



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

Tomingley Gold Project

Monthly Environmental Monitoring Report – January 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 January 2014.

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

2. WEATHER FOR JANUARY 2014

2.1 WEATHER STATION DATA

TGO weather data is presented below.

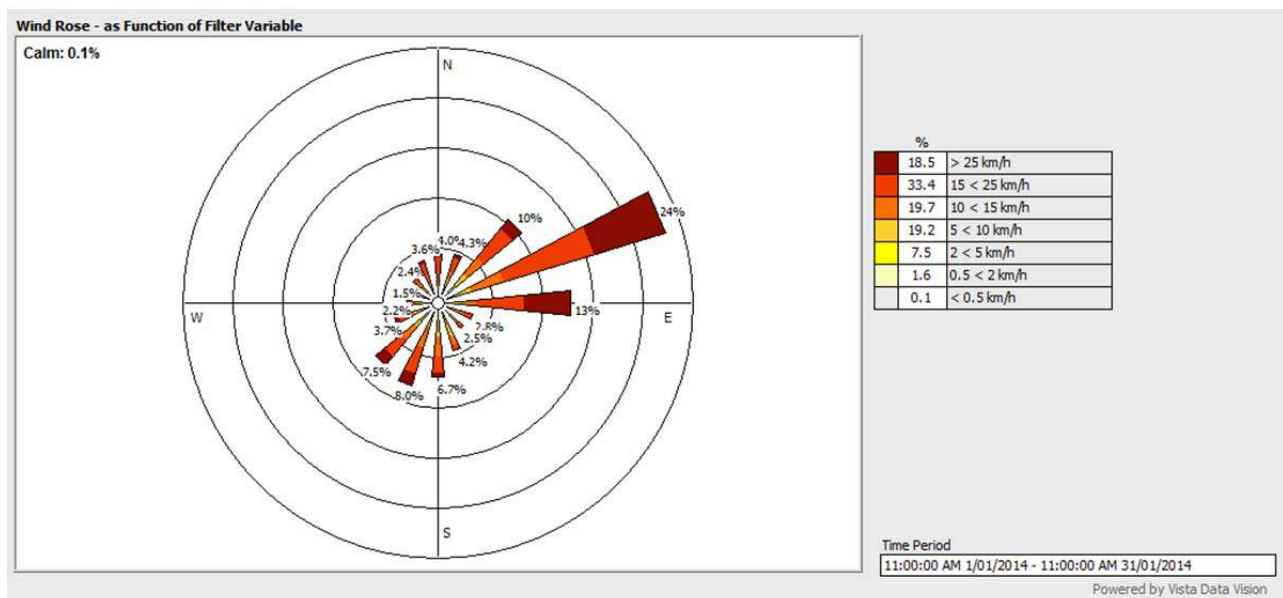


Figure 1. January 2014 wind monitoring station data

January	Amount (millimetres)
9/01/2014	31.2
10/01/2014	6.0
19/01/2014	0.6
23/01/2014	6.2
24/01/2014	17.2
Total	62.1 mm

Table 1. January 2014 rainfall data

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.

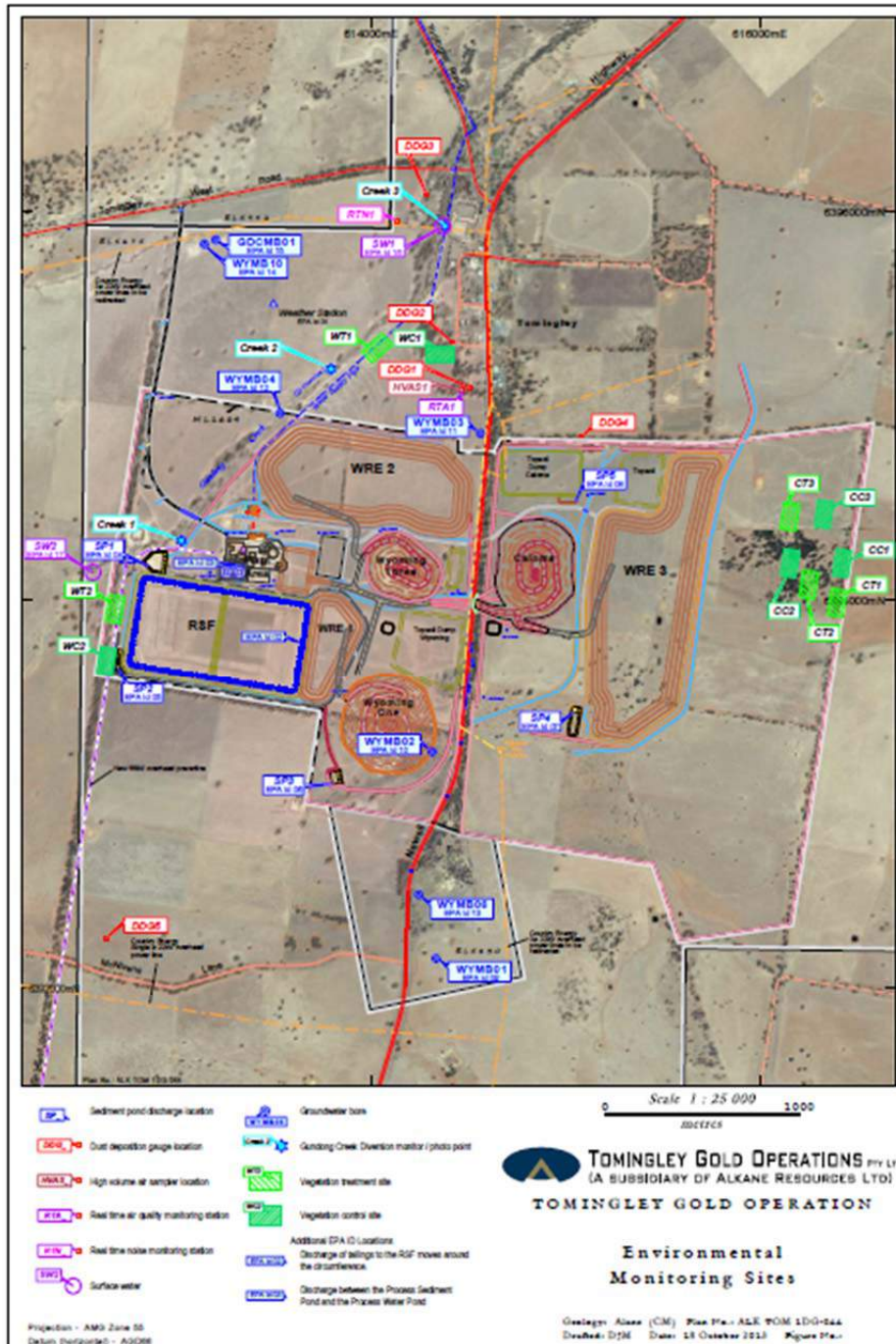


Figure 2

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.

	Air quality (ug/m3)
Maximum	56.9
Avg	18.4

Table 2. January PM10 air quality monitoring summary.

During January there were 2 occasions when the 24-Hour Average of 50ug/m³ was exceeded. Data presented in Appendix 1.

3.2 DEPOSITIONAL DUST

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

Location	Date Monitored	Insoluble solids (g/m2/month)	Maximum increase in deposited dust level	Maximum total deposited dust level
DDG1	09/01/2014 06/02/2014	- 1.7	An increase in deposited dust level was recorded in all monitoring points except DDG2	6.4 g/m2/month
DDG2	09/01/2014 06/02/2014	- 0.8		
DDG3	09/01/2014 06/02/2014	- 1.6		
DDG4	09/01/2014 06/02/2014	- 6.4		
DDG5	09/01/2014 06/02/2014	- 2.1		
DDG BP	09/01/2014 06/02/2014	- 3.2		
DDG Truck stop	09/01/2014 06/02/2014	- 2.1		

Table 3. Deposited Dust results for January 2014

3.3 HIGH VOLUME AIR SAMPLER - TOTAL SUSPENDED PARTICULATES

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

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

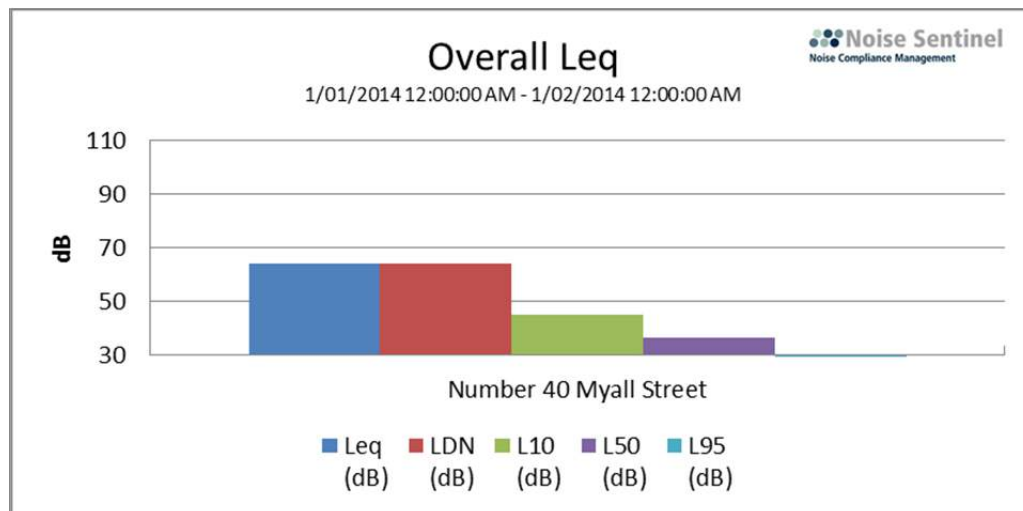
Location	Sheet ID	Date On	Date Off	Results (TSP $\mu\text{g}/\text{m}^3$)	Performance Criteria (Annual Average)
HVAS1	687394	1/01/2014	02/01/2014	74.3	90 mg/m ₃
HVAS1	687395	7/01/2014	08/01/2014	123	
HVAS1	687396	13/01/2014	14/01/2014	78.5	
HVAS1	687397	19/01/2014	20/01/2014	66.5	
HVAS1	687398	25/01/2014	26/01/2014	26.6	
HVAS1	888600	31/01/2014	01/02/2014	49.1	

Table 4. High Volume Air Sampler Data for January 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 resented below.



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	1/01 12:00:00 AM	1/02 12:00:00 AM	82%	64.2	64.2	21.9	44.9	36.5	27.8

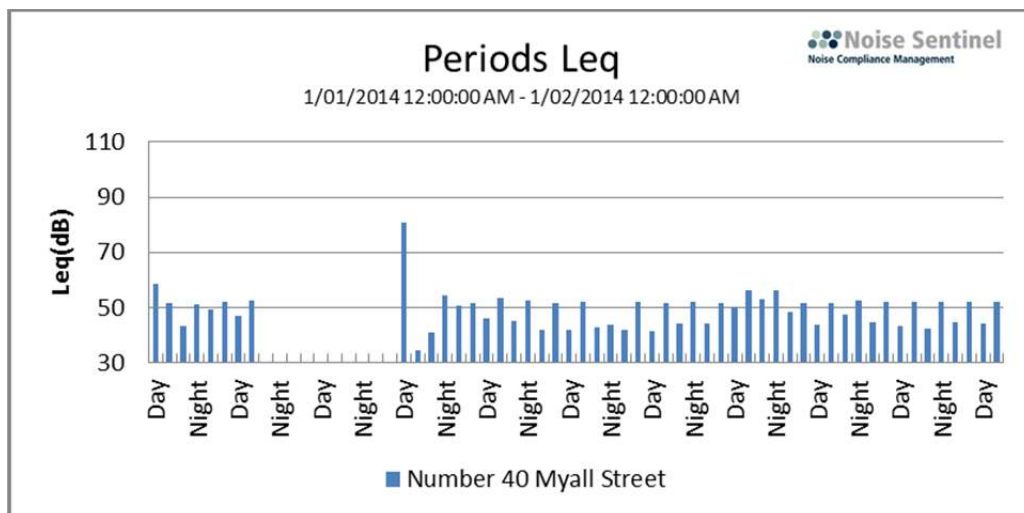


Figure 3. Noise monitoring data.

4.2 HAND HELD NOISE MONITORING

No hand held monitoring was carried out during January

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

Photos were taken and a vegetation monitoring survey was undertaken at each of the three Gundong Creek photo monitoring points during January 2014. See Figures 4 to 9.



Figure 4. Gundong Creek monitoring point 1 – 26 Jan 2013



Figure 5. Gundong Creek monitoring point 1 – 5 Jan 2014



Figure 6. Gundong Creek monitoring point 2 – 26 Jan 2013



Figure 7. Gundong Creek monitoring point 2 – 5 Jan 2014



Figure 8. Gundong Creek monitoring point 3 – 26 Jan 2013



Figure 9. Gundong Creek monitoring point 3 – 5 Jan 2014

Native fauna sightings during January include:

- Two Spotted Harriers was sighted on the far eastern side of Caloma 1 in the leased area.
- One Spotted Harrier was sighted between the primary mine access road and Gundong Creek.

- A group of six Superb Parrots were seen in the Inland Grey Box community beside the primary mine entrance road.
- Grey-crowned Babbler group (or two) observed amongst the woodland areas on the eastern and north eastern side of Caloma.
- Two Australian Hobbies were sighted circling over the ROM pad.

Vertebrate pests sighted during January include:

- Approximately 5 Hare sightings (Various across the site)
- Two Fox sightings (Primary access road and in the Belah/ Black Oak woodland community component of the Biodiversity Offset area).

There were no fauna deaths recorded during January 2014.

Appendix 1
Real Time Air Quality Monitoring Data for PM10

Site Report - Site Tomingley Gold Report :				
TimeBeginning	PM10	Noise	Status	Filter Load
Date&Time	ug/m3	ug	0=ok	%
1/01/2014 0:00	29.2	0.074	0	79.4
2/01/2014 0:00	30.1	0.059	0	79.4
3/01/2014 0:00	34.2	0.047	0	78.6
4/01/2014 0:00	23.5	0.042	0	82.8
5/01/2014 0:00	19.9	0.046	0	82.8
6/01/2014 0:00	37	0.045	0	84.1
7/01/2014 0:00	56.9	0.046	0	85.6
8/01/2014 0:00	52	0.039	<Samp	88.6
9/01/2014 0:00	20.9	0.076	---	93.3
10/01/2014 0:00	18.9	0.101	<Samp	92.3
11/01/2014 0:00	-125.7	0.232	<Samp	83.9
12/01/2014 0:00	22.1	0.125	0	81.2
13/01/2014 0:00	35.8	0.072	0	86.9
14/01/2014 0:00	45.7	0.08	---	94.2
15/01/2014 0:00	30.8	0.075	---	95.1
16/01/2014 0:00	28.6	0.073	---	95.8
17/01/2014 0:00	28.4	0.07	---	96.8
18/01/2014 0:00	32.5	0.058	---	98.3
19/01/2014 0:00	31.4	0.078	---	98.8
20/01/2014 0:00	27.6	0.063	---	101.5
21/01/2014 0:00	32.9	0.073	---	103.1
22/01/2014 0:00	48.9	0.051	---	105.4
23/01/2014 0:00	30.7	0.053	---	106.1
24/01/2014 0:00	-140	0.199	<Samp	104.3
25/01/2014 0:00	10.4	0.162	0	87.2
26/01/2014 0:00	13.6	0.079	<Samp	89.3
27/01/2014 0:00	17.5	0.072	<Samp	91.4
28/01/2014 0:00	14.7	0.069	<Samp	92.2
29/01/2014 0:00	19.4	0.073	---	93.4
30/01/2014 0:00	15.9	0.076	---	95
31/01/2014 0:00	27.1	0.057	---	97.2

Real Time Air Quality Monitoring - Summary				
TimeBeginning	PM10	Noise	Status	Filter Load
Date&Time	ug/m3	ug	0=ok	%
Min	-140	0.039	0	78.6
MinDate	24/01/2014 0:00	8/01/2014 0:00	1/01/2014 0:00	3/01/2014 0:00
Maximum	56.9	0.232	0	106.1
MaxDate	7/01/2014 0:00	11/01/2014 0:00	1/01/2014 0:00	23/01/2014 0:00
Avg	18.4	0.079	0	91.7
Num	31	31	10	31
Data[%]	97	97	31	97
STD	41.9	0	0	8