



TOMINGLEY
GOLD OPERATIONS PTY LTD
(A wholly owned subsidiary of Alkane Resources Ltd)

Tomingley Gold Project

Monthly Environmental Monitoring Report – August 2013



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TABLE OF REVISIONS

Revision Number	Revision Date	Prepared By	Comments
Revision 1	September 2013	Colleen Measday	Submitted for Information

TABLE OF CONTENTS

1.	INTRODUCTION AND SCOPE	4
2.	WEATHER FOR AUGUST 2013	4
2.1	WEATHER STATION DATA.....	4
3.	MONITORING LOCATIONS.....	4
4.	AIR QUALITY MONITORING.....	5
4.1	PM10 MONITORING	5
4.2	DEPOSITIONAL DUST.....	5
4.3	HIGH VOLUME AIR SAMPLER - TOTAL SUSPENDED PARTICULATES.....	6
5.	NOISE MONITORING.....	6
5.1	REAL-TIME NOISE MONITORING	6
5.2	HAND HELD MONITORING.....	6
6.	SURFACE WATER MONITORING	6
6.1	GUNDONG CREEK.....	6
6.2	SEDIMENTATION PONDS.....	7
7.	CULTURAL HERITAGE MONITORING.....	7
8.	GROUNDWATER MONITORING.....	7
9.	BIODIVERSITY MONITORING	7

1. INTRODUCTION AND SCOPE

This Monthly Environmental Monitoring Report has been prepared to collate environmental monitoring data undertaken for the Tomingley Gold Project during the month of August 2013.

This report also compares data collected to targets and provides commentary on environmental issues during the month.

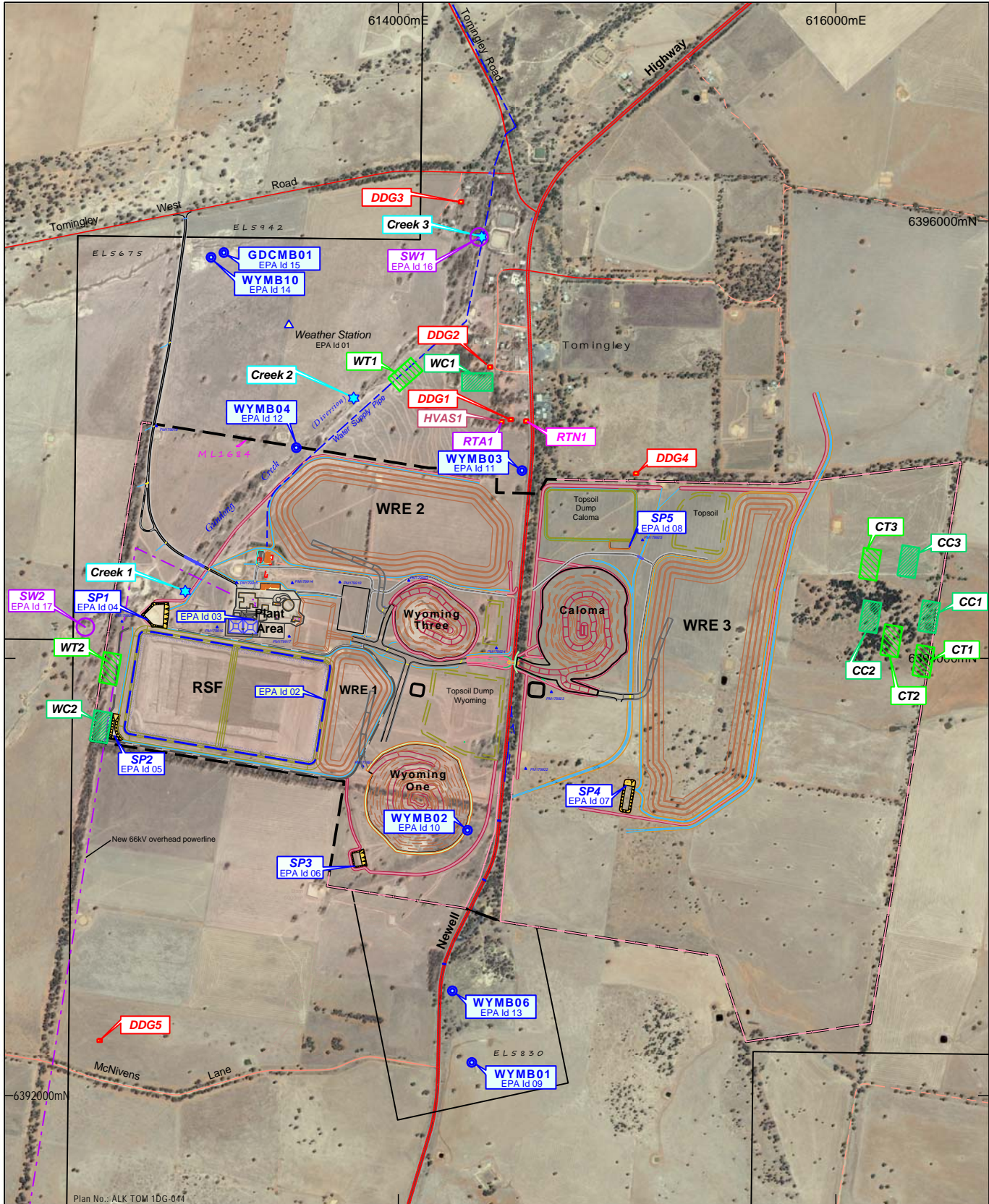
2. WEATHER FOR AUGUST 2013

2.1 WEATHER STATION DATA

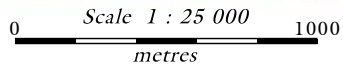
Data from the weather station located on site for the month of August 2013 is attached in Appendix 1.

3. MONITORING LOCATIONS

Figure 1 indicates the location where permanent monitoring is undertaken for the project. Any additional monitoring undertaken will be discussed within the body of this report.



Plan No.: ALK TOM 1DG-044



- | | |
|--|--|
| Sediment pond discharge location | Groundwater bore |
| Dust deposition gauge location | Gundong Creek Diversion monitor / photo point |
| High volume air sampler location | Vegetation treatment site |
| Real time air quality monitoring station | Vegetation control site |
| Real time noise monitoring station | Additional EPA ID Locations |
| Surface water | Discharge of tailings to the RSF moves around the circumference. |
| | Discharge between the Process Sediment Pond and the Process Water Pond |

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TOMINGLEY GOLD OPERATION

Environmental Monitoring Sites

Projection - AMG Zone 55
Datum (horizontal) - AGD66

Geology: Alane (CM) Plan No.: ALK TOM 1DG-044
Drafted: DJM Date: 4 October 2013 Figure No.:

4. AIR QUALITY MONITORING

4.1 PM10 MONITORING

PM10 is measured via a Tapered Element Oscillating Microbalance (TEOM) located at the southern edge of the Tomingley Village. This machine transmits real-time data via the internet to a computer on site.

The Performance Criteria for PM10 has been set at an Annual Average of 30ug/m³ and a 24-Hour Average of 50ug/m³.

During August there were no exceedences of the 24-Hour Average of 50ug/m³ recorded.

The 24-Hour Average for August was 14.3 ug/m³

The 24-Hour results are included in Appendix 2 to this report.

4.2 DEPOSITIONAL DUST

Depositional Dust monitoring undertaken during August 2013 returned the results indicated in Table 1 below.

Table 1 – Deposited Dust results for August 2013

Location	Date Monitored	Insoluble solids (g/m ² /month)	Comments	Maximum increase in deposited dust level	Maximum total deposited dust level
DDG1	12/07/13 - 09/08/13	1.0	These results are all within the acceptable range for depositional dust during construction.	2 g/m ² /month	4 g/m ² /month
DDG2	12/07/13 - 09/08/13	1.2			
DDG3	12/07/13 - 09/08/13	0.5			
DDG4	12/07/13 - 09/08/13	1.0			
DDG5	12/07/13 - 09/08/13	0.5			

4.3 HIGH VOLUME AIR SAMPLER - TOTAL SUSPENDED PARTICULATES

High Volume Air Sampling (HVAS) for Total Suspended Particulates (TSP) was undertaken during August 2013. Table 2 below provides the results.

The performance criteria for TSP is averaged over 12 months, however data collected to date is below the 90mg/m³ average criteria.

Table 2 – High Volume Air Sampler Data for August 2013

Location	Sheet ID	Date On	Date Off	Results (TSP mg/m ³)	Performance Criteria (Annual Average)
HVAS1	8688845	1/8/2013	2/08/2013	20.3	90 mg/m ³
HVAS1	8688843	7/8/2013	8/8/2013	31.5	
HVAS1	8688846	12/08/2013	13/08/2013	24.8	
HVAS1	8688847	18/08/2013	19/08/2013	35.6	
HVAS1	8688848	24/08/2013	25/08/2013	19.5	

5. NOISE MONITORING

5.1 REAL-TIME NOISE MONITORING

The real time noise monitor was operational at the southern end of the Tomingley Village during August 2013. There were no noise complaints recorded during August 2013.

5.2 HAND HELD MONITORING

No attended monitoring was undertaken during August 2013.

6. SURFACE WATER MONITORING

6.1 GUNDONG CREEK

Gundong Creek did not flow during the monitoring period and therefore no samples were collected.

6.2 SEDIMENTATION PONDS

Sedimentation Ponds 1, 2, 3 and 4 are currently constructed and operational on site. They have been built to capture the ARR 90th percentile average rainfall over a five day period. This has been calculated at 35.6 mm over five days.

If the rainfall event exceeds this over 5 days then the ponds are allowed to overflow.

None of the ponds constructed on site overflowed during August 2013.

The surveyed Total Volume (m³) of the Sedimentation Ponds following construction on site are as follows:

- Sediment Basin 1 = 20,800m³
- Sediment Basin 2 = 3,023m³
- Sediment Basin 3 = 7,440m³
- Sediment Basin 4 = 15,510m³
- Sediment Basin 5 = will be surveyed upon completion of construction

In all cases the constructed volume has exceeded the minimum design volume.

7. CULTURAL HERITAGE MONITORING

There was no cultural heritage monitoring undertaken in August 2013.

8. GROUNDWATER MONITORING

There was no groundwater monitoring undertaken in August 2013.

9. BIODIVERSITY MONITORING

There was no vegetation monitoring undertaken during August 2013.

There were no fauna deaths recorded during August 2013.

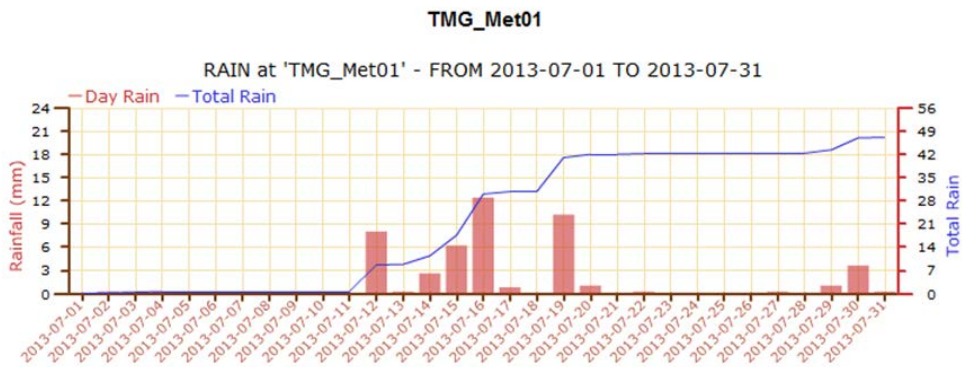
Identification and relocation of Grey-Crowned Babbler nests along the route of the 66kv power line, was undertaken during August 2013. During tree clearing a fauna spotter was present on site to check for the presence of fauna prior to clearing the vegetation. One central bearded dragon was relocated.

Appendix 1

Weather Station Data

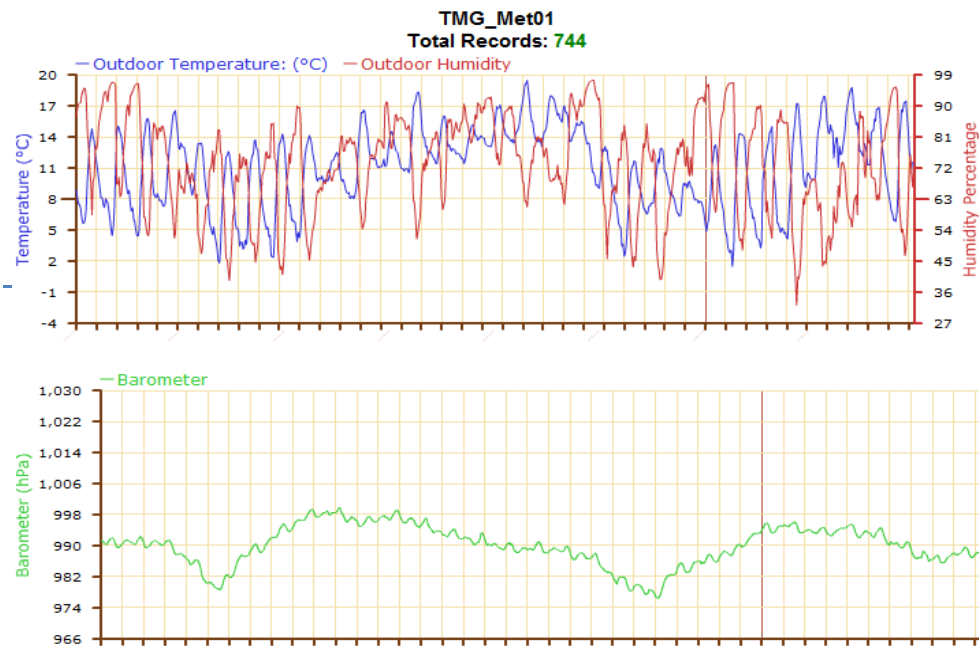
Rainfall

Alkane Environmental Rain Reports Portal

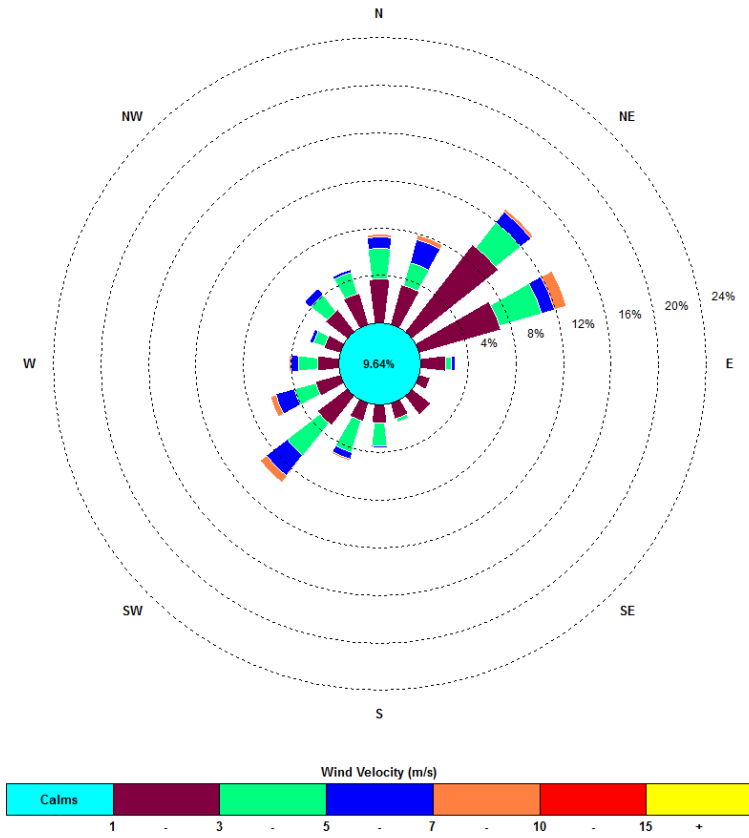


Temperature

Alkane Environmental Monitoring Portal

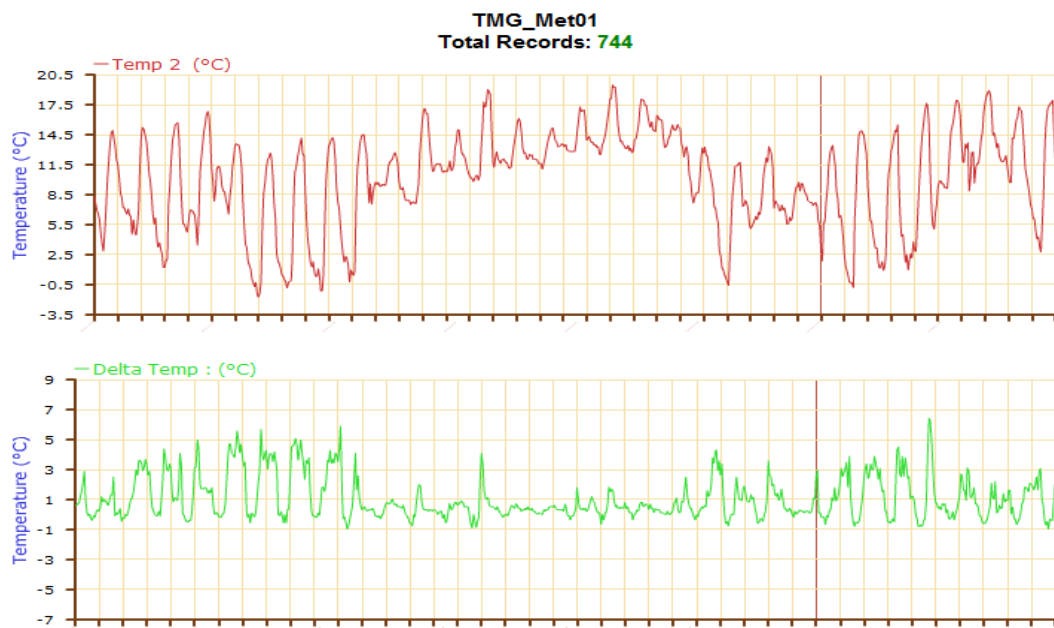


Wind Direction



Temperature at 2m and 10m

Alkane Environmental Monitoring Portal



Filtering for station **TMG_Met01**, From **2013-07-01**, To **2013-07-31** every **HOUR** showing : **Temp2**, **Temp/Hum2**

Appendix 2

Real Time Air Quality Monitoring Data for PM10

Site Report - Tomingley Gold Mine : August 2013

Date & Time	PM10
	ug/m3
01/08/2013 00:00	13.5
02/08/2013 00:00	14.2
03/08/2013 00:00	10.5
04/08/2013 00:00	15.8
05/08/2013 00:00	19.8
06/08/2013 00:00	20.8
07/08/2013 00:00	7.9
08/08/2013 00:00	8.7
09/08/2013 00:00	10
10/08/2013 00:00	8.5
11/08/2013 00:00	9.5
12/08/2013 00:00	11
13/08/2013 00:00	12.6
14/08/2013 00:00	16.2
15/08/2013 00:00	12.5
16/08/2013 00:00	22.1
17/08/2013 00:00	17.1
18/08/2013 00:00	15.8
19/08/2013 00:00	12.8
20/08/2013 00:00	12.4
21/08/2013 00:00	17.1
22/08/2013 00:00	13.6
23/08/2013 00:00	11.8
24/08/2013 00:00	7
25/08/2013 00:00	9.5
26/08/2013 00:00	15
27/08/2013 00:00	14.7
28/08/2013 00:00	12.8
29/08/2013 00:00	33.2
30/08/2013 00:00	22.9
31/08/2013 00:00	14.9
Average	14.3