Narrabri Coal Mine
Community Consultative Committee
Meeting #10

Environmental Monitoring Report
May 2010 – July 2010

Noise Monitoring

Attended noise monitoring was undertaken on the 23rd June 2010 to verify if noise levels were within compliance limits. The results from this monitoring are detailed in the tables below.

Noise Monitoring Results – 23 June 2010 (Day)				
Location	Time	dB(A),L_{eq}	Wind speed/ direction	Identified Noise Sources
Bow Hills	12:41 pm	44.0	1.0-1.5 m/s SE	Traffic (43), Birds (35), NCM inaudible
Naroo	11:03 am	50.0	1.0-1.5 m/s SE	Traffic (47), Birds (45), Wind (40), NCM (35)
Claremont*	11:23 am	45.0	1.0-1.5 m/s SE	Wind (41),Birds (40), Tractor (38), NCM (25)
Westhaven	11:49 am	45.0	1.0-1.5 m/s SE	Birds (42), Wind (38), NCM (34)
Greylands	12:16 pm	43.0	1.0-1.5 m/s SE	Traffic (42), Birds (35), Wind (35), NCM (33)

* Correction of 4-8dB to be subtracted from the *mine noise component only* measured at "Claremont" boundary to estimate levels at "Kurrajong".

Noise Monitoring Results – 23 June 2010 (Evening)				
Location	Time	dB(A),L_{eq}	Wind speed/ direction	Identified Noise Sources
Bow Hills	8:35 pm	43.0	1.0-1.5 m/s SE	Traffic (42), Insects (35), NCM inaudible
Naroo	8:16 pm	38.0	1.0-1.5 m/s SE	Traffic (36), Insects (31), NCM inaudible
Claremont*	7:52 pm	37.3	1.0-1.5 m/s SE	Wind (36), Pump (32), NCM inaudible
Westhaven	7:28 pm	36.0	1.0-1.5 m/s SE	NCM (34), Insects (31), Sheep (26)
Greylands	7:06 pm	41.0	1.0-1.5 m/s SE	Traffic (38), Insects (34), NCM (33)

* Correction of 4-8dB to be subtracted from the *mine noise component only* measured at "Claremont" boundary to estimate levels at "Kurrajong".

Noise Monitoring Results – 23 June 2010 (Night)				
Location	Time	dB(A),L_{eq}	Wind speed/ direction	Identified Noise Sources
Bow Hills	10:05 pm	44.0	0.5 m/s SE	Traffic (43), Insects (36), NCM inaudible
Naroo	10:23 pm	37.5	0.5 m/s SE	Traffic (35), Insects (34), NCM inaudible
Claremont*	10:46 pm	34.0	0.5 m/s SE	NCM (32), Insects (30)
Westhaven	11:18 pm	34.1	0.5 m/s SE	NCM (33), Insects (28)
Greylands	11:41 pm	38.0	0.5 m/s SE	Insects (35), Traffic (34), NCM (30)

* Correction of 4-8dB to be subtracted from the *mine noise component only* measured at "Claremont" boundary to estimate levels at "Kurrajong".

The results indicate that noise emissions from the mine were below the criterion of 35 dB(A),$L_{eq(15min)}$ at all receivers, with exception of "Naroo" day emissions where 35 dB(A) was recorded, equal to the limit.

In addition to the operational noise, the noise from the mine must not exceed 45 dB(A) $L_{1(1\ min)}$ between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. During the night time measurement circuit the $L_{1\ (1\ min)}$ noise from the mine did not exceed 45 dB(A) at any monitoring location.

Deposited Dust Monitoring

Month	ND1 Turrabaa	ND2 Claremont	ND3 Bow Hills	ND4 Matoppo	ND5 Claremont	ND6 Willarah	ND7 Claremont	ND8 Claremont
August 2009	64.4	2.2	6.2	1.5	1.6	2.3	1.5	1.4
September 2009	18.9	20.5	18.1	23.6	12.9	14.3	12.6	19.1
October 2009	8.3	4.2	4.8	2.7	2.7	0.9	2.7	4.1
November 2009	7.0	1.9	1.5	2.2	1.9	1.9	2.8	1.5
December 2009	15.4	10.3	2.3	3.1	1.9	1.9	1.7	1.8
January 2010	10.7	3.8	1.4	11.0	1.6	5.4	1.5	5.0
February 2010	5.2	1.3	1.2	2.9	1.6	2.3	0.9	2.0
March 2010	1.3	1.5	1.0	26.3	2.9	4.3	5.2	2.6
April 2010	1.4	1.0	1.4	36.1	1.4	0.8	4.5	2.1
May 2010	1.3	2.2	1.0	8.0	18.3	3.3	1.6	1.0
June 2010	1.0	1.4	4.8	16.0	7.8	2.2	3.0	1.2
July 2010	1.4	0.8	3.0	21.0	4.2	0.6	11.1	0.9
Annual Average	11.4	4.2	3.9	12.9	4.9	3.4	4.1	3.6

Deposited dust results have remained at relatively low levels since the last meeting with the exception ND4 (Matoppo), ND5 and ND7 (Claremont). ND3 (Bow Hills) slightly exceeded the 4 g/m^2/month criteria during June 2010.

ND4 at Matoppo has returned elevated dust levels since January 2010. Recent discussions with the residents have confirmed that the elevated dust results are not mine-related and that the mine does not cause any dust issues for the residents. The residents have advised that since January they have been burning materials (eg. newspapers) in a drum in close proximity to the dust gauge. The compliant result in February correlates with when the residents were on holidays. The residents have indicated that they will relocate the drum which should result in a decrease in deposited dust levels at ND4.

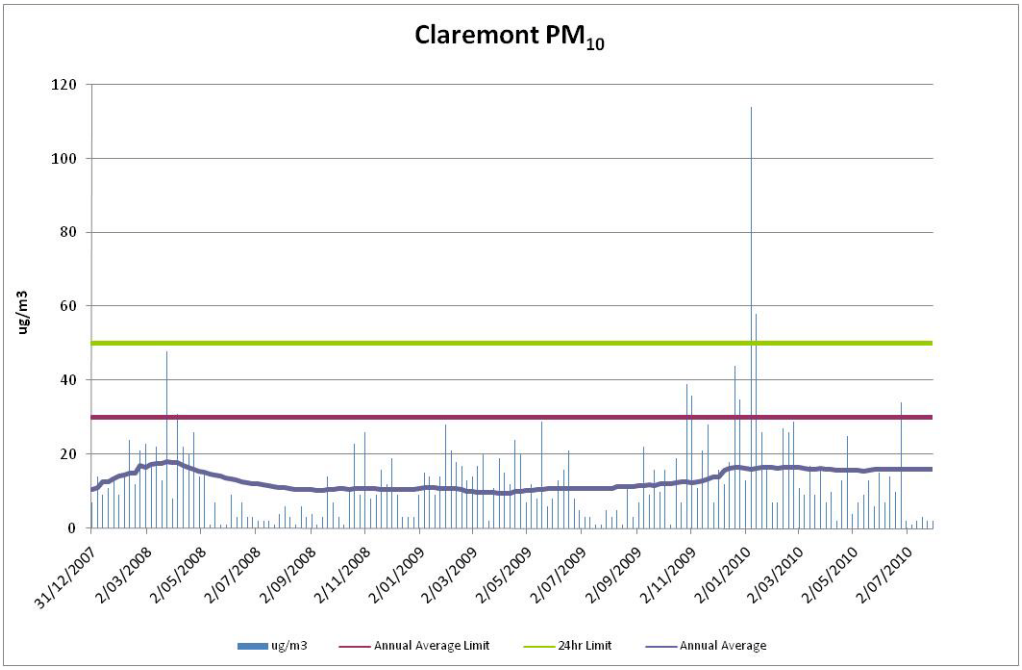
The elevated results at ND5 (Claremont) are not unexpected as the area adjacent to the monitor has also been subject to earthworks over the past three months. ND7 at Claremont recorded an elevated reading for July 2010 which is thought to be caused by construction and traffic in that area. The slightly elevated result at ND3 (Bow Hills)

is not thought to be caused by activities at the mine, based on prevailing wind directions during the month.

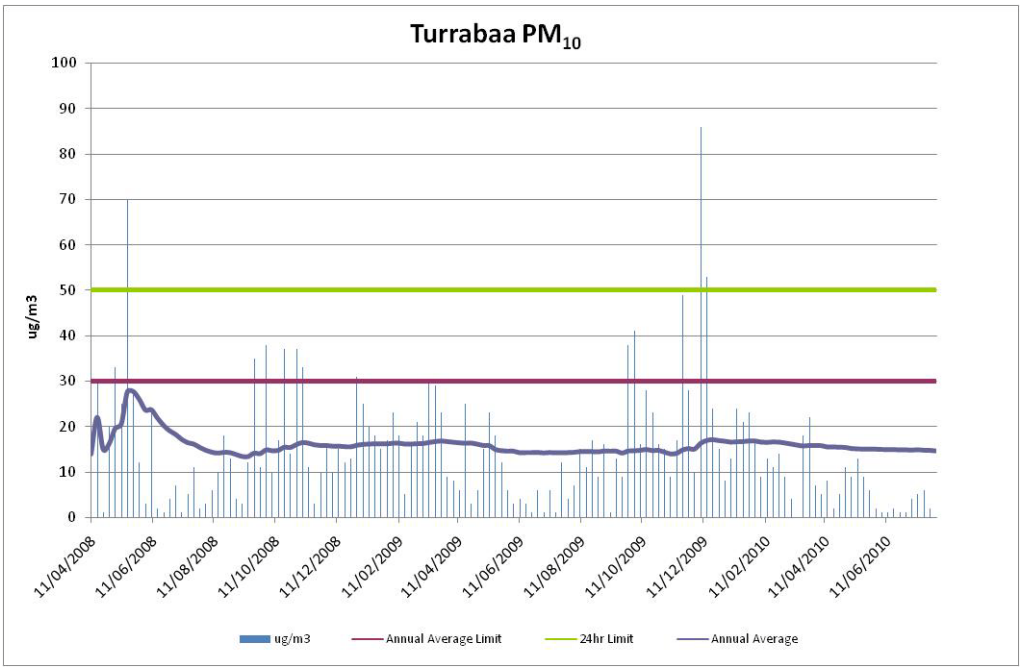
Currently, five sites (ND1, ND2, ND4, ND5 and ND7) have an annual average that exceeds the annual average criteria of 4 g/m^2/month, compared to 3 sites at the last meeting. The number of monitoring locations exceeding the annual average criteria is expected to reduce over the next three months as the elevated results in September 2009 become redundant in the annual average calculation.

High Volume Air Sampling (PM_{10})

PM_{10} measurements taken to date for the "Claremont" High Volume Air Sampler is returning a running annual average of 16.0 µg/m^3 which is well below the annual average limit of 30 µg/m^3.



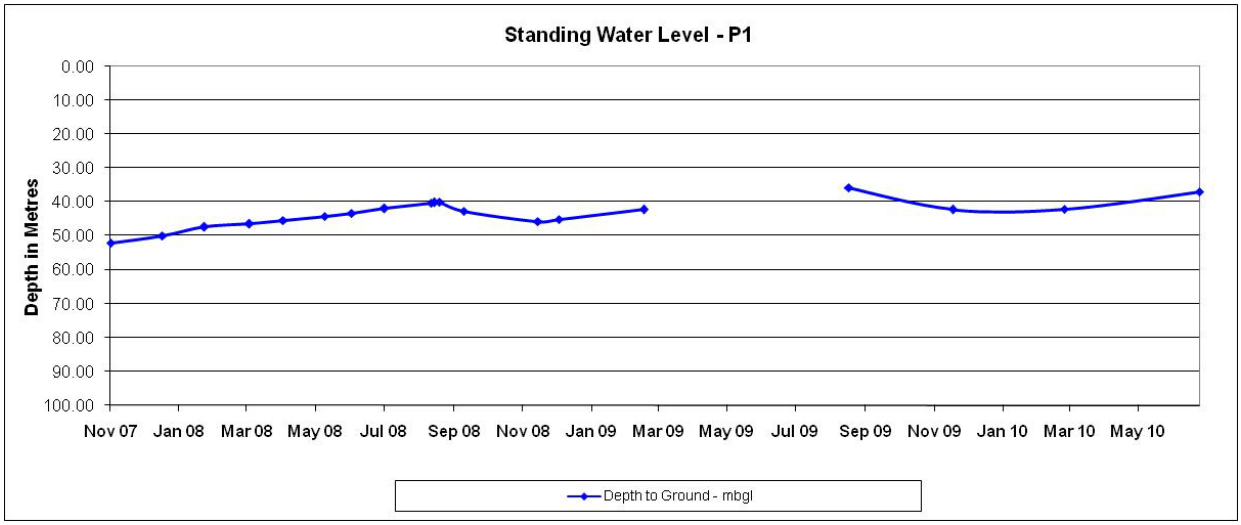
PM_{10} measurements taken to date for the "Turrabaa" High Volume Air Sampler is returning a running annual average of 14.66 µg/m^3 which is also well below the annual average limit of 30 µg/m^3.

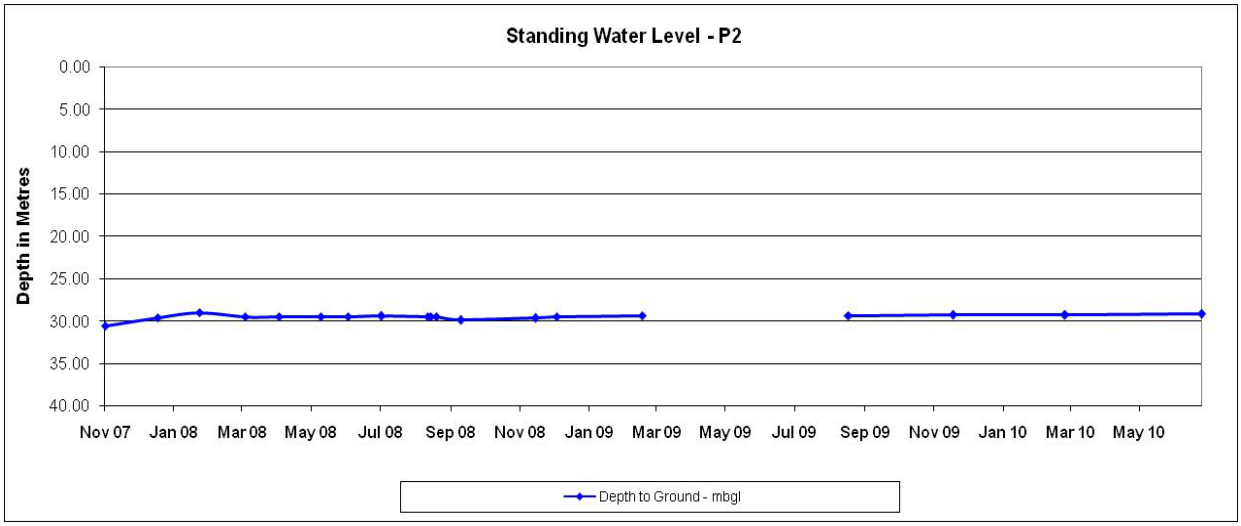


PM_{10} levels have remained compliant over the past month.

Groundwater Monitoring

The graphs below show the SWL trends at each site since monitoring commenced. In general, groundwater levels have remained relatively constant over the last 6 months with the exception of P18 and P20. These piezometers are located approximately 1.5km north-east of the surface facilities and the drop in SWL is likely associated with water extraction from the coal seam. P20 has recently been grouted and will therefore no longer be monitored. This was required as the piezometer was due to be intersected by a lateral gas drainage hole.




Standing Water Level - P2
Depth in Metres
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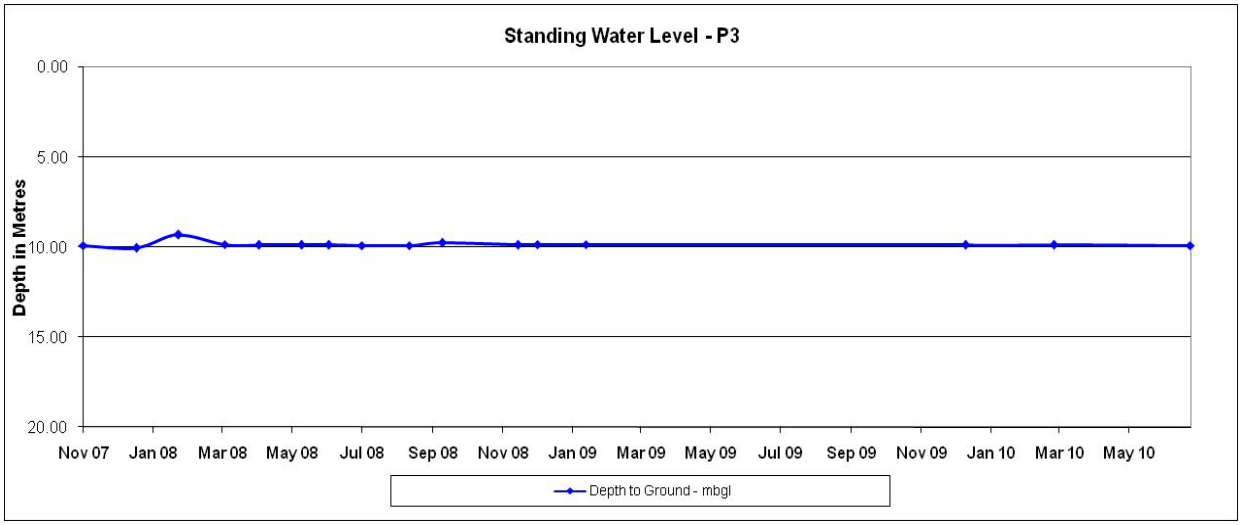
10.00
15.00
20.00
25.00
30.00
35.00
40.00
Nov 07
Jan 08
Mar 08
May 08
Jul 08
Sep 08
Nov 08
Jan 09
Mar 09
May 09
Jul 09
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P3
Depth in Metres
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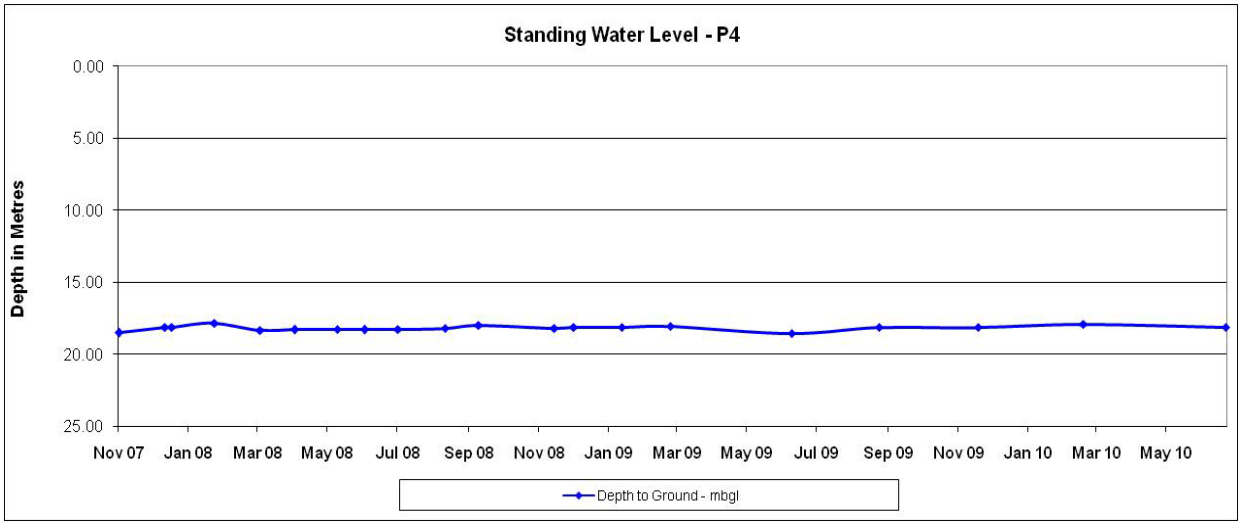
15.00
20.00
Nov 07
Jan 08
Mar 08
May 08
Jul 08
Sep 08
Nov 08
Jan 09
Mar 09
May 09
Jul 09
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P4
Depth in Metres
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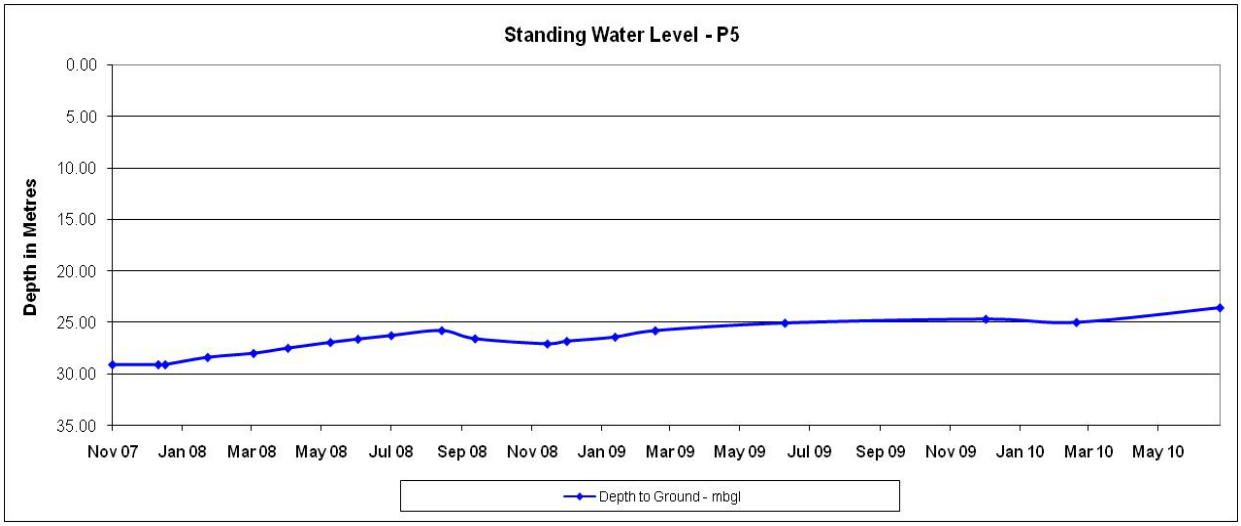
20.00
25.00
Nov 07
Jan 08
Mar 08
May 08
Jul 08
Sep 08
Nov 08
Jan 09
Mar 09
May 09
Jul 09
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P5
Depth in Metres
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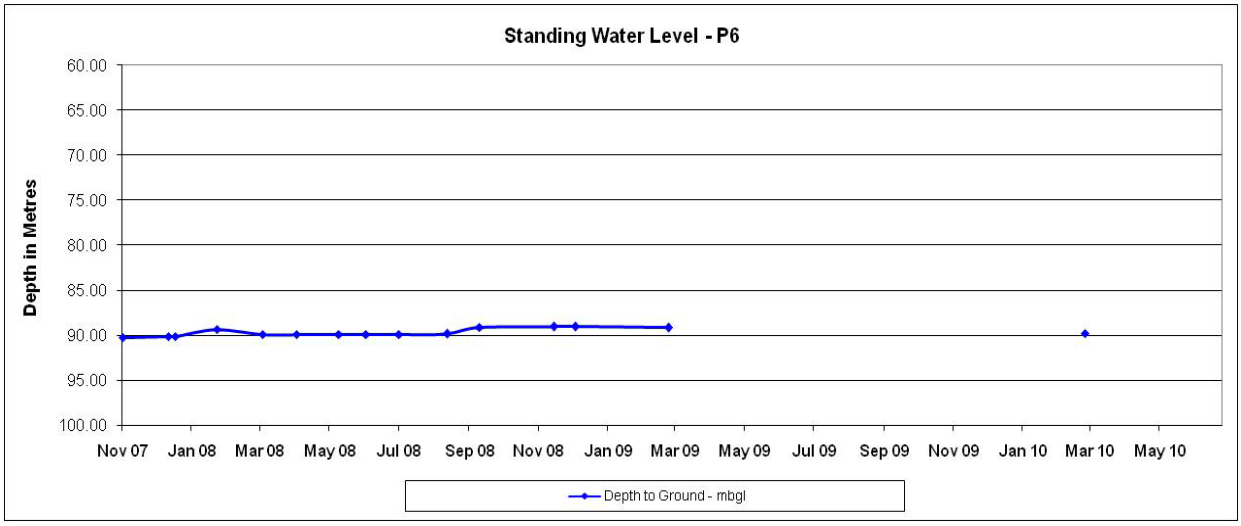
20.00
25.00
30.00
35.00
Nov 07
Jan 08
Mar 08
May 08
Jul 08
Sep 08
Nov 08
Jan 09
Mar 09
May 09
Jul 09
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P6
Depth in Metres
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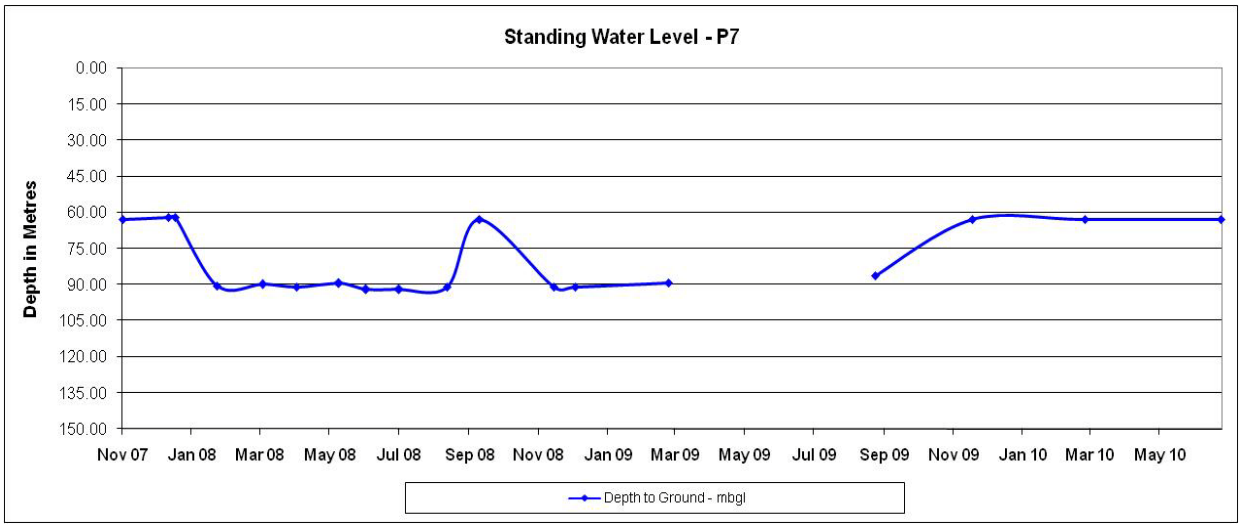
70.00
75.00
80.00
85.00
90.00
95.00
100.00
Nov 07
Jan 08
Mar 08
May 08
Jul 08
Sep 08
Nov 08
Jan 09
Mar 09
May 09
Jul 09
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl

*P6 – Dry


Standing Water Level - P7
Depth in Metres
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30.00
45.00
60.00
75.00
90.00
105.00
120.00
135.00
150.00
Nov 07
Jan 08
Mar 08
May 08
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May 09
Jul 09
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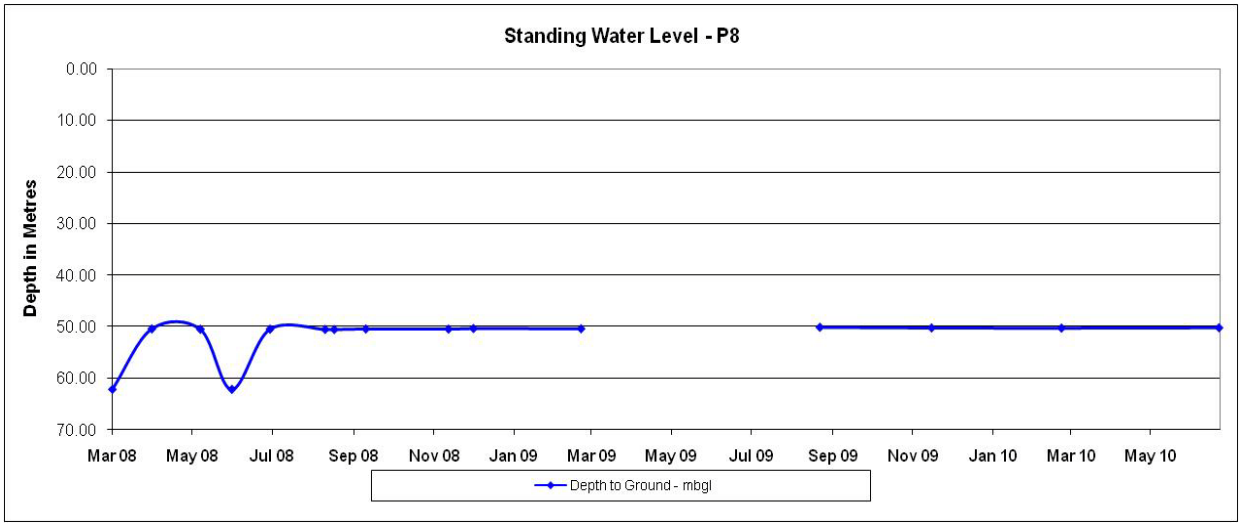
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P8
Depth in Metres
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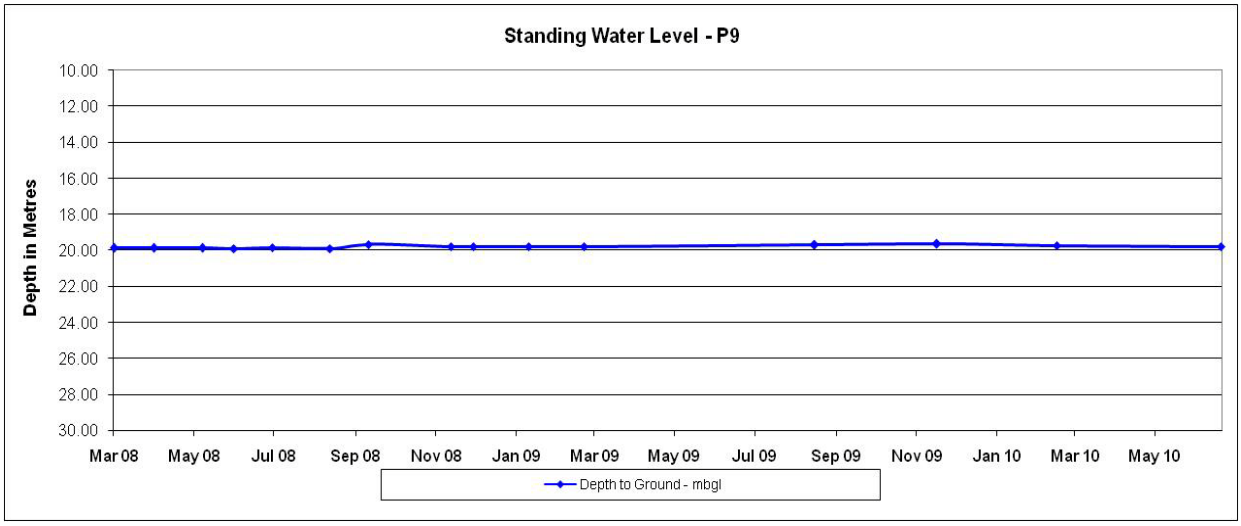
20.00
30.00
40.00
50.00
60.00
70.00
Mar 08
May 08
Jul 08
Sep 08
Nov 08
Jan 09
Mar 09
May 09
Jul 09
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P9
Depth in Metres
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12.00
14.00
16.00
18.00
20.00
22.00
24.00
26.00
28.00
30.00
Mar 08
May 08
Jul 08
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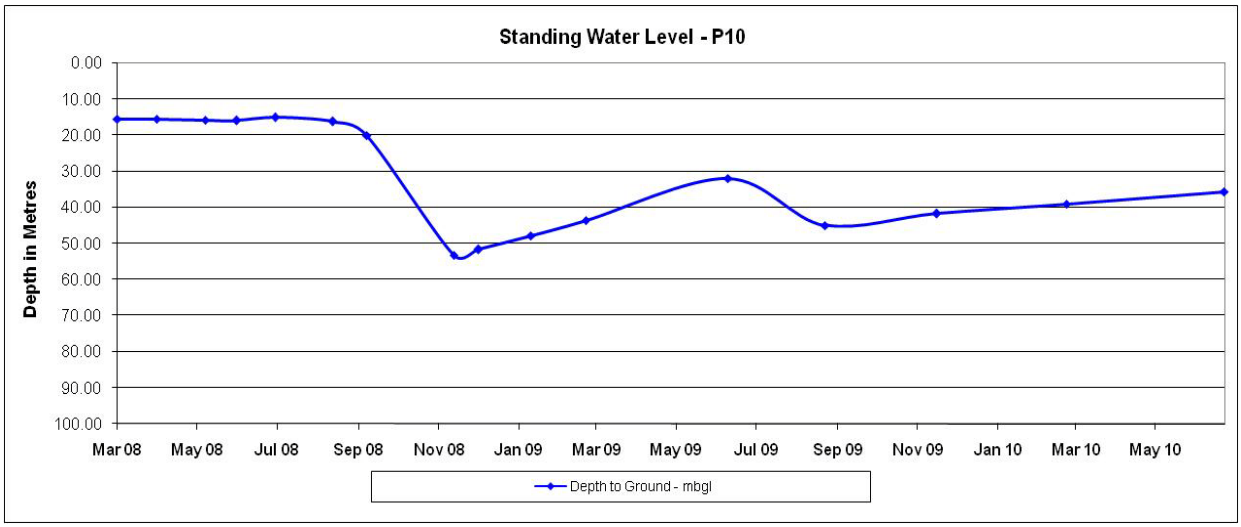
May 09
Jul 09
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P10
Depth in Metres
0.00
10.00
20.00
30.00
40.00
50.00
60.00
70.00
80.00
90.00
100.00
Mar 08
May 08
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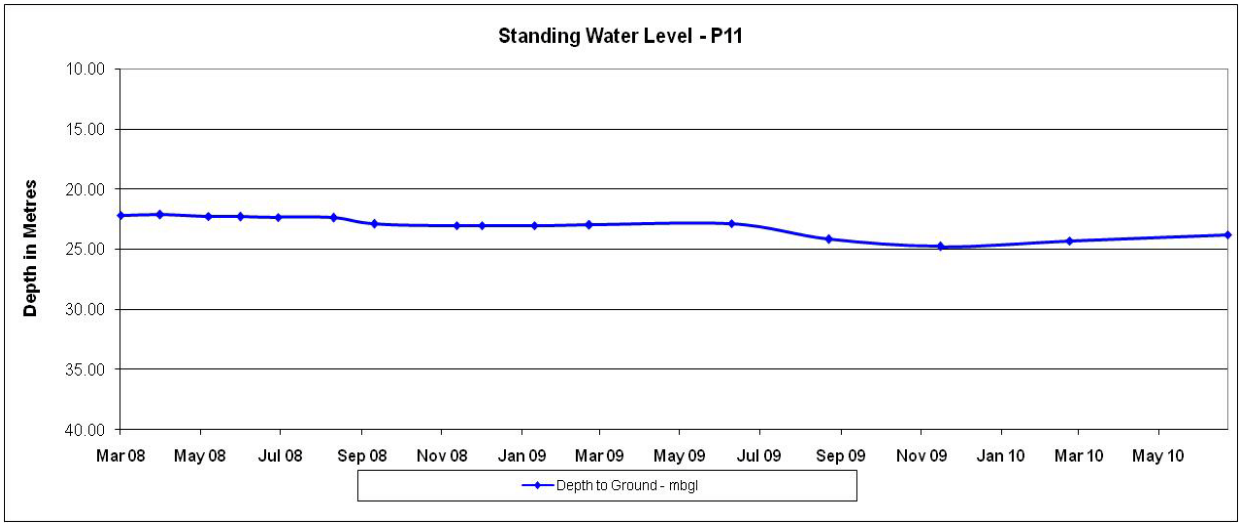
May 09
Jul 09
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P11
Depth in Metres
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15.00
20.00
25.00
30.00
35.00
40.00
Mar 08
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Sep 08
Nov 08
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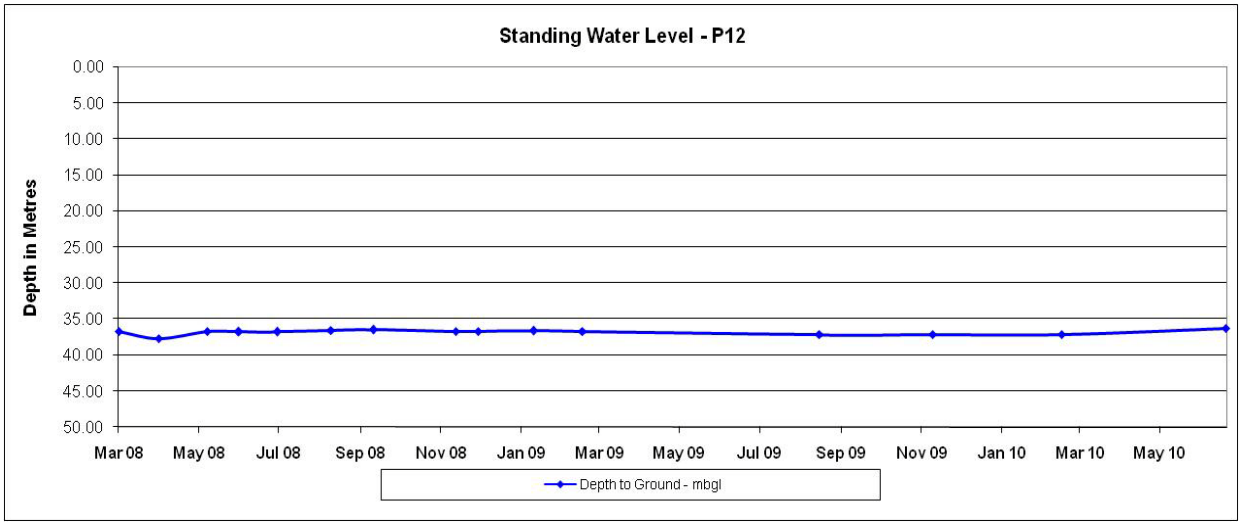
May 09
Jul 09
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P12
Depth in Metres
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10.00
15.00
20.00
25.00
30.00
35.00
40.00
45.00
50.00
Mar 08
May 08
Jul 08
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Jul 09
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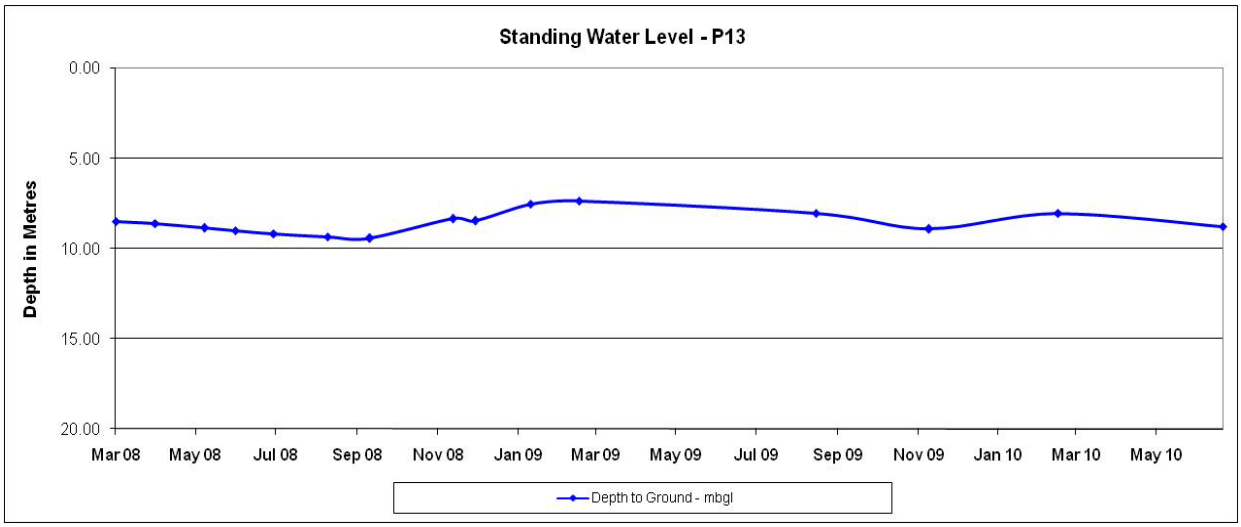
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P13
Depth in Metres
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10.00
15.00
20.00
Mar 08
May 08
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May 09
Jul 09
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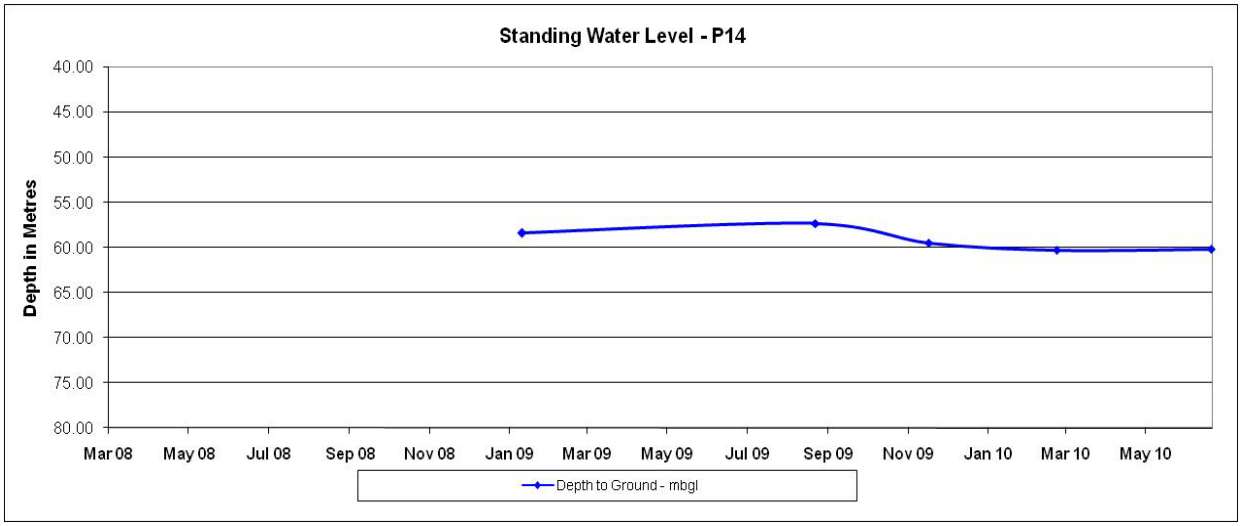
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P14
Depth in Metres
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50.00
55.00
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65.00
70.00
75.00
80.00
Mar 08
May 08
Jul 08
Sep 08
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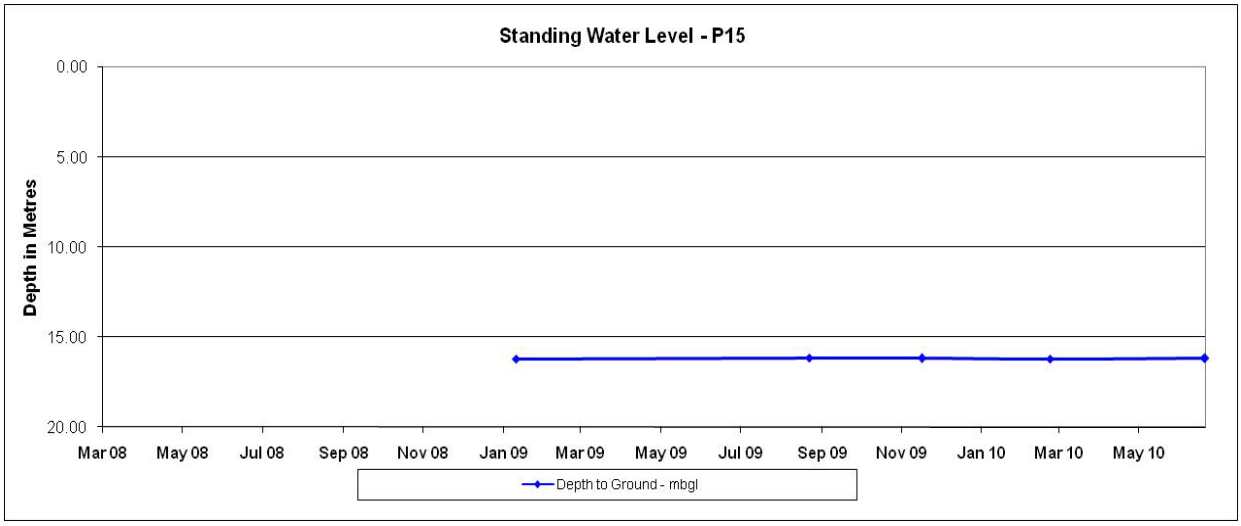
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P15
Depth in Metres
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10.00
15.00
20.00
Mar 08
May 08
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Jul 09
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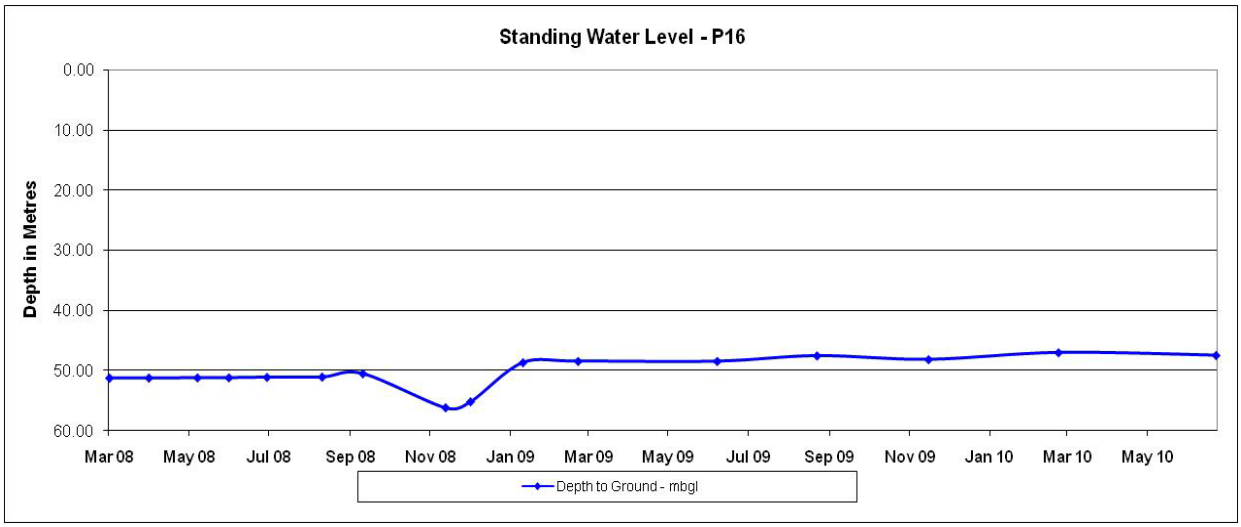
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P16
Depth in Metres
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20.00
30.00
40.00
50.00
60.00
Mar 08
May 08
Jul 08
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Nov 08
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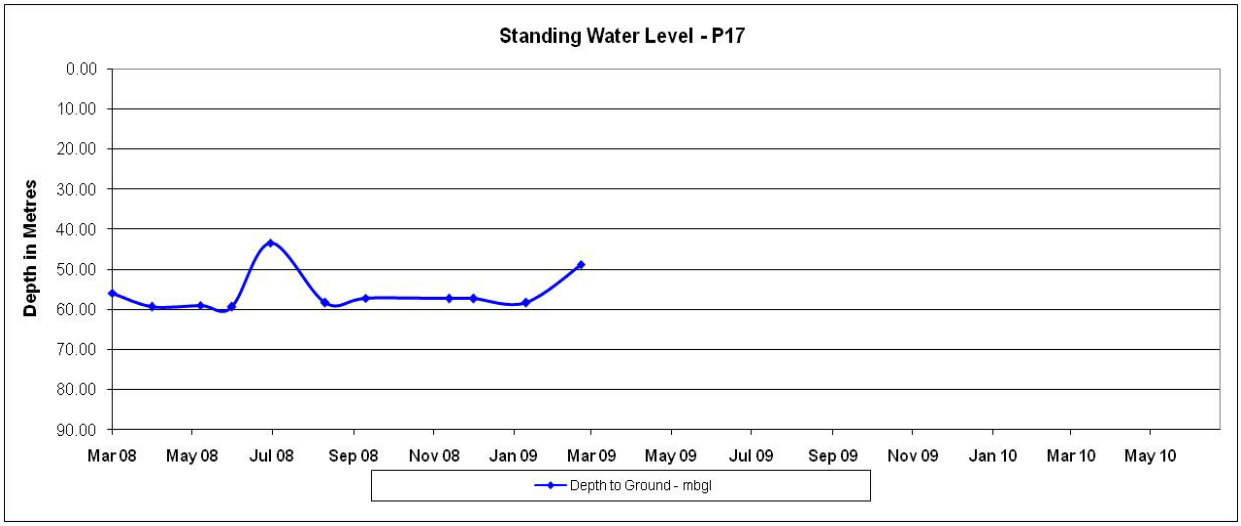
May 10
Depth to Ground - mbgl


Standing Water Level - P17
Depth in Metres
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60.00
70.00
80.00
90.00
Mar 08
May 08
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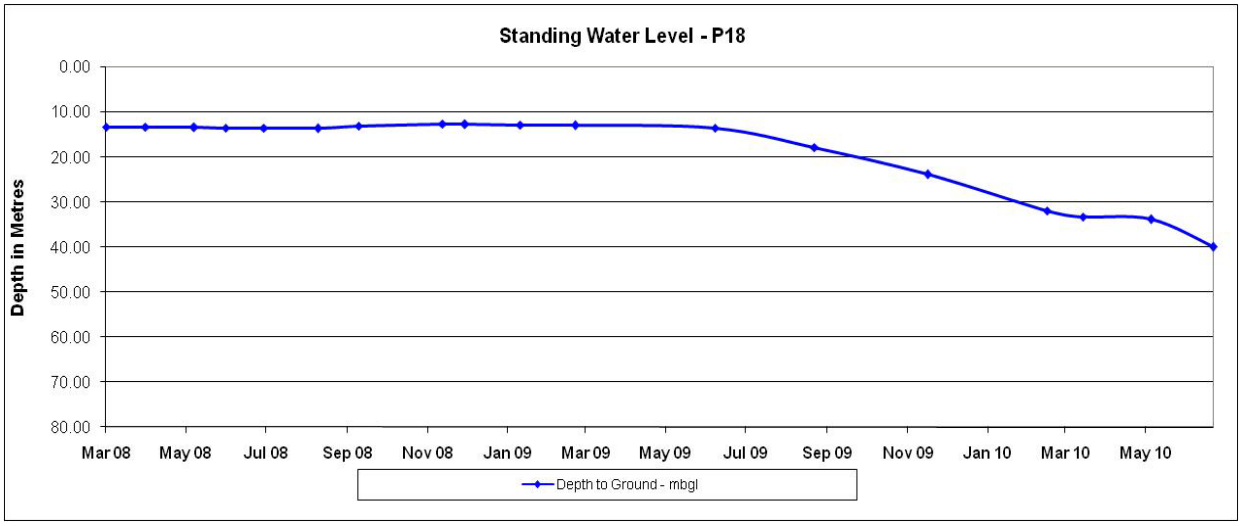
Mar 10
May 10
Depth to Ground - mbgl

*P17 - Dry


Standing Water Level - P18
Depth in Metres
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20.00
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60.00
70.00
80.00
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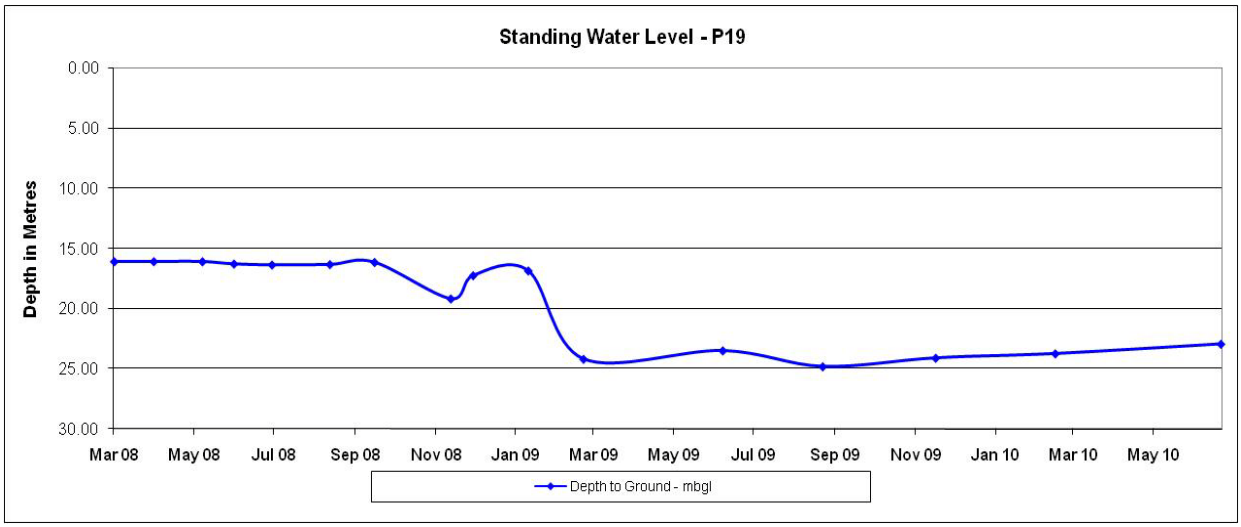
Sep 09
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl


Standing Water Level - P19
Depth in Metres
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10.00
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30.00
Mar 08
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Sep 08
Nov 08
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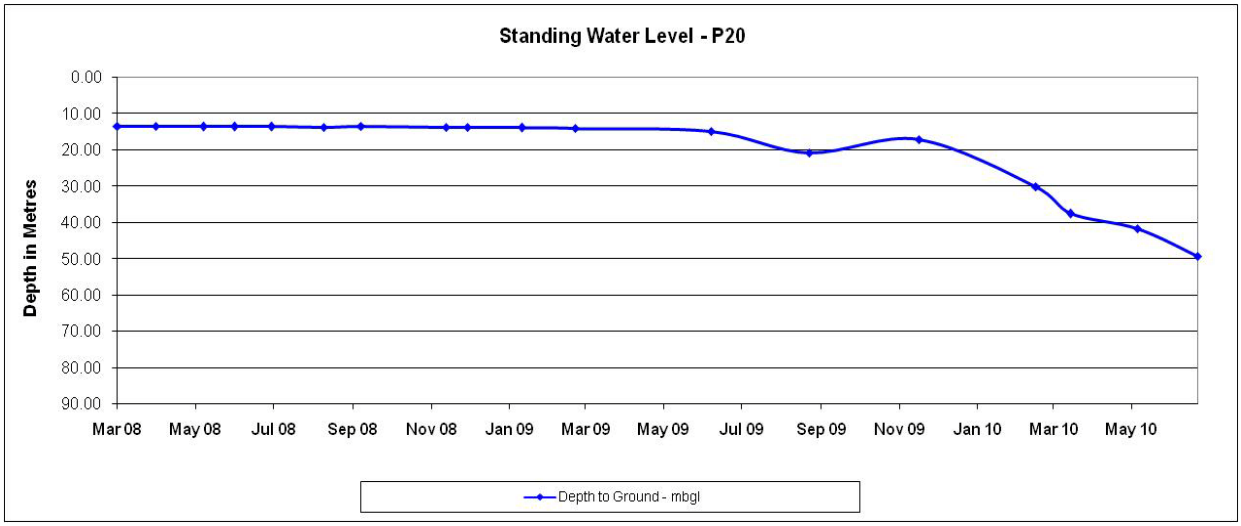
Nov 09
Jan 10
Mar 10
May 10
Depth to Ground - mbgl



Surface Water Monitoring

No wet weather discharges have occurred during the last 3 months.

Routine monitoring of onsite dams was conducted in July 2010 to obtain background water quality data. There was nothing in these results that were indicative of any change in water quality since monitoring commenced.

Complaints

No complaints have been lodged since the last CCC meeting.

Rehabilitation

The planting of tube stock in and around the amenity bund has occurred to improve the site visually.