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

Tomingley Gold Project

Monthly Environmental Monitoring Report – April 2014

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TABLE OF REVISIONS

Revision Number	Revision Date	Prepared By	Comments
Revision 1	May 2014	Mark Williams	Submitted for Information

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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 April 2014.

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

2. WEATHER FOR APRIL 2014

2.1 WEATHER STATION DATA

TGO weather data is presented below.

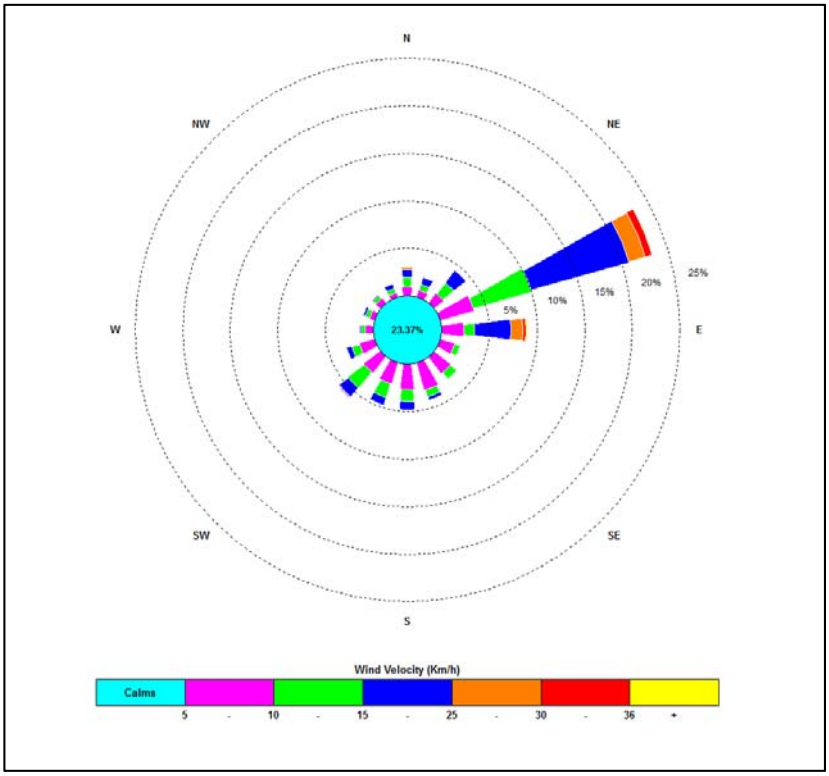


Figure 1. April 2014 wind monitoring station data

April	**Amount (millimetres)**
03/04/2014	24.6
04/04/2014	1
06/04/2014	0.2
10/04/2014	23
11/04/2014	1.2
12/04/2014	0.2
30/04/2014	18.6
Total	**68.8 mm**

Table 1. April 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.

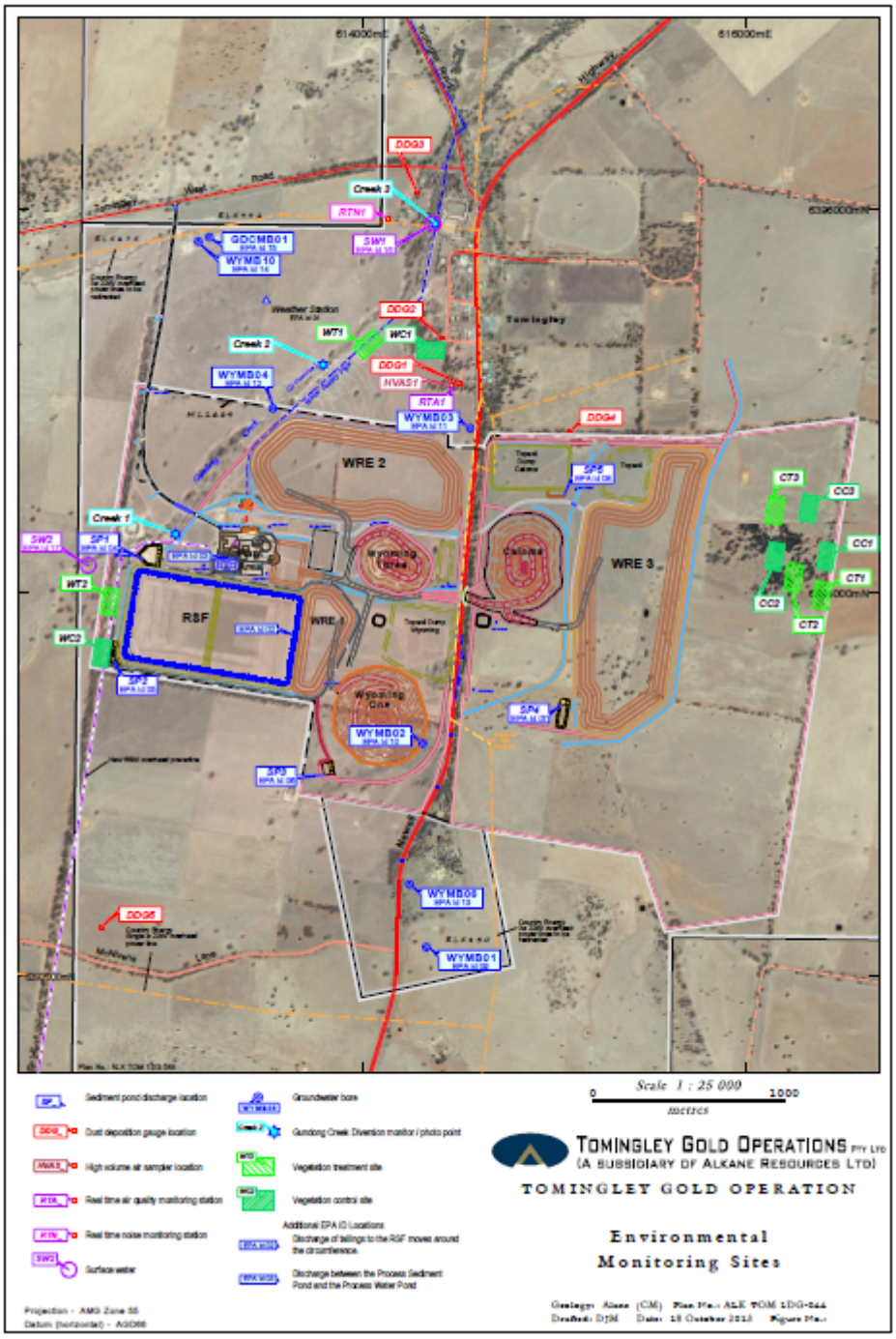


Figure 2. TGO water and vegetation monitoring points.

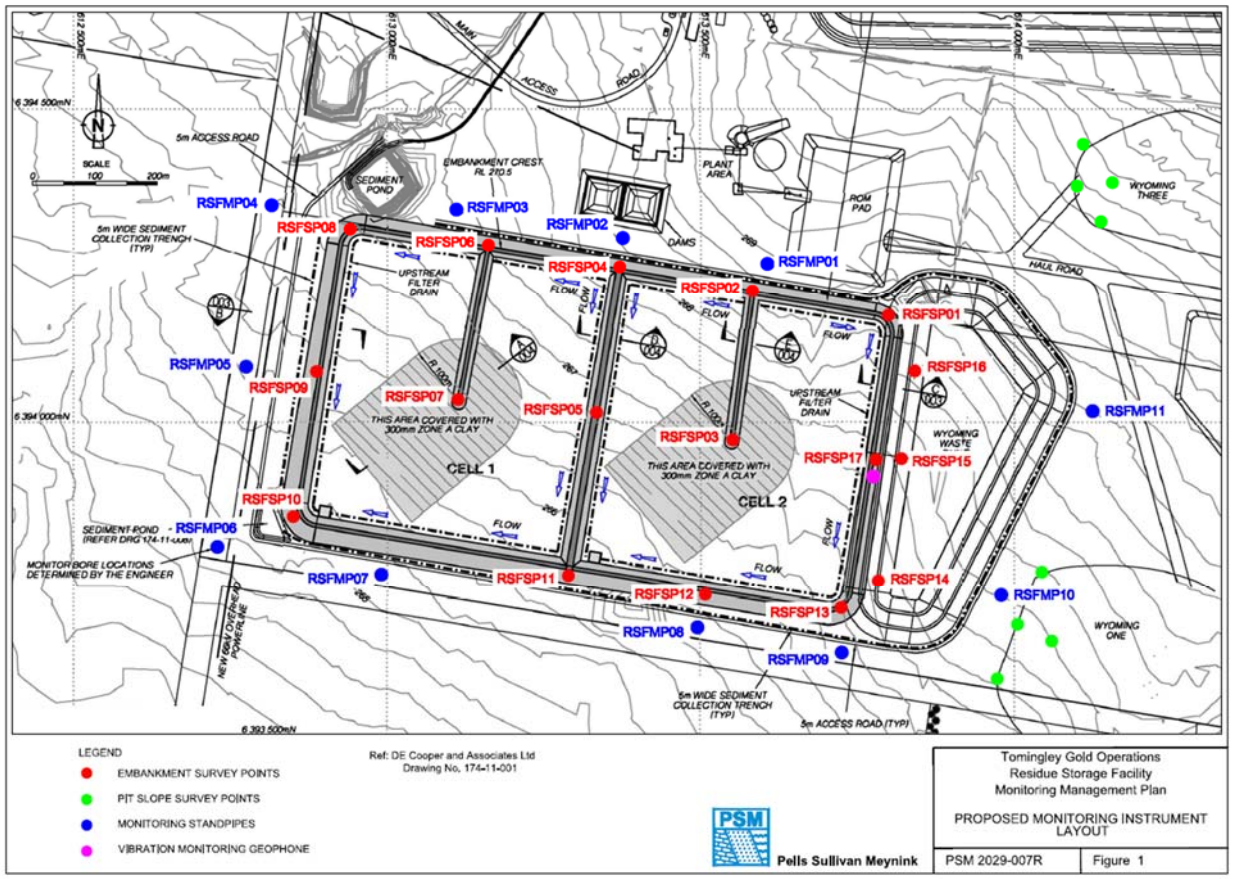


Figure 3. Residue Storage Facility monitoring points.

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/m^3 and a 24-Hour Average of 50ug/m^3.

The TEOM system has been repaired. It is now operating appropriately and has started to record data from the 12th May. The data recorded prior to that date is not available.

3.2 DEPOSITIONAL DUST

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

Location	Date Monitored	Insoluble solids (g/m2/month)	Maximum increase in deposited dust level
DDG1	01/04/2014 – 01/05/2014	1.4	An increase was recorded for DDG3 small increase of only 0.4 g/m^2. While DDG4 again gives the highest reading, all are within acceptable limits.
DDG2	01/04/2014 – 01/05/2014	1.3	
DDG3	01/04/2014 – 01/05/2014	1.4	
DDG4	01/04/2014 – 01/05/2014	8.1	
DDG5	01/04/2014 – 01/05/2014	0.8	

Table 3. Deposited Dust results for April 2014

3.3 HIGH VOLUME AIR SAMPLER - TOTAL SUSPENDED PARTICULATES

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

The performance criteria for TSP is averaged over 12 months.

Location	Sheet ID	Date On	Date Off	Results (TSP µg/m^3)	Performance Criteria (Annual Average)
HVAS1	8892900	02/04/2014	03/04/2014	27.1	90 mg/m$_3$
HVAS1	8954868	08/04/2014	09/04/2014	19.7	
HVAS1	8954863	14/04/2014	15/04/2014	31.1	
HVAS1	8854864	20/04/2014	21/04/2014	40.6	
HVAS1	8954866	30/04/2014	02/05/2014	55.9	

Table 4. High Volume Air Sampler Data for April 2014

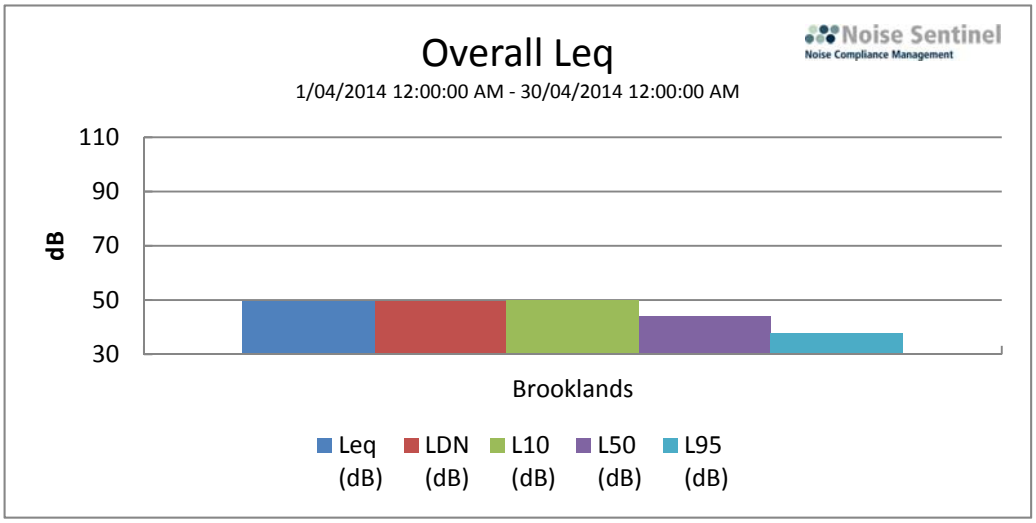
4. NOISE MONITORING

4.1 REAL-TIME NOISE MONITORING

Due to a circuit board failure the monitor was off line for significant period in March. It has since been repaired and was fully operational during April period.

Long Period

Tomingley Gold Site (1/04/2014 12:00 AM - 30/04/2014 12:00 AM)



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)
Brooklands	1/04 12:00:00 AM	30/04 12:00:00 AM	74%	49.7	49.7	24.4	49.9	44.0	37.6

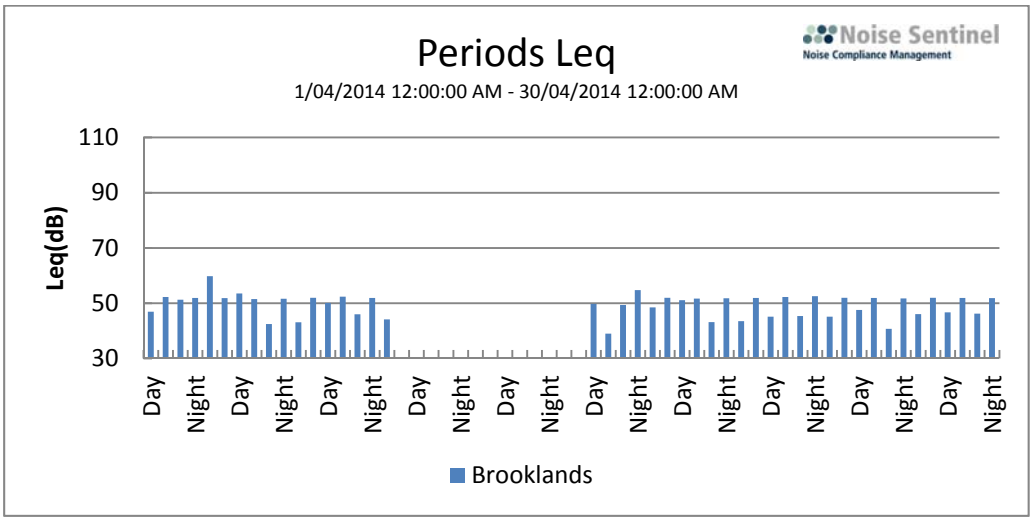


Figure 3. Noise monitoring data.

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 April 2014.

6. GROUNDWATER MONITORING

Groundwater monitoring is carried out quarterly. All ground water monitoring piezometers were sampled in March. Results for this monitoring are shown below.

Pollutant	Units	WYMB 01 (EPA09)	WYMB 02 (EPA10)	WYMB 03 (EPA11)	WYMB 04 (EPA12)	WYMB 06 (EPA13)	WYMB 10 (EPA14)	GDCMB 01 (EPA15)
pH	unitless	8.1	8.24	8.07	7.68	7.58	7.47	6.83
EC@ 25C	uS/cm	12200	22700	21200	27200	13200	28700	434
Bicarbonate as CaCO3	mg/L	341	967	1080	957	1150	847	34
Carbonate Alkality as CaCO3	mg/L	-	-	-	-	-	<1	
Total Alkalinity as CaCO3	mg/L	341	967	1080	957	1150	847	34
Hardness as CaCO3	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
Sulfate as SO4- Phosphate	mg/L	927	1810	1910	2280	2010	2820	20
Chloride	mg/L	3470	6420	5900	7650	2750	8050	58
Calcium (dissolved)	mg/L	231	153	196	273	140	226	<1
Magnesium (dissolved)	mg/L	257	500	585	757	309	649	1
Sodium (dissolved)	mg/L	2450	5770	5410	6580	3060	7120	100

Potassium (dissolved)	mg/L	8	12	19	22	9	28	1
Arsenic	mg/L	0.002	<0.001	0.002	0.003	0.03	<0.001	0.006
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	mg/L	<0.001	0.003	0.002	0.049	0.004	0.001	0.025
Copper	mg/L	0.041	0.057	0.030	0.015	0.012	0.002	0.015
Nickel	mg/L	0.006	0.005	0.013	0.011	0.036	0.004	0.014
Lead	mg/L	<0.001	0.002	0.002	0.049	0.004	<0.001	0.015
Zinc	mg/L	0.035	0.12	0.038	0.149	0.077	0.009	0.046
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Free Cyanide	mg/L	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Total Cyanide	mg/L	0.019	0.006	<0.004	<0.004	0.079	<0.004	<0.004
Weak Acid Dissociable Cyanide	mg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Ammonia as N	mg/L	0.06	0.02	0.03	0.06	0.05	0.02	0.04
Total Iron	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Phosphate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nitrate	Mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Standing water level	meter below ground level	38.7	59.28	54.25	63.2	35.6	72.7	2.1

N/A: Not analysed in this occasion.

7. BIODIVERSITY MONITORING

Native fauna sightings:

- An Australasian Pipit was observed near the Residue Storage Facility
- Grey-fantails are often seen around the administration building
- Zebra Finches nesting outside the main administration building successfully raised three chicks
- Grey Kangaroos have been seen in the front paddock.
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Native animal rescue:

No native animal rescue was required this month.

Vertebrate pests:

- Foxes and Hares were sighted in the paddocks surrounding the mine.
- A large cat was observed on the mine site.