



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: January 2017

Obtained Date: 14 February 2017

Publication Date: 21 February 2017

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	13/01/17	19/01/17	-	-	-	3.3
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	13/01/17	19/01/17	-	-	-	2.8
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	13/01/17	19/01/17	-	-	-	1.0
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/02/17	6.1	16.6	18.1	24.2
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

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**	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.



WHITEHAVEN COAL

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	-	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-

Table 4 – Monitoring (Noise – Limits Apply)



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			
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

Table 5 – Monitoring (Blasts – Limits Apply)



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

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	101.9	113.5	120	No
	Blast Vibration	mm/s	Every Blast		0.05	0.1	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	3	102.2	111.9	120	No
	Blast Vibration	mm/s	Every Blast		0.17	0.47	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

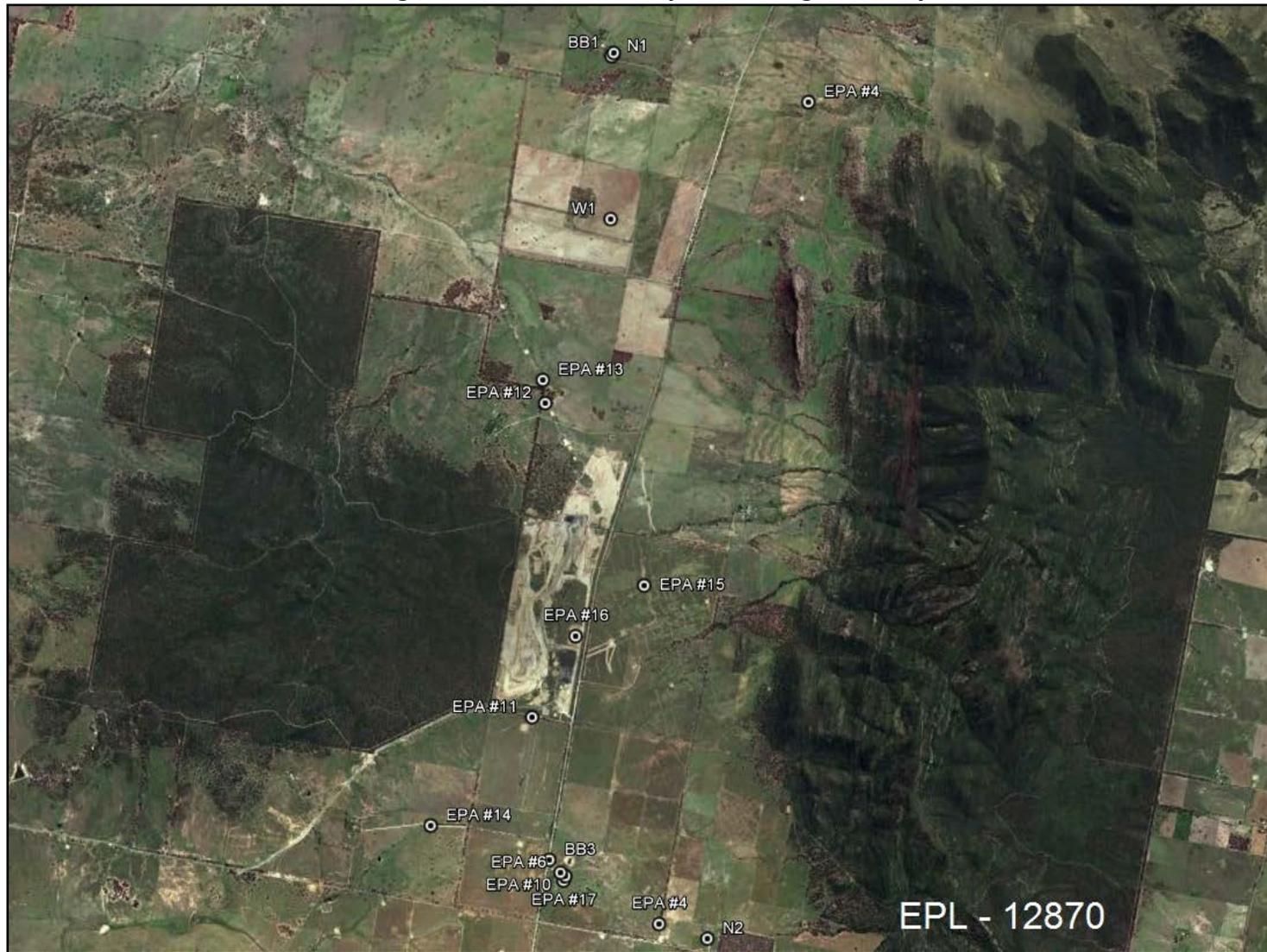


Figure 1 – EPL 12870 Monitoring Locations



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: February 2017

Obtained Date: 8 March 2017

Publication Date: 20 March 2017

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	14/02/17	21/02/17	-	-	-	0.4
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	14/02/17	21/02/17	-	-	-	1.3
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	14/02/17	21/02/17	-	-	-	0.4
10	PM ₁₀	µg/m ³	Every 6 days	4	Various	8/03/17	16.0	22.6	22.2	30.2
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					-	-	-	

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.



WHITEHAVEN COAL

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	-	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	-	-	-	-	-	-	-
	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

Table 5 – Monitoring (Blasts – Limits Apply)



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

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	99.2	105.5	120	No
	Blast Vibration	mm/s	Every Blast		0.08	0.22	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	6	95.1	108.8	120	No
	Blast Vibration	mm/s	Every Blast		0.24	0.71	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

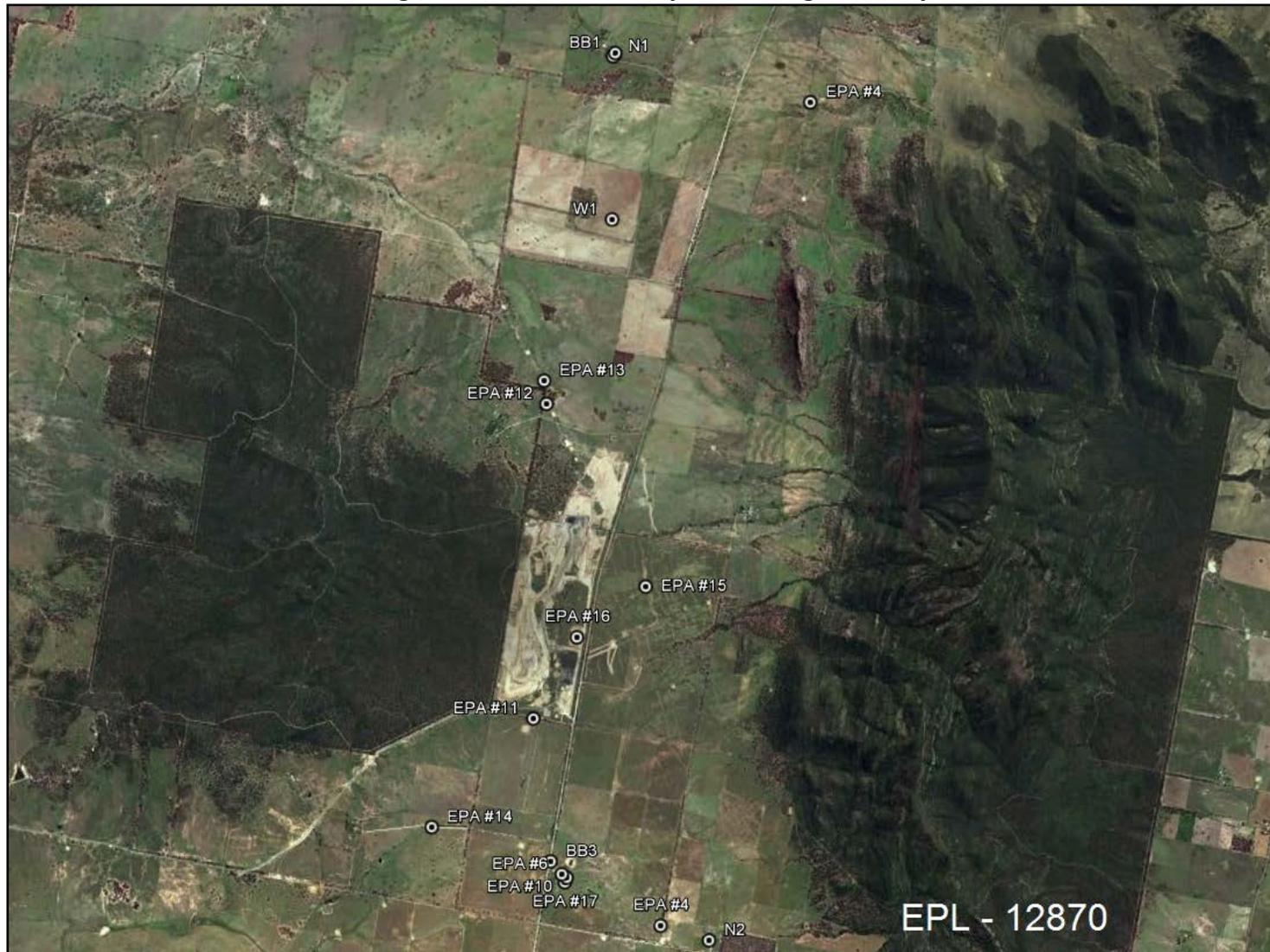


Figure 1 – EPL 12870 Monitoring Locations



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: March 2017

Obtained Date: 24th April 2017

Publication Date: 28th April 2017

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	17/03/17	28/03/17	-	-	-	0.9
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/03/17	28/03/17	-	-	-	0.8
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/03/17	28/03/17	-	-	-	0.7
10	PM ₁₀	µg/m ³	Every 6 days	6	Various	12/04/17	6.2	8.3	7.2	14.7
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					-	-	-	-



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**	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.



WHITEHAVEN COAL

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	-	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	-	-	-	-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	TOC	mg/L					-	-	-	-
	TSS	mg/L					-	-	-	-

Table 4 – Monitoring (Noise – Limits Apply)



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)	Compliant (Y/N)	Comments
N1	20/03/17	21:26	30		IA			35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	4.7	NA	
		22:00	40			IA			3.7	NA	
		22:00	45				IA		3.7	NA	
	21/03/17	16:28	60	IA					3.1	NA	
		18:01	30		IA				6.1	NA	
	22/03/17	21:15	30		NM				2.5	Y	
	23/03/17	16:22	60	IA					1.8	Y	
		23:01	45				IA		1.9	Y	
		23:01	45				IA		1.9	Y	
	24/03/17	16:25	60	IA					3.1	NA	
		22:00	45				IA		3.5	NA	
		22:00	45				IA		3.5	NA	
	20/03/17	20:28	30		29			35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	4.4	NA	
		23:21	30			32			3.5	NA	
		23:21	30				45		4.1	NA	
	21/03/17	14:37	60	NM					3.6	NA	
		00:08	30			34			4.3	NA	
		00:08	30				46		4.3	NA	
	22/03/17	20:25	30		IA				5.4	NA	
	23/03/17	14:36	60	IA					2.7	Y	
		18:09	30		IA				2.4	Y	
	24/03/17	14:38	60	IA					3.9	NA	
		00:20	40			34			1.1	Y	
		00:20	40				43		1.1	Y	
25/03/17	23:16	60			39		2.6	N			
	23:16	60				NM	2.6	NA			

Note: Measured noise levels are not necessarily the result of activity at Rocglen Coal Mine

Table 5 – Monitoring (Blasts – Limits Apply)



WHITEHAVEN COAL

Rocgen Coal Mine- Monthly Monitoring Summary

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	92.1	112.9	120	No
	Blast Vibration	mm/s	Every Blast		0.03	0.08	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	3	90.7	114.1	120	No
	Blast Vibration	mm/s	Every Blast		0.07	0.2	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

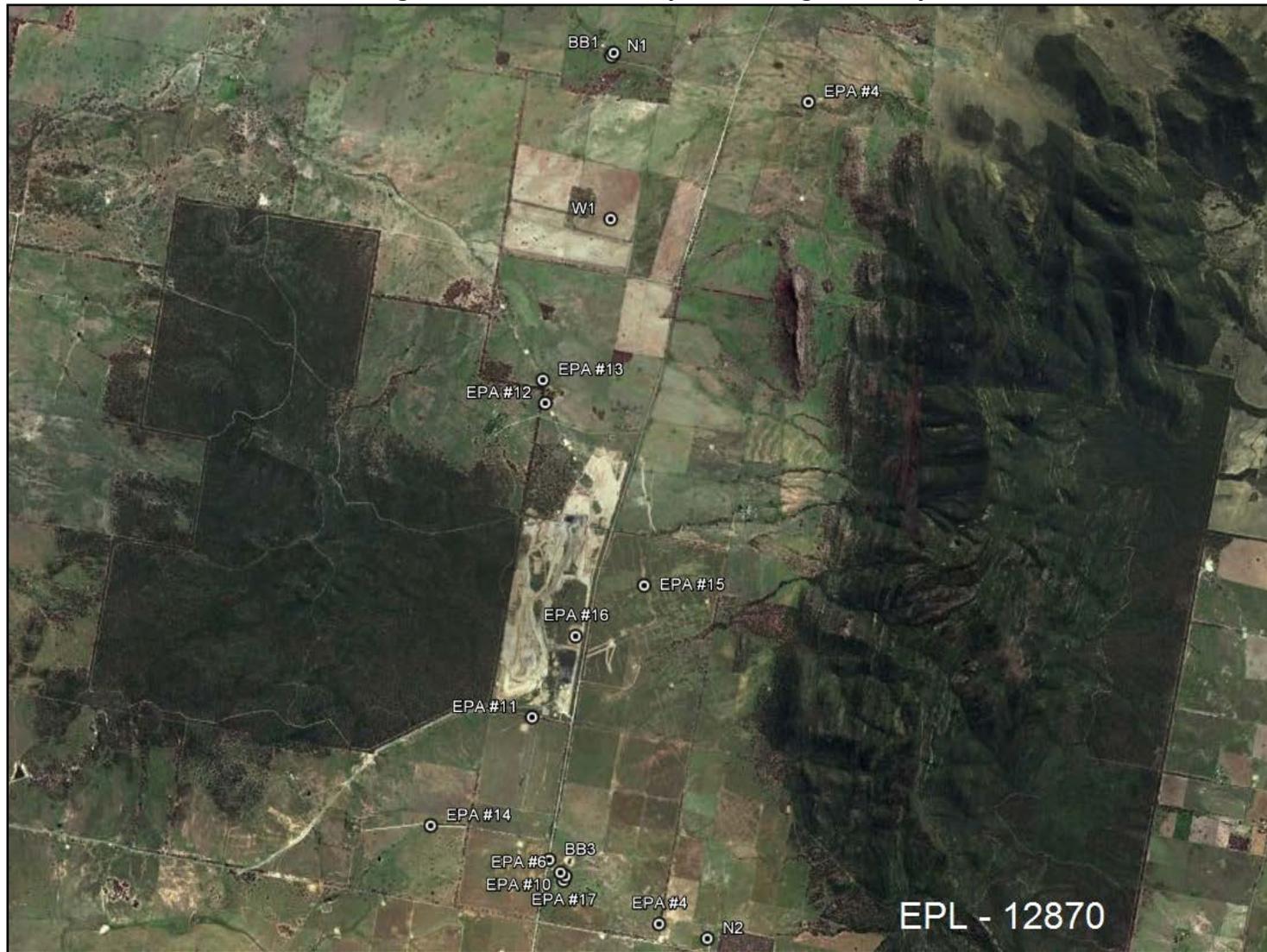


Figure 1 – EPL 12870 Monitoring Locations

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: April 2017

Obtained Date: 16 May 2017

Publication Date: 16 May 2017

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	18/04/17	28/04/17	-	-	-	0.5
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/04/17	28/04/17	-	-	-	0.4
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/04/17	28/04/17	-	-	-	0.4
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	16/5/2017	<0.01	3.0	1.4	12.5
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**	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.



WHITEHAVEN COAL

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	-	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	-	-	-	-	-	-	-
	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)	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 are not necessarily the result of activity at Rocglen Coal Mine



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	2	96.4	108.8	120	No
	Blast Vibration	mm/s	Every Blast		0.14	0.28	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	2	93.3	99.0	120	No
	Blast Vibration	mm/s	Every Blast		0.64	1.27	10	No



Rocglen 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 2017

Obtained Date: 14 June 2017

Publication Date: 22 June 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	17/05/17	23/05/17	-	-	-	0.8
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/05/17	23/05/17	-	-	-	0.6
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/05/17	23/05/17	-	-	-	0.6
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	14/06/17	3.2	7.1	3.9	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					-	-	-	-



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**	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.



WHITEHAVEN COAL

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	-	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	-	-	-	-	-	-	-
	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)	Compliant (Y/N)	Comments
N1	22/05/17	16:36	90	26	-	-	-	35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	1.5	Y	
		21:02	30	-	IA	-	-		0	Y	
		22:00	60	-	-	IA	-		1.7	Y	
		22:00	60	-	-	-	IA		1.7	Y	
	23/05/17	11:12	90	IA	-	-	-		1.8	Y	
		20:11	30	-	IA	-	-		1	Y	
		22:00	60	-	-	IA	-		2.9	Y	
		22:00	60	-	-	-	IA		2.9	Y	
	24/05/17	13:19	90	IA	-	-	-		4.1	NA	
		20:02	30	-	35	-	-		1.1	Y	
		22:00	60	-	-	34	-		2.7	Y	
		22:00	60	-	-	-	38		3.1	NA	
N2	22/05/17	14:50	90	IA	-	-	-	1.7	Y		
		20:00	30	-	26	-	-	0	NA		
		23:20	60	-	-	34	-	0.7	Y		
		23:20	60	-	-	-	37	0.0	NA		
	23/05/17	13:16	90	28	-	-	-	0.8	Y		
		19:17	30	-	29	-	-	1.3	Y		
		23:21	60	-	-	39	-	0.5	N*		
		23:21	60	-	-	-	47	0.6	Y		
	24/05/17	11:21	90	<20	-	-	-	3.8	NA		
		19:14	30	-	<20	-	-	0.7	Y		
		23:18	60	-	-	30	-	2	Y		
		23:18	60	-	-	-	30	2	Y		

Note: Measured noise levels are not necessarily the result of activity at 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	2	93.7	101.4	120	No
	Blast Vibration	mm/s	Every Blast		0.05	0.09	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	2	87.0	102.0	120	No
	Blast Vibration	mm/s	Every Blast		0.24	0.47	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

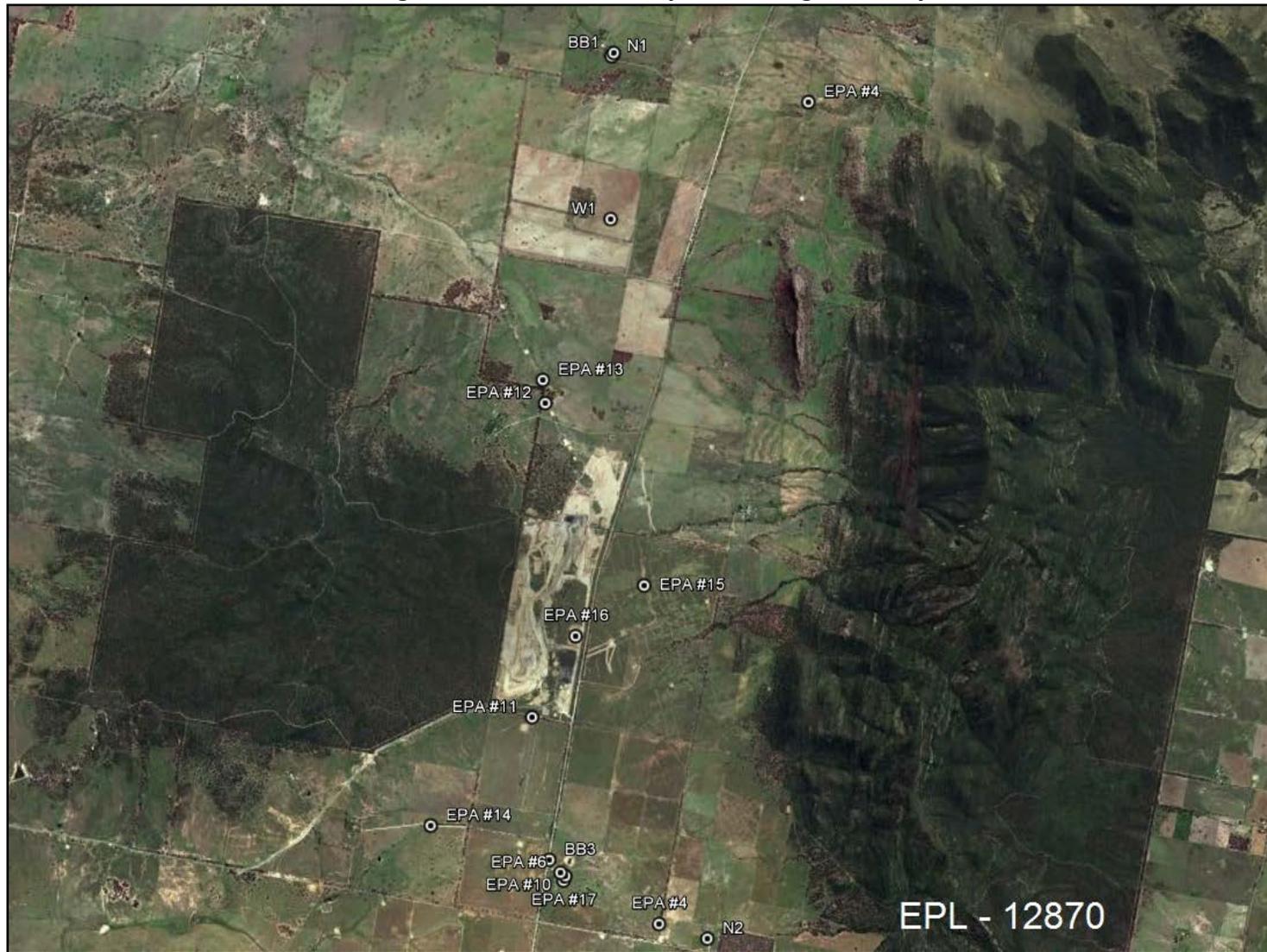


Figure 1 – EPL 12870 Monitoring Locations



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: June 2017

Obtained Date: 14th July 2017

Publication Date: 18th July 2017

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	16/06/17	26/06/17	-	-	-	0.7
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/06/17	26/06/17	-	-	-	0.6
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/06/17	26/06/17	-	-	-	0.5
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	17/07/17	4.2	8.8	7.4	14.4
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

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**	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.



WHITEHAVEN COAL

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	-	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	-	-	-	-	-	-	-
	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)	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 are not necessarily the result of activity at 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	96.8	113.1	120	No
	Blast Vibration	mm/s	Every Blast		0.12	0.31	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	3	105.3	108.0	120	No
	Blast Vibration	mm/s	Every Blast		0.37	1.04	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

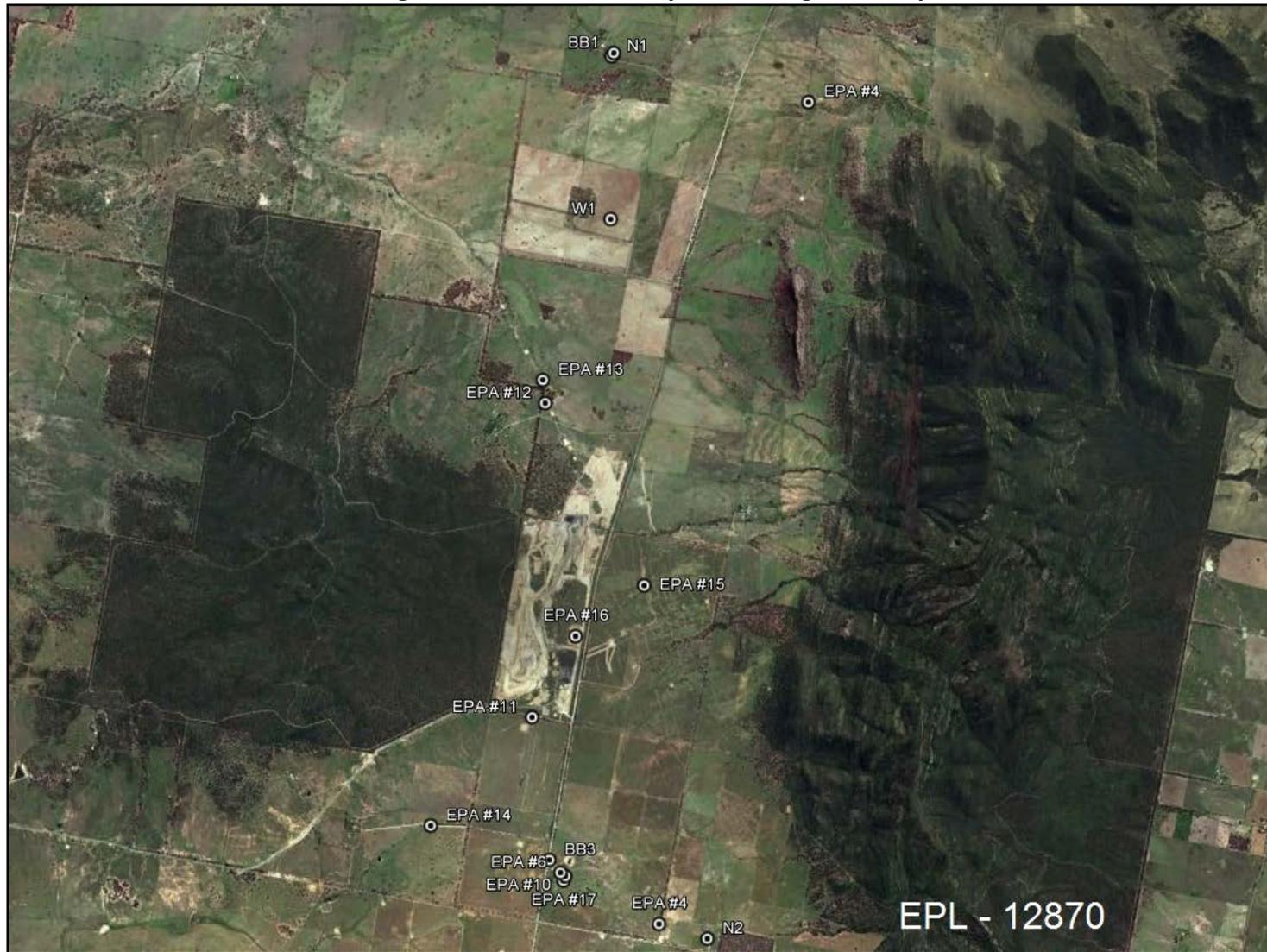


Figure 1 – EPL 12870 Monitoring Locations



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: July 2017

Obtained Date: 15th August 2017

Publication Date: 28th August 2017

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	18/07/17	27/07/17	-	-	-	3.5
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/07/17	27/07/17	-	-	-	0.6
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/07/17	27/07/17	-	-	-	0.3
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	15/08/17	4.0	6.04	5.6	9.8
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					-	-	-	-



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**	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.



WHITEHAVEN COAL

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	-	-	-	-	-	-	-
	Arsenic	mg/L					-	-	-	-
	Bicarbonate	mg/L					-	-	-	-
	Chloride	mg/L					-	-	-	-
	Iron	mg/L					-	-	-	-
	Manganese	mg/L					-	-	-	-
	Sodium	mg/L					-	-	-	-
16	Conductivity	µS/cm	Quarterly	-	-	-	-	-	-	-
	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)	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 are not necessarily the result of activity at Rocglen Coal Mine



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	5	102.9	110.3	120	No
	Blast Vibration	mm/s	Every Blast		0.18	0.26	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	5	103.4	117.4	120	Yes
	Blast Vibration	mm/s	Every Blast		0.56	1.25	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

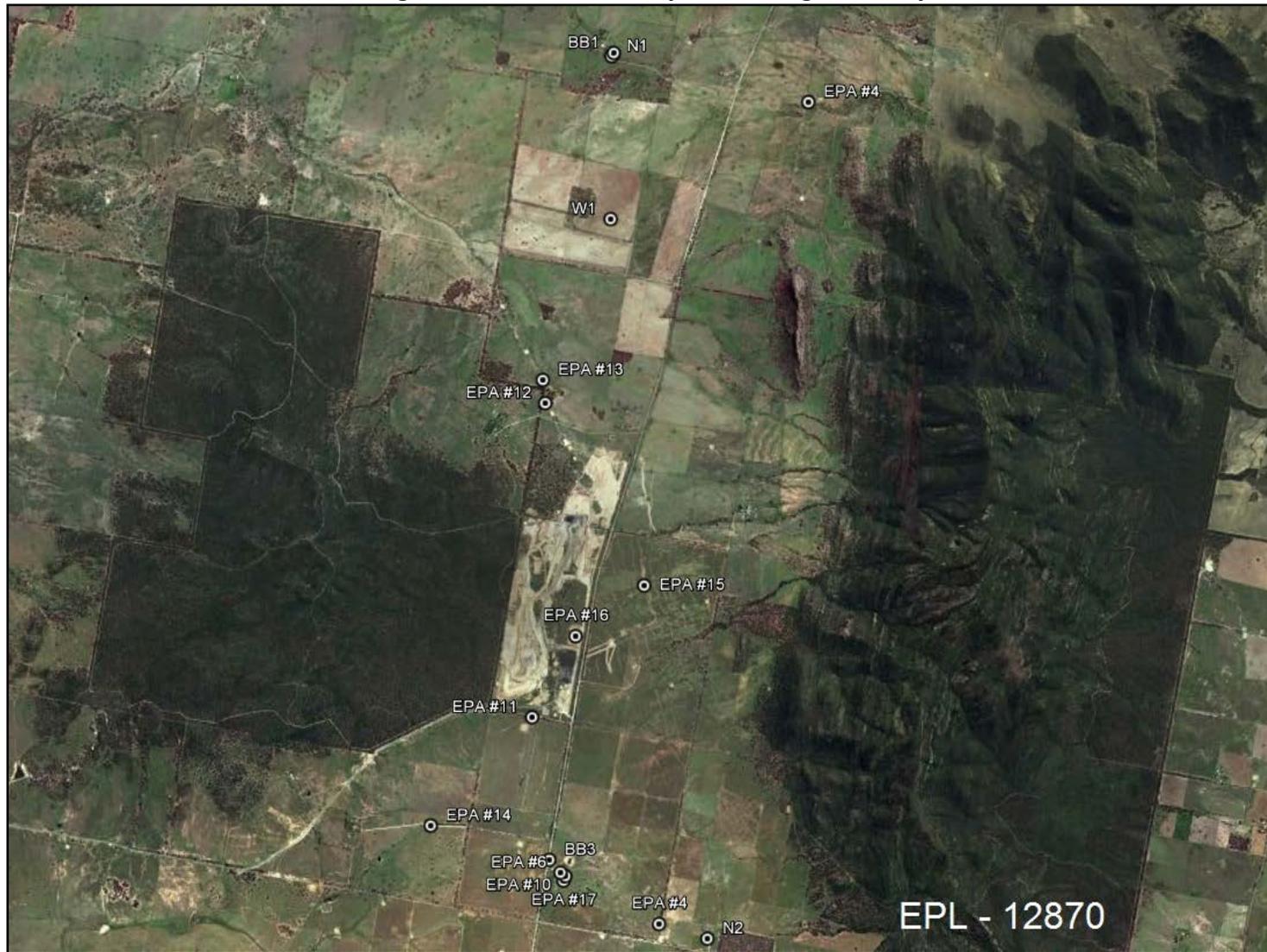


Figure 1 – EPL 12870 Monitoring Locations



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 2017

Obtained Date: 15th September 2017

Publication Date: 21st September 2017

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	17/08/17	28/08/17	-	-	-	0.5
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/08/17	28/08/17	-	-	-	0.2
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	17/08/17	28/08/17	-	-	-	0.3
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	15/08/17	5.2	14.3	11.7	22.5
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**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	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	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.



WHITEHAVEN COAL

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	10/08/17	17/08/17	-	-	-	1140
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	9.4
	TOC	mg/L					-	-	-	4
	TSS	mg/L					-	-	-	8



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)	Compliant (Y/N)	Comments
N1	14/08/17	16:27	90	IA				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	0.6	Y	2 noise exceedances recorded during quarterly monitoring. Reported to EPA as per requirements of EPL 12870.
		21:31	30		<20				0.2	Y	
		22:01	60			<20			0.4	Y	
		22:01	60				<20		0.4	Y	
	15/08/17	11:52	90	IA					1.8	Y	
		20:28	30		IA				4.9	NA	
		22:00	60			IA			5.0	NA	
		22:00	60				IA		5.0	NA	
	16/08/17 - 17/08/16	13:56	90	IA					NA	Y	
		20:09	30		<20				2.8	Y	
		22:00	60			IA			2.1	Y	
		22:00	60				IA		2.1	Y	
N2	14/08/17	14:40	90	IA				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	1.1	Y	
		20:31	30		39				0.2	N	
		23:18	60			30			0.0	Y	
		23:18	60				NM		0.3	Y	
	15/08/17 – 16/08/17	13:48	90	29					0.9	Y	
		19:39	30		<30				4.5	NA	
		23:18	60			35			2.5	N	
		23:18	60				45		2.5	Y	
	16/08/17 - 17/08/16	12:04	90	15					4.6	NA	
		19:19	30		23				1.7	Y	
		23:15	60			23			1.2	Y	
		23:15	60				27		1.7	Y	

Note: Measured noise levels are not necessarily the result of activity at 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	2	101.2	108.5	120	No
	Blast Vibration	mm/s	Every Blast		0.22	0.26	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	2	104.7	102.7	120	No
	Blast Vibration	mm/s	Every Blast		0.45	0.66	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

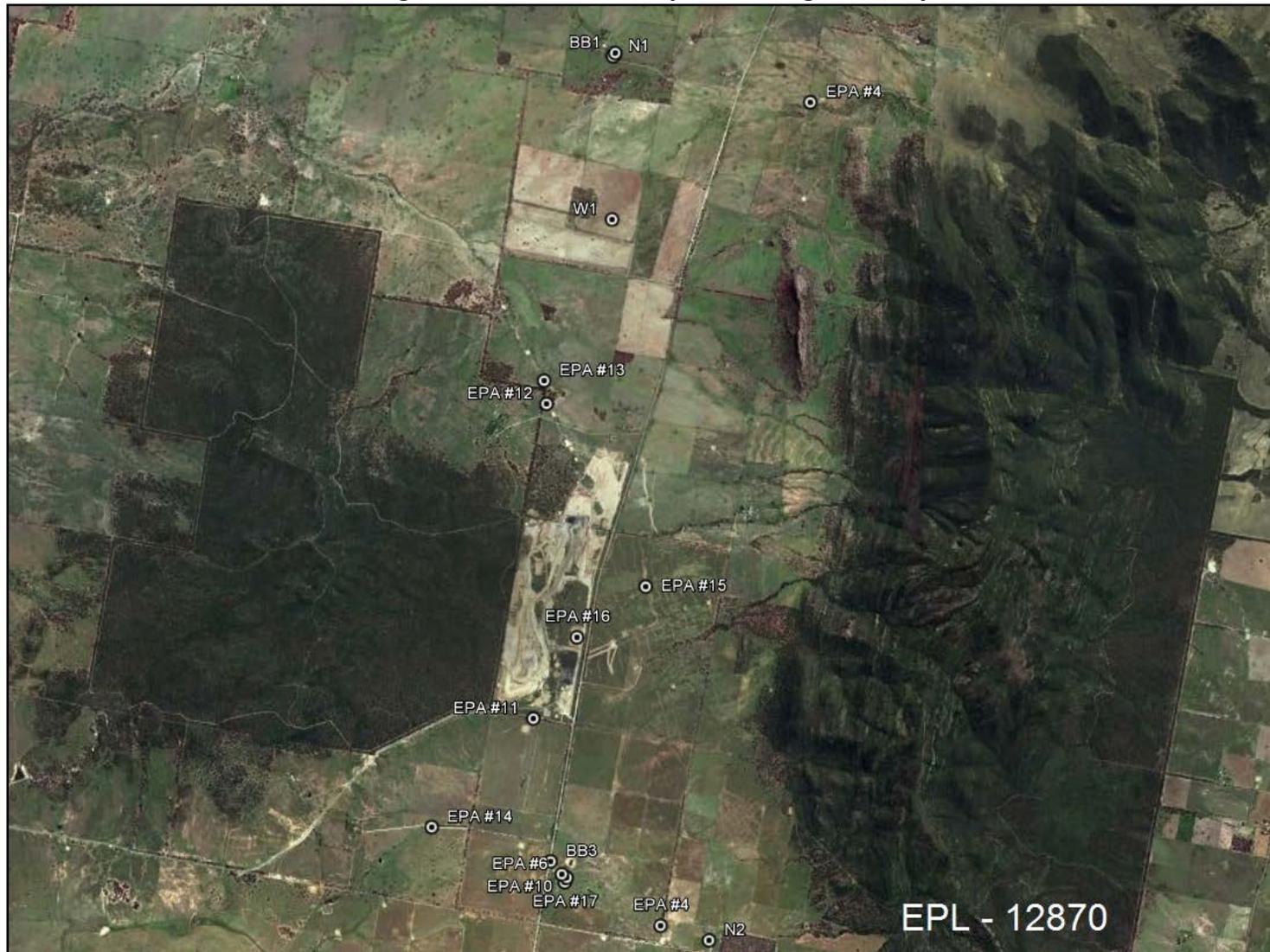


Figure 1 – EPL 12870 Monitoring Locations



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 2017

Obtained Date: 11th October 2017

Publication Date: 24th October 2017

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	18/09/17	27/09/17	-	-	-	1
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/09/17	27/09/17	-	-	-	1.3
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18/09/17	27/09/17	-	-	-	0.9
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	11/10/17	8.9	19.8	19.8	35.2
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

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**	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.



WHITEHAVEN COAL

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)	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 are not necessarily the result of activity at 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	98.6	105.3	120	No
	Blast Vibration	mm/s	Every Blast		0.16	0.22	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	3	99.9	103.4	120	No
	Blast Vibration	mm/s	Every Blast		0.5	0.73	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

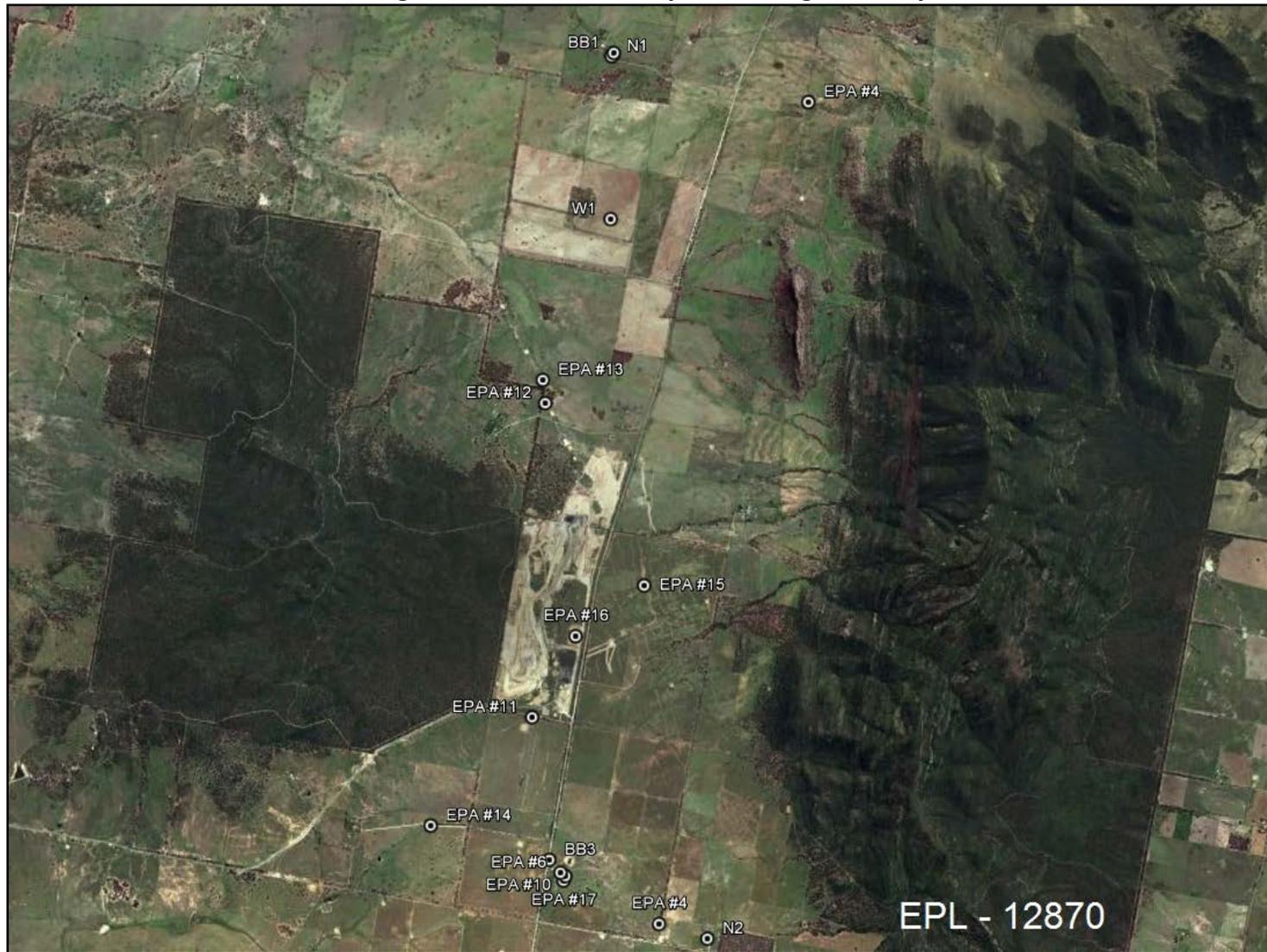


Figure 1 – EPL 12870 Monitoring Locations



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 2017

Obtained Date: 9th November 2017

Publication Date: 17th November 2017

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	18-10-17	26-10-17	-	-	-	1.1
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18-10-17	26-10-17	-	-	-	1.2
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	18-10-17	29-10-17	-	-	-	1.2
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	9-11-17	<0.1	4.7	4.7	7.5
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**	0	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	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	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.



WHITEHAVEN COAL

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)	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 are not necessarily the result of activity at 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	-	95.9	120	No
	Blast Vibration	mm/s	Every Blast		-	0.13	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	1	-	101.4	120	No
	Blast Vibration	mm/s	Every Blast		-	0.6	10	No



Rocgen Coal Mine- Monthly Monitoring Summary

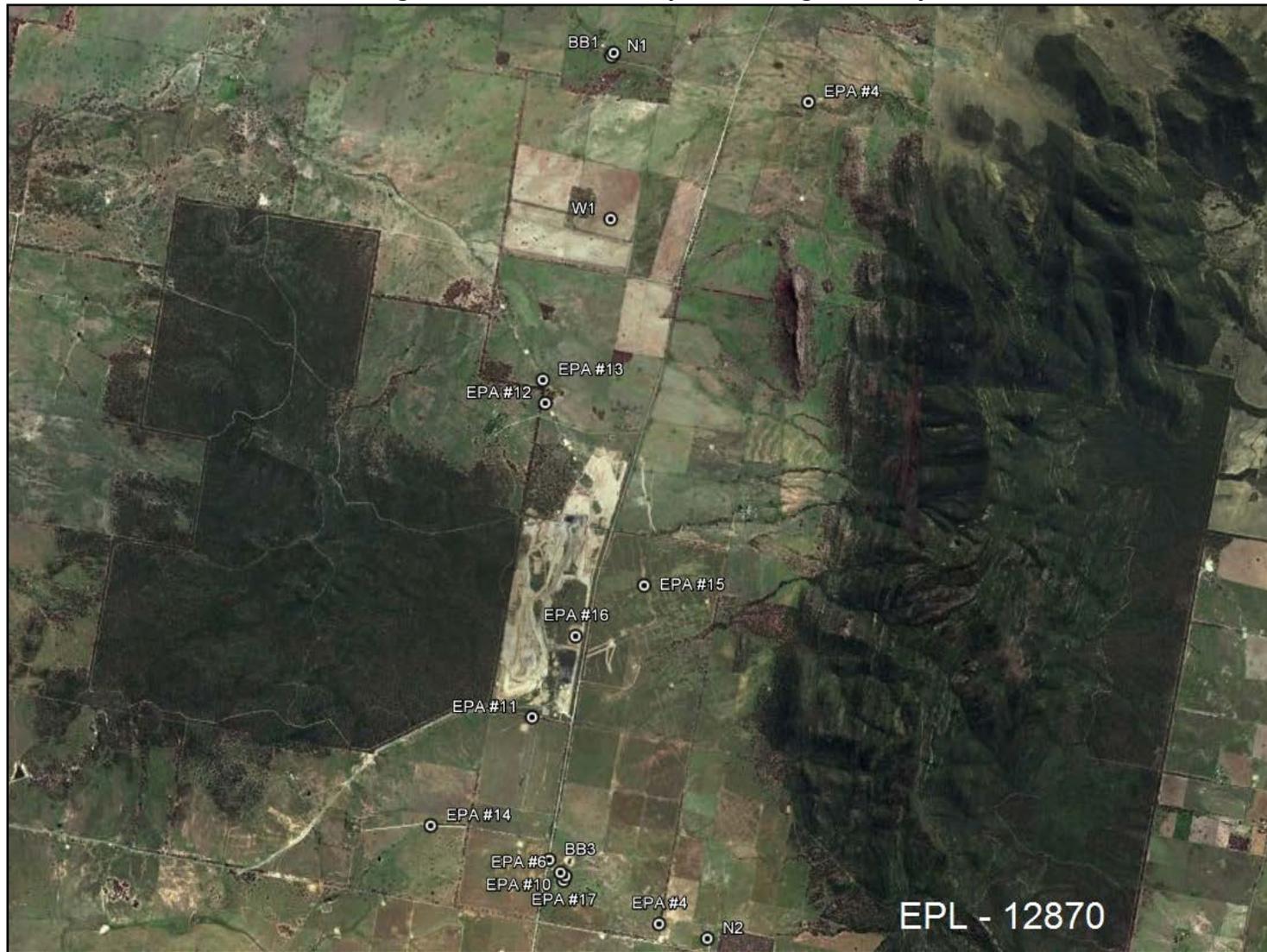


Figure 1 – EPL 12870 Monitoring Locations



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 2017

Obtained Date: 11th December 2017

Publication Date: 14th December 2017

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	16/11/17	24/11/17	-	-	-	0.8
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/11/17	24/11/17	-	-	-	2.2
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	16/11/17	24/11/17	-	-	-	31.4
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	11/12/17	2.3	8.6	8.5	17.8
11	Conductivity	µS/cm	Special Frequency 1*	1	20/11/17	27/11/17	-	-	-	411
	Total organic carbon	mg/L					-	-	-	11
12	Conductivity	µS/cm	Special Frequency 1*	1	20/11/17	27/11/17	-	-	-	229
	Total organic carbon	mg/L					-	-	-	9
13	TSS	mg/L	Special Frequency 2**	1	20/11/17	27/11/17	-	-	-	34
	Conductivity	µS/cm					-	-	-	144
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	7.10
	Total organic carbon	mg/L					-	-	-	38



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**	1	20/11/17	27/11/17	-	-	-	162
	Conductivity	µS/cm					-	-	-	326
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	7.40
	Total organic carbon	mg/L					-	-	-	30
15	TSS	mg/L	Special Frequency 2**	1	20/11/17	27/11/17	-	-	-	26
	Conductivity	µS/cm					-	-	-	292
	Oil & Grease	mg/L					-	-	-	<5
	pH	pH					-	-	-	7.63
	Total organic carbon	mg/L					-	-	-	19

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	20/11/17	27/11/17	-	256	50	Yes	
	Oil & Grease	mg/L					-	<5	10	No	
	pH	pH					-	7.9	6.5-8.5	No	
12	TSS	mg/L	Special Frequency 1*	1	20/11/17	27/11/17	-	254	50	Yes	
	Oil & Grease	mg/L					-	<5	10	No	
	pH	pH					-	7.6	6.5-8.5	No	

* 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.



WHITEHAVEN COAL

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)	Rocglen Measured Levels – dB(A) Leq 15min Day	Rocglen Measured Levels – dB(A) Leq 15min Evening	Rocglen Measured Levels – dB(A) Leq 15min Night	Rocglen Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s)	Compliant (Y/N)	Comments
N1	13/11/17	16:27	90	NM				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	3.0	Y	
		18:00	30		NM				1.9	Y	
		22:00	60			IA			4.2	NA	
		22:00	60				IA		4.2	NA	
	14/11/17	12:39	90	NM					1.3	Y	
		20:46	30		IA				3.5	NA	
		22:00	60			IA			2.4	Y	
		22:00	60				IA		2.4	Y	
	15/11/17	12:31	90	IA					2.9	Y	
		21:08	30		IA				2.5	Y	
		22:00	60			<25			2.3	Y	
		22:00	60				<25		2.3	Y	
N2	13/11/17	14:40	90	<20				35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	1.6	Y	
		18:55	30		IA				4.1	NA	
		23:23	60			<30			3.0	Y	
		23:23	60				30		3.0	Y	
	14/11/17	14:27	90	NM					0.7	Y	
		19:55	30		IA				3.8	NA	
		23:21	60			NM			2.4	Y	
		23:21	60				NM		2.4	Y	
	15/11/17- 16/11/17	14:24	90	IA					1.2	Y	
		20:22	30		<25				1.2	Y	
		23:25	60			<25			2.4	Y	
		23:25	60				<25		2.4	Y	

Note: Measured noise levels are not necessarily the result of activity at 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	99.1	103.4	120	No
	Blast Vibration	mm/s	Every Blast		0.31	0.93	10	No
BB3	Blast Noise	dB (Lin Peak)	Every Blast	4	96.5	102.7	120	No
	Blast Vibration	mm/s	Every Blast		0.2	0.48	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 2017

Obtained Date: 16th January 2018

Publication Date: 16th January 2018

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	15/12/17	16/01/18	-	-	-	1.7
6	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/12/17	16/01/18	-	-	-	1.6
7	Particulates-Deposited Matter	g/m ² /month	Continuous	1	15/12/17	16/01/18	-	-	-	1.4
10	PM ₁₀	µg/m ³	Every 6 days	5	Various	5/01/18	7.4	16.3	11.2	29.0
11	Conductivity	µS/cm	Special Frequency 1*	1	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
12	Conductivity	µS/cm	Special Frequency 1*	1	-	-	-	-	-	-
	Total organic carbon	mg/L					-	-	-	-
13	TSS	mg/L	Special Frequency 2**	1	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	Oil & Grease	mg/L					-	-	-	-
	pH	pH					-	-	-	-
	Total organic carbon	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	TSS	mg/L	Special Frequency 2**	-	-	-	-	-	-	-
	Conductivity	µS/cm					-	-	-	-
	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*	-	-	-	-	-	50	Yes	-
	Oil & Grease	mg/L					-	-	10	No	
	pH	pH					-	-	6.5-8.5	No	
12	TSS	mg/L	Special Frequency 1*	-	-	-	-	-	50	Yes	-
	Oil & Grease	mg/L					-	-	10	No	
	pH	pH					-	-	6.5-8.5	No	

* 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.



WHITEHAVEN COAL

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)	Rocglen Measured Levels – dB(A) Leq 15min Day	Rocglen Measured Levels – dB(A) Leq 15min Evening	Rocglen Measured Levels – dB(A) Leq 15min Night	Rocglen Measured Levels – dB(A) LA 1min Night	Limits	Wind speed (m/s)	Compliant (Y/N)	Comments
N1	-	-	90					35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	-	-	
		-	30						-	-	
		-	60						-	-	
		-	60						-	-	
	-	90					-		-		
	-	30					-		-		
	-	60					-		-		
	-	60					-		-		
	-	90					-		-		
	-	30					-		-		
	-	60					-		-		
	-	60					-		-		
N2	-	-	90					35 dB(A) Leq (15 min) Day, Evening, Night 45dB(A) L _A (1 min) Night	-	-	
		-	30						-	-	
		-	60						-	-	
		-	60						-	-	
	-	90					-		-		
	-	30					-		-		
	-	60					-		-		
	-	60					-		-		
	-	90					-		-		
	-	30					-		-		
	-	60					-		-		
	-	60					-		-		

Note: Measured noise levels are not necessarily the result of activity at 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	0	-	-	120	-
	Blast Vibration	mm/s	Every Blast		-	-	10	-
BB3	Blast Noise	dB (Lin Peak)	Every Blast	0	-	-	120	-
	Blast Vibration	mm/s	Every Blast		-	-	10	-



Rocgen Coal Mine- Monthly Monitoring Summary

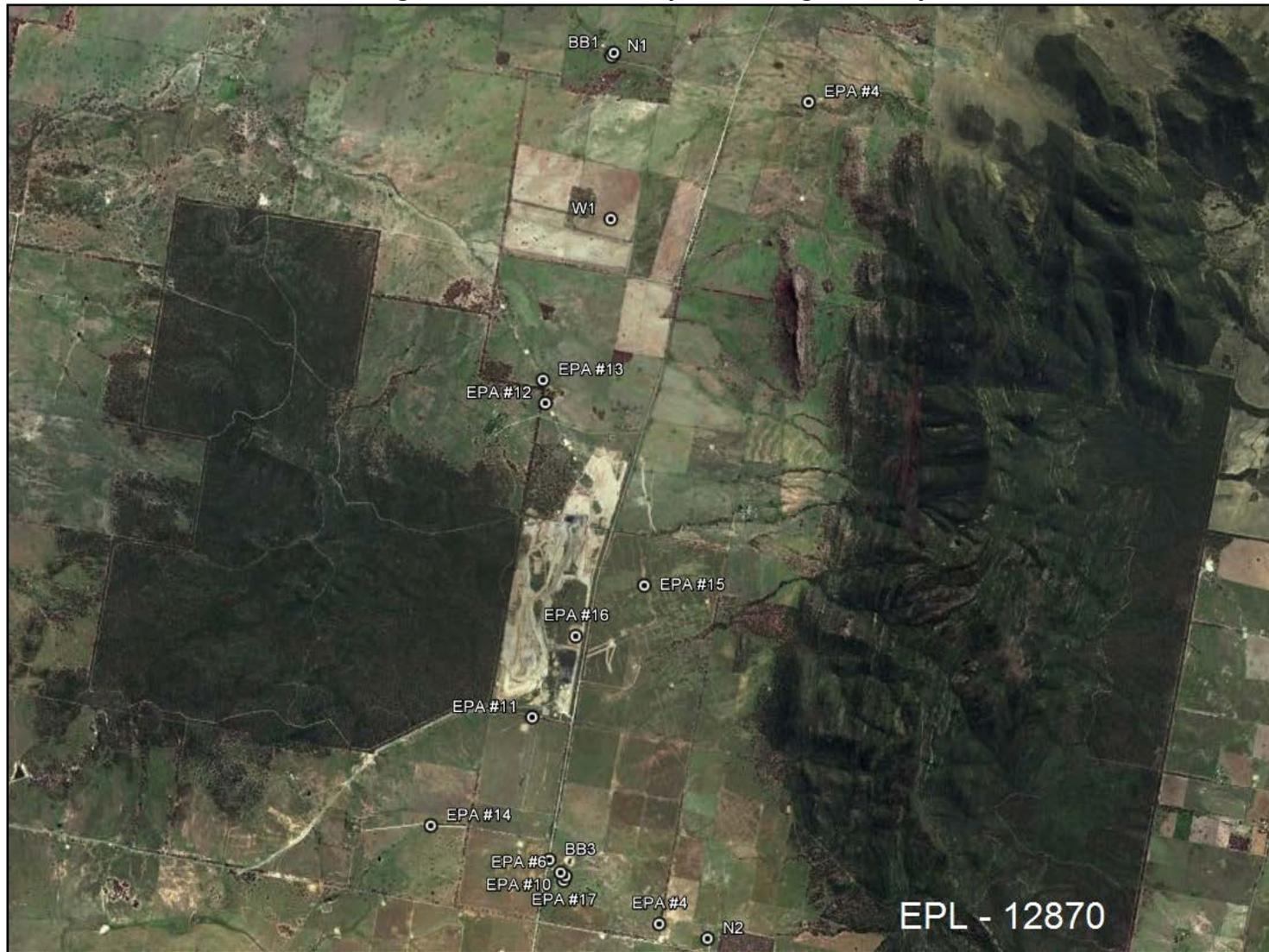


Figure 1 – EPL 12870 Monitoring Locations