

Narrabri Coal Project Community Consultative Committee Meeting #5

Environmental Monitoring Report February 2009 – April 2009

Noise Monitoring

Attended noise monitoring was undertaken on the Monday 23rd and Tuesday 24th March 2009 to verify if noise levels were within compliance limits. The results from this monitoring are detailed in the tables below.

Noise monitoring results 23 March 2009 (evening)

Location	Time	dB(A),Leq	Wind speed/ direction	Identified Noise Sources
Bow Hills	7:31 pm	47.0	Calm	Traffic (47), NCM (25)
Naroo	7:53 pm	45.2	Calm	Insects (43), Traffic (39), NCM inaudible
Kurrajong*	8:16 pm	42.5	Calm	Insects (41), NCM (<15)
Westhaven	8:48 pm	38.9	0-0.5m/s SE	Insects (38.9), NCM inaudible
Greylands	9:14 pm	46.8	Calm	Insects (46), NCM (23)

* Correction of -8dB applied to the *mine noise component only* measured at "Claremont" boundary.

Noise monitoring results 24 March 2009 (Day)

Location	Time	dB(A),Leq	Wind speed/ direction	Identified Noise Sources
Naroo	8:32 am	N/A	Calm	Roadworks – no measurement taken
Kurrajong*	8:46 am	39.7	Calm	Birds (39), NCM (<15)
Westhaven	9:07 am	31.4	Calm	Birds (31), NCM inaudible
Greylands	9:28 am	42.0	Calm	Birds (41), Traffic (35), NCM inaudible
Bow Hills	7:45 pm	42.3	Calm	Birds (42), NCM (27)

* Correction of -8dB applied to the *mine noise component only* measured at "Claremont" boundary.

Noise monitoring results 23-24 March 2009 (Night)

Location	Time	dB(A),Leq	Wind speed/ direction	Identified Noise Sources
Bow Hills	10:29 pm	44.2	Calm	Insects (42), Traffic (40), NCM inaudible
Naroo	10:43 pm	44.8	Calm	Traffic (44), Insects (32), NCM inaudible
Kurrajong*	11:03 pm	46.8	Calm	Insects (46), NCM (<15)
Westhaven	11:27 pm	26.1	Calm	Insects (26), NCM inaudible
Greylands	11:49 pm	40.0	Calm	Cattle (37), Insects (34), NCM inaudible
Kurrajong*	12:07 am	46.5	Calm	Insects (46), NCM (<15)
Kurrajong*	12:47 am	47.5	Calm	Insects (47), NCM (<15)
Kurrajong*	1:18 am	47.8	Calm	Insects (47), NCM (19)
Kurrajong*	2:13 am	43.2	Calm	Insects (43), NCM (18)

* Correction of -8dB applied to the mine noise component only measured at "Claremont" boundary. It was not possible to conduct monitoring at a point within 30m of the residence, as access to the property was denied by the land owner. An alternative location was chosen at the edge of mine owned land in the direction of "Kurrajong". Measurements were taken near the boundary fence with "Claremont", which is approximately half way between the works for construction of the box cut and the "Kurrajong" residence. Noise contours from the project EA showed that the noise level at "Kurrajong" is approximately 8 dB lower than at the measurement point.

The above monitoring results demonstrate compliance at all receivers throughout the survey.

Unattended noise monitoring was also undertaken through March as required under the consent. Noise logs have been provided to Narrabri Coal from the consultant as part of the background noise collation. This data does not distinguish between mine and other noise sources and as such the data is not presented in this report. It is anticipated that following the first 12 months of mining from the project site, the requirement for ongoing unattended noise monitoring will be removed.

Deposited Dust Monitoring

Month	ND1 Turrabaa	ND2 Claremont	ND3 Bow Hills	ND4 Matoppo	ND5 Claremont	ND6 Willarath	ND7 Claremont	ND8 Claremont
March 2008	1.6	3.7	1.5	1.1	1.3	1.7	1.2	1.1
April 2008	2.5	1.1	0.9	1.2	1.7	1.0	1.0	0.6
May 2008	3.5	2.6	2.2	2.1	2.3	2.0	0.6	1.5
June 2008	4.2	1.7	3.5	0.9	1.7	0.4	1.3	0.6
July 2008	3.1	0.6	4.4	0.5	1.9	0.4	0.3	0.3
August 2008	1.2	0.5	3.6	1.6	3.3	0.4	0.5	0.5
September 2008	3.8	1.4	1.4	8.6	4.3	1.0	0.8	0.6
October 2008	28.6	0.8	0.8	10.9	1.9	4.6	0.9	0.6
November 2008	13.1	1.6	0.9	24.9	1.3	1.5	1.4	0.1
December 2008	2.2	1.3	0.8	15.6	1.5	2.3	1.1	0.1
January 2009	3.2	2.3	1.4	27.9	1.9	2.6	0.8	1.6
February 2009	1.8	1.9	0.5	9.4	2.0	13.8	1.0	3.5
March 2009	0.6	13.8	3.1	5.1	35.5	6.6	3.6	3.5
Annual Average	5.34	2.56	1.92	8.45	4.66	2.95	1.12	1.12

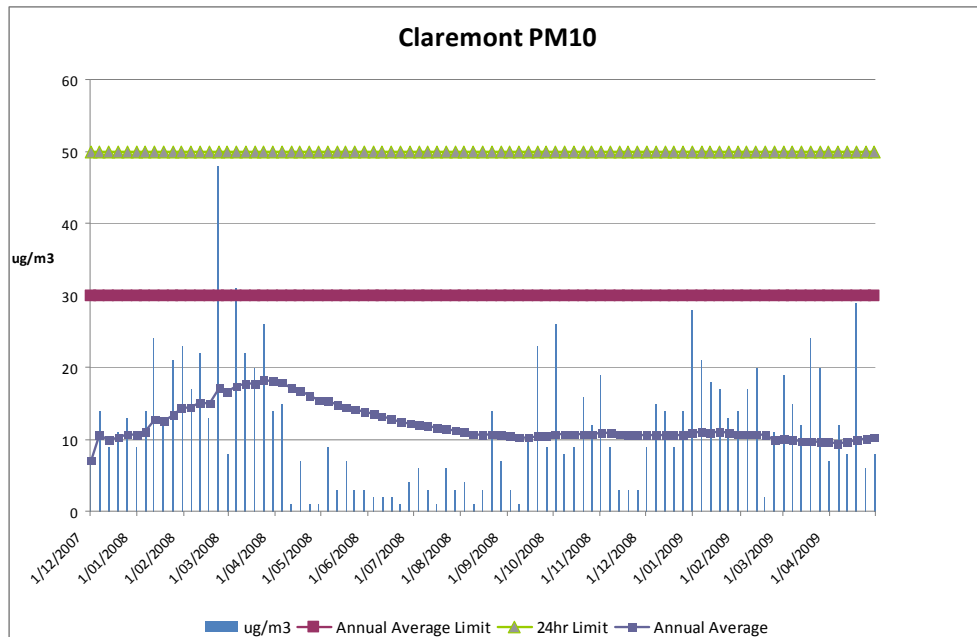
The deposited dust results indicate that a number of outlier results have significantly skewed the overall annual average, specifically for monitors ND1, ND2, ND4 and ND5. Contamination of samples has been a particular problem, particularly from leaf matter, insects and bird and frog droppings. Results over March from ND2 and ND5 were inconsistent with previous months results which further indicates contamination issues. It is also noteworthy that over this period there has been cultivation activity immediately adjacent to a number of the affected monitors.

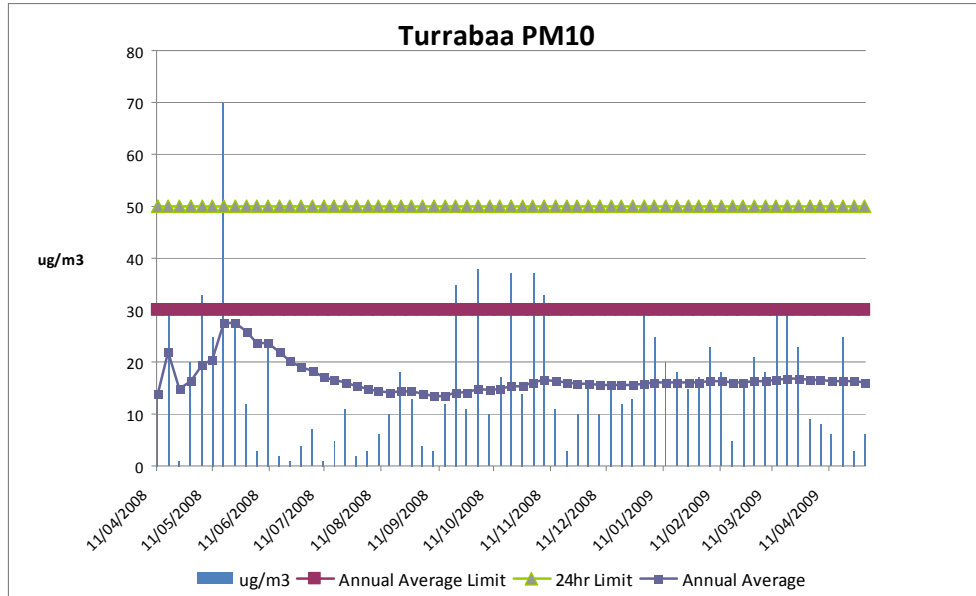
Given the reduced extent of surface construction activity over this period, the high deposited dust readings are considered more likely to be associated with contamination and other factors, and not necessarily connected to operations at the Narrabri site. This will be reviewed with the collection of the May dust data.

High Velocity Air Sampling (PM10)

PM10 measurements taken to date for the Claremont High Velocity Air Sampler is returning a running annual average of 10.16ug/m³ which is well below the annual average limit of 30ug/m³. The highest reading from this sampler remains at 48ug/m³ as measured on 23rd February 2008.

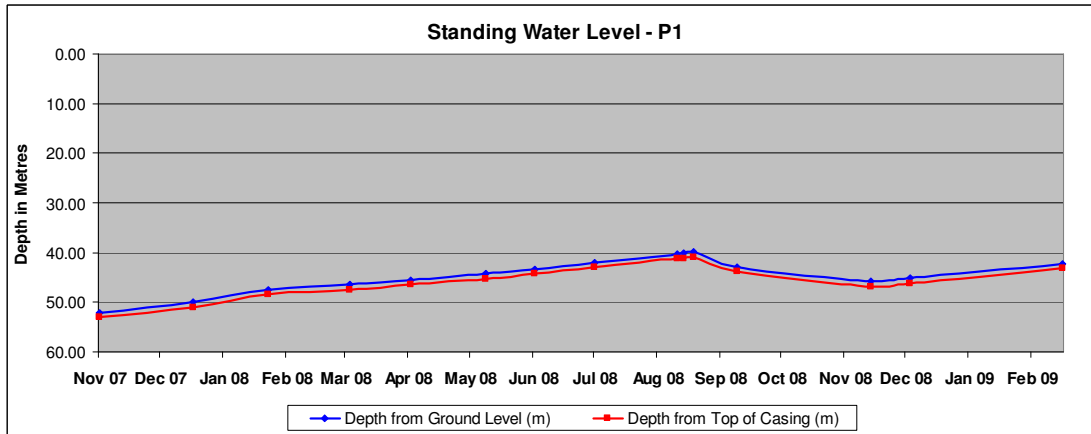
PM10 measurements taken to date for the Turrabaa High Velocity Air Sampler is returning a running annual average of 16.15ug/m³ which is well below the annual average limit of 30ug/m³. The highest reading from this sampler remains at 70ug/m³ as measured on 17th May 2008.

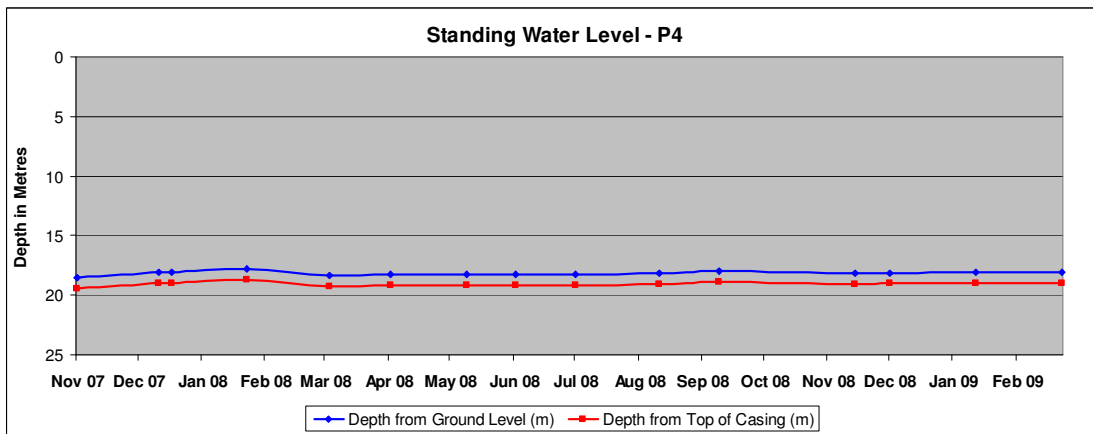
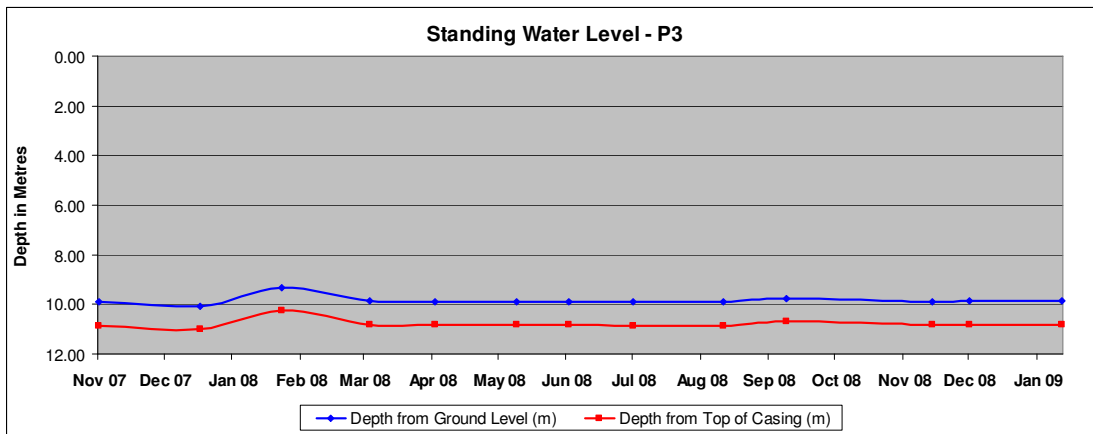
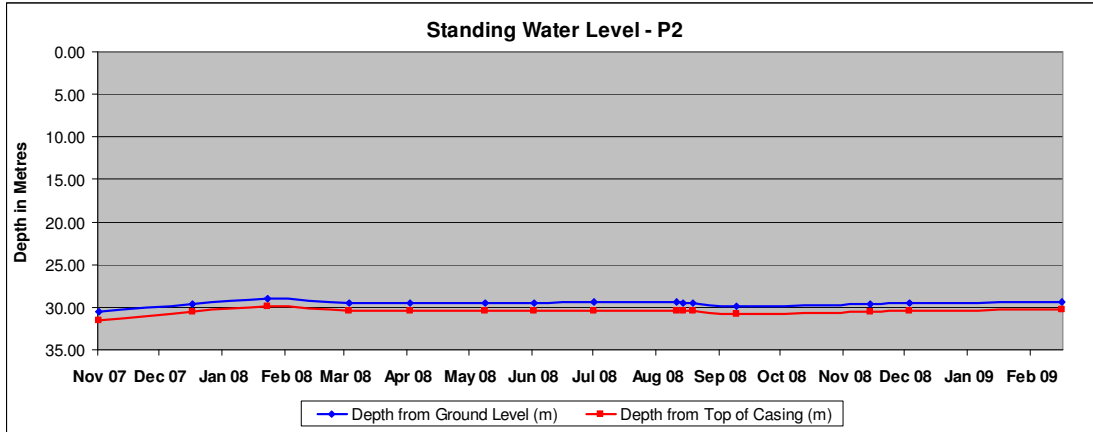


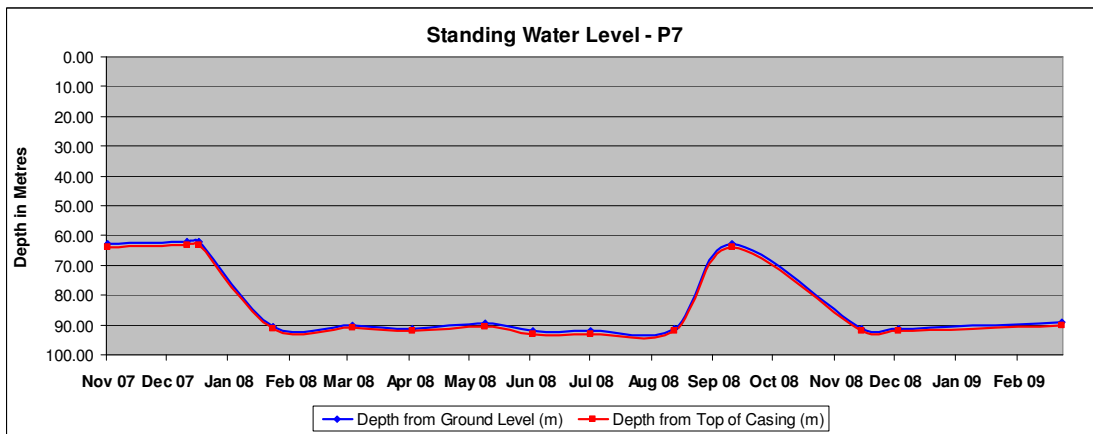
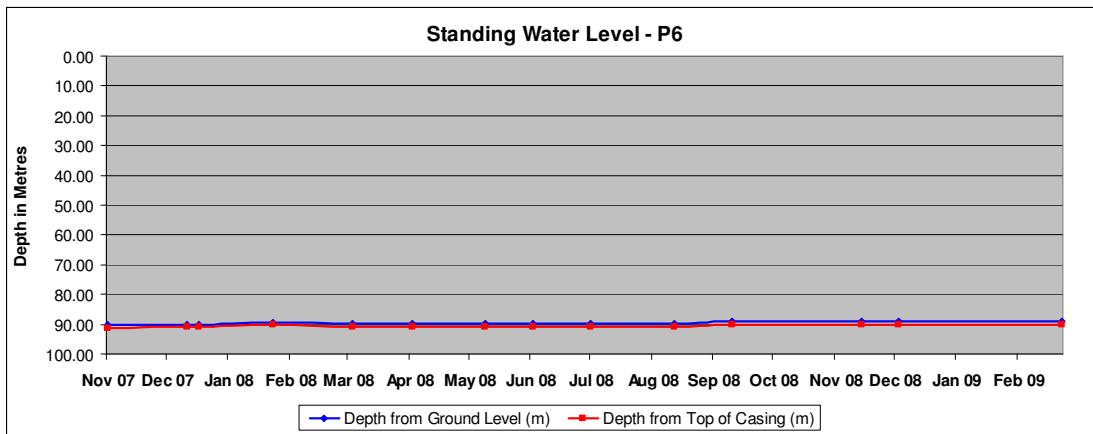
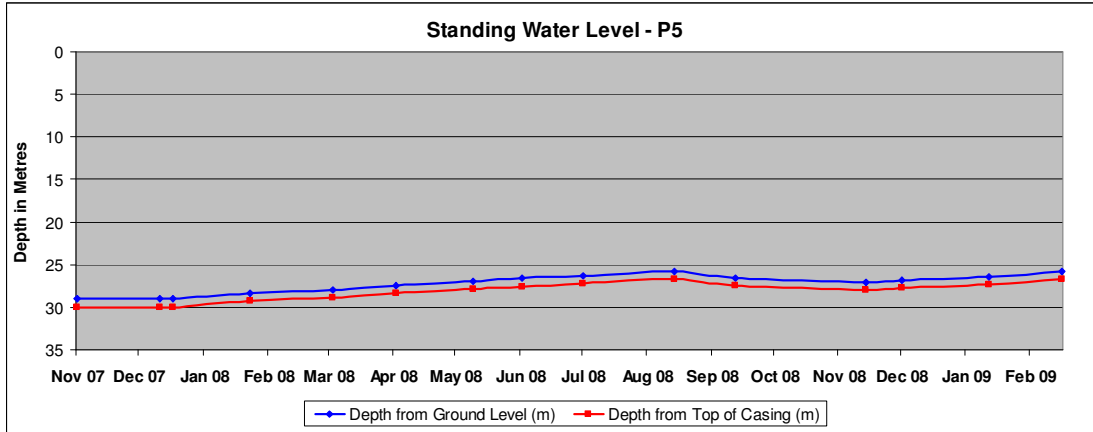


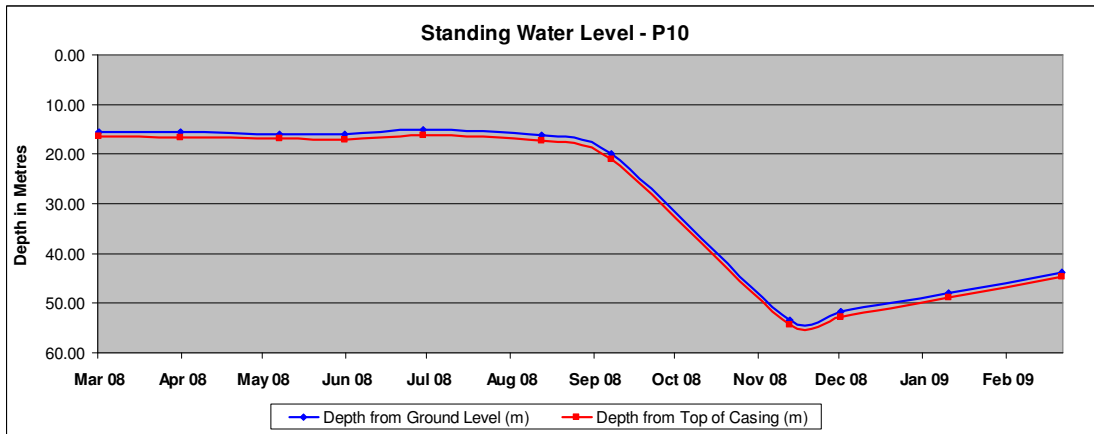
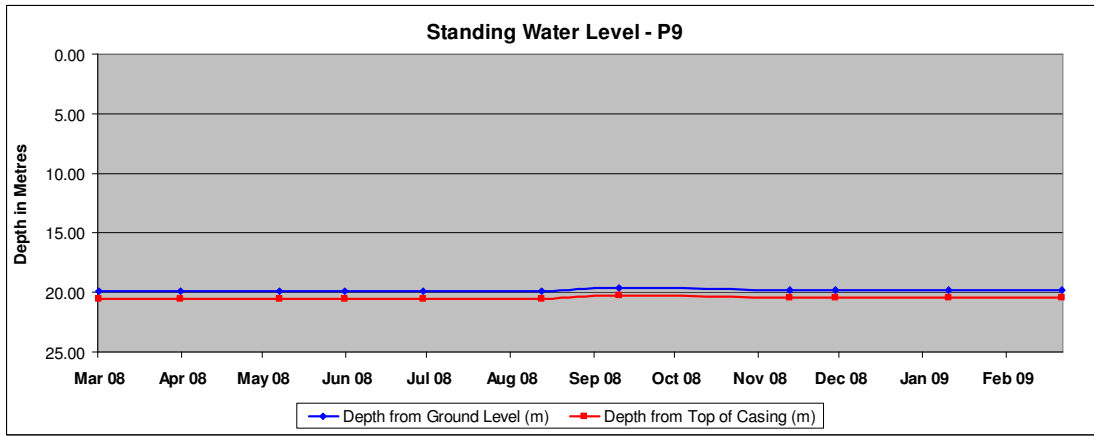
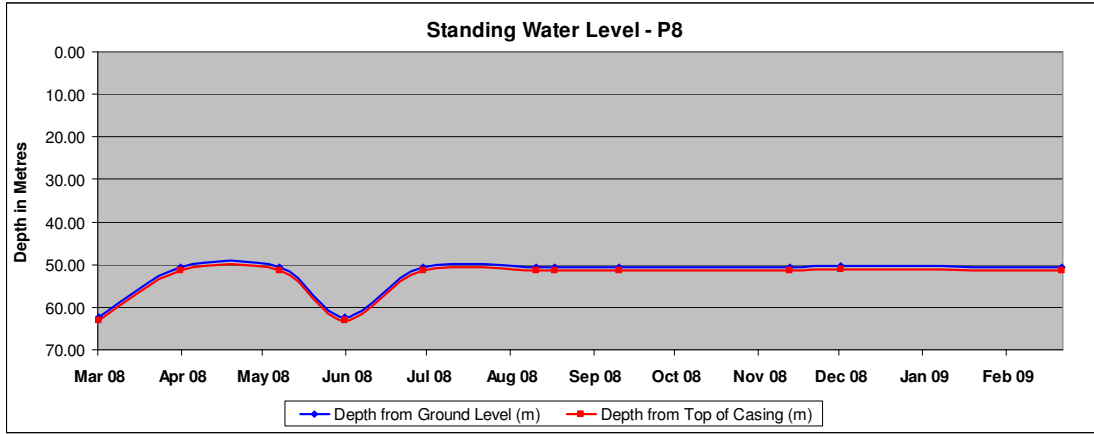
Groundwater Monitoring

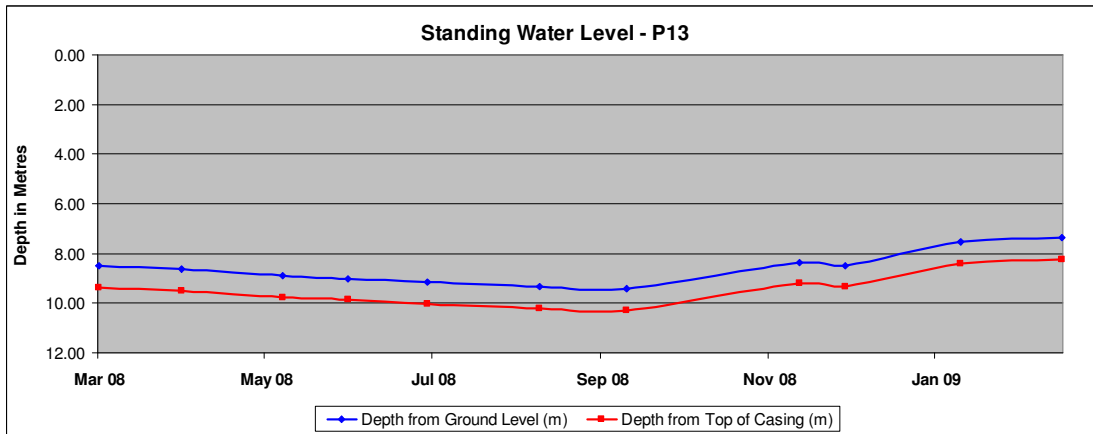
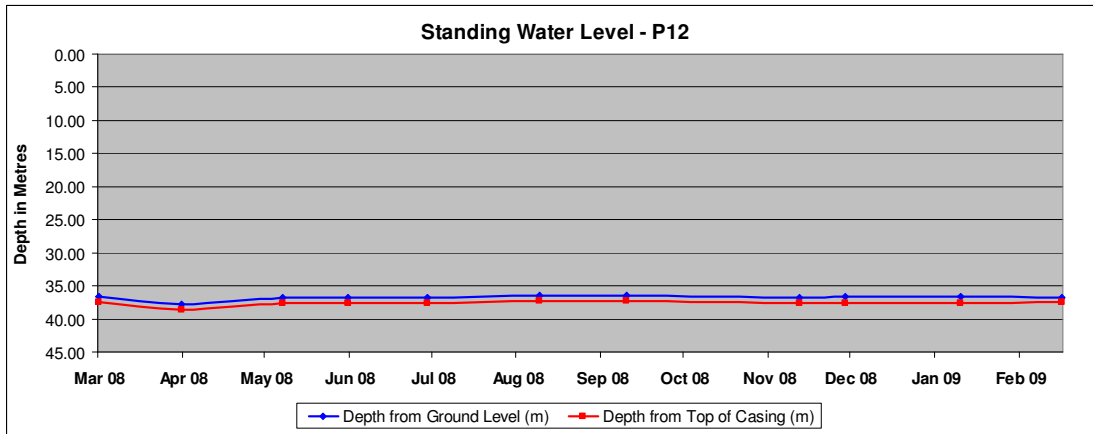
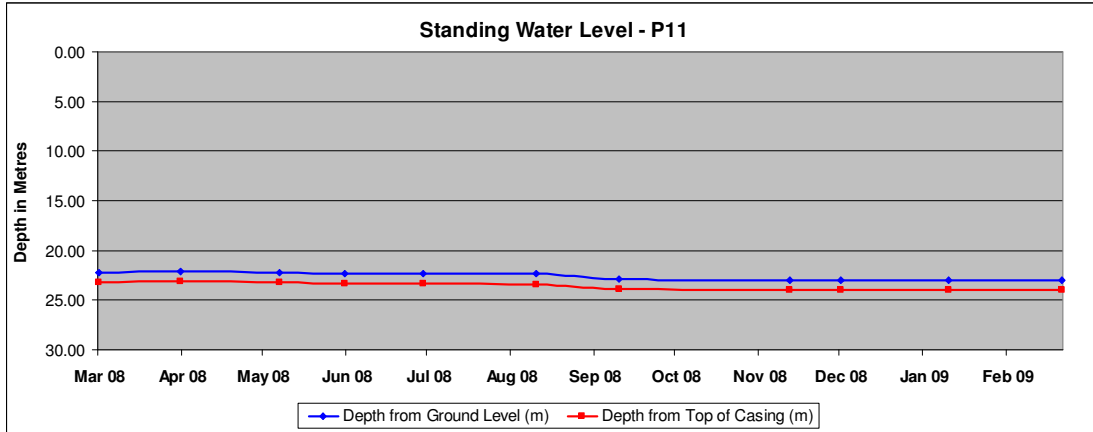
Groundwater monitoring data to date as follows:-

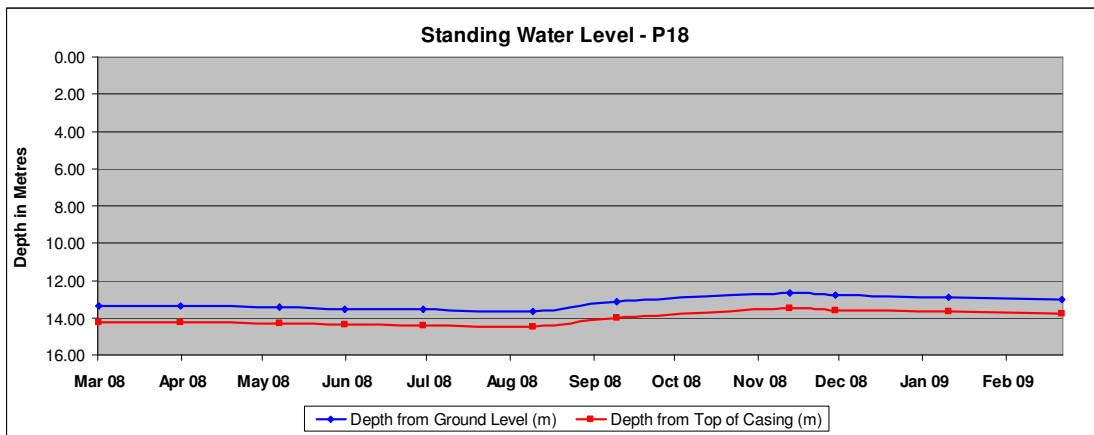
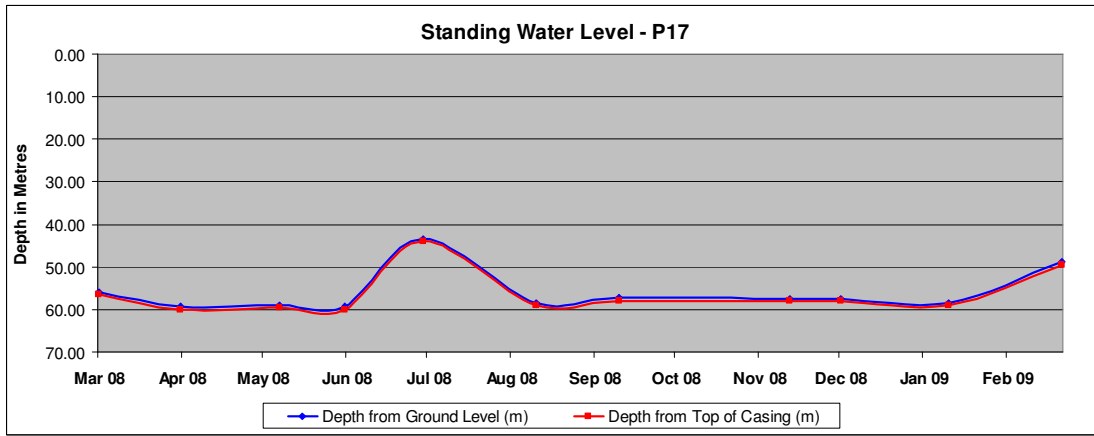
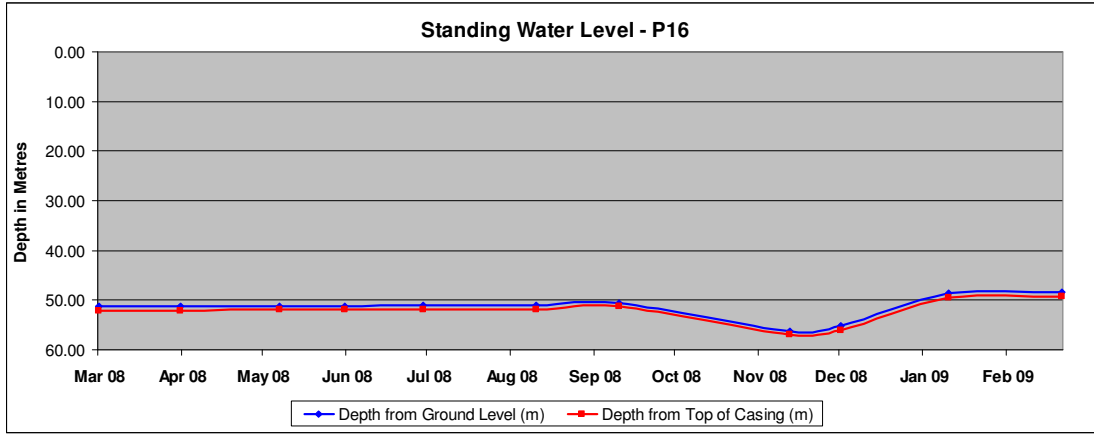


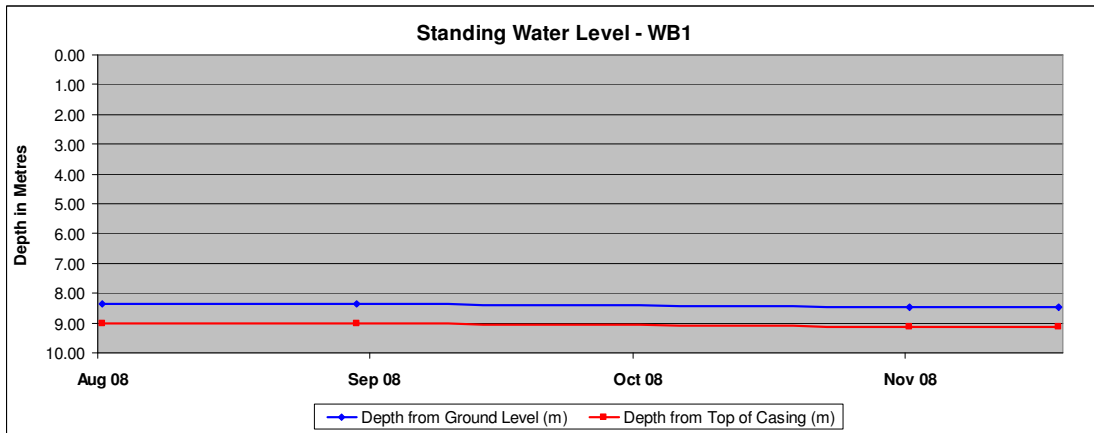
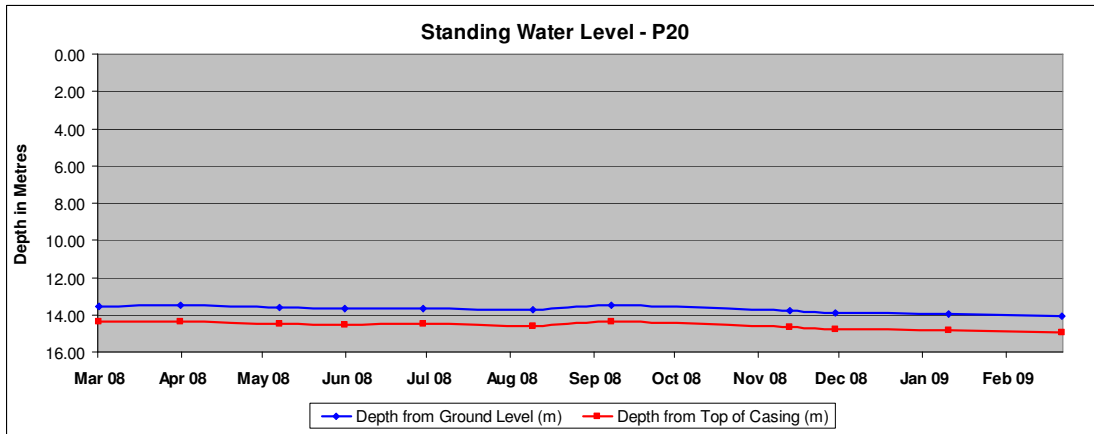
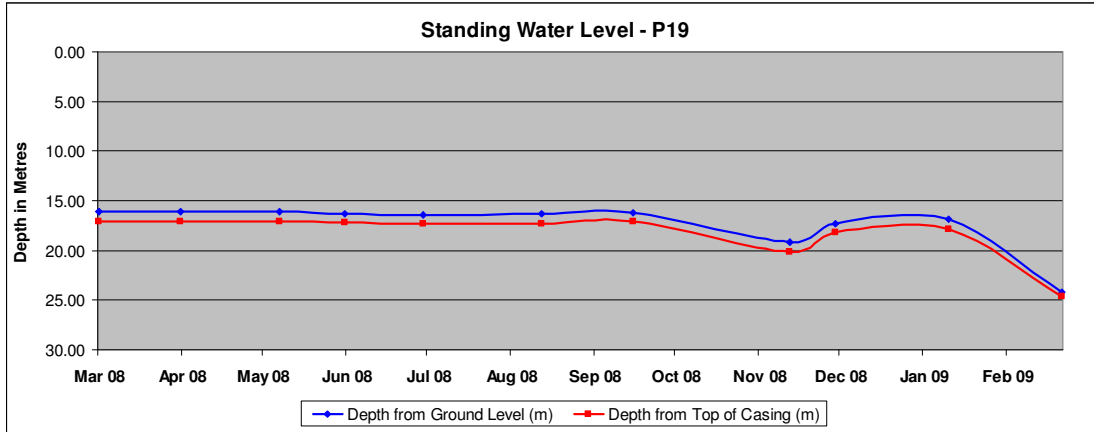


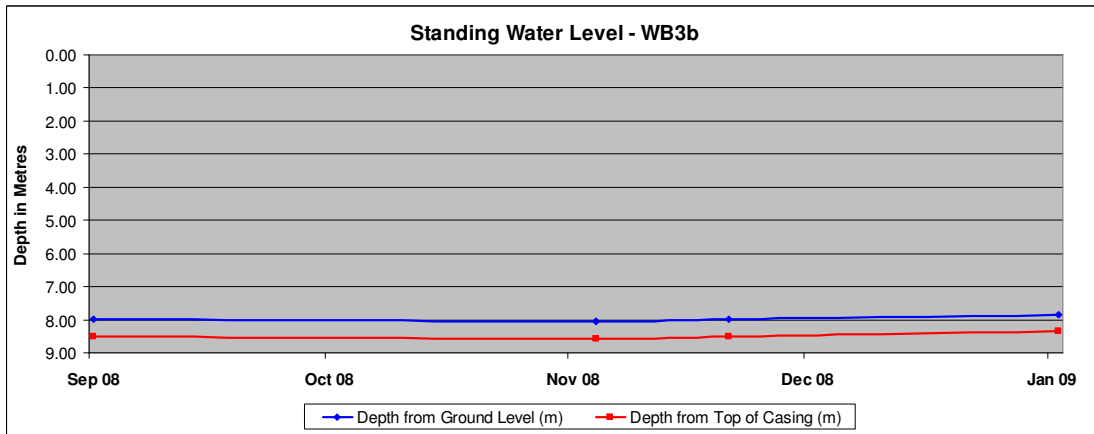
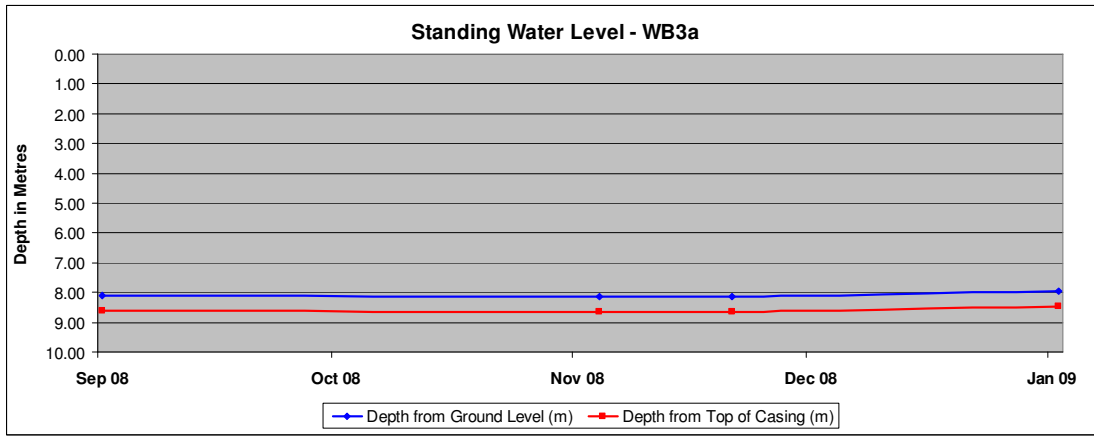
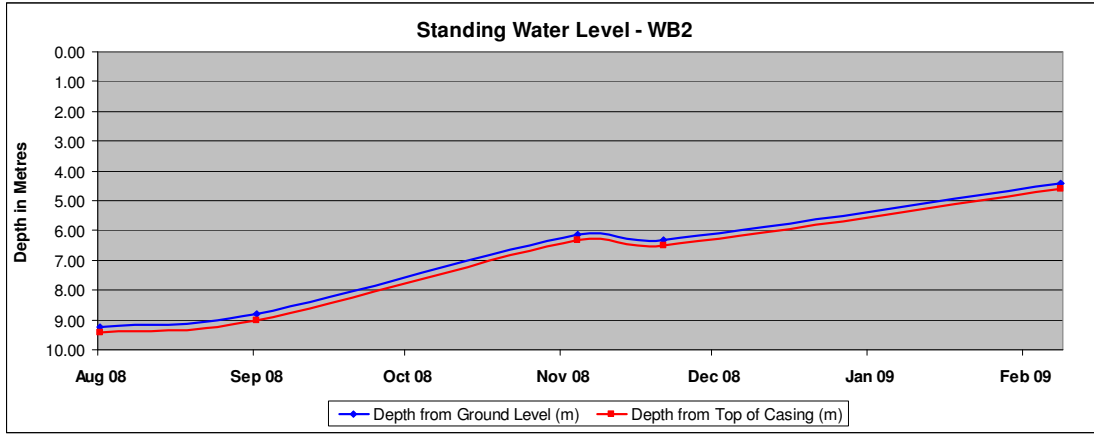


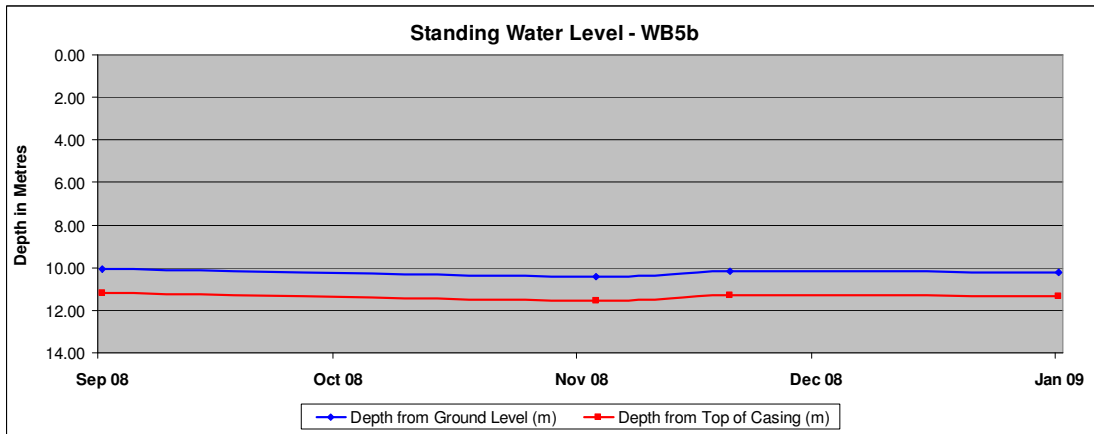
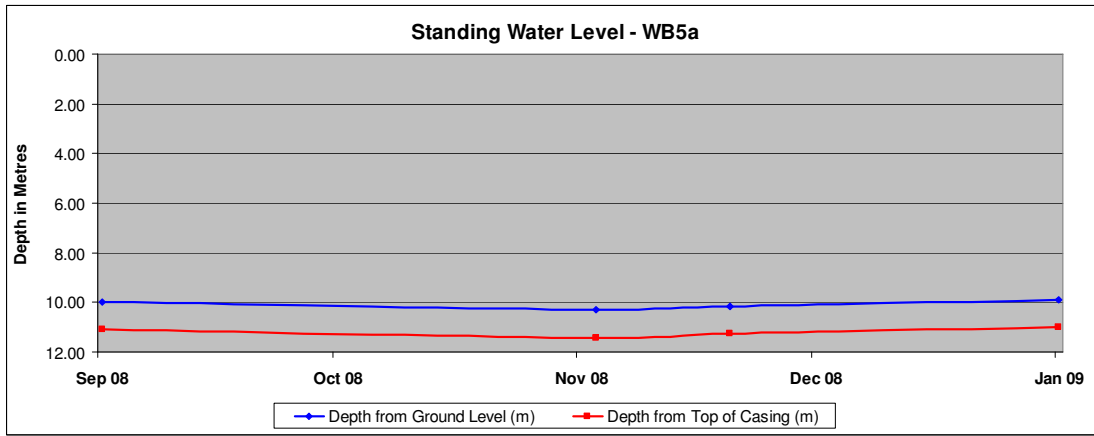
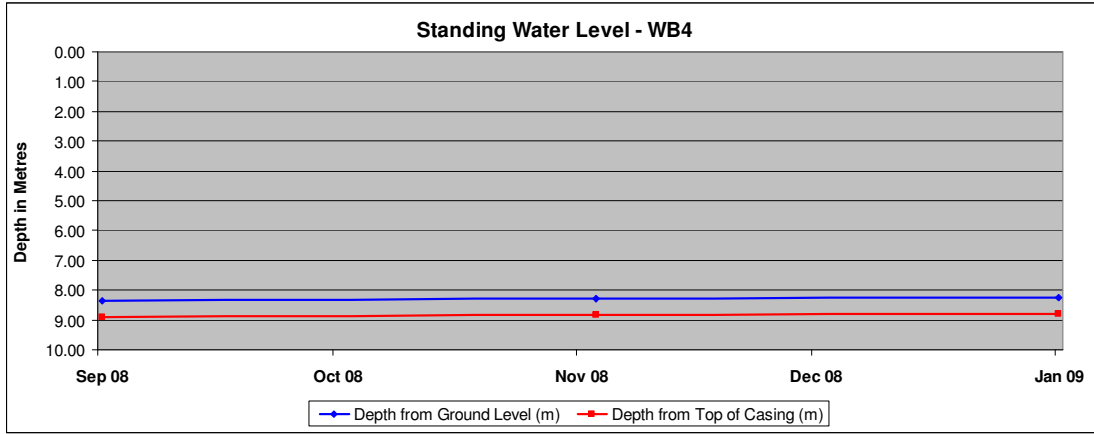


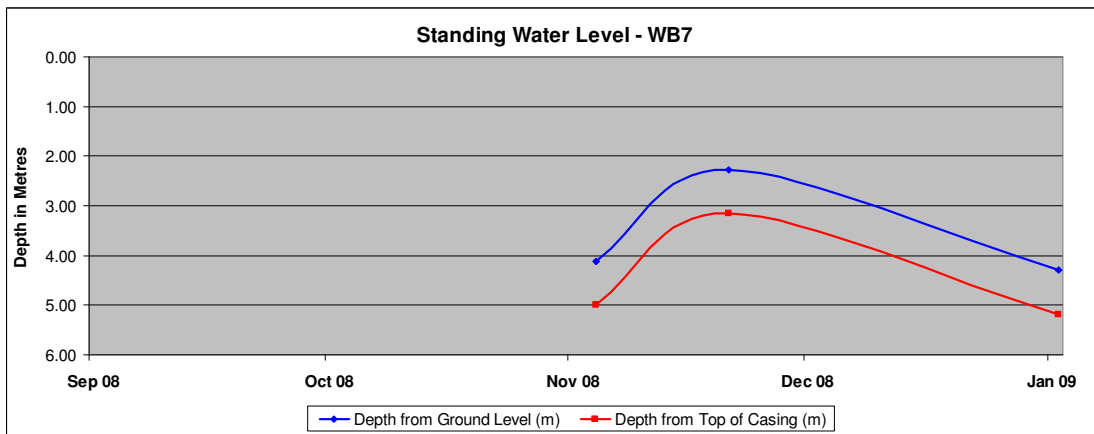
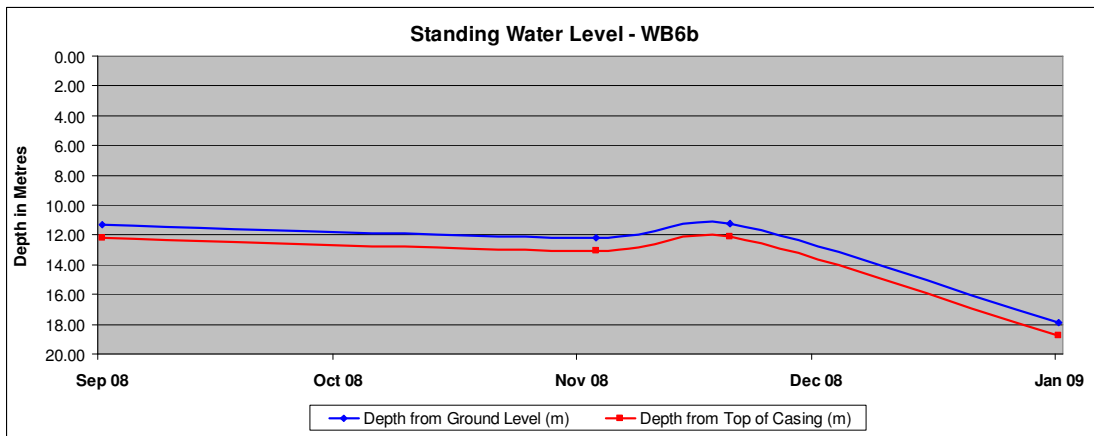
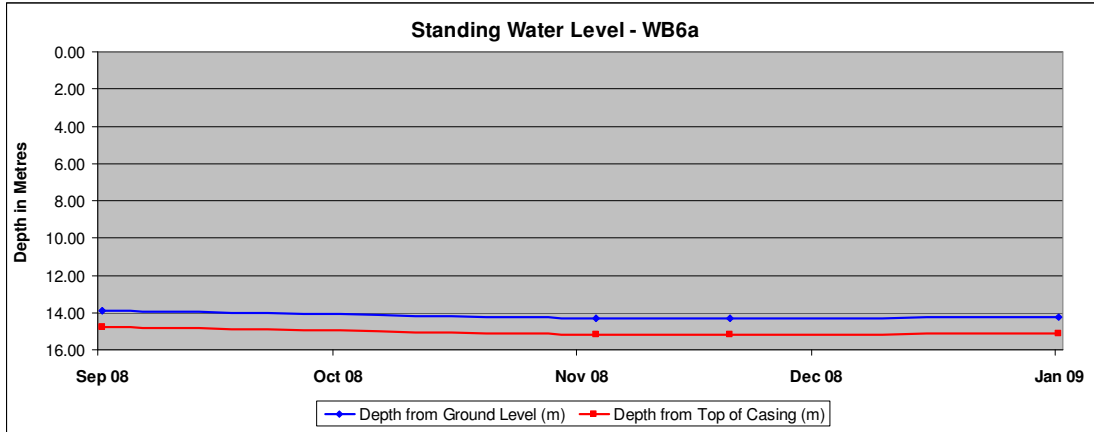












The groundwater monitoring results have not changed significantly since the last meeting. ALS Acirl is scheduled to complete the next full round of water sampling by early June. These results will be provided at the next meeting.

Surface Water Monitoring

During February, a rainfall event provided an opportunity for additional surface water sampling from the creek systems upstream and downstream of the mine site. The results are tabulated below.

Date	Time	Sample Location	pH	Electrical Conductivity (us/cm)	Total Suspended Solids (mg/L)	Grease & Oil (mg/L)
17 February 2009	1611	KCUS	7.2	280	123	<2
17 February 2009	1620	KC2US	6.7	70	14	<2
17 February 2009	1626	KCDS	6.9	180	132	<2
17 February 2009	1650	PC1	7.1	60	57	<2
17 February 2009	1708	PC	7.1	180	38	<2
17 February 2009	1720	KC1DS	7.1	145	142	<2
17 February 2009	1750	KC2DS	7.1	105	1130	<2

Narrabri Coal is still awaiting the DECC to provide approval to the licence variation application to provide locations for nominated discharge points off site, and concentration criteria for discharge waters.

Complaints

No complaints have been lodged on the complaints line since the previous meeting. However, three complaints were made directly to the Project Manager, Ben Bomford, who advised the Environmental Manager. These complaints are:

8 March 2009

Irregular grinding noise coming from the project site causing sleep disturbance. Attempts were made to try to identify noise source. Arranged for Spectrum Acoustics to undertake full noise survey from "Kurrajong" measurement point to confirm noise compliance.

15 March 2009

Irregular grinding noise coming from the project site causing sleep disturbance.

Attempts made to try to identify noise source. Arranged for Spectrum Acoustics to undertake full noise survey from "Kurrajong" measurement point to confirm noise compliance. A subsequent phone call was received from the Dept of Planning on the 16th March regarding the complainants concerns. The complainant also contacted Brian Cullen, General Manager Technical Services on the 16th March to discuss the issue.

The complainant continues to refuse access to "Kurrajong" for monitoring. At the time of the complaint, Narrabri Coal were investigating the set up of a Barn owl monitor on the Kurrajong boundary for up to 1 month to verify noise related complaints, in conjunction with ongoing attended monitoring.

22 April 2009

Mark Lennox left a non-specific message (complaint) on Ben Bomford's phone on the 22nd April. The complainant's message requested a return call by 1:00pm, and if not possible by 1:00pm to not bother contacting him. Narrabri Coal assumes the complaint related to noise as per previous complaints.

As the message was not able to be retrieved until after 1:00pm no subsequent contact was made with the complainant, as per his request.

2 May 2009

Mark Lennox contacted Ben Bomford to complain about noise over the previous 2-3 days suggesting the site was obviously doing something different to cause the level of noise experienced. On review, it was identified that there were no additional or different activities undertaken over that period. Mr Lennox contacted Ben Bomford two days later to advise the noise had ceased.

In response to these ongoing complaints, Narrabri Coal engaged Spectrum Acoustics and Sound Science to set up a real time Barn Owl Noise Monitor on the "Claremont"/"Kurrajong" boundary. This was undertaken on the 13th May 2009 and will be in place for approximately 1 month to ascertain the noise levels experienced 24hr/7days week at that location. Arrangements were made with the DECC as to means of extrapolating the data back to the "Kurrajong" residence on the basis that the landholder refuses to allow access for monitoring. DECC advised that our proposed methodology would be acceptable.

Rehabilitation

Additional seeding to cover crops has been undertaken across areas of disturbance no longer required during the surface construction works. In addition, up to 300 tree seedlings have been planted in strategic locations within the project site, particularly along drainage lines/contour banks to further enhance the surface rehabilitation works being undertaken. This will be extended further to include planting of the eastern section of the amenity bund in the near future. Prior to this work being undertaken, this section of the bund will be re-ripped given the compacted nature of the surface material.