

**WAMBO COAL
ENVIRONMENTAL REPORTING
1 JULY – 31 JULY 2019**

September 2019

**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**

Monitoring Frequency: Once per month
 Sampling Method: Grab sample
 Limits: Nil

Table 1 - WCPL Surface and Mine Water Dam Results

Site	Date	pH	EC (µS/cm)	TSS (mg/L)	Comments
SW01	25 July 2019				No Flow
SW02	25 July 2019				Dry
SW03	25 July 2019				No Flow
SW04	25 July 2019				Dry
SW05	25 July 2019				Dry
SW06	25 July 2019				Dry
SW07	25 July 2019				Dry
SW08	25 July 2019				Dry
SW12	26 July 2019	8.81	8820	526	
SW14	26 July 2019	8.64	847	8	
SW15	26 July 2019				No Access
SW27	25 July 2019				Dry
SW31	26 July 2019	8.49	651	34	
SW32a	25 July 2019				Dry
SW38	26 July 2019	8.68	9810	<5	
SW39	26 July 2019				Dry
SW40	25 July 2019				No Flow
SW51	26 July 2019	8.81	1640	188	
SW52	26 July 2019	8.74	1080	50	
Wombat Dam	26 July 2019				No Access
Milk Can Dam	26 July 2019	8.77	4510	34	
Rug Dump Dam	26 July 2019	8.76	1570	110	
Montrose East 1	26 July 2019	8.12	746	156	
Montrose East 2	26 July 2019	8.50	651	23	

Monitoring Frequency: Once per month
Sampling Method: AM19
Limits: 4g / m² / month EPA Guideline

Date sampled: 19 July 2019
Date obtained: 26 July 2019
Date published: 4 Sept 2019

Table 2 - WCPL Depositional Dust Gauges

Site	Date	Ash (g/m ²)	Total Insoluble Matter (g/m ²)	AR/IS Ratio	Comment
D11	19 July 2019	1.3	1.8	72.22	Insects
D19	19 July 2019	2.1	3.1	67.74	Veg/ Insects
D21	19 July 2019	0.7	0.9	77.78	Insects
D22	19 July 2019	2.4	2.8	85.71	Insects

Monitoring Frequency: Continuous
 Sampling Method: AM22
 Limits: Nil

Date sampled: Continuous
 Date obtained: Continuous
 Date published: 4 Sept 2019

Table 3 - WCPL PM10 Results

Date of Run	PM01 - Coralie (Sentinex 19)		PM02 - Wambo Road (Caban) (Sentinex 20)		PM03 - Thelander (Sentinex 21)		PM04 - Muller (Sentinex 22)	
	PM10 24 Hour Result (ug/m ³)	YTD Average	PM10 24 Hour Result (ug/m ³)	YTD Average	PM10 24 Hour Result (ug/m ³)	YTD Average	PM10 24 Hour Result (ug/m ³)	YTD Average
1/07/2019	17.1	24.61	18.7	23.81	7.9	18.73	18.4	25.87
2/07/2019	21.2	24.59	32.8	23.86	15.2	18.71	16.8	25.82
3/07/2019	23.0	24.58	19.8	23.84	18.6	18.71	23.9	25.81
4/07/2019	8.6	24.49	7.8	23.75	8.1	18.66	9.5	25.72
5/07/2019	16.2	24.45	6.5	23.65	8.8	18.60	15.6	25.66
6/07/2019	12.8	24.38	5.8	23.56	7.4	18.54	18.9	25.62
7/07/2019	12.9	24.32	8.1	23.47	16.3	18.53	29.8	25.65
8/07/2019	8.3	24.24	7.7	23.39	5.7	18.46	8.1	25.55
9/07/2019	6.5	24.14	7.3	23.30	3.7	18.38	4.6	25.44
10/07/2019	8.9	24.06	10.0	23.23	4.8	18.31	5.7	25.34
11/07/2019	15.3	24.01	15.9	23.20	11.7	18.28	12.1	25.27
12/07/2019	16.7	23.98	15.0	23.15	11.7	18.24	11.6	25.20
13/07/2019	17.3	23.94	9.7	23.08	8.0	18.19	8.9	25.11
14/07/2019	13.7	23.89	21.0	23.07	7.2	18.13	8.4	25.02
15/07/2019	12.0	23.83	12.9	23.02	5.7	18.07	6.4	24.93
16/07/2019	12.4	23.77	21.3	23.01	6.8	18.01	7.2	24.84
17/07/2019	9.8	23.70	18.8	22.99	5.9	17.95	6.4	24.74
18/07/2019	9.5	23.62	21.4	22.98	6.8	17.89	7.4	24.66
19/07/2019	12.0	23.57	22.3	22.98	12.3	17.86	22.1	24.64
20/07/2019	14.4	23.52	16.6	22.95	13.1	17.84	28.2	24.66
21/07/2019	23.8	23.52	26.0	22.96	15.4	17.83	17.3	24.62
22/07/2019	21.9	23.51	26.4	22.98	16.3	17.82	23.3	24.62
23/07/2019	18.4	23.49	29.0	23.01	11.3	17.79	13.3	24.56
24/07/2019	18.2	23.46	25.6	23.02	12.2	17.76	21.1	24.54
25/07/2019	21.4	23.45	35.2	23.08	18.2	17.76	27.7	24.56
26/07/2019	23.5	23.45	27.1	23.10	14.8	17.75	15.7	24.52
27/07/2019	23.2	23.45	30.2	23.13	18.5	17.75	36.0	24.57
28/07/2019	21.2	23.44	34.2	23.19	17.6	17.75	33.1	24.61
29/07/2019	18.1	23.41	24.8	23.20	12.8	17.73	18.6	24.58

Date of Run	PM01 - Coralie (Sentinex 19)		PM02 - Wambo Road (Caban) (Sentinex 20)		PM03 - Thelander (Sentinex 21)		PM04 - Muller (Sentinex 22)	
	PM10 24 Hour Result (ug/m ³)	YTD Average	PM10 24 Hour Result (ug/m ³)	YTD Average	PM10 24 Hour Result (ug/m ³)	YTD Average	PM10 24 Hour Result (ug/m ³)	YTD Average
30/07/2019	12.0	23.36	13.5	23.15	13.2	17.70	30.6	24.61
31/07/2019	13.8	23.31	13.2	23.10	8.6	17.66	33.5	24.66

Monitoring Frequency: Every blast
 Airblast Overpressure Limit: 120 dBL
 Ground Vibration Limit: 10mm/s

Date sampled: Continuous
 Date obtained: Continuous
 Date published: 4 Sept 2019

Table 4 - WCPL Blast Monitoring Results

Date & Time	ID	BM02 - Kelly		BM05 - Muller		BM07 - Thelander	
		dBL	mm/sec	dBL	mm/sec	dBL	mm/sec
17-07-2019 15:46:57	M_27WMA_405	79.5	0.14	100.6	2.17	93.2	1.88
17-07-2019 15:58:22	M_27WRA_408 & 409	95.0	0.10	107.6	0.42	101.6	0.31
19-07-2019 12:01:09	M_27WTA_414	102.4	0.04	104.8	0.48	98.2	0.68
19-07-2019 12:08:37	M_27WRA_410/411	92.5	0.18	103.4	0.73	96.5	0.36
26-07-2019 11:32:51	M_27WRA_413 & 416	81.2	0.20	104.7	0.52	96.2	0.28
31-07-2019 12:03:35	HS_WRA_406	102.1	0.54	103.0	0.04	95.5	0.03

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

Date sampled: continuous
 Date obtained: 1 August 2019
 Date published: 4 Sept 2019

Table 5 - WCPL Meteorology

Date	Temperature (2m)			Temperature (10m)			Humidity			Solar Radiation		RAIN	Wind Speed		
	Average	Min	Max	Average	min	Max	Average	Min	Max	Average	Max	Sum (mm)	Average	Min	Max
1/07/2019	7.4	-1.1	19.2	8.1	-0.1	18.5	68.7	23.9	98.0	133.7	598.5	0.0	0.2	0.1	1.5
2/07/2019	8.9	-0.2	22.3	9.6	0.0	21.1	70.4	31.4	95.8	126.8	621.2	0.0	0.8	0.1	4.6
3/07/2019	10.4	-0.3	19.5	10.4	0.0	18.5	85.2	46.9	99.6	113.8	604.1	10.8	1.0	0.1	4.0
4/07/2019	14.5	13.4	16.7	14.1	13.1	16.0	90.4	74.8	99.6	61.0	452.8	3.2	1.7	0.7	3.2
5/07/2019	14.5	10.8	19.4	14.3	10.7	18.5	85.9	66.1	99.1	104.0	639.8	0.4	1.6	0.2	4.7
6/07/2019	14.1	10.1	18	13.8	10.5	17.4	89.5	70.1	99.3	68.9	553.9	0.2	1.0	0.1	4.4
7/07/2019	12.4	7.1	20.0	12.6	7.2	18.9	87.9	56.9	100.0	123.4	587.1	0.2	0.2	0.0	2.7
8/07/2019	12.8	7.5	17.7	12.6	7.9	16.7	91.3	75.7	100.0	70.0	583.0	1.0	1.4	0.1	4.4
9/07/2019	11.6	3.9	18.5	11.9	5.6	17.7	78.5	45.8	100.0	158.5	612.6	0.2	1.6	0.1	5.2
10/07/2019	9.5	0.1	17.7	9.6	0.9	16.8	71.1	38.2	100.0	156.6	608.6	0.0	1.8	0.1	5.0
11/07/2019	14.6	8.4	20.7	14.2	8.3	19.8	53.0	27.2	81.0	148.7	628.1	0.0	3.9	1.6	7.1
12/07/2019	15.2	9.8	20.3	14.8	9.8	19.4	53.4	39.7	68.9	131.7	695.4	0.0	3.6	1.4	6.9
13/07/2019	14.2	8.8	16.9	13.8	8.8	16.1	44.0	26.2	62.6	138.8	664.0	0.0	3.9	1.2	7.9
14/07/2019	10.6	3.0	16.6	10.3	4.6	15.8	52.8	32.5	79.7	164.4	628.2	0.0	3.4	0.5	6.7
15/07/2019	12.8	7.2	18.2	12.6	9.0	17.2	51.8	29.3	69.6	158.3	690.9	0.0	2.3	0.2	5.5
16/07/2019	12.3	5.8	21.3	12.3	7.0	20.4	58.0	33.5	83.1	166.3	636.9	0.0	2.8	0.1	6.3
17/07/2019	11.6	0.9	20.0	11.8	1.7	19.2	62.4	36.5	94.1	164.6	625.9	0.0	2.3	0.2	5.5
18/07/2019	12.6	2.3	19.3	12.4	4.3	18.6	55.8	37.6	89.7	167.7	642.3	0.0	2.8	0.2	5.4
19/07/2019	9.2	-1.3	19.6	9.8	0.1	18.7	65.3	33.4	95.2	166.3	632.2	0.0	1.5	0.1	4.7
20/07/2019	18.9	-1.9	24.7	8.5	-2.0	20.7	78.1	26.1	100.0	168.4	646.2	0.0	0.5	0.0	3.0
21/07/2019	9.6	-2.5	22.9	10.9	-1.2	22.6	65.9	31.3	97.3	163.6	629.1	0.0	1.5	0.1	6.1
22/07/2019	11.3	3.9	22.1	12.2	5.3	21.9	72.5	38.8	92.6	114.8	652.7	0.0	0.0	0.1	2.3
23/07/2019	13.1	0.6	23.2	13.8	1.9	22.7	53.5	17.4	98.7	168.3	649.6	0.0	2.2	0.2	7.0
24/07/2019	15.2	7.1	22.2	15.4	9.0	21.4	40.6	27.5	69.0	164.4	624.3	0.0	2.7	0.2	5.7
25/07/2019	10.9	2.3	19.9	11.5	2.9	19.1	67.8	42.9	95.5	164.0	627.6	0.0	0.4	0.1	2.7
26/07/2019	10.9	1.1	20.1	11.8	2	19.6	69.7	40.7	98.9	112.7	595.2	0.0	1.0	0.1	4.0
27/07/2019	11.4	2.9	20.8	12.4	5.1	20.6	70.5	39.0	96.2	145.2	642.3	0.0	0.2	0.1	2.3
28/07/2019	10.8	3.4	20.4	11.7	4.5	20.4	73.4	37.5	98.8	134.6	702.4	0.0	0.1	0.0	1.5
29/07/2019	11.6	-0.5	22.1	12.1	1.0	21.5	67.7	31.2	97.6	160.1	619.1	0.4	1.0	0.1	4.5
30/07/2019	12.5	6.5	17.9	12.6	7.7	17.1	82.6	53.8	99.9	101.3	560.5	0.4	1.1	0.1	4.6
31/07/2019	13.1	8.4	17.7	13.1	9.5	17.1	72.1	51.8	93.3	121.8	871.6	0.0	1.5	0.2	4.0
	12.2	-2.5	24.7	12.1	-2.0	22.7	68.7	17.4	100.0	136.9	871.6	16.8	1.6	0.0	7.9

