

Final Report
on
EL 5/2011 – SASSAFRAS

Reporting Period: 24 April 2012 – 4 April 2013
Project Operator: ABx4 Pty Ltd
Address: Level 2, 131 Macquarie Street, Sydney, NSW, 2000
Author: Tamara Coyte
Compiled by: Robert Tockar
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NOTE: All Garmin maps use WGS – 84

1 ABSTRACT

Objective:

Exploration Licence (EL) 5/2011 “Sassafras” was applied for by ABx4 Pty Ltd (ABx4) 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 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 lateritic weathering profile (from upper-most iron rich zone through alumina rich zone down into mottled and pallid saprolite zone).

Summary of Results:

EL5/2011 aimed to cover extensions to the Deloraine targets, and reported bauxite areas around Forbes and Sassafras. The application was significantly reduced due to overlap of Category 1 and 2 farming land. Analysis of data related to the tenement area was conducted but was not highly prospective.

The Sassafras tenement contains large areas of Tertiary volcanic plateaus, which are often ideal for bauxite formation. Analysis of digital data has shown that the areas are lacking the bauxite indicators and with current information have low bauxite potential. Bauxite has not been identified in the Sassafras tenement and potential targets are minimal.

ABx4 has therefore decided to relinquish the entire tenement so it can focus on other tenements with more potential.

2 INTRODUCTION

Exploration Rationale

EL 5/2011 Sassafras 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 Mitsubishi 12 tonne truck.

Geological Setting

The geology of the Sassafras tenement consists almost entirely of Dolerite, tertiary volcanics and quaternary sediments. The bauxite mineralization in Tasmania is generally hosted in Tertiary volcanics in the vicinity of large volcanic belts. Bauxite was formed during the Lower Tertiary period when volcanism commenced and extreme wet-tropical climatic conditions prevailed – at the boundary between the Cretaceous Era and the onset of the Tertiary Era, which is often referred to as the K-T boundary commonly associated with the extinction of the dinosaurs, approximately 40 to 60 million years ago. The bauxite occurs on the old lateritic surface, where the processes of laterisation and ground water migration in the Tertiary period have removed silica from the rock, leaving mainly Aluminium and Iron rich minerals behind.

Tenement Information

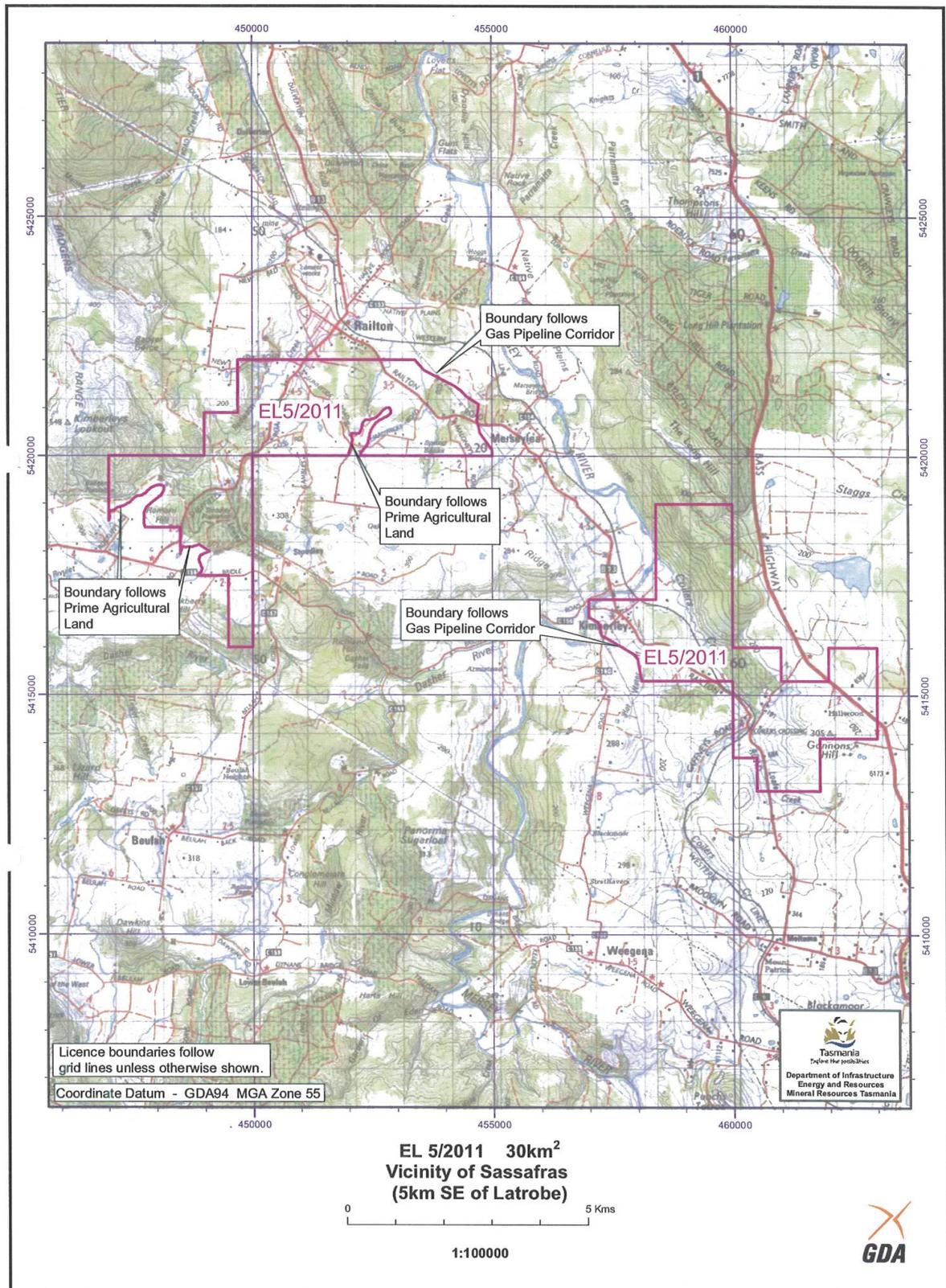
EL 5/2011 “Sassafras” was granted on and from 24 April 2012 for a period of 5 years to ABx4.

This is the Final Report for the reporting period 24 April 2012 - 4 April 2013 incorporating the results of work completed during this time period.

Total area of the Licence is 30sq km and its Mineral Category is 1 – Metallic Minerals and Atomic Substances. The entire tenement area will be relinquished.

INTRODUCTION Cont

Location



Map 1 – Location Map of EL 5/2011 "Sassafras"

The Sassafras tenement is located in the North West of Tasmania around Railton. The tenement covers an active rail-way and is only 20km away by road from Devonport.

INTRODUCTION Cont

The majority of the land usage in the tenement is agricultural land with between Categories 4-6. Access to private and public land was not required for the work completed.

Tenure, including joint venture details and title transfers

EL 5/2011 “Sassafras” is 100% owned by ABx4 which is a fully owned subsidiary of Australian Bauxite Limited.

3 REVIEW OF PREVIOUS WORK

Prior to Current Tenement

The following were references used to attain historical information:

- H.B. Owen (1954). *Bauxite in Australia*, Bureau of Mineral Resources Bulletin no. 24
- S.E. Close (1970). *Scintillometer Search for Bauxite, Northwest Tasmania*, CRA Exploration Pty Ltd

During current Tenement

A detailed study of geological mapping, satellite images and literature was conducted to define the areas with the best potential for bauxite. Exploration focused on bauxite that is exposed at surface at the highest points of Terrain.

The Sassafras tenement contains large areas of Tertiary volcanic plateaus, which are often ideal for bauxite formation. Analysis of digital data has shown that the areas are lacking the bauxite indicators and with current information have low bauxite potential.

Bauxite has not been identified in the Sassafras tenement and potential targets are minimal. ABx4 will focus its resources on areas with greater potential and will relinquish the entire tenement.

4 EXPLORATION COMPLETED DURING THE REPORTING PERIOD

Literature Review

The following were references used to attain historical information:

- H.B. Owen (1954). *Bauxite in Australia*, Bureau of Mineral Resources Bulletin no. 24
- S.E. Close (1970). *Scintillometer Search for Bauxite, Northwest Tasmania*, CRA Exploration Pty Ltd

Regional Exploration Activities

A detailed study of geological mapping, satellite images and literature was conducted to define the areas with the best potential for bauxite. Exploration focused on bauxite that is exposed at surface at the highest points of Terrain.

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Bauxite has not been identified in the Sassafras tenement and potential targets are minimal. ABx4 will therefore focus its resources on areas with greater potential and will relinquish the entire tenement.

5 DISCUSSION AND CONCLUSIONS

The Sassafras tenement contains large areas of Tertiary volcanic plateaus, which are often ideal for bauxite formation. Analysis of digital data has shown that the areas are lacking the bauxite indicators and with current information have low bauxite potential.

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6 ENVIRONMENT

Surface Disturbing Operations:

No drilling or surface disturbing operations were undertaken.

There was no track clearing as driving was done on existing tracks.

Surveys (archaeological, botanical):

No surveys were undertaken.

Rehabilitation:

No rehabilitation was required as there was no ground disturbance and driving was done on existing tracks.

7 EXPENDITURE

Table 1 – Exploration Activity and Expenditure Table for reporting period 24 April 2012 – 4 April 2013

Exploration Category	Description of Activity	Quantity	Expenditure
Office Administration			
Authority Management	Environment		
	Tenement Management		\$1,594
Office Activities	Data Processing & Interpretation		
Field Activities	Geological Mapping		
	Sampling		
	Equipment Hire	Vehicle hire	\$109
	Accommodation/Field Camp	Days	
	Travel		\$355
	Land Holder Liaison		
	Field Supplies	Equipment	\$52
	Other		
	Geophysics		
	Airborne		
	Type	Line kms	
	Ground		
	Type	Line kms	
	Drilling (program cost)		
	RAB/AC	Holes/total metres	
	RC	Holes/total metres	
	Diamond	Holes/total metres	
	Other	Holes/total metres	
Laboratory	ME-XRF 13B, Reactive Silica & Available Alumina		
Salaries / Wages	Employees		\$6,882
		Grand Total	\$8,992

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

8 REFERENCES

H.B. Owen (1954). *Bauxite in Australia*, Bureau of Mineral Resources Bulletin no. 24

S.E. Close (1970). *Scintillometer Search for Bauxite, Northwest Tasmania*, CRA Exploration Pty Ltd