

# Rocglen Coal Mine Community Consultative Committee Meeting #3

## Environmental Monitoring Report, February 2009 – April 2009

### Noise Monitoring

Attended noise monitoring was undertaken on the 10 – 11<sup>th</sup> March 2009, as required for operational noise monitoring under the Noise Monitoring Program, with results outlined below:

#### RCM Attended Noise Monitoring Results 10 March 2009 (evening)

Location	Time	dB(A), Leq	Wind Speed	Noise source
<i>Costa Vale</i>	9:05pm	>60	>3 m/s, S	Wind (>60), <b>RCM inaudible</b>
<i>Surrey</i>	9:23pm	55	3 m/s, S	Wind (55), <b>RCM (34)</b>

#### RCM Attended Noise Monitoring Results 11 March 2009 (day)

Location	Time	dB(A), Leq	Wind Speed	Noise source
<i>Costa Vale</i>	9:10am	49	1.0 m/s, SE	Birds and insects (49), <b>RCM (30)</b>
<i>Surrey</i>	9:31am	50	0.1 m/s, SE	Birds and insects (49), Wind in trees (40), <b>RCM inaudible</b>

#### RCM Attended Noise Monitoring Results 11 March 2009 (night)

Location	Time	dB(A), Leq	Wind Speed	Noise source
<i>Costa Vale</i>	2:32am	40	0.5 m/s, SE	Insects (36), Wind (35), Dogs (34), <b>RCM inaudible</b>
<i>Surrey</i>	2:06am	38	0.5 m/s, SE	Insects (37), Wind (35), <b>RCM inaudible</b>

Unattended noise monitoring was also carried out in December 2008 at both the “Costa Vale” and “Surrey” properties with results provided in the following tables. 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” – Dec 2008

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
16/12/2008	40.7	39.7	38.7	30.7	29.2	29.2
17/12/2008	42.2	45.2	46.0	31.1	34.2	31.6
18/12/2008	44.3	44.7	48.2	29.4	29.9	37.8
<b>LAeq</b>	<b>43</b>	<b>44</b>	<b>46</b>	-	-	-
<b>L90</b>				<b>31</b>	<b>30</b>	<b>32</b>

### RCM Unattended Noise Monitoring Results “Surrey” – Dec 2008

Date	Leq(day)	Leq(eve)	Leq(night)	L90(day)	L90(eve)	L90(night)
16/12/2008	42.5	41.8	40.4	30.5	31.4	27.4
17/12/2008	39.5	41.8	38.5	29.9	30.6	27.5
18/12/2008	47.2	41.6	41.4	31.0	32.2	26.7
<b>LAeq</b>	<b>44</b>	<b>41</b>	<b>40</b>	-	-	-
<b>L90</b>				<b>31</b>	<b>31</b>	<b>27</b>

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 19 blasts.

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

Blast #19 on the 24<sup>th</sup> April 2009 was not monitored as a result of the Orica operator unintentionally failing to set the monitors to capture the wave trace data. Four complaints were received following this blast (as outlined in the Complaints section of this report) and Orica have since supplied written advice regarding the incident.

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

### **Air Quality**

#### **PM10 Results**

The annual average for PM10 readings as determined from data from October 2008 through to April 2009 is as follows:

Glen Roc: 21.88ug/m<sup>3</sup>  
Surrey: 13.69ug/m<sup>3</sup>

Running average PM10 levels at both monitoring points remains below the annual average limit of 30ug/m<sup>3</sup>. The 24hr criterion of 50ug/m<sup>3</sup> has not been breached at either site, with the highest PM10 readings for each site to date as follows:

Costa Vale: 44ug/m<sup>3</sup> on the 5<sup>th</sup> February 2009

Surrey: 33ug/m<sup>3</sup> on the 31<sup>st</sup> December 2008

### 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
<b>March 2008</b>	1.9	0.8	1.6	2.1	1.0	2.0	1.4	1.3
<b>April 2008</b>	1.8	1.3	1.1	0.9	0.8	0.7	1.4	1.1
<b>May 2008</b>	0.9	0.9	0.5	0.5	0.5	0.9	0.7	0.3
<b>June 2008</b>	0.6	0.6	0.4	0.4	0.2	0.7	0.7	0.5
<b>July 2008</b>	0.6	0.7	0.4	0.2	0.4	0.6	0.6	0.4
<b>August 2008</b>	1.1	0.7	0.6	0.4	0.7	0.7	0.7	0.6
<b>September 2008</b>	1.3	1.5	0.8	1.2	0.6	1.7	2.7	1.2
<b>October 2008</b>	1.6	1.3	1.4	1.0	0.7	1.0	1.1	1.5
<b>November 2008</b>	1.0	1.0	2.2	1.7	1.4	1.6	1.9	2.5
<b>December 2008</b>	NLS	1.0	1.0	0.8	0.7	0.8	1.4	0.7
<b>January 2009</b>	NLS	3.2	2.4	1.1	1.4	1.6	2.0	1.4
<b>February 2009</b>	NLS	0.7	1.1	0.6	3.2	0.6	0.8	1.3
<b>March 2009</b>	NLS	1.1	0.8	1.8	1.1	1.7	1.3	2.8
<b>Average</b>	<b>1.2</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>1.3</b>	<b>1.2</b>

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/m<sup>2</sup>/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.

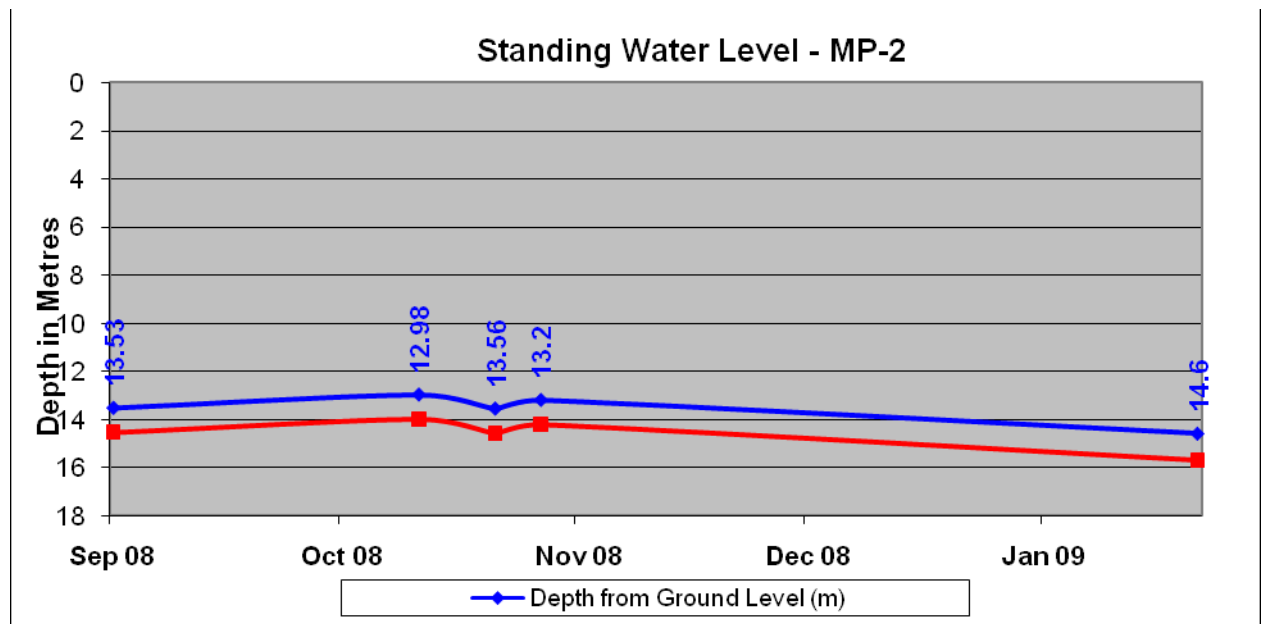
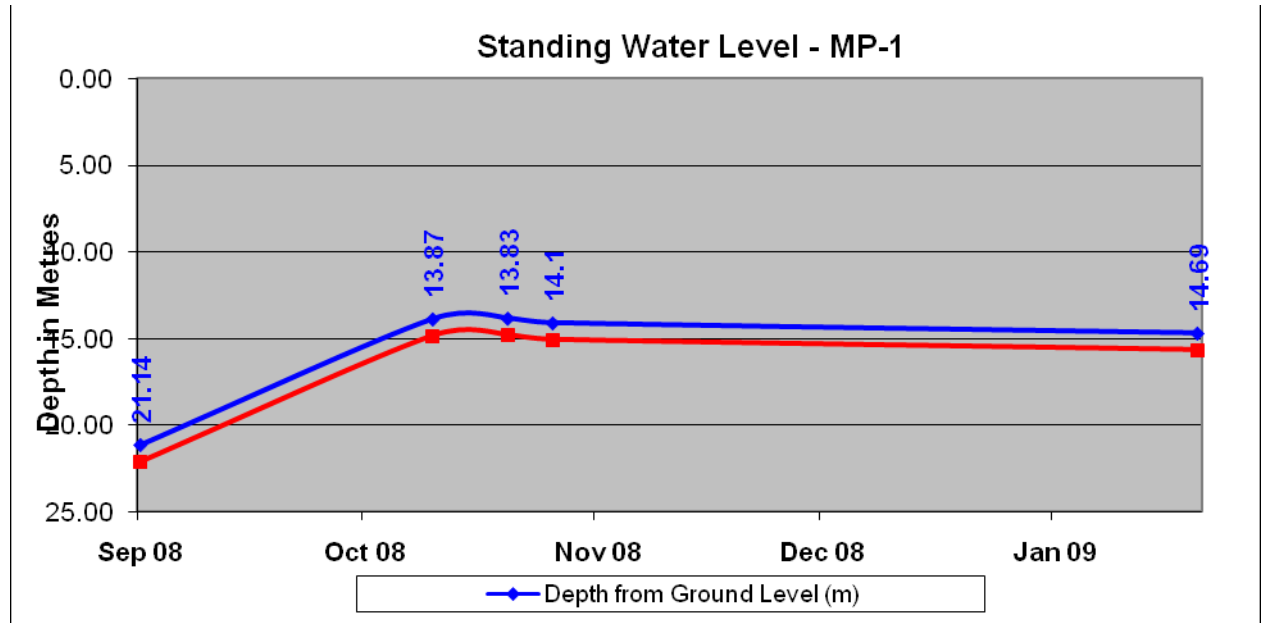
## Water Monitoring

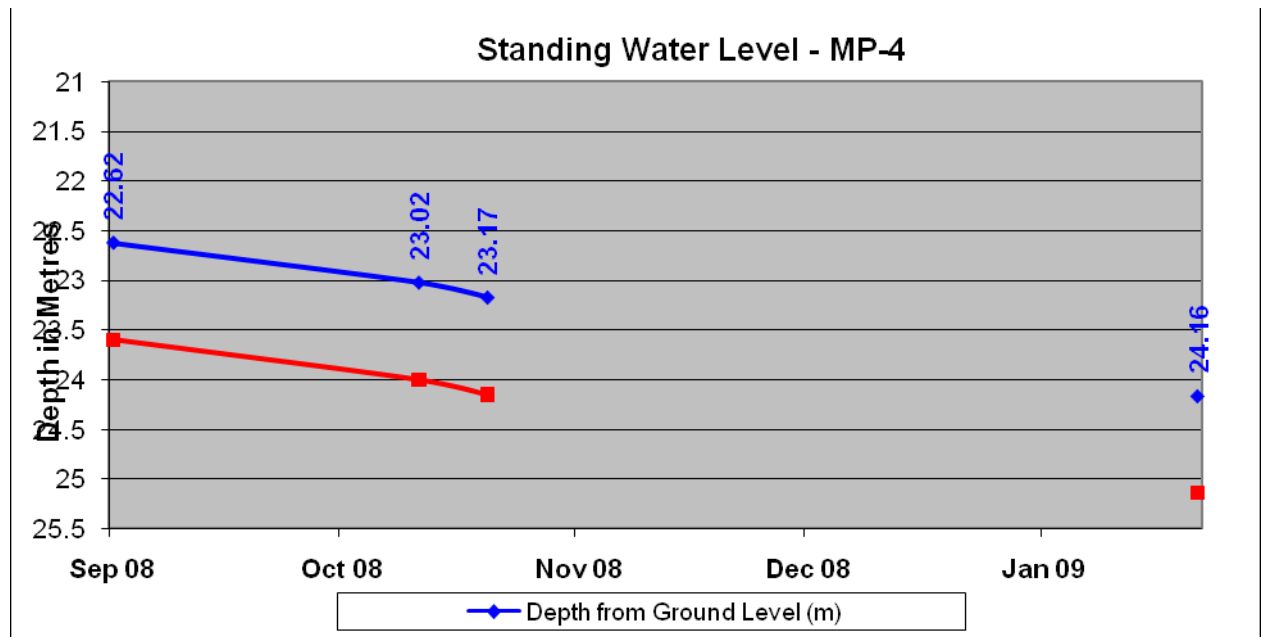
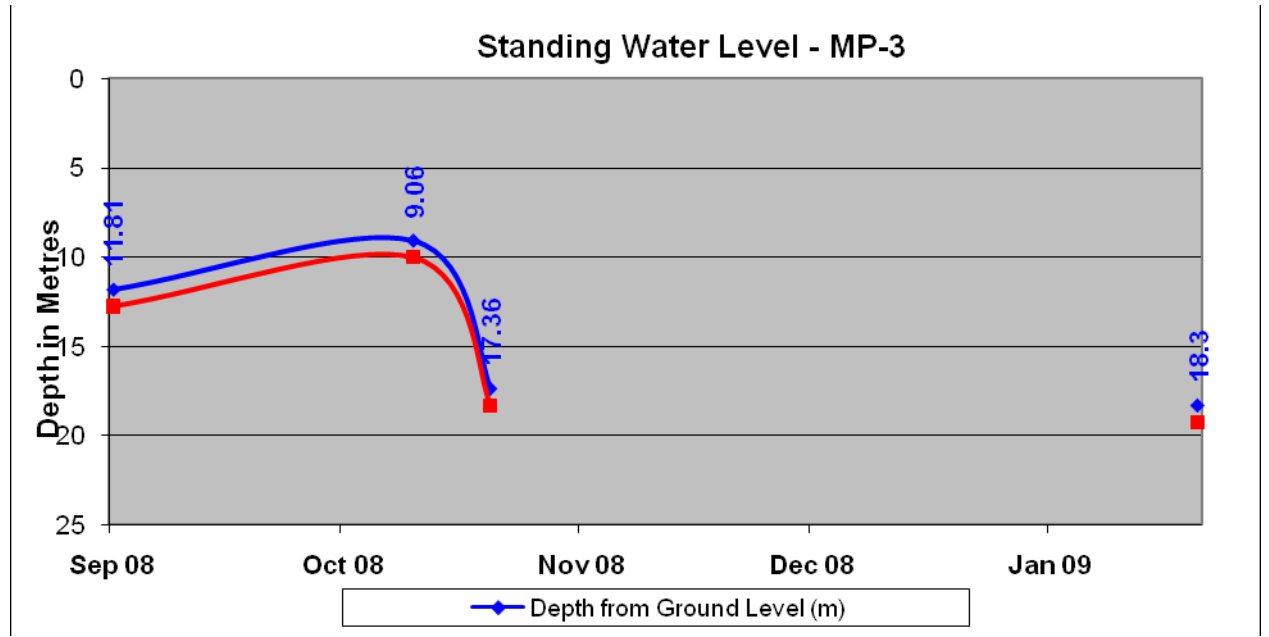
### Ground Water

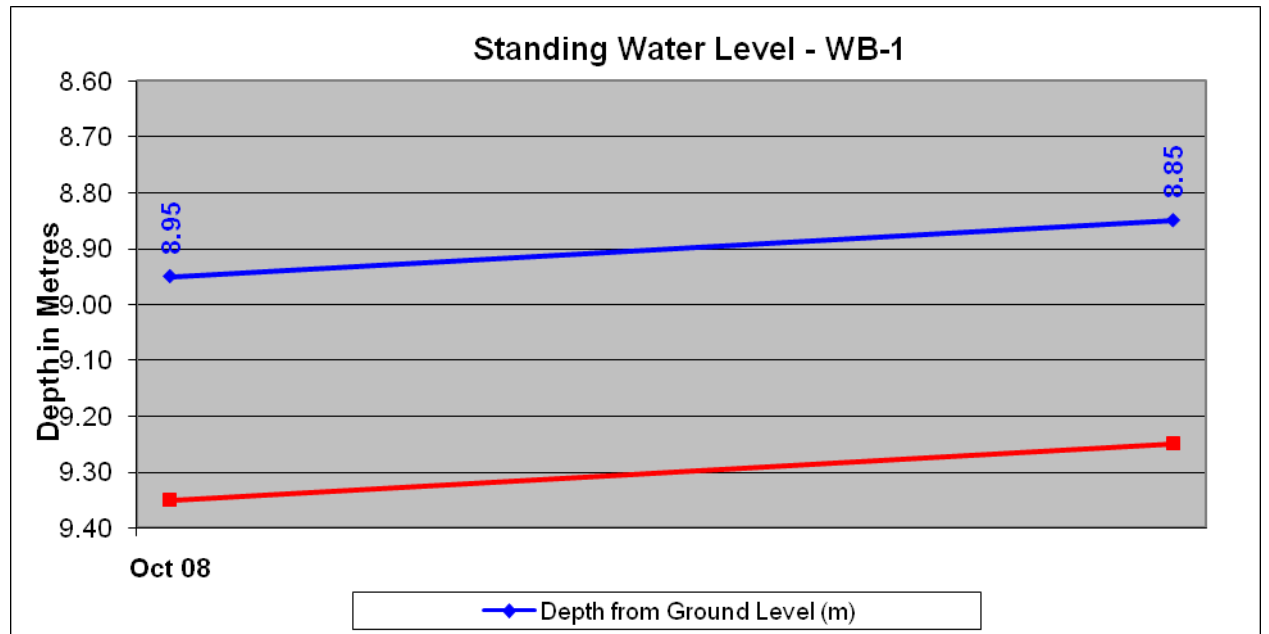
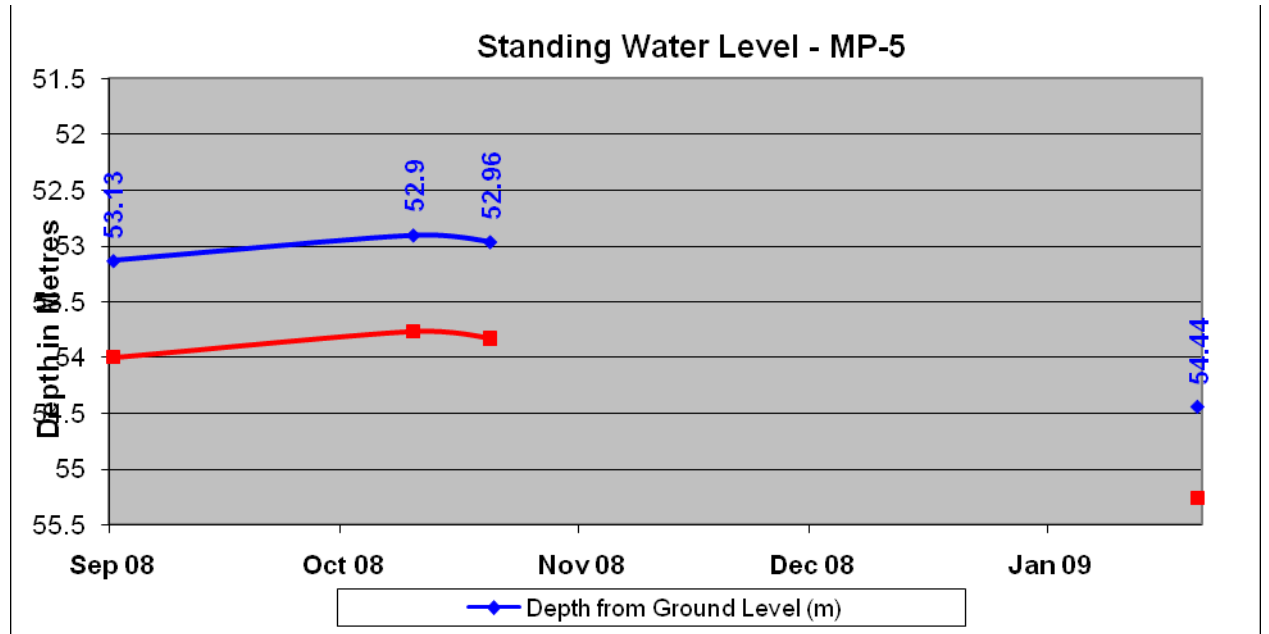
Groundwater monitoring obtained to date is presented in the following table. ALS are expected to commence groundwater monitoring this week. Results will be provided in the next CCC environmental monitoring report.

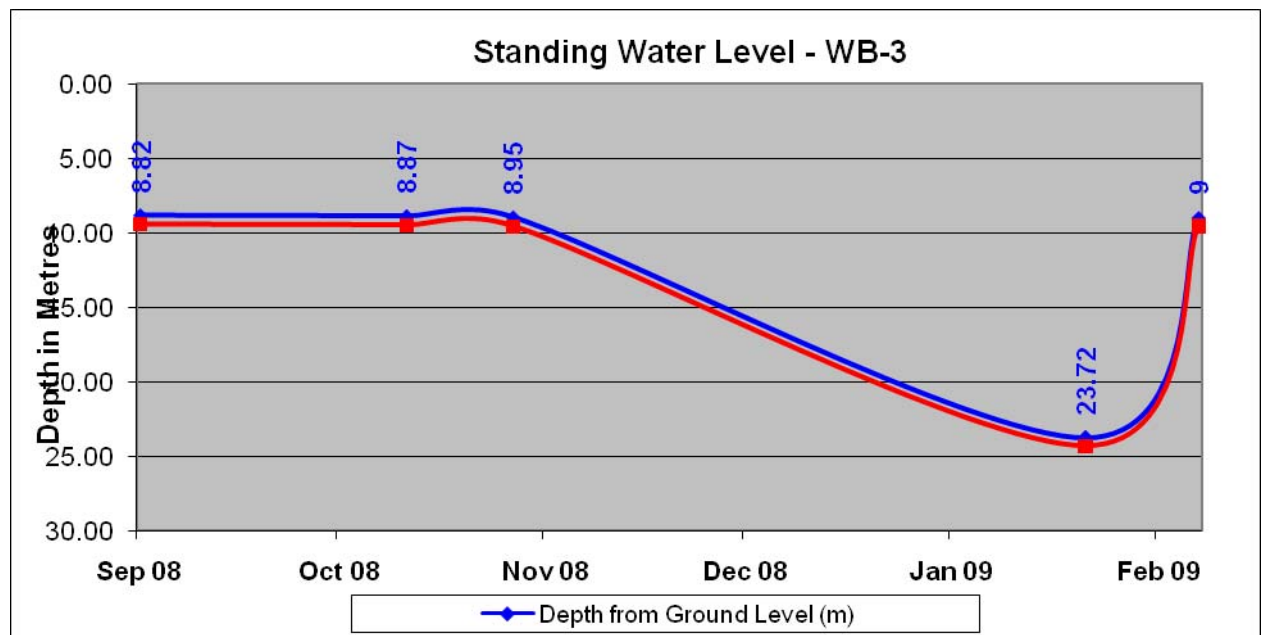
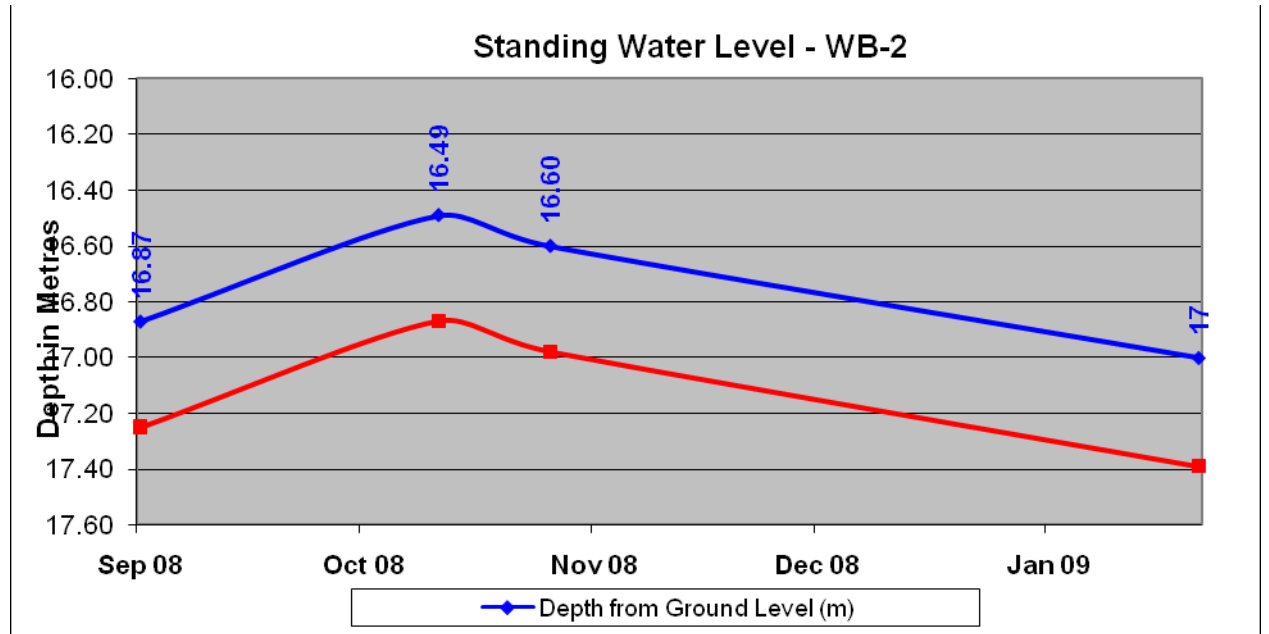
Site	Date	SWL (m)	pH	Elect. Conduct
<b>MP1</b>	September 08	21.14		
	13 October 08	13.87		
	23 October 08	13.83		
	29 October 08	14.10	7.6	2.36
	23 Jan 09	14.69		
<b>MP2</b>	September 08	13.53		
	13 October 08	12.98		
	23 October 08	13.56		
	29 October 08	13.20	7.3	4.18
	23 January 09	15.70		
<b>MP3</b>	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)		
<b>MP4</b>	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)		
<b>MP5</b>	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)		
<b>WB1</b>	13 October 08	8.95		
	28 October 08	8.85	7.9	1996
	NO ACCESS			
<b>WB2</b>	September 08	16.87		
	13 October 08	16.49		
	28 October 08	16.60	7.7	3.43
	23 January 09	17.00		
<b>WB3</b>	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		
<b>WB4</b>	Casing Sealed	No Access		

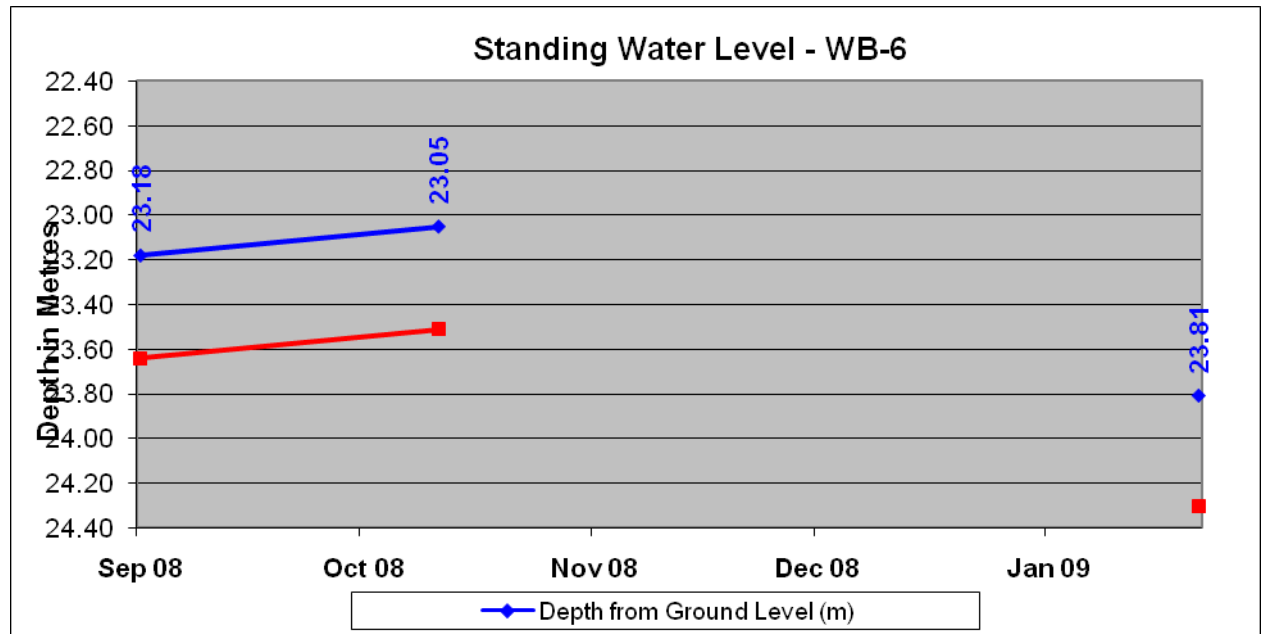
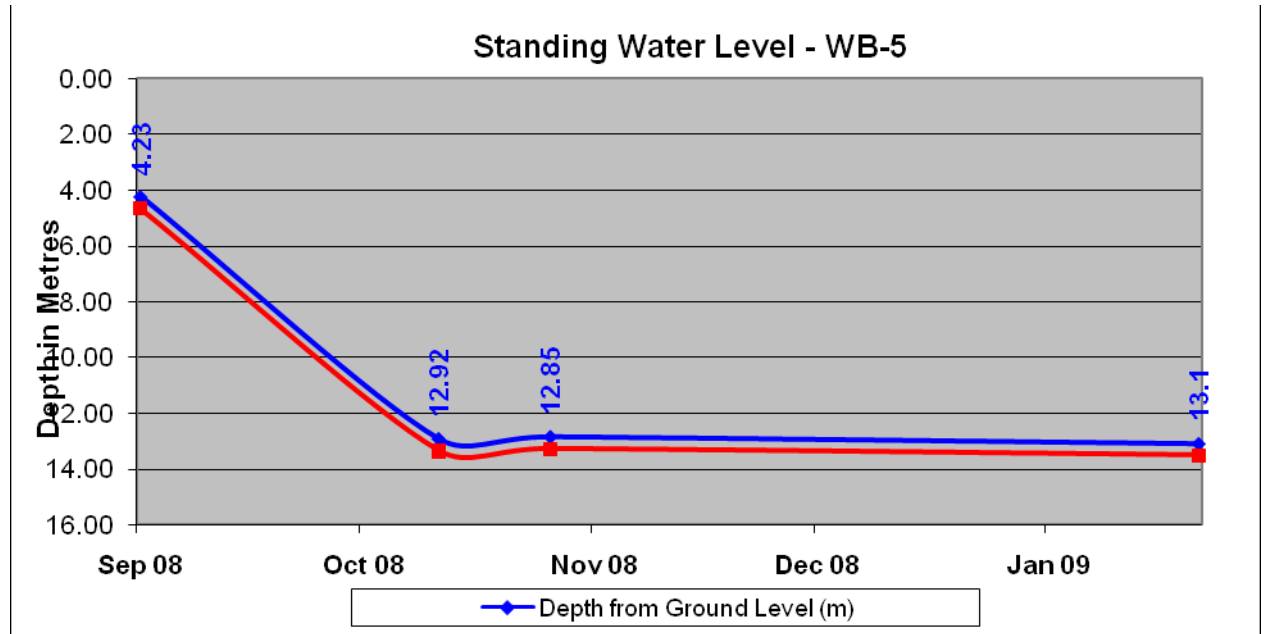
<b>WB5</b>	September 08	4.23		
	13 October 08	12.92		
	28 October 08	12.85	7.2	8.4
	23 January 09	13.1		
<b>WB6</b>	September 08	23.18		
	13 October 08	23.05		
	29 October 08	No Access		
	23 January 09	23.81		
<b>WB7</b>	September 08	41.75		
	13 October 08	19.11		
	28 October 08	18.90	7.2	2.73
	23 January 09	21.35		
<b>WB8</b>	September 08	No Access		
	13 October 08	No Access		
	29 October 08	No Access		
	23 January 09	46.4		
<b>WB9</b>	September 08	23.88		
	13 October 08	24.09		
	28 October 08	24.50	7.5	931
	23 January 09	24.27		
<b>WB10</b>	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		
<b>WB11</b>	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		
<b>WB12</b>	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		
<b>Yarrari Prod</b>	September 08	55.24		
	13 October 08	50.18		
	28 October 08	49.90	7.3	4.03
	27 January 09	49.90		
<b>Wundurra Stud</b>	27 January 09	20.37		

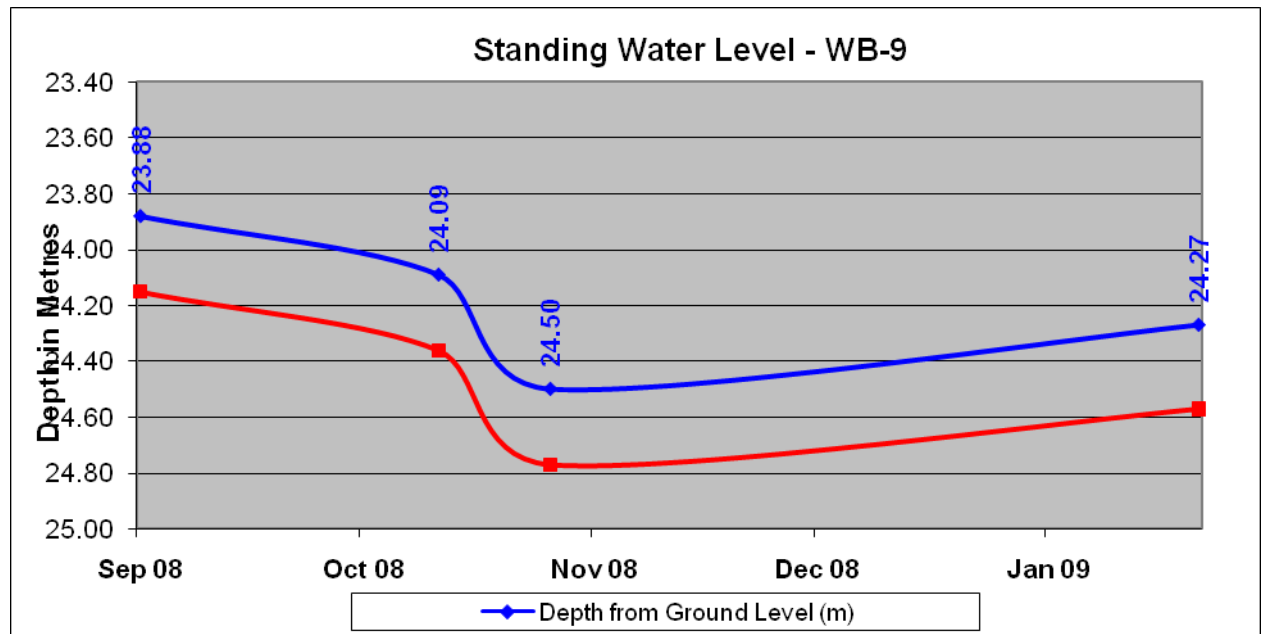
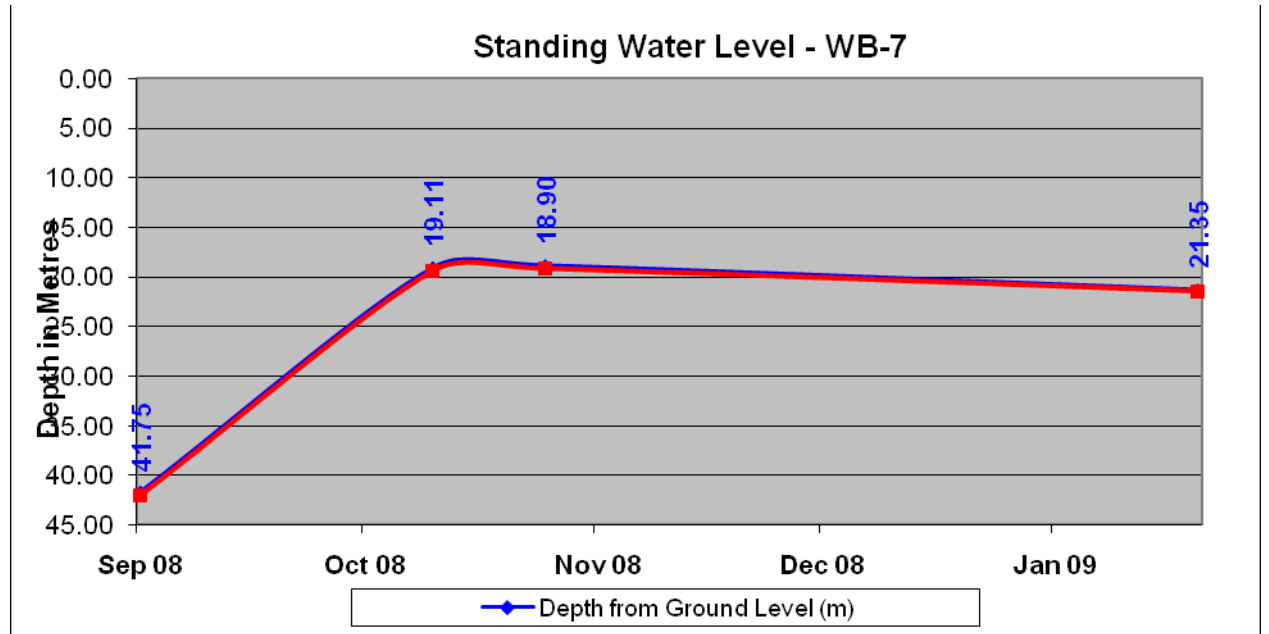


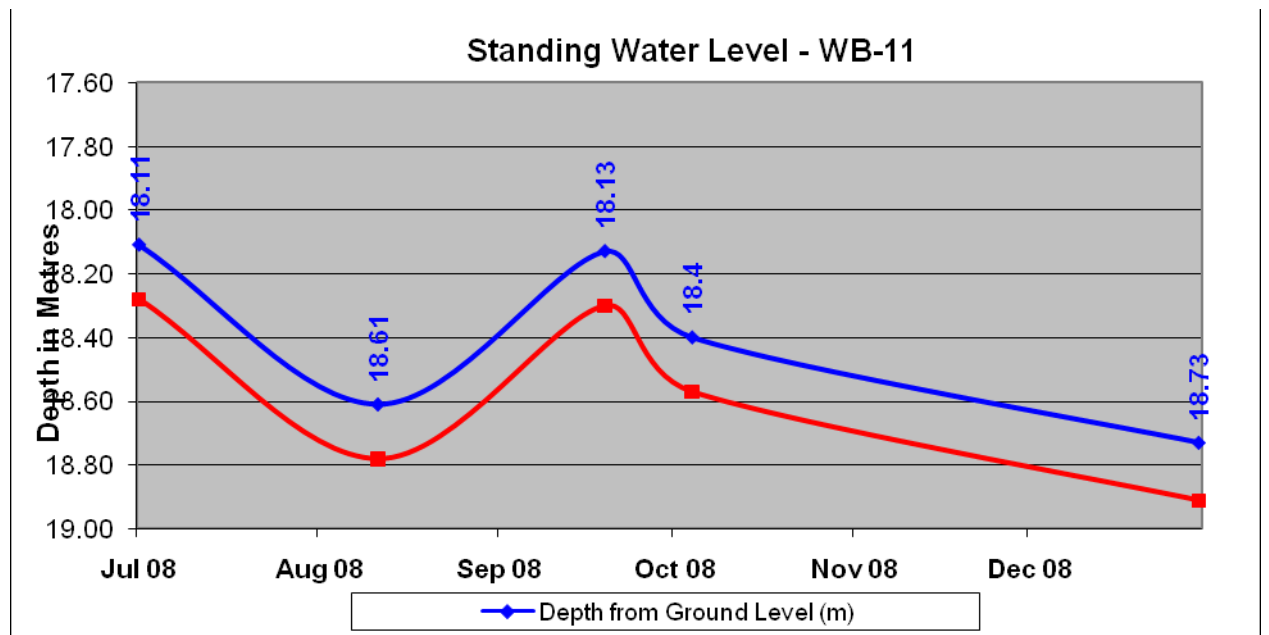
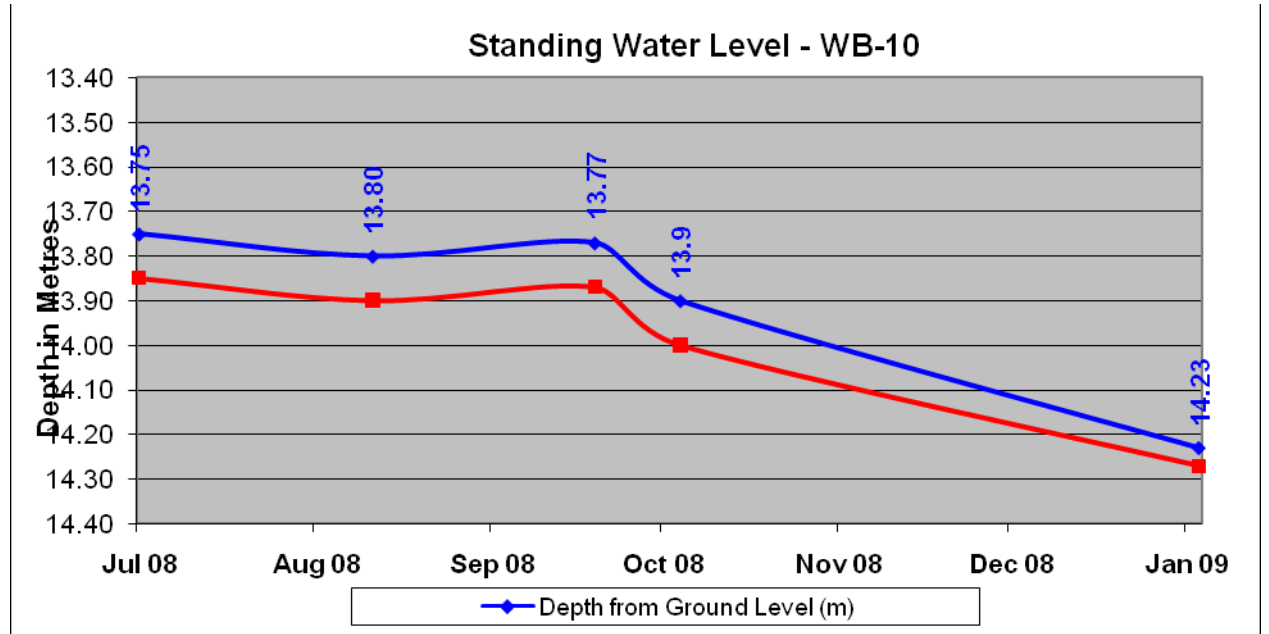


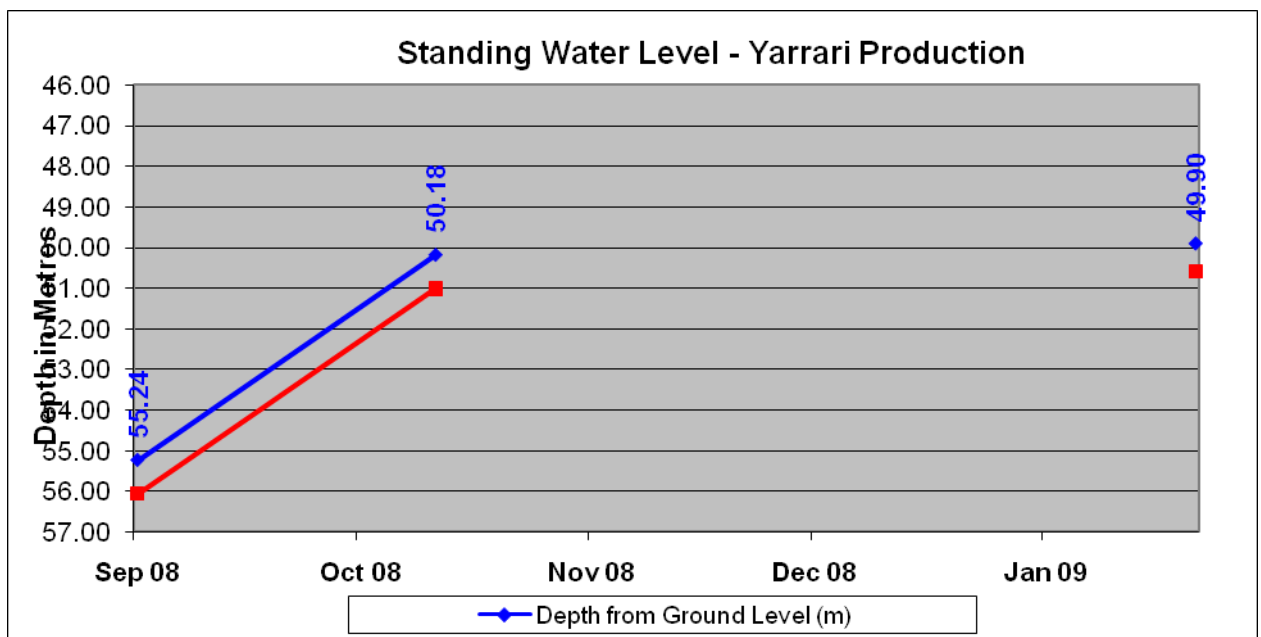
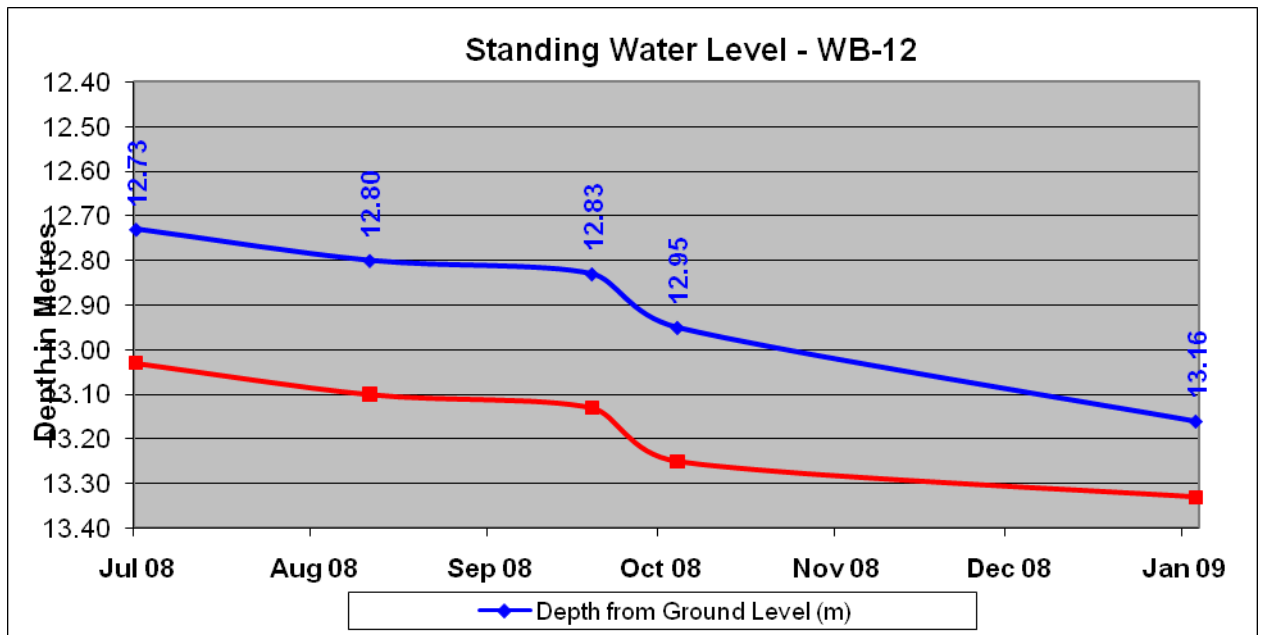












The results obtained to date are to establish background water levels and general variability in the water bores. As the mining operation is not making water in the pit from the coal seam, the operation to date would have had minimal impact on groundwater flows and levels. Ongoing monitoring will help 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. Rocglen is still awaiting written approval for the variation. 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. No wet weather discharge events have occurred during the previous 3 months.

Surface water sampling will commence this month, in conjunction with groundwater monitoring, 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

Since the last meeting there have been no complaints lodged on the complaints line, however four complaints were made directly to the Rocglen site office. These complaints were as follows:

### 20<sup>th</sup> April 2009

Loud bang and vibration at house at “Surrey” following blast on Friday morning (17<sup>th</sup> April 2009). Blast was the most significant to date and literally scared her due to the intensity of the blast. Was very upset by it and fears future blasting will be of a similar nature.

Danny Young contacted the complainant to discuss the blast. An offer was made to set up a blast monitor at the complainant’s residence for future blasts but was subsequently denied. The complainant was asked to contact the mine if they should require anything further.

### 20<sup>th</sup> April 2009

Loud bang and vibration at house at “Carlton” following blast on Friday morning. Blast was the most significant to date and was concerned as previous blasts had not resulted in any impact at their property.

Danny Young contacted the complainant to discuss the blast and asked that they contact either him or the mine should they have any further concerns in relation to future blasting.

### 20<sup>th</sup> April 2009

Loud bang and vibration at house on “Penryn” property following blast on Friday morning (17<sup>th</sup> April 2009), with strong smell of nitropril and dust. Blast

was the most significant to date and was concerned as previous blasts had not resulted in any impact at their property.

Danny Young contacted the complainant to discuss the blast and asked that they contact either him or the mine should they have any further concerns in relation to future blasting.

#### 20<sup>th</sup> April 2009

Loud bang and vibration at house on “Brolga” property following blast on Friday morning. Blast was the most significant to date and was concerned as previous blasts had not resulted in any impact at their property.

The complainant contacted the site office to identify the extent of the blast at their property with no direct requirement for follow up.

It was identified that the blast was only of a relatively small size as compared to previous blasts and on that basis it was difficult to pinpoint a reason for the intensity at each of the properties. The shot was fired early in the morning which may have resulted in an inversion impact which would have intensified the outcome. Rocglen will endeavour to fire future shots over the winter period at around 12pm to avoid potential inversion impacts.

On check with Orica with regard to blast monitor results it was discovered that Orica had failed to properly initiate the monitor thereby did not obtain a blast monitor result. Orica have provided formal advice to Whitehaven as to the reasoning for this incident.