

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

June 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	31 May 2019				Pool
SW02	31 May 2019				Dry
SW03	31 May 2019				Pool
SW04	31 May 2019				Dry
SW05	31 May 2019				Dry
SW06	31 May 2019				Dry
SW07	31 May 2019				Dry
SW08	31 May 2019				Dry
SW12	21 May 2019	8.9	7290	20	
SW14	21 May 2019	8.6	621	11	
SW15	21 May 2019	8.9	3800	36	
SW27	31 May 2019				Dry
SW31	21 May 2019	9.1	4800	41	
SW32a	31 May 2019				Dry
SW38	21 May 2019	8.9	9020	6	
SW39	21 May 2019				Pool
SW40	21 May 2019				Dry
SW51	21 May 2019	8.7	1220	192	
SW52	21 May 2019	8.8	882	42	
Wombat Dam	21 May 2019				No access
Milk Can Dam	21 May 2019	8.7	2750	46	
Rug Dump Dam	21 May 2019	8.4	817	91	
Montrose East 1	21 May 2019	9.1	413	39	
Montrose East 2	21 May 2019	8.6	424	12	

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

Date sampled: 17 May 2019
Date obtained: 24 May 2019
Date published: 17 June 2019

Table 2 - WCPL Depositional Dust Gauges

Site	Date	Ash (g/m ²)	Total Insoluble Matter (g/m ²)	AR/IS Ratio	Comment
D11	17/05/2019	1.7	2.2	77.27	Insects
D19	17/05/2019	1.5	2.4	62.50	Vegetation
D21	17/05/2019	1.2	1.4	85.71	Insects
D22	17/05/2019	2.9	3.5	82.86	Insects

Monitoring Frequency: Continuous
 Sampling Method: AM22
 Limits: Nil

Date sampled: Continuous
 Date obtained: Continuous
 Date published: 17 June 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
1/05/2019	27.6	29.21	58.1	24.51	20.0	22.17	33.0	29.76
2/05/2019	2.4	28.98	57.8	24.79	19.0	22.15	38.4	29.83
3/05/2019	18.8	28.90	27.1	24.81	15.5	22.09	14.3	29.70
4/05/2019	7.2	28.72	5.7	24.65	5.3	21.96	6.4	29.51
5/05/2019	7.0	28.54	8.4	24.52	5.0	21.82	8.6	29.34
6/05/2019	11.6	28.41	7.7	24.38	4.8	21.68	6.4	29.15
7/05/2019	10.8	28.27	19.7	24.34	7.8	21.57	7.9	28.98
8/05/2019	18.0	28.18	26.2	24.36	15.0	21.52	14.6	28.87
9/05/2019	14.8	28.08	21.4	24.34	10.6	21.43	15.5	28.76
10/05/2019	18.3	28.00	17.3	24.28	12.2	21.36	13.2	28.64
11/05/2019	9.7	27.86	14.7	24.21	7.5	21.25	8.2	28.48
12/05/2019	10.1	27.72	13.3	24.12	10.7	21.17	22.6	28.44
13/05/2019	18.4	27.65	30	24.17	15.2	21.12	29.3	28.45
14/05/2019	15.6	27.56	24.6	24.17	15.2	21.08	32.3	28.47
15/05/2019	19.1	27.50	25.9	24.18	19.9	21.07	42.0	28.58
16/05/2019	18.2	27.43	22.7	24.17	16.0	21.03	22.9	28.53
17/05/2019	24.5	27.41	34.8	24.25	16.6	21.00	34.6	28.58
18/05/2019	24.7	27.39	25.9	24.26	15.8	20.96	26.4	28.56
19/05/2019	23.5	27.36	35.8	24.35	18.3	20.94	32.4	28.59
20/05/2019	18.4	27.29	24.0	24.35	12.4	20.88	16.0	28.50
21/05/2019	17.4	27.22	25.0	24.35	11.7	20.81	14.0	28.39
22/05/2019	16.1	27.14	35.4	24.43	15.0	20.77	19.5	28.33
23/05/2019	32.3	27.18	41.6	24.55	25.7	20.81	42.2	28.43
24/05/2019	21.5	27.14	53.5	24.75	18.3	20.79	18.0	28.36
25/05/2019	19.1	27.08	30.1	24.79	13.7	20.74	14.3	28.26
26/05/2019	18.4	27.02	32.2	24.84	12.4	20.68	13.6	28.16
27/05/2019	34.2	27.07	47.5	25.00	15.4	20.65	14.1	28.06
28/05/2019	13.6	26.98	17.5	24.95	11.7	20.59	11.8	27.95
29/05/2019	17.5	26.92	20.1	24.92	13.5	20.54	13.3	27.85

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
30/05/2019	10.3	26.80	15.7	24.85	7.6	20.45	8.2	27.72
31/05/2019	11.5	26.70	24.8	24.85	8.8	20.37	9.6	27.59

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

Date sampled: Continuous
 Date obtained: Continuous
 Date published: 17 June 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
2/05/2019 11:13	M_27WRA_381	77.5	0.05	101.1	0.19	95.4	0.14
2/05/2019 11:22	M_27WRA_382	98.9	0.12	101.9	0.26	96.5	0.16
7/05/2019 14:32	M_27WMA_385	84.6	0.10	109.6	0.71	101.9	0.69
7/05/2019 14:36	M_27WMA_383	105.5	0.09	108.6	1.53	103.8	0.79
7/05/2019 14:42	M_27WRC_384	83.7	0.11	101.9	0.34	93.7	0.22
10/05/2019 14:04	M_27WRC_386	80.7	0.06	105.6	0.37	96.2	0.42
14/05/2019 11:24	HD_RCA_387	88.1	0.03	95.4	0.09	90.5	0.05
14/05/2019 11:30	M_27WRC_389	101.0	0.22	101.5	0.33	93.2	0.23
24/05/2019 11:09	M_WEST_DOZER_390	82.2	0.06	100.5	0.14	94.1	0.09
24/05/2019 11:16	HD_RCA_388/391	81.5	0.10	101.6	0.44	92.2	0.33
24/05/2019 11:28	M_27WRC_392	82.4	0.16	106.2	0.74	98.0	1.64
31/05/2019 12:02	M_27WMA_393	75.2	0.17	100.5	2.57	97.0	2.59

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

Date sampled: continuous
 Date obtained: 1 June 2019
 Date published: 17 June 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
1/05/2019	17.8	10.9	24.9	18.2	11.8	24.4	80.7	56.6	98.3	89.8	497.0	0.0	0.3	0.0	2.9
2/05/2019	19.2	14.8	25.2	19.5	15.2	24.9	82.2	55.5	97.1	78.1	445.4	0.0	0.1	0.0	1.8
3/05/2019	18.9	14.9	25.9	18.9	15.3	25.3	83.3	49.1	97.2	70.5	570.9	5.8	1.6	0.0	5.3
4/05/2019	18.2	11.6	22.8	18.3	14.2	22.4	81.0	37.6	98.0	111.9	746.3	4.2	0.2	0.1	3.7
5/05/2019	13.7	7.3	21.1	14.5	8.3	20.4	74.4	43.5	99.4	166.0	848.4	0.4	0.8	0.1	4.0
6/05/2019	13.8	7.2	21.7	14.4	8.1	20.9	74.6	42.3	99.0	186.7	721.0	0.0	0.3	0.2	3.8
7/05/2019	14.7	5.2	22.5	15.2	6.1	21.9	64.0	34.8	98.6	193.6	724.7	0.0	1.9	0.1	5.4
8/05/2019	15.6	6.8	21.5	15.9	8.6	21.0	54.1	30.6	85.9	180.0	718.0	0.0	2.7	0.2	6.5
9/05/2019	10.5	1.3	21.0	11.2	2.2	20.4	72.9	36.2	97.8	187.6	733.2	0.0	0.8	0.1	4.2
10/05/2019	10.7	2.4	18.6	11.0	3.2	18.5	76.0	50.1	98.9	85.1	614.4	0.6	1.8	0.0	6.3
11/05/2019	14.2	9.8	21.6	14.2	10.0	20.9	58.5	34.1	76.0	186.3	714.9	0.2	2.6	0.1	6.5
12/05/2019	11.9	2.0	21.6	12.3	2.7	21.1	70.6	40.8	97.9	183.9	692.2	0.0	0.4	0.1	2.7
13/05/2019	14.1	5.4	22.6	14.4	6.2	22.3	79.1	51.8	98.1	147.7	699.2	0.0	0.1	0.0	1.6
14/05/2019	16.3	9.4	25.7	16.7	11.2	25.0	72.3	33.5	98.4	166.6	671.4	0.0	0.8	0.0	4.3
15/05/2019	14.0	5.4	22.8	14.6	6.5	22.1	78.9	48.1	98.6	141.3	684.0	0.0	0.6	0.1	4.6
16/05/2019	14.6	6.2	23.2	15.2	7.3	22.5	76.8	46.0	99.0	167.9	659.5	0.0	0.8	0.0	3.4
17/05/2019	14.8	8.4	23.5	15.5	9.2	23.1	80.0	49.5	98.1	121.9	690.1	0.0	0.1	0.0	1.6
18/05/2019	14.8	6.4	24.2	15.4	7.4	23.5	79.8	47.2	99.7	163.6	632.1	0.0	0.5	0.1	4.5
19/05/2019	15.1	7.8	23.2	15.5	8.0	22.5	80.7	44.3	99.7	156.7	631.6	0.0	0.4	0.2	3.3
20/05/2019	15.1	7.7	24.9	15.7	8.3	24.2	78.4	42.7	99.7	145.0	756.3	0.2	0.8	0.0	3.9
21/05/2019	15.6	6.3	26.4	16.3	7.4	25.9	74.2	40.0	98.6	160.2	619.9	0.0	1.0	0.0	4.5
22/05/2019	15.5	6.9	26.4	16.3	8.4	26.0	73.1	33.1	98.1	133.4	647.6	0.0	0.5	0.1	2.5
23/05/2019	16.6	10.9	24.3	17.0	11.5	23.8	79.7	49.4	98.1	150.1	661.9	0.0	0.3	0.0	2.2
24/05/2019	14.5	6.0	24.8	15.3	6.6	24.3	76.4	36.5	99.8	147.4	613.8	0.0	0.8	0.0	3.8
25/05/2019	12.9	2.6	24.8	13.7	4.0	24.3	69.0	27.2	98.2	147.0	625.1	0.0	1.1	0.0	5.2
26/05/2019	14.6	5.9	23.5	16.1	8.8	23.1	64.5	37.5	92.7	142.2	669.9	0.0	1.6	0.2	5.3
27/05/2019	13.2	8.6	19.3	13.2	9.8	18.6	58.2	35.4	85.0	141.2	640.5	1.0	4.2	0.1	8.7
28/05/2019	11.7	6.8	16.4	11.5	6.7	15.9	53.1	38.3	69.2	159.5	610.1	0.0	3.9	1.6	6.4
29/05/2019	14.7	11.5	18.4	14.5	11.5	17.8	51.6	43.6	63.2	124.1	619.8	0.0	4.5	1.9	8.3
30/05/2019	10.7	3.3	17.9	11.2	6.0	17.3	53.8	23.3	80.4	164.3	625.5	0.0	2.1	0.1	5.5
31/05/2019	9.8	3.9	18.4	10.0	5.0	17.8	64.2	39.0	92.5	159.1	608.0	0.0	2.5	0.1	5.9
	14.4	1.3	26.6	14.9	2.2	26.0	71.5	23.3	99.8	148.2	848.4	12.4	1.3	0.0	8.7

