

**Third Annual Report**  
**on**  
**EL 12/2012 – Scottsdale**

**Reporting Period:** 12 December 2014 - 11 December 2015  
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## EXECUTIVE SUMMARY

Exploration Licence (EL) 12/2012 “Scottsdale” 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 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.

Work completed in the current reporting period includes:

- Brief Desktop Review – to determine area currently proposed for relinquishment.

ABx has recently applied to relinquish a further 36 km<sup>2</sup> of the 82 km<sup>2</sup> of the EL12/2012 tenement area.

The Scottsdale tenement is centred on the Scottsdale State forest and is approximately 4km north of Scottsdale. The tenement is only 60km by road to the port of Bell Bay, a large operating port north of Launceston. There is also a railway through Scottsdale which is currently decommissioned. The Scottsdale tenement is ideally located for both rail and road transport to the port.

## ABSTRACT

### Objective:

Exploration Licence (EL) 12/2012 "Scottsdale" 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 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 bauxite 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 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 12 tonne truck to get samples representing the whole bauxite profile.
5. Systematic drill testing at close spacings to obtain data for resource estimation in the best target areas defined by programme under 4.

### Results:

Work completed in the current reporting period include:

- Brief desktop review - to determine area currently proposed for relinquishment.

### 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 bauxite 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 spacings to obtain data for preliminary resource estimation in the best target areas defined by program.
- Sieve testing to find optimal sieve size for Tasmanian bauxites.
- Detailed analysis of assay results to determine assaying strategy for future drilling.

## INTRODUCTION

### Exploration Rationale

EL 12/2012 “Scottsdale” 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 12/2012 “Scottsdale” was granted on and from 12 December 2011 for a period of 5 years to ABx4. The Mineral Category of EL 12/2012 is 1 – Metallic Minerals and Atomic Substances.

This is the Third Annual Report covering the reporting period 12 December 2014 - 11 December 2015.

Total area of the original licence was 128sq km. ABx4 has previously relinquished 46 km<sup>2</sup> and is now applying to relinquish a further 36 km<sup>2</sup> to bring the total remaining area to 82sq km.

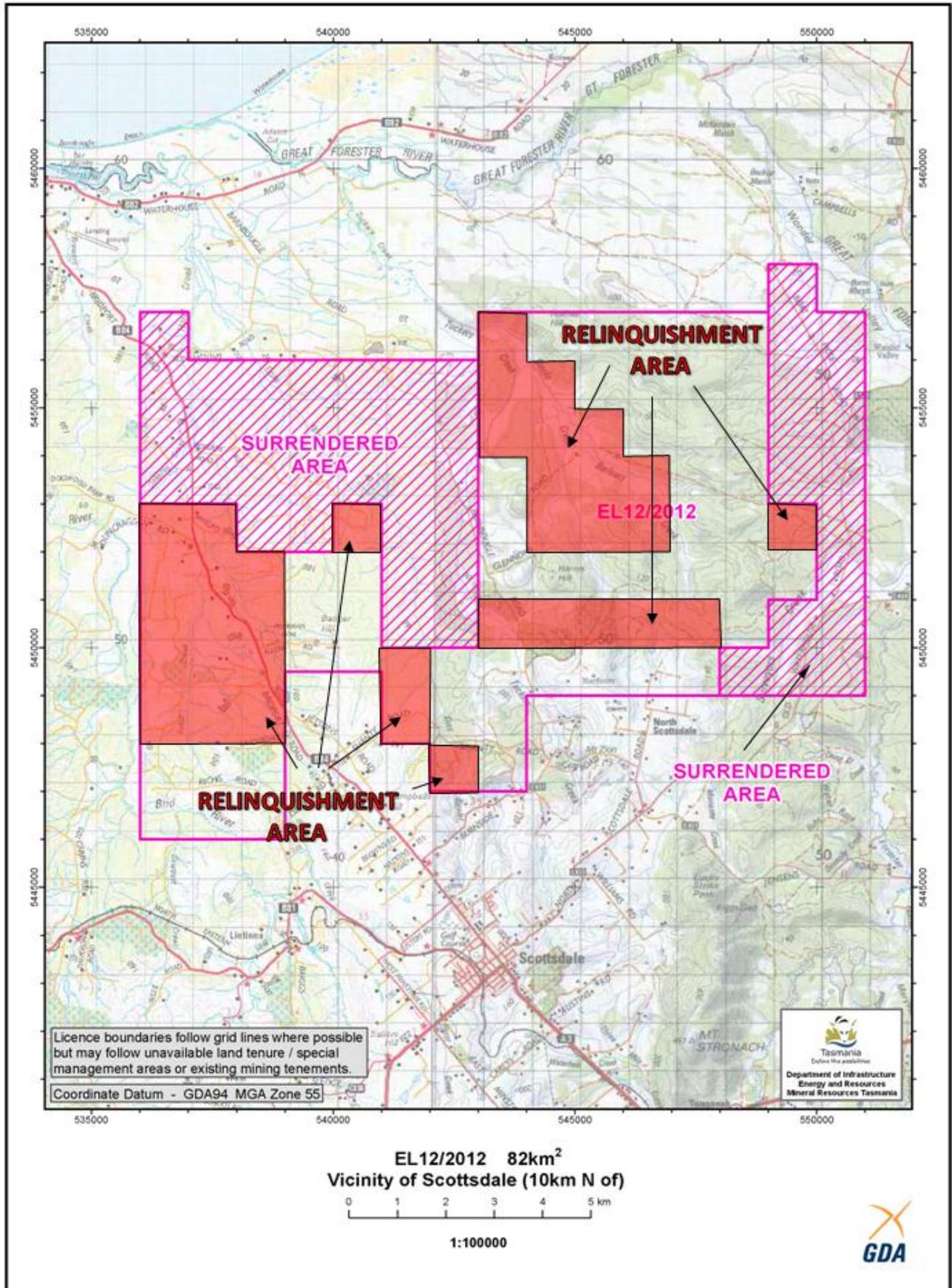
### Tenure, including joint venture details and title transfers

EL 12/2012 “Scottsdale” is 100% owned by ABx4 which is a fully owned subsidiary of Australian Bauxite Limited.

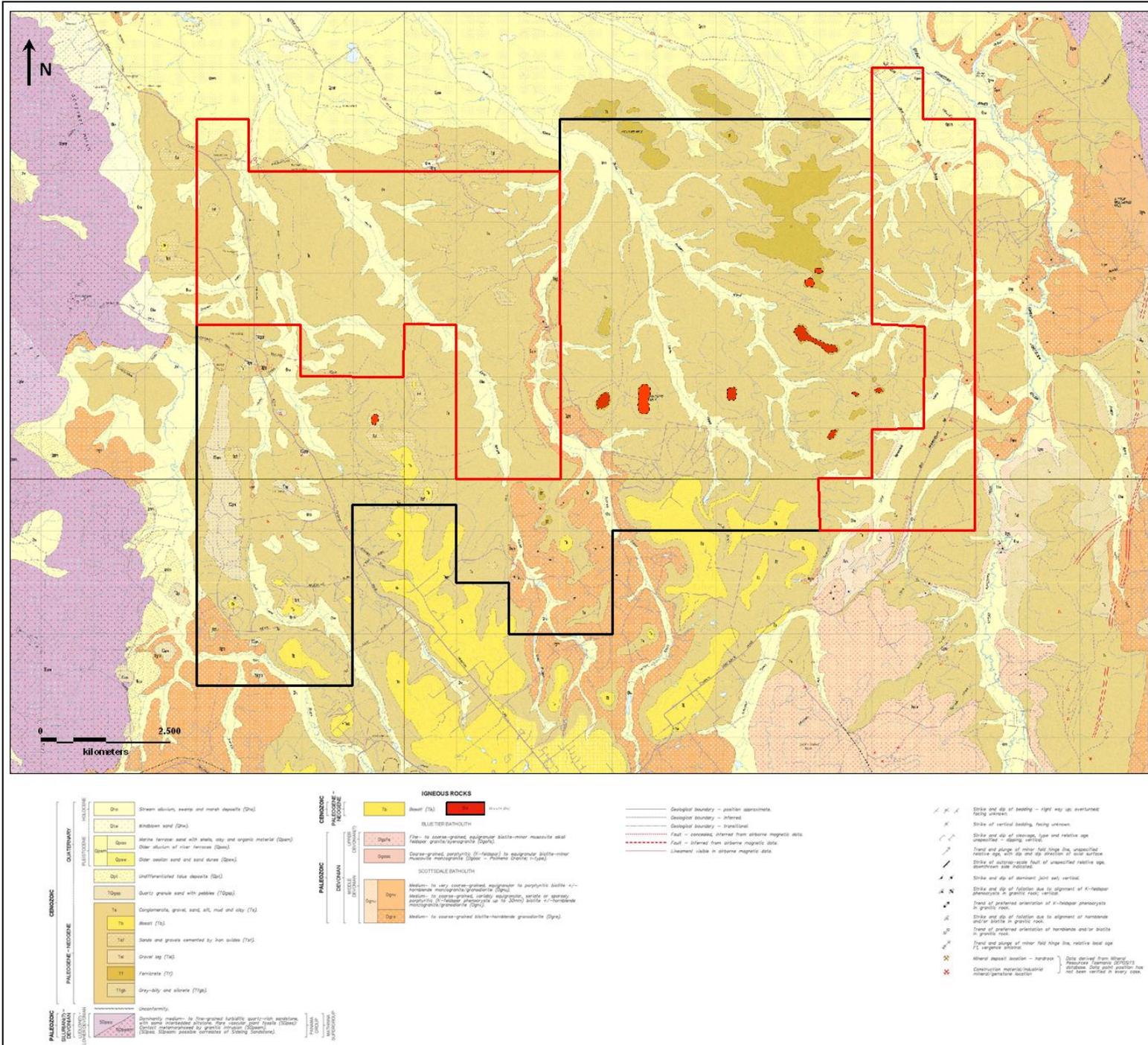
### Location

The Scottsdale tenement is centred on the Scottsdale State forest and is approximately 4km north of Scottsdale. The tenement is only 60km by road to the port of Bell Bay, a large operating port north of Launceston. There is also a railway through Scottsdale which is currently decommissioned. The Scottsdale tenement is ideally located for both rail and road transport to the port.

The majority of the land usage is plantation, State Forest and agricultural land. Gaining access to farming properties has been very successful; with all landowners contacted by ABx4 allowing exploration on their land.



Map 1. Map showing the original tenement area (outer, thick outline) in addition to previous (dashed pink) and currently proposed (red shaded) relinquishment areas



Map 2. EL12/2012 geological map with tenement outline and area that has previously been relinquished. Base map: McClenaghan, M.P., Vicary, M.J. 2010. Digital Geological Atlas 1:25000 Scale Series, Sheet 5445. Pearly Brook. Mineral resources Tasmania.

## **REVIEW OF PREVIOUS WORK**

### **Prior to Current Tenement**

No historical references for bauxite have been identified for the Scottsdale Tenement.

Geological Maps composed by Mineral Resources Tasmania:

- McClenaghan, M.P., Vicary, M.J. 2010. Digital Geological Atlas 1:25000 Scale Series, Sheet 5445. Pearly Brook. Mineral resources Tasmania.

### **Within Current Term of Tenure**

In the first year of tenure, ABx4 completed drill testing of the Scottsdale bauxite targets. A total of 68 holes were drilled for 640m. The two key drill targets 'Plantation target' and 'Glennon's target' consisted of small zones of bauxite within the larger target area. The tonnage in the Scottsdale tenement has a total of less than 50,000 Tonnes of low-sub grade bauxite. These deposits are not economically viable on their own and were much less than expected.

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

### **Regional Exploration Activities**

#### **Desktop Review**

A brief desktop review of the Scottsdale tenement was undertaken in order to select areas for relinquishment going into the fourth year of tenure.

The areas selected for relinquishment are shown on Map 1. Map showing the original tenement area (outer, thick outline) in addition to previous (dashed pink) and currently proposed (red shaded) relinquishment areas. These areas were selected on the basis that they are not highly prospective for discovery of bauxite. Past exploration activities in these areas were unsuccessful in identifying any bauxite outcrops.

ABx has applied to relinquish 36 of the 82 km<sup>2</sup> tenement area of EL12/2012.

## **DISCUSSION OF RESULTS**

On the basis of the results of the desktop review undertaken in the current reporting period, ABx4 has applied to relinquish 36 km<sup>2</sup> of the EL12/2012 licence area. This brings the remaining licence area to 46 km<sup>2</sup>.

## CONCLUSIONS AND RECOMMENDATIONS

On the basis of the results of the desktop review undertaken in the current reporting period, ABx4 has applied to relinquish 36 km<sup>2</sup> of the EL12/2012 licence area. This brings the remaining licence area to 46 km<sup>2</sup>.

### **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 bauxite 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 spacings to obtain data for preliminary resource estimation in the best target areas defined by program.
- Sieve testing to find optimal sieve size for Tasmanian bauxites.
- Detailed analysis of assay results to determine assaying strategy for future drilling.

## **ENVIRONMENT**

### **Surface Disturbing Operations:**

No surface disturbing activities have taken place during the current reporting period.

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

No archaeological or botanical surveys have taken place during the current reporting period.

### **Rehabilitation:**

No rehabilitation activities have taken place during the current reporting period.

## EXPENDITURE

Table 1. Exploration Activity and Expenditure Table for the current reporting period.

EL 12/2012 Scottsdale - Expenditure over 3rd Year of Tenure	
1. Geoscientific costs	
Geology	\$1,328
Geochemistry	
Geophysics	
Remote sensing	
2. Drilling and Gridding Costs	
Gridding	
Drilling	
Holes/metres	
3. Land Access Costs	
4. Rehabilitation Costs	
5. Feasibility Study Costs	
6. Other Costs	
7. Administration Costs (< 10%)	
8. Total Costs	
	\$1,328

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

## REFERENCES

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

McClenaghan, M.P., Vicary, M.J. 2010. *Digital Geological Atlas 1:25000 Scale Series, Sheet 5445. Pearly Brook*. Mineral Resources Tasmania.

T. Coyte, *First Annual Report on EL12/2012 Scottsdale*, December 2013, ABx4 Pty Ltd

T. Coyte, *Second Annual Report on EL12/2012 Scottsdale*, December 2014, ABx4 Pty Ltd