

Fourth Annual Report

on

EL 6/2010 – Cleveland

Reporting Period: 14 September 2013 – 13 September 2014

Project Operator: ABx4 Pty Ltd

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1 ABSTRACT

Objective:

Exploration Licence (EL) 6/2010 “Cleveland” 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 Mitsubishi 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 quartz, loss on ignition and other analyses as required in 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 bauxite profile.
5. Systematic drill testing at close spacing's to obtain data for resource estimation in the best target areas defined by programme under 4.

Results

Due to a higher prioritisation of human and financial resources in the adjacent EL 7/2010 “Conara” (where over \$1M has been spent to date), exploration activities did not occur within EL 6/2010 besides inclusion in several desktop reviews of bauxite targets across Tasmania.

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 quartz, loss on ignition and sieving (+0.26mm) at 260 microns as required in the bauxite search.
- 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 bauxite profile.
- Systematic drilling at close spacings to obtain data for preliminary resource estimation in the best target areas defined by program.
- 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 Licences EL37/2010 a 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.

Land within the tenement consists of freehold agricultural land with some forests and plantations. Bauxite targets are located mostly on freehold land.

EL 6/2010 “Cleveland” 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

The historic work done by H.B. Owen (‘Bauxite in Australia’, 1954) demonstrated that bauxite in Tasmania can be found in both Jurassic Dolerite and Tertiary Basaltic Volcanics. According to Owen, these bauxite deposits - regardless of host rock type - are thought to form either as ‘grouped remnants of former continuous sheet’ or ‘formed in lenticular or pod shaped bodies in localised depressions’.

Tenement Information

EL 6/2010 “Cleveland” was granted on and from 14 September 2010 for a period of 5 years to ABx4 Pty Ltd (**ABx4**).

This is the Fourth Annual Report for the reporting period 14 September 2013 - 13 September 2014 incorporating the results of work completed during the Fourth year of tenure.

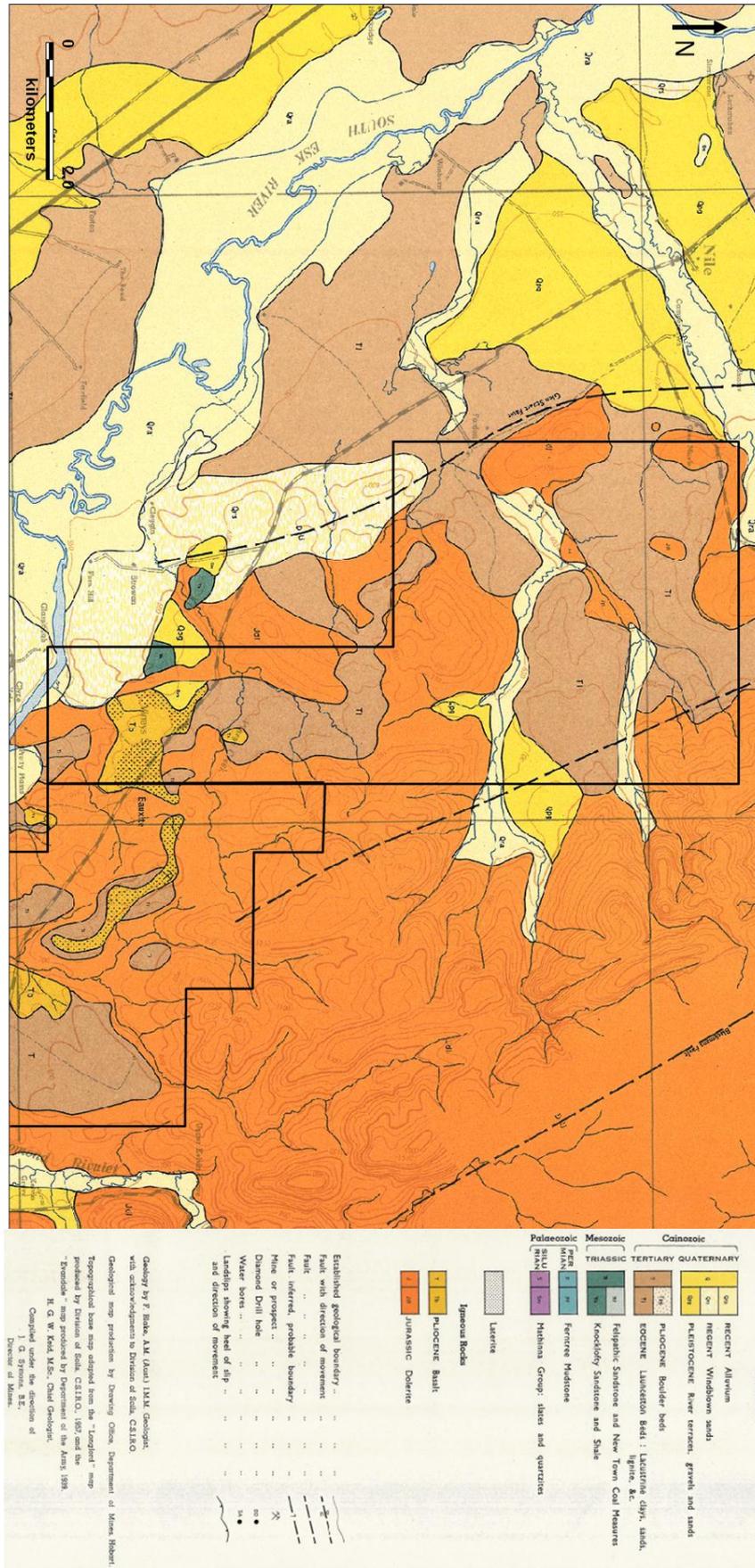
Total area of the Licence is 34 sq km and its Mineral Category is 1 – Metallic Minerals and Atomic Substances. ABx4 relinquished 202sq km in 2012 in order to focus on those areas most prospective for bauxite discovery.

Tenure, including joint venture details and title transfers

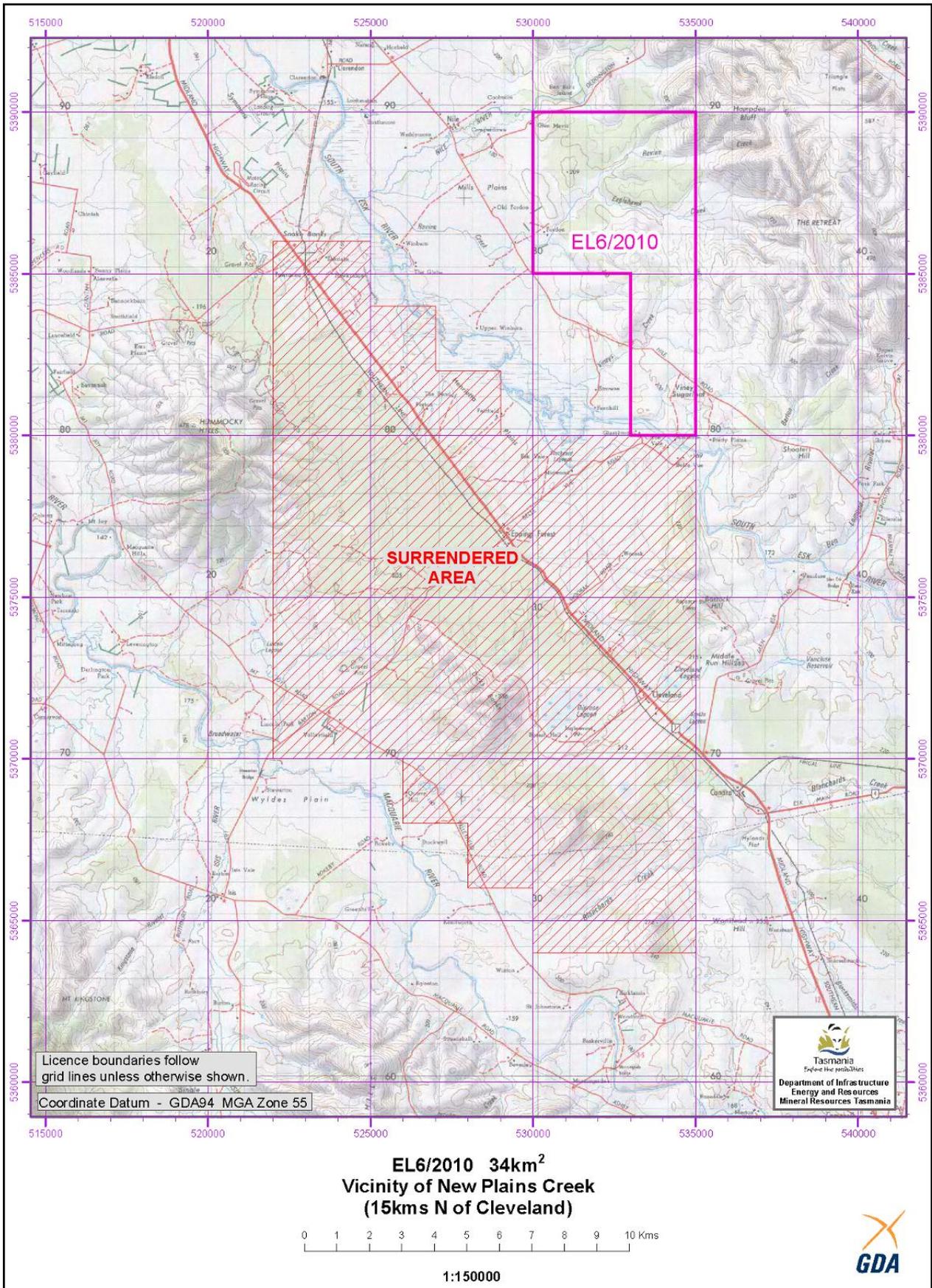
EL 6/2010 “Cleveland” is 100% owned by ABx4 which is a wholly-owned subsidiary of Australian Bauxite Limited.

Location

EL 6/2010 is centred on the town of Epping Forest. The tenement covers an active railway with a siding at Conara 10km to the south-east and is only 75km away from the deep water port at Bell Bay. The tenement is close to the City of Launceston which could offer a wide range of services and skilled work force.



Map 1. Longford sheet of the 1:63360 Geological Atlas Series centred on EL 6/2010. Projection MGA94 Zone 55, Datum GDA94.



Map 2 – Location map of EL 6/2010, including previously surrendered areas. Projection MGA94 one 55, Datum GDA94.

3 REVIEW OF PREVIOUS WORK

Prior to Current Tenement

Historical references for bauxite in the Cleveland Tenement are reported by H.B. Owen in his book "Bauxite in Australia", 1954, which was the basis for Initial exploration of the area. Bauxite was also mapped in the 1950's by F. Black.

- H.B. Owen, 1954, Bauxite in Australia, Bulletin 24
- F. Blake (compiler) 1959. Geological Atlas 1:63360 Series, Sheet No. 478 Longford, Division of Soils C.S.I.R.O.

Summary of Work Completed in 1st, 2nd & 3rd Years of Tenure

In October 2010 a drilling program was organized which drilled 4 holes into the Powranna target totalling 46m using an RC drill rig mounted on a light Mitsubishi 12 tonne truck. Only one hole PW004 was drilled on EL 6/2010 Cleveland tenement as seen in **Error! Reference source not found.** below. These holes were to test the large plateaus of laterite which had formed in the central region of Tasmania. The 4 holes intersected a laterite profile rich in clay quartz and iron but very poor in alumina. The composition of the laterite suggests it's derived from tertiary sediments. If tertiary volcanics exist in the area, they could be worth exploring because they would make a good alumina rich host rock for bauxite to form. In the third year of tenure the Nile North and Nile Road bauxite targets were identified and some assaying was done (See *Cleveland Third Annual Report*, 2013).

4 EXPLORATION COMPLETED DURING THE REPORTING PERIOD

Regional Exploration Activities

Due to a higher prioritisation of human and financial resources in the adjacent EL 7/2010 “Conara” (where over \$1M has been spent to date), exploration activities did not occur within EL 6/2010 besides inclusion in several desktop reviews of bauxite targets across Tasmania.

5 DISCUSSION OF RESULTS

Due to a higher prioritisation of human and financial resources in the adjacent EL 7/2010 “Conara” (where over \$1M has been spent to date), exploration activities did not occur within EL 6/2010 besides inclusion in several desktop reviews of bauxite targets across Tasmania.

6 CONCLUSIONS AND RECOMMENDATIONS

Due to a higher prioritisation of human and financial resources in the adjacent EL 7/2010 “Conara” (where over \$1M has been spent to date), exploration activities did not occur within EL 6/2010 besides inclusion in several desktop reviews of bauxite targets across Tasmania.

However, work is expected to continue in the next reporting period.

Recommendations for future work include:

- 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 quartz, loss on ignition and sieving (+0.26mm) at 260 microns as required in the bauxite search.
- 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 bauxite profile.
- Systematic drilling at close spacing's to obtain data for preliminary resource estimation in the best target areas defined by program.
- Systematic sampling and drilling at waypoints with best bauxite potential.
- Detailed analysis of assay results to determine assaying strategy for future drilling.

7 ENVIRONMENT

Surface Disturbing Operations:

No surface disturbing operations were undertaken in the fourth year of tenure.

Surveys (archaeological, botanical):

No Botanical Survey were completed within this reporting period

Rehabilitation:

No rehabilitation was required during the current reporting period.

8 EXPENDITURE

Table 1. Exploration Activity and Expenditure Table for reporting period 14 September 2013 – 14 September 2014.

Exploration Category	Description of Activity	Quantity	Expenditure
Office Administration	General		\$500
Authority Management	Tenement Management		\$700
Office Activities	Data Processing & Report Preparation		\$1000
Field Activities	Geological Mapping		
	Sampling		
	Equipment Hire		
	Travel & Accommodation		
	Field Supplies		
	Geophysics		
	Airborne		
	Type		
	Ground		
	Type		
	Drilling (program cost)		
	RAB/AC		
	RC		
	Diamond		
	Other		
Laboratory	ME-XRF 13B, Reactive Silica & Available Alumina		
Salaries / Wages	Employees	Geologists	\$1054.50
		Grand Total	\$3,254.50

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

9 REFERENCES

T. Coyte, J.Rebek, EL 6/2010 *Cleveland First Annual Report - August 2011*, ABx4 Pty Ltd

T. Coyte, J.Rebek, EL 6/2010 *Cleveland Second Annual Report - August 2012*, ABx4 Pty Ltd

T. Coyte, EL 6/2010 *Cleveland Third Annual Report - August 2012*, ABx4 Pty Ltd

H.B. Owen, 1954, *Bauxite in Australia*, Bulletin 24

F. Blake (compiler) 1959. *Geological Atlas 1:63360 Series, Sheet No. 478 Longford*, Division of Soils C.S.I.R.O.