

**WAMBO COAL
ENVIRONMENTAL REPORTING
1 APRIL – 30 APRIL 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	1/04/2019				Pool
SW02	1/04/2019				Dry
SW03	1/04/2019				Pool
SW04	1/04/2019				Dry
SW05	1/04/2019				Dry
SW06	1/04/2019				Dry
SW07	1/04/2019				Dry
SW08	1/04/2019				Dry
SW12	1/04/2019	8.8	2860	40	
SW14	1/04/2019	8.3	531	14	
SW15	1/04/2019	9	2750	74	
SW27					Pool
SW31	1/04/2019	9.2	3330	200	
SW32a					Pool
SW38	1/04/2019	9.2	3270	15	
SW39					Pool
SW40					Pool
SW51	1/04/2019	8.8	991	658	
SW52	1/04/2019	9.6	821	172	
Wombat Dam	1/04/2019	7.57	318	44	
Milk Can Dam	1/04/2019	8.13	418	72	
Rug Dump Dam	1/04/2019	7.96	418	278	
Montrose East 1	1/04/2019	7.75	249	639	
Montrose East 2	1/04/2019	8.27	257	279	

Monitoring Frequency: Every 2 months
 Sampling Method: Grab sample
 Limits: Nil

Date sampled: 3/04/2019
 Date obtained: 3/04/2019
 Date published: 3/06/2019

Table 2 - WCPL Groundwater Results

Site	Date	pH	EC (μ S/cm)	Depth	Comments
P301	3/04/2019	6.70	6870.0	18.73	
P315	3/04/2019				Dry
GW02	3/04/2019	7.20	544.0	9.44	
GW08	3/04/2019				Dry
GW09	3/04/2019				Dry
GW11	3/04/2019	7.00	601.0	7.60	
GW12	3/04/2019				Dry
GW13	3/04/2019	6.90	3820.0	7.10	
GW15	3/04/2019	6.90	638.0	11.85	
GW16	3/04/2019	7.70	1451.0	11.99	
GW17	3/04/2019	7.10	5330.0	12.64	
GW21	3/04/2019				Dry
GW22	3/04/2019	8.30	6870.0	35.96	
GW23 (Site 4A)	3/04/2019				Dry
GW24 (Site 4B)	3/04/2019	6.30	1747.0	9.42	
GW25 (Site 9A)	3/04/2019				Dry
GW26 (Site 9B)	3/04/2019	7.20	1129.0	8.37	
GW27 (Instream 1)	3/04/2019				Dry
GW28 (Instream 3)	3/04/2019				Dry
GW29 (Site 7b)	3/04/2019				Dry
GW30 (Site 11)	3/04/2019				Dry
P1	4/04/2019	6.90	8470.0	27.70	
P11	4/04/2019				Mud
P16	4/04/2019	7.31	7350.00	9.54	
P20	4/04/2019	7.60	5090.00	8.83	

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

Date sampled: 16/04/2019
Date obtained: 16/04/2019
Date published: 3/06/2019

Table 3 - WCPL Depositional Dust Gauges

Site	Date	Ash (g/m ²)	Total Insoluble Matter (g/m ²)	AR/IS Ratio	Comment
D11	16/04/2019	1	1.3	76.92	
D19	16/04/2019	2.5	3.9	64.10	
D21	16/04/2019	1.5	2.1	71.43	
D22	16/04/2019				Broken

Monitoring Frequency: Continuous
 Sampling Method: AM22
 Limits: Nil

Date sampled: Continuous
 Date obtained: Continuous
 Date published: 3/06/2019

Table 4 - 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
1/04/2019	20.6	32.06	15.9	25.12	13.8	23.33	14.0	31.33
2/04/2019	9.8	31.82	7.2	24.92	8.4	23.17	17.7	31.18
3/04/2019	16.6	31.65	14.9	24.81	15.4	23.08	20.9	31.06
4/04/2019	15.3	31.47	12.4	24.68	12.8	22.97	20.5	30.95
5/04/2019	12.8	31.27	11.0	24.53	10.7	22.84	19.0	30.82
6/04/2019	15.2	31.10	18.8	24.47	11.4	22.72	13.2	30.63
7/04/2019	18.2	30.96	19.9	24.42	12.1	22.61	14.3	30.46
8/04/2019	21.8	30.87	28.7	24.47	16.8	22.54	18.2	30.33
9/04/2019	27.4	30.83	24.6	24.47	19.5	22.51	20.9	30.24
10/04/2019	19.6	30.72	19.6	24.42	19.6	22.48	26.4	30.20
11/04/2019	19.3	30.60	13.9	24.31	18.5	22.44	20.6	30.10
12/04/2019	15.6	30.45	12.0	24.19	15.6	22.38	18.9	29.99
13/04/2019	22.8	30.38	18.2	24.13	13.9	22.29	20.0	29.89
14/04/2019	25.1	30.33	23.7	24.13	27.5	22.34	31.6	29.91
15/04/2019	21.1	30.24	16.0	24.05	15.7	22.28	23.5	29.84
16/04/2019	17.0	30.11	17.0	23.98	13.5	22.19	27.1	29.82
17/04/2019	15.9	29.97	9.9	23.85	14.2	22.12	15.3	29.68
18/04/2019	15.9	29.84	16.7	23.78	17.9	22.08	19.3	29.58
19/04/2019	19.7	29.75	21.4	23.76	18.5	22.04	21.8	29.51
20/04/2019	15.6	29.61	13.1	23.66	17.8	22.00	25.5	29.47
21/04/2019	18.3	29.51	15.3	23.58	19.6	21.98	25.6	29.44
22/04/2019	19.6	29.42	15.9	23.51	17.9	21.95	33.9	29.48
23/04/2019	19.3	29.33	11.2	23.40	16.2	21.89	23.8	29.43
24/04/2019	15.7	29.21	25.5	23.42	18.1	21.86	27.6	29.41
25/04/2019	29.8	29.21	41.7	23.58	29.2	21.92	41.7	29.52
26/04/2019	32.1	29.24	47.6	23.79	26.7	21.97	23.8	29.47
27/04/2019	30.9	29.25	35.5	23.89	37.1	22.10	38.7	29.55
28/04/2019	22.6	29.20	32.9	23.97	20.5	22.08	28.3	29.54
29/04/2019	35.3	29.25	31.7	24.04	36.93	22.21	42.1	29.64
30/04/2019	25.9	29.22	46.3	24.23	20	22.19	39.5	29.73

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

Date sampled: Continuous
 Date obtained: Continuous
 Date published: 3/06/2019

Table 5 - WCPL Blast Monitoring Results

Date & Time	ID	BM02 - Kelly		BM05 - Muller		BM07 - Thelander	
		dBL	mm/sec	dBL	mm/sec	dBL	mm/sec
8/04/2019 12:06	M_27MWA_366	103.3	0.39	110.4	1.68	97.6	1.53
8/04/2019 12:17	M_27WRA_375 & M_27WRA_377	102.3	0.12	110.1	0.56	101.0	0.24
8/04/2019 12:25	M_27WRA_372	103.8	0.06	108.2	0.27	98.0	0.16
13/04/2019 10:00	HD_RCA_378 & HD_WWA_380	82.6	0.01	105.8	0.13	101.8	0.09
26/04/2019 10:08	M_27WMA_374	85.7	0.12	107.7	2.40	99.7	1.84
26/04/2019 10:17	HD_RCA_376	83.5	0.02	91.9	0.09	89.4	0.06
26/04/2019 10:27	M_27WMA379	90.9	0.30	109.6	1.08	99.3	0.88

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

Date sampled: continuous
 Date obtained: continuous
 Date published: 3/06/2019

Table 6 - WCPL Meteorology

Date	Temperature (2m)			Temperature (10m)			Humidity			Solar Radiation		RAIN	Wind Speed		
	Min	Average	Max	Min	Average	Max	Min	Average	Max	Average	Max	Sum (mm)	Min	Average	Max
1/04/2019	7.6	15.5	23.1	7.9	15.8	22.7	45.0	78.3	98.0	203.1	1001.7	0.6	0.1	1.2	5.4
2/04/2019	16.2	18.5	23.0	16.3	18.5	22.5	64.7	86.0	97.6	123.4	791.1	1.0	0.2	1.1	4.3
3/04/2019	12.8	19.6	26.1	13.0	19.7	25.6	42.5	76.0	99.6	262.7	904.4	0.4	0.1	1	3.3
4/04/2019	12.6	19.1	25.1	13.3	19.1	24.3	51.0	77.8	99.2	187.3	1052.2	0.0	0.1	1.2	4.9
5/04/2019	15.9	19.0	24.1	16.7	19.1	23.4	61.2	85.0	96.6	133.9	1002.3	3.8	0.1	1.2	4.5
6/04/2019	15.4	21.3	30.1	15.8	21.6	29.6	38.2	74.6	99.3	247.2	907.2	0.2	0.1	1.2	5.9
7/04/2019	13.4	21.8	32.9	14.1	22.4	32.6	25.0	65.9	97.6	233.8	877.3	0.0	0.1	1.2	5.2
8/04/2019	12.4	21.9	33.1	13.2	22.6	32.9	21.2	60.6	95.5	246.2	866.4	0.0	0	1.4	5.6
9/04/2019	13.0	22.2	32.7	14.1	22.5	32.3	24.5	55.2	92.7	230.7	895.0	0.0	0.1	2.4	6.2
10/04/2019	11.1	17.1	22.1	12.1	17.1	21.5	44.9	64.1	89.5	187.0	975.4	0.0	0.0	1.9	5.5
11/04/2019	11.1	17.0	23.4	12.3	17.1	22.7	47.0	71.6	92.8	202.0	928.7	0.0	0.0	1.5	3.8
12/04/2019	13.5	18.1	24.5	14.0	18.1	23.9	47.5	76.0	97.0	178.7	918.6	0.0	0.4	1.1	4.2
13/04/2019	10.4	17.9	26.6	11.3	18.1	26.4	35.8	74.5	99.5	219.7	970.9	0.0	0.1	0.3	3.4
14/04/2019	13.4	18.1	24.1	14.1	18.3	23.8	45.2	78.9	97.9	108.0	956.3	0.2	0.1	0.9	4.2
15/04/2019	10.5	16.6	24.4	11.2	17.1	23.9	43.1	79.7	99.6	165.3	897.9	0.2	0.0	0.6	3.9
16/04/2019	11.1	17.3	24.5	12.6	18.0	23.7	55.6	82.7	99.1	167.5	1014.6	0.0	0.0	1.1	4.6
17/04/2019	10.8	18.1	26.1	11.5	18.4	25.2	46.6	79.0	99.1	193.9	1028.6	0.2	0.0	1.1	5.4
18/04/2019	10.5	19.0	26.7	11.5	19.3	26.4	41.8	78.2	99.3	222.2	811.4	0.0	0.1	0.5	4.0
19/04/2019	15.3	20.1	26.2	15.5	20.3	25.7	53.8	80.8	98.1	171.2	838.1	0.0	0.1	1.2	4.3
20/04/2019	13.1	20.1	27.3	14.1	20.3	26.8	53.0	82.0	99.2	180.4	960.9	0.0	0.0	0.9	5.0
21/04/2019	13.6	20.5	26.6	14.6	20.9	26.3	50.9	78.8	99.1	183.4	808.5	0.0	0.0	0.8	3.1
22/04/2019	14.5	20.2	26.7	15.1	20.4	26.3	49.7	79.2	98.5	171.1	811.4	0.0	0.1	0.5	3.0
23/04/2019	12.7	20.2	27.1	13.7	20.4	26.6	41.5	76.8	99.3	202.7	904.1	0.0	0.2	1.6	5.0
24/04/2019	15.1	20.4	26.5	16.0	20.5	26.0	38.4	71.9	97.3	205.5	781.3	0.0	0.2	0.9	3.3
25/04/2019	10.7	19.1	29.1	11.3	19.5	28.9	37.0	73.1	99.0	191.6	739.7	0.0	0.0	0.3	2.9
26/04/2019	11.9	20.9	29.6	12.6	21.3	29.2	31.5	59.5	98.0	196.6	747.9	0.0	0.1	1.7	5.3
27/04/2019	8.6	15.8	21.2	9.8	16.2	20.6	45.4	61.5	93.8	179.6	790.5	0.0	0.1	1.0	3.8
28/04/2019	6.2	15.1	25.8	7.5	15.7	25.4	24.8	60.9	99.3	207.9	764.6	0.0	0.1	1.6	5.5
29/04/2019	7.3	16.0	23.7	8.2	16.4	23.2	49.5	73.4	96.4	187.0	841.7	0.0	0.1	1.2	4.8
30/04/2019	9.5	16.7	23.4	10.3	17.2	23.1	54.2	80.5	98.7	129.6	737.3	0.0	0.0	0.0	1.8
MONTH	6.2	18.7	33.1	7.5	18.9	32.9	21.2	74.7	99.6	189.3	1052.2	6.6	0	1.0	5.9

