WHITE DAM GOLD MINE

Quarterly

Compliance Report

1st January 2014 to 30th June 2014

(combining 1st and 2nd quarters)

TENEMENTS	ML 6275 MPL 95 MPL 104 ML6395 MPL 105 MPL 106 MPL 107 MPL139
MINE OWNER	Exco Operations (SA) Pty Limited and Polymetals (White Dam) Pty Limited
MINE OPERATOR	Polymetals Operations Pty Limited
Senior Site Representative (SSR)	Jason Creighton
MINE CONTRACTOR	Lucas Earthmovers Pty Limited (input ceased with completion of mining however are currently reworking heap leach pad)
REPORTING PERIOD	Ist January 2014 to 31st June 2014 (two quarters)
PEPR REFERENCE	MARP (PEPR) Version 8 – approved January 2012
REPORT DATE	8th August 2014
CONTACT PERSON	Jason Creighton – Site Supervisor Land line 07 38356200; 0438252189 JCreighton@copperchem.com.au

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1 Introduction

1.1 Project Description

The White Dam Gold Mine (the 'Mine') involves the mechanical extraction and chemical processing of ore via a dump leaching process using sodium cyanide. The operation (based on the current approved operation) is expected to ultimately produce approximately 160k ounces of gold over an approximate five and a half year operational mine life.

Construction of the mine project was completed in early 2010 with operations commencing in March 2010 and the first gold pour in April 2010. The mine had thus been operational (as at the end of the second quarter 2014) for a period of approximately 52 months. Since completion of the previous compliance report (submitted to DMITRE in March 2014) there have been minimal changes to mine operations. At present (@ July 2014), leaching of ore on the heap leach pad is continuing and is expected to continue until the economic recovery of gold (ECG) ceases. This outcome is expected to be completed in the 3rd quarter 2014. The previous intent was to cease operations at the site in the 2nd quarter 2013. Full details on proposed timing of site operations once ore leaching with a cyanide solution ceases has been detailed in the recently submitted Mine Closure Plan.

Contact details are provided below.

Exco Operations (SA) Limited

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Phone: (07) 38356212 or 0438252189 Contact: Mr Jason Creighton

White Dam Gold Mine PMB 23 via Cockburn SA 5440

Phone: 08 89194455 or 0488 089777 Contact: Gary Heitman

1.2 Location

The Mine is located to the north-east of Olary, South Australia. Broken Hill, in New South Wales, is the closest regional centre and is about 80 kilometres (km) east of the project area (refer **Figure 1**).

Figure 1: Project Area Location Map

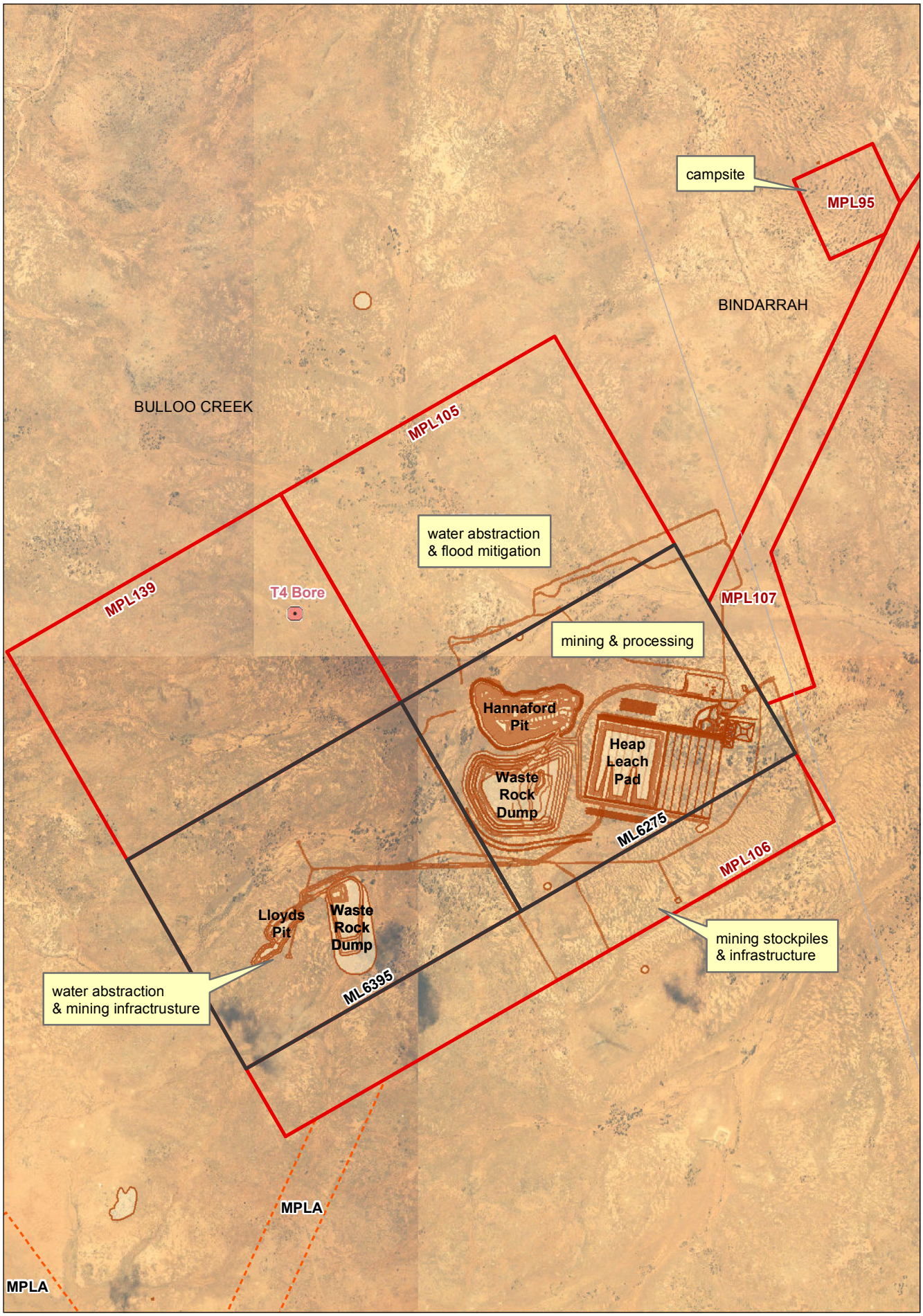
1.3 Tenements and Purpose

Table 1 below presents details of the tenements at White Dam and the purpose of each in regard to the total project while **Figure 2** shows the below tenements and the activities that have been or continue to be associated with each ML and MPL.

Table 1 Leases granted for the White Dam Project

Type[A]	Pastoral Block(s)	Name	Licence #	PIRSA Reference	Purpose(s)
ML	897 OH (Olary)	Bulloo Creek Station	ML6275	TO2435	Mining operations may be carried out for the recovery of metallic mineral ores (gold) from the area of the lease. (Current White Dam operation - contains Hannaford Pit and associated waste dump.)
MPL	656 OH	Bindarrah Station	MPL95	TO2642	For the purpose of constructing and operating an accommodation camp and associated infrastructure including communications (which may include a tower) specifically for use in association with the mining operation known as 'White Dam Gold Project' (used for White Dam Camp Site).
MPL	897 OH 656 OH	Bulloo Creek Station Bindarrah Station	MPL107	TO2644	For the purpose of constructing and operating a mine access road and services, including water pipelines, for the accommodation camp and for a possible future water supply pipeline to transport water from a remote bore field specifically for use in association with the mining (this pipeline is no longer planned to be implemented).
ML	897 OH (Olary)	Bulloo Creek Station	ML 6395 -	TO2553	Mining operations may be carried out for the recovery of metallic mineral ores (gold) from the area of the lease. (Contains Vertigo (Lloyd's) Pit and associated waste dump). Formerly for the purpose of development and operation of a groundwater bore field and associated infrastructure for use in association with the mining operation known as "White Dam Gold Project" and for the purposes of storing temporary topsoil stockpiles and addressing flood mitigation issues in relation to that Project. These former activities are still contained and undertaken within this ML (the Vertigo project area).
MPL	897 OH (Olary)	Bulloo Creek Station	MPL105	TO2560	For the purpose of development and operation of a groundwater bore field and associated infrastructure for use in association with the mining operation and for the purposes of storing temporary topsoil stockpiles and addressing flood mitigation issues in relation to the Project. Note that this area is formerly the subject of a Mining Lease Application for the proposed White Dam North Project. An application for a Retention Lease for this area may be submitted to DMITRE.
MPL	897 OH (Olary)	Bulloo Creek Station	MPL106	TO2643	For the purpose of storing temporary topsoil stockpiles, location of an explosive magazine, waste dumps, ore stockpiles, crushing and screening, dump leach pad, bore field pipelines, process ponds and related infrastructure to be used for operations specifically associated with the mining operation.
MPL	897 OH (Olary)	Bulloo Creek Station	MPL139		MPL for formerly proposed Production Bore T4. For the purpose of development and operation of a groundwater bore field

Note A: ML - Mineral Lease. MPL - Miscellaneous Purposes Lease



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POLYMETALS MINING LIMITED

0 0.25 0.5 0.75 1 Km

Projection: MGA Zone 54 (GDA 94)

Updated 5/11/12 - S Macdonald

- Pastoral Leases
- Mining lease (ML6275 and 6395)
- Misc. purposes licence (granted)
- Misc. purposes licence (appl.)
- Mine Infrastructure

Figure 2

Planned Activities on Lease Application Areas

2 Summary of Mine Operations

Table 2 provides a summary of the current mine operational parameters. This shows minimal change from the previous compliance report. **Figure 2** presents the mine plan as presented in the final approved MARP (Version 8, 20th December 2011). It should be noted that a revised MARP (now PEPR) previously lodged with DMITRE in July 2012 then addressed Closure Plan requirements. A revised draft Closure Plan was submitted to DMITRE on the 18th July 2014 and further liaison has been and will continue to be conducted with DMITRE and the EPA regarding closure standards. It has been agreed with DMITRE that the final accepted Closure Plan plus the existing approved PEPR will form the revised approved PEPR for the project.

Additional site investigations and assessments have been undertaken within this reporting period to inform the proposed closure standards and measures to be implemented. Liaison with DMITRE officers is ongoing in regard to the progress of this Closure Plan preparation.

Table 2: Mine Plan Summary

Component	Details
ML/MPL area (current approved):	906ha
Project disturbance footprint (@ June 2014)	100.97ha
Project disturbance footprint – ultimate approved	148.26ha
Mining method	Conventional open pit with truck and shovel
Mining inventory (@ June 2014)	Mining completed June 2012
Open pit dimensions (ultimate final pit)	Hannaford @ 19.42ha, Lloyd's @ 3.25ha
Open pit dimensions (@ June 2014)	Hannaford: 19.32ha, Lloyd's: 3.25ha
Mine operational life (based on current approval)	3rd quarter 2014 (possible date to commence Leach Pad flushing with water following cessation of economic recovery of gold - this is subject to on-going review and has been reported in the recently submitted draft Closure Plan
Mining rate (average)	Mining Complete
Ore handling and processing	Heap leach extraction with cyanide
Waste rock dump area and volume (ultimate)	Hannaford: 26ha (2.3Mm^3) Lloyds: 6.7ha
Waste rock dump area (@ June 2014)	Hannaford: 26ha, Lloyds: 6.7ha (ie. ultimate area reached)
Ore Mined (@end September2012-complete)	5,909,086t @ 0.95g/t
Gold production (@ end June 2014)	150,311 oz gold (total)
Operating hours	Continuous operation, 24 hours per day, 7 days per week
Raw water source and daily consumption (average)	Production bores (4 of; only 3 in use); 0.720ML/d
Potable water source	Rainwater tanks and RO plant on-site. Tanker delivery only as required
Power requirement	265 kVA average load
Workforce numbers (WDJV)	Typically 3 persons onsite with a maximum of 5 persons at any time
Operational commencement date	April 2010
Accommodation	Workforce now accommodated in Broken Hill.
Capital expenditure (@end June 2014)	$12.3M

3 Changes to Mine operations

Since completion of the previous compliance report there have been no significant changes to the day-to-day operational status and procedures conducted at the mine. Mining is complete while gold production from heap leach operation continues. The rehandling of cell 10, 11 and 12 was completed and irrigation reinstated during the second quarter. There are no plans for any further rehandling of the leach pad at this stage. There has been no change to the method of leaching and gold recovery procedures since the previous report and there is no change to the current pad footprint.

4 Ore Reserves and Mine Life

4.1 Resource Estimate and Pit Design

Hannaford Pit

Mining at Hannaford Pit is complete. The resource mined was as follows:

- Total ultimate volume of pit: 4.91 Mm^3
- Volume of overburden/interburden: 2.14 Mm^3
- Ore comprising oxide ore: 2.13 Mm^3.
- Pit Elevation (to base): 64m bgl.

Lloyd's Pit (in Vertigo project area)

Mining in Lloyds Pit is complete. The resource mined was as follows:

- Total ultimate volume of pit: 0.56Mm^3
- Volume of overburden/interburden: 0.42Mm^3
- Ore comprising oxide ore: 0.14Mm^3
- Pit Elevation (to base): 36m bgl.

The cut-off grade for both pits was 0.15 g/t.

Based on the above, the following describes total volumes mined over the life of the two pits.

- Total cumulative pit volume: 5.47Mm^3
- Volume of waste stockpiled:2.34M BCM (5.85Mt)
- Strip ratio : 1:1.3 (Hannaford) and 1:3 (Vertigo)
- Gold recovery from heap leach: 80%
- Gold produced to date (@ June 2014): 150,311 oz

5 Activities during Reporting Period

The following presents a description of the activities undertaken in the tenements during the reporting period.

5.1 Construction

No new construction has occurred in this quarter.

5.2 Mining and Operations

No further mining has occurred in the reporting period (both pits complete- refer Sections 4.1 and 5.3). Included in the current overall site operations process is the running of the gold recovery plant, associated ponds and production water bores. The gold recovery process has continued essentially unchanged from the previous reporting period with further reworking of the ore currently placed in cells on the pad undertaken (refer Section 3). All earthworks associated with this reworking is fully contained within the pad perimeter bunding.

5.3 Mining Details

Mining of all White Dam ore was performed by conventional drill and blast, and load and haul techniques. This was performed on the basis of two stages. Both stages are now complete. No new mining has occurred during the reporting period.

Hannaford Pit

Mining of Stage 2 commenced in May 2010 and was completed in January 2012. Vertical development involved the progressive extraction of rock in a north – south orientation, and down dip within the confines of the final pit.

Vertigo Deposit (Lloyds Pit)

Lloyd's pit was commenced in January 2012 and completed in June 2012. Mining methods were similar to those used within the Hannaford Pit.

5.4 Other

Other activities included:

- Stakeholder liaison and consultation, primarily with representatives from DMITRE and the EPA regarding closure procedures and compliance. Three site visits by DMITRE personnel were undertaken in the reporting period, again primarily related to mine closure matters;
- Ongoing pit stability monitoring
- Regional and site monitoring and production bore sampling
- Site monitoring in regard to weeds and erosion.

6 Proposed Activities during next reporting period

A description of the activities proposed to be conducted in the coming reporting period (ie July to September 2014) is presented below.

6.1 Construction

No construction works are proposed during the next reporting period. Construction works at the site are essentially complete.

6.2 Mining and Operations

Mining has been completed. Gold recovery via the heap leach pad and process plant will continue in this period. Leaching with cyanide is currently expected to continue to up to the 3rd quarter 2014 however this timing to completion is uncertain as it will depend on the economic gold recovery from

the leach pad. Once the economic gold recovery limit is reached (this will depend on operational and economic factors) then irrigation of the pad with a cyanide solution will cease. Irrigation with raw water will then commence until such time as residual cyanide runoff concentrations (as defined in the PEPR and associated Closure Plan once approved) are in compliance. The duration of this water irrigation is uncertain as it will depend on the effectiveness of the leaching procedure on a temporal basis and the agreed final compliance standard for WAD cyanide in runoff from the pad.

Revisions to the proposed mine closure arrangement include the intent to divert HLP runoff (once ECG and associated flushing with a cyanide solution is complete) to the pit have been described in the recently submitted Closure Plan. This has been the subject of detailed investigations and has included the engagement of an independent consultancy to evaluate the environmental risks associated with this approach. The draft plan has indicated that this approach is likely to present an acceptable level of risk and is believed to provide the optimal solution in achieving sustainable mine closure outcomes.

6.3 Other

Other activities at the site will include the following:

- Ongoing monitoring of Hannaford pit stability;
- Monitoring of rehabilitation effectiveness on the WRDs and other rehabilitated areas with maintenance/ rectification as required;
- Ongoing sampling of offsite regional groundwater bores and onsite monitoring bores. This is conducted on a quarterly basis.
- Ongoing monitoring of surface water sites as applicable (i.e. after significant rain and runoff events as defined in the current MARP/PEPR).

All proposed monitoring activities to be undertaken following cessation of cyanide irrigation are described in the draft Closure Plan.

6.4 Disturbance areas

Information about the areas on the mining tenements that have been disturbed by mining operations and the rehabilitation status of each area is provided below in **Table 3**.

Table 3: Operations Summary

Component	Original Planned areas of disturbance- 2007	Revised Area of disturbance - total planned area	Area Disturbed @ December 2013	Area Disturbed @ June 2014
Domain 1 Infrastructure Areas				
Process Plant area	0.1	0.1	0.1	0.1
Workshop and laydown area	1	1	1	1
Access roads, camp road and haul roads	13.95	21.67	14	14[1]
Hardstand and laydown area (remote from main workshop incl contractor)	1	4.0	4.0	4.0[2]
Accommodation Village	0.4	0.4	0.4	0.4[3]
Domain 2 Heap Leach pad and ponds				
heap leach pad	48.9	27.5	20.2	20.2
process ponds	12.98	1.9	1.9	1.9
Domain 3 Waste Dump				
waste dump(s)	35.7	32.7	32.7 (including Lloyd's)	32.7[4]
Domain 4 Active Mine and Voids				
Pit(s)	15.3	22.67	22.67 (including Lloyd's)	22.67
Creek diversion	0.68	2.5	2.5	2.5[5]
Levee	2.4	1.5	1.5	1.5[6]
TOTAL	**132.41**	**115.94**	**100.97**	**100.97**

7 Rehabilitation activities

Table 4 compares the area disturbed in the preceding reporting period and the actual area disturbed up to the end of this reporting period. There has been no change since the previous reporting period with the exception of the proposed repositioning of the diversion bund which is currently planned to be undertaken in 2015 as well as the connecting channels and pipework between the HLP and the Hannaford Pit to be implemented as part of the diversion of HLP seepage to this pit. The table also indicates the area of rehabilitation for each of these reporting periods. The areas required for the leach pad (based on ore volumes from the Hannaford and Lloyd's pit) are significantly lower than the current approved area. The actual process pond area is also substantially lower than the original

[1] Estimate
[2] Earthmoving contractors area rehabilitated with all facilities removed – compliance to be confirmed
[3] Accommodation village incl. WWTP decommissioned but infrastructure yet to be removed
[4] Refer text re area of reshaping and rehabilitation for WRDs; very minor additional area to be shaped
[5] Refer text regarding proposed relocation of diversion bund
[6] Note that the proposed diversion of HLP runoff to pit with closure will show a minor change to this final figure

planned area. During the reporting period, activities were focused on ore processing. Extensive rehabilitation activities across the site will continue once the Heap Leach Pad is decommissioned and processing operations cease.

Rehabilitation of the Hannaford waste rock dump commenced in mid-2011, and rehabilitation of the Lloyd's waste rock dump commenced in July 2012 and comprised reprofiling of the batters along with topsoiling. A trial area on the Hannaford waste dump had also been established to assess the likely rehabilitation outcomes and success for a number of treatment options. Such options included rehabilitation using natural volunteer colonisation for plant establishment, hand seeding using certain selected plant species within both topsoil and mine waste planting medium.

Both the Hannaford and Lloyd's waste dump reshaping to final batter profiles plus topsoiling is essentially complete (with the exception of a minor area of the Hannaford WRD used for bioremediation plus access ramp and adjacent area.) Plantings have been completed to supplement natural colonisation.

Table 4: Disturbance and Rehabilitation Progress

Area (ha)						
Component	Last Reporting Period		Current Reporting Period[7]		Proposed next 3 months*	
	Approved/Planned Area of disturbance (a)	Rehabilitated area @ December 2013	Actual Area of disturbance (a) end June 2014	Rehabilitated area @ end June 2014	Actual Area of disturbance (a)[8]	Rehabilitated area planned for the next quarter
Process Plant area	0.1	0	0.1	0	0.1	0
Workshop and laydown area	1	0	1	0	1	0
Access roads, camp road and haul roads (actual disturbance in brackets)	27.0 (21.7)	7	14.67	7	14.67	0
Hardstand and laydown area - remote from main workshop incl contractor (actual area in brackets)	4.64 (4.0)	4.0	4.0	4.0	0	0
Accommodation Village	0.4	0	0.4	0	0.4	0
heap leach pad (actual area in brackets)	48.9 (27.5)[9]	0	20.2	0	20.2	0
process ponds (actual area in brackets)	6.85 (1.9)	0	1.9	0	1.9	0
waste dumps	32.7	30.2 (essentially completed- vegetative rehabilitation to continue).	32.7	30.2 (essentially completed- vegetative rehabilitation to continue).	2.5	0

[7] No change since last quarter due to logistical requirements. All rehabilitation earthworks to commence simultaneously with HLP reshaping/topsoiling.
[8] No additional disturbance proposed with exception of final battering of HLP (refer draft Closure Plan)
[9] Note that final area of HLP and associated works will show very minor change with diversion of runoff to pit (refer Draft Closure Plan for full details)

Pit / s	22.67	21.5 (95% complete)	22.67	21.5 (refer text re geotechnical issues)	1.2	0
Creek diversion	2.5	1.6	2.5	1.6 (Further works to be implemented –final stabilisation required- refer text)	0.9	0
Levee	1.5[10]	1.5	1.5	1.5 (initial works implemented – refer text)	0 (tba- refer text)	0
Airstrip (not to be undertaken)	(4.2)	0	0	0	0	0
TOTAL	**148.26 (115.94)**	**57.6**	**108.64**	**65.8**	**42.87**	**0**

* note that final area proposed for rehabilitation (except for rebattering of heap leach pad) will be similar as heap leach pad irrigation and associated process ponds will continue to be used

Summary details are provided below:

- *The amount of land disturbed*: no land was disturbed in this reporting period over and above that previously disturbed. No further disturbance associated with the White Dam mining project is proposed with the exception of the increased area of the Heap Leach pad resulting from the battering of slopes to the required angle following decommissioning and associated construction of diversion works for HLP runoff to the pit (refer draft Closure Plan).
- *Vegetation cleared*: no vegetation was disturbed in this reporting period over and above that previously disturbed.
- *Revegetation or rehabilitation earthworks conducted*: These works have comprised the final reshaping of the Hannaford and Lloyd's WRDs (almost completed, minor area of Hannaford WRD remains to be reshaped), topsoiling (almost completed) and subsequent rehabilitation works (under monitoring).
- *Evidence (by using closure and rehabilitation criteria in the current approved PEPR/MARP) of the effectiveness of rehabilitation:* This is being progressively undertaken. Photo points have been established and monitoring protocols developed and are presented in the draft Closure Plan. Closure and rehabilitation criteria are addressed in the Closure Plan (and associated investigations that are required prior to formal closure).
- *Any problems or potential improvements learned from previous rehabilitation*: No issues have been identified.

In regard to whether rehabilitation may or may not be achieved as planned, given the advanced status of the rehabilitation of both WRDs, there is a very low risk in this regard. Current rehabilitation requirements that have yet to be undertaken revolve mainly around the detoxification of the heap leach pad, its subsequent reshaping to the required design profiles and rehabilitation comprising topsoiling and plant establishment. Exco is confident that this work can be successfully undertaken and with a very low risk of failure. Predicted risks have been presented in the draft Closure Plan and an acceptable level of risk can be achieved in all cases for all domains.

The other issue relates to the geotechnical issues associated with the Hannaford pit walls and has been addressed in the Closure Plan. This issue is also considered to be of low risk in terms of long term

[10] See notes regarding potential diversion works from HLP to pit

stability effects. A geotechnical assessment was presented in the previous compliance report. Further assessment and monitoring procedures are presented in the draft Closure Plan.

8 Environmental Management Activities

Period ending 30th June 2014

Environmental management activities conducted for the project have been essentially a continuation of measures implemented with the continuation of rehabilitation efforts and activities during the closure phase for those areas that can be rehabilitated.

It has been a case of implementation of management and monitoring strategies for activities in accordance with the provisions of the approved MARP Version 8 (as summarised in Table 7.3 of the MARP) and as applicable to the current operational status of the project. The operational monitoring program is based on monitoring at a number of locations within and in proximity to the mine operational area. These sites are shown on **Figure 3**.

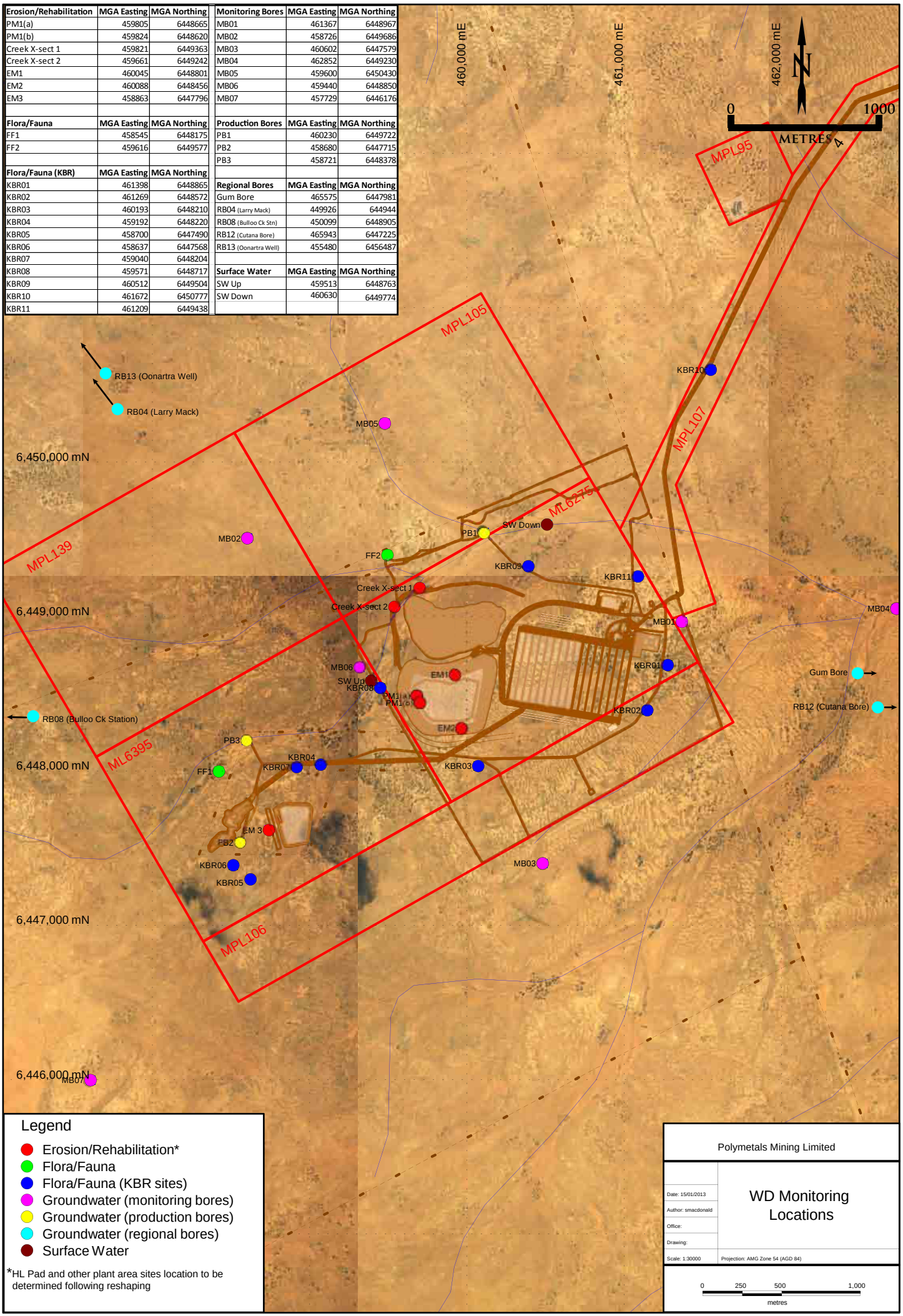
The following sections describe the activities performed for each environmental element of the site during the reporting period. For each environmental element, the prescribed control and management measures of the MARP/PEPR are also referenced.

It should be noted that the monitoring plan presented herein has been modified in terms of the additional matters that are to be monitored as part of site closure activities. Also, during the conduct of site investigations undertaken in the reporting period that provided additional baseline data for the draft Closure Plan, some additional monitoring and site sampling was undertaken. This included:

- Soil sampling of the WRD and HLP material and undisturbed areas in proximity to the mine site
- Contaminated land sampling
- Additional water quality sampling at selected sites
- Establishment of Photo monitoring points, primarily for the assessment of vegetation cover and incidence of erosion.

Erosion/Rehabilitation	MGA Easting	MGA Northing
PM1(a)	459805	6448665
PM1(b)	459824	6448620
Creek X-sect 1	459821	6449363
Creek X-sect 2	459661	6449242
EM1	460045	6448801
EM2	460088	6448456
EM3	458863	6447796
Flora/Fauna	**MGA Easting**	**MGA Northing**
FF1	458545	6448175
FF2	459616	6449577
Flora/Fauna (KBR)	**MGA Easting**	**MGA Northing**
KBR01	461398	6448865
KBR02	461269	6448572
KBR03	460193	6448210
KBR04	459192	6448220
KBR05	458700	6447490
KBR06	458637	6447568
KBR07	459040	6448204
KBR08	459571	6448717
KBR09	460512	6449504
KBR10	461672	6450777
KBR11	461209	6449438

Monitoring Bores	MGA Easting	MGA Northing
MB01	461367	6448967
MB02	458726	6449686
MB03	460602	6447579
MB04	462852	6449230
MB05	459600	6450430
MB06	459440	6448850
MB07	457729	6446176
Production Bores	**MGA Easting**	**MGA Northing**
PB1	460230	6449722
PB2	458680	6447715
PB3	458721	6448378
Regional Bores	**MGA Easting**	**MGA Northing**
Gum Bore	465575	6447981
RB04 (Larry Mack)	449926	644944
RB08 (Bulloo Ck Stn)	450099	6448905
RB12 (Cutana Bore)	465943	6447225
RB13 (Oonartra Well)	455480	6456487
Surface Water	**MGA Easting**	**MGA Northing**
SW Up	459513	6448763
SW Down	460630	6449774



Legend

- Erosion/Rehabilitation*
- Flora/Fauna
- Flora/Fauna (KBR sites)
- Groundwater (monitoring bores)
- Groundwater (production bores)
- Groundwater (regional bores)
- Surface Water

*HL Pad and other plant area sites location to be determined following reshaping

Polymetals Mining Limited

WD Monitoring Locations

Date: 15/01/2013
Author: smacdonald
Office:
Drawing:
Scale: 1:30000
Projection: AMG Zone 54 (AGD 84)

0 250 500 1,000
metres

9 Flora and Fauna

9.1 General Outcomes

The White Dam site and general environs are significantly degraded due to previous land use activities. Management of flora and fauna issues has nevertheless been a significant component of environmental management at the site. Reference sites have been previously established by Kellogg, Brown and Root (KBR) as per the (then) MARP requirements in regard to control sites that serve as a baseline upon which to judge the effects of mining activity. Other reference sites have also been indicated in the draft Closure Plan.

Recommendations included the following with a response to each subsequently presented:

1. *The continuation of the weeds control program e.g. weed mapping and spraying across the mining lease* This activity has been active throughout the reporting period however control needs are minor and have been affected by the dry site conditions.
2. *Implementation of weeds removal programs for all weeds, but especially African Boxthorn (which has been identified as a weed species of some concern), Noogoora burr and Bathurst burr*: Again this has been active during the reporting period however minor removal activity has been required only.
3. *The mapping and monitoring of weed species distributions at the site*: Monitoring as a random activity has been undertaken across the mining leases in the reporting period.

Pest fauna species recommendations/ requirements included:

- *The implementation of a dingo-dog monitoring program. Any observations of dingo-dogs, tracks presumed to be dingo-dog in appearance and evidence of its presence are documented and this information is passed on to the pastoralists immediately*: No dingo-dog sightings have occurred during the reporting period.
- *European red fox monitoring; fox numbers and evidence of fox presence is documented and this information passed on to the pastoralists:* Undertaken as above. No sightings during this reporting period.
- *The implementation of rabbit control measures and a warren removal program:* This work is essentially complete given the current mine status;
- *Any occurrences of wild pigs (including evidence) should be documented and this information needs to be supplied to the pastoralists;* There has been no reported sighting of feral pigs on the lease;
- *The implementation of feral cat control program is required.* No cats were sighted or trapped during this reporting period.

Other flora species management recommendations by KBR implemented at site included:

- Seed collection commenced in 2010/11. Ongoing collection of native seeds was strongly recommended, especially for species such as pearl bluebush and summer growing grasses. There has been no seed collection during the reporting period however there are substantial seed stocks stored at the site. Seeds collected have been used for the seeding of both of the reshaped WRDs. It is expected that further seed collection will be undertaken at the site in

preparation for and prior to the final reshaping of the heap leach pad and associated topsoiling;

- The Gilgai at WD11 remains a No-go Zone and a chain fence was recommended to remain around the site to prevent any damage to this area. This fence was implemented and remains in place.

9.2 MARP Control and Management Measures

Table 5 details the current approved MARP/PEPR (Version 8) control measures to be implemented and the outcomes for the reporting period.

Table 5: MARP Flora and Fauna Controls

Flora & Fauna Control and Management Measures	Details/Outcomes For Reporting Period
A permanent diversion drain and perimeter bund will be constructed to prevent surface runoff entering the operational areas from the existing natural watercourse. This will result in a permanent change to existing riparian vegetation, off-set by rehabilitation of the creek banks resulting in new riparian vegetation.	Diversion drain/bund and perimeter bund constructed previously. Due to the western wall geotechnical issues, this diversion bund has previously been re-established some 40m west of the previous bund. It has been lined with rock on the eastern side of creek to assist in preventing erosion from future flooding events. The location and configuration of this bund (and any need for repositioning) has been the subject of assessment by geotechnical consultants as part of the finalisation of Closure Plan commitments. It is proposed that the diversion bund be realigned to accord with the previously presented geotechnical report recommendations and undertaken when the closure plan has been agreed to (refer draft Closure Plan). A monitoring procedure has been established for the bund to evaluate any erosion effects and will be further modified pending the implementation of the repositioned diversion bund as per the geotechnical report recommendations and the required final profile .described in the Closure Plan
Annual survey of flora and fauna habitat biodiversity with Biodiversity Index calculated for upstream and downstream control areas.	A flora and fauna survey was undertaken by KBR in November 2011.This has provided the basis of the ongoing monitoring program and rehabilitation compliance. Future vegetation monitoring strategies in regard to completion criteria have been described in the draft Closure Plan.
Clearance of vegetation to divert the creek is covered by the SEB agreement.	Original estimate (as presented in previous MARP) was that a total of approx 214 ha of vegetation would be cleared for the establishment and operation of the White Dam Gold Mine. Actual planned clearance area was estimated to be approx. 148.26ha due to revision to site plans. Under the *Native Vegetation Act 1991 (NV Act)*, a Significant Environmental Benefit (SEB) is

Flora & Fauna Control and Management Measures	Details/Outcomes For Reporting Period
	required where native vegetation is to be cleared as part of a mining development. The SEB strategies proposed in the NVMP to be implemented at the site and surrounds are as follows: a) Exclusion of some of the grazing pressure from stock by erecting fences. Outcome: mine site is fully fenced b) Control of pest plants and herbivores throughout the lease areas and grazing enclosures. Outcome: controls implemented c) Financial and technical assistance for the management of pest species in the Bimbowrie Conservation Park. Outcome: Financial assistance continues to be provided. Report on use of these SEB funds has previously been received from park manager (Ian Falkenberg). Implementation of the approved SEB strategies has been carried out in accordance with the agreement.
Leach pad, launders and process ponds to be fenced to exclude stock.	The mining lease housing the leach pad, launders and process ponds is fully enclosed by a stock-proof fence, including a cattle grid at the access point to the lease. Process ponds and drains from heap leach pad have also been fenced. These remain in place.
Leach pad, process ponds and launders to be rinsed following cessation of processing.	Not applicable during this reporting period. Implementation of this procedure has been fully described in the draft Closure Plan.
All deaths of terrestrial fauna discovered in operational areas to be reported and investigated with corrective actions implemented to prevent recurrence.	No native species deaths occurred in the reporting period (refer below). All deaths of native fauna to date have been reported to DMITRE and corrective actions implemented as appropriate.

Vegetation Clearing

No vegetation clearing has been undertaken during the reporting period and no further clearing is proposed. However, with the expansion of the heap leach pad footprint to comply with final rehabilitation batter slopes, some minor additional clearing will be required following cessation of water flushing (estimated at approx. 7.3 additional hectares over and above the existing leach pad footprint). This will be undertaken once heap leach water quality compliance is achieved (as defined in final Closure Plan). Any additional clearing required for the diversion of HLP runoff to the pit will be as minimal native vegetation is present in this area.

Incidents

No fauna related incidents occurred during the reporting period.

Daily monitoring of the plant areas and ponds is ongoing with fauna capture and release when applicable. To date, losses are considered to be low and no species of conservation significance have been impacted to date. All deaths and injuries to native fauna have been reported to DMITRE.

10 Groundwater

10.1 General Outcomes

The groundwater monitoring network and programme has continued during the reporting term. New data is reported herein.

Figure 3 illustrates the location of the seven monitoring bores, and four production bores. Further regional monitoring bores are also monitored where accessible however some sites are not in a condition suitable for groundwater monitoring purposes (inaccessible or are dry).

The main regional bore for monitoring is Gum Bore – a pastoralist bore located on the Bindarrah pastoral lease. This is the closest operating well to the Mine site (refer **Figure 3**). Maintaining and preserving the quality of water from Gum Bore and the prevailing water level is a specific environmental measurement outcome in the approved MARP/PEPR.

Gum Bore produces low yields of low salinity waters. Both the past and recent groundwater assessments indicate that the aquifers of the Mine borefield and Gum Bore are not connected. This has been confirmed through monitoring during current and previous reporting periods. Results have indicated that there has been minimal change to water levels in this bore during the reporting periods and there has also been little change relative to pre-mining levels. Similarly, salinity levels have shown minimal fluctuation and remains well below the 3000mg/L TDS compliance criterion.

10.2 Water Level Sampling Results

Table 6 below indicates the change of water levels at monitoring bores adjacent to the operations area.

Table 6: Monitoring Bore Level Summary

Bore I.D.	MB01	MB02	MB03	MB04	MB05	MB06	MB07	Gum Bore
Pre-mining SWL	50.08	34.12	52.56	44	49.92	30.48	41.65	30.98
Latest Water Level*	54.0	44.0	44.0	44.0	50.0	Dry (100+)	41.0	30.2 (see note)
Change in Water Level	-3.92	-9.88	8.56	0	-0.08	nr	0.65	+0.28

* All levels are given in metres.

Monitoring bore MB05 had previously shown a substantial level reduction from baseline but the level has stabilised since last reporting period and is now close to baseline. MB06 has a major reduction but this is expected to recover with cessation of groundwater extraction. As is noted below, there has been no observable effect on regional bore levels.

Figure 4 below shows the changes in salinity levels at monitoring bores over time. Bores are sampled quarterly (when accessible). This shows minimal change to salinity levels and within expected natural fluctuations.

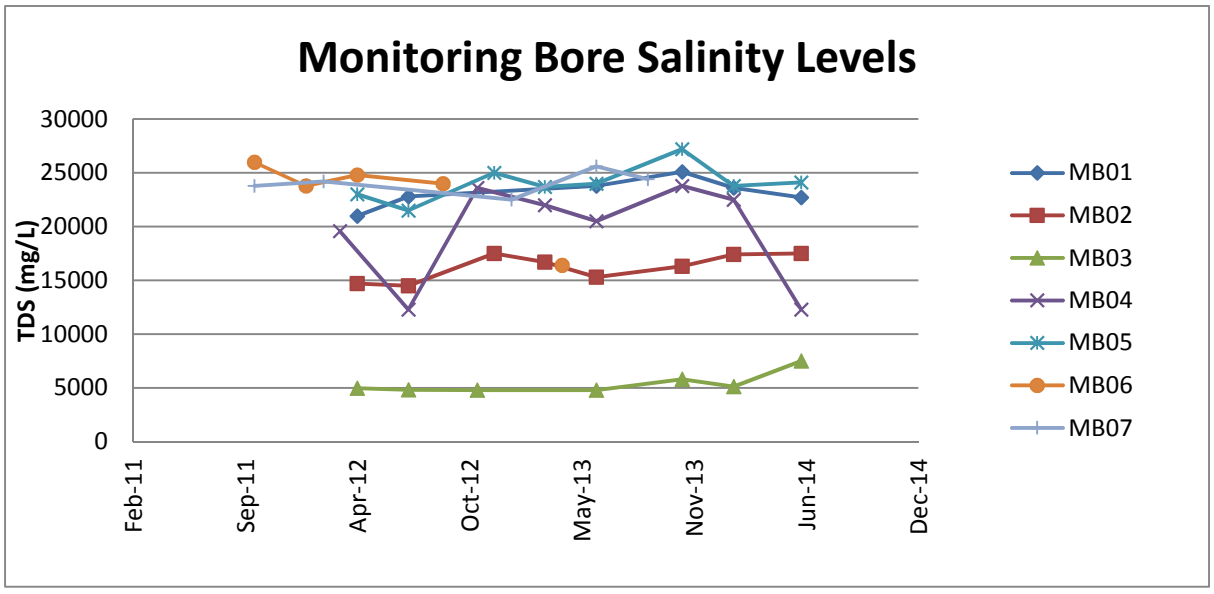


Figure 4: Monitoring Bore Salinity Levels

Figure 5 below indicates that there has been minimal change to bore water levels throughout most regional bores during this and previous reporting periods. As was the case with the previous compliance report, Gum Bore could not be sampled due to its active use at the time of visiting however discussions with the landholder have indicated that bore water quality and level remains unchanged in terms of quality for stock usage.

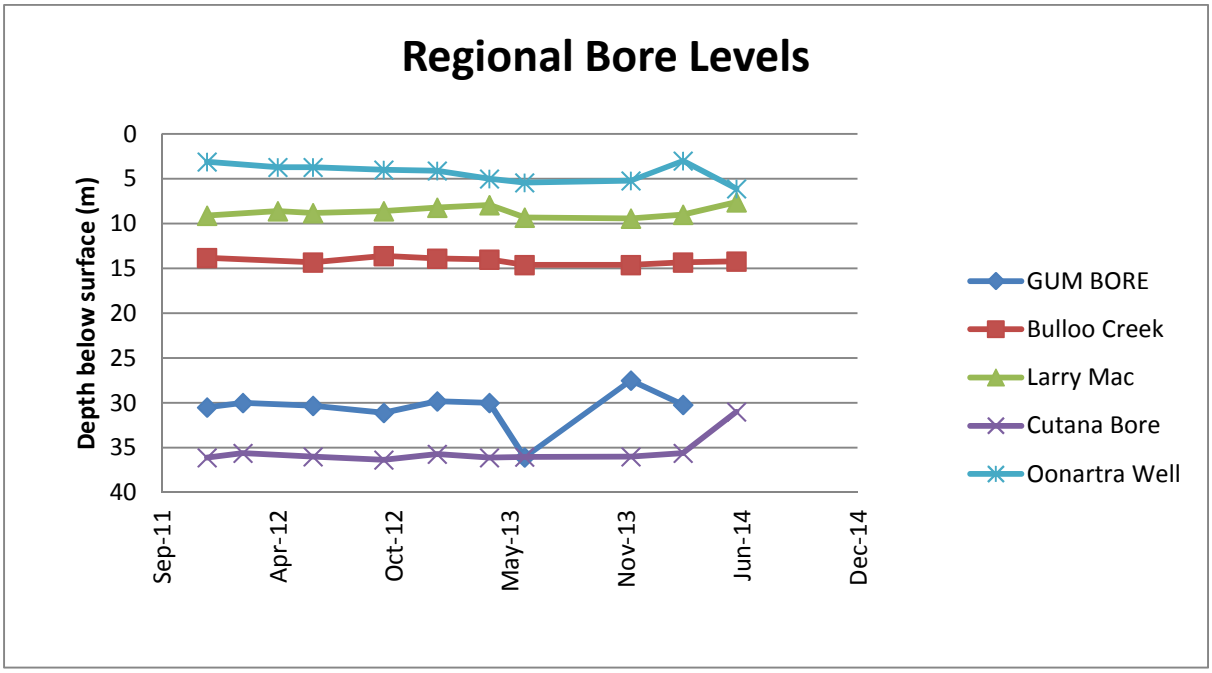


Figure 5: Regional Bore Level Monitoring

10.3 Other Groundwater Quality Data

Appendix A presents the results of all laboratory data recently collected for the regional and site monitoring bores. In all cases, data is consistent with pre-development levels.

The previous quarterly compliance report (which was lodged with DMITRE in March 2014) included laboratory testwork results for January that indicated that cyanide levels in three of the monitoring bores (MB02,MB05 and MB07) were above detection level of 0.004mg/L (ie. 0.005mg/L, 0.008mg/L and 0.005mg/L respectively). Other bores indicated an absence of CN. Investigations indicated that there may have been possible CN contamination of sampling apparatus during site sampling and further sampling of MB05 was undertaken in February which indicated compliance. Weekly testwork was taken to further confirm that no detectable cyanide is present in bores. It was also found that the laboratory procedures regarding CN analyses and reporting may not have been sufficiently stringent in regard to the potential for contamination from handling errors. The laboratory (ALS) has since intensified their internal procedures in this regard. Full results of subsequent analyses were reported to DMITRE and the EPA. Subsequent and on-going sampling has indicated an absence of CN in any of the bores (ie all below the detection level).

10.4 Compliance

Table 7 below indicates the outcome measurement criteria from the MARP/PEPR and compliance achieved during the reporting period.

Table 7: Groundwater Outcome Measurement Compliance

Outcome Measurement Criteria	Compliance
Leading Indicator: Drawdown at 2km from MPL to be no more than 5m (from pre-mining standing level) after 1 year of pumping and no more than 7m (from pre-mining standing level)after 2 years of pumping	One of the 8 bores shown in Table 6 show drawdown levels of <7 metres (ie MB02; MB06 not recorded but previously well in excess of 7m). MB03 has recovered since last reporting period to near baseline levels. It has been

	found that the bores which show drawdown of >7m are within the 2km measurement zone so drawdown at 2km and beyond is considered likely to be within this compliance level (no effect has been observed at regional bores(see above regarding Gum Bore). MB06 has a significant cone of depression however water levels are expected to indicate recharge in the future due to cessation of mining and associated extraction. It has been continually demonstrated during the course of the mining and groundwater extraction operations that drawdown effects have been localised in scale.
The pastoralist has agreed that if the salinity of the water in Gum Bore reaches 3000 TDS, his use of the water will be adversely affected. Thus the trigger point (criterion) for remedial actions will be reached at 3000 TDS.	Last reporting period indicated that salinity levels in Gum Bore remain stable, and well under the compliance level of 3000mg/L TDS (note that Gum Bore could not be sampled during this period due to active landholder use at the time of sampling).
No incidence of cyanide detected in Monitoring bores	Compliance achieved. Cyanide levels in monitoring bores remain below 0.004mg/L (as per laboratory detection limit). Issues previously raised with possible contamination from sampling procedures have since been resolved.

11 Surface water

11.1 General outcomes

The MARP requires that there be no statistical difference between upstream and downstream sites collected during opportunistic sampling of periodic surface flow events. During this particular reporting period, as well as the last four periods, the prevailing dry conditions and absence of rain events likely to cause significant runoff have resulted in insufficient data for statistical purposes. No runoff events occurred during this reporting period. A total of only 20.5mm of rainfall was received in the quarter.

11.2 Water Sampling Results

While site conditions have been dry during the reporting period (rainfall received for the six month period was 131.5mm), sampling was able to be conducted following a minor rainfall event when surface water was present in the watercourse adjacent to the site. Assessments were conducted for metals and cyanide with the laboratory results presented in **Appendix A** (Creek Sampling). All levels were typical for the rural environment and were consistent with pre-development baseline water quality sampling. Cyanide levels were below the detection limit. Results are comparable to all past reporting periods.

11.3 Compliance

Table 8 below indicates the outcome measurement criteria from the MARP/PEPR and compliance achieved during the reporting period.

Table 8: Surface Water Outcome Measurement Compliance

Outcome Measurement Criteria	Compliance
No statistically significant difference in water quality attributable to the operation measured between upstream and downstream samples collected during opportunistic sampling of periodic surface water flow events	All parameters measured were in compliance with relevant quality guidelines and consistent with baseline conditions.
Photographic record of flow paths during flow events to detect any flow restrictions	Minimal runoff was reported during the reporting period. No effects from flow restrictions (if present) are evident on site.

12 Air quality

12.1 General outcomes

While dust sampling was in place for the duration of mining operations, this has now ceased (last sample August 2012) as mining and associated haul vehicle movement at site has essentially ceased (i.e. the major potential dust sources have stopped).

12.2 Compliance

Table 9 below indicates the outcome measurement criteria from the MARP/PEPR and compliance achieved during the reporting period.

Table 9: Air Quality Outcome Measurement Compliance

Outcome Measurement Criteria	Compliance
No statistically significant difference in dust deposition between Mining Lease gauges and control gauges.	Dust monitoring has ceased due to the completion of mining activities.

13 Additional matters

13.1 Topsoil Stockpiles

Topsoil stockpiles during mining operations were surveyed once a month, used and residual volumes recorded both diagrammatically (**Figure 6**) and values recorded. Based on surveys to date, there is sufficient topsoil stockpiled to enable completion of the site rehabilitation program. To date, most topsoil has been used in the rehabilitation of the Hannaford and Vertigo WRDs. Additional topsoil is available from stripping undertaken prior to the development of the two pits. A check undertaken in late 2012 of these stockpiles confirmed remaining volumes as given in **Table 10**. An estimated 17,623m^3 of topsoil is required to cover the leach pad to a depth of 100mm with additional lesser volumes for other rehabilitation uses such as roads and infrastructure areas. The remaining volumes are sufficient for these requirements. There has been no topsoil recovery and usage during the reporting period.

Table 10: Summary of Topsoil Volumes (m^3)

Topsoil Stockpile Name	Original Volume	Cumulative Usage	Remaining
TSP1	7261	7261	depleted
TSP2	2005	2005	depleted
TSP3	2749	inaccessible	inaccessible
TSP4	19518	19518	depleted
TSP5	9034	nil	9034
TSP6	1145	nil	1145
TSP7	6984	nil	6984
TSP8	2994	nil	2994
TSP9	9836	8336	1500
TSP10	779	779	depleted
TSP11	2000	2000	depleted
TSP12	2248	2248	depleted
Total	**66553**	**42147**	**21657**

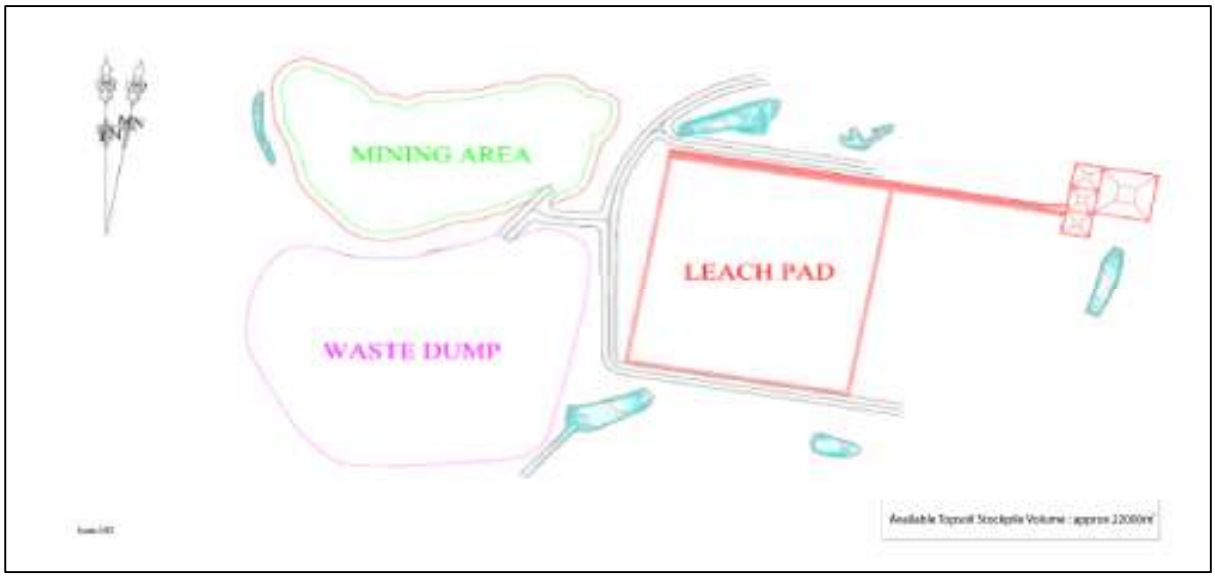


Figure 6: Topsoil stockpile inventory within the White Dam project site[11]

13.2 Reportable Incidents

No reportable incidents occurred during the reporting period. Repairs undertake to the split liner in the Barren Pond reported previously have been effective and are the subject of active visual monitoring on a weekly basis. Laboratory results from the nearest bore (MB1) have indicated no evidence of cyanide migration to this bore.

[11] total volume includes minor volumes from Vertigo area, and excludes TSP 3 west of pit (inaccessible due to proximity to pit slip).

14 Compliance with outcomes

The following **Tables 11** and **12** present a summary of compliance for the project as presented in the current approved MARP.

Table 11: Compliance Summary

Domain	Closure Objective	Outcome Measurement Criteria	Works performed	Determination of compliance
Mine pits	Render safe for stock post-mining Render safe for humans	Test to demonstrate compaction that achieves a dry density ratio of at least 95% relative to Standard Compaction determined by AS 1289 5.1.1. Fencing completed to a standard acceptable to the pastoral lease holder and PIRSA (DMITRE).	Compaction testwork shows that the bunding material compaction undertaken during previous diversion bank construction is unacceptable. Additional bund consolidation work following realignment of the diversion bund is to be undertaken (and has been detailed in Closure Plan). Remainder of closure bund has been paddock-dumped. Current fencing of lease areas is to be retained as per agreement with pastoral leaseholder .	Reconstruction of diversion bund will employ suitable material compaction strategies to meet this compliance objective. The results of this diversion bund development and associated compaction work will be reported to DMITRE once construction is undertaken. Remainder of pit closure bund will be stabilised to the required final profiles. Final fence condition to be confirmed with leaseholder and Pastoral Board. Confirming correspondence with the pastoralist is to be arranged.
Leach pad, waste rock dumps	Physical stability Non-polluting	Leach pad and waste dumps demonstrated to be stable after rehabilitation via annual photographic record. (Detailed compliance criteria are developed in the Closure Plan and will be ratified by DMITRE once final Closure Plan is approved)	A monitoring program including photographic evidence has commenced and will be ongoing once reshaping of all landforms is completed and compliance criteria (as confirmed in Closure Plan) are in place. Note the leach pad is not yet under rehabilitation	The current growth of vegetation is acceptable given the prevailing drought conditions. There is confidence that full rehabilitation is achievable (as is defined in draft Closure Plan).
		Leach pad runoff weak acid-dissociable (WAD) cyanide level to be less than 0.2 mg/l. (Reference: Technical Report: Treatment of Cyanide Heap Leaches and Tailings. US Environmental Protection Agency. Washington. 1994)	Not applicable to current stage of project	Will not be completed in the next reporting period. Compliance limits are the subject of further assessment given intent to divert HLP seepage to pit. This has been reported in the draft Closure Plan.

Domain	Closure Objective	Outcome Measurement Criteria	Works performed	Determination of compliance
		Leach pad runoff pH to be neutral before walk away.	Not applicable to current stage of project	Not applicable in the next reporting period. Compliance and means to achieve same are the subject of assessment and reporting in the draft Closure Plan.
		Survey to prove slope angle 15^0or less.	A complete survey of WRDs batter slopes is to be completed	Some batters of WRDs may not comply with this requirement. This has been described in draft Closure Plan and survey will be conducted once all batters slopes for all landforms have been completed. This will include assessment of the final heap leach pad batter slopes where compliance with criterion will be stringently applied.[12]
Plant and equipment	Remove plant for re-use elsewhere	Soil samples to be tested for cyanide residue. Cyanide concentration to be less than level of detection.	Baseline cyanide testwork conducted and cyanide levels recorded for future reference on mine closure and plant removal. Not applicable at this stage.	Will not be completed in the next reporting period
Roads	Return to unimproved pastoral use.	Document all agreed actions with lessee and copy to PIRSA (DMITRE).	Discussions have been held with pastoralist and rehabilitation measures agreed - part of the access road to the camp area will be retained as the pastoralist has stock yards in this area. Agreements with pastoralist will be confirmed in final Closure Plan.	Road rehabilitation works to continue where roads are no longer required and not required by pastoralist.
		Measure biodiversity values on site and at a control site. Success is achieved when biodiversity value on site are no different to biodiversity values in control areas	Reference sites subject to active visual monitoring are described in the draft Closure Plan.. Comparisons with rehabilitated landforms in terms of cover and biodiversity value not yet practical at this time.	Active surveillance monitoring undertaken. Detailed site evaluation of control sites planned once draft Closure Plan compliance criteria have been confirmed.

[12] Note that many of the current rehabilitated batters of both the Hannaford and Vertigo WRD's have been assessed (as a preliminary evaluation) as not complying with the 15^o batter criterion. It is considered possible that the earthmoving contractors may have established an overall slope profile of 15^o however, due to the presence of an intermediate 10m wide bench with slightly flatter toe slopes, actual batters on the dump may be steeper. This is to be confirmed by survey to be undertaken in the reporting period that will occur once all slope rebattering has been completed. This is not believed to substantially affect stability or erosion susceptibility of the WRD's.

Domain	Closure Objective	Outcome Measurement Criteria	Works performed	Determination of compliance
	Remove surface water obstructions	Sample water upstream and downstream of site. No difference in TDS between samples taken upstream and downstream. (refer **Figure 3** for control sites)	Sampling of the upstream and downstream surface water points conducted during the reporting period conducted for metals and CN only due to absence of streamflow	No significant runoff events in this reporting period however sampling for metals and CN indicated no evidence of contamination from mine site.
Buildings	Return to unimproved pastoral use	Document all agreed actions with lessee and include in Annual mine and rehabilitation report to DMITRE	Camp has been decommissioned with accommodation now provided in Broken Hill.	Camp decommissioning completed. No rehabilitation proposed in the next reporting period
Bore field	Return to unimproved pastoral use	Document all agreed actions with lessee and include in Annual mine and rehabilitation report to DMITRE	No further agreements were reached during the reporting period. All actions described in this report. Borefield under active use.	Not applicable at this stage
All disturbed areas except open pit voids	Return to unimproved pastoral use	Measure biodiversity values on site and at a control site. No difference between biodiversity values on site and at control sites. Monitor abundance and diversity of native species and non-native species. No difference between abundance and diversity values on site and at control sites	Monitoring or measurement of Biodiversity values were performed on the mine site previously. Surveillance monitoring of control sites continued. Final detailed compliance conditions have been presented in draft Closure Plan recently submitted to DMITRE.	Visual monitoring at control sites has been ongoing. Detailed surveys proposed once Closure compliance criteria (as presented in draft Closure Plan) have been confirmed.

Table 12: Compliance (Environmental Protection)

Environmental risk	Aspect	Outcome Measurement criteria	Works Performed	Determination of Compliance
Groundwater and Surface Water	Flora protection Fauna disturbance	No statistically significant difference in Biodiversity Index between 'control' sites upstream and downstream of creek diversion.	Refer Section 9. No significant statistical differences evident. To be subject to detailed assessment once realigned creek diversion is in place.	Complied (significant flows absent but monitoring for contaminants indicated absence)
	Protection of surface watercourses	No statistically significant difference in water quality attributable to the operation measured between upstream and downstream samples collected during opportunistic sampling of periodic surface water flow events. (refer Figure 3 for control sites) Photographic record of flow paths during flow events to detect any flow restrictions.	Refer Section 11. Statistical differences not able to be assessed. No significant runoff events occurred during reporting period but sampling conducted for metals and CN.	Water quality compliance for metals and CN indicated (refer Section 11)
	Protection of stock water supply	Leading indicator: Drawdown at 2 km from MPL to be no more than 5 m (from pre-mining standing level) after 1 year of pumping and no more than 7m (from pre-mining standing level) after 2 years of pumping. The Pastoralist has agreed that if the salinity of the water in Gum Bore reaches 3,000 TDS, his use of the water will be adversely affected. Thus the trigger point (criterion) for the actions listed in the previous column will be reached at 3,000 TDS.	Refer Section 10	Complied
Erosion	Protection of flora and habitat due to erosion	Annual change-map (GIS) to indicate progressive rehabilitation. No statistically significant difference in water total suspended solids (TSS) attributable to the operation measured between upstream and downstream samples collected during opportunistic sampling of periodic surface water flow events. No statistically significant difference in dust deposition between Mining Lease gauges and control gauges.	Change map maintained Refer Section 11 Refer Section 12	Complied n/a Dust monitoring ceased due to completion of mining. Dust deposition minimal based on visual assessment.
Cyanide	Injury to flora and fauna	No change in biodiversity index.	Refer Section 9	No fauna incidents.
	Protection of soil and water	No incidence of cyanide detected in monitoring bores.	Refer Section 10.3 regarding CN monitoring outcomes. Previous sampling inadequacies have been rectified.	Complied. No incidence of cyanide following exhaustive investigation into sampling and laboratory procedures.
	Acid generation	Formed waste dump final slope angle to be no greater than 15^0.	WRDs established to be no greater than 15^0	Refer Table 11 for commentary on slope compliance of WRDs. No potential for acid generation from

Environmental risk	Aspect	Outcome Measurement criteria	Works Performed	Determination of Compliance
		Runoff water samples collected during opportunistic sampling of periodic surface water flow events to be greater than pH 5.	Refer Section 11	either WRD due to absence of significant volumes of acid generating waste material (as reported in draft Closure Plan) n/a
Waste Dumps	Protection of topsoil	Topsoil stockpile height no higher than 2m. Annual topsoil stockpile survey to indicate no significant decrease in topsoil volume, taking into account natural compaction.	Stockpiles comply (refer Section 13.1). Annual topsoil survey undertaken.	Confirmed
Land use and soil quality	Protection of soil and water	All spillage incidents reported, investigated and corrective actions completed to prevent recurrence. Post operation soil contamination survey and consequent remediation work to leave soil uncontaminated. Meeting minutes submitted to DMITRE.	No reported incident (see Section 13.2) Previous bioremediation sampling reported in compliance report. Informal discussions only with pastoralists with agreements reached be finalised in writing regarding fencing and other final closure conditions.	Complied No further sampling conducted- to be addressed prior to operations closure. Meeting minutes not applicable during this period. Informal landholder meeting held (Bindarrah).

14.1 Rectification of Non-Compliances

There have been no non-compliances within the project area during the reporting period.

Rectification

No rectification measures are required.

Mitigation

No mitigation measures to correct any site non-compliances have been required (note that improved groundwater monitoring procedures have been implanted at the site due to possible sampling errors identified in previous compliance report (see Section 10.3).

Preventative action

No preventative actions have been required.

14.2 Compliance with leading indicator criteria

Compliance requirements have been summarised in **Tables 12** and **13**. Compliance has been indicated in all areas where relevant to the current stage of the project.

15 Management system audits

No Management System Audit has been completed in this period. An independent audit will be carried out in the reporting period that will follow completion of CN leaching of the Heap Leach Pad with confirmation of results to DMITRE as per draft Closure Plan requirements. This audit will also include an assessment of rehabilitation works to date.

16 Environment Protection and Biodiversity Conservation Act reporting

The EPBC Act does not apply to the site and no reporting is required.

17 Emerging Environmental Hazards

While not an emerging hazard, during the life of the Hannaford pit, wall failure occurred on the western side along a major fault. Detailed investigations have been conducted into the stability of the Hannaford pit and remedial works necessary to ensure stability into the long term. This aspect has been presented in the revised draft Closure Plan.

18 Adjacent land use

The project is located 32 km northwest of the Olary town site, 10 km north of the Barrier Highway and the Broken Hill railway line, and 80 km east of Broken Hill. Adjacent and use is pastoral, with Bulloo Creek, and Bindarrah pastoral leases being the closest. Regular contact is kept with pastoral residents surrounding the project site.

The land within and surrounding the larger Drew Hill project area was and is also primarily used for the pastoral industry – predominantly sheep grazing.

19 Stakeholder Liaison/ Complaints Reporting

Tenure and ownership of the mine tenements are detailed below.

Mining Lease 6275; Mining Lease 6395		
Miscellaneous Purposes Licences MPL139, MPL105, MPL106 (part MPL107)		
Certificate of Land Title/Lease Number	Crown Lease	1299/38
Pastoral Number	Bulloo Creek	2363
Name of Leaseholder	Geoffrey and Lynette Riggs	
Activity	Stock (sheep) grazing	
Miscellaneous Purposes Licence MPL95 (part MPL107)		
Certificate of Land Title/Lease Number	Crown Lease	1276/20
Pastoral Number	Bindarrah	2200
Name of Leaseholder	G.S. & M.J. Parker	
Activity	Stock (sheep) grazing	

Informal liaison has continued with one of the two key pastoralists (Bindarrah) Arrangements will be formalised in writing and will be clarified in the final Closure Plan. No concerns or complaints were raised by landholders during the reporting period. There were no public complaints.

APPENDIX A

GROUNDWATER QUALITY DATA

CERTIFICATE OF ANALYSIS

Work Order	: **EM1406391**	Page	: 1 of 9
Client	: **WHITE DAM GOLD PRODUCTION JOINT VENTURE**	Laboratory	: Environmental Division Melbourne
Contact	: MR GARY HEITMAN	Contact	: Shirley LeCornu
Address	: White Dam Gold Mine PMB 23 Via Cockburn SOUTH AUSTRALIA	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: gheitman@whitedam.com.au	E-mail	: shirley.lecornu@alsenviro.com
Telephone	: +61 08 8919 4455	Telephone	: +61-3-8549 9630
Facsimile	: ----	Facsimile	: +61-3-8549 9601
Project	: White Dam Gold Mine	QC Level	: NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Order number	: ----		
C-O-C number	: ----	Date Samples Received	: 30-JUN-2014
Sampler	: AR	Issue Date	: 04-JUL-2014
Site	: ----		
		No. of samples received	: 6
Quote number	: AD/059/09	No. of samples analysed	: 6

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- **EG020-T: Metals for EM1406391 #1, #2, #4 - #6 have been diluted prior to analysis due to sample matrix. LORs have been raised accordingly.**
- **EP080: Particular samples (EM-1406391-001,002,003) show minor btex hit. Confirmed by re-anlaysis.**

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Christopher Lemaitre	Non-Metals Team Leader	Melbourne Inorganics
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics
Eric Chau	Metals Team Leader	Melbourne Inorganics
Nancy Wang	Senior Semivolatile Instrument Chemist	Melbourne Organics

Analytical Results

Sub-Matrix: **WATER** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Client sample ID	MB1	MB2	MB3	MB4	MB5
				Client sampling date / time	25-JUN-2014 15:00	25-JUN-2014 15:00	25-JUN-2014 15:00	25-JUN-2014 15:00	25-JUN-2014 15:00
					EM1406391-001	EM1406391-002	EM1406391-003	EM1406391-004	EM1406391-005
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit		**7.42**	**7.38**	**7.68**	**7.34**	**7.34**
EA015: Total Dissolved Solids									
Total Dissolved Solids @180°C	----	10	mg/L		**22700**	**16600**	**8000**	**22300**	**22800**
ED037P: Alkalinity by PC Titrator									
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L		<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L		<1	<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		**137**	**165**	**191**	**119**	**151**
Total Alkalinity as CaCO3	----	1	mg/L		**137**	**165**	**191**	**119**	**151**
ED045G: Chloride Discrete analyser									
Chloride	16887-00-6	1	mg/L		**10500**	**8000**	**4020**	**10200**	**11300**
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L		**946**	**869**	**301**	**1160**	**874**
Magnesium	7439-95-4	1	mg/L		**618**	**464**	**226**	**559**	**582**
Sodium	7440-23-5	1	mg/L		**5880**	**4380**	**2250**	**5600**	**6790**
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		**3.83**	**2.55**	**0.65**	**4.04**	**1.63**
Arsenic	7440-38-2	0.001	mg/L		<0.010	<0.010	<0.001	<0.010	<0.010
Beryllium	7440-41-7	0.001	mg/L		<0.010	<0.010	<0.001	<0.010	<0.010
Cadmium	7440-43-9	0.0001	mg/L		**0.0014**	<0.0010	<0.0001	**0.0018**	<0.0010
Chromium	7440-47-3	0.001	mg/L		**0.046**	**0.029**	**0.009**	**0.019**	**0.020**
Copper	7440-50-8	0.001	mg/L		**0.076**	**0.105**	**0.018**	**0.039**	**0.082**
Cobalt	7440-48-4	0.001	mg/L		<0.010	**0.011**	**0.001**	<0.010	<0.010
Nickel	7440-02-0	0.001	mg/L		**0.035**	**0.048**	**0.004**	**0.021**	**0.015**
Lead	7439-92-1	0.001	mg/L		**0.047**	**0.018**	**0.002**	<0.010	**0.021**
Zinc	7440-66-6	0.005	mg/L		**0.619**	**0.736**	**0.124**	**0.563**	**0.239**
Lithium	7439-93-2	0.001	mg/L		**0.048**	**0.051**	**0.015**	**0.038**	**0.048**
Manganese	7439-96-5	0.001	mg/L		**0.209**	**0.171**	**0.089**	**0.154**	**0.256**
Molybdenum	7439-98-7	0.001	mg/L		**0.044**	**0.026**	**0.032**	**0.022**	**0.035**
Selenium	7782-49-2	0.01	mg/L		<0.10	<0.10	<0.01	<0.10	<0.10
Uranium	7440-61-1	0.001	mg/L		**0.156**	**0.054**	**0.017**	**0.089**	**0.072**
Vanadium	7440-62-2	0.01	mg/L		<0.10	**0.12**	**0.01**	<0.10	**0.11**
Boron	7440-42-8	0.05	mg/L		**6.09**	**5.22**	**1.99**	**4.04**	**6.47**
Iron	7439-89-6	0.05	mg/L		**5.55**	**4.87**	**0.93**	**4.23**	**5.29**

Analytical Results

Sub-Matrix: **WATER** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Client sample ID	MB1	MB2	MB3	MB4	MB5
				Client sampling date / time	25-JUN-2014 15:00	25-JUN-2014 15:00	25-JUN-2014 15:00	25-JUN-2014 15:00	25-JUN-2014 15:00
					EM1406391-001	EM1406391-002	EM1406391-003	EM1406391-004	EM1406391-005
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	0.004	mg/L		<0.004	<0.004	<0.004	<0.004	<0.004
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L		**1.8**	**2.9**	**3.8**	**1.3**	**2.5**
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	----	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L		**2.04**	**0.24**	**4.30**	**0.47**	**0.02**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		**2.04**	**0.24**	**4.30**	**0.47**	**0.02**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**0.4**	**0.3**	**0.4**	**0.4**	**0.3**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ **Total Nitrogen as N**	----	0.1	mg/L		**2.4**	**0.5**	**4.7**	**0.9**	**0.3**
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.02**	**0.02**	**0.05**	**0.02**	**0.03**
EK085M: Sulfide as S2-									
Sulfide as S2-	18496-25-8	0.1	mg/L		<0.1	<0.1	<0.1	<0.1	<0.1
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	50	µg/L		**70**	<50	<50	<50	<50
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		**70**	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
>C10 - C16 Fraction	>C10_C16	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	----	100	µg/L		**140**	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		**140**	<100	<100	<100	<100

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	MB1	MB2	MB3	MB4	MB5
				Client sampling date / time	25-JUN-2014 15:00	25-JUN-2014 15:00	25-JUN-2014 15:00	25-JUN-2014 15:00	25-JUN-2014 15:00
Compound	CAS Number	LOR	Unit		EM1406391-001	EM1406391-002	EM1406391-003	EM1406391-004	EM1406391-005
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	<100	<100	<100	<100
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		**4**	**4**	**5**	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ **Total Xylenes**	1330-20-7	2	µg/L		<2	<2	<2	<2	<2
^ **Sum of BTEX**	----	1	µg/L		**4**	**4**	**5**	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**89.8**	**101**	**109**	**101**	**94.7**
Toluene-D8	2037-26-5	0.1	%		**97.3**	**110**	**113**	**115**	**100**
4-Bromofluorobenzene	460-00-4	0.1	%		**81.3**	**95.4**	**105**	**100**	**88.5**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	MB7	----	----	----	----
				Client sampling date / time	25-JUN-2014 15:00	----	----	----	----
Compound	CAS Number	LOR	Unit		EM1406391-006	----	----	----	----
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit		**7.50**	----	----	----	----
EA015: Total Dissolved Solids									
Total Dissolved Solids @180°C	----	10	mg/L		**25000**	----	----	----	----
ED037P: Alkalinity by PC Titrator									
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L		<1	----	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L		<1	----	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		**116**	----	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L		**116**	----	----	----	----
ED045G: Chloride Discrete analyser									
Chloride	16887-00-6	1	mg/L		**11200**	----	----	----	----
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L		**1240**	----	----	----	----
Magnesium	7439-95-4	1	mg/L		**596**	----	----	----	----
Sodium	7440-23-5	1	mg/L		**5900**	----	----	----	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		**0.65**	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.010	----	----	----	----
Beryllium	7440-41-7	0.001	mg/L		<0.010	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0010	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		**0.013**	----	----	----	----
Copper	7440-50-8	0.001	mg/L		**0.028**	----	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.010	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		**0.016**	----	----	----	----
Lead	7439-92-1	0.001	mg/L		**0.012**	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		**0.646**	----	----	----	----
Lithium	7439-93-2	0.001	mg/L		**0.046**	----	----	----	----
Manganese	7439-96-5	0.001	mg/L		**0.826**	----	----	----	----
Molybdenum	7439-98-7	0.001	mg/L		<0.010	----	----	----	----
Selenium	7782-49-2	0.01	mg/L		<0.10	----	----	----	----
Uranium	7440-61-1	0.001	mg/L		**0.041**	----	----	----	----
Vanadium	7440-62-2	0.01	mg/L		<0.10	----	----	----	----
Boron	7440-42-8	0.05	mg/L		**4.49**	----	----	----	----
Iron	7439-89-6	0.05	mg/L		**3.87**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	MB7	----	----	----	----
			Client sampling date / time	25-JUN-2014 15:00	----	----	----	----
Compound	CAS Number	LOR	Unit	EM1406391-006	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	0.004	mg/L	<0.004	----	----	----	----
EK040P: Fluoride by PC Titrator								
Fluoride	16984-48-8	0.1	mg/L	**1.8**	----	----	----	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	----	0.01	mg/L	<0.01	----	----	----	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	**0.02**	----	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**0.02**	----	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**0.2**	----	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**0.2**	----	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	<0.01	----	----	----	----
EK085M: Sulfide as S2-								
Sulfide as S2-	18496-25-8	0.1	mg/L	<0.1	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L	<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L	<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L	<50	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013								
C6 - C10 Fraction	C6_C10	20	µg/L	<20	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	----	----	----	----
>C10 - C16 Fraction	>C10_C16	100	µg/L	<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L	<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	MB7	----	----	----	----
				Client sampling date / time	25-JUN-2014 15:00	----	----	----	----
Compound	CAS Number	LOR	Unit		EM1406391-006	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 - Continued									
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ **Total Xylenes**	1330-20-7	2	µg/L		<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**95.4**	----	----	----	----
Toluene-D8	2037-26-5	0.1	%		**92.7**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%		**86.5**	----	----	----	----

CERTIFICATE OF ANALYSIS

Work Order	: **EM1402319**	Page	: 1 of 4
Client	: **WHITE DAM GOLD PRODUCTION JOINT VENTURE**	Laboratory	: Environmental Division Melbourne
Contact	: MR GARY HEITMAN	Contact	: Shirley LeCornu
Address	: White Dam Gold Mine PMB 23 Via Cockburn SOUTH AUSTRALIA	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: gheitman@whitedam.com.au	E-mail	: shirley.lecornu@alsenviro.com
Telephone	: +61 08 8919 4455	Telephone	: +61-3-8549 9630
Facsimile	: ----	Facsimile	: +61-3-8549 9601
Project	: White Dam Gold Mine	QC Level	: NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Order number	: ----		
C-O-C number	: ----	Date Samples Received	: 14-MAR-2014
Sampler	: GH	Issue Date	: 18-MAR-2014
Site	: ----		
		No. of samples received	: 4
Quote number	: AD/059/09	No. of samples analysed	: 4

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

Analytical Results

Sub-Matrix: **WATER** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Client sample ID	PB1	MB5	CRUS (Up Stream)	CRDS (Down Stream)	----
				Client sampling date / time	12-MAR-2014 15:00	12-MAR-2014 15:00	12-MAR-2014 15:00	12-MAR-2014 15:00	----
					EM1402319-001	EM1402319-002	EM1402319-003	EM1402319-004	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L		----	----	**17**	**86**	----
ED045G: Chloride Discrete analyser									
Chloride	16887-00-6	1	mg/L		----	----	**21**	**60**	----
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L		----	----	**21**	**25**	----
Magnesium	7439-95-4	1	mg/L		----	----	**4**	**5**	----
Sodium	7440-23-5	1	mg/L		----	----	**48**	**77**	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		----	----	**20.7**	**4.70**	----
Arsenic	7440-38-2	0.001	mg/L		----	----	**0.007**	**0.005**	----
Boron	7440-42-8	0.05	mg/L		----	----	**0.20**	**0.28**	----
Barium	7440-39-3	0.001	mg/L		----	----	**0.426**	**0.096**	----
Beryllium	7440-41-7	0.001	mg/L		----	----	**0.001**	<0.001	----
Cadmium	7440-43-9	0.0001	mg/L		----	----	<0.0001	<0.0001	----
Cobalt	7440-48-4	0.001	mg/L		----	----	**0.016**	**0.004**	----
Chromium	7440-47-3	0.001	mg/L		----	----	**0.019**	**0.007**	----
Copper	7440-50-8	0.001	mg/L		----	----	**0.051**	**0.034**	----
Manganese	7439-96-5	0.001	mg/L		----	----	**0.491**	**0.136**	----
Nickel	7440-02-0	0.001	mg/L		----	----	**0.024**	**0.007**	----
Lead	7439-92-1	0.001	mg/L		----	----	**0.015**	**0.004**	----
Selenium	7782-49-2	0.01	mg/L		----	----	<0.01	<0.01	----
Vanadium	7440-62-2	0.01	mg/L		----	----	**0.06**	**0.04**	----
Zinc	7440-66-6	0.005	mg/L		----	----	**0.260**	**0.152**	----
Lithium	7439-93-2	0.001	mg/L		----	----	**0.014**	**0.006**	----
Molybdenum	7439-98-7	0.001	mg/L		----	----	**0.003**	**0.003**	----
Uranium	7440-61-1	0.001	mg/L		----	----	**0.001**	**0.001**	----
Iron	7439-89-6	0.05	mg/L		----	----	**16.7**	**3.33**	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		----	----	<0.0001	<0.0001	----
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	0.004	mg/L		<0.004	<0.004	<0.004	<0.004	----
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L		----	----	**0.4**	**0.6**	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	PB1	MB5	CRUS (Up Stream)	CRDS (Down Stream)	----
			Client sampling date / time	12-MAR-2014 15:00	12-MAR-2014 15:00	12-MAR-2014 15:00	12-MAR-2014 15:00	----
Compound	CAS Number	LOR	Unit	EM1402319-001	EM1402319-002	EM1402319-003	EM1402319-004	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	----	0.01	mg/L	----	----	<0.01	<0.01	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	----	----	**0.02**	<0.01	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	----	----	**0.02**	<0.01	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	----	----	<0.1	<0.1	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	----	----	<0.1	<0.1	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	----	----	**0.42**	**0.18**	----

Surrogate Control Limits

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	Recovery Limits (%) High
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	129
Toluene-D8	2037-26-5	70	125
4-Bromofluorobenzene	460-00-4	71	129

CERTIFICATE OF ANALYSIS

Work Order	: **EM1404050**	Page	: 1 of 3
Client	: **WHITE DAM GOLD PRODUCTION JOINT VENTURE**	Laboratory	: Environmental Division Melbourne
Contact	: MR GARY HEITMAN	Contact	: Shirley LeCornu
Address	: White Dam Gold Mine PMB 23 Via Cockburn SOUTH AUSTRALIA	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: gheitman@whitedam.com.au	E-mail	: shirley.lecornu@alsenviro.com
Telephone	: +61 08 8919 4455	Telephone	: +61-3-8549 9630
Facsimile	: ----	Facsimile	: +61-3-8549 9601
Project	: White Dam Gold Mine	QC Level	: NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Order number	: ----		
C-O-C number	: ----	Date Samples Received	: 01-MAY-2014
Sampler	: PD	Issue Date	: 02-MAY-2014
Site	: ----		
		No. of samples received	: 3
Quote number	: AD/059/09	No. of samples analysed	: 3

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- **EK026Sf: EM1404050 #2 positive Total cyanide results has been confirmed by re-digestion and re-analysis.**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	Control 1	Control 2	Control 3	----	----
			Client sampling date / time	23-APR-2014 15:00	23-APR-2014 15:00	23-APR-2014 15:00	----	----
Compound	CAS Number	LOR	Unit	EM1404050-001	EM1404050-002	EM1404050-003	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	0.002	mg/L	<0.002	**0.009**	<0.002	----	----