

WAMBO COAL PTY LIMITED

MONTHLY ENVIRONMENTAL MONITORING REPORT

MARCH 2016

Table 1 - Monthly Surface Water Results

Sample Location	pH	EC (µS/cm)	TSS (mg/L)	TDS (mg/L)	Oil & Grease (mg/L)	Temp (°C)	Comments
WOLLOMBI BROOK							
SW01	7.4	767	<5	432		25.0	
SW03	7.4	726	<5	429	<5	24.8	
SW02	7.6	758	<5	417	<5	25.5	
SW40	7.5	737	<5	440		25.5	
NORTH WAMBO CREEK							
SW04							Dry
SW27a							Pool No Flow
SW32a	7.5	319	432	202		23.5	
SW05							Pool No Flow
SOUTH WAMBO/STONY CREEK							
SW06	7.1	446	<5	295		22.2	
SW07	7.4	583	<5	348		23.7	
SW08							Dry
WATERFALL CREEK							
SW39							Pool No Flow
MINE WATER DAMS							
SW12	8.8	6020				28.9	
SW14							To Low No Sample
SW15	9.1	5390				31.9	
SW20							Dry
SW29							No access
SW30	9.1	5120				29.6	
SW31	9.1	5050				30.3	
SW38	8.8	5720				21.3	

Note: Figures in bold fall outside trigger levels.

Table 2 - Ground Water Results

Sample Location	pH	EC (μ S/cm)	Depth to Water (m)	Temp ($^{\circ}$ C)	Comments
GW02					No groundwater monitoring scheduled for March.
GW11					
P106					
P109					
P110					
P111					
P114					
P116					
P202					
P206					
P301					
P315					
GW12					
GW13					
GW14					
GW15					
GW16					
GW17					
GW18					
GW19					
GW21					
GW22					
P1*					
P12*					
P13*					
P15*					
P16*					
P17*					
P18*					
P20*					

Note: All depths measured to top of casing, except United bores which are to ground. Figures in bold are outside trigger levels listed in Table 5 of the Ground Water Monitoring Programme (GWMP), which is part of the Site Water Management Plan.

* Represents data that is provided on a quarterly basis. The results are to be updated once available.

Table 3 - Dust Deposition Results

Site	Insoluble Solids (IS) (g/m ² .month)	Ash Residue (AR) (g/m ² .month)	IS:AR Ratio	IS YTD Average (g/m ² .month)	AR YTD Average (g/m ² .month)
D01*	6.1	2.3	38	3.7	2.3
D03	3.3	2.4	73	3.0	2.4
D07	4.5	2.8	62	4.5	2.7
D09	2.6	1.6	62	2.5	1.5
#D11	2.7	2.1	78	4.3	3.7
#D12	4.8	2.9	60	3.6	2.4
#D17	2.2	1.5	68	1.9	1.2
D19	4.4	2.9	66	3.1	2.1
D20	1.7	1.1	65	1.4	0.9
#D21	3.3	2.5	76	2.4	1.8
#D22	3.9	2.8	72	2.6	1.9
D23	Broken			1.6	1.2
#D24	1.7	0.9	53	1.2	0.7
#D25	5.8	4.4	76	3.6	2.8
D26	3.0	1.9	63	2.2	1.5

Note:

Results in **bold** are YTD average above 4g/m²/month

Results # are dust gauges not on WCPL owned land. DD gauges on Wambo Coal land and above criteria level are not considered non-compliance.

* Contaminated sample

Table 4 - HVAS Results

Date of Run	HV01 - Coralie TSP ($\mu\text{g}/\text{m}^3$)	HV02 - Caban TSP ($\mu\text{g}/\text{m}^3$)	HV03 - Thelander TSP ($\mu\text{g}/\text{m}^3$)	HV04 - Muller TSP ($\mu\text{g}/\text{m}^3$)
6/03/2016	119	60.6	79.4	133
12/03/2016	119	60.0	97.2	152
18/03/2016	33.8	33.6	19.2	51.7
24/03/2016	74.2	63.6	82.2	179
30/03/2016	31.7	39.5	20.8	55.4
Monthly Mean	75.5	51.5	59.8	114.2
Yearly Mean	59.0	51.2	56.9	94.9

Table 5 - Blast Results

Peabody Wambo Blasting Results 2016													
Blast Number	Date	Time	Blast ID	Homestead (BM01)		Kelly (BM02)		Muller (BM05)		Harris (BM03)		Thelander (BM07)	
				Overpressure dB(L)	Vibration (mm/sec)	Overpressure dB(L)	Vibration (mm/sec)	Overpressure dB(L)	Vibration (mm/sec)	Overpressure dB(L)	Vibration (mm/sec)	Overpressure dB(L)	Vibration (mm/sec)
14	2/03/2016	11:31:30	WRC6, M18W	96.9	0.09	90.9	0.15	107.9	0.3	106.6	0.08	110.1	0.35
15	11/03/2016	9:16:26	M21WRC1	103.3	0.13	103.3	0.08	115.8	0.67	104.4	0.08	110.3	0.64

* Trigger unit SMS unable to be received by monitoring unit. Blast below monitoring unit vibration trigger threshold

** Hardware failure

*** Software failure

Table 6 - PM₁₀ Results

Date	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
1/03/2016	14.0	18.6	16.4	19.6	16.9	17.8	19.7	20.7
2/03/2016	22.0	18.7	25.9	19.7	25.0	17.9	31.8	20.9
3/03/2016	21.7	18.7	29.3	19.8	24.9	18.1	28.0	21.0
4/03/2016	24.6	18.8	22.2	19.9	23.4	18.1	23.1	21.0
5/03/2016	26.0	18.9	18.3	19.8	21.6	18.2	28.8	21.1
6/03/2016	24.2	19.0	15.4	19.8	18.3	18.2	22.7	21.2
7/03/2016	24.8	19.1	24.2	19.8	19.2	18.2	23.1	21.2
8/03/2016	32.9	19.3	18.2	19.8	24.2	18.3	28.7	21.3
9/03/2016	20.1	19.3	20.1	19.8	14.6	18.3	20.5	21.3
10/03/2016	34.5	19.5	27.9	19.9	23.4	18.3	26.9	21.4
11/03/2016	29.9	19.7	26.9	20.0	22.5	18.4	26.6	21.5
12/03/2016	25.2	19.8	19.3	20.0	25.4	18.5	30.8	21.6
13/03/2016	25.4	19.9	17.6	20.0	20.9	18.5	29.9	21.7
14/03/2016	27.8	20.0	28.3	20.1	37.1	18.8	27.9	21.8
15/03/2016	10.8	19.8	11.4	20.0	11.0	18.7	15.3	21.7
16/03/2016	10.2	19.7	6.3	19.8	7.3	18.5	10.0	21.5
17/03/2016	17.3	19.7	13.0	19.7	14.2	18.5	16.9	21.5
18/03/2016	10.6	19.6	13.0	19.6	8.9	18.3	12.7	21.4
19/03/2016	14.0	19.5	10.6	19.5	11.4	18.2	12.0	21.2
20/03/2016	10.5	19.4	9.0	19.4	10.5	18.1	19.8	21.2
21/03/2016	7.1	19.2	6.7	19.2	6.1	18.0	11.5	21.1
22/03/2016	7.6	19.1	8.4	19.1	7.6	17.9	11.8	21.0
23/03/2016	14.5	19.0	16.0	19.1	15.5	17.8	21.6	21.0
24/03/2016	22.0	19.0	23.1	19.1	22.2	17.9	36.0	21.2
25/03/2016	20.8	19.1	26.7	19.2	12.7	17.8	20.1	21.2
26/03/2016	30.8	19.2	22.2	19.2	26.4	17.9	28.4	21.3
27/03/2016	26.7	19.3	18.0	19.2	23.6	18.0	29.3	21.3
28/03/2016	18.9	19.3	17.6	19.2	22.5	18.0	34.8	21.5
29/03/2016	17.4	19.3	19.2	19.2	20.0	18.1	23.7	21.5
30/03/2016	10.1	19.2	12.6	19.1	10.0	18.0	12.0	21.4
31/03/2016		FALSE		FALSE		FALSE		FALSE

Table 7 - Meteorological Data

Date	Temperature (2m)			Temperature (10m)			Temperature Inversion			Humidity			Solar Radiation			Rain	Wind Speed		
	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	mm	Min	Avg	Max
01/03/15	16.5	23.2	30.3	17.6	23.8	30.2	-6.6	7.4	20.3	41.9	71.2	96.0	-1.6	238.5	1088.8	0.0	0.0	2.0	5.8
02/03/15	17.0	24.4	33.5	17.9	25.0	33.5	-5.1	7.5	19.1	25.9	70.3	96.5	-1.6	264.1	938.7	0.0	0.0	1.4	5.1
03/03/15	17.5	25.1	33.5	18.6	25.7	33.5	-8.2	7.4	21.8	33.1	70.5	96.8	-1.6	251.6	880.4	0.0	0.0	1.8	5.6
04/03/15	20.3	24.5	30.1	21.1	25.0	30.0	-4.7	5.3	14.2	50.1	72.0	90.8	-1.6	179.9	1012.8	0.0	0.4	2.2	6.0
05/03/15	18.8	24.2	31.3	19.9	24.7	31.6	-8.7	6.0	19.8	34.5	70.0	93.1	-1.6	247.3	934.8	0.0	0.0	1.7	5.0
06/03/15	16.1	23.9	32.1	17.7	24.5	32.0	-5.2	7.7	23.5	37.9	71.0	96.4	-1.6	266.9	884.2	0.0	0.0	1.9	5.9
07/03/15	18.8	26.0	34.3	20.1	26.5	34.0	-9.0	7.1	21.5	31.3	67.6	95.6	-1.6	265.4	869.2	0.0	0.0	1.4	5.4
08/03/15	20.3	24.9	32.0	21.3	25.3	31.8	-5.5	4.9	15.5	36.0	72.5	91.9	-1.6	219.5	944.3	0.0	0.3	2.4	6.4
09/03/15	19.1	26.8	35.8	20.7	27.4	35.9	-12.7	8.0	23.4	28.7	68.4	96.4	-1.6	242.2	853.7	0.0	0.0	1.2	4.1
10/03/15	19.7	26.6	35.1	20.7	27.2	35.1	-6.1	8.0	22.5	28.1	68.2	96.0	-1.6	199.1	850.2	0.0	0.0	1.6	5.5
11/03/15	20.9	25.3	34.3	22.1	25.8	34.2	-6.3	6.3	16.7	28.1	72.2	92.5	-1.6	182.7	900.5	0.0	0.0	1.5	5.6
12/03/15	18.7	26.2	34.4	19.9	26.7	34.3	-7.0	6.0	17.0	34.7	67.2	96.5	-1.6	243.3	824.8	0.0	0.0	1.6	5.5
13/03/15	20.0	25.4	32.8	20.9	25.8	32.7	-7.5	5.4	14.6	34.9	68.5	90.9	-1.6	203.4	930.5	0.0	0.0	1.7	5.1
14/03/15	19.2	24.7	33.9	19.3	25.1	33.6	-10.0	5.0	16.8	39.9	76.8	96.7	-1.6	148.1	981.3	30.9	0.0	1.1	10.5
15/03/15	20.2	22.7	25.5	21.1	23.1	25.4	-4.7	5.1	11.7	66.3	79.5	96.5	-1.6	128.3	741.3	0.0	0.4	2.4	5.2
16/03/15	18.3	21.2	25.2	19.4	21.7	25.0	-6.3	5.9	16.0	65.2	85.1	95.2	-1.6	113.1	850.0	2.5	0.0	1.6	6.2
17/03/15	17.8	21.9	27.7	18.8	22.4	27.7	-3.6	6.8	17.8	54.5	80.4	95.6	-1.6	145.9	1071.1	0.4	0.0	1.5	5.4
18/03/15	15.7	21.8	29.6	17.5	22.5	29.7	-5.9	9.1	29.6	54.7	80.7	97.5	-1.6	117.6	808.9	1.2	0.0	2.4	6.5
19/03/15	11.4	18.3	25.1	13.1	19.1	25.3	-3.3	10.7	34.8	28.3	64.0	94.8	-1.7	257.2	883.7	0.0	0.0	1.7	6.9
20/03/15	13.9	18.1	22.5	15.2	18.7	22.6	-7.2	7.5	23.8	57.8	72.8	87.8	-1.7	100.1	926.3	0.0	0.0	2.0	4.3
21/03/15	16.1	18.7	23.5	16.7	19.1	23.3	-4.3	4.9	13.7	52.8	74.3	92.2	-1.6	135.2	949.8	0.4	0.8	2.4	4.6
22/03/15	15.0	19.8	25.3	16.7	20.3	25.0	-7.1	6.7	28.9	41.1	63.8	85.5	-1.6	213.5	1034.6	0.0	0.0	2.1	4.4
23/03/15	11.1	19.1	28.0	12.4	20.1	28.4	-9.3	12.9	37.5	31.3	67.8	96.7	-1.6	236.0	861.6	0.0	0.0	0.9	2.3
24/03/15	12.1	21.0	30.3	13.3	21.8	30.5	-6.0	10.6	22.9	25.2	61.1	96.2	-1.7	238.9	819.3	0.0	0.0	1.2	6.5
25/03/15	11.7	18.5	24.7	13.2	19.5	25.5	-4.2	13.1	32.8	49.3	77.8	95.7	-1.7	80.9	477.7	0.2	0.0	0.7	2.5
26/03/15	12.8	20.4	29.5	13.8	21.1	29.3	-4.7	9.0	21.8	35.9	74.9	97.4	-1.7	208.0	838.1	0.2	0.0	1.3	4.7
27/03/15	15.4	21.9	29.8	17.1	22.6	29.8	-6.9	8.9	29.0	42.2	76.9	96.7	-1.7	209.6	780.5	0.0	0.0	1.8	6.4
28/03/15	17.7	22.9	29.2	18.9	23.7	29.5	-3.2	10.4	25.7	42.7	74.2	95.2	-1.6	155.3	817.8	0.0	0.0	0.8	2.1
29/03/15	19.9	22.7	28.5	20.7	23.3	28.5	-2.6	7.3	17.9	52.8	83.1	95.5	-1.6	94.3	993.6	0.5	0.0	1.3	4.1
30/03/15	14.9	21.7	28.2	19.2	22.6	28.1	-5.9	11.3	65.7	34.6	61.7	96.2	-1.7	171.3	855.1	1.6	0.0	2.2	5.4
31/03/15	11.9	19.5	28.0	13.6	20.7	27.9	-6.1	15.9	61.3	33.4	63.6	92.0	-1.7	222.6	805.8	0.0	0.0	1.3	4.9
MONTH	11.1	22.6	35.8	12.4	23.3	35.9	-12.7	8.0	65.7	25.2	71.9	97.5	-1.7	192.9	1,088.8	42.8	0.0	1.7	10.5

