

# **Partial Relinquishment Report**

**for**

**EL 9/2010 – Deloraine**

**Reporting Period:** 14 September 2010 – 13 September 2019

**Project Operator:** ABx4 Pty Ltd

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**CONTENTS**

1 ABSTRACT ..... 3

2 INTRODUCTION..... 4

3 REVIEW OF PREVIOUS WORK..... 6

4. EXPLORATION COMPLETED DURING THE REPORTING PERIOD..... 7

4 DISCUSSION OF RESULTS..... 10

5 CONCLUSIONS AND RECOMMENDATIONS..... 11

6 ENVIRONMENT ..... 12

7 REFERENCES..... 13

**MAPS**

Map 1. Location of EL 9/2010 “Deloraine” and the areas proposed for relinquishment .....

Map 2 Location of samples (yellow crosses) collected within EL 9/2010 “Deloraine” and the areas relinquished (cross-hatched).

Map 3 Location of drillholes completed within EL 9/2010 “Deloraine” and the areas relinquished (cross-hatched).

# 1 ABSTRACT

## Objective

Exploration Licence No. 9/2010 “Deloraine” was applied for by ABx4 Pty Ltd (“ABx4”) in order to facilitate an exploration program to discover potentially economic 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 tenement.

## Work Undertaken in the Relinquished Area:

1. Traversing of public roads in 4WD vehicle.
2. Desktop reviews of EL9/2010 area.
3. Application of the ABx remote sensing method to locate any bauxite zones with potential for commercial development within the areas proposed for relinquishment.

## Results

Little ground-work has been done in the relinquished areas besides the traversing of several public roads in a 4WD vehicle. No bauxite has been found in these areas to date. Based on remote sensing analyses, there is however, still some potential for bauxite occurrences to be found in areas not explored by car. ABx’s assessment is that these occurrences tend to be small and some are adjacent to built-up or tourist areas which are unlikely to ever be developed as mineral projects.

The portions of EL 9/2010 which have been relinquished are considered low-priority and were relinquished because exploration was not likely to occur there in the near future.

## 2 INTRODUCTION

### Exploration Rationale

Exploration Licence (EL) 9/2010 “Deloraine” 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 by field traversing and where appropriate by 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

The tenement has been renewed several times with a current expiry date of 13 September 2019. On 21 March 2017, adjacent ABx4-held tenement EL37/2010 “Westbury” was consolidated into the EL9/2010 area, which prior to the current proposed relinquishment made up 211km<sup>2</sup>. After the partial relinquishment in 2017, the area was reduced to 136 km<sup>2</sup>

A further extension application for two years has been lodged a residual area of 51 km<sup>2</sup> is currently proposed for renewal, and this renewal is currently being processed.

This Partial Relinquishment Report has been written to document the 85 km<sup>2</sup> of land being surrendered from the EL9/2010 tenement at the end of the seventh reporting period. The application for surrender was approved by the Chief Government Geologist on 6 April 2020.

The Mineral Category of EL 9/2010 is 1 – Metallic Minerals and Atomic Substances.

### Location

EL 9/2010 is located around the town of Deloraine where there is a rail line which connects all the ports of Tasmania to each other. Ports and rail way lines in Tasmania are generally under capacity and the Deloraine Tenement is only 42km from Devonport. EL 9/2010 is close to the city of Launceston and could offer a wide range of services and skilled work force.

### Ownership, including joint venture details and title transfers if applicable

EL 9/2010 “Deloraine” is 100% owned by ABx4 which is a wholly-owned subsidiary of Australian Bauxite Limited.



### 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:

4. Miss S.E. Close, Feb 1970, Scintillometer Search for Bauxite, Northwest Tasmania, *CRA Exploration Pty Limited*
5. 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  $\text{Al}_2\text{O}_3$ ,  $\text{SiO}_2$  and  $\text{Fe}_2\text{O}_3$  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  $\text{Fe}_2\text{O}_3$  and  $\text{SiO}_2$ . The higher values occurred in holes B20 and B25.

## **4. EXPLORATION COMPLETED DURING THE REPORTING PERIOD**

### **Regional Exploration Activities**

#### **Road Traversing**

Exploration within the current proposed relinquishment areas has been limited to the traversing of public roads by 4WD vehicles.

Sampling has been undertaken within the tenement, as described in previous annual reports for this projects. All samples were taken within portions of the tenement which have been retained, as shown in Map 2.

No bauxite has been observed in areas being relinquished.

#### **Desktop Review**

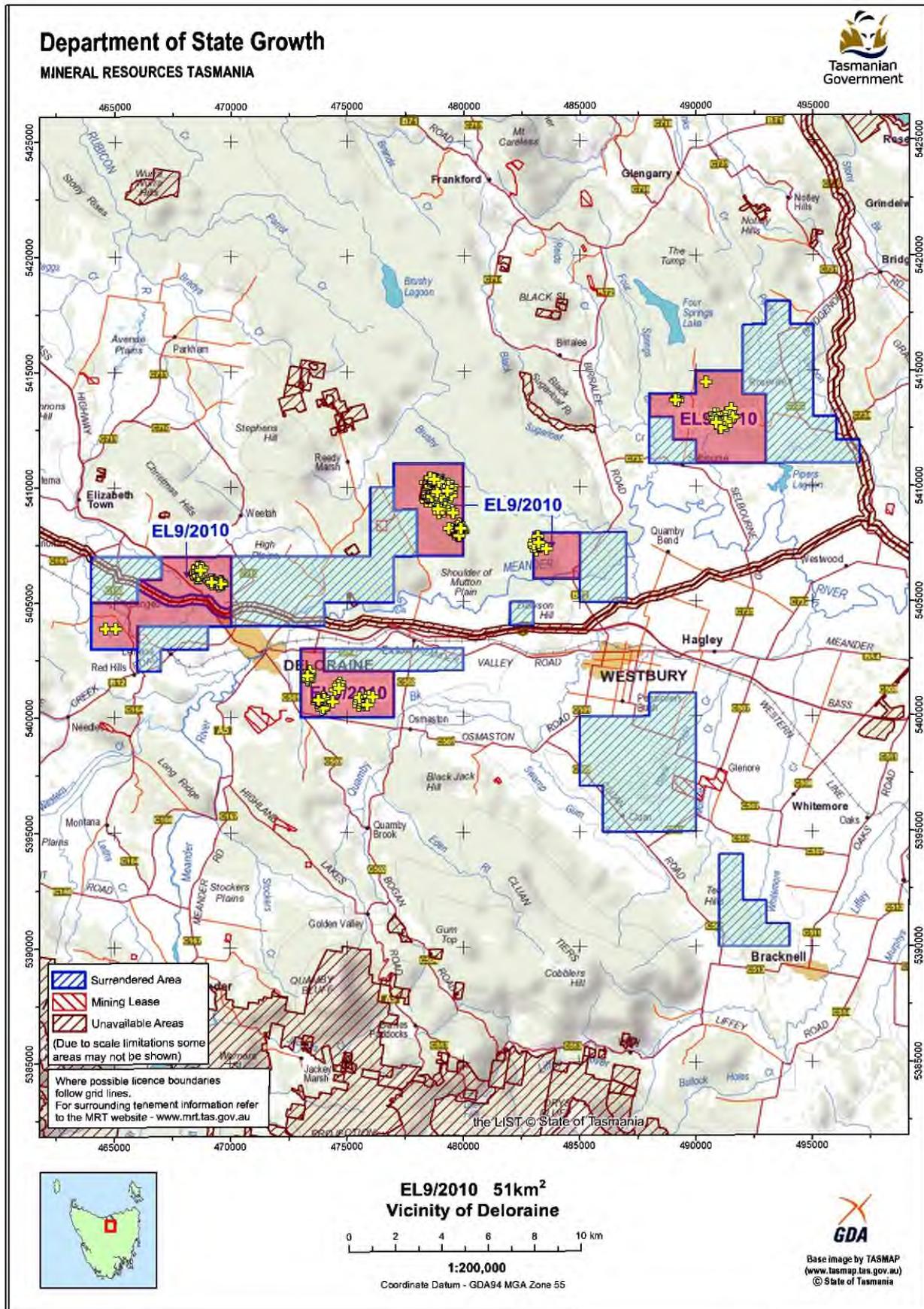
A desktop prospectivity review was undertaken by ABx4. The objective of the review was to assess targets across all ABx4 exploration licences, and to review and prioritise target areas to guide future exploration activities.

ABx's in-house exploration technology based on a series of publicly available data sets of geophysics, topography and geological mapping was applied. No potentially viable new bauxite prospects were found in the areas being relinquished.

The areas selected for relinquishment (85km<sup>2</sup>) were considered low-priority and, on this basis, a decision was made by management to relinquish these areas as shown in Map 1.

#### **Drilling**

All drilling which has been undertaken to date has been located in portions of the tenement which have been retained, as shown in Map 3.



Map 2. Location of samples (yellow crosses) collected within EL 9/2010 "Deloraine" and the areas relinquished (cross-hatched).



## 4 DISCUSSION OF RESULTS

The work conducted in the current relinquished areas involved:

1. Traversing of public roads in 4WD vehicles. During these traverses no bauxite outcrops were observed;
2. Desktop reviews of EL9/2010 area which did not reveal any areas that may have been overlooked by previous exploration work;
3. Application of the ABx remote sensing method which failed to locate any bauxite zones with potential for commercial development within the areas proposed for relinquishment.

Whilst no bauxite has been found in these areas to date, based on remote sensing analyses, there is still some potential for bauxite occurrences to be found in areas not explored by car.

However, ABx's assessment is that these occurrences tend to be small and some are adjacent to built-up or tourist areas which are unlikely to ever be developed as mineral projects.

The portions of EL 9/2010 which have been relinquished are considered low-priority and were relinquished because exploration was not likely to occur there in the near future.

## **5 CONCLUSIONS AND RECOMMENDATIONS**

The areas proposed for relinquishment (totalling 85km<sup>2</sup>) were considered low-priority and, on this basis, a decision was made by management to relinquish these areas (refer to map on previous page).

ABx's judgement is that the probability of discovering a commercially viable bauxite project in these areas is low.

The extent of bauxite mineralisation in the areas relinquished cannot be stated unequivocally because these areas were largely unexplored but because exploration is unlikely to occur in the near future, it is better to relinquish these areas.

## **6 ENVIRONMENT**

### **Surface Disturbing Operations:**

No surface disturbing activities have occurred in the relinquished areas.

### **Surveys (archaeological, botanical):**

No surveys were undertaken over the areas being relinquished.

### **Rehabilitation:**

No rehabilitation was required as no surface disturbing activities were undertaken.

## 7 REFERENCES

- Miss S.E. Close, February 1970, Scintillometer Search for Bauxite, Northwest Tasmania, *CRA Exploration Pty Limited*
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