



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

Tomingley Gold Project

Monthly Environmental Monitoring Report – February 2014



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Revision Number	Revision Date	Prepared By	Comments
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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 February 2014. This report also compares data collected to targets and provides commentary on environmental issues during the month.

2. WEATHER FOR FEBRUARY 2014

2.1 WEATHER STATION DATA

TGO weather data is presented below.

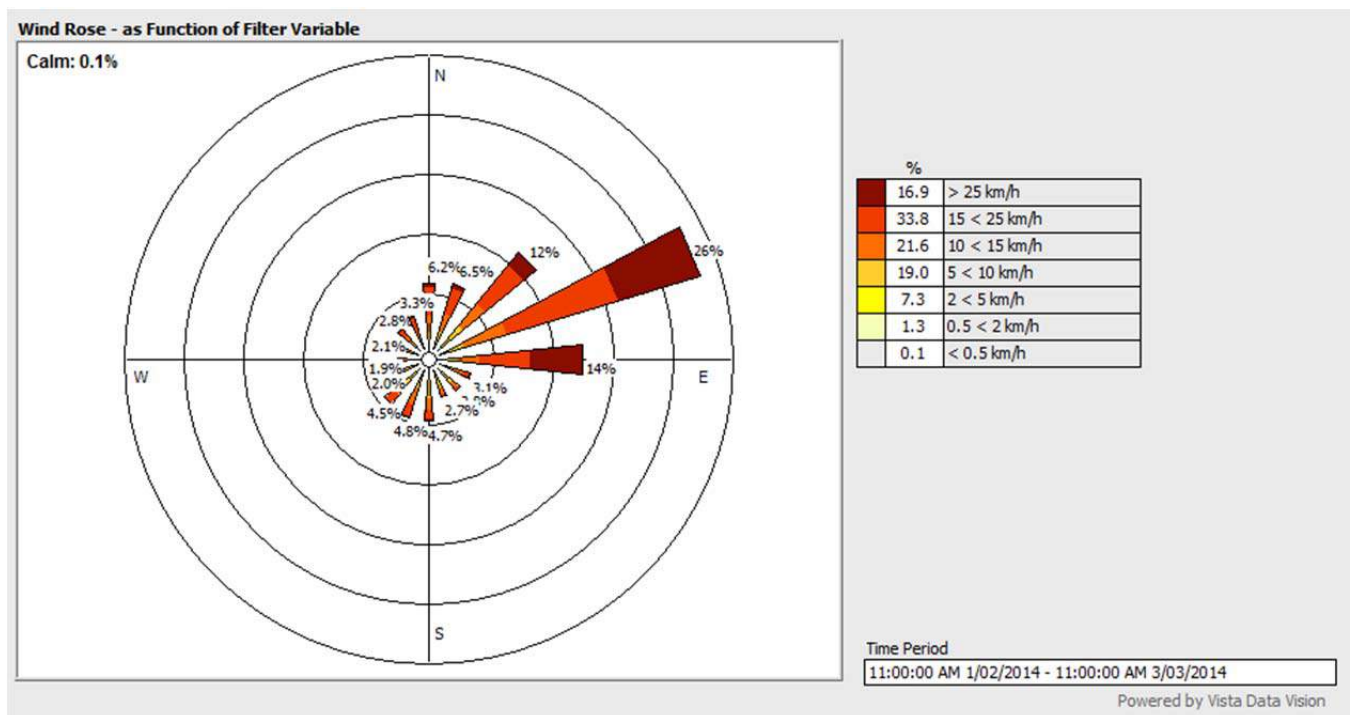


Figure 1. February 2014 wind monitoring station data

February	Amount (millimetres)
15/02/2014	1.4
16/02/2014	13.8
19/02/2014	23.6
21/02/2014 – 28/02/2014	Weather station data nonsensical
27/02/2014	2.2
28/02/2014	1.2
Total	42.2 mm

Table 1. February 2014 rainfall data – Due to nonsensical data from Alkane weather station, data from 27/02/2014 and 28/02/2014 has been taken from Elders weather website:

<http://www.eldersweather.com.au/dailysummary.jsp?lt=site&lc=50031&dt=1>

3. MONITORING LOCATIONS

Figure 2 indicates the location of where monitoring is undertaken for the project. Any additional monitoring undertaken will be discussed within the body of this report.

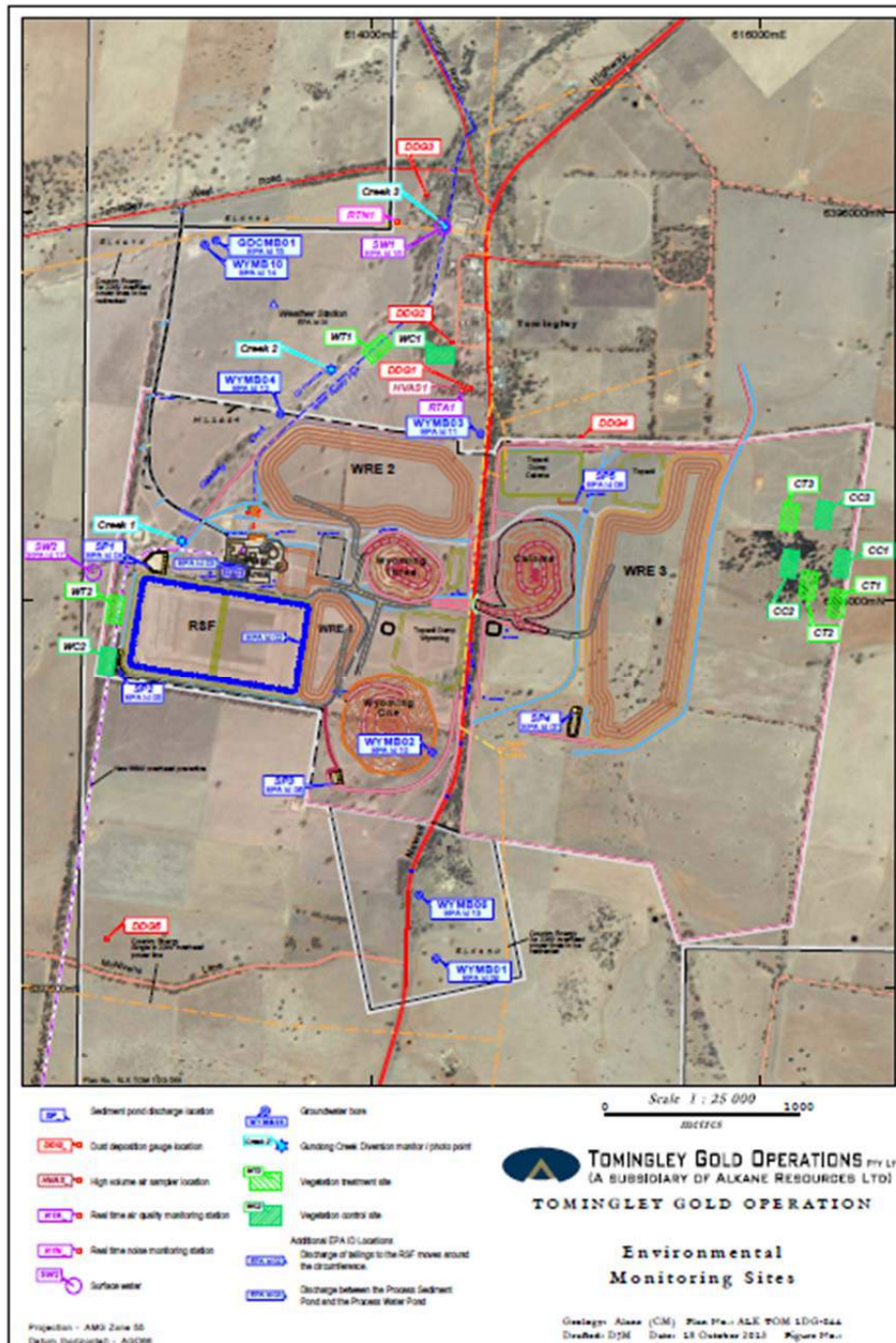


Figure 2. TGO water and vegetation monitoring points.

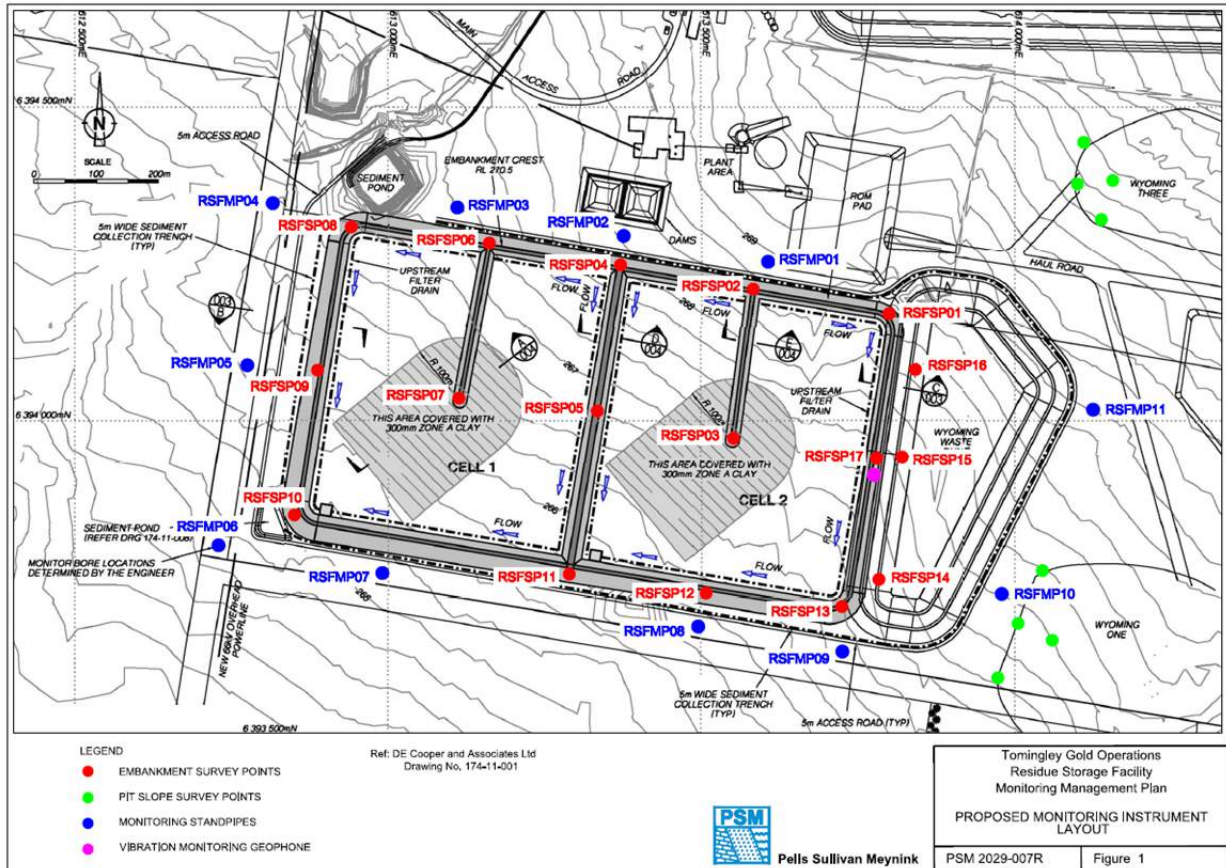


Figure 3. Residue Storage Facility monitoring points.

AIR QUALITY MONITORING

3.1 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 located 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 a service visit by a TEOM technician, the TEOM was confirmed to be operating inappropriately and was shipped for repair.

3.2 DEPOSITIONAL DUST

Depositional Dust monitoring undertaken during February 2014 returned the results indicated in Table 3 below.

Location	Date Monitored	Insoluble solids (g/m ² /month)	Maximum increase in deposited dust level	Maximum total deposited dust level
DDG1	06/02/2014 01/03/2014	- 2.2	An increase in deposited dust level was recorded in 4 monitoring points. A notable decrease of 78mg was seen in DDG4 after a high reading last month.	51mg/ month
DDG2	06/02/2014 01/03/2014	- 1.7		
DDG3	06/02/2014 01/03/2014	- 2.8		
DDG4	06/02/2014 01/03/2014	- 2.1		
DDG5	06/02/2014 01/03/2014	- 2.4		
DDG BP	06/02/2014 01/03/2014	- 3.8		
DDG Truck stop	06/02/2014 01/03/2014	- 3.0		

Table 3. Deposited Dust results for February 2014

3.3 HIGH VOLUME AIR SAMPLER - TOTAL SUSPENDED PARTICULATES

High Volume Air Sampling (HVAS) for Total Suspended Particulates (TSP) was undertaken during February 2014. Table 4 below provides the results.

The performance criteria for TSP is averaged over 12 months. Data presented below show two sampling event exceeded this annual average limit.

Location	Sheet ID	Date On	Date Off	Results (TSP µg/m ³)	Performance Criteria (Annual Average)
HVAS1	888605	06/02/2014	07/02/2014	199.0	90 mg/m ³
HVAS1	888606	12/02/2014	13/02/2014	164.0	
HVAS1	888607	18/02/2014	19/02/2014	50.1	
HVAS1	888608	24/02/2014	25/02/2014	83.4	

Table 4. High Volume Air Sampler Data for February 2014

4. NOISE MONITORING

4.1 REAL-TIME NOISE MONITORING

Real time noise monitoring is undertaken on an ongoing basis and the data for this month is presented below.

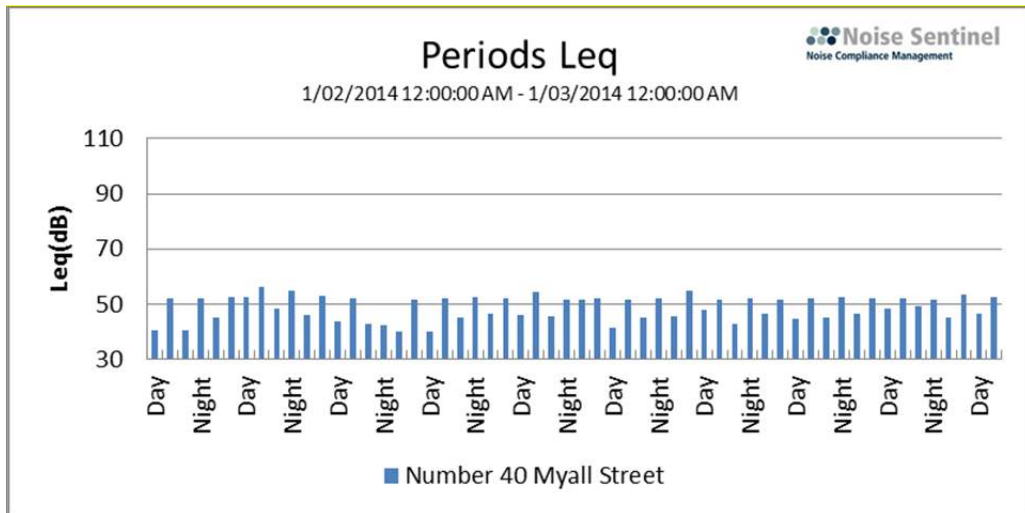
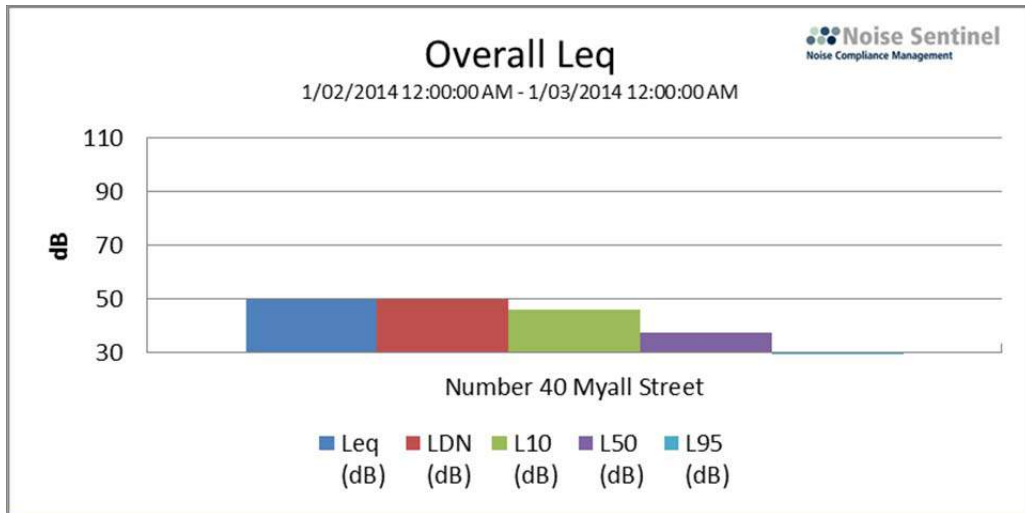


Figure 4. Noise monitoring data.

4.2 HAND HELD NOISE MONITORING

No hand held monitoring was carried out during February.

Overall Data

Location	Start Time	End Time	Activity	LDN (dB)	L _{eq} (dB)	L _{Min} (dB)	L ₁₀ (dB)	L ₅₀ (dB)	L ₉₅ (dB)	
Number 40 Myall Street	1/02 AM	1/03 AM	12:00:00 12:00:00	98%	49.5	49.5	21.5	45.7	37.6	29.3

5. SURFACE WATER MONITORING

5.1 GUNDONG CREEK

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

5.2 SEDIMENTATION PONDS

There was no discharge from the sedimentation ponds during January 2014 accordingly no monitoring was carried out.

6. GROUNDWATER MONITORING

Groundwater monitoring is carried out quarterly.

Ground water monitoring was carried not carried out since last report.

7. BIODIVERSITY MONITORING

Native fauna sightings during January include:

- A Gould's Long-eared Bat was found under a Deposited Dust Gauge.
- An Echidna was sighted walking alongside the main site entry road.
- Several Kangaroos were seen on several occasions in the front paddock.
- A Common Bronzewing and White-faced Heron were seen.
- A Swamp Wallaby was seen at the turn off to Tomingley West Rd. early one morning.

Native animal rescue:

- Juvenile Eastern Brown Snake, juvenile Bearded Dragon and small skin were collected and removed from an enclosed area in the processing plant. All were in good health and were released elsewhere on site.
- During the disbanding of a dam on site, two Eel-tailed Catfish and numerous Yabbies were translocated to an alternative dam on site.

Vertebrate pests sighted during January include:

- Two Hare sightings
- Two Fox sightings
- Numerous small Carp in dam on site