

**WAMBO COAL
POLLUTION MONITORING DATA
1 JANUARY 2021 – 31 JANUARY 2021**

JANUARY REPORT

Published 4 March 2021

**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	5/1/2021	6.86	162	37	
Point 25	SW02	5/1/2021	6.84	183	43	
Point 26	SW03	5/1/2021	6.82	189	42	
Point 27	SW04	5/1/2021	7.11	217	<5	
Point 28	SW05	5/1/2021	6.98	194	97	
Point 29	SW06	5/1/2021	6.67	179	62	
Point 30	SW07	5/1/2021	6.71	185	50	
Point 31	SW08	5/1/2021	6.74	191	25	
Point 33	SW15	5/1/2021	8.96	4060	80	
Point 34	SW27a	5/1/2021	7.32	208	62	
Point 36	SW32a	5/1/2021	7.24	205	110	
Point 39	SW39	5/1/2021				No Flow
Point 40	SW40	5/1/2021	6.89	181	42	
Point 41	SW41	5/1/2021	7.38	140	35	

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	TSS (mg/L)	Turbidity (NTU)	Volume (ML/day)	Comments
Point 4						No Discharges
Point 19						No Discharges

Sewerage Treatment Monitoring

Monitoring Frequency: Quarterly during discharge
 Sampling Method: Grab sample
 Limits: Nil
 Date sampled: No sample in January
 Date obtained: No sample in January

Table 3- WCPL Discharge Monitoring

EPL ID	Site ID	Date	pH	Faecal Coliforms	Comments
Point 42	STPD2	-	-	-	No sample required in January
Point 52	STP2	-	-	-	No sample required in January
Point 55	STPD1	-	-	-	No sample required in January

PM10 Monitoring

Monitoring Frequency: Continuous

Sampling Method: AM22

Limits: Nil

Date sampled: Continuous

Date obtained: Continuous

Table 4 - WCPL PM10 Results

Date of Run	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
1/01/2021	7.1	18.94	7.30	14.38	7.4	19.51	6.3	14.62
2/01/2021	7.6	18.81	7.31	14.28	9.2	19.42	3.9	14.45
3/01/2021	10.8	18.69	NaN	14.19	11.9	19.31	3.9	14.28
4/01/2021	10.9	18.46	NaN	14.05	8.9	19.20	11.5	14.24
5/01/2021	9	18.12	7.02	13.67	6.8	18.86	9.0	14.16
6/01/2021	9.1	18.03	6.84	13.56	13.4	18.76	9.0	14.09
7/01/2021	8.6	17.91	4.00	13.48	11.2	18.69	6.5	13.97
8/01/2021	9.8	17.75	5.94	13.33	15.5	18.56	12.2	13.95
9/01/2021	8.3	17.65	5.46	13.23	9	18.45	5.1	13.82
10/01/2021	8.9	17.54	6.41	13.11	9.1	18.37	5.6	13.71
11/01/2021	12.9	17.36	NaN	12.91	10.7	18.15	5.3	13.59
12/01/2021	19.8	17.26	10.65	12.75	18.8	18.03	8.2	13.51
13/01/2021	15.9	17.21	13.53	12.68	21	17.96	17.2	13.56
14/01/2021	18.9	17.18	12.46	12.63	18.4	17.89	21.3	13.67
15/01/2021	31.1	17.18	20.48	12.61	22.5	17.84	31.1	13.90
16/01/2021	18.2	17.17	10.34	12.57	18.9	17.80	17.5	13.94
17/01/2021	21.4	17.16	15.57	12.54	21.1	17.77	12.8	13.93
18/01/2021	20.4	17.17	10.80	12.52	19.8	17.77	18.5	13.99
19/01/2021	21.2	17.19	17.60	12.53	26	17.79	20.0	14.06
20/01/2021	12.9	17.14	12.50	12.45	17.2	17.74	5.8	13.96
21/01/2021	19.7	17.08	17.73	12.37	30.1	17.70	7.4	13.88
22/01/2021	23.5	17.05	12.86	12.31	22.7	17.62	9.3	13.82
23/01/2021	21.7	16.92	14.41	12.27	20.8	17.53	12.0	13.80
24/01/2021	23.4	16.86	17.30	12.16	26.4	17.48	16.1	13.83
25/01/2021	20.7	16.80	14.09	12.04	25.9	17.43	12.3	13.81
26/01/2021	17.3	16.79	11.84	12.02	17.8	17.41	21.4	13.90
27/01/2021	12.5	16.71	7.65	11.91	19	17.34	2.1	13.76
28/01/2021	3.2	16.63	1.49	11.85	5.8	17.24	2.4	13.64
29/01/2021	5.9	16.56	2.68	11.74	7.6	17.16	2.7	13.52
30/01/2021	11.7	16.50	5.59	11.63	11.1	17.08	7.6	13.45
31/01/2021	10.6	16.43	7.23	11.55	15.7	17.00	11.1	13.42

*NaN >75% of data collected during period

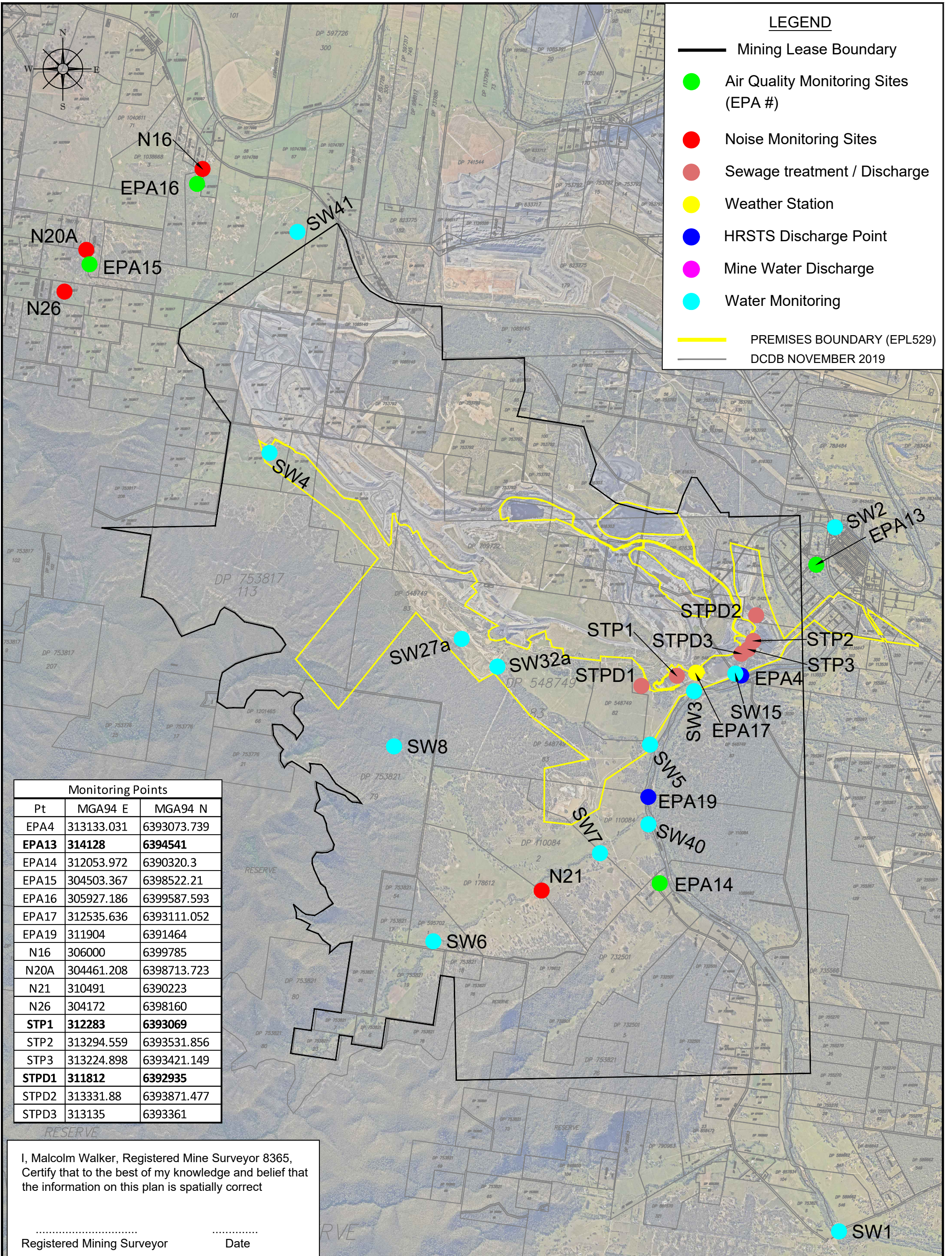
Meteorological Monitoring
Monitoring Frequency: Continuous
Sampling Method: Site Meteorological Station EPA17
Limits: Nil

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
1/01/2021	18.6	16.7	20.6	18.5	16.7	20.4	90.9	75.7	100.0	122.5	478.9	8.4	2.2	0.7	3.5	160.8	16.0	23.2	7.7
2/01/2021	18.9	16.4	21.3	18.8	16.3	21.1	91.1	78.2	100.0	119.4	601.1	4.0	1.9	0.8	3.9	164.7	16.3	27.0	7.4
3/01/2021	22.5	19.1	28.5	22.5	19.3	27.9	86.1	60.0	100.0	215.1	1098.2	2.4	1.0	0.1	2.6	134.6	28.2	92.0	6.3
4/01/2021	21.4	18.2	29.8	21.5	18.5	29.2	92.6	61.6	100.0	166.4	1150.8	84.0	1.2	0.0	5.9	205.4	33.5	93.8	6.3
5/01/2021	23.5	15.9	31.5	23.5	16.1	31.1	75.3	40.6	100.0	378.0	1250.7	0.4	1.7	0.1	4.6	259.2	27.0	91.5	9.0
6/01/2021	22.1	19.1	25.0	22.1	19.8	24.6	78.3	65.4	100.0	132.1	816.2	0.0	2.5	0.4	4.6	143.4	19.4	69.9	9.3
7/01/2021	20.0	17.9	23.6	20.0	17.8	23.1	73.5	58.0	93.4	155.8	833.2	2.0	2.7	1.2	5.8	144.4	17.9	30.1	9.9
8/01/2021	19.6	15.1	23.6	19.6	15.6	23.1	66.5	47.4	92.1	237.7	1133.0	0.0	2.7	1.2	4.9	142.5	19.5	33.8	7.9
9/01/2021	19.5	15.8	24.0	19.3	15.7	23.7	85.4	60.8	100.0	237.9	1261.4	12.2	2.1	0.4	4.9	124.6	18.5	44.3	9.3
10/01/2021	21.4	14.4	28.3	21.4	14.7	27.7	74.2	43.9	100.0	356.2	1419.1	0.0	1.9	0.2	5.2	136.9	23.7	76.6	7.2
11/01/2021	22.7	15.4	29.2	22.7	16.1	28.9	68.9	36.2	100.0	421.6	1230.4	0.0	1.8	0.2	5.2	127.3	21.4	49.6	6.3
12/01/2021	24.3	15.0	32.9	24.4	15.6	32.5	69.1	37.2	100.0	380.2	1249.3	0.0	1.3	0.1	3.1	178.0	23.9	87.1	5.0
13/01/2021	24.0	17.0	30.6	24.0	17.3	30.2	72.4	38.0	100.0	397.1	1267.9	0.0	1.7	0.2	4.5	146.0	24.2	75.7	8.1
14/01/2021	26.4	17.3	36.2	26.6	17.6	35.9	66.4	31.0	100.0	351.2	1261.7	0.0	2.2	0.1	4.9	251.0	24.4	83.7	5.9
15/01/2021	27.4	21.2	35.1	27.7	21.4	34.8	57.6	20.0	94.7	367.5	1194.0	0.0	2.2	0.1	6.6	234.1	25.5	102.6	8.3
16/01/2021	22.8	14.1	30.1	23.0	15.3	29.7	34.5	15.2	79.4	429.8	1239.0	0.0	1.8	0.3	4.9	219.5	28.3	83.6	9.2
17/01/2021	20.5	9.9	30.1	20.7	10.7	29.6	60.5	25.0	100.0	387.2	1231.0	0.0	1.5	0.0	5.2	188.1	35.1	99.7	13.7
18/01/2021	24.3	15.9	33.1	24.4	16.5	32.7	59.3	24.8	99.8	364.6	1188.8	0.0	1.7	0.2	4.2	222.3	31.0	89.0	8.2
19/01/2021	22.0	14.8	28.7	22.2	15.8	27.9	64.3	43.8	86.2	242.5	1218.2	0.0	2.5	0.3	7.2	156.0	24.5	70.8	10.1
20/01/2021	19.7	16.1	23.1	19.6	16.8	22.6	71.6	53.6	92.2	145.0	706.9	0.0	2.4	0.3	5.0	132.2	19.0	37.8	11.8
21/01/2021	21.3	12.4	29.4	21.3	13.1	28.7	66.0	33.5	100.0	396.5	1181.3	0.0	1.3	0.1	4.3	143.5	31.4	79.7	10.4
22/01/2021	25.1	14.8	35.2	25.2	15.7	34.4	63.0	28.9	100.0	379.8	1139.3	0.0	1.7	0.2	4.7	228.2	27.5	82.8	4.8
23/01/2021	28.4	18.0	37.2	28.7	18.6	36.8	52.5	24.0	91.5	362.0	1132.5	0.0	1.7	0.1	4.4	202.9	29.3	87.3	7.5
24/01/2021	28.9	18.8	38.4	29.1	19.5	37.7	53.7	20.5	100.0	385.1	1142.9	0.0	1.5	0.1	4.8	178.8	29.4	89.7	7.7
25/01/2021	27.7	15.7	38.4	27.8	16.1	38.0	55.2	16.5	99.7	391.1	1151.7	0.0	1.5	0.0	4.6	221.4	28.5	102.7	8.0
26/01/2021	28.9	17.8	38.2	29.1	18.2	37.6	56.2	25.6	100.0	374.2	1140.3	0.0	1.9	0.1	4.5	242.8	26.2	84.8	8.4
27/01/2021	25.5	20.5	29.2	25.4	20.6	29.9	65.7	49.5	83.4	232.9	1051.0	0.0	2.8	0.6	5.4	160.0	23.7	92.2	6.5
28/01/2021	20.7	18.8	22.5	20.7	18.9	22.4	88.4	77.7	100.0	79.7	328.0	3.6	2.8	1.8	4.2	159.0	17.6	23.0	12.5
29/01/2021	21.3	18.4	24.8	21.3	18.4	24.6	94.2	78.7	100.0	85.7	443.9	7.0	2.1	1.0	4.0	142.9	21.9	70.1	11.7
30/01/2021	24.4	20.7	30.1	24.4	21.0	29.4	79.7	50.5	100.0	203.8	1303.0	0.0	1.2	0.1	3.5	153.4	28.0	93.6	7.2
31/01/2021	23.3	18.9	28.4	23.3	19.1	27.7	82.1	60.9	100.0	210.3	1080.5	0.0	2.0	0.1	4.4	161.4	23.9	80.7	6.0
	23.1	9.9	38.4	23.2	10.7	38.0	70.6	15.2	100.0	282.4	1419.1	124	1.9	0.0	7.2	176.4	24.7	102.7	4.8



Monitoring Points		
Pt	MGA94 E	MGA94 N
EPA4	313133.031	6393073.739
EPA13	314128	6394541
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
STP1	312283	6393069
STP2	313294.559	6393531.856
STP3	313224.898	6393421.149
STPD1	311812	6392935
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