



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

Tomingley Gold Project

Monthly Environmental Monitoring Report – December 2013



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TABLE OF REVISIONS

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 December 2013.

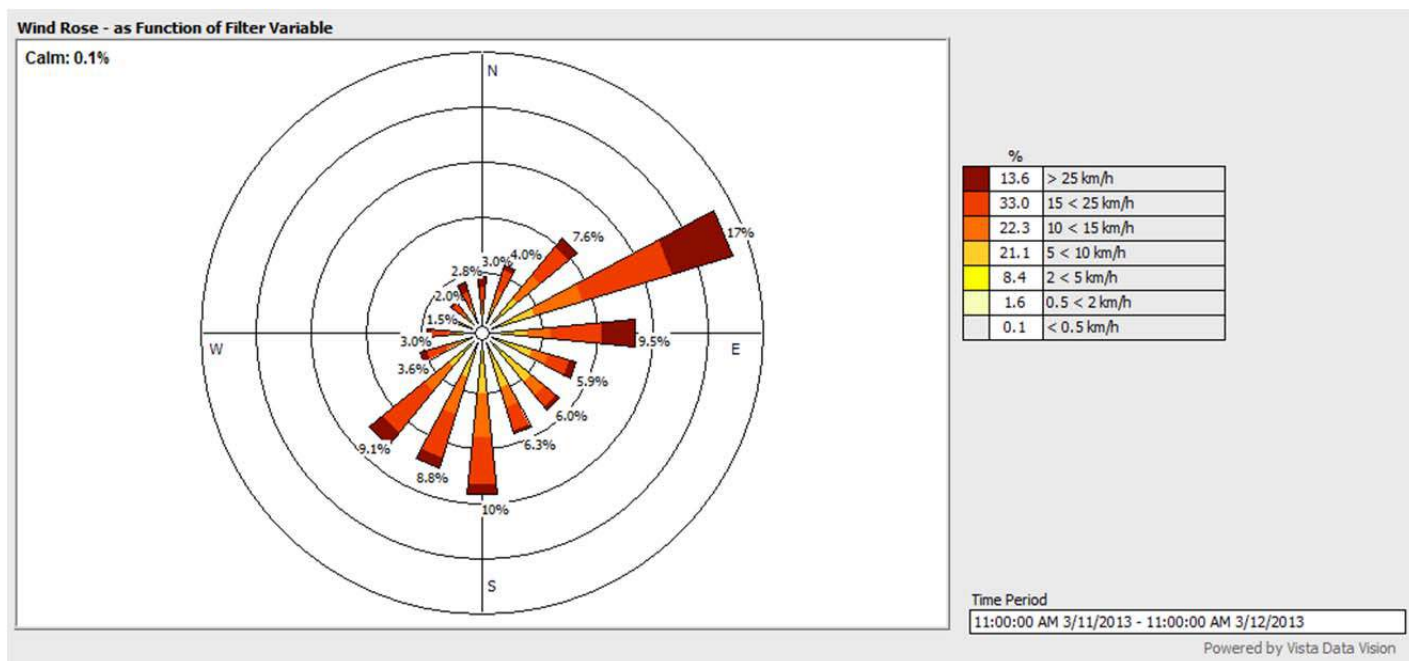
This report also compares data collected to targets and provides commentary on environmental issues during the month.

2. WEATHER FOR DECEMBER 2013

2.1 WEATHER STATION DATA

Data from the weather station located on site is presented below.

Figure 1. December 2013 wind station data.



RAINFALL

Table 1. December 2013 rainfall data

December	
4/12/2013	1.4 mm
5/12/2013	9.2 mm
25/12/2013	30.8 mm
Total	41.4 mm

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.

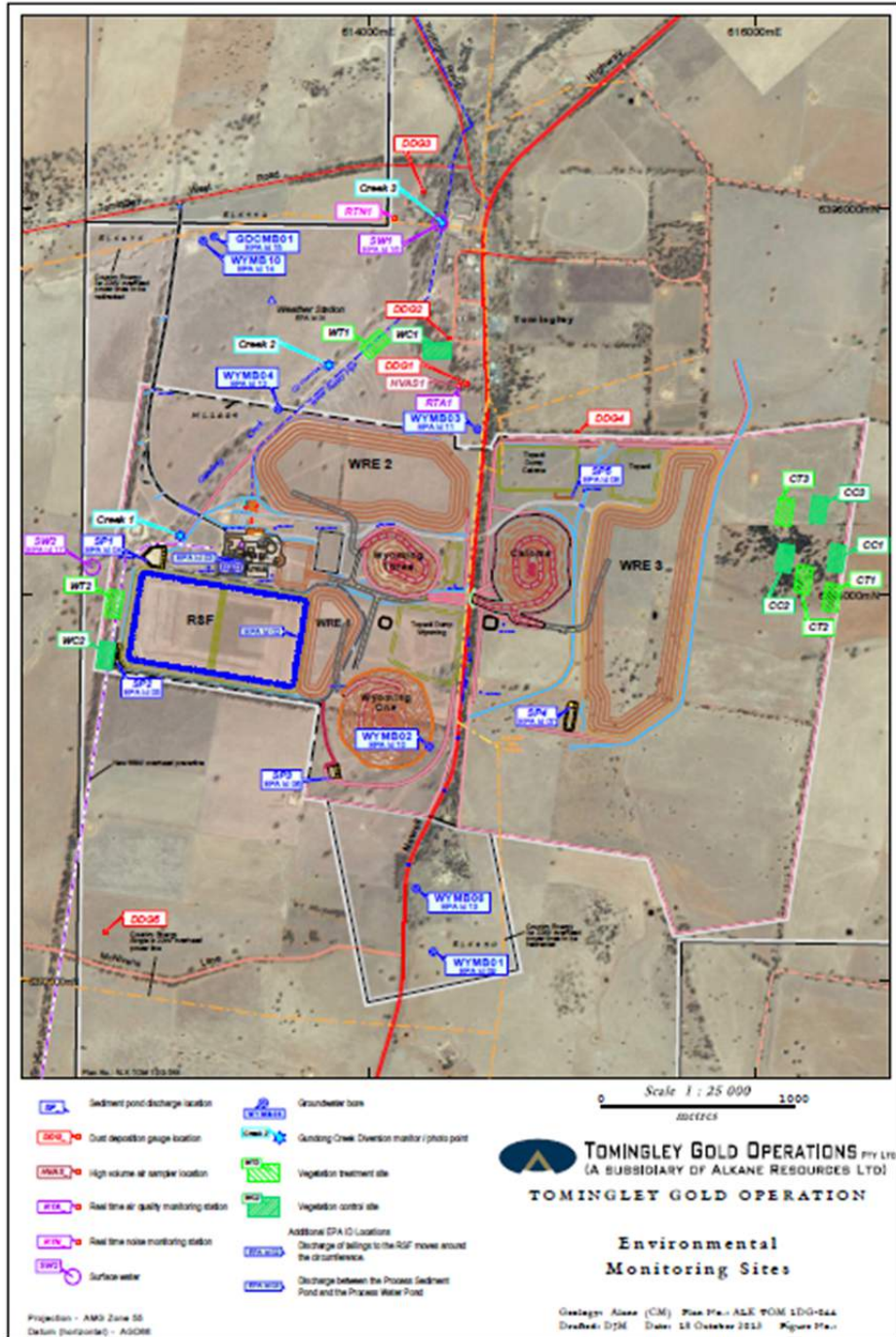


Figure 2

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)
Min	-549
MinDate	25/12/2013 00:00
Maximum	53.8
MaxDate	23/12/2013 00:00
Avg	-3.1
Num	31
Data[%]	97
STD	111.1

Table 2. December 2013 PM10 air quality monitoring summary.

Complete data presented in Appendix 1.

3.2 DEPOSITIONAL DUST

Depositional Dust monitoring undertaken during December 2013 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	05/12/13 – 09/01/2014	0.9	A decrease in deposited dust level was recorded in all monitoring points	2.5 g/m2/month
DDG2	05/12/13 – 09/01/2014	1.3		
DDG3	05/12/13 – 09/01/2014	1.1		
DDG4	05/12/13 – 09/01/2014	2.5		
DDG5	05/12/13 – 09/01/2014	0.7		
DDG BP	05/12/13 – 09/01/2014	1.6		
DDG Truck stop	05/12/13 – 09/01/2014	1.4		

Table 3. Deposited Dust results for December 2013

3.3 HIGH VOLUME AIR SAMPLER - TOTAL SUSPENDED PARTICULATES

High Volume Air Sampling (HVAS) for Total Suspended Particulates (TSP) was undertaken during December 2013. Table 4 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.

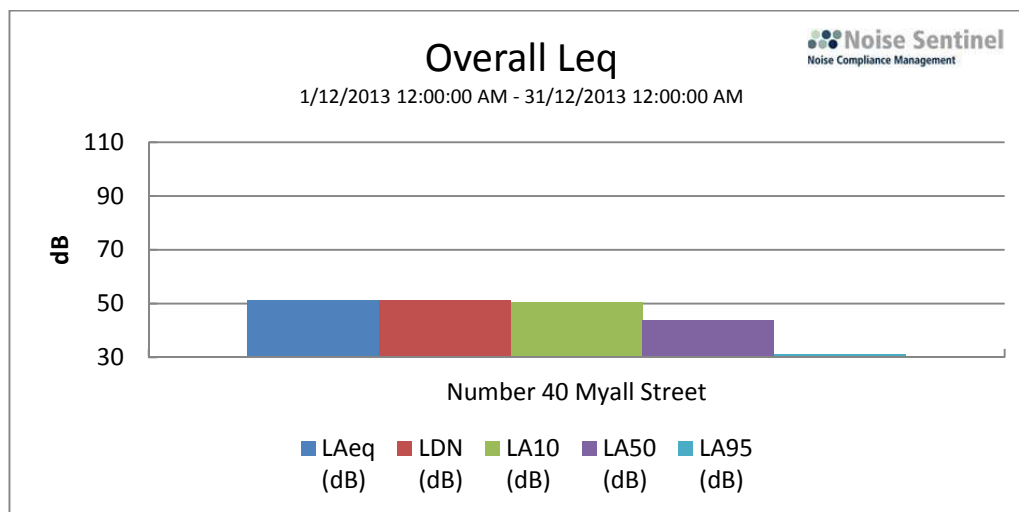
Table 4 – High Volume Air Sampler Data for December 2013

Location	Sheet ID	Date On	Date Off	Results (TSP mg/m ³)	Performance Criteria (Annual Average)
HVAS1	8832667	06/12/2013	07/12/2013	64.6	90 mg/m ³
HVAS1	8832668	12/12/2013	13/12/2013	64.5	
HVAS1	8687393	18/12/2013	19/12/2013	42.9	
HVAS1	8886599	23/12/2013	25/12/2013	64.6	

4. NOISE MONITORING

4.1 REAL-TIME NOISE MONITORING

Figure 3. Noise monitoring data given below.



Overall Data

Location	Start Time	End Time	Activity	LDN (dB)	L _{Aeq} (dB)	L _{AMin} (dB)	L _{A10} (dB)	L _{A50} (dB)	L _{A95} (dB)
Number 40 Myall Street	1/12 12:00:00 AM	31/12 12:00:00 AM	100%	51.1	51.1	21.4	50.7	44.0	31.4

7. BIODIVERSITY MONITORING

There was no vegetation monitoring undertaken during December 2013.

There were no fauna deaths recorded during December 2013.

Native fauna sightings during December include:

- Spotted Harrier was sighted on the far northern side of Caloma.
- Zebra Finches noted nesting near administration area on the TGO site.



Figure 4. Male and female Zebra Finch in their nest.

Appendix 1

Real Time Air Quality Monitoring Data for PM10

Site Report - Site Tomingley Gold Report : Time Beginning

Date & Time	PM10 ug/m3	Noise ug	Status 0=ok	Filter Load %
01/12/2013 00:00	14.3	0.034	---	100.1
02/12/2013 00:00	17.4	0.037	---	99.3
03/12/2013 00:00	18.2	0.044	---	98
04/12/2013 00:00	45.2	0.061	---	97.6
05/12/2013 00:00	22.3	0.113	---	104.2
06/12/2013 00:00	20.8	0.07	---	105.6
07/12/2013 00:00	25.3	0.066	---	104.3
08/12/2013 00:00	12.9	0.066	---	100.9
09/12/2013 00:00	37.5	0.055	---	98.9
10/12/2013 00:00	16	0.04	---	102.5
11/12/2013 00:00	19.9	0.037	---	103.8
12/12/2013 00:00	18.4	0.044	---	103.4
13/12/2013 00:00	16.3	0.057	---	102.5
14/12/2013 00:00	20.9	0.041	---	102.4
15/12/2013 00:00	16	0.05	---	102.4
16/12/2013 00:00	27.9	0.043	---	102.3
17/12/2013 00:00	15.1	0.035	---	102.8
18/12/2013 00:00	23.7	0.036	---	101.6
19/12/2013 00:00	22.7	0.035	---	101.8
20/12/2013 00:00	28.8	0.038	---	101.4
21/12/2013 00:00	29.3	0.036	---	100.7
22/12/2013 00:00	41.3	0.046	---	100.8
23/12/2013 00:00	53.8	0.04	---	103.4
24/12/2013 00:00	11	0.035	---	106.5
25/12/2013 00:00	-549	0.451	<Samp	98.2
26/12/2013 00:00	-224.4	0.294	3950	67.5
27/12/2013 00:00	9.5	0.156	0	65.9
28/12/2013 00:00	13.9	0.09	0	69.3
29/12/2013 00:00	38.6	0.08	0	73.2
30/12/2013 00:00	18.9	0.072	0	76.3
31/12/2013 00:00	20.3	0.107	0	77.3
Min	-549	0.034	0	65.9
MinDate	25/12/2013 00:00	01/12/2013 00:00	27/12/2013 00:00	27/12/2013 00:00
Maximum	53.8	0.451	3950	106.5
MaxDate	23/12/2013 00:00	25/12/2013 00:00	26/12/2013 00:00	24/12/2013 00:00
Avg	-3.1	0.078	658.3	96
Num	31	31	6	31
Data[%]	97	97	19	97
STD	111.1	0.1	1612.6	12.5