



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33516&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: January 2015

Publication Date: 25th February 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/01/2015	29/01/2015	-	-	-	<0.1
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/01/2015	29/01/2015	-	-	-	1.0
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/01/2015	29/01/2015	-	-	-	1.5
10	PM ₁₀	µg/m ³	Every 6 days	5	Various		8.2	10.2	9.3	15.3
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1								35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night			No monitoring this month
N2								35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night			No monitoring this month

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	2	102.7	105.3	120	No
	Blast Vibration	mm/s	Every Blast		0.23	0.25	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	2	106.7	108.0	120	No
	Blast Vibration	mm/s	Every Blast		0.31	0.41	10	No

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

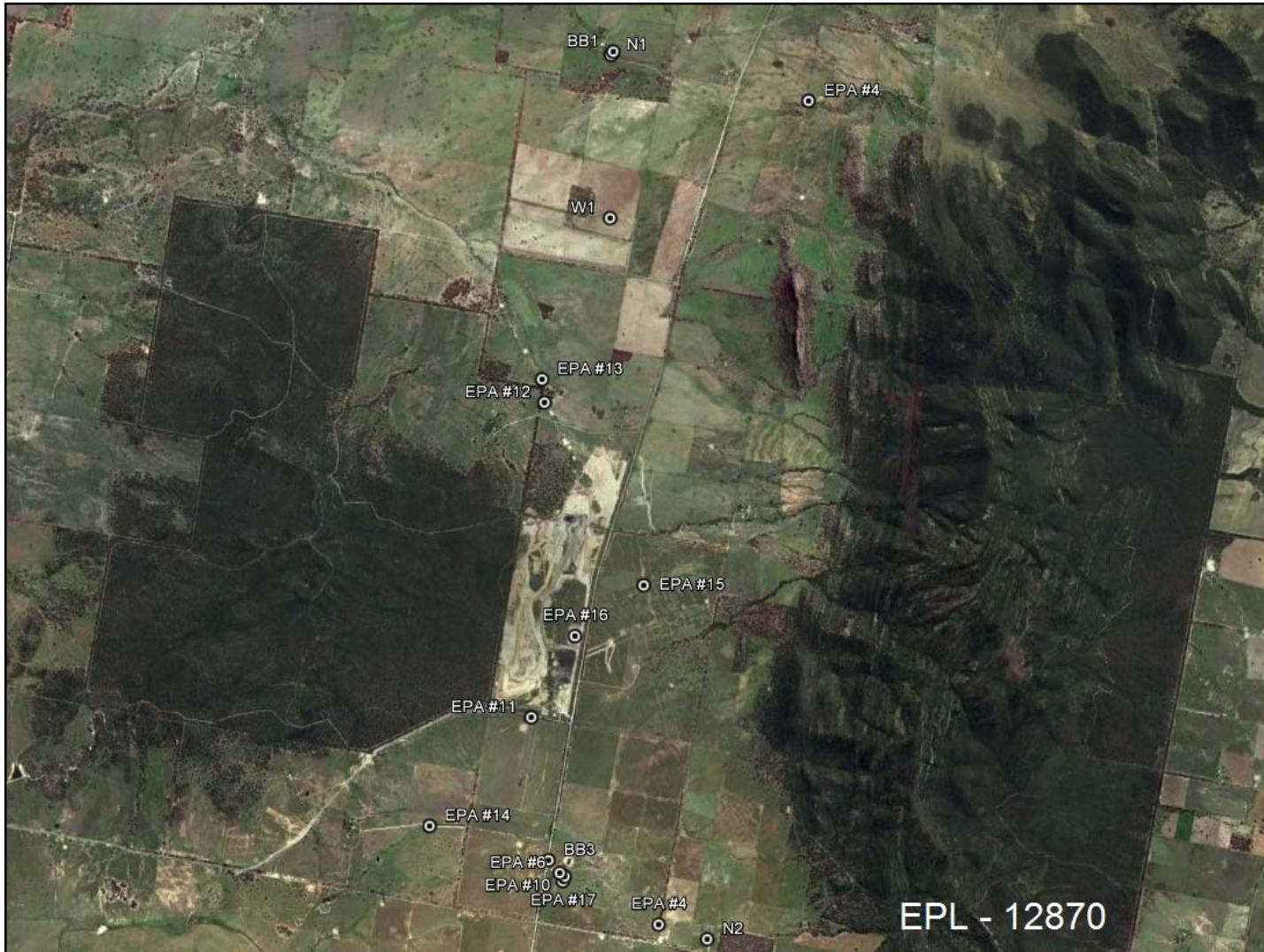


Figure 1 – EPL 12870 Monitoring Locations



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: February 2015

Publication Date: 21st April 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/2/15	27/2/15	-	-	-	1.8
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/2/15	27/2/15	-	-	-	2.4
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/2/15	27/2/15	-	-	-	1.8
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	13/3/15	5.0	8.9	8.9	13.8
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

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EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	1	11/2/15	23/2/15	-	-	-	2260
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	9.15
	TOC	mg/L					-	-	-	4
	TSS	mg/L					-	-	-	46



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) <small>Leq 15min Day</small>	Measured Levels – dB(A) <small>Leq 15min Evening</small>	Measured Levels – dB(A) <small>Leq 15min Night</small>	Measured Levels – dB(A) <small>LA 1min Night</small>	Limits	Wind speed/direction	Compliant (Y/N)	Comments
N1								35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night			No monitoring this month
N2								35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night			No monitoring this month

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	2*	-	95.4	120	No
	Blast Vibration	mm/s	Every Blast		-	0.15	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	2*	-	92.1	120	No
	Blast Vibration	mm/s	Every Blast		-	0.41	10	No

* Note: Very small shot on 3/2/15 resulted in no trigger

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: March 2015

Publication Date: 21st April 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/3/15	26/3/15	-	-	-	0.7
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/3/15	26/3/15	-	-	-	0.5
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/3/15	26/3/15	-	-	-	1.6
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	13/4/15	7.3	18.3	17.8	30.9
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS /cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY
Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA 1min Night	Limits	Wind speed/direction	Compliant (Y/N)	Comments
N1	23/3/15	10:58am	90 mins	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	1.3/W	Y	No monitoring this month
		8:29pm	30 mins		Inaudible				Calm	Y	
		10:25pm	60 mins			Inaudible			Calm	Y	
		10:25pm	60 mins				n/a		Calm	Y	
	24/3/15	9:08am	90 mins	Inaudible					1.4/N		
		8:32pm	30 mins		26				2.0/E		
		11:16pm	60 mins			Inaudible			0.8/SW		
		11:16pm	60 mins				n/a		0.8/SW		
	25/3/15	10:11am	90 mins	Inaudible					0.4/SW		
		9:13pm	30 mins		22				Calm		
		11:31pm	60 mins			Inaudible			Calm		
		11:31pm	60 mins				n/a		Calm		
N2	23/3/15	9:10am	90 mins	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	0.9/N		
		9:20pm	30 mins		27				Calm		
		11:41pm	60 mins			Inaudible			Calm		
		11:41pm	60 mins						Calm		
	24/3/15	7:20am	90 mins	35					0.4/NE		
		7:44pm	30 mins		Inaudible				1.1/E		
		10:01pm	60 mins			24			0.4/SW		
		10:01pm	60 mins				28		0.8/SW		
	25/3/15	8:26am	90 mins	27					Calm		
		8:15pm	30 mins		27				Calm		
10:15pm		60 mins			Inaudible		0.3/ESE				
10:15pm		60 mins				n/a	0.3/ESE				

Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine



ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	1	-	95.4	120	No
	Blast Vibration	mm/s	Every Blast		-	0.15	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	1	-	113.3	120	No
	Blast Vibration	mm/s	Every Blast		-	0.38	10	No

ROCGLLEN COAL MINE – MONTHLY MONITORING SUMMARY



Figure 1 – EPL 12870 Monitoring Locations



Rocglen Coal Mine- Monthly Monitoring Summary

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: April 2015

Publication Date: 13th May 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/4/2015	28/4/2015	-	-	-	1.4
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/4/2015	28/4/2015	-	-	-	1.0
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/4/2015	28/4/2015	-	-	-	0.7
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	12/5/2015	2.4	8.88	7.1	22.3
11	Conductivity	µS/cm	Special Frequency 1*	1	7/4/2015	14/4/2015	-	-	-	129
	Total organic carbon	mg/L					-	-	-	13
12	Conductivity	µS/cm	Special Frequency 1*	1	21/4/2015	28/4/2015	-	-	-	301
	Total organic carbon	mg/L					-	-	-	5
13	TSS	mg/L	Special Frequency 2**	2	Various	Various	24	45.5	45.5	67
	Conductivity	µS/cm					43	50	50	57
	Oil & Grease	mg/L					<5	<5	<5	<5
	pH	pH					7.04	7.09	7.09	7.14
	Total organic carbon	mg/L					7	8	8	9



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	2	Various	Various	49	95	95	141
	Conductivity	µS/cm					54	57	57	60
	Oil & Grease	mg/L					<5	<5	<5	<5
	pH	pH					7.01	7.035	7.035	7.06
	Total organic carbon	mg/L					6	6.5	6.5	7
15	TSS	mg/L	Special Frequency 2**	2	Various	Various	74	129	129	184
	Conductivity	µS/cm					132	134.5	134.5	137
	Oil & Grease	mg/L					<5	<5	<5	<5
	pH	pH					7.4	7.45	7.45	7.51
	Total organic carbon	mg/L					9	10	10	11

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	1	7/4/2015	14/4/2015	-	353	50	Yes	Compliant. Received rainfall greater than 38.4mm
	Oil & Grease	mg/L					-	<5	10	No	
	pH	pH					-	8.12	6.5-8.5	No	
12	TSS	mg/L	Special Frequency	1	21/4/2015	28/4/2015	-	222	50	Yes	Compliant. Received
	Oil & Grease	mg/L					-	<5	10	No	



WHITEHAVEN COAL

Rocglen Coal Mine- Monthly Monitoring Summary

	pH	pH	1*				-	7.04	6.5-8.5	No	rainfall greater than 38.4mm
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Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-

Rocgen Coal Mine- Monthly Monitoring Summary

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
N1	-	-	90 mins	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	-	-	No monitoring this month
		-	30 mins		Inaudible				-	-	
		-	60 mins			Inaudible			-	-	
		-	60 mins				n/a		-	-	
	-	-	90 mins	Inaudible					-	-	
		-	30 mins		26				-	-	
		-	60 mins			Inaudible			-	-	
		-	60 mins				n/a		-	-	
	-	-	90 mins	Inaudible					-	-	
		-	30 mins		22				-	-	
		-	60 mins			Inaudible			-	-	
		-	60 mins				n/a		-	-	
N2	-	-	90 mins	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	-	-	
		-	30 mins		27				-	-	
		-	60 mins			Inaudible			-	-	
		-	60 mins						-	-	
	-	-	90 mins	35					-	-	
		-	30 mins		Inaudible				-	-	
		-	60 mins			24			-	-	
		-	60 mins				28		-	-	
	-	-	90 mins	27					-	-	
		-	30 mins		27				-	-	
	-	60 mins			Inaudible		-	-			



Rocglen Coal Mine- Monthly Monitoring Summary

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/direction	Compliant (Y/N)	Comments
		-	60 mins				n/a		-	-	

-Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	2	97.9	104.1	120	No
	Blast Vibration	mm/s	Every Blast		0.35	0.5	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	2	106.85	108.5	120	No
	Blast Vibration	mm/s	Every Blast		0.595	0.73	10	No



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary



Figure 1 – EPL 12870 Monitoring Locations

Rocglen Coal Mine- Monthly Monitoring Summary

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: May 2015

Publication Date: 23/06/2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/05/2015	26/05/2015	-	-	-	1.0
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/05/2015	26/05/2015	-	-	-	<0.1
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/05/2015	26/05/2015	-	-	-	0.2
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	16/06/2015	3.0	9	7.2	16.4
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-



WHITEHAVEN COAL

Rocglen Coal Mine- Monthly Monitoring Summary

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0							
	Oil & Grease	mg/L									
	pH	pH									
12	TSS	mg/L	Special Frequency 1*	0							
	Oil & Grease	mg/L									
	pH	pH									

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.



Rocgen Coal Mine- Monthly Monitoring Summary

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	11/05/2015	19/05/2015	-	-	-	<0.01
	Arsenic	mg/L					-	-	-	0.008
	Bicarbonate	mg/L					-	-	-	195
	Chloride	mg/L					-	-	-	378
	Iron	mg/L					-	-	-	<0.05
	Manganese	mg/L					-	-	-	<0.001
	Sodium	mg/L					-	-	-	416
16	Conductivity	µS/cm	Quarterly	0	11/05/2015	19/05/2015	-	-	-	1950
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	9.16
	TOC	mg/L					-	-	-	6
	TSS	mg/L					-	-	-	33

Rocglen Coal Mine- Monthly Monitoring Summary

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) <small>L_{eq} 15min Day</small>	Measured Levels – dB(A) <small>L_{eq} 15min Evening</small>	Measured Levels – dB(A) <small>L_{eq} 15min Night</small>	Measured Levels – dB(A) <small>L_A 1min Night</small>	Limits	Wind speed/ direction	Compliant (Y/N)	Comments	
N1	-	-	90 mins	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	-	-	No monitoring this month	
		-	30 mins		Inaudible				-	-		
		-	60 mins			Inaudible			-	-		
		-	60 mins				n/a		-	-		
	-	-	90 mins	Inaudible						-		-
		-	30 mins		26				-	-		
		-	60 mins			Inaudible			-	-		
		-	60 mins				n/a		-	-		
	-	-	90 mins	Inaudible						-		-
		-	30 mins		22				-	-		
		-	60 mins			Inaudible			-	-		
		-	60 mins				n/a		-	-		
N2	-	-	90 mins	Inaudible				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	-	-		
		-	30 mins		27				-	-		
		-	60 mins			Inaudible			-	-		
		-	60 mins						-	-		
	-	-	90 mins	35						-	-	
		-	30 mins		Inaudible				-	-		
		-	60 mins			24			-	-		
		-	60 mins				28		-	-		
-	-	-	90 mins	27				-	-			



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) L _{eq} 15min Day	Measured Levels – dB(A) L _{eq} 15min Evening	Measured Levels – dB(A) L _{eq} 15min Night	Measured Levels – dB(A) L _A 1min Night	Limits	Wind speed/ direction	Compliant (Y/N)	Comments
		-	30 mins		27				-	-	
		-	60 mins			Inaudible			-	-	
		-	60 mins				n/a		-	-	

-Note: Measured noise levels refer to noise attributable to Rocgen Coal Mine

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	0	-	-	-	-
	Blast Vibration	mm/s	Every Blast		-	-	-	-
BB3	Blast Noise	dB (Lin Peak)	Every Blast	0	-	-	-	-
	Blast Vibration	mm/s	Every Blast		-	-	-	-



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary



Figure 1 – EPL 12870 Monitoring Locations

Rocglen Coal

Mine-

Monthly Monitoring Summary

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: June 2015

Publication Date: 21st July 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	22/06/2015	26/06/2015	-	-	-	0.3
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	22/06/2015	26/06/2015	-	-	-	<0.1
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	22/06/2015	26/06/2015	-	-	-	<0.1
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	09/07/2015	1.7	3.9	3.1	6.5
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	2	Various	Various	11	14	14	17
	Conductivity	µS/cm					69	95	95	121
	Oil & Grease	mg/L					<5	<5	<5	<5
	pH	pH					6.9	6.92	6.92	6.95
	Total organic carbon	mg/L					12	15	15	18



WHITEHAVEN COAL

Rocgen Coal

Mine-

Monthly Monitoring Summary

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	TSS	mg/L	Special Frequency 2**	2	Various	Various	74	74.5	74.5	75
	Conductivity	µS/cm					102	166	166	230
	Oil & Grease	mg/L					<5	<5	<5	<5
	pH	pH					7.18	7.19	7.19	7.2
	Total organic carbon	mg/L					11	11.5	11.5	12
15	TSS	mg/L	Special Frequency 2**	2	Various	Various	6	8	8	10
	Conductivity	µS/cm					138	143.5	143.5	149
	Oil & Grease	mg/L					<5	<5	<5	<5
	pH	pH					7.47	7.63	7.63	7.78
	Total organic carbon	mg/L					9	9.56	9.5	10

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.



Rocglen Coal

Mine-

Monthly Monitoring Summary

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



Rocglen Coal

Mine-

Monthly Monitoring Summary

Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
N1	09/06/2015	2:59 pm	90 mins	<20				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	1.0/ WNW	Y	
		9:05 pm	30 mins		33				0.4/ ESE	Y	
		11:12 pm	60 mins			21			0.4/ E	Y	
		11:12 pm	60 mins				<20		0.4/ E	Y	
	10/06/2015	8:50 am	90 mins	31					0.7 /SSE	Y	
		9:15 pm	30 mins		22				4.0/ E	Y	
		11:14 pm	60 mins			<20			5.6 /ESE	Y	
		11:14 pm	60 mins				37		5.6/ ESE	Y	
	11/06/2015	10:34 am	90 mins	<20					4.3/ ESE	Y	
		9:14 pm	30 mins		<20				3.6/ E	Y	
		11:13 pm	60 mins			<20			3.5/ E	Y	
		11:13 pm	60 mins				<20		3.5/ E	Y	
N2	09/06/2015	1:15 pm	90 mins	<20				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	2.9/ W	Y	
		8:22 pm	30 mins		32				0.2/ NNE	Y	
		10:00 pm	60 mins			29			0.4/ ESE	Y	
		10:00 pm	60 mins				28		0.4/ ESE	Y	
	10/06/2015	7:06 am	90 mins	27					0.2/ E	Y	
		8:31 pm	30 mins		31				3.8/ E	Y	
		10:00 pm	60 mins			31			4.1/ E	Y	
		10:00 pm	60 mins				36		4.1/ E	Y	
11/06/2015	7:04 am	90 mins	<20				1.3/ SE	Y			



Rocglen Coal

Mine-

Monthly Monitoring Summary

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
		8:29 pm	30 mins		27				3.4/ E	Y	
		10:01 pm	60 mins			31			3.9/ E	Y	
		10:01 pm	60 mins				35		3.9/ E	Y	

-Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine

Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	1	-	101.3	120	No
	Blast Vibration	mm/s	Every Blast		-	0.28	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	1	-	104.5	120	No
	Blast Vibration	mm/s	Every Blast		-	0.63	10	No



Monthly Monitoring Summary



Figure 1 – EPL 12870 Monitoring Locations



Rocglen Coal Mine- Monthly Monitoring Summary

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: July 2015

Publication Date: 13th August 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	20-07-15	31-07-15	-	-	-	0.8
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	20-07-15	31-07-15	-	-	-	0.4
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	20-07-15	31-07-15	-	-	-	<0.1
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	10/08/15	2.6	3.6	3.7	5.0
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L		-	-	-	-	-	-	-



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	Conductivity	µS/cm	Special Frequency 2**				-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Rocgen Coal Mine- Monthly Monitoring Summary

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



Rocglen Coal Mine- Monthly Monitoring Summary
Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments	
N1	-		90 mins					35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) LA (1 min) Night				
			30 mins									
			60 mins									
			60 mins									
	-			90 mins								
				30 mins								
				60 mins								
				60 mins								
	-			90 mins								
				30 mins								
				60 mins								
				60 mins								
N2	-		90 mins				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) LA (1 min) Night					
			30 mins									
			60 mins									
			60 mins									
	-			90 mins								
				30 mins								
				60 mins								
				60 mins								
	-			90 mins								
				30 mins		27						
				60 mins							31	
				60 mins								35

-Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine



WHITEHAVEN COAL

Rocglen Coal Mine- Monthly Monitoring Summary
Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	1	-	99.1	120	No
	Blast Vibration	mm/s	Every Blast		-	0.12	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	1	-	105.1	120	No
	Blast Vibration	mm/s	Every Blast		-	0.38	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

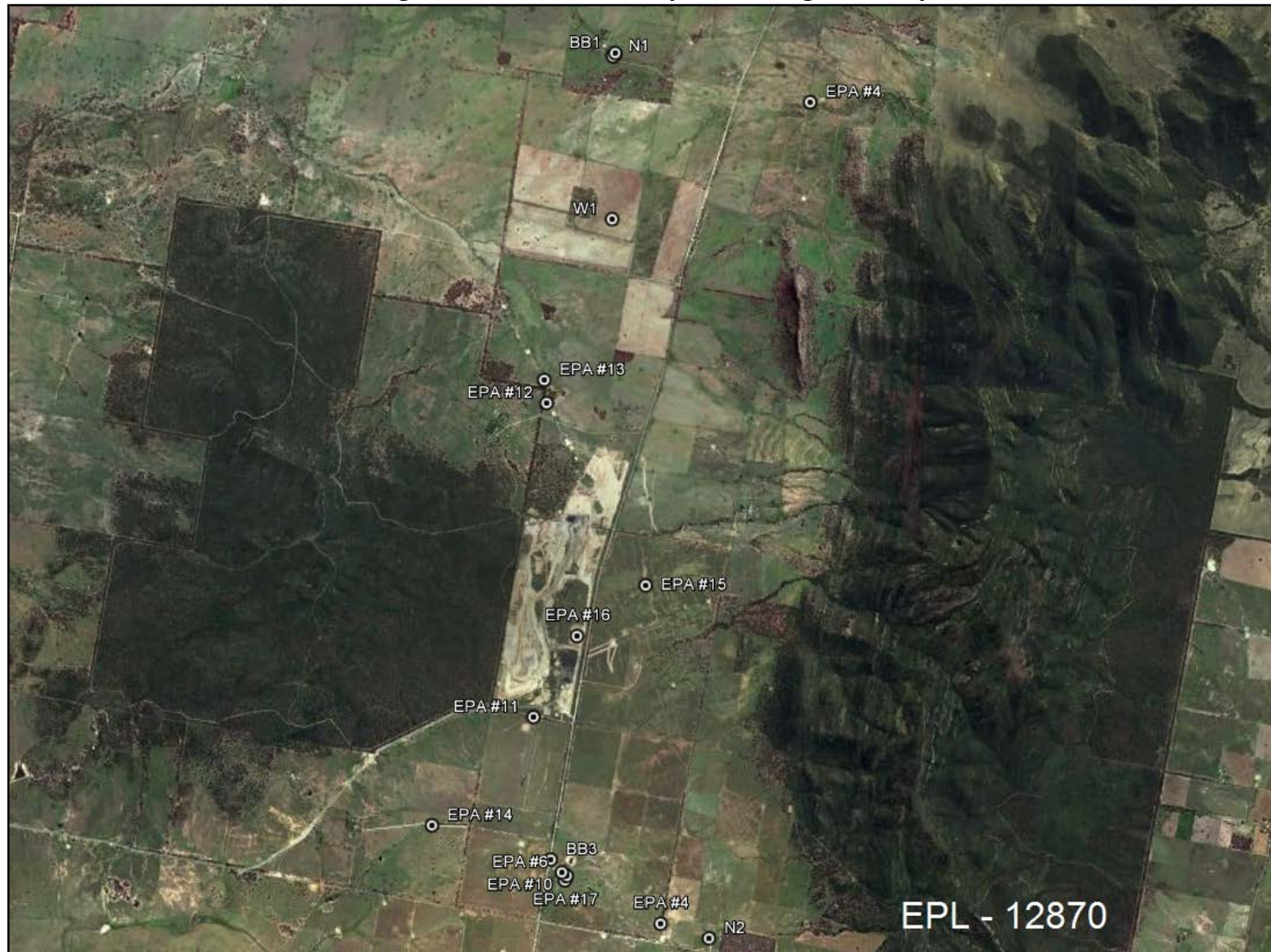


Figure 1 – EPL 12870 Monitoring Locations



Rocglen Coal Mine- Monthly Monitoring Summary

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: August 2015

Publication Date: 21st September 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19-08-15	18-09-15	-	-	-	<0.1
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19-08-15	18-09-15	-	-	-	<0.1
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19-08-15	18-09-15	-	-	-	<0.1
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	4-09-15	5.0	9.06	8.8	16.7
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L		-	-	-	-	-	-	-



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	Conductivity	µS/cm	Special Frequency 2**				-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.



Rocgen Coal Mine- Monthly Monitoring Summary

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	1	18-08-15	25-08-15	-	-	-	1700
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	8.75
	TOC	mg/L					-	-	-	3
	TSS	mg/L					-	-	-	23



Rocglen Coal Mine- Monthly Monitoring Summary
Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments	
N1	-		90 mins					35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) LA (1 min) Night				
			30 mins									
			60 mins									
			60 mins									
	-			90 mins								
				30 mins								
				60 mins								
				60 mins								
	-			90 mins								
				30 mins								
				60 mins								
				60 mins								
N2	-		90 mins				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) LA (1 min) Night					
			30 mins									
			60 mins									
			60 mins									
	-			90 mins								
				30 mins								
				60 mins								
				60 mins								
	-			90 mins								
				30 mins		27						
				60 mins							31	
				60 mins								35

-Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine



WHITEHAVEN COAL

Rocglen Coal Mine- Monthly Monitoring Summary
Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	1	-	100.0	120	No
	Blast Vibration	mm/s	Every Blast		-	0.25	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	1	-	95.2	120	No
	Blast Vibration	mm/s	Every Blast		-	0.31	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

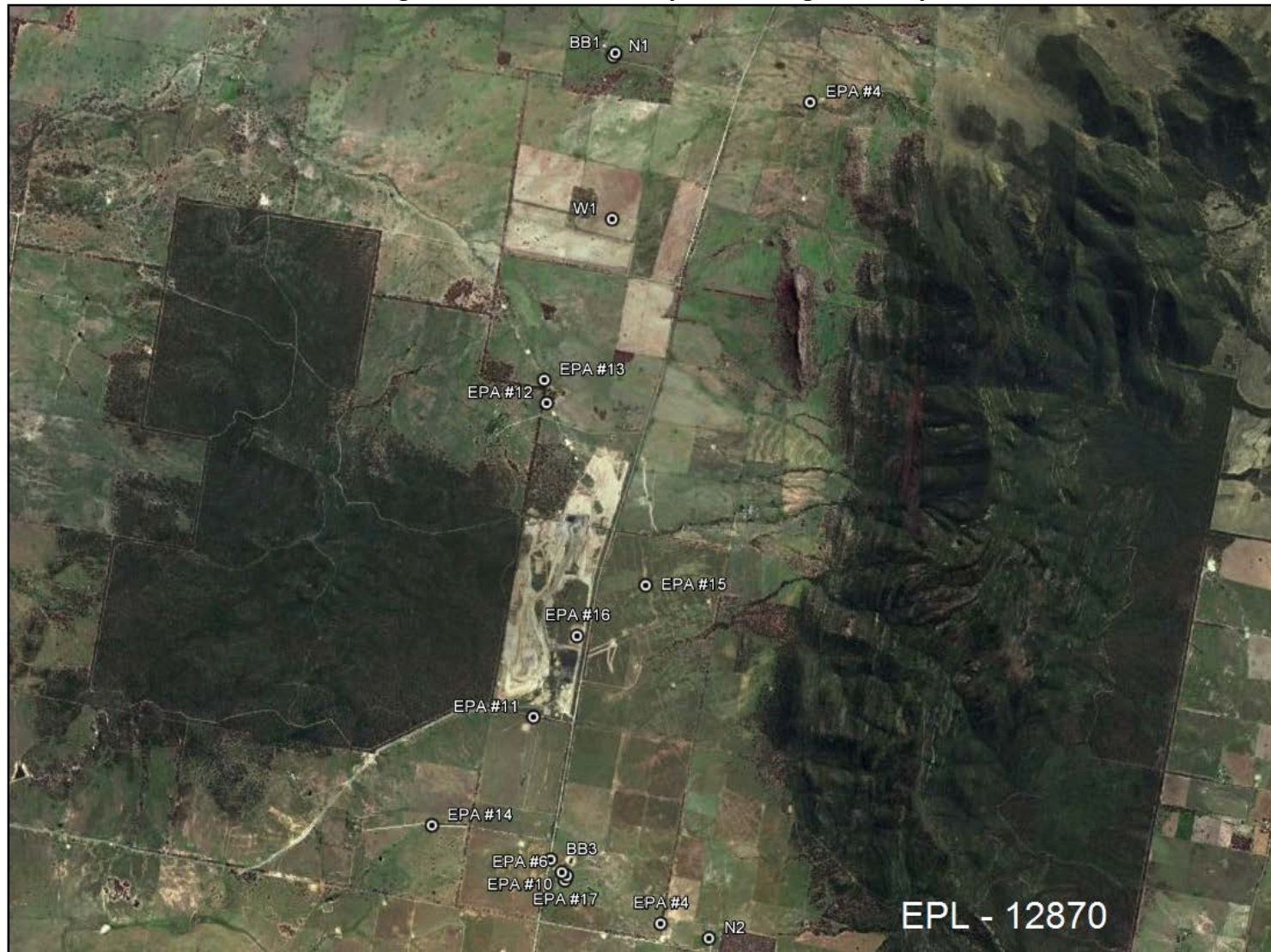


Figure 1 – EPL 12870 Monitoring Locations



Rocglen Coal Mine- Monthly Monitoring Summary

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: September 2015

Publication Date: 22 October 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18-09-2015	29-09-2015	-	-	-	1.0
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18-09-2015	29-09-2015	-	-	-	1.2
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18-09-2015	29-09-2015	-	-	-	0.8
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	13-10-2015	7.2	11.9	8.7	25.9
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L		-	-	-	-	-	-	-



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	Conductivity	µS/cm	Special Frequency 2**				-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Rocgen Coal Mine- Monthly Monitoring Summary

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



Rocglen Coal Mine- Monthly Monitoring Summary
Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
N1	14-09-2015	4:20pm	90 mins	<20				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) LA (1 min) Night	1.5 / 286	Y	Noise monitoring was interrupted on the 15 th September due to storms restricting mining operations. Additional monitoring was undertaken on the 17 th September in response.
		9:19pm	30 mins		<20				1.7 / 30	Y	
		11:23pm	60 mins			<20			2.3 / 20	Y	
		11:23pm	60 mins				<20		2.3 / 20	Y	
	15-09-2015	10:14am	90 mins	<20					4.4 / 307	Y	
	17-09-2015	9:11pm	30 mins		31				2.5 / 180	Y	
		11:16pm	60 mins			30			3.1 / 155	Y	
		11:16pm	60 mins				35		3.1 / 155	Y	
	16-09-2015	9:34am	90 mins	<20					1.6 / 162	Y	
		9:19pm	30 mins		25				0.5 / 156	Y	
		11:22pm	60 mins			30			0.7 / 14	Y	
		11:22pm	60 mins				36		0.7 / 14	Y	
N2	14-09-2015	2:32pm	90 mins	23				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) LA (1 min) Night	1.3 / 23	Y	
		8:33pm	30 mins		28				1.5 / 10	Y	
		10:07pm	60 mins			31			2.2 / 17	Y	
		10:07pm	60 mins				36		2.2 / 17	Y	
	15-09-2015	8:21am	90 mins	29					1.3 / 270	Y	
	17-09-2015	8:27pm	30 mins		<20				2.8 / 185	Y	
		10:01pm	60 mins			<20			2.7 / 161	Y	
		10:01pm	60 mins				<20		2.7 / 161	Y	
	16-09-2015	7:49am	90 mins	33					0.5 / 330	Y	
		8:35pm	30 mins		<20				1.0 / 144	Y	
10:08pm		60 mins			20		1.1 / 182	Y			
10:08pm		60 mins				23	1.1 / 182	Y			

-Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine



WHITEHAVEN COAL

Rocglen Coal Mine- Monthly Monitoring Summary
Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	4	94.3	108.2	120	No
	Blast Vibration	mm/s	Every Blast		0.15	0.23	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	4	103.9	109.9	120	No
	Blast Vibration	mm/s	Every Blast		0.29	0.54	10	No



Rocgen Coal Mine- Monthly Monitoring Summary



Figure 1 – EPL 12870 Monitoring Locations



Rocglen Coal Mine- Monthly Monitoring Summary

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: October 2015

Publication Date: 10th November 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	20-10-15	23-10-15	-	-	-	0.2
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	20-10-15	23-10-15	-	-	-	0.4
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	20-10-15	23-10-15	-	-	-	0.5
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	09-10-15	12.8	20.32	16.4	35.1
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L		-	-	-	-	-	-	-



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	Conductivity	µS/cm	Special Frequency 2**				-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Rocgen Coal Mine- Monthly Monitoring Summary

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



Rocglen Coal Mine- Monthly Monitoring Summary Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments			
N1	-	-	-	-	-	-	-	35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	-	-				
		-	-	-	-	-	-		-					
		-	-	-	-	-	-		-					
		-	-	-	-	-	-		-					
	-	-	-	-	-	-	-		-	-		-		
		-	-	-	-	-	-		-	-		-		
		-	-	-	-	-	-		-	-		-		
		-	-	-	-	-	-		-	-		-		
	N2	-	-	-	-	-	-		-	35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night		-	-	
			-	-	-	-	-		-			-		
			-	-	-	-	-		-			-		
			-	-	-	-	-		-			-		
-		-	-	-	-	-	-	-	-		-			
		-	-	-	-	-	-	-	-		-			
		-	-	-	-	-	-	-	-		-			
		-	-	-	-	-	-	-	-		-			

-Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine



WHITEHAVEN COAL

Rocglen Coal Mine- Monthly Monitoring Summary
Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	3	97.2	109.1	120	No
	Blast Vibration	mm/s	Every Blast		0.16	0.33	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	3	96.2	108.9	120	No
	Blast Vibration	mm/s	Every Blast		0.48	1.01	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

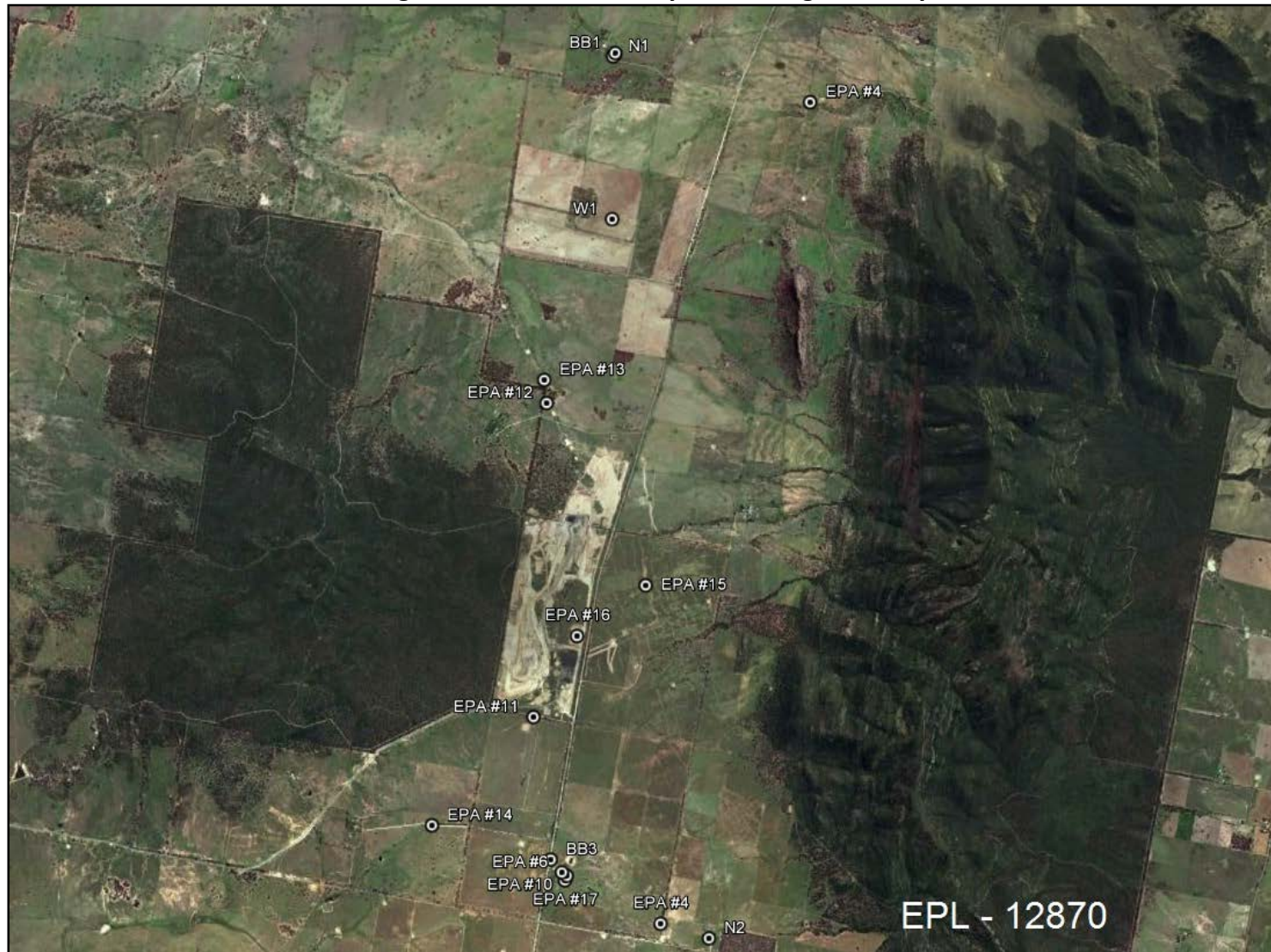


Figure 1 – EPL 12870 Monitoring Locations



Rocglen Coal Mine- Monthly Monitoring Summary

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: November 2015

Publication Date: 17 December 2015

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/11/15	27/11/15	-	-	-	0.8
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/11/15	27/11/15	-	-	-	3.1
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	19/11/15	27/11/15	-	-	-	1.1
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	9/12/15	9.9	18.82	17.8	26.0
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L		-	-	-	-	-	-	-



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	Conductivity	µS/cm	Special Frequency 2**				-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Rocgen Coal Mine- Monthly Monitoring Summary

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	1	19/11/15	27/11/15	-	-	-	2070
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	9.00
	TOC	mg/L					-	-	-	4
	TSS	mg/L					-	-	-	6



Rocglen Coal Mine- Monthly Monitoring Summary Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments			
N1	-	-	-	-	-	-	-	35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) LA (1 min) Night	-	-				
		-	-	-	-	-	-		-					
		-	-	-	-	-	-		-					
		-	-	-	-	-	-		-					
	-	-	-	-	-	-	-		-	-		-		
		-	-	-	-	-	-		-	-		-		
		-	-	-	-	-	-		-	-		-		
		-	-	-	-	-	-		-	-		-		
	N2	-	-	-	-	-	-		-	35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) LA (1 min) Night		-	-	
			-	-	-	-	-		-			-		
			-	-	-	-	-		-			-		
			-	-	-	-	-		-			-		
-		-	-	-	-	-	-	-	-		-			
		-	-	-	-	-	-	-	-		-			
		-	-	-	-	-	-	-	-		-			
		-	-	-	-	-	-	-	-		-			

-Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine



WHITEHAVEN COAL

Rocglen Coal Mine- Monthly Monitoring Summary
Table 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	4	99.6	111.0	120	No
	Blast Vibration	mm/s	Every Blast		0.2	0.73	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	4	97.1	115.3	120	Yes
	Blast Vibration	mm/s	Every Blast		0.3	0.94	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

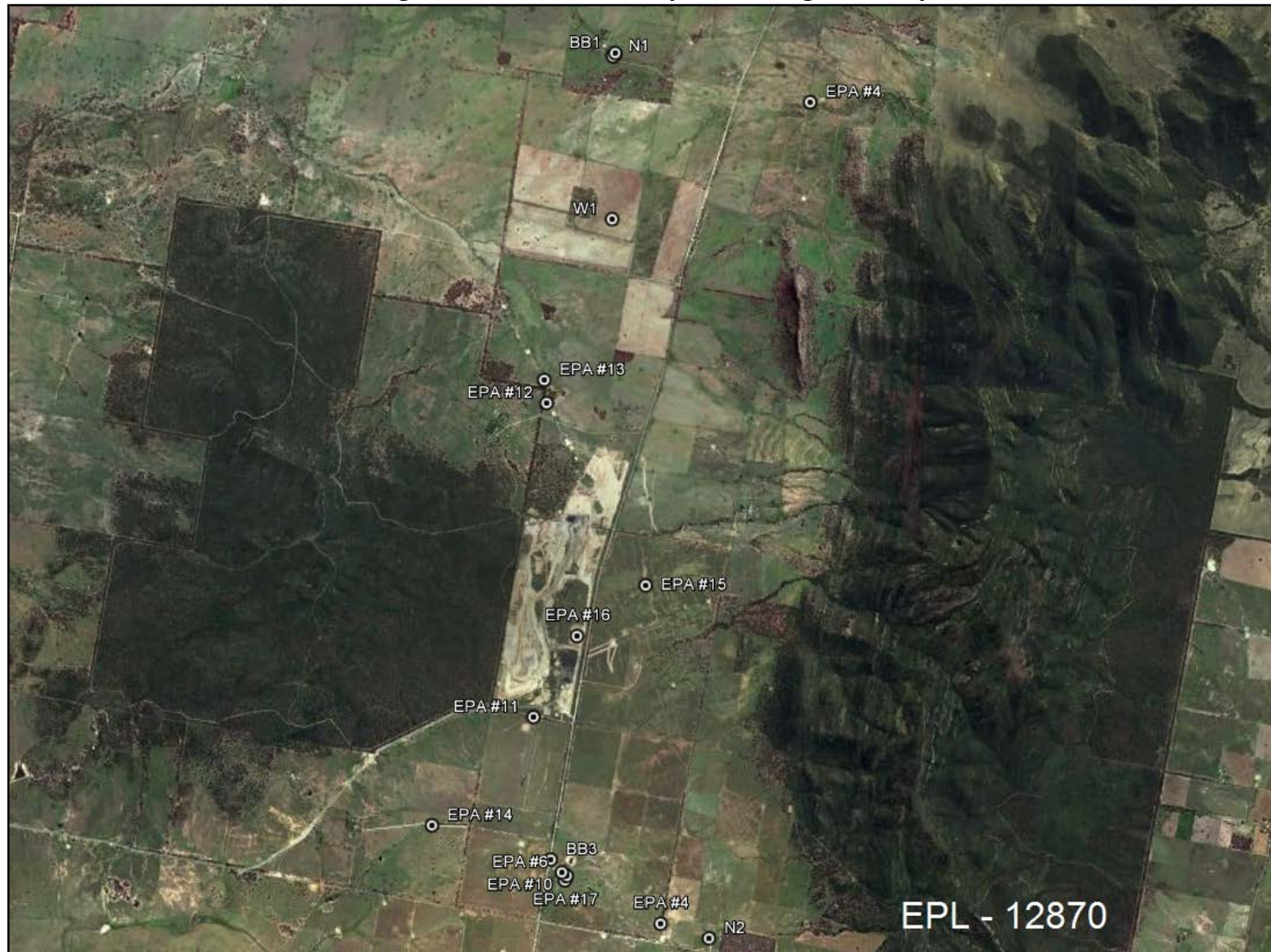


Figure 1 – EPL 12870 Monitoring Locations



Rocglen Coal Mine- Monthly Monitoring Summary

Site Information

EPL No: 12870

EPA Website Link: <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

Licensee: Whitehaven Coal Mining Pty Ltd

Licensee Address: Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: December 2015

Publication Date: 14 January 2016

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
4	Particulates-Deposited Matter	g/m ² /month	Continuous	1	21/12/15	30/12/15	-	-	-	1.6
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	21/12/15	30/12/15	-	-	-	0.8
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	21/12/15	30/12/15	-	-	-	0.4
10	PM ₁₀	µg/m ³	Every 6 days	6	Various	11/01/16	2.5	13.8	12.05	26.7
11	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	0	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
	TSS	mg/L		-	-	-	-	-	-	-



Rocgen Coal Mine- Monthly Monitoring Summary

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Mean Value	Median Value	Max or Only Value
14	Conductivity	µS/cm	Special Frequency 2**				-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
15	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	mg/L					-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date(s) Sampled	Date(s) Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
11	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	
12	TSS	mg/L	Special Frequency 1*	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-	
	pH	pH					-	-	-	-	

* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

** Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.

Rocgen Coal Mine- Monthly Monitoring Summary

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max Value/Only Value
16	Aluminium	mg/L	Yearly	0	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	0	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-



WHITEHAVEN COAL

Rocglen Coal Mine- Monthly Monitoring Summary
Table 4 – Monitoring (Noise – Limits Apply)

EPL ID	Date	Start Time	Period (mins)	Measured Levels – dB(A) Leq 15min Day	Measured Levels – dB(A) Leq 15min Evening	Measured Levels – dB(A) Leq 15min Night	Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s) /direction	Compliant (Y/N)	Comments
N1	7/12/15	1:27pm	15 min	<20				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	2.1/ 214	Y	
		9:16pm	15 min		<20				1.2/ 332	Y	
		11:18pm	15 min			<20			1.2/ 55	Y	
		11:18pm	1 min				<20		1.2/ 55	Y	
	8/12/15	9:15am	15 min	<20					1.3/ 212	Y	
		9:03pm	15 min		<20				1.7/ 8	Y	
		11:17pm	15 min			<20			3.0/ 279	Y	
		11:17pm	1 min				<20		3.0/ 279	Y	
	9/12/15	10:28am	15 min	<20					3.5/ 295	Y	
		9:15pm	15 min		<20				2.5/ 46	Y	
		11:16pm	15 min			<20			1.9/79	Y	
		11:16pm	1 min				<20		1.9/79	Y	
N2	7/12/15	11:41 am	15 min	<20				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	1.7/ 253	Y	
		8:29pm	15 min		26				2.3/ 292	Y	
		10:02pm	15 min			28			1.0/ 30	Y	
		10:02pm	1 min				35		1.0/ 30	Y	
	8/12/15	9:11am	15 min	29					1.3/ 212	Y	
		8:13pm	15 min		23				1.8/ 10	Y	
		10:00pm	15 min			32			2.3/ 11	Y	
		10:00pm	1 min				37		2.3/ 11	Y	
	9/12/15	8:42am	15 min	28					1.6/ 19	Y	
		8:29pm	15 min		26				2.3/ 51	Y	
		10:00pm	15 min			30			2.7/ 18	Y	
		10:00pm	1 min				39		2.7/ 18	Y	

-Note: Measured noise levels refer to noise attributable to Rocglen Coal Mine



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary YTable 5 – Monitoring (Blasts – Limits Apply)

EPL ID	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max or Only Value	100%ile Limit	(Potential) Non-compliance /breach
BB1	Blast Noise	dB (Lin Peak)	Every Blast	6	98.3	108.9	120	No
	Blast Vibration	mm/s	Every Blast		0.12	0.26	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	6	96.5	105.7	120	No
	Blast Vibration	mm/s	Every Blast		0.31	0.64	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

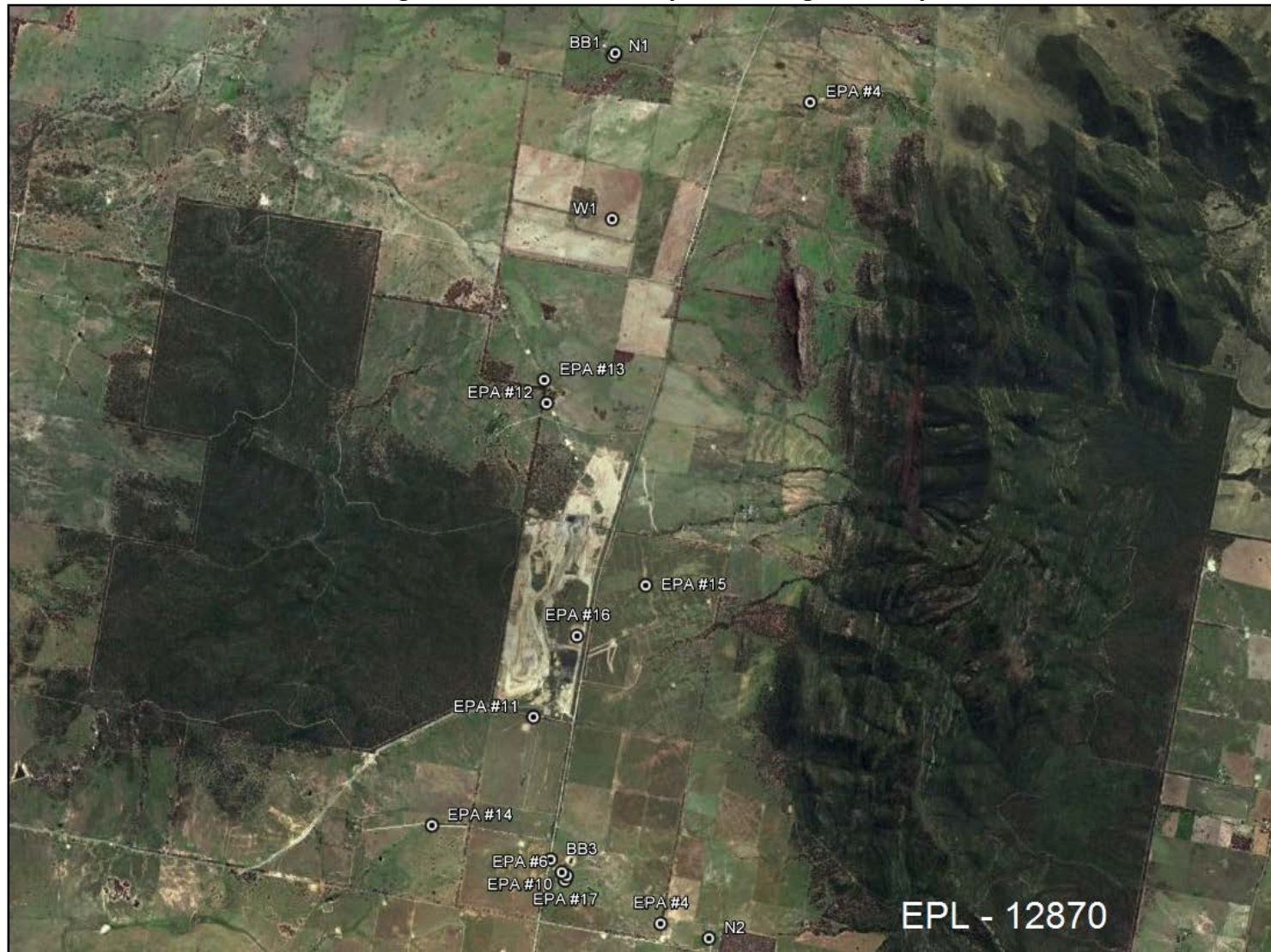


Figure 1 – EPL 12870 Monitoring Locations