

**WAMBO COAL  
POLLUTION MONITORING DATA  
1 NOVEMBER 2023 – 30 NOVEMBER 2023  
NOVEMBER MONTHLY REPORT**

Published 6 December 2023

**Environment Protection Licence Number: 529  
Licensee: Wambo Coal Pty Limited, PMB 1, Singleton NSW 2330  
Premises: Wambo Coal Pty Limited, Jerrys Plains Road, Warkworth NSW 2330**

The following pollution monitoring data is published as a requirement of the Wambo Environmental Protection Licence (EPL) 529. A link to EPL529 can be found on the Environmental Protection Authority (EPA) Public Register. A link to the EPA's public register can be found at: <https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers/about-prpoeo>

Monthly interim reports will be provided on a fortnightly basis until a final monthly report is produced when all monthly data is available.

The location of each sampling point is provided in 'Plan 2672-2' at the end of this document.

## Monitoring Data

### **Surface and Mine Water Dam Monitoring**

**Monitoring Frequency: Once per month**

**Sampling Method: Grab sample**

**Limits: Nil**

**Table 1 - WCPL Surface and Mine Water Dam Results**

EPL ID	Site ID	Date	pH	EC (µS/cm)	TSS (mg/L)	Comments
Point 24	SW01	30/11/2023	7.42	915	6	-
Point 25	SW02	30/11/2023	7.48	893	6	-
Point 26	SW03	30/11/2023	7.43	2780	20	-
Point 27	SW04	30/11/2023	-	-	-	DRY
Point 28	SW05	30/11/2023	-	-	-	DRY
Point 29	SW06	30/11/2023	-	-	-	DRY
Point 30	SW07	30/11/2023	-	-	-	POOL/NO FLOW
Point 31	SW08	30/11/2023	-	-	-	DRY
Point 33	SW15	6/11/2023	8.80	5770	12	-
Point 34	SW27a	30/11/2023	-	-	-	DRY
Point 36	SW32a	30/11/2023	-	-	-	DRY
Point 39	SW39	30/11/2023	-	-	-	DRY
Point 40	SW40	30/11/2023	-	-	-	POOL/NO FLOW
Point 41	SW41	30/11/2023	-	-	-	DRY

**Water Discharge Monitoring**

Monitoring Frequency: Continuous during discharge (EC, pH, Turbidity)  
 Daily during discharge (TSS, Volume)  
 Sampling Method: In line instrumentation (EC, pH Turbidity)  
 Grab sample (TSS)  
 Limits: pH- 6.5 to 9.5  
 TSS – 120  
 Volume – 250ML/day  
 Date sampled: Continuous  
 Date obtained: Continuous

Table 2 - WCPL Discharge Monitoring

Site	Date	pH (Avg)	Conductivity (µS/cm) Avg	TSS (mg/L)	Turbidity (NTU)	Volume (ML/day)	Comments
Point 4	No Discharges in November						
Point 19	No Discharges in November						

**Sewerage Treatment Monitoring**

Monitoring Frequency: Quarterly during discharge  
 Sampling Method: Grab sample  
 Limits: Nil  
 Date sampled: 27 November 2023  
 Date obtained: Within 7 days of sample collection

Table 3- WCPL Discharge Monitoring

EPL ID	Site ID	Date	pH	Faecal Coliforms (CFU/100mL)	Comments
Point 43	STPD3	-	-	-	No discharge
Point 52	STPD2	-	-	-	Sampled Quarterly
Point 56	STP1	27/11/23	7.14	1600	Sampled Quarterly

**PM10 Monitoring**

**Monitoring Frequency: Continuous**

**Sampling Method: AM22**

**Limits: Nil**

**Date sampled: Continuous**

**Date obtained: Continuous**

**Table 4 - WCPL PM10 Results**

Date	PM02 (D2)- Wambo Road (Caban) (EPA14)		PM03 (D4) - Thelander (EPA15)		PM04 (D1) - Muller (EPA16)		PM05 (D5) - Kelly (EPA 53)	
	PM10 24 Hour Result (ug/m <sup>3</sup> )	Annual Average	PM10 24 Hour Result (ug/m <sup>3</sup> )	Annual Average	PM10 24 Hour Result (ug/m <sup>3</sup> )	Annual Average	PM10 24 Hour Result (ug/m <sup>3</sup> )	Annual Average
1/11/2023	24.1	15.33	25.6	11.72	33.3	18.09	22.8	21.87
2/11/2023	21.6	15.37	15.7	11.76	26.0	18.15	26.8	21.90
3/11/2023	17.7	15.40	12.6	11.79	22.6	18.20	20.7	21.92
4/11/2023	13.4	15.41	15.6	11.82	23.7	18.23	24.4	21.95
5/11/2023	10.2	15.40	8.1	11.82	16.5	18.23	19.2	21.98
6/11/2023	13.6	15.41	14.9	11.84	17.4	18.24	23.5	22.01
7/11/2023	18.7	15.42	13.5	11.85	20.4	18.25	23.1	22.03
8/11/2023	22.4	15.45	11.1	11.85	21.2	18.26	19.8	22.04
9/11/2023	28.2	15.49	13.3	11.87	28.2	18.30	21.6	22.07
10/11/2023	13.4	15.49	7.2	11.86	14.6	18.30	17.1	22.08
11/11/2023	14.4	15.49	14.9	11.88	19.3	18.31	29.5	22.12
12/11/2023	24.3	15.52	NaN	11.90	22.2	18.34	46.6	22.20
13/11/2023	30	15.56	NaN	11.91	41.6	18.42	32.9	22.25
14/11/2023	27.4	15.60	22.8	11.95	30.3	18.46	39.6	22.31
15/11/2023	30.9	15.66	21.2	11.99	30.4	18.49	30.4	22.35
16/11/2023	29.5	15.71	19.9	12.03	28.1	18.55	30.1	22.38
17/11/2023	13.8	15.73	11.9	12.06	16.3	18.58	16.0	22.40
18/11/2023	16.4	15.74	11.3	12.07	20.1	18.61	20.3	22.41
19/11/2023	30.3	15.79	27.6	12.13	34.7	18.66	28.5	22.45
20/11/2023	24.3	15.82	17.0	12.15	28.9	18.69	22.0	22.47
21/11/2023	19.5	15.82	9.8	12.15	26.5	18.74	13.4	22.38
22/11/2023	17.8	15.82	11.6	12.17	20.6	18.77	20.3	22.34
23/11/2023	11.5	15.83	11.5	12.19	23.2	18.81	15.6	22.33
24/11/2023	10.7	15.82	8.2	12.20	14.3	18.82	20.1	22.31
25/11/2023	8.8	15.80	8.8	12.21	8.7	18.81	10.7	22.28
26/11/2023	8	15.76	4.5	12.19	8.2	18.80	15.0	22.28
27/11/2023	15.9	15.75	6.7	12.17	18.4	18.79	26.4	22.32
28/11/2023	15.5	15.73	14.2	12.19	21.6	18.81	19.9	22.28
29/11/2023	12.4	15.71	11.1	12.19	14.2	18.80	13.0	22.26
30/11/2023	6.2	15.67	4.6	12.15	5.9	18.76	22.6	22.27

\*NaN >75% of data collected during period

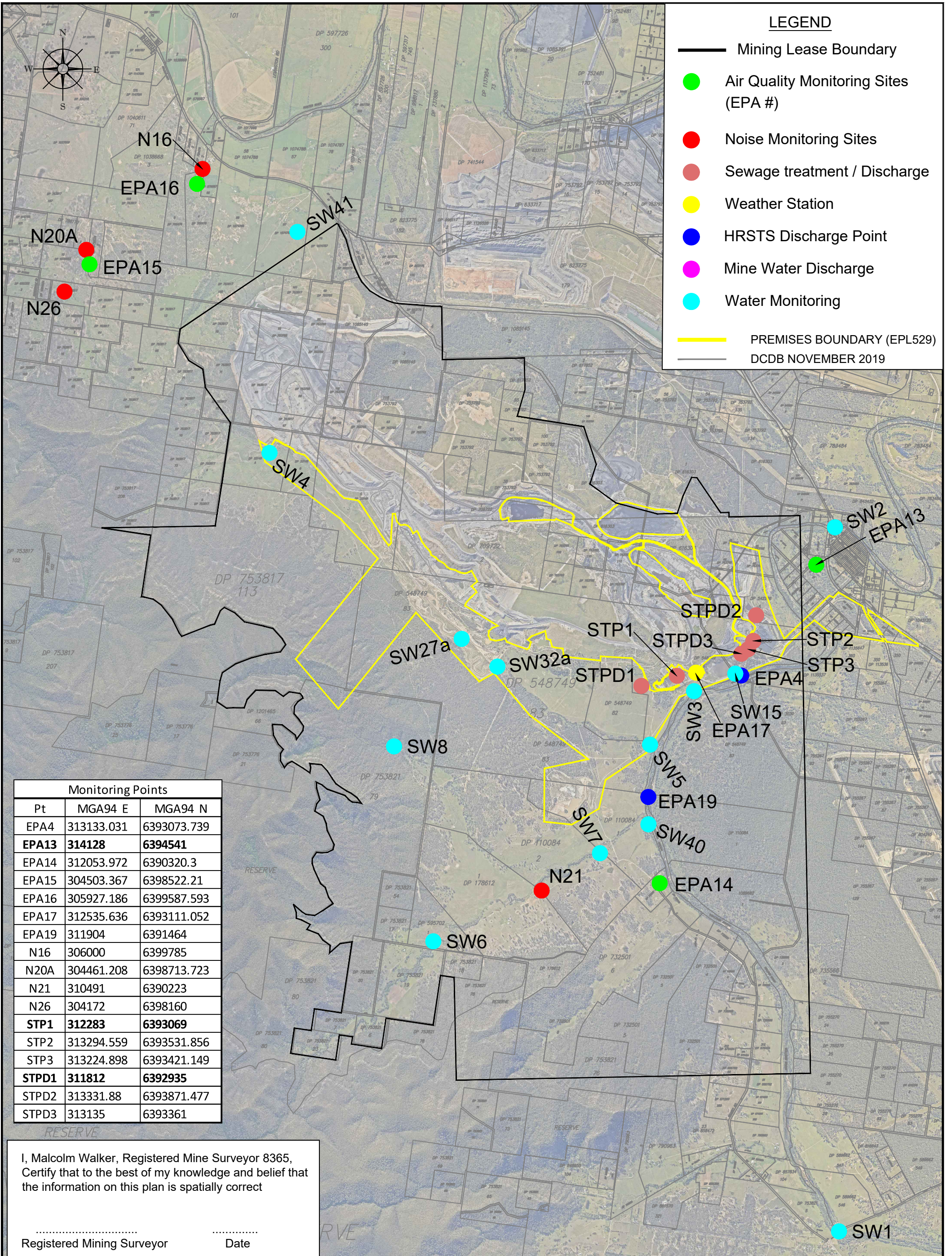
**Meteorological Monitoring**  
**Monitoring Frequency: Continuous**  
**Sampling Method: Site Meteorological Station EPA17**  
**Limits: Nil**

**Date sampled: continuous**  
**Date obtained: continuous**

**Table 5 - WCPL Meteorology**

Date	Temperature (2m)			Temperature (10m)			Humidity			Solar Radiation		RAIN	Wind Speed at 10m			Wind Direction at 10m	Sigma Theta		
	Average	Min	Max	Average	Min	Max	Average	Min	Max	Average	Max	Sum (mm)	Average	Min	Max	Average	Average	Max	Min
1/11/2023	20.6	14.7	25.1	20.2	14.8	24.1	51.7	32.6	74.7	420.5	1288.5	0.0	3.6	1.0	6.1	104.7	20.0	38.6	12.5
2/11/2023	19.2	13.1	25.7	19.1	14.0	25.0	60.4	32.8	91.7	291.2	1272.1	0.0	2.3	0.2	6.3	120.9	22.0	96.2	7.9
3/11/2023	19.5	12.6	26.7	19.5	13.5	25.9	68.6	40.4	98.9	267.9	1063.1	0.0	2.2	0.2	5.3	129.3	21.8	73.3	8.1
4/11/2023	20.1	16.2	25.9	20.1	16.7	25.1	69.2	42.8	97.0	214.2	1160.6	0.2	2.5	0.2	6.0	132.1	17.7	47.6	7.2
5/11/2023	17.5	15.1	21.6	17.5	15.3	20.9	79.8	61.6	100.0	123.4	829.9	5.0	2.6	0.7	6.2	134.0	16.8	36.3	7.7
6/11/2023	17.9	13.9	22.3	17.8	14.3	21.7	65.2	46.1	83.4	221.2	1055.2	0.0	2.4	0.6	4.9	125.9	18.2	37.5	8.3
7/11/2023	18.7	8.7	27.5	18.9	10.1	26.8	67.6	31.9	100.0	341.5	1250.6	0.0	1.5	0.1	5.0	146.5	28.2	85.2	7.2
8/11/2023	20.3	9.6	31.2	20.6	10.3	30.6	65.0	25.2	100.0	290.0	1229.6	0.0	1.2	0.1	5.5	182.6	33.2	89.8	5.3
9/11/2023	20.1	15.7	31.4	20.2	16.1	30.4	75.6	33.9	100.0	182.4	1224.2	4.6	1.6	0.0	35.1	147.1	30.3	89.4	7.7
10/11/2023	21.9	13.3	30.8	21.8	14.0	29.8	68.5	29.8	100.0	328.6	1159.0	0.0	1.9	0.0	6.2	213.8	23.6	93.2	6.5
11/11/2023	24.4	13.0	35.7	24.8	14.0	35.0	60.8	17.3	100.0	365.9	1149.6	0.0	1.7	0.2	4.6	240.0	25.2	78.8	6.6
12/11/2023	28.1	15.6	38.2	28.4	16.7	37.3	48.1	23.2	89.5	352.5	1096.8	0.0	2.7	0.1	6.2	224.3	27.0	91.2	8.8
13/11/2023	21.8	18.5	26.3	21.6	18.7	25.3	61.4	43.0	77.6	267.6	1226.1	0.0	3.5	1.0	6.1	102.7	18.1	35.6	10.0
14/11/2023	23.4	12.4	35.3	23.2	13.2	34.4	57.2	17.8	100.0	354.9	1134.0	0.0	2.1	0.1	6.4	214.4	24.1	80.2	7.5
15/11/2023	24.4	17.9	35.3	24.2	18.8	34.4	59.8	16.8	86.2	311.7	1189.1	0.0	2.5	0.2	5.8	200.0	22.0	71.3	6.1
16/11/2023	23.3	18.5	34.5	23.1	18.9	33.3	69.8	19.6	99.9	272.4	1162.4	2.8	1.6	0.0	5.5	163.4	28.1	98.1	5.0
17/11/2023	19.3	16.0	24.1	19.2	16.0	23.4	70.4	40.1	100.0	246.8	1176.7	0.2	2.7	0.5	5.1	137.9	18.3	50.8	8.7
18/11/2023	19.5	11.4	26.7	19.3	12.1	25.8	61.1	32.3	100.0	375.1	1205.2	0.0	2.2	0.1	5.2	132.8	23.6	67.1	10.0
19/11/2023	22.3	9.8	32.8	22.2	10.6	32.0	56.8	22.0	100.0	375.8	1154.9	0.0	1.7	0.1	6.0	144.8	29.2	97.2	7.1
20/11/2023	20.4	17.6	23.9	20.5	18.0	23.7	75.0	60.1	92.3	80.9	467.7	0.8	1.3	0.0	3.8	141.0	24.2	84.8	9.5
21/11/2023	22.6	16.6	28.9	22.4	17.0	28.3	65.0	43.1	92.6	262.8	1216.5	0.2	1.6	0.1	4.6	142.4	26.4	89.8	8.0
22/11/2023	22.0	17.5	26.8	22.0	18.2	26.1	69.3	49.5	92.3	178.7	827.3	0.0	2.7	0.7	6.0	111.8	17.6	38.8	7.9
23/11/2023	21.6	16.9	25.9	21.6	17.7	25.2	72.0	52.4	97.9	163.8	981.3	0.0	2.1	0.3	4.6	138.1	19.0	34.8	8.3
24/11/2023	21.6	18.4	26.4	21.5	18.4	26.0	80.9	53.8	100.0	123.9	559.3	8.8	1.7	0.5	3.9	121.9	18.9	44.1	4.4
25/11/2023	20.4	18.2	23.3	20.4	18.2	23.3	90.8	70.1	100.0	76.9	462.1	6.4	1.1	0.1	2.8	187.0	24.8	81.3	3.7
26/11/2023	24.9	19.3	32.8	24.7	19.9	31.9	59.5	26.0	82.8	379.5	1248.9	0.0	3.7	0.3	79.8	293.5	26.6	82.4	11.9
27/11/2023	22.4	14.1	32.1	22.4	14.5	31.0	72.4	31.1	100.0	293.8	1185.6	0.4	1.9	0.1	6.0	167.5	28.4	96.8	10.2
28/11/2023	21.4	19.9	24.5	21.4	20.1	24.2	89.8	71.5	100.0	111.3	672.3	5.4	1.9	0.3	4.4	130.4	17.8	42.0	7.7
29/11/2023	22.5	17.5	32.5	22.5	18.1	31.2	82.8	38.8	100.0	257.8	1244.3	1.4	1.8	0.1	56.7	163.9	27.9	90.5	7.8
30/11/2023	24.7	16.8	31.0	24.8	17.2	30.4	52.2	25.1	100.0	304.9	1231.4	0.0	3.4	0.2	6.0	270.6	21.7	80.0	10.3
<b>Total</b>	<b>21.3</b>	<b>8.7</b>	<b>38.2</b>	<b>21.5</b>	<b>10.1</b>	<b>37.3</b>	<b>67.7</b>	<b>16.8</b>	<b>100</b>	<b>259.7</b>	<b>1288.5</b>	<b>36.2</b>	<b>2.2</b>	<b>0</b>	<b>79.8</b>	<b>162.7</b>	<b>23.4</b>	<b>98.1</b>	<b>3.7</b>

This page is intentionally left blank.



**LEGEND**

- Mining Lease Boundary
- Air Quality Monitoring Sites (EPA #)
- Noise Monitoring Sites
- Sewage treatment / Discharge
- Weather Station
- HRSTS Discharge Point
- Mine Water Discharge
- Water Monitoring
- PREMISES BOUNDARY (EPL529)
- DCDB NOVEMBER 2019

**Monitoring Points**

Pt	MGA94 E	MGA94 N
EPA4	313133.031	6393073.739
<b>EPA13</b>	<b>314128</b>	<b>6394541</b>
EPA14	312053.972	6390320.3
EPA15	304503.367	6398522.21
EPA16	305927.186	6399587.593
EPA17	312535.636	6393111.052
EPA19	311904	6391464
N16	306000	6399785
N20A	304461.208	6398713.723
N21	310491	6390223
N26	304172	6398160
<b>STP1</b>	<b>312283</b>	<b>6393069</b>
STP2	313294.559	6393531.856
STP3	313224.898	6393421.149
<b>STPD1</b>	<b>311812</b>	<b>6392935</b>
STPD2	313331.88	6393871.477
STPD3	313135	6393361

I, Malcolm Walker, Registered Mine Surveyor 8365,  
 Certify that to the best of my knowledge and belief that  
 the information on this plan is spatially correct

.....  
 Registered Mining Surveyor                      Date