

Rocglen Coal Mine Community Consultative Committee Meeting #2

Environmental Monitoring Report, October 2008 – January 2009

Noise Monitoring

Attended noise monitoring was undertaken on the 29th September 2008 as required under the Noise Monitoring Program (construction noise monitoring) with results outlined below:

RCM Attended Noise Monitoring Results 29th September 2008 (Day)

Location	Time	dB(A), Leq	Wind Speed	Noise source
<i>Costa Vale</i>	2:55pm	35	1.5m/s, SE	Birds(34), RCM(<25)
<i>Surrey</i>	3:40pm	38	1.0m/s, SE	Birds(37), RCM(31)

Unattended noise monitoring was also carried out in September at both the “Costa Vale” and “Surrey” properties with results provided in the tables below. Unattended monitoring provides noise levels from all sources and does not distinguish mine related noise from other noise factors.

RCM Unattended Noise Monitoring Results “Costa Vale”

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
<i>22/09/2008</i>		57.9	51.7	36.7	31.0	34.0
<i>23/09/2008</i>	57.5	44.7	48.6	29.7	39.0	32.0
<i>24/09/2008</i>	46.0	55.1	46.3	30.2	47.0	28.3
<i>25/09/2008</i>	42.1	43.6	19.0	29.0	32.5	29.5
<i>LAeq</i>	53	51	48	-	-	-
<i>L90</i>				30	36	31

RCM Unattended Noise Monitoring Results “Surrey”

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
<i>22/09/2008</i>		54.4	48.7	34.4	33.7	29.4
<i>23/09/2008</i>	45.8	37.0	43.2	26.5	33.0	28.7
<i>24/09/2008</i>	49.6	45.8	43.6	33.3	39.9	27.8
<i>25/09/2008</i>	47.7	37.1		26.0	30.1	
<i>LAeq</i>	48	42	43	-	-	-
<i>L90</i>				30	33	29

Attended noise monitoring was also conducted on the 16th and 17th December 2008 as required for operational noise monitoring with results presented below:

RCM Noise Monitoring 16th December 2008 (day)

Location	Time	dB(A), Leq	Wind Speed/Direction	Noise Source
Surrey	1:17pm	39.6	0-1m/s, W	Wind(34), Birds(33), RCM(33)
Costa Vale	1:46pm	35.2	1.0 m/s, W	Insects(35), RCM inaudible

RCM Noise Monitoring 16th December 2008 (evening)

Location	Time	dB(A), Leq	Wind Speed/Direction	Noise Source
Costa Vale	7:31pm	63.9	1-2m/s, W	Dogs(63), RCM inaudible
Surrey	7:59pm	38.1	1-2m/s, W	Birds(35), RCM(34)

RCM Noise Monitoring 17th December 2008 (night)

Location	Time	dB(A), Leq	Wind Speed/Direction	Noise Source
Surrey	12:11am	34.2	calm	Insects(31), RCM(30)
Costa Vale	12:34am	35.5	calm	Insects(34), RCM(28)

Review of the above results indicate noise levels within compliance limits throughout the noise surveys.

Blast Monitoring

Blasting Results

Since the first shot there have been 10 blasts.

All blasts during this report period have been compliant within the limits of 115dBL and 5mm/s.

To date, the highest overpressure recorded is 115.0 dBL recorded at “Costa Vale” on the 12th December 2008. The highest ground vibration recorded is 1.50 mm/s recorded at “Roseberry” on the 12th December 2008.

Air Quality

PM10 Results

The annual average for PM10 readings can currently only be assessed based on 2 months data from October and November 2008. It is expected that the

December 2008 results will be available in the near future. The current running average for each monitor is as follows:

Costa Vale: 25.5ug/m³
Surrey: 11.3ug/m³

Running average PM10 levels at both monitoring points remains below the annual average limit of 30ug/m³. The 24hr criterion of 50ug/m³ has not been breached at either site, with the highest PM10 readings for each site to date as follows:

Costa Vale: 43ug/m³ on the 20th October 2008
Surrey: 20ug/m³ on the 1st November 2008

During November 2008 Whitehaven was asked by the owner of the “Costa Vale” property to cease PM10 and deposited dust monitoring at that location as the owner did not want mine related staff accessing his property at such frequencies to change over monitoring equipment. As a consequence, the PM10 unit has now been relocated to the “Glen Roc” property and the deposited dust bottle removed. The DECC has been advised of this requirement and Whitehaven is currently undertaking a modification of the Air Quality Monitoring Program and the Environment Protection Licence to reflect these changes.

Deposited Dust Results

The Deposited Dust results obtained for the site to date are as follows:-

Air Quality (Dust Deposition) Results

Month	BD1 Costa Vale	BD2 Glenroc	BD3 Belah	BD4 Surrey	BD5 Stratford	BD6 Roseberry	BD7 Roseglass	BD8 Yarrowonga
December 2007	1.3	0.6	2.2	1.1	0.8	1.0	0.9	NA
January 2008	1.2	0.5	1.1	3.3	0.8	1.1	0.7	2.1
February 2008	1.8	1.1	1.9	1.3	0.5	0.6	0.5	0.7
March 2008	1.9	0.8	1.6	2.1	1.0	2.0	1.4	1.3
April 2008	1.8	1.3	1.1	0.9	0.8	0.7	1.4	1.1
May 2008	0.9	0.9	0.5	0.5	0.5	0.9	0.7	0.3
June 2008	0.6	0.6	0.4	0.4	0.2	0.7	0.7	0.5
July 2008	0.6	0.7	0.4	0.2	0.4	0.6	0.6	0.4
August 2008	1.1	0.7	0.6	0.4	0.7	0.7	0.7	0.6
September 2008	1.3	1.5	0.8	1.2	0.6	1.7	2.7	1.2
October 2008	1.6	1.3	1.4	1.0	0.7	1.0	1.1	1.5
November 2008	1.0	1.0	2.2	1.7	1.4	1.6	1.9	2.5
December 2008	NLS	1.0	1.0	0.8	0.7	0.8	1.4	0.7
Average	1.2	0.9	1.2	1.1	0.7	1.0	1.1	1.1

The deposited dust levels have remained relatively consistent over the last 12 months, with no significant variation from background levels in early 2008 to dust levels since mine commencement. All monitors remain well within the standard concentration threshold of 4g/m²/month.

It should be noted that monitoring at the Costa Vale monitor ceased in December 2008 at the request of the landowner. An existing monitor at the "GlenRoc" property will continue to monitor deposited dust levels north of the mine site.

Water Monitoring

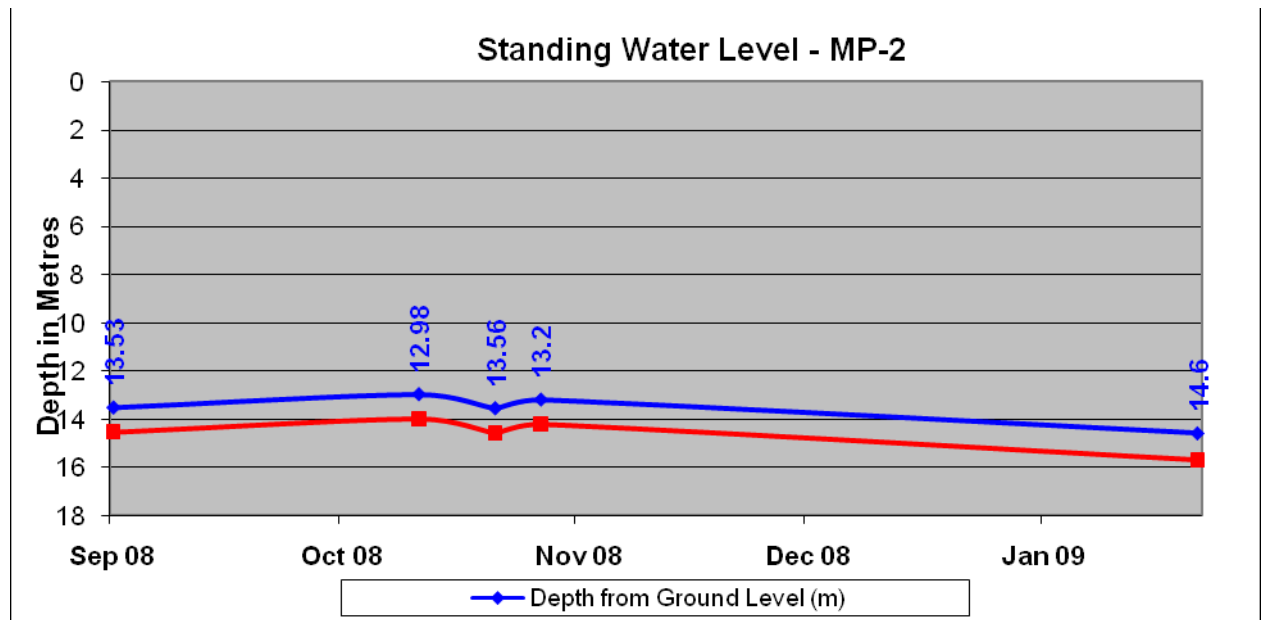
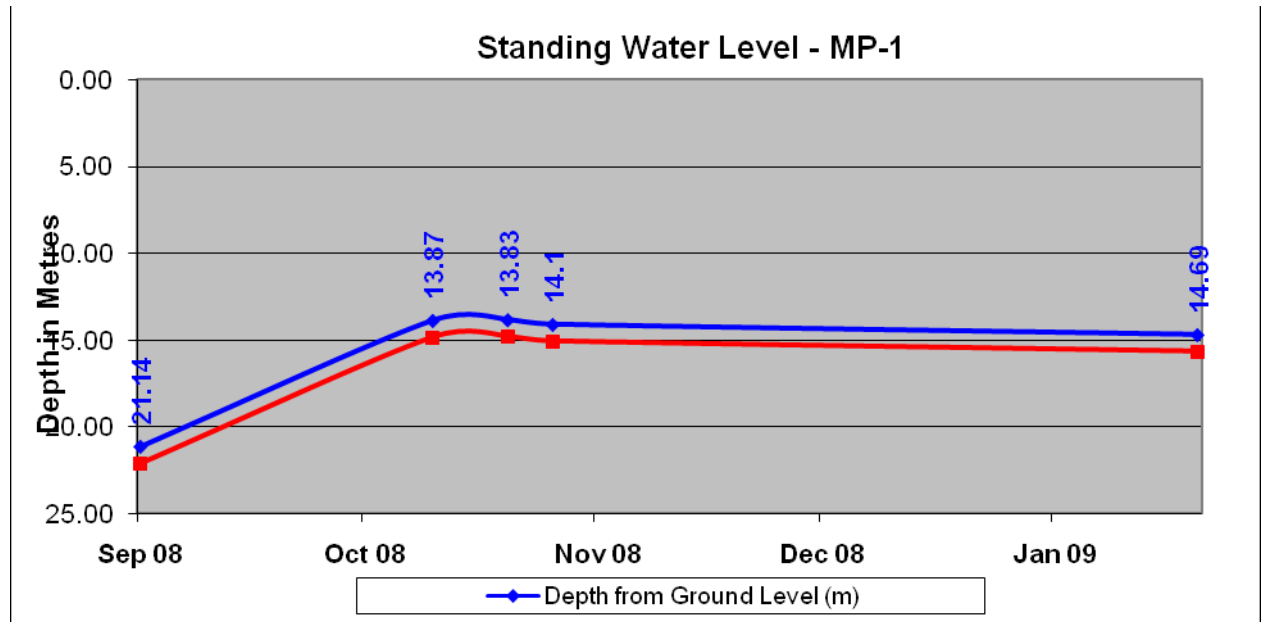
Ground Water

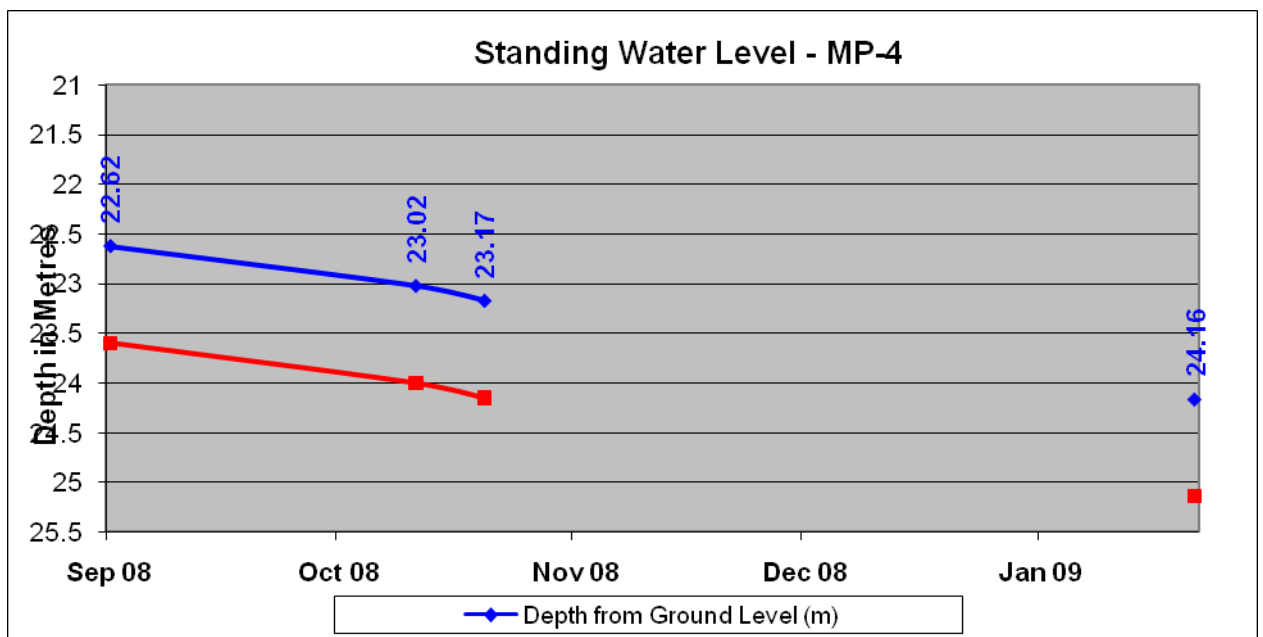
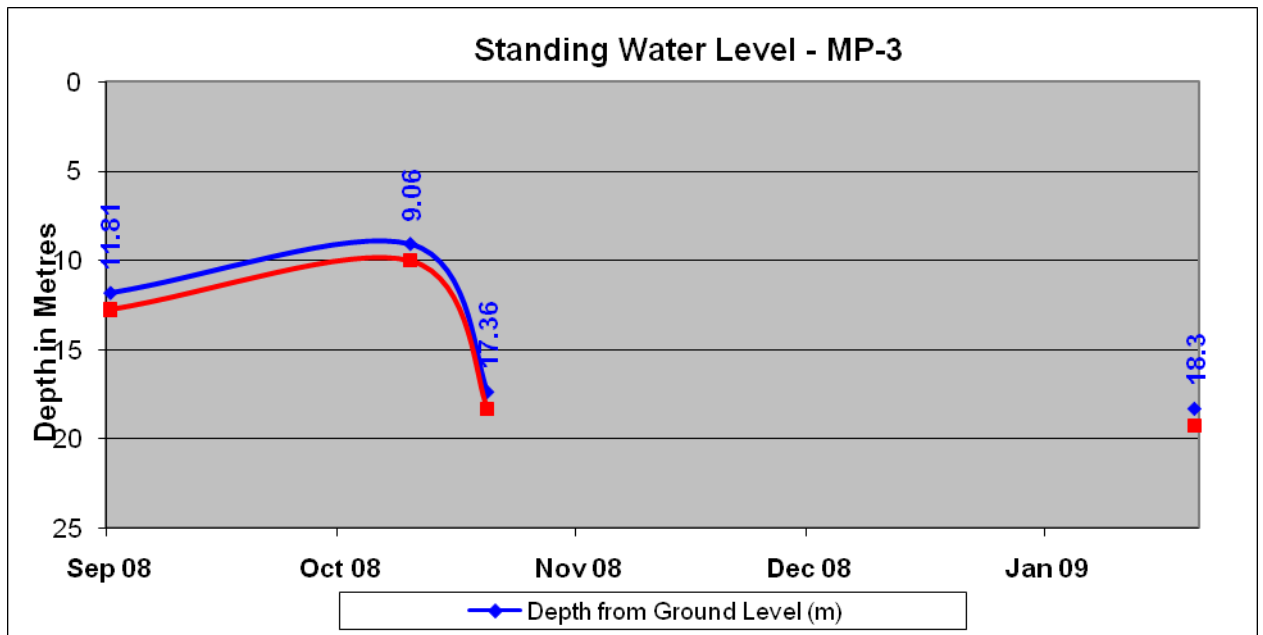
Groundwater monitoring obtained to date is presented in the following table. An additional full water quality sampling round was undertaken by EA Systems in October 2008 and the full chemical analysis results are available for review on request.

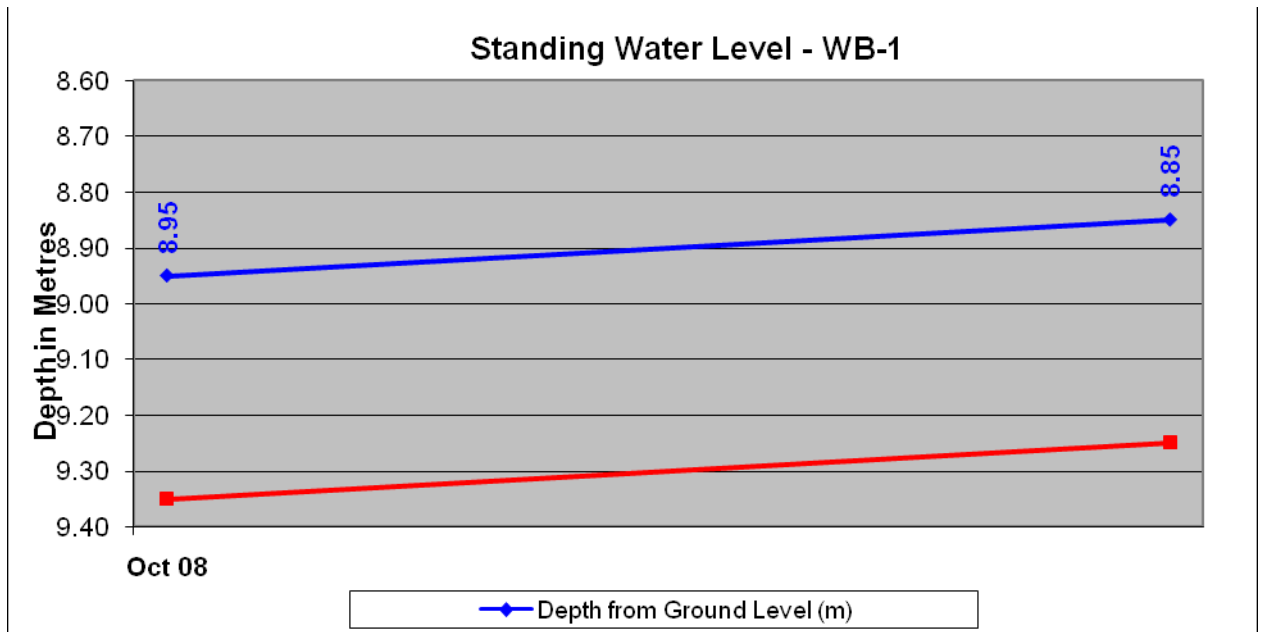
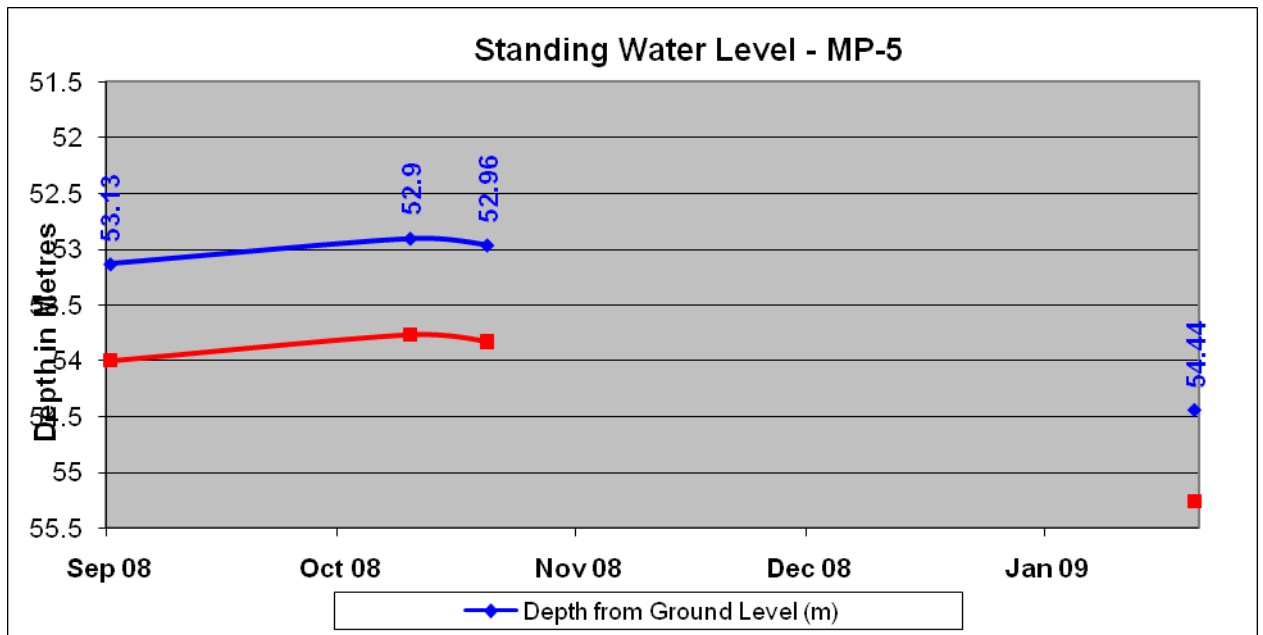
Site	Date	SWL (m)	pH	Elect. Conduct
MP1	September 08	21.14		
	13 October 08	13.87		
	23 October 08	13.83		
	29 October 08	14.10	7.6	2.36
	23 Jan 09	14.69		
MP2	September 08	13.53		
	13 October 08	12.98		
	23 October 08	13.56		
	29 October 08	13.20	7.3	4.18
	23 January 09	15.70		
MP3	September 08	11.81		
	13 October 08	9.06		
	23 October 08	17.36		
	29 October 08	N/S Bore Dry		
	23 January 09	19.24 (mud)		
MP4	September 08	22.62		
	13 October 08	23.02		
	22 October 08	23.17		
	29 October 08	N/S Bore Dry		
	23 January 09	24.16 (mud)		
MP5	September 08	53.13		
	13 October 08	52.9		
	23 October 08	52.96		
	29 October 08	N/S Bore Dry		
	23 January 09	54.44 (mud)		
WB1	13 October 08	8.95		
	28 October 08	8.85	7.9	1996
	NO ACCESS			

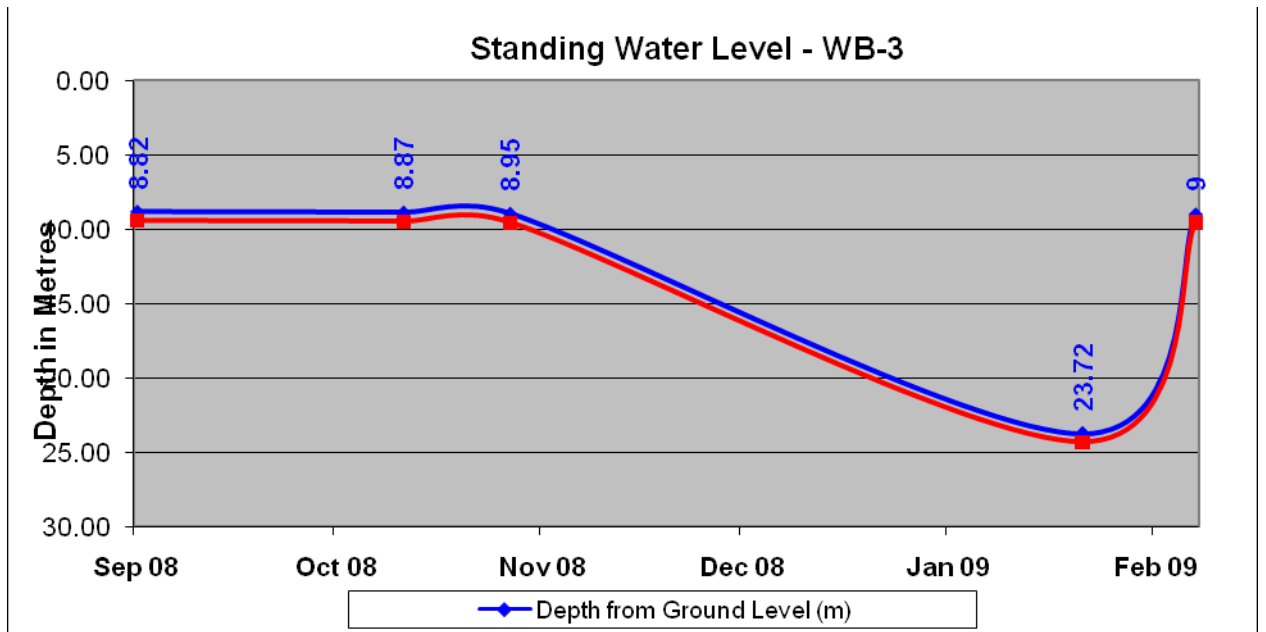
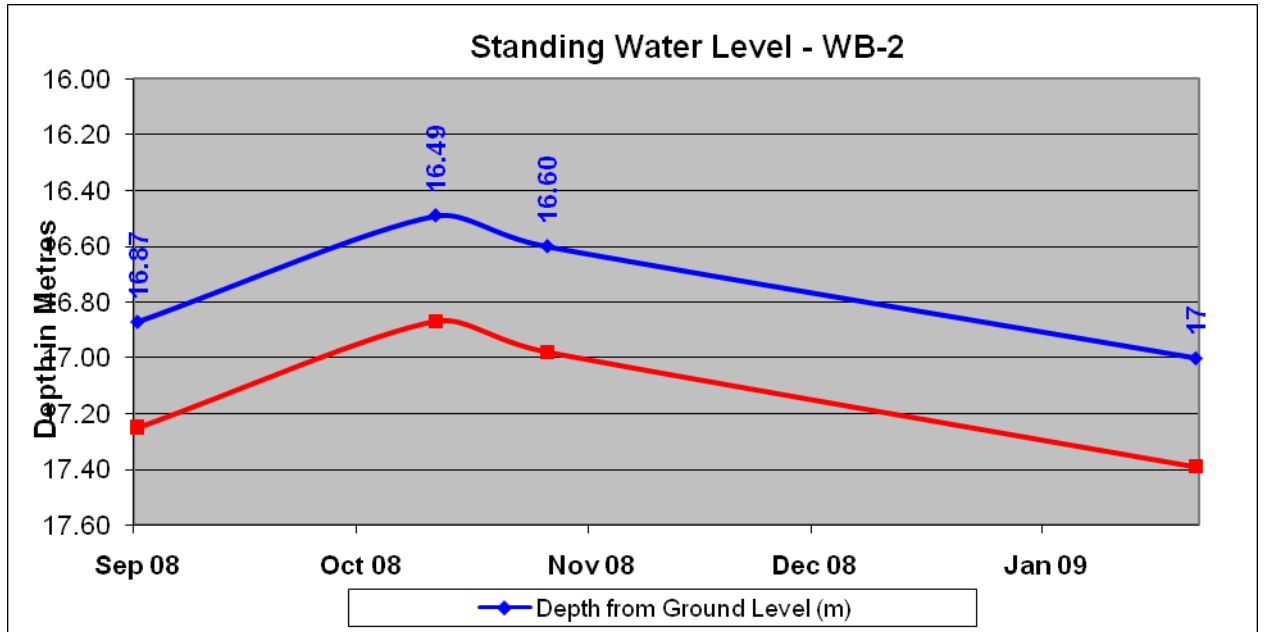
WB2	September 08	16.87		
	13 October 08	16.49		
	28 October 08	16.60	7.7	3.43
	23 January 09	17.00		
WB3	September 08	8.82		
	13 October 08	8.87		
	29 October 08	8.95	7.2	4.48
	23 January 09	23.72		
	10 February	9.0		
WB4	Casing Sealed	No Access		
WB5	September 08	4.23		
	13 October 08	12.92		
	28 October 08	12.85	7.2	8.4
	23 January 09	13.1		
WB6	September 08	23.18		
	13 October 08	23.05		
	29 October 08	No Access		
	23 January 09	23.81		
WB7	September 08	41.75		
	13 October 08	19.11		
	28 October 08	18.90	7.2	2.73
	23 January 09	21.35		
WB8	September 08	No Access		
	13 October 08	No Access		
	29 October 08	No Access		
	23 January 09	46.4		
WB9	September 08	23.88		
	13 October 08	24.09		
	28 October 08	24.50	7.5	931
	23 January 09	24.27		
WB10	July 08	13.75		
	September 08	13.80		
	13 October 08	13.77		
	28 October 08	13.9	7.4	2235
	27 January 09	14.23		
WB11	July 08	18.11		
	September 08	18.61		
	13 October 08	18.13		
	28 October 08	18.4	7.5	1086
	27 January 09	18.73		
WB12	July 08	12.73		
	September 08	12.80		
	13 October 08	12.83		
	28 October 08	12.95	8.1	2152
	27 January 09	13.16		
Yarrari Prod	September 08	55.24		
	13 October 08	50.18		

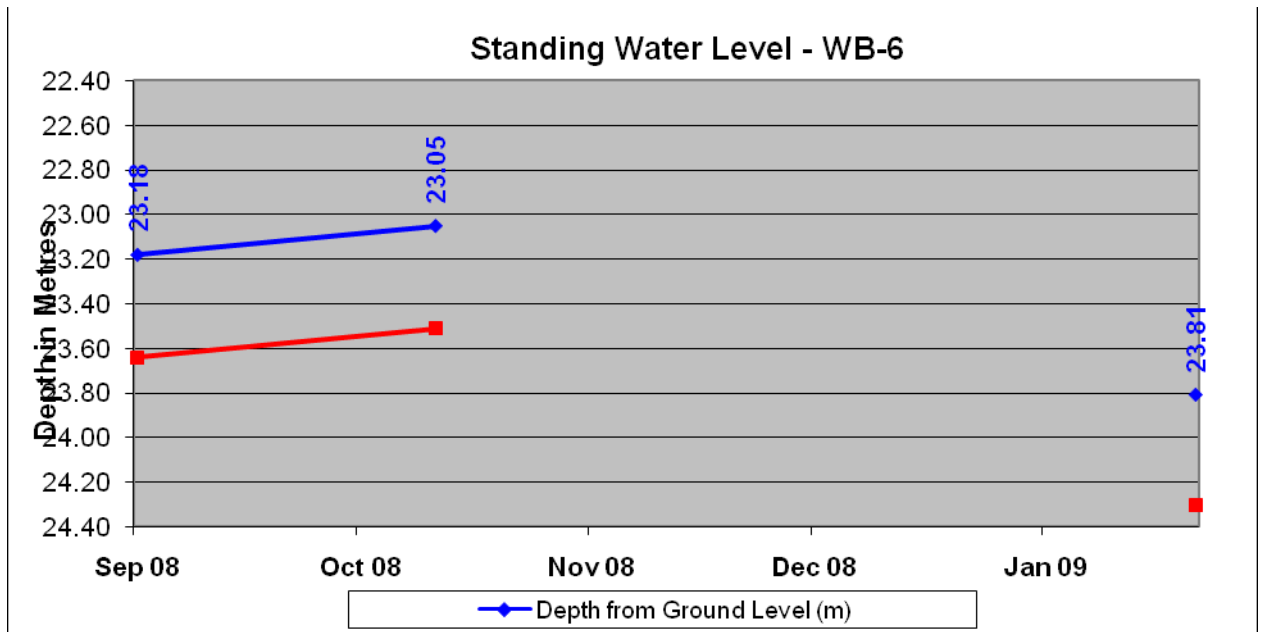
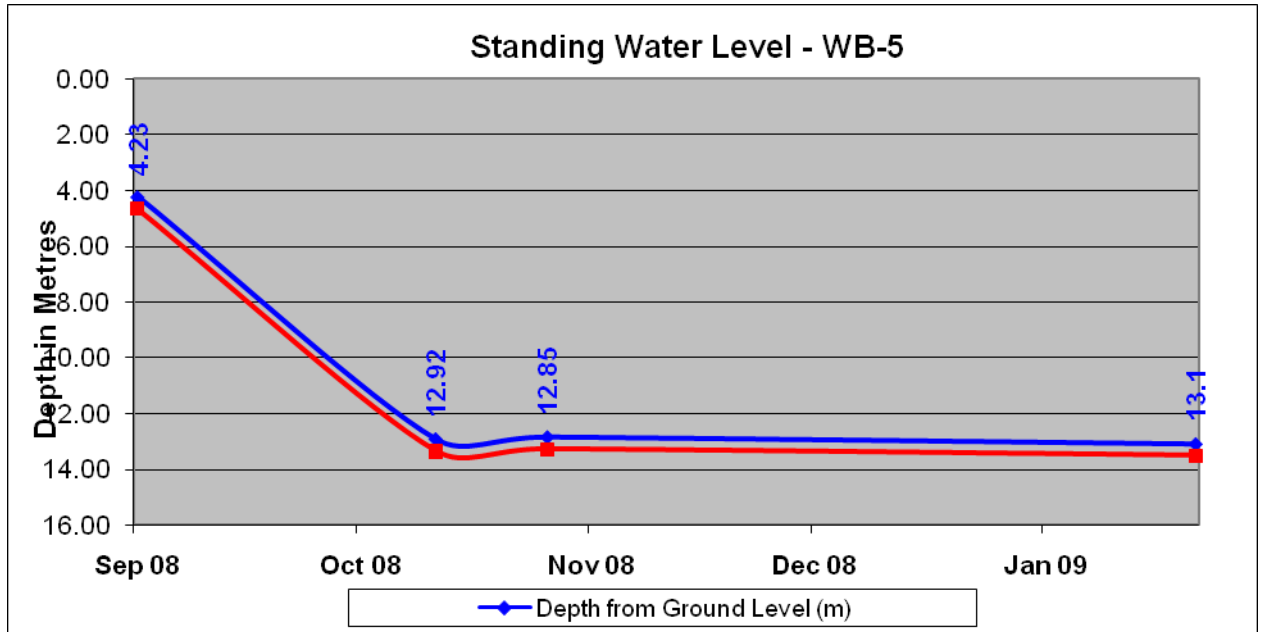
	28 October 08	49.90	7.3	4.03
	27 January 09	49.90		
Wundurra Stud	27 January 09	20.37		

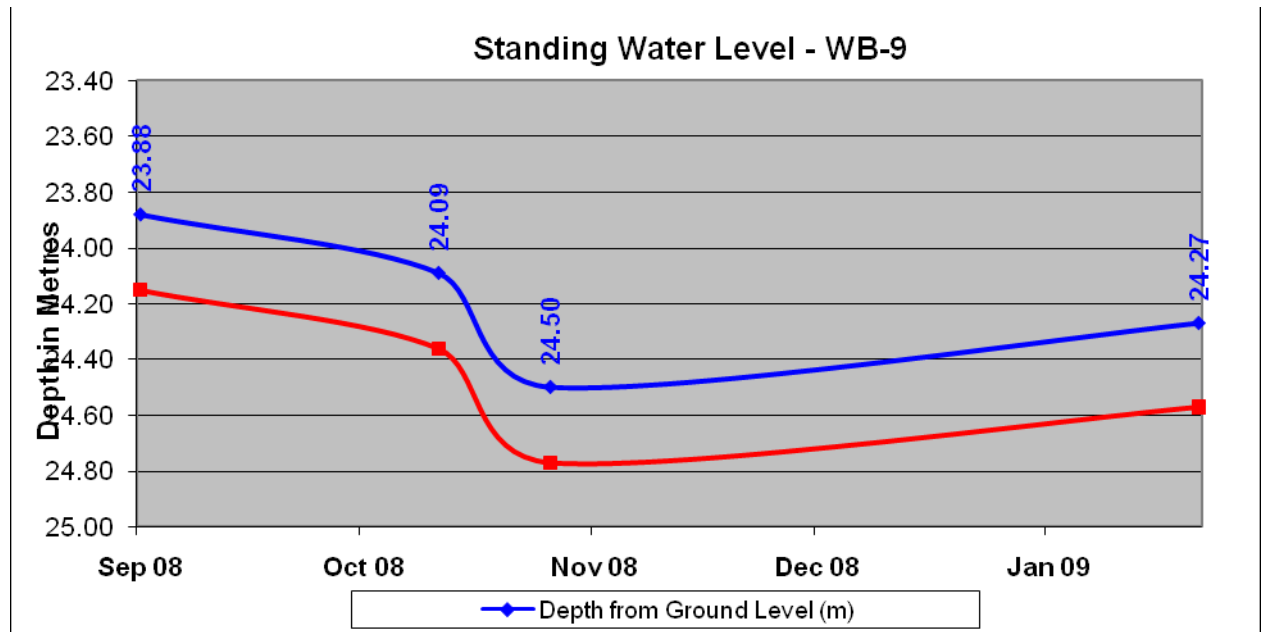
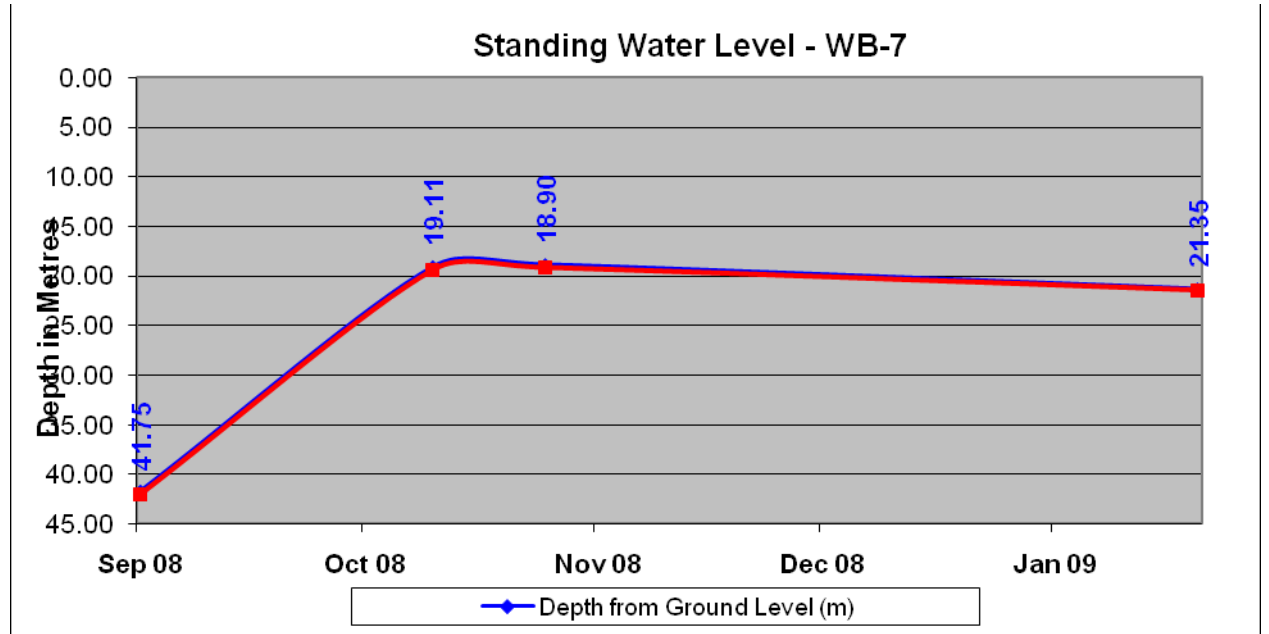


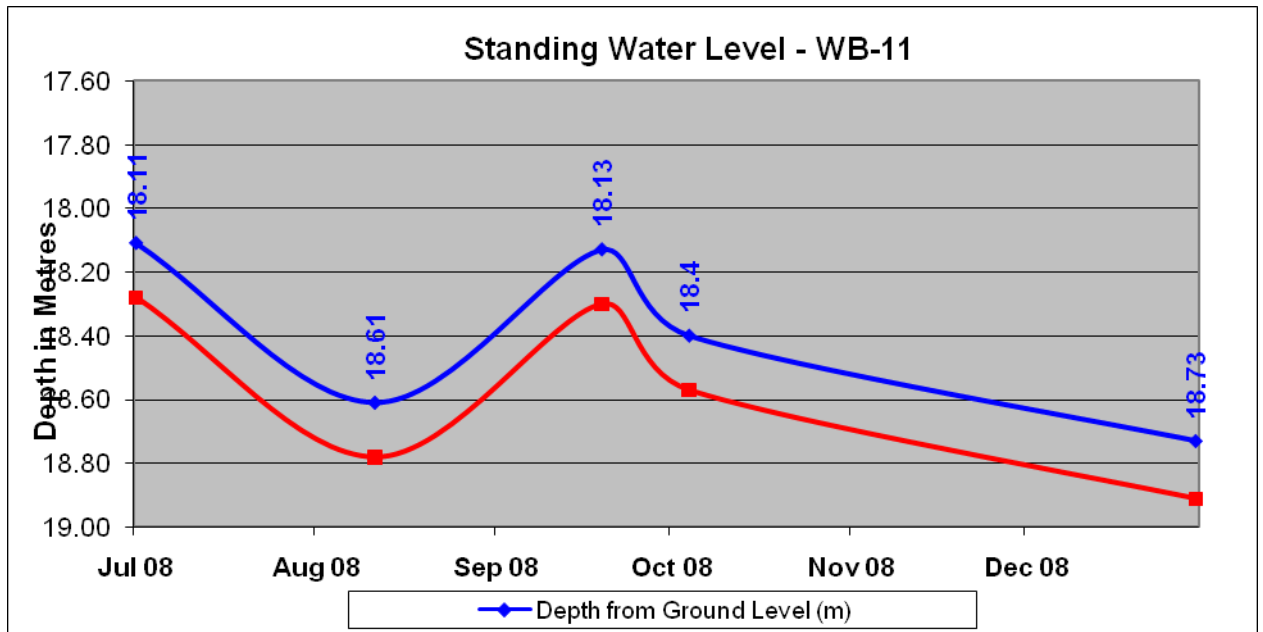
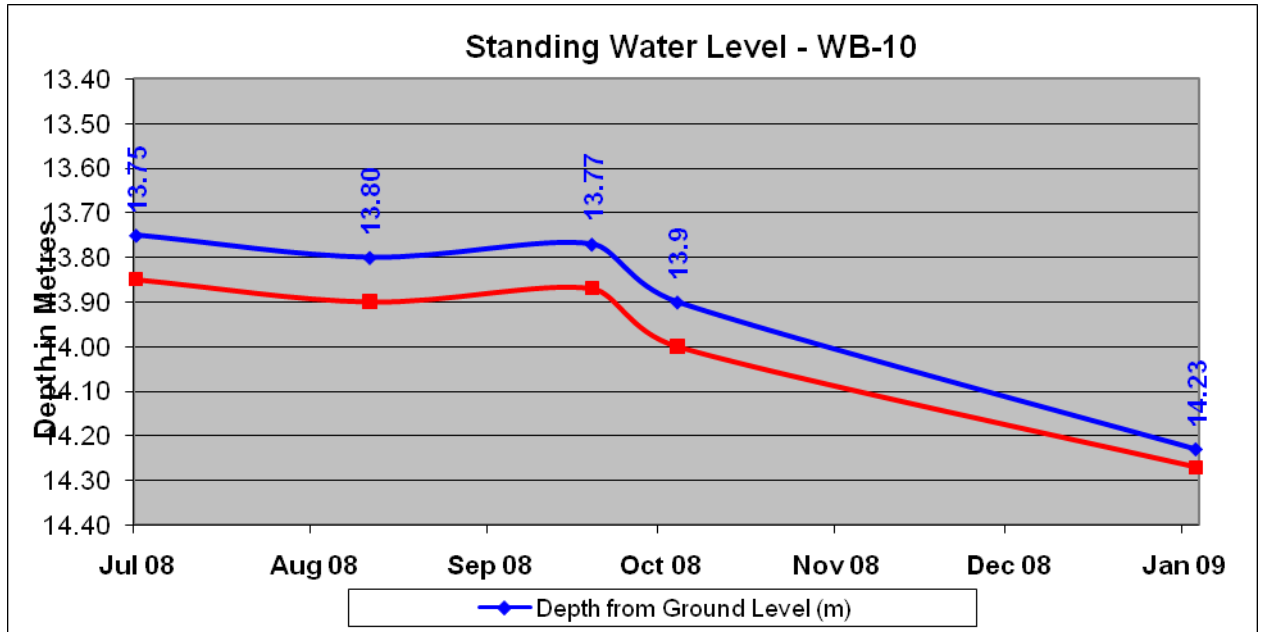


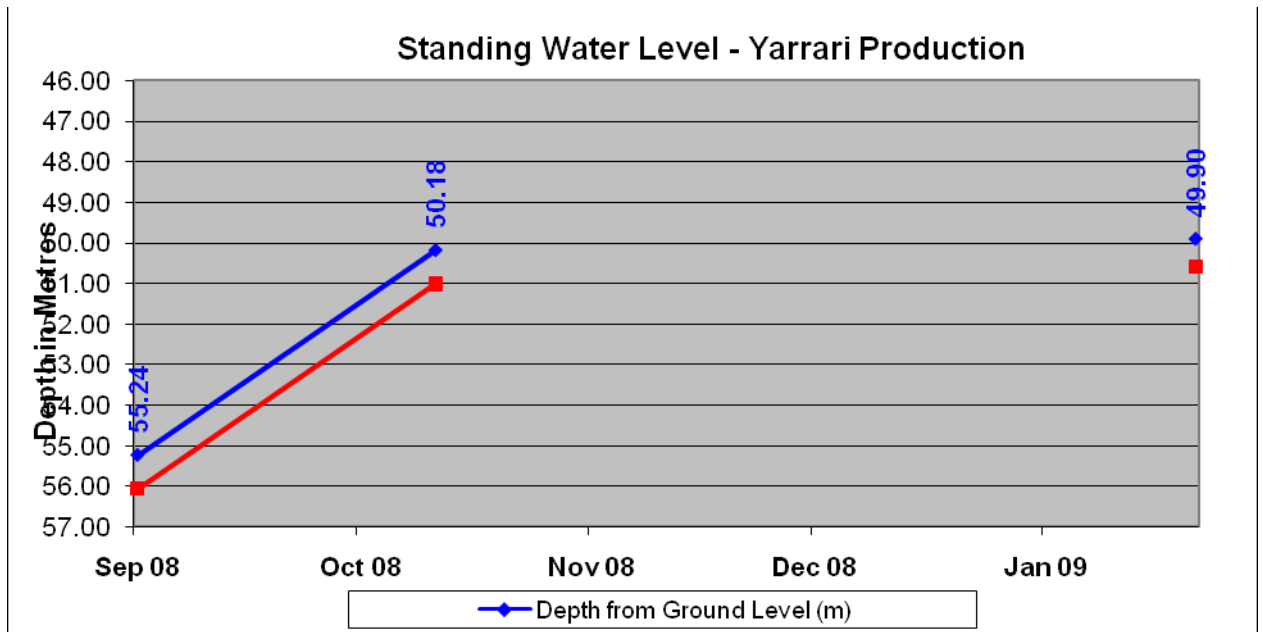
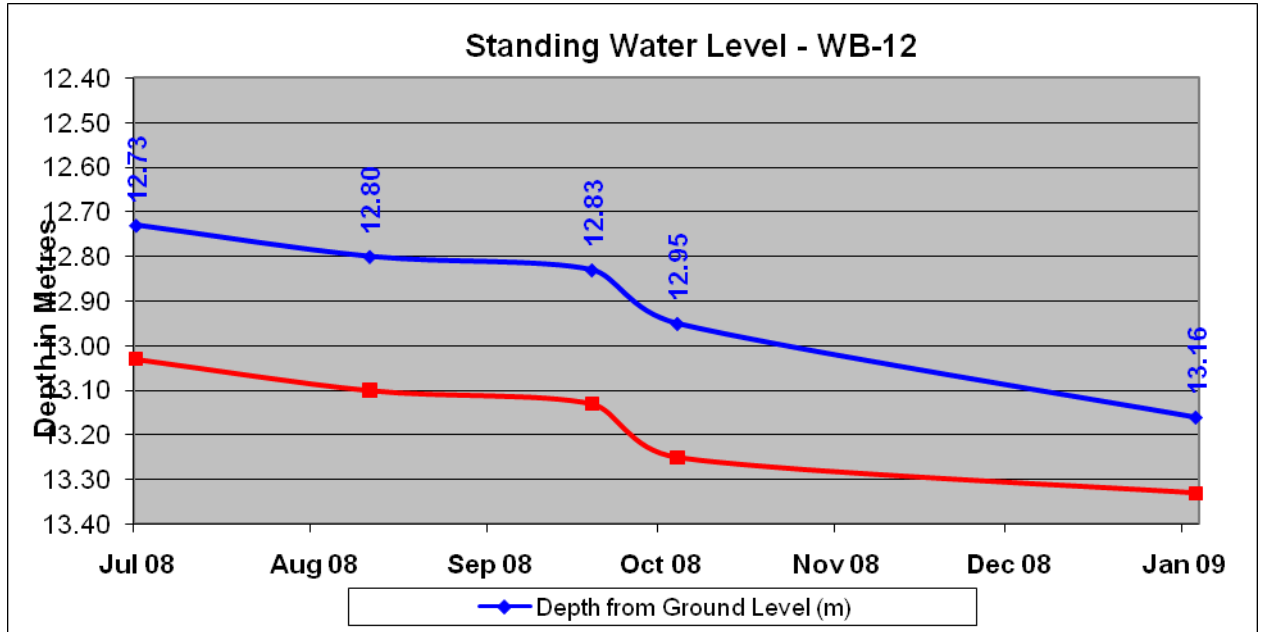












The results obtained to date are to establish background water levels and general variability in the water bores. As the mining operation is not making water in the pit from the coal seam the operation to date would have had minimal impact on groundwater flows and levels. Ongoing monitoring will help establish general variability and trends in water level and chemistry as the operation progresses.

Surface Water

A variation application for the environment protection licence has been lodged with the DECC which will verify surface water monitoring points to assess compliance with concentration thresholds. Until such time as these points are confirmed, monitoring has been undertaken from surface water flows south of the site during wet weather events for background data. The results of this sampling is shown below:

DATE	LOCATION	pH	EC	TSS	Grease/Oil
23 Sep 08	UNDC	7.7	150	510	<2
17 Dec 08	UNDC	6.6	145	21	<2

Surface water sampling will commence in the coming months to obtain background water quality from on site storages. This data will be of relevance in the event of any future discharge from these storages during wet weather events.

Complaints

There have been no complaints registered on the Rocglen complaints line. The owner of "Costa Vale", through contact with the Gunnedah Office and Environmental Officer on 21st November 2008 requested removal of environmental monitoring points on his property due to frequency of access requirements from mine related personnel. All monitoring equipment was subsequently removed immediately and relocated. Mr David Torrens also contacted the Whitehaven Gunnedah Office in January to advise of a drop in volume from his bore. Mr Torrens property is located well to the south-east of the predicted drawdown cone established during groundwater modelling and unlikely to be affected by the mining operation. As the mine has not encountered significant groundwater inflows to the workings, it is considered highly unlikely that the operation has had any influence on any reduction in volumes experienced in his bore.