2022
R12	28 April 2022	60 minutes	7:03 pm	<20	59	Night 38	Lapse / 1.7 / 080	Train (59), insects (37), frogs (34), WCC (<20)	No	20/05/2022
R96	28 April 2022	60 minutes	8:11 pm	<20	47	Night 37	Lapse / 0.9 / 037	Insects (47), traffic (28), frogs (25), WCC (<20)	No	20/05/2022
R98	28 April 2022	60 minutes	9:17 pm	<20	45	Night 35	Lapse / 0.9 / 279	Insects (44), frogs (36), dogs (23), WCC (<20)	No	20/05/2022
R57	28 April 2022	60 minutes	9:08 pm	<20	48	Night 35	Lapse / 0.9 / 279	Birds (45), traffic (44), frogs (38), dogs (24), WCC (<20)	No	20/05/2022

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

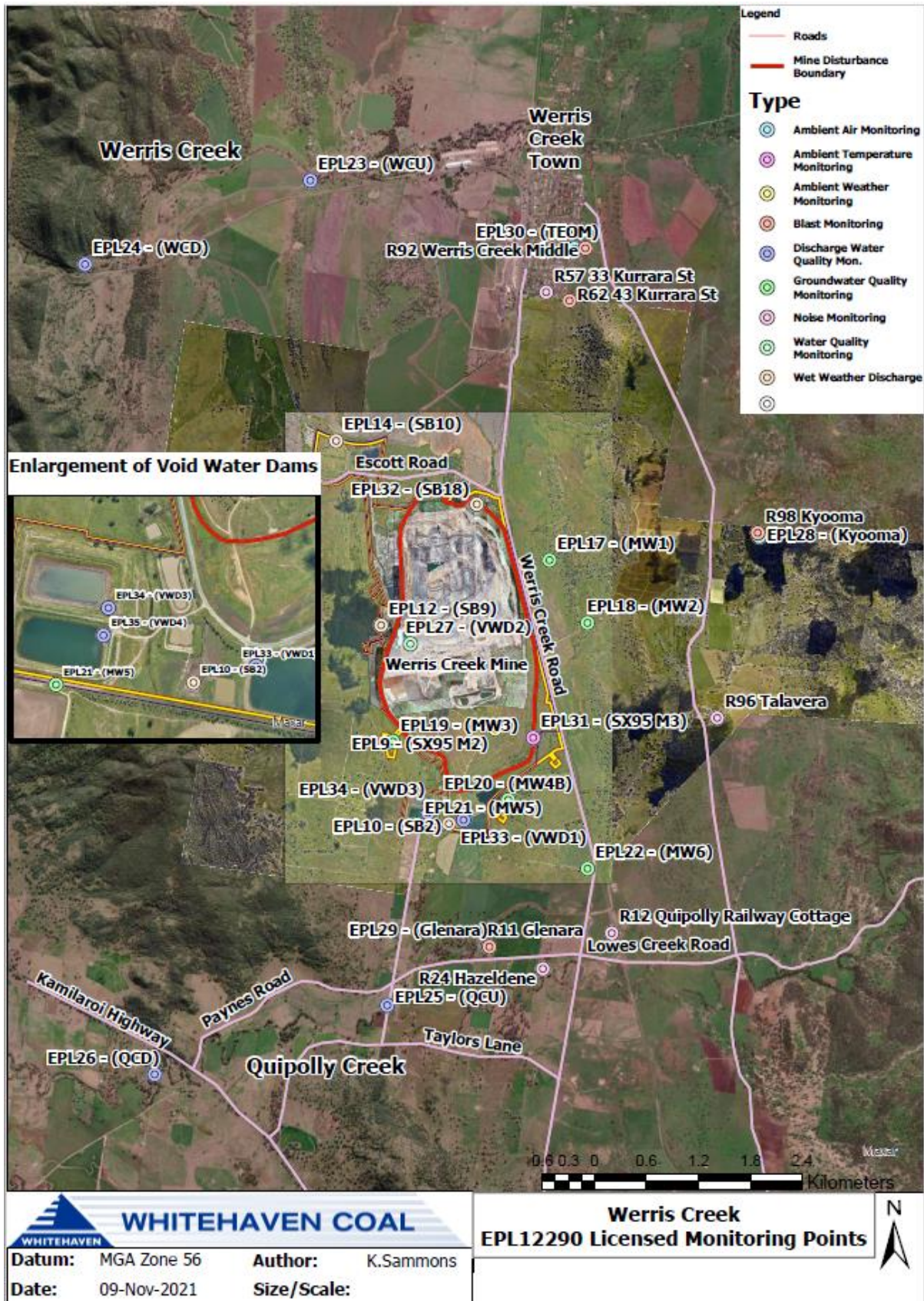
IA = Inaudible.

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	4	102.3	103.7	120.0	No	02/05/2022
	Blast Vibration	mm/s	Every Blast	4	0.14	0.18	10.0	No	02/05/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	4	100.8	103.0	120.0	No	02/05/2022
	Blast Vibration	mm/s	Every Blast	4	0.63	0.70	10.0	No	02/05/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	4	98.8	102.4	120.0	No	02/05/2022
	Blast Vibration	mm/s	Every Blast	4	0.45	0.60	10.0	No	02/05/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	4	96.2	101.6	120.0	No	02/05/2022
	Blast Vibration	mm/s	Every Blast	4	0.22	0.30	10.0	No	02/05/2022

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

*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 2022

Obtained Date: 15/07/2022

Publication Date: 18/07/2022

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	27/06/2022	27/06/2022	1.3	2.8	2.1	5.0
	Solid Particles	g/m ² /month	Continuous	1	21/06/2022	15/07/2022	0.5	0.5	0.5	0.5
29	PM10	µg/m ³	Every 6 days	5	27/06/2022	11/07/2022	1.0	10.8	14.7	20.0
	Solid Particles	g/m ² /month	Continuous	1	21/06/2022	15/07/2022	0.9	0.9	0.9	0.9
30	PM10	µg/m ³	Continuous	Continuous	30/06/2022	01/07/2022	2.0	6.0	5.6	10.6
	Solid Particles	g/m ² /month	Continuous	1	21/06/2022	15/07/2022	0.6	0.6	0.6	0.6
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 Phosphorus (Total)	pH mg/L	Special Frequency 2 Special Frequency 2	0* 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*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 1	0*	-	-	-	-	9	No
33^	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No
34	Electrical Conductivity	µS/cm	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	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No

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

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

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

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

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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

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 June 2022	60 minutes	12:05 pm	N/A	55	Day 37	4.6 / 152	Traffic (55), birds (40), WCC (<20)	No	14/07/2022
R12	28 June 2022	60 minutes	12:09 pm	N/A	39	Day 38	4.8 / 144	Traffic (38), birds (32), WCC (<20)	No	14/07/2022
R96	28 June 2022	60 minutes	1:17 pm	N/A	43	Day 38	2.8 / 163	Birds (46), traffic (26), WCC (<20)	No	14/07/2022
R98	28 June 2022	60 minutes	2:25 pm	N/A	39	Day 35	4.0 / 142	Birds (39), traffic (28), dog (22), WCC (<20)	No	14/07/2022
R57	28 June 2022	60 minutes	2:23 pm	N/A	48	Day 35	4.0 / 142	Traffic (47), birds (40), Crawfords ² (22), WCC (<20)	No	14/07/2022
R24	28 June 2022	60 minutes	7:04 pm	<20	43	Night 37	Lapse / 2.1 / 148	Traffic (43), insects (22), WCC (<20)	No	14/07/2022
R12	28 June 2022	60 minutes	7:01 pm	<20	37	Night 38	Lapse / 2.1 / 148	Traffic (37), insects (24), WCC (<20)	No	14/07/2022
R96	28 June 2022	60 minutes	8:14 pm	<20	29	Night 37	Lapse / 1.6 / 152	Traffic (26), dog (26), WCC (<20)	No	14/07/2022
R98	28 June 2022	60 minutes	9:23 pm	<20	29	Night 35	Lapse / 1.6 / 111	Frogs (27), traffic (25), WCC (<20)	No	14/07/2022
R57	28 June 2022	60 minutes	9:22 pm	<20	48	Night 35	Lapse / 1.5 / 133	Traffic (48), birds (36), dogs (28), Crawfords ³ (26), WCC (<20)	No	14/07/2022

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

IA = Inaudible.

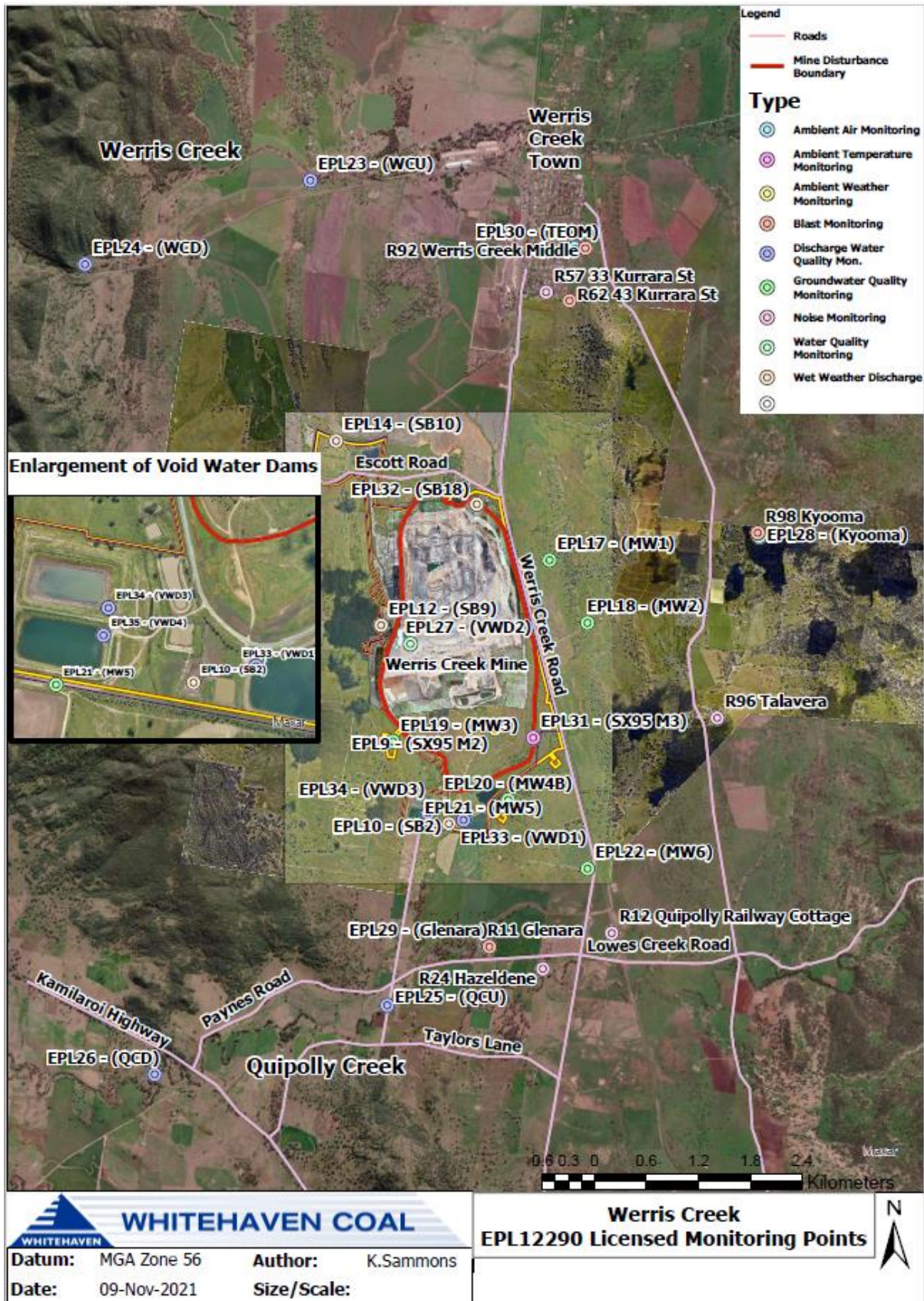
WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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	3	100.6	104.1	120.0	No	01/07/2022
	Blast Vibration	mm/s	Every Blast	3	0.09	0.17	10.0	No	01/07/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	3	105.1	112.5	120.0	No	01/07/2022
	Blast Vibration	mm/s	Every Blast	3	0.49	0.98	10.0	No	01/07/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	3	102.2	104.5	120.0	No	01/07/2022
	Blast Vibration	mm/s	Every Blast	3	0.56	1.22	10.0	No	01/07/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	3	96.9	99.7	120.0	No	01/07/2022
	Blast Vibration	mm/s	Every Blast	3	0.29	0.54	10.0	No	01/07/2022



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 2022

Obtained Date: 12/08/2022

Publication Date: 12/08/2022

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	27/07/2022	10/08/2022	0	1.4	1.6	3.4
	Solid Particles	g/m ² /month	Continuous	1	20/07/2022	12/08/2022	0.3	0.3	0.3	0.3
29	PM10	µg/m ³	Every 6 days	5	27/07/2022	10/08/2022	1.3	5.0	4.5	11.8
	Solid Particles	g/m ² /month	Continuous	1	20/07/2022	12/08/2022	0.3	0.3	0.3	0.3
30	PM10	µg/m ³	Continuous	Continuous	31/07/2022	01/08/2022	-1.7	5	5.1	13.5
	Solid Particles	g/m ² /month	Continuous	1	21/06/2022	12/08/2022	0.2	0.2	0.2	0.2
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	1	01/07/2022	04/07/2022	780	780	780	780
	Nitrate	mg/L	Special Frequency 1	1	01/07/2022	04/07/2022	4.4	4.4	4.4	4.4
	Nitrogen (Total)	mg/L	Special Frequency 1	1	01/07/2022	04/07/2022	4.6	4.6	4.6	4.6
	Phosphorus (Total)	mg/L	Special Frequency 1	1	01/07/2022	04/07/2022	<0.05	<0.05	<0.05	<0.05
	Reactive Phosphorus	mg/L	Special Frequency 1	1	01/07/2022	04/07/2022	<0.005	<0.005	<0.005	<0.005
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	1	01/07/2022	04/07/2022	510	510	510	510
	Nitrate	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	1.6	1.6	1.6	1.6
	Nitrogen (Total)	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	1.6	1.6	1.6	1.6
	Oil and Grease	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	01/07/2022	04/07/2022	7.19	7.19	7.19	7.19
	Phosphorus (Total)	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	<0.05	<0.05	<0.05	<0.05
	Reactive Phosphorus	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	0.083	0.083	0.083	0.083
26	Total Suspended Solids	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	3	3	3	3
	Conductivity	µS/cm	Special Frequency 2	1	01/07/2022	04/07/2022	780	780	780	780
	Nitrate	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	0.32	0.32	0.32	0.32
	Nitrogen (Total)	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	0.4	0.4	0.4	0.4
	Oil and Grease	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	01/07/2022	04/07/2022	7.9	7.9	7.9	7.9
	Phosphorus (Total)	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	<0.05	<0.05	<0.05	<0.05
33	Reactive Phosphorus	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	0.062	0.062	0.062	0.062
	Total Suspended Solids	mg/L	Special Frequency 2	1	01/07/2022	04/07/2022	2	2	2	2
	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	1	01/07/2022	04/07/2022	4	4	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	01/07/2022	04/07/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	01/07/2022	04/07/2022	7.81	7.81	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	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No
34	Electrical Conductivity	µS/cm	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	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No

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

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

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

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

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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

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	14 July 2022	60 minutes	3:01pm	N/A	53	Day 37	4.9 / 154	Traffic (53), birds (34), WCC (<20)	No	02/08/2022
R12	14 July 2022	60 minutes	12:50pm	N/A	40	Day 38	2.0 / 129	Traffic (40), birds (24), WCC (<20)	No	02/08/2022
R96	14 July 2022	60 minutes	1:59pm	N/A	39	Day 38	2.8 / 179	Birds (38), traffic (31), WCC (<20)	No	02/08/2022
R98	14 July 2022	60 minutes	3:17pm	N/A	45	Day 35	4.4 / 162	Birds (45), WCC (<20)	No	02/08/2022
R57	15 July 2022	60 minutes	10:02am	N/A	46	Day 35	1.3 / 323	Traffic (45), dogs (34), insects (33), birds (31), WCC (<20)	No	02/08/2022
R24	14 July 2022	60 minutes	8:06pm	<20	54	Night 37	Lapse / 2.6 / 172	Traffic (54), frogs (21), WCC (<20)	No	02/08/2022
R12	14 July 2022	60 minutes	7:00pm	<20	40	Night 38	Lapse / 2.1 / 102	Traffic (40), birds (24), frogs (22), WCC (<20)	No	02/08/2022
R96	14 July 2022	60 minutes	8:08pm	<20	39	Night 37	+0.2 / 1.9 / 149	Dogs (39), traffic (26), frogs (24), WCC (<20)	No	02/08/2022
R98	14 July 2022	60 minutes	9:16pm	<20	34	Night 35	+0.4 / 1.0 / 183	Birds (32), frogs (29), WCC (<20)	No	02/08/2022
R57	14 July 2022	60 minutes	10:09pm	<20	38	Night 35	+1.6 / 2.0 / 203	Traffic (37), Crawfords ³ (32), birds (22), WCC (<20)	No	02/08/2022

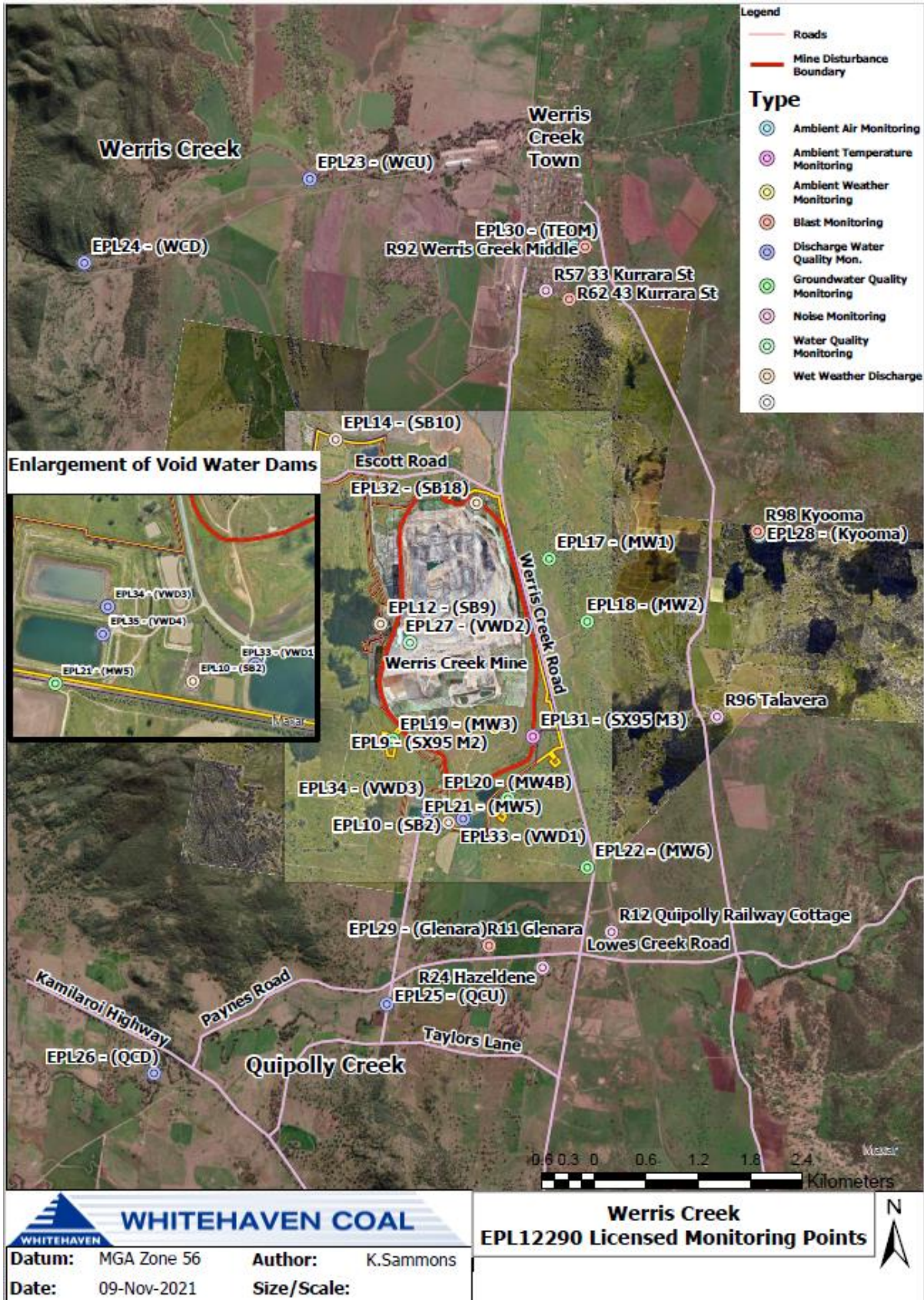
NM = Not Measurable. This denotes noise from the mine was audible at low levels however cannot be quantified.

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	7	102.5	107.5	120.0	No	01/08/2022
	Blast Vibration	mm/s	Every Blast	7	0.13	0.20	10.0	No	01/08/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	7	103.2	107.9	120.0	No	01/08/2022
	Blast Vibration	mm/s	Every Blast	7	0.93	1.32	10.0	No	01/08/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	7	103.1	109.1	120.0	No	01/08/2022
	Blast Vibration	mm/s	Every Blast	7	0.56	0.97	10.0	No	01/08/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	7	101.2	112.7	120.0	No	01/08/2022
	Blast Vibration	mm/s	Every Blast	7	0.36	0.53	10.0	No	01/08/2022

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 2022

Obtained Date: 14/09/2022

Publication Date: 14/09/2022

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Measurements for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value
28	PM10	µg/m ³	Every 6 days	5	26/08/2022	06/09/2022	0.6	1.9	2.0	3.4
	Solid Particles	g/m ² /month	Continuous	1	19/08/2022	08/09/2022	0.9	0.9	0.9	0.9
29	PM10	µg/m ³	Every 6 days	5	26/08/2022	06/09/2022	0.6	3.3	3.0	5.7
	Solid Particles	g/m ² /month	Continuous	1	19/08/2022	08/09/2022	0.7	0.7	0.7	0.7
30	PM10	µg/m ³	Continuous	Continuous	31/08/2022	01/09/2022	2.6	8.0	7.2	17.3
	Solid Particles	g/m ² /month	Continuous	1	19/08/2022	08/09/2022	0.4	0.4	0.4	0.4
10	Conductivity	µS/cm	Special Frequency 1	1	18/08/2022	19/08/2022	570	570	570	570
	Nitrate	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<0.005	<0.005	<0.005	<0.005
	Nitrogen (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.5	0.5	0.5	0.5
	Phosphorus (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.4	0.4	0.4	0.4
	Reactive Phosphorus	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.35	0.35	0.35	0.35
12	Conductivity	µS/cm	Special Frequency 1	1	11/08/2022	15/08/2022	650	650	650	650
	Nitrate	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	3	3	3	3

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 1	1	11/08/2022	15/08/2022	4.9	4.9	4.9	4.9
	Phosphorus (Total)	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	<0.05	<0.05	<0.05	<0.05
	Reactive Phosphorus	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	<0.005	<0.005	<0.005	<0.005
12	Conductivity	µS/cm	Special Frequency 1	1	18/08/2022	19/08/2022	570	570	570	570
	Nitrate	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	3.6	3.6	3.6	3.6
	Nitrogen (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	4.8	4.8	4.8	4.8
	Phosphorus (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<0.05	<0.05	<0.05	<0.05
	Reactive Phosphorus	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<0.005	<0.005	<0.005	<0.005
14	Conductivity	µS/cm	Special Frequency 1	1	11/08/2022	15/08/2022	590	590	590	590
	Nitrate	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	0.33	0.33	0.33	0.33
	Nitrogen (Total)	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	1.3	1.3	1.3	1.3
	Phosphorus (Total)	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	0.5	0.5	0.5	0.5
	Reactive Phosphorus	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	0.43	0.43	0.43	0.43
14	Conductivity	µS/cm	Special Frequency 1	1	14/08/2022	15/08/2022	140	140	140	140
	Nitrate	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	2.3	2.3	2.3	2.3
	Nitrogen (Total)	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	3.6	3.6	3.6	3.6
	Phosphorus (Total)	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	0.6	0.6	0.6	0.6
	Reactive Phosphorus	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	0.52	0.52	0.52	0.52
14	Conductivity	µS/cm	Special Frequency 1	1	18/08/2022	19/08/2022	430	430	430	430
	Nitrate	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.25	0.25	0.25	0.25
	Nitrogen (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.7	0.7	0.7	0.7
	Phosphorus (Total)	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.6	0.6	0.6	0.6
	Reactive Phosphorus	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	0.52	0.52	0.52	0.52
32	Conductivity	µS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	-	-



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	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
23	Conductivity	µS/cm	Special Frequency 2	1	11/08/2022	15/08/2022	900	900	900	900
	Nitrate	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	2.6	2.6	2.6	2.6
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	4	4	4	4
	Oil and Grease	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	11/08/2022	15/08/2022	8.18	8.18	8.18	8.18
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.2	0.2	0.2	0.2
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.17	0.17	0.17	0.17
23	Total Suspended Solids	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	19	19	19	19
	Conductivity	µS/cm	Special Frequency 2	1	14/08/2022	15/08/2022	290	290	290	290
	Nitrate	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	1.5	1.5	1.5	1.5
	Nitrogen (Total)	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	3.3	3.3	3.3	3.3
	Oil and Grease	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	14/08/2022	15/08/2022	7.98	7.98	7.98	7.98
	Phosphorus (Total)	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	0.6	0.6	0.6	0.6
	Reactive Phosphorus	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	0.49	0.49	0.49	0.49
23	Total Suspended Solids	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	105	105	105	105
	Conductivity	µS/cm	Special Frequency 2	1	18/08/2022	19/08/2022	600	600	600	600
	Nitrate	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	1.6	1.6	1.6	1.6
	Nitrogen (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	1.8	1.8	1.8	1.8
	Oil and Grease	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	<5	<5	<5	<5



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 2	1	18/08/2022	19/08/2022	7.07	7.07	7.07	7.07
	Phosphorus (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.2	0.2	0.2	0.2
	Reactive Phosphorus	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.17	0.17	0.17	0.17
	Total Suspended Solids	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	8	8	8	8
24	Conductivity	µS/cm	Special Frequency 2	1	11/08/2022	15/08/2022	980	980	980	980
	Nitrate	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	2.7	2.7	2.7	2.7
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	4.4	4.4	4.4	4.4
	Oil and Grease	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	11/08/2022	15/08/2022	8.17	8.17	8.17	8.17
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.2	0.2	0.2	0.2
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.23	0.23	0.23	0.23
24	Conductivity	µS/cm	Special Frequency 2	1	14/08/2022	15/08/2022	260	260	260	260
	Nitrate	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	2.6	2.6	2.6	2.6
	Nitrogen (Total)	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	5.1	5.1	5.1	5.1
	Oil and Grease	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	14/08/2022	15/08/2022	7.88	7.88	7.88	7.88
	Phosphorus (Total)	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	0.9	0.9	0.9	0.9
	Reactive Phosphorus	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	0.8	0.8	0.8	0.8
	Total Suspended Solids	mg/L	Special Frequency 2	1	14/08/2022	15/08/2022	460	460	460	460
24	Conductivity	µS/cm	Special Frequency 2	1	18/08/2022	19/08/2022	660	660	660	660
	Nitrate	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	2.1	2.1	2.1	2.1
	Nitrogen (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	2.4	2.4	2.4	2.4
	Oil and Grease	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	<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 2	1	18/08/2022	19/08/2022	7.04	7.04	7.04	7.04
	Phosphorus (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.3	0.3	0.3	0.3
	Reactive Phosphorus	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.27	0.27	0.27	0.27
	Total Suspended Solids	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	28	28	28	28
25	Conductivity	µS/cm	Special Frequency 2	1	11/08/2022	15/08/2022	460	460	460	460
	Nitrate	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	1.1	1.1	1.1	1.1
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	2	2	2	2
	Oil and Grease	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	11/08/2022	15/08/2022	7.35	7.35	7.35	7.35
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.1	0.1	0.1	0.1
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.1	0.1	0.1	0.1
25	Total Suspended Solids	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	8	8	8	8
	Conductivity	µS/cm	Special Frequency 2	1	18/08/2022	19/08/2022	330	330	330	330
	Nitrate	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.24	0.24	0.24	0.24
	Nitrogen (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.9	0.9	0.9	0.9
	Oil and Grease	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	18/08/2022	19/08/2022	6.98	6.98	6.98	6.98
	Phosphorus (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.1	0.1	0.1	0.1
	Reactive Phosphorus	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.088	0.088	0.088	0.088
26	Total Suspended Solids	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	2	2	2	2
	Conductivity	µS/cm	Special Frequency 2	1	11/08/2022	15/08/2022	540	540	540	540
	Nitrate	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.46	0.46	0.46	0.46
	Nitrogen (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	1.7	1.7	1.7	1.7
26	Oil and Grease	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	<5	<5	<5	<5

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 2	1	11/08/2022	15/08/2022	7.62	7.62	7.62	7.62
	Phosphorus (Total)	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.1	0.1	0.1	0.1
	Reactive Phosphorus	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	0.1	0.1	0.1	0.1
	Total Suspended Solids	mg/L	Special Frequency 2	1	11/08/2022	15/08/2022	20	20	20	20
26	Conductivity	µS/cm	Special Frequency 2	1	18/08/2022	19/08/2022	380	380	380	380
	Nitrate	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.29	0.29	0.29	0.29
	Nitrogen (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.9	0.9	0.9	0.9
	Oil and Grease	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	1	18/08/2022	19/08/2022	7.03	7.03	7.03	7.03
	Phosphorus (Total)	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.1	0.1	0.1	0.1
	Reactive Phosphorus	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	0.11	0.11	0.11	0.11
33	Total Suspended Solids	mg/L	Special Frequency 2	1	18/08/2022	19/08/2022	6	6	6	6
	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*	-	-	-	-	-	-	
34	Aluminium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Arsenic (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Barium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Beryllium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	BOD	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cadmium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Chromium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cobalt (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Copper (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Iron (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Lead (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Magnesium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Manganese (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Nickel (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
Potassium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-	
Selenium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-	

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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

WERRIS CREEK COAL EPL – MONTHLY SUMMARY
Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)
10	Total Suspended Solids	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	5	5	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	18/08/2022	19/08/2022	6.99	6.99	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	13	13	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	11/08/2022	15/08/2022	7.43	7.43	6.5-8.5	No
12	Total Suspended Solids	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	6	6	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	18/08/2022	19/08/2022	7.09	7.09	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	11	11	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	11/08/2022	15/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	11/08/2022	15/08/2022	7.44	7.44	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	89	89	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	14/08/2022	15/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	14/08/2022	15/08/2022	7.26	7.26	6.5-8.5	No
14	Total Suspended Solids	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	35	35	50~	No
	Oil and Grease	mg/L	Special Frequency 1	1	18/08/2022	19/08/2022	<5	<5	10	No
	pH	pH	Special Frequency 1	1	18/08/2022	19/08/2022	7.22	7.22	6.5-8.5	No
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No
	pH	pH	Special Frequency 1	0*	-	-	-	-	9	No
33^	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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

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

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

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

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



WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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

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	08/24/2022	01/09/2022	1930	1930	1930	1930
	Nitrate	mg/L	Every 3 Months	1	08/24/2022	01/09/2022	0.14	0.14	0.14	0.14
	Nitrogen (Total)	mg/L	Every 3 Months	1	08/24/2022	01/09/2022	0.2	0.2	0.2	0.2
	Oil and Grease	mg/L	Every 3 Months	1	08/24/2022	01/09/2022	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	08/24/2022	01/09/2022	8.19	8.19	8.19	8.19
	Phosphorus (Total)	mg/L	Every 3 Months	1	08/24/2022	01/09/2022	0.01	0.01	0.01	0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	08/24/2022	01/09/2022	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	08/24/2022	01/09/2022	<5	<5	<5	<5
27	Conductivity	µS/cm	Every 3 Months	1	08/25/2022	02/09/2022	1550	1550	1550	1550
	Nitrate	mg/L	Every 3 Months	1	08/25/2022	02/09/2022	0.15	0.15	0.15	0.15
	Nitrogen (Total)	mg/L	Every 3 Months	1	08/25/2022	02/09/2022	0.2	0.2	0.2	0.2
	Oil and Grease	mg/L	Every 3 Months	1	08/25/2022	02/09/2022	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	08/25/2022	02/09/2022	7.9	7.9	7.9	7.9
	Phosphorus (Total)	mg/L	Every 3 Months	1	08/25/2022	02/09/2022	0.01	0.01	0.01	0.01
	Reactive Phosphorus	mg/L	Every 3 Months	1	08/25/2022	02/09/2022	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	08/25/2022	02/09/2022	<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	18 August 2022	60 minutes	10:04am	N/A	50	Day 37	1.5 / 359	Traffic (48), train (43), birds (40), WCC (<20)	No	12/09/2022
R12	18 August 2022	60 minutes	11:12am	N/A	48	Day 38	2.3 / 251	Traffic (48), birds (30), insects (26), WCC (<20)	No	12/09/2022
R96	18 August 2022	60 minutes	12:34pm	N/A	43	Day 38	3.0 / 287	Birds (42), train (36), aeroplane (25), WCC (<20)	No	12/09/2022
R98	18 August 2022	60 minutes	1:48pm	N/A	45	Day 35	4.6 / 291	Birds (43), insects (40), WCC (22)	No	12/09/2022
R57	18 August 2022	60 minutes	3:45pm	N/A	52	Day 35	3.4 / 293	Traffic (52), insects (40), birds (38), residential (26), WCC (<20)	No	12/09/2022
R24	18 August 2022	60 minutes	8:01pm	29	52	Night 37	Lapse / 3.6 / 205	Traffic (51), trains (43), frogs (31), WCC (26)	No	12/09/2022
R12	19 August 2022	60 minutes	12:19am	30	41	Night 38	+2.6 / 1.7 / 320	Birds (38), traffic (37), frogs (30), WCC (26)	No	12/09/2022
R96	18 August 2022	60 minutes	10:55pm	32	42	Night 37	+4.3 / 2.7 / 008	Frogs (40), birds (36), WCC (29)	No	12/09/2022
R98	18 August 2022	60 minutes	9:47pm	<20	35	Night 35	+3.4 / 3.6 / 002	Birds (32), frogs (32), WCC (<20)	No	12/09/2022
R57	18 August 2022	60 minutes	7:45pm	<20	44	Night 35	Lapse / 2.7 / 358	Traffic (43), Crawfords Freightlines (33), dogs (32), frogs (27), WCC (<20)	No	12/09/2022

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

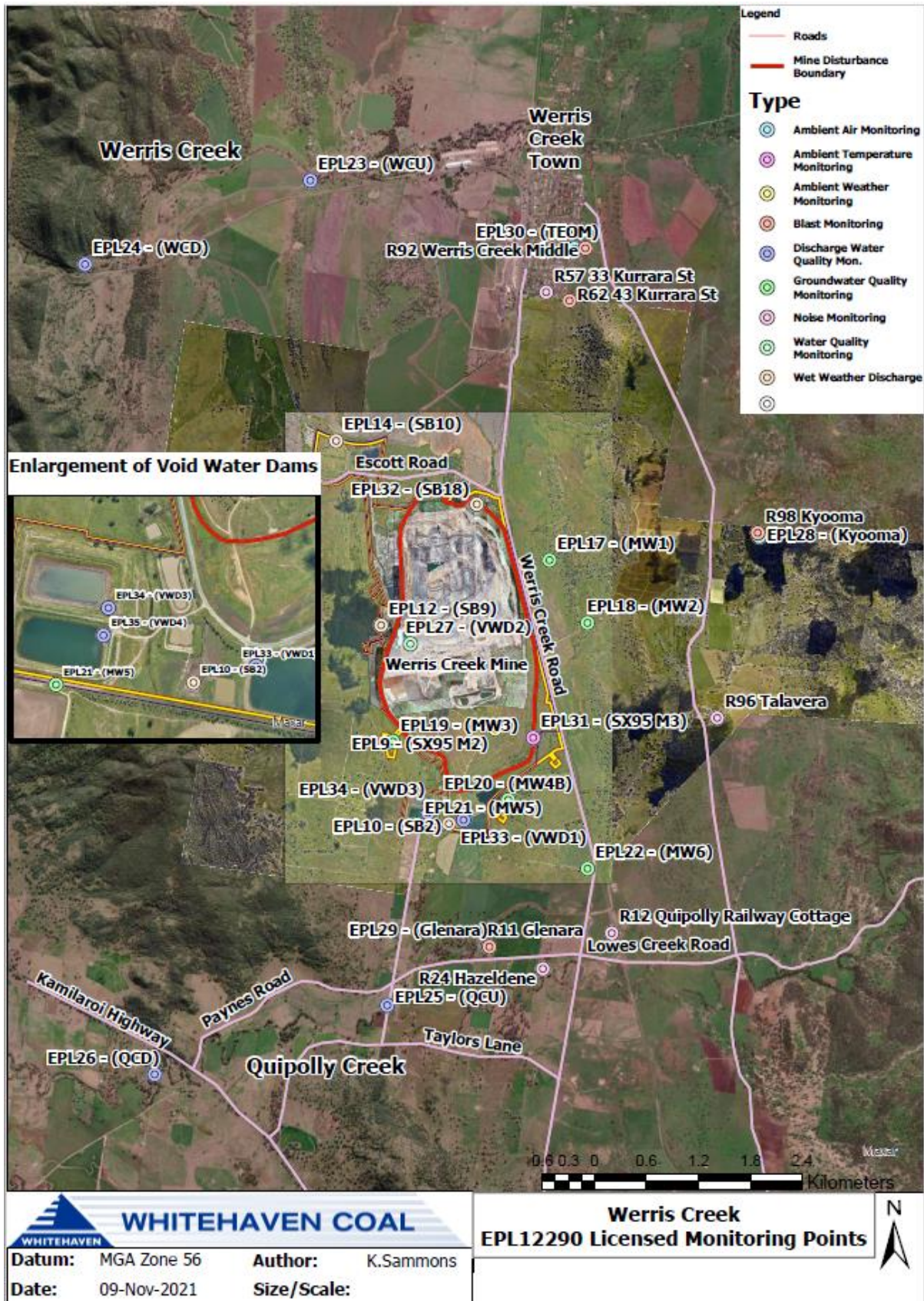
IA = Inaudible.

WERRIS CREEK COAL EPL – MONTHLY SUMMARY
Table 5 – Monitoring (Blasts – Limits Apply)

Location	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max Value	100%ile Limit	(Potential) Non-compliance /breach	Date Obtained
R11	Blast Noise	dB (Lin Peak)	Every Blast	9	100.6	109.2	120.0	No	01/09/2022
	Blast Vibration	mm/s	Every Blast	9	0.07	0.11	10.0	No	01/09/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	9	100.6	104.4	120.0	No	01/09/2022
	Blast Vibration	mm/s	Every Blast	9	0.48	0.89	10.0	No	01/09/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	9	101.1	109.1	120.0	No	01/09/2022
	Blast Vibration	mm/s	Every Blast	9	0.37	0.49	10.0	No	01/09/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	9	92.4	109.1	120.0	No	01/09/2022
	Blast Vibration	mm/s	Every Blast	9	0.24	0.31	10.0	No	01/09/2022



WERRIS CREEK COAL EPL – MONTHLY SUMMARY



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 2022

Obtained Date: 13/10/22

Publication Date: 26/10/22

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	25/09/2022	06/10/2022	2.1	3.8	3.0	6.7
	Solid Particles	g/m ² /month	Continuous	1	19/09/2022	13/10/2022	1.7	1.7	1.7	1.7
29	PM10	µg/m ³	Every 6 days	5	25/09/2022	06/10/2022	4.2	10.0	8.9	17.2
	Solid Particles	g/m ² /month	Continuous	1	19/09/2022	13/10/2022	0.9	0.9	0.9	0.9
30	PM10	µg/m ³	Continuous	Continuous	30/09/2022	01/10/2022	2.6	8.3	7.9	14.8
	Solid Particles	g/m ² /month	Continuous	1	19/09/2022	13/10/2022	0.7	0.7	0.7	0.7
10	Conductivity	µS/cm	Special Frequency 1	4	15,16,22 & 28/09/2022	10/10/2022	192	433	350	840

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	4	15,16,22 & 28/09/2022	10/10/2022	0.01	0.04	0.02	0.10
	Nitrogen (Total)	mg/L	Special Frequency 1	4	15,16,22 & 28/09/2022	10/10/2022	0.6	0.9	0.6	1.7
	Phosphorus (Total)	mg/L	Special Frequency 1	4	15,16,22 & 28/09/2022	10/10/2022	0.10	0.50	0.40	1.09
	Reactive Phosphorus	mg/L	Special Frequency 1	4	15,16,22 & 28/09/2022	10/10/2022	0.14	0.34	0.38	0.47
12	Conductivity	µS/cm	Special Frequency 1	3	20, 28 & 30/09/2022	07/10/2022	290	307	310	320
	Nitrate	mg/L	Special Frequency 1	3	20, 28 & 30/09/2022	07/10/2022	0.12	1.07	1.10	2.00
	Nitrogen (Total)	mg/L	Special Frequency 1	3	20, 28 & 30/09/2022	07/10/2022	0.3	1.2	1.5	1.8
	Phosphorus (Total)	mg/L	Special Frequency 1	3	20, 28 & 30/09/2022	07/10/2022	0.06	0.07	0.06	0.10
	Reactive Phosphorus	mg/L	Special Frequency 1	3	20, 28 & 30/09/2022	07/10/2022	0.02	0.04	0.04	0.06
14	Conductivity	µS/cm	Special Frequency 1	5	15, 16, 21,22 & 28/09/2022	10/10/2022	110	157	140	270
	Nitrate	mg/L	Special Frequency 1	5	15, 16, 21,22 & 28/09/2022	10/10/2022	0.31	0.84	0.81	1.68

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 1	5	15, 16, 21,22 & 28/09/2022	10/10/2022	0.7	1.7	1.5	3.7
	Phosphorus (Total)	mg/L	Special Frequency 1	5	15, 16, 21,22 & 28/09/2022	10/10/2022	0.50	0.56	0.50	0.70
	Reactive Phosphorus	mg/L	Special Frequency 1	5	15, 16, 21,22 & 28/09/2022	10/10/2022	0.41	0.47	0.49	0.52
32	Conductivity	µS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	pH	pH	Special Frequency 1	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	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
	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
23	Conductivity	µS/cm	Special Frequency 2	5	15, 16, 21, 22 & 28/09/2022	10/10/2022	157	383	380	650
	Nitrate	mg/L	Special Frequency 2	5	15, 16, 21, 22 & 28/09/2022	10/10/2022	0.13	0.69	0.64	1.50
	Nitrogen (Total)	mg/L	Special Frequency 2	5	15, 16, 21, 22 & 28/09/2022	10/10/2022	1.00	1.42	1.40	1.90
	Oil and Grease	mg/L	Special Frequency 2	5	15, 16, 21, 22 & 28/09/2022	10/10/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	5	15, 16, 21, 22 & 28/09/2022	10/10/2022	7.63	7.95	7.97	8.20
	Phosphorus (Total)	mg/L	Special Frequency 2	5	15, 16, 21, 22 & 28/09/2022	10/10/2022	0.10	0.32	0.20	0.68
	Reactive Phosphorus	mg/L	Special Frequency 2	5	15, 16, 21, 22 & 28/09/2022	10/10/2022	0.11	0.23	0.23	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
	Total Suspended Solids	mg/L	Special Frequency 2	5	15, 16, 21, 22 & 28/09/2022	10/10/2022	18	95	59	237
24	Conductivity	µS/cm	Special Frequency 2	5	15, 16, 21,22 & 28/09/2022	10/10/2022	159	482	650	760
	Nitrate	mg/L	Special Frequency 2	5	15, 16, 21,22 & 28/09/2022	10/10/2022	0.64	1.29	1.40	1.90
	Nitrogen (Total)	mg/L	Special Frequency 2	5	15, 16, 21,22 & 28/09/2022	10/10/2022	1.10	2.20	1.80	4.30
	Oil and Grease	mg/L	Special Frequency 2	5	15, 16, 21,22 & 28/09/2022	10/10/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	5	15, 16, 21,22 & 28/09/2022	10/10/2022	7.55	7.98	8.16	8.20
	Phosphorus (Total)	mg/L	Special Frequency 2	5	15, 16, 21,22 & 28/09/2022	10/10/2022	0.20	0.51	0.20	1.26
	Reactive Phosphorus	mg/L	Special Frequency 2	5	15, 16, 21,22 & 28/09/2022	10/10/2022	0.15	0.36	0.24	0.76
	Total Suspended Solids	mg/L	Special Frequency 2	5	15, 16, 21,22 & 28/09/2022	10/10/2022	29	312	70	858

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
25	Conductivity	µS/cm	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	10/10/2022	110	270	300	340
	Nitrate	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	10/10/2022	0.15	0.43	0.28	1.40
	Nitrogen (Total)	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	10/10/2022	0.60	1.35	1.10	2.60
	Oil and Grease	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	10/10/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	10/10/2022	7.06	7.70	7.82	7.90
	Phosphorus (Total)	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	10/10/2022	0.09	0.31	0.15	0.70
	Reactive Phosphorus	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	10/10/2022	0.08	0.21	0.16	0.49
	Total Suspended Solids	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	10/10/2022	10	47	22	135

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
26	Conductivity	µS/cm	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	07/10/2022	240	306	300	440
	Nitrate	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	07/10/2022	0.29	0.67	0.41	2.40
	Nitrogen (Total)	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	07/10/2022	0.70	1.43	1.10	2.80
	Oil and Grease	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	07/10/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	07/10/2022	7.48	7.67	7.72	7.90
	Phosphorus (Total)	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	07/10/2022	0.10	0.30	0.18	0.70
	Reactive Phosphorus	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	07/10/2022	0.10	0.22	0.17	0.54
	Total Suspended Solids	mg/L	Special Frequency 2	6	15,16,20,22, 28 & 30/09/2022	07/10/2022	22	60	28	157
33	Aluminium (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
	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*	-	-	-	-	-	

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
	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*	-	-	-	-	-	

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
	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*	-	-	-	-	-	



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
	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*	-	-	-	-	-	



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

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)	Comments
10	Total Suspended Solids	mg/L	Special Frequency 1	4	15,16,22 & 28/09/2022	10/10/2022	21	633	50~	Yes [#]	Sample from the 16 th and 22 nd taken after approx. 58.6 and 51.4mm of rain respectively, therefore limit for TSS does not apply. The 15 th and 28 th were controlled releases.
	Oil and Grease	mg/L	Special Frequency 1	4	15,16,22 & 28/09/2022	10/10/2022	<5	<5	10	No	
	pH	pH	Special Frequency 1	4	15,16,22 & 28/09/2022	10/10/2022	7.38	7.71	6.5-8.5	No	
12	Total Suspended Solids	mg/L	Special Frequency 1	3	20, 28 & 30/09/2022	07/10/2022	20	117	50~	Yes [#]	The samples taken on the 20 th , 28 th and 30 th were controlled releases.
	Oil and Grease	mg/L	Special Frequency 1	3	20, 28 & 30/09/2022	07/10/2022	<5	<5	10	No	
	pH	pH	Special Frequency 1	3	20, 28 & 30/09/2022	07/10/2022	7.35	7.49	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)	Comments
14	Total Suspended Solids	mg/L	Special Frequency 1	5	15, 16, 21,22 & 28/09/2022	10/10/2022	9	100	50~	No	Sample from the 16 th and 22 nd taken after approx. 58.6 and 51.4mm of rain respectively , therefore limit for TSS does not apply. The 15 th , 21 st and 28 th were controlled releases.
	Oil and Grease	mg/L	Special Frequency 1	5	15, 16, 21,22 & 28/09/2022	10/10/2022	<5	<5	10	No	
	pH	pH	Special Frequency 1	5	15, 16, 21,22 & 28/09/2022	10/10/2022	7.11	7.37	6.5-8.5	No	
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 1	0*	-	-	-	-	9	No	
33^	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No	



WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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

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

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

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

#The discharge sample was inconsistent with pre-discharge sampling of the dam and has been discussed with the EPA. This will be documented in the Annual Return.

- 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*	-	-	-	-	-	-
Total Suspended Solids	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*	-	-	-	-	-	-
Total Suspended Solids	mg/L	Every 3 Months	0*	-	-	-	-	-	-	
17	Conductivity	µS/cm	Every 6 Months	0	13/09/2022	21/09/2022	Dry	Dry	Dry	Dry
	Nitrate	mg/L	Every 6 Months	0	13/09/2022	21/09/2022	Dry	Dry	Dry	Dry
	Nitrogen (Total)	mg/L	Every 6 Months	0	13/09/2022	21/09/2022	Dry	Dry	Dry	Dry
	pH	pH	Every 6 Months	0	13/09/2022	21/09/2022	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
	Phosphorus (Total)	mg/L	Every 6 Months	0	13/09/2022	21/09/2022	Dry	Dry	Dry	Dry
	Reactive Phosphorus	mg/L	Every 6 Months	0	13/09/2022	21/09/2022	Dry	Dry	Dry	Dry
	Standing Water Level	Metres	Every 6 Months	0	13/09/2022	21/09/2022	Dry	Dry	Dry	Dry
18	Conductivity	µS/cm	Every 6 Months	1	13/09/2022	21/09/2022	872	872	872	872
	Nitrate	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.33	0.33	0.33	0.33
	Nitrogen (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.4	0.4	0.4	0.4
	pH	pH	Every 6 Months	1	13/09/2022	21/09/2022	7.86	7.86	7.86	7.86
	Phosphorus (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.03	0.03	0.03	0.03
	Reactive Phosphorus	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.05	0.05	0.05	0.05
19	Standing Water Level	Metres	Every 6 Months	1	13/09/2022	21/09/2022	33.7	33.7	33.7	33.7
	Conductivity	µS/cm	Every 6 Months	1	13/09/2022	21/09/2022	3220	3220	3220	3220
	Nitrate	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	9.54	9.54	9.54	9.54
	Nitrogen (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	10	10	10	10
	pH	pH	Every 6 Months	1	13/09/2022	21/09/2022	7.78	7.78	7.78	7.78
	Phosphorus (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.05	0.05	0.05	0.05
	Reactive Phosphorus	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.04	0.04	0.04	0.04
20	Standing Water Level	Metres	Every 6 Months	1	13/09/2022	21/09/2022	16.68	16.68	16.68	16.68
	Conductivity	µS/cm	Every 6 Months	1	13/09/2022	21/09/2022	1050	1050	1050	1050
	Nitrate	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	2.74	2.74	2.74	2.74
	Nitrogen (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	3.2	3.2	3.2	3.2
	pH	pH	Every 6 Months	1	13/09/2022	21/09/2022	8.09	8.09	8.09	8.09

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
	Phosphorus (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.15	0.15	0.15	0.15
	Reactive Phosphorus	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.16	0.16	0.16	0.16
	Standing Water Level	Metres	Every 6 Months	1	13/09/2022	21/09/2022	15.57	15.57	15.57	15.57
21	Conductivity	µS/cm	Every 6 Months	1	13/09/2022	21/09/2022	2120	2120	2120	2120
	Nitrate	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	1.41	1.41	1.41	1.41
	Nitrogen (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	1.5	1.5	1.5	1.5
	pH	pH	Every 6 Months	1	13/09/2022	21/09/2022	8.07	8.07	8.07	8.07
	Phosphorus (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.11	0.11	0.11	0.11
	Reactive Phosphorus	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.12	0.12	0.12	0.12
	Standing Water Level	Metres	Every 6 Months	1	13/09/2022	21/09/2022	8.88	8.88	8.88	8.88
22	Conductivity	µS/cm	Every 6 Months	1	13/09/2022	21/09/2022	1700	1700	1700	1700
	Nitrate	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	4.11	4.11	4.11	4.11
	Nitrogen (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	4.9	4.9	4.9	4.9
	pH	pH	Every 6 Months	1	13/09/2022	21/09/2022	8.08	8.08	8.08	8.08
	Phosphorus (Total)	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.09	0.09	0.09	0.09
	Reactive Phosphorus	mg/L	Every 6 Months	1	13/09/2022	21/09/2022	0.07	0.07	0.07	0.07
	Standing Water Level	Metres	Every 6 Months	1	13/09/2022	21/09/2022	15.61	15.61	15.61	15.61

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 September 2022	60 minutes	11:05am	N/A	45	Day 37	1.8 / 142	Traffic (45), birds (32), WCC (<20)	No	17/10/2022
R12	19 September 2022	60 minutes	12:17pm	N/A	46	Day 38	2.2 / 329	Traffic (46), insects (32), birds (28), WCC (<20)	No	17/10/2022
R96	19 September 2022	60 minutes	1:35pm	N/A	51	Day 38	1.7 / 225	Frogs (50), traffic (42), birds (38), insects (36), WCC (<20)	No	17/10/2022
R98	19 September 2022	60 minutes	2:48pm	N/A	43	Day 35	1.6 / 054	Birds (43), traffic (26), WCC (21)	No	17/10/2022
R57	19 September 2022	60 minutes	3:32pm	N/A	50	Day 35	4.2 / 289	Traffic (50), birds (36), Crawfords ² (34), insects (28), WCC (<20)	No	17/10/2022

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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 September 2022	60 minutes	8:03pm	<20	54	Night 37	+0.4 / 1.1 / 171	Train (54), traffic (39), frogs (26), insects (25), WCC (<20)	No	17/10/2022
R12	20 September 2022	60 minutes	12:15am	<20	63	Night 38	+2.6 / 0.2 / 293	Trains (63), traffic (40), frogs (25), insects (22), WCC (<20)	No	17/10/2022
R96	19 September 2022	60 minutes	10:53pm	28	45	Night 37	+3.4 / 0.5 / 084	Frogs (44), dogs (38), WCC (25) , insects (23)	No	17/10/2022
R98	19 September 2022	60 minutes	9:45pm	<20	36	Night 35	+3.9 / 0.8 / 347	Frogs (36), insects (23), aeroplane (22), WCC (<20)	No	17/10/2022
R57	19 September 2022	60 minutes	7:42pm	28	43	Night 35	+0.8 / 1.6 / 194	Train (43), traffic (32), WCC (25) , frogs (23)	No	17/10/2022

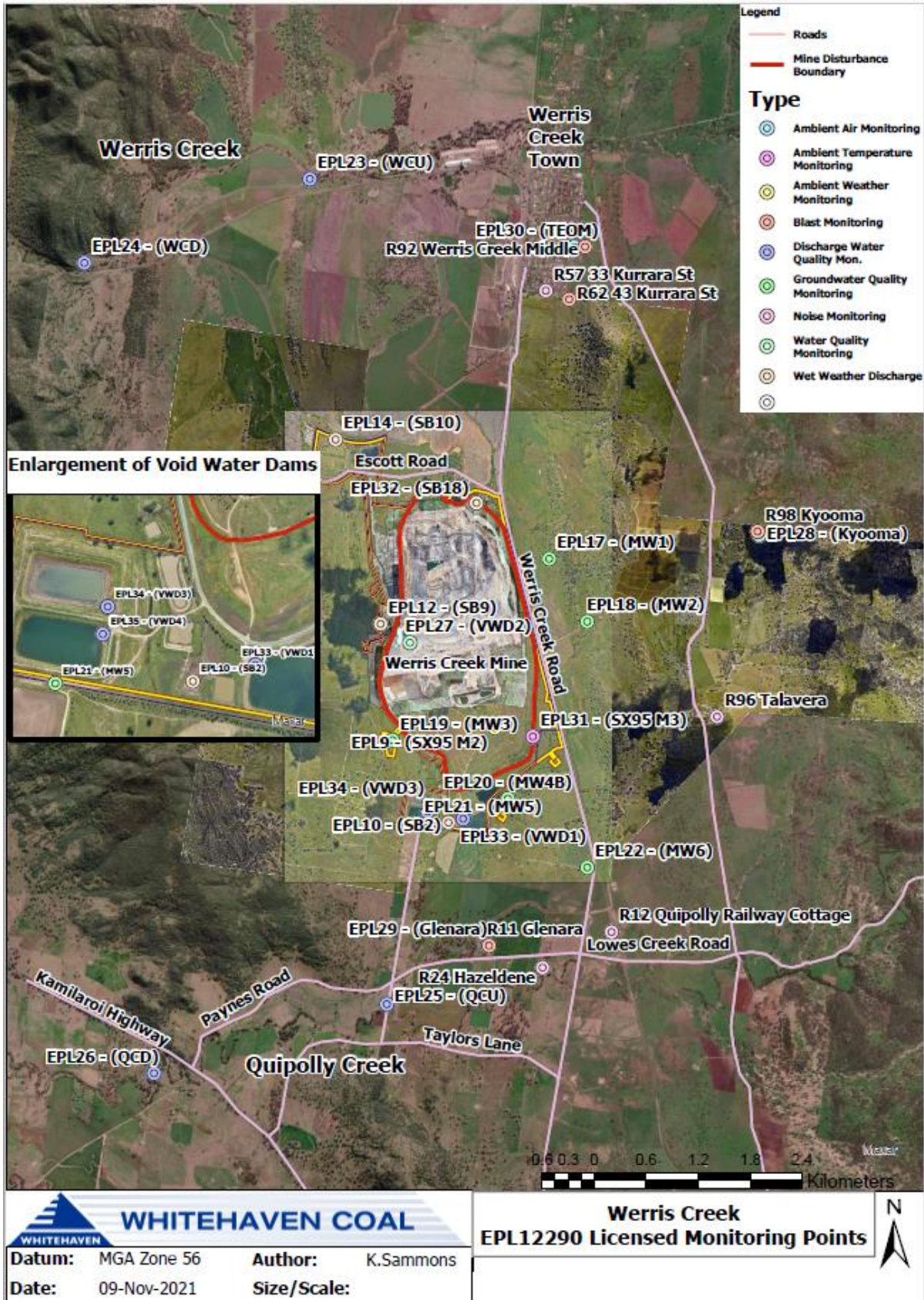
NM = Not Measurable. This denotes noise from the mine was audible at low levels however cannot be quantified.

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	7	98.9	105.7	120.0	No	01/10/2022
	Blast Vibration	mm/s	Every Blast	7	0.12	0.17	10.0	No	01/10/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	7	102.0	110.6	120.0	No	01/10/2022
	Blast Vibration	mm/s	Every Blast	7	0.69	1.40	10.0	No	01/10/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	7	101.5	107.5	120.0	No	01/10/2022
	Blast Vibration	mm/s	Every Blast	7	0.38	0.45	10.0	No	01/10/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	7	98.3	102.6	120.0	No	01/10/2022
	Blast Vibration	mm/s	Every Blast	7	0.27	0.33	10.0	No	01/10/2022

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 2022

Obtained Date: 17/11/2022

Publication Date: 17/11/2022

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	31/10/2022	16/11/2022	2.4	3.9	3.9	5.5
	Solid Particles	g/m ² /month	Continuous	1	20/10/2022	15/11/2022	1.2	1.2	1.2	1.2
29	PM10	µg/m ³	Every 6 days	5	31/10/2022	16/11/2022	3.5	6.5	6.2	10.5
	Solid Particles	g/m ² /month	Continuous	1	20/10/2022	15/11/2022	2.0	2.0	2.0	2.0
30	PM10	µg/m ³	Continuous	Continuous	31/10/2022	01/11/2022	2.2	7.8	7.4	16.5
	Solid Particles	g/m ² /month	Continuous	1	20/10/2022	15/11/2022	1.1	1.1	1.1	1.1
10	Conductivity	µS/cm	Special Frequency 1	6	18 & 26/10/2022	15/11/2022	350	425	365	570
	Nitrate	mg/L	Special Frequency 1	6	18 & 26/10/2022	15/11/2022	0.005	0.006	0.006	0.007
	Nitrogen (Total)	mg/L	Special Frequency 1	6	18 & 26/10/2022	15/11/2022	0.30	0.38	0.35	0.50
	Phosphorus (Total)	mg/L	Special Frequency 1	6	18 & 26/10/2022	15/11/2022	0.07	0.12	0.08	0.20
	Reactive Phosphorus	mg/L	Special Frequency 1	6	18 & 26/10/2022	15/11/2022	0.05	0.09	0.05	0.18

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
12	Conductivity	µS/cm	Special Frequency 1	4	18 & 26/11/2022	15/11/2022	390	440	440	490
	Nitrate	mg/L	Special Frequency 1	4	18 & 26/11/2022	15/11/2022	<0.005	0.91	1.30	1.40
	Nitrogen (Total)	mg/L	Special Frequency 1	4	18 & 26/11/2022	15/11/2022	0.2	1.1	1.0	2.1
	Phosphorus (Total)	mg/L	Special Frequency 1	4	18 & 26/11/2022	15/11/2022	0.07	0.08	0.08	0.08
	Reactive Phosphorus	mg/L	Special Frequency 1	4	18 & 26/11/2022	15/11/2022	0.01	0.02	0.01	0.03
14	Conductivity	µS/cm	Special Frequency 1	7	12, 18, 28 & 29/20/2022	15/11/2022	100	167	190	210
	Nitrate	mg/L	Special Frequency 1	7	12, 18, 28 & 29/20/2022	15/11/2022	<0.005	0.10	0.06	0.21
	Nitrogen (Total)	mg/L	Special Frequency 1	7	12, 18, 28 & 29/20/2022	15/11/2022	0.1	0.3	0.2	0.7
	Phosphorus (Total)	mg/L	Special Frequency 1	7	12, 18, 28 & 29/20/2022	15/11/2022	0.20	0.37	0.30	0.60
	Reactive Phosphorus	mg/L	Special Frequency 1	7	12, 18, 28 & 29/20/2022	15/11/2022	0.23	0.37	0.33	0.52
32	Conductivity	µS/cm	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrate	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Nitrogen (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	pH	pH	Special Frequency 1	0*	-	-	-	-	-	-
	Phosphorus (Total)	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	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
	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	-	-
23	Conductivity	µS/cm	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	390	513	480	700
	Nitrate	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	0.53	0.82	0.68	1.40
	Nitrogen (Total)	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	0.90	1.18	1.00	1.80
	Oil and Grease	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	8.10	8.17	8.17	8.23
	Phosphorus (Total)	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	0.10	0.13	0.10	0.20
	Reactive Phosphorus	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	0.13	0.14	0.14	0.16
	Total Suspended Solids	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	9	12	12	16
24	Conductivity	µS/cm	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	340	560	530	840
	Nitrate	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	0.52	0.97	0.84	1.70
	Nitrogen (Total)	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	0.90	1.35	1.20	2.10
	Oil and Grease	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	<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 2	4	12, 18, 28 & 29/10/2022	15/11/2022	7.99	8.12	8.11	8.25
	Phosphorus (Total)	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	0.20	0.28	0.25	0.40
	Reactive Phosphorus	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	0.15	0.23	0.20	0.37
	Total Suspended Solids	mg/L	Special Frequency 2	4	12, 18, 28 & 29/10/2022	15/11/2022	10	28	20	63
25	Conductivity	µS/cm	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	290	330	330	370
	Nitrate	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	0.24	0.29	0.29	0.33
	Nitrogen (Total)	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	0.80	0.90	0.90	1.00
	Oil and Grease	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	7.65	7.72	7.72	7.79
	Phosphorus (Total)	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	0.10	0.15	0.15	0.20
	Reactive Phosphorus	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	0.11	0.13	0.13	0.14
	Total Suspended Solids	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	8	8	8	8
26	Conductivity	µS/cm	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	320	353	330	480

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	2	18 & 26/10/2022	15/11/2022	0.28	0.30	0.29	0.40
	Nitrogen (Total)	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	0.80	0.88	0.90	1.00
	Oil and Grease	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	7.66	7.70	7.70	7.79
	Phosphorus (Total)	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	0.10	0.15	0.15	0.20
	Reactive Phosphorus	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	0.13	0.13	0.13	0.16
	Total Suspended Solids	mg/L	Special Frequency 2	2	18 & 26/10/2022	15/11/2022	18	12	8	20
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*	-	-	-	-	-	-	

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*	-	-	-	-	-	-	
34	Aluminium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Arsenic (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Barium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Beryllium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	BOD	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cadmium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Chromium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cobalt (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Copper (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Iron (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Lead (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Magnesium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Manganese (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Nickel (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
Potassium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-	
Selenium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-	

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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

WERRIS CREEK COAL EPL – MONTHLY SUMMARY
Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)	Comments
10	Total Suspended Solids	mg/L	Special Frequency 1	6	18 & 26/10/2022	15/11/2022	15	23	50~	No	
	Oil and Grease	mg/L	Special Frequency 1	6	18 & 26/10/2022	15/11/2022	<5	<5	10	No	
	pH	pH	Special Frequency 1	6	18 & 26/10/2022	15/11/2022	7.68	8.04	6.5-8.5	No	
12	Total Suspended Solids	mg/L	Special Frequency 1	4	18 & 26/10/2022	15/11/2022	18	25	50~	No	
	Oil and Grease	mg/L	Special Frequency 1	4	18 & 26/10/2022	15/11/2022	<5	<5	10	No	
	pH	pH	Special Frequency 1	4	18 & 26/10/2022	15/11/2022	7.56	8.11	6.5-8.5	No	
14	Total Suspended Solids	mg/L	Special Frequency 1	7	12, 18, 28 & 29/10/2022	15/11/2022	13	67	50~	No	Sample from the 12th taken after approx. 52mm of rain, therefore limit for TSS does not apply. The 18th, 28th and 29th were controlled releases.
	Oil and Grease	mg/L	Special Frequency 1	7	12, 18, 28 & 29/10/2022	15/11/2022	<5	<5	10	No	
	pH	pH	Special Frequency 1	7	12, 18, 28 & 29/10/2022	15/11/2022	6.78	7.67	6.5-8.5	No	
32	Total Suspended Solids	mg/L	Special Frequency 1	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)	Comments
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 1	0*	-	-	-	-	9	No	
33^	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No	
34	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No	
35	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No	

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

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

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

The discharge sample was inconsistent with pre-discharge sampling of the dam and has been discussed with the EPA. This will be documented in the Annual Return.

- 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	26 October 2022	60 minutes	11:54am	N/A	51	Day 37	4.7 / 286	Traffic (51), birds (40), insects (28), WCC (<20)	No	17/11/2022
R12	26 October 2022	60 minutes	1:50pm	N/A	47	Day 38	6.8 / 284	Traffic (46), birds (39), insects (34), wind (32), WCC (<20)	No	17/11/2022
R96	26 October 2022	60 minutes	2:58pm	N/A	44	Day 38	5.3 / 277	Birds (43), wind (36), WCC (23)	No	17/11/2022
R98	26 October 2022	60 minutes	4:06pm	N/A	45	Day 35	6.2 / 285	Birds (44), wind (38), WCC (24)	No	17/11/2022
R57	26 October 2022	60 minutes	2:42pm	N/A	50	Day 35	2.3 / 305	Traffic (49), birds (42), Crawfords ² (30), insects (27), WCC (<20)	No	17/11/2022
R24	26 October 2022	60 minutes	7:03pm	<20	43	Night 37	Lapse / 2.7 / 165	Traffic (43), frogs (32), insects (22), WCC (<20)	No	17/11/2022
R12	26 October 2022	60 minutes	11:56pm	<20	41	Night 38	Lapse / 2.9 / 317	Traffic (41), insects (28), frogs (27), WCC (<20)	No	17/11/2022
R96	26 October 2022	60 minutes	10:44pm	35	39	Night 37	Lapse / 3.7 / 312	Frogs (37), WCC (32) , traffic (30), insects (24)	No	17/11/2022
R98	26 October 2022	60 minutes	9:39pm	39	43	Night 35	Lapse / 5.1 / 285	Frogs (42), WCC (35) , insects (24)	No	17/11/2022
R57	26 October 2022	60 minutes	7:47pm	33	43	Night 35	Lapse / 6.2 / 276	Residential (45), traffic (36), frogs (35), wind (32), insects (29), WCC (29)	No	17/11/2022

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

IA = Inaudible.

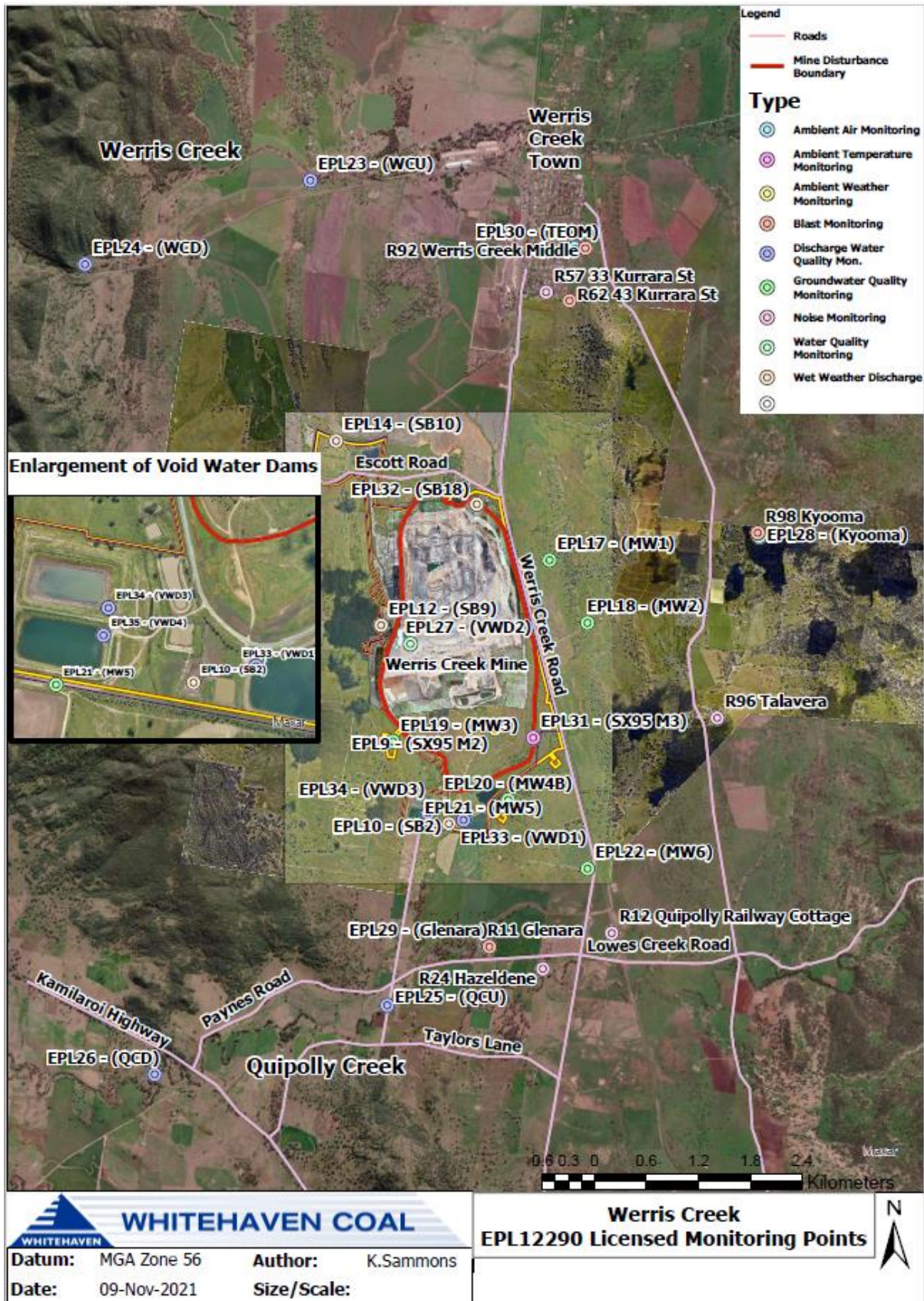
WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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	8	101.1	110.6	120.0	No	01/11/2022
	Blast Vibration	mm/s	Every Blast	8	0.08	0.15	10.0	No	01/11/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	8	99.9	105.3	120.0	No	01/11/2022
	Blast Vibration	mm/s	Every Blast	8	0.57	1.21	10.0	No	01/11/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	8	100.3	110.7	120.0	No	01/11/2022
	Blast Vibration	mm/s	Every Blast	8	0.41	0.90	10.0	No	01/11/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	8	94.6	102.7	120.0	No	01/11/2022
	Blast Vibration	mm/s	Every Blast	8	0.27	0.52	10.0	No	01/11/2022



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 2022

Obtained Date: 20/12/2022

Publication Date: 20/12/2022

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	30/11/2022	16/12/2022	1.6	4.7	4.1	7.1
	Solid Particles	g/m ² /month	Continuous	1	18/11/2022	14/12/2022	0.8	0.8	0.8	0.8
29	PM10	µg/m ³	Every 6 days	5	3/11/2022	16/12/2022	2.0	11.1	13.2	16.6
	Solid Particles	g/m ² /month	Continuous	1	18/11/2022	14/12/2022	0.7	0.7	0.7	0.7
30	PM10	µg/m ³	Continuous	Continuous	30/11/2022	01/12/2022	4.5	10.6	10.3	18.1
	Solid Particles	g/m ² /month	Continuous	1	18/11/2022	14/12/2022	0.6	0.6	0.6	0.6
10	Conductivity	µS/cm	Special Frequency 1	4	1, 2 & 14/11/2022	17/11/2022	100	233	230	370
	Nitrate	mg/L	Special Frequency 1	4	1, 2 & 14/11/2022	17/11/2022	0.040	0.092	0.065	0.170
	Nitrogen (Total)	mg/L	Special Frequency 1	4	1, 2 & 14/11/2022	17/11/2022	0.50	0.60	0.60	0.70
	Phosphorus (Total)	mg/L	Special Frequency 1	4	1, 2 & 14/11/2022	17/11/2022	0.20	0.53	0.50	0.90
	Reactive Phosphorus	mg/L	Special Frequency 1	4	1, 2 & 14/11/2022	17/11/2022	0.17	0.47	0.47	0.78

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
12	Conductivity	µS/cm	Special Frequency 1	8	3 & 18/11/2022	23/11/2022	220	288	285	350
	Nitrate	mg/L	Special Frequency 1	8	3 & 18/11/2022	23/11/2022	0.05	1.05	0.68	2.80
	Nitrogen (Total)	mg/L	Special Frequency 1	8	3 & 18/11/2022	23/11/2022	0.3	1.5	1.0	3.9
	Phosphorus (Total)	mg/L	Special Frequency 1	8	3 & 18/11/2022	23/11/2022	0.05	0.18	0.20	0.30
	Reactive Phosphorus	mg/L	Special Frequency 1	8	3 & 18/11/2022	23/11/2022	0.01	0.13	0.12	0.27
14	Conductivity	µS/cm	Special Frequency 1	3	1 & 14/11/2022	17/11/2022	80	103	80	150
	Nitrate	mg/L	Special Frequency 1	3	1 & 14/11/2022	17/11/2022	<0.005	0.09	0.09	0.12
	Nitrogen (Total)	mg/L	Special Frequency 1	3	1 & 14/11/2022	17/11/2022	0.5	0.8	0.6	1.2
	Phosphorus (Total)	mg/L	Special Frequency 1	3	1 & 14/11/2022	17/11/2022	0.50	0.57	0.60	0.60
	Reactive Phosphorus	mg/L	Special Frequency 1	3	1 & 14/11/2022	17/11/2022	0.41	0.51	0.52	0.60
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*	-	-	-	-	-	-

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 1	0*	-	-	-	-	-	-
23	Conductivity	µS/cm	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	120	150	150	180
	Nitrate	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	0.22	0.26	0.26	0.30
	Nitrogen (Total)	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	0.70	0.85	0.85	0.99
	Oil and Grease	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	7.81	7.91	7.91	8.00
	Phosphorus (Total)	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	0.50	0.65	0.65	0.80
	Reactive Phosphorus	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	0.47	0.68	0.68	0.89
	Total Suspended Solids	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	295	498	498	701
24	Conductivity	µS/cm	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	130	155	155	180
	Nitrate	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	0.44	0.49	0.49	0.53
	Nitrogen (Total)	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	0.90	1.00	1.00	1.10
	Oil and Grease	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	<5	7	7	7

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 2	2	1 & 14/11/2022	17/11/2022	8.01	8.05	8.05	8.09
	Phosphorus (Total)	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	1.20	1.60	1.60	2.00
	Reactive Phosphorus	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	0.83	1.12	1.12	1.40
	Total Suspended Solids	mg/L	Special Frequency 2	2	1 & 14/11/2022	17/11/2022	1106	1248	1248	1390
25	Conductivity	µS/cm	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	90	190	210	280
	Nitrate	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	0.01	0.13	0.19	0.22
	Nitrogen (Total)	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	0.70	1.14	0.80	2.10
	Oil and Grease	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	6.82	7.43	7.62	7.77
	Phosphorus (Total)	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	0.20	0.54	0.30	1.00
	Reactive Phosphorus	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	0.18	0.47	0.23	0.94
	Total Suspended Solids	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	13	50	36	100
26	Conductivity	µS/cm	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	160	212	210	340

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	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	0.10	0.16	0.16	0.27
	Nitrogen (Total)	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	0.70	0.97	0.80	2.10
	Oil and Grease	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	<5	<5	<5	<5
	pH	pH	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	7.16	7.49	7.62	7.77
	Phosphorus (Total)	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	0.20	0.45	0.30	1.00
	Reactive Phosphorus	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	0.17	0.35	0.24	0.87
	Total Suspended Solids	mg/L	Special Frequency 2	5	1, 2, 3, 14 & 18/11/2022	23/11/2022	21	69	50	148
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*	-	-	-	-	-	-	

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*	-	-	-	-	-	-	
34	Aluminium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Arsenic (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Barium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Beryllium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	BOD	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cadmium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Chromium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Cobalt (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Copper (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Iron (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Lead (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Magnesium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Manganese (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
	Nickel (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-
Potassium	mg/L	Special Frequency 3	0*	-	-	-	-	-	-	
Selenium (dissolved)	mg/L	Special Frequency 3	0*	-	-	-	-	-	-	

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

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

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of samples for the Month	Date Sampled	Date Obtained	Min Value	Max Value	100%ile Limit	Exceedance (Yes/No)	Comments
10	Total Suspended Solids	mg/L	Special Frequency 1	4	1, 2 & 14/11/2022	17/11/2022	32	526	50~	No	Samples from the 1 st and 2 nd taken after approx. 67.2mm of rain, therefore limit for TSS does not apply. The 14 th was an uncontrolled release.
	Oil and Grease	mg/L	Special Frequency 1	4	1, 2 & 14/11/2022	17/11/2022	<5	<5	10	No	
	pH	pH	Special Frequency 1	4	1, 2 & 14/11/2022	17/11/2022	7.28	7.73	6.5-8.5	No	
12	Total Suspended Solids	mg/L	Special Frequency 1	8	3 & 18/11/2022	23/11/2022	45	410	50~	No	Samples from the 3 rd and 18 th taken after approx. 67.2mm and 57.6mm, respectively, of rain, therefore limit for TSS does not apply.
	Oil and Grease	mg/L	Special Frequency 1	8	3 & 18/11/2022	23/11/2022	<5	<5	10	No	
	pH	pH	Special Frequency 1	8	3 & 18/11/2022	23/11/2022	7.26	7.57	6.5-8.5	No	
14	Total Suspended Solids	mg/L	Special Frequency 1	3	1 & 14/11/2022	17/11/2022	28	190	50~	No	Samples from the 1 st and 14 ^h taken after approx. 67.2mm
	Oil and Grease	mg/L	Special Frequency 1	3	1 & 14/11/2022	17/11/2022	<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)	Comments
	pH	pH	Special Frequency 1	3	1 & 14/11/2022	17/11/2022	7.07	7.44	6.5-8.5	No	and 57.6mm, respectively, of rain, therefore limit for TSS does not apply.
32	Total Suspended Solids	mg/L	Special Frequency 1	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 1	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 1	0*	-	-	-	-	9	No	
33 [^]	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No	
34	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No	
35	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No	

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

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

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

#The discharge sample was inconsistent with pre-discharge sampling of the dam and has been discussed with the EPA. This will be documented in the Annual Return.

- 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.



WERRIS CREEK COAL EPL – MONTHLY SUMMARY

- 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	23/11/2022	01/12/2022	1710	1710	1710	1710
	Nitrate	mg/L	Every 3 Months	1	23/11/2022	01/12/2022	0.24	0.24	0.24	0.24
	Nitrogen (Total)	mg/L	Every 3 Months	1	23/11/2022	01/12/2022	0.4	0.4	0.4	0.4
	Oil and Grease	mg/L	Every 3 Months	1	23/11/2022	01/12/2022	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	23/11/2022	01/12/2022	8.01	8.01	8.01	8.01
	Phosphorus (Total)	mg/L	Every 3 Months	1	23/11/2022	01/12/2022	0.02	0.02	0.02	0.02
	Reactive Phosphorus	mg/L	Every 3 Months	1	23/11/2022	01/12/2022	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	23/11/2022	01/12/2022	7	7	7	7
27	Conductivity	µS/cm	Every 3 Months	1	24/11/2022	02/12/2022	1140	1140	1140	1140
	Nitrate	mg/L	Every 3 Months	1	24/11/2022	02/12/2022	0.49	0.49	0.49	0.49
	Nitrogen (Total)	mg/L	Every 3 Months	1	24/11/2022	02/12/2022	0.7	0.7	0.7	0.7
	Oil and Grease	mg/L	Every 3 Months	1	24/11/2022	02/12/2022	<5	<5	<5	<5
	pH	pH	Every 3 Months	1	24/11/2022	02/12/2022	7.97	7.97	7.97	7.97
	Phosphorus (Total)	mg/L	Every 3 Months	1	24/11/2022	02/12/2022	0.02	0.02	0.02	0.02
	Reactive Phosphorus	mg/L	Every 3 Months	1	24/11/2022	02/12/2022	<0.01	<0.01	<0.01	<0.01
	Total Suspended Solids	mg/L	Every 3 Months	1	24/11/2022	02/12/2022	14	14	14	14
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	10 November 2022	60 minutes	12:45pm	N/A	46	Day 37	2.1 / 292	Traffic (45), birds (35), aeroplanes (31), insects (25), WCC (<20)	No	12/12/2022
R12	10 November 2022	60 minutes	1:51pm	N/A	44	Day 38	2.2 / 357	Traffic (44), insects (27), birds (25), WCC (<20)	No	12/12/2022
R96	10 November 2022	60 minutes	2:58pm	N/A	33	Day 38	4.1 / 297	Birds (32), insects (23), traffic (23), WCC (22)	No	12/12/2022
R98	10 November 2022	60 minutes	4:06pm	N/A	45	Day 35	2.2 / 315	Dog (44), birds (35), insects (27), WCC (<20)	No	12/12/2022
R57	10 November 2022	60 minutes	2:42pm	N/A	47	Day 35	1.0 / 226	Traffic (47), birds (37), residential (27), WCC (<20)	No	12/12/2022
R24	10 November 2022	60 minutes	7:00pm	25	50	Night 37	Lapse / 0.9 / 358	Traffic (50), frogs (31), insects (28), WCC (22)	No	12/12/2022
R12	10 November 2022	60 minutes	11:53pm	<20	39	Night 38	+1.3 / 1.2 / 140	Traffic (38), insects (29), frogs (27), WCC (<20)	No	12/12/2022
R96	10 November 2022	60 minutes	10:41pm	<20	41	Night 37	Lapse / 0.3 / 157	Frogs (40), dogs (35), insects (25), WCC (<20)	No	12/12/2022
R98	10 November 2022	60 minutes	9:36pm	<20	40	Night 35	Lapse / 2.8 / 138	Birds (38), insects (33), dog (31), frogs (28), WCC (<20)	No	12/12/2022
R57	10 November 2022	60 minutes	7:43pm	<20	46	Night 35	+0.0 / 2.1 / 135	Traffic (43), Crawfords ³ (40), insects (37), frogs (35), WCC (<20)	No	12/12/2022

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

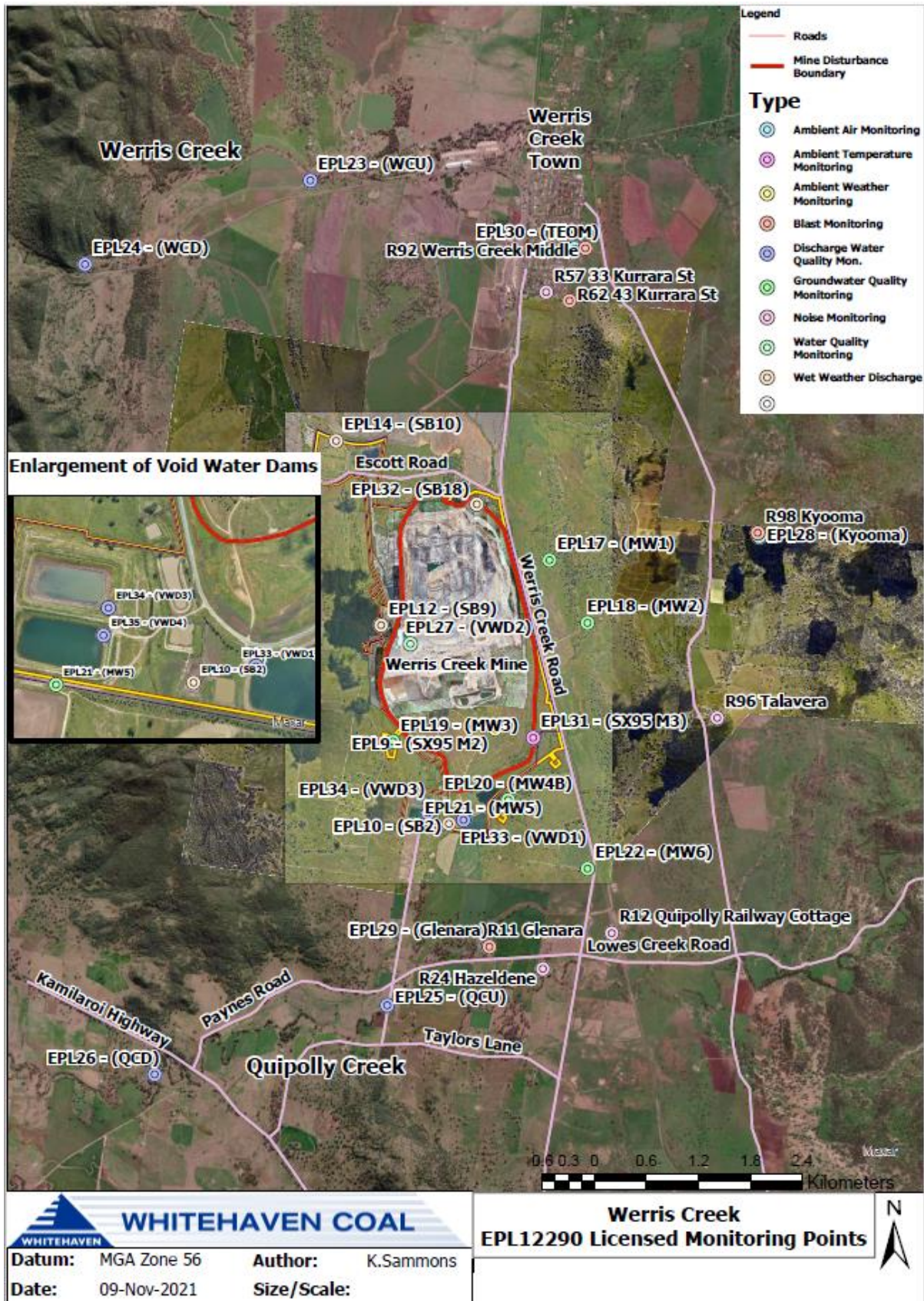
IA = Inaudible.

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	7	97.8	101.4	120.0	No	01/12/2022
	Blast Vibration	mm/s	Every Blast	7	0.12	0.18	10.0	No	01/12/2022
R98	Blast Noise	dB (Lin Peak)	Every Blast	7	100.3	105.4	120.0	No	01/12/2022
	Blast Vibration	mm/s	Every Blast	7	0.85	1.14	10.0	No	01/12/2022
R62	Blast Noise	dB (Lin Peak)	Every Blast	7	102.6	107.6	120.0	No	01/12/2022
	Blast Vibration	mm/s	Every Blast	7	0.59	0.91	10.0	No	01/12/2022
R92	Blast Noise	dB (Lin Peak)	Every Blast	7	100.2	106.4	120.0	No	01/12/2022
	Blast Vibration	mm/s	Every Blast	7	0.37	0.55	10.0	No	01/12/2022



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: DECEMBER 2022

Obtained Date: 13/01/2023

Publication Date: 13/01/2023

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	30/12/2022	13/01/2023	0.7	6.7	6.3	16.1
	Solid Particles	g/m ² /month	Continuous	1	19/12/2022	12/01/2023	¹ NS	¹ NS	¹ NS	¹ NS
29	PM10	µg/m ³	Every 6 days	5	30/12/2022	13/01/2023	3.9	8.9	6.0	20.4
	Solid Particles	g/m ² /month	Continuous	1	19/12/2022	12/01/2023	3.5	3.5	3.5	3.5
30	PM10	µg/m ³	Continuous	Continuous	31/12/2022	01/01/2023	4.7	13.0	11.1	24.5
	Solid Particles	g/m ² /month	Continuous	1	19/12/2022	12/01/2023	0.6	0.6	0.6	0.6
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*	-	-	-	-	-	-



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
14	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*	-	-	-	-	-	-
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*	-	-	-	-	-	-
	Reactive Phosphorus	mg/L	Special Frequency 2	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)	mg/L	Special Frequency 2	0*	-	-	-	-	-	-
	Oil and Grease	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
	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*	-	-	-	-	-	-
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*	-	-	-	-	-	-



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

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

¹NS – No sample. EPL ID 28 sample site vandalised and sample bottle shot and smashed.

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)	Comments
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	



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)	Comments
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	µS/cm	Special Frequency 4	2	6/12 & 28/12/2022-	05/01/2023	1717	1788	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	1	11/23/2022	01/12/2022	<5	<5	10	No	
	pH	pH	Special Frequency 4	2	6/12 & 28/12/2022-	05/01/2023	8.1	8.17	9	No	
34	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No	
35	Electrical Conductivity	µS/cm	Special Frequency 4	0*	-	-	-	-	2000	No	
	Oil and Grease	mg/L	Special Frequency 3	0*	-	-	-	-	10	No	
	pH	pH	Special Frequency 4	0*	-	-	-	-	9	No	

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

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

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

The discharge sample was inconsistent with pre-discharge sampling of the dam and has been discussed with the EPA. This will be documented in the Annual Return.

- 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.



WERRIS CREEK COAL EPL – MONTHLY SUMMARY

- 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	19 December 2022	60 minutes	3:48pm	N/A	44	Day 37	4.5 / 162	Traffic (42), birds (40), WCC (<20)	No	11/01/2023
R12	19 December 2022	60 minutes	1:45pm	N/A	44	Day 38	3.5 / 146	Birds (44), traffic (33), WCC (<20)	No	11/01/2023
R96	19 December 2022	60 minutes	12:38pm	N/A	40	Day 38	3.0 / 158	Birds (39), insects (33), traffic (26), WCC (<20)	No	11/01/2023
R98	19 December 2022	60 minutes	11:29am	N/A	37	Day 35	2.6 / 180	Birds (34), insects (32), train (30), WCC (<20)	No	11/01/2023
R57	19 December 2022	60 minutes	10:00am	N/A	51	Day 35	3.2 / 144	Train (51), birds (38), traffic (30), WCC (<20)	No	11/01/2023
R24	19 December 2022	60 minutes	7:57pm	<20	47	Night 37	Lapse / 4.1 / 168	Traffic (47), birds (32), insects (27), WCC (<20)	No	11/01/2023
R12	20 December 2022	60 minutes	12:01am	<20	41	Night 38	Lapse / 3.6 / 145	Train (41), insects (30), traffic (24), WCC (<20)	No	11/01/2023
R96	19 December 2022	60 minutes	10:49pm	<20	42	Night 37	Lapse / 4.8 / 138	Insects (42), traffic (27), WCC (<20)	No	11/01/2023
R98	19 December 2022	60 minutes	9:40pm	<20	52	Night 35	Lapse / 5.6 / 142	Insects (51), dog (45), WCC (<20)	No	11/01/2023
R57	19 December 2022	60 minutes	7:43pm	<20	51	Night 35	Lapse / 6.1 / 146	Train (50), birds (43), traffic (38), WCC (<20)	No	11/01/2023

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	99.7	111.5	120.0	No	01/01/2023
	Blast Vibration	mm/s	Every Blast	5	0.13	0.27	10.0	No	01/01/2023
R98	Blast Noise	dB (Lin Peak)	Every Blast	5	99.9	102.5	120.0	No	01/01/2023
	Blast Vibration	mm/s	Every Blast	5	0.99	1.34	10.0	No	01/01/2023
R62	Blast Noise	dB (Lin Peak)	Every Blast	5	102.2	103.2	120.0	No	01/01/2023
	Blast Vibration	mm/s	Every Blast	5	0.72	1.14	10.0	No	01/01/2023
R92	Blast Noise	dB (Lin Peak)	Every Blast	5	100.1	101.6	120.0	No	01/01/2023
	Blast Vibration	mm/s	Every Blast	5	0.38	0.50	10.0	No	01/01/2023

WERRIS CREEK COAL EPL – MONTHLY SUMMARY

