

First Annual Report
on
EL 16/2012 – Reedy Marsh

Reporting Period: 16 June 2013 – 15 June 2014
Project Operator: ABx4 Pty Ltd
Address: Level 2, 131 Macquarie Street, Sydney, NSW, 2000
Authors: Tamara Coyte, Thomas Battaglia
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1 ABSTRACT

Objective:

Exploration Licence (EL) 16/2012 “Brushy Rivulet” was applied for in order to facilitate an exploration program to discover economically viable deposits of bauxite associated with Tertiary Volcanics, in an area with old peneplained surfaces preserved as plateaus. The goal of the program is to determine the quality and quantity of the bauxite in the area using an RC drill rig mounted on a light 12 tonne truck.

Methodology:

1. Detailed geological mapping, including geomorphological mapping, to define the areas with best potential for bauxite.
2. Systematic sampling of natural outcrops and exposures in road cuts of lateritic weathering profile.
3. Chemical analyses of samples, including specialist analyses to determine total and available alumina, total and reactive silica, loss on ignition and other analyses as required in the bauxite search.
4. Drill testing of zones with best potential defined by work under 1, 2. and 3, by an RC drill rig mounted on a light Mitsubishi truck to get samples representing the whole lateritic weathering profile (from upper-most iron rich zone through alumina rich zone down into mottled and pallid saprolite zone).
5. Systematic drill testing at close spacing's to obtain data for resource estimation in the best target areas defined by programme under 4.
6. Mine-ability study of Tasmanian bauxite using a small excavator to dig bauxite and screen test on a larger scale.

Results:

Preliminary geological mapping by traversing by foot took place in May 2014 in order to delineate the extent of bauxite ore in the south-eastern section of the tenement area (see Map 2 for mapping area). Several bauxite outcrops were identified within this mapping area, however, more traversing is required to properly map the bauxite in this area.

Recommendations for future work:

Recommendation for future work include further:

- Detailed geological mapping, including geomorphological mapping and study of satellite images to define the areas with the best potential for bauxite.
- Systematic sampling of natural outcrops and exposures in road cuts of lateritic weathering profile.
- Chemical analyses of samples, including specialist analyses to determine total and available alumina, total and reactive silica, loss on ignition and sieving.

- Drill testing of zones with best potential with an RC drill rig mounted on a light six wheel truck to get samples representing the whole lateritic weathering profile (from upper-most iron rich zone through alumina rich zone down into mottled and pallid saprolite zone).
- Systematic drilling at close spacing's to obtain data for preliminary resource estimation in the best target areas defined by the program.
- Sieve testing to find optimal sieve size for Tasmanian bauxites.
- Detailed analysis of assay results to determine assaying strategy for future drilling.

2 INTRODUCTION

Exploration Rationale

ABx4 Pty Ltd - the holder of Category 1 Exploration Licence EL 16/2012 - is the wholly owned subsidiary of Australian Bauxite Ltd. Australian Bauxite Limited (ABx) (ASX: ABZ) is an exploration company that holds the core of the Tasmanian Bauxite Province with all tenements selected on 3 principles:

- Quality – good quality bauxite with potential for significant resource tonnages;
- Proximity – easy access to infrastructure connected to export ports; and
- Accessibility – free of socio-environmental or native title land constraints.

A large portion of the land within the tenement boundary consists of tree plantations owned by the recently-liquidated Gunns Limited.

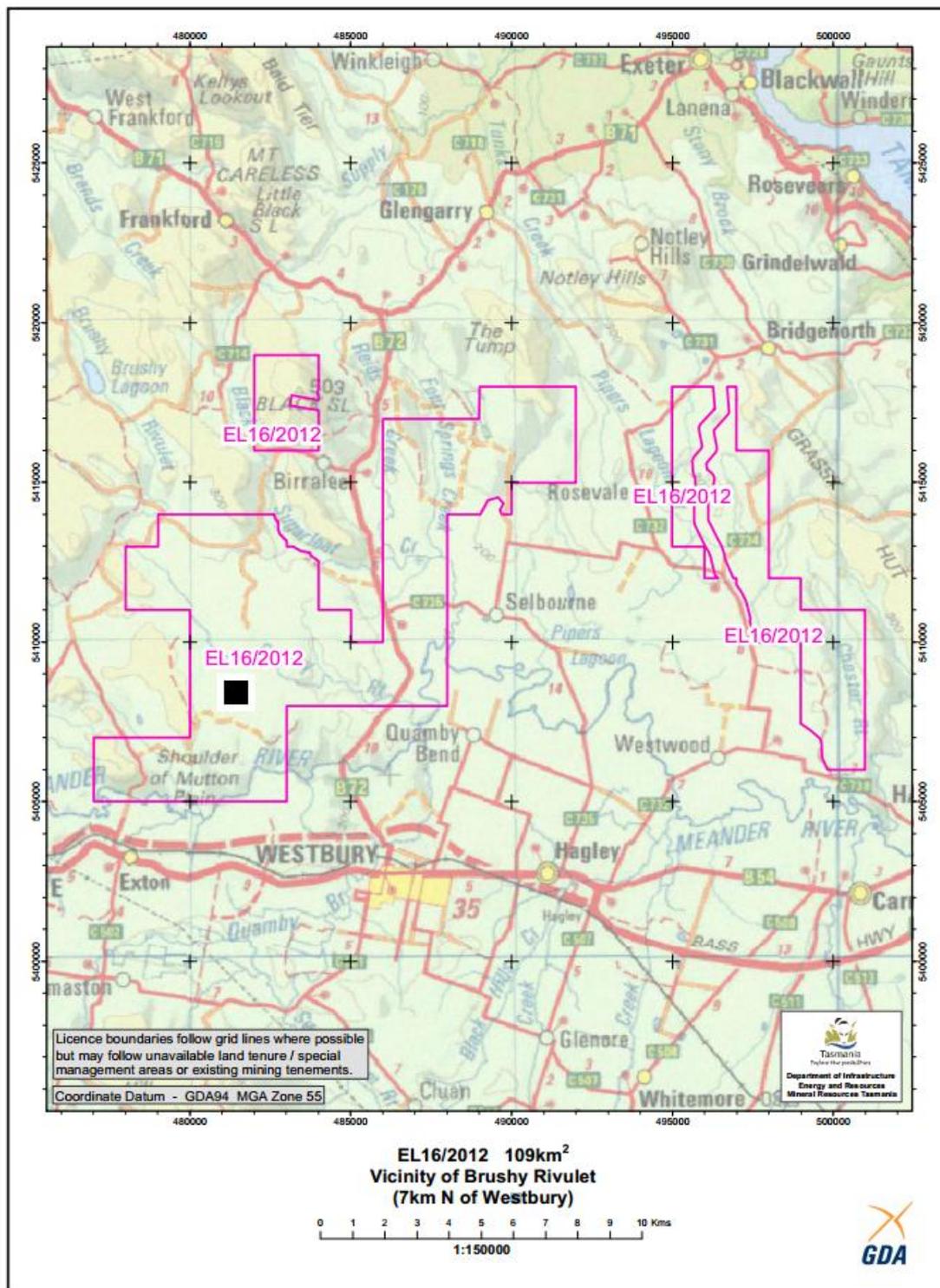
EL 16/2012 “Brushy Rivulet” was applied for in order to facilitate an exploration program to discover economically viable deposits of bauxite associated with Tertiary Volcanics in an area with old peneplained surfaces preserved as plateaus. The goal of the program was to determine the quality and quantity of the bauxite in the area using an RC drill rig mounted on a light 12 tonne truck.

Geological Setting

In the Brushy Rivulet area, the occurrences of bauxite are located in and surrounding areas containing Jurassic Dolerite (See Map 1. Mapped geology of EL16/2012 “Brushy Rivulet” from the 1:250,000 Geological Map of Northeast Tasmania (MRT), including Legend extract (see References).

The expansive Jurassic Dolerite province is mapped by the 1:250,000 Map of Tasmania (See References) and covers much of Central and Southeast Tasmania. During the Tertiary period, these relatively young Jurassic rocks were subjected to horst and graben faulting (Solomon, M., 1981).

The vast majority of the land usage in the tenement is private land (inc. forestry operations) with small sections (mainly the north-west and north-east corners of the south-east sub-area) comprising of National Parks, Forrest Reserves, and Conservation areas.



Map 2. Location map of EL 16/2012 "Brushy Rivulet" (pink outline). Black square indicates location of mapping area.

3 REVIEW OF PREVIOUS WORK

Prior to Current Tenement

Exploration for Bauxite was conducted by C.R.A Exploration Pty Limited (**CRA**) in the late 1960s and early 1970s. CRA decided to relinquish its tenement in central northern Tasmania as no worthwhile results were obtained. Two reports were composed by CRA:

1. Miss S.E. Close, Feb 1970, Scintillometer Search for Bauxite, Northwest Tasmania, *CRA Exploration Pty Limited*
2. Miss S.E. Close, June 1971, Final Report on Bauxite Search, Devonport E.L. 36/70 Tasmania, *CRA Exploration Pty Limited*

The following is an extract from the second report, summarizing CRA's findings:

Final Report on Bauxite Search, Devonport E.L. 36/70 Tasmania

Final testing of this area in central northern Tasmania was carried out using a Gemco Model 210A auger drill. A total footage of 1148 feet was drilled in 57 holes and 206 samples were sent to Zinc Corporation for Al_2O_3 , SiO_2 and Fe_2O_3 analysis.

Drilling was concentrated on the two most promising areas, near Sassafras and near Deloraine, although all areas of soil over basalt within the E.L. were tested.

CONCLUSION

It is recommended that the E.L. be relinquished before the renewal date of 24th June, 1971. A memo has already been written to this effect.

No worthwhile results were obtained. Most of the 206 samples contained less than 30% total alumina, while 8 contained between 30 and 40% total alumina, but were also high in Fe_2O_3 and SiO_2 . The higher values occurred in holes B20 and B25.

GENERAL DISCUSSION

As stated before, the drilling was carried out on all the areas of soil over basalt within the E.L. These have been described in preceding reports.

4 EXPLORATION COMPLETED DURING THE REPORTING PERIOD

During First Year of Tenure

A desktop review was initially undertaken based on Google Earth satellite imagery in order to identify primary targets for exploration (read: field mapping) within the tenement area.

Geological mapping by traversing on foot occurred in May of 2014 within the south-west segment of the south-west tenement sub-area. Bauxite was identified in several outcrops within the mapping area. Tertiary Volcanics (Dolerite) was also identified within the mapping area.

No drilling or surface sampling took place during the first year of tenure

5 CONCLUSIONS AND RECOMMENDATIONS

A decision has been made by ABx4 to hold on to 100% of the EL 16/2012 tenement area continuing into the second year of tenure as of 16 June 2014.

The Brushy Rivulet tenement borders the ABx4 Pty Ltd “Deloraine” (EL 9/2010) tenement where recent exploration at the “DL-130” site has led to intersections of thick and high grade bauxite. Thus, the “Brushy Rivulet” tenement has large potential for discovery and may form a major part of future successes within the region.

Furthermore, the mapping undertaken in May was promising (with several bauxite outcrops identified) and further geological mapping – and potentially a drilling programme (depending on financial priorities across all Tasmanian tenements over the next 12 months) – is planned for the second year of tenure.

6 ENVIRONMENT

Surface Disturbing Operations:

No drilling, surface sampling or any other type of disturbance of the surface occurred over the first year of tenement.

7 EXPENDITURE

Table 1 – Exploration Activity and Expenditure Table for reporting period 16 June 2013 – 15 June 2014.

Exploration Category	Description of Activity	Quantity	Expenditure
Office Administration			
Authority Management	Tenement management		
Office Activities	Data Processing & Interpretation		
Field Activities	Geological Mapping		
	Equipment Hire	Vehicle Hire	\$230.24
	Accommodation/Field Camp		\$1499.75
	Land Holder Liaison		
	Field Supplies		\$1270.90
	Travel		
	Other		\$55.39
	Feasibility Studies		
	Engineering Studies		
	Native Title Survey		
	Pit work		
	Drilling (program cost)		
	RC		
Laboratory	ME-XRF 13B, Reactive Silica & Available Alumina		
Salaries / Wages	Contractors - Geological		\$1812.442
	Contractors - field assistants		
	Contractors - Engineers		
		Grand Total	\$4,868.70

Note: Office Administration was met by parent company – Australian Bauxite Limited.

8 REFERENCES

McClenaghan, M.P.; Calver, C.R.; Vicary, M.J.; (comp.). 2011. *Geology of Northeast Tasmania. Edition 2011.1*. Digital Geological Atlas 1:250 000 Scale Series. Mineral Resources Tasmania.

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Miss S.E. Close, June 1971, Final Report on Bauxite Search, Devonport E.L. 36/70 Tasmania, *CRA Exploration Pty Limited*

Solomon, M., 1981. An Introduction to the Geology and Metallic Ore Deposits of Tasmania. *Economic Geology*. Vol 76, P194-208.