

**WAMBO COAL
POLLUTION MONITORING DATA
1 SEPTEMBER 2022 – 30 SEPTEMBER 2022
SEPTEMBER MONTHLY REPORT**

Published 25 October 2022

**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	16/9/2022	7.46	641	7	
Point 25	SW02	16/9/2022	7.47	634	8	
Point 26	SW03	16/9/2022	7.50	629	10	
Point 27	SW04	16/9/2022	7.76	383	8	
Point 28	SW05	16/9/2022	7.45	1900	16	
Point 29	SW06	16/9/2022	7.16	270	<5	
Point 30	SW07	16/9/2022	7.45	418	52	
Point 31	SW08	16/9/2022	8.16	2780	<5	
Point 33	SW15	16/9/2022	8.85	4730	31	
Point 34	SW27a	16/9/2022	8.08	1220	32	
Point 36	SW32a	16/9/2022	7.99	670	74	
Point 39	SW39	16/9/2022	7.4	123	28	
Point 40	SW40	16/9/2022	7.05	492	13	
Point 41	SW41	16/9/2022	7.16	135	33	

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	7/9/2022	8.8	5450	10	8.7	17.85	
	8/9/2022	8.8	5000	<5	32	10.69	
	26/9/2022	8.8	5000	15	18	14.73	
Point 19	No Discharges in September						

Sewerage Treatment Monitoring

Monitoring Frequency: Quarterly during discharge

Sampling Method: Grab sample

Limits: Nil

Date sampled: 5/9/2022

Date obtained: 20/9/2022

Table 3- WCPL Discharge Monitoring

EPL ID	Site ID	Date	pH	Faecal Coliforms (CFU/100mL)	Comments
Point 42	STPD2				No discharge
Point 52	STP2	5/9/2022	7.1	<91	
Point 55	STPD1	-	-	-	No discharge

PM10 Monitoring
Monitoring Frequency: Continuous
Sampling Method: AM22
Limits: Nil

Date sampled: Continuous
Date obtained: Continuous

Table 4 - WCPL PM10 Results

Date	PM02 - Wambo Road (Caban) (EPA14)		PM03 - Thelander (EPA15)		PM04 - Muller (EPA16)		PM05 - Kelly (EPA 53)	
	PM10 24 Hour Result (ug/m ³)	Annual Average	PM10 24 Hour Result (ug/m ³)	Annual Average	PM10 24 Hour Result (ug/m ³)	Annual Average	PM10 24 Hour Result (ug/m ³)	Annual Average
1/09/2022	12.6	10.72	7.7	7.90	12.1	12.36	11.8	14.66
2/09/2022	13.4	10.70	10.8	7.90	12.3	12.33	13.8	14.65
3/09/2022	8.0	10.66	3.9	7.85	8.2	12.28	7.2	14.60
4/09/2022	7.4	10.64	4.0	7.84	8.3	12.26	6.6	14.57
5/09/2022	8.2	10.63	5.0	7.83	8.8	12.25	8.9	14.53
6/09/2022	7.3	10.63	7.2	7.84	13.3	12.28	8.9	14.53
7/09/2022	11.3	10.64	9.9	7.86	12.9	12.29	9.3	14.53
8/09/2022	14.6	10.65	8.6	7.87	16.1	12.31	15.8	14.50
9/09/2022	6.7	10.62	3.7	7.85	9.3	12.31	6.6	14.46
10/09/2022	5.4	10.58	1.2	7.84	4.9	12.30	10.9	14.39
11/09/2022	8.4	10.55	5.8	7.83	7.1	12.28	18.4	14.34
12/09/2022	9.6	10.53	4.9	7.81	7.2	12.26	14.2	14.29
13/09/2022	10.3	10.50	6.3	7.80	10.2	12.24	11.5	14.18
14/09/2022	11.4	10.50	6.3	7.77	13.0	12.22	11.3	14.15
15/09/2022	8.4	10.51	7.4	7.79	10.8	12.23	11.1	14.17
16/09/2022	6.7	10.51	4.4	7.79	5.3	12.23	11.4	14.19
17/09/2022	10.1	10.52	4.7	7.79	8.1	12.23	23.2	14.23
18/09/2022	12.7	10.52	4.9	7.79	8.1	12.21	27.8	14.27
19/09/2022	9.7	10.48	4.0	7.76	8.0	12.19	24.3	14.24
20/09/2022	15.1	10.50	11.2	7.78	15.3	12.21	15.7	14.23
21/09/2022	12.7	10.51	9.4	7.79	16.8	12.24	16.3	14.20
22/09/2022	6.7	10.51	5.2	7.80	7.5	12.23	9.1	14.17
23/09/2022	7.6	10.50	2.7	7.79	8.7	12.23	8.0	14.15
24/09/2022	9.2	10.48	4.5	7.78	9.9	12.23	15.2	14.11
25/09/2022	6.8	10.47	2.8	7.77	6.1	12.22	15.5	14.07
26/09/2022	12.5	10.44	8.1	7.76	14.0	12.22	19.7	14.06
27/09/2022	11.7	10.45	12.5	7.78	13.4	12.22	11.9	14.07
28/09/2022	10.2	10.45	4.6	7.75	7.8	12.20	12.8	14.08
29/09/2022	6.9	10.42	2.6	7.72	6.0	12.15	7.8	14.05
30/09/2022	8.8	10.40	5.5	7.69	12.0	12.13	6.8	14.01

*NaN >75% of data collected during period

Meteorological Monitoring

Monitoring Frequency: Continuous

Sampling Method: Site Meteorological Station EPA17

Limits: Nil

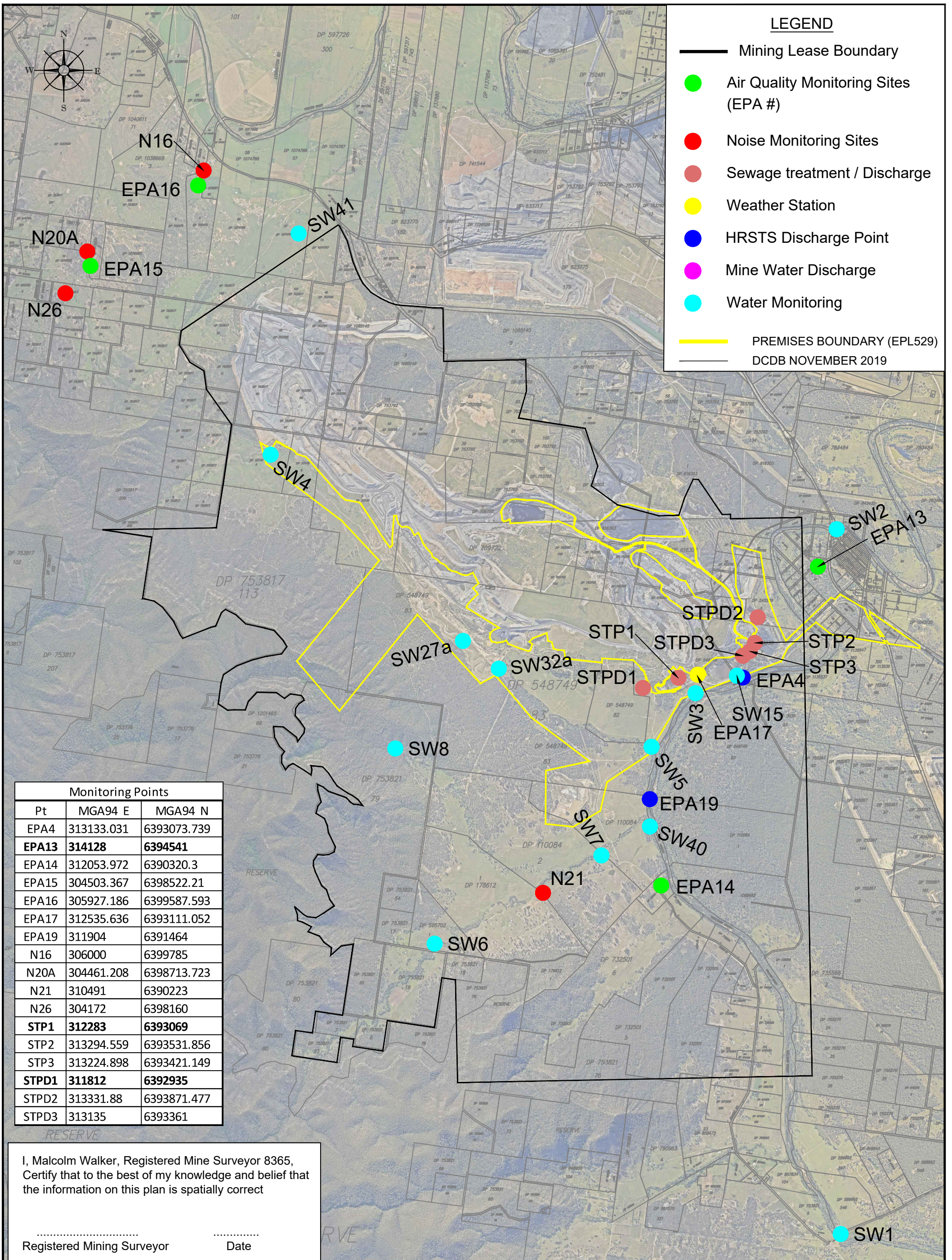
Date sampled: continuous

Date obtained: continuous

Table 5 - WCPL Meteorology

Date	Temperature (2m)			Temperature (10m)			Humidity			Solar Radiation		RAIN	Wind Speed			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
1/09/2022	16.5	9.5	22.6	16.5	10.0	22.2	70.4	37.0	100.0	300.4	989.6	0.0	1.3	0.0	3.3	220.2	26.8	93.8	7.0
2/09/2022	13.8	9.5	17.8	13.8	9.8	17.6	80.9	56.5	100.0	68.3	418.1	2.6	1.1	0.1	2.5	187.4	27.6	96.2	7.8
3/09/2022	12.2	10.2	14.3	12.2	10.2	14.2	81.3	64.6	99.6	63.8	495.1	6.6	3.3	1.6	5.3	165.0	17.1	23.2	11.8
4/09/2022	13.0	9.2	17.9	13.2	10.6	17.3	77.2	51.2	99.3	182.2	909.5	1.8	2.6	0.2	5.3	157.6	22.3	80.9	11.2
5/09/2022	13.0	6.0	19.2	13.2	6.8	18.7	73.6	38.8	100.0	231.2	1020.8	0.2	1.4	0.0	4.3	137.1	26.7	100.3	7.8
6/09/2022	12.1	6.9	18.1	12.4	7.6	17.5	78.8	50.9	100.0	172.5	1033.3	0.0	1.3	0.2	3.4	153.6	23.3	77.4	6.7
7/09/2022	12.6	4.4	20.1	12.7	5.0	19.6	79.1	48.4	100.0	226.8	974.0	0.0	1.4	0.2	3.6	143.9	23.8	91.6	7.3
8/09/2022	14.9	7.1	22.1	15.1	7.5	21.6	78.1	45.7	100.0	205.0	849.6	0.0	1.0	0.0	2.7	163.3	29.3	94.0	9.1
9/09/2022	14.9	10.6	22.4	14.9	10.7	21.8	87.7	42.9	100.0	139.0	943.6	4.8	1.2	0.1	4.4	225.5	25.8	83.6	6.7
10/09/2022	16.0	11.9	20.9	16.0	12.4	20.3	70.7	44.6	90.6	239.8	993.3	0.8	3.3	0.8	6.1	298.0	21.2	60.5	15.1
11/09/2022	15.4	10.9	19.9	15.3	11.1	19.2	61.7	42.8	81.0	259.7	961.2	0.0	3.4	1.7	5.5	304.2	20.1	34.0	13.4
12/09/2022	14.7	9.6	20.9	14.7	10.2	20.3	54.9	34.8	76.4	282.1	949.6	0.0	2.6	0.2	4.8	274.0	25.9	90.2	11.3
13/09/2022	13.0	6.9	19.9	13.0	7.5	19.3	71.0	35.6	100.0	226.0	1077.2	0.4	1.6	0.1	5.3	154.1	27.6	94.7	9.4
14/09/2022	13.2	7.2	19.6	13.3	7.4	19.2	72.4	34.5	100.0	208.1	1006.8	0.2	1.4	0.1	4.2	142.1	24.9	86.5	7.0
15/09/2022	13.0	10.8	15.5	12.9	10.8	15.1	95.7	81.6	100.0	68.0	596.0	21.8	0.9	0.1	3.6	158.0	26.7	88.7	8.0
16/09/2022	16.5	11.1	22.8	16.8	12.5	22.3	67.4	34.5	100.0	285.0	979.0	4.4	2.9	0.0	5.9	271.9	27.1	95.1	9.5
17/09/2022	16.1	7.5	23.5	16.1	7.9	22.8	59.8	31.3	100.0	272.9	1060.6	0.0	3.0	0.1	6.5	272.0	22.4	77.3	8.0
18/09/2022	16.6	11.9	21.9	16.6	12.4	21.3	50.7	34.8	63.7	261.3	980.3	0.0	3.6	1.0	6.5	308.5	20.7	46.9	13.8
19/09/2022	16.1	8.1	22.6	16.3	9.1	21.9	56.3	31.8	96.8	254.3	1018.3	0.0	2.8	0.1	5.2	286.1	24.5	76.8	12.8
20/09/2022	14.4	4.9	22.4	14.7	5.3	22.0	71.0	40.3	100.0	296.7	1023.6	0.0	1.3	0.0	4.4	144.6	29.6	98.3	7.9
21/09/2022	15.6	11.7	20.2	15.6	12.3	19.6	86.5	60.5	100.0	108.0	770.0	4.2	1.0	0.2	2.3	174.5	21.6	61.3	6.8
22/09/2022	16.0	13.1	17.6	15.9	13.8	17.4	91.4	74.3	100.0	102.9	636.6	18.4	2.4	0.3	5.9	134.8	20.1	43.9	11.9
23/09/2022	16.9	12.8	21.4	16.9	13.2	21.1	88.4	66.2	100.0	152.4	1014.6	0.0	1.6	0.1	3.6	155.7	23.9	89.5	6.4
24/09/2022	16.8	10.6	24.8	16.9	11.3	24.2	86.0	45.4	100.0	169.2	1022.4	0.0	1.6	0.0	4.1	209.7	30.4	93.2	7.4
25/09/2022	14.5	6.9	23.2	14.6	7.0	22.7	72.2	30.3	100.0	308.2	1020.4	0.2	1.6	0.1	4.4	240.9	31.3	95.7	7.1
26/09/2022	14.8	7.2	22.7	15.0	7.6	22.1	75.7	35.2	100.0	222.7	1082.8	0.0	0.9	0.1	2.8	203.1	33.6	90.6	8.8
27/09/2022	15.6	11.1	22.1	15.7	11.3	21.7	84.0	51.1	100.0	174.8	967.3	2.4	1.0	0.1	3.6	188.7	26.0	82.4	7.7
28/09/2022	16.3	10.7	22.9	16.4	11.2	22.3	70.2	30.4	100.0	304.0	1042.7	2.2	2.1	0.1	4.8	244.1	28.0	89.9	7.2
29/09/2022	15.3	9.9	20.9	15.3	10.3	20.3	77.4	49.1	100.0	174.7	916.5	4.2	2.0	0.0	4.8	202.4	28.6	93.3	12.2
30/09/2022	15.4	12.5	18.8	15.4	12.9	18.3	78.2	61.7	100.0	182.8	827.2	1.2	3.0	0.1	6.1	160.1	18.4	38.9	7.0
	14.8	4.4	24.8	14.9	5.0	24.2	75.0	30.3	100.0	203.8	1082.8	76.4	2.0	0.0	6.5	202.5	25.2	100.3	6.4

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Rev.	Drawn	Description	Approved
D	MJW	Water monitoring and discharge sites added	
E	MJW	Monitoring points except water monitoring added to coordinate table	
G	MJW	STPD3 Location amended	
H	MJW	EPA 13, STP 1, STPD1 & EPA 11 Locations amended	JB
I	RE	Opencut related monitors removed	JB

WAMBO COAL PTY LIMITED
 ABN 13 000 668 057
 Jerry's Plains Rd, Warkworth Phone: 02 65 702200
 Via Singleton, NSW, 2330 Fax: 02 65 702290
 Prepared by NWU Survey Ph: 02 65 702318

Wambo mine Environment Protection Licence 529 Plan of Premises- Monitoring Sites		Drawing No. 2672-2
		Revision No. J_26/11/2020
Date	Scale: 1:45,000	Drawn MJW
Checked JB	Approved PJ	Sheet Size A3