

Fourth Annual Report

on

EL 7/2010 – Conara

Reporting Period: 14 September 2013 – 13 September 2014

Project Operator: ABx4 Pty Ltd

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Date: 7 October 2014

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1 ABSTRACT

Objective:

Exploration Licence (EL) 7/2010 “Conara” 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 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 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 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.
6. Mine-ability study of Tasmanian bauxite using a small excavator to dig bauxite and screen test on a larger scale.

Results:

Australian Bauxite Limited subsidiary company ABx4 completed drill testing of the Fingal Rail bauxite targets in EL7/2010 in early 2014. The targets are located on freehold land. A total of 90 holes for 1197m were drilled between February and April 2014 (CN618-CN708) bringing the total to 361 holes for the Fingal Rail area. 202 samples were selected for sieved assay and 80 samples were selected for whole assay at ALS Brisbane.

The Fingal Rail deposit is low grade but the DSO bauxite could be selectively mined and sieved to produce and moderate-high grade ore. The upper bauxite layer contains large amounts of PDM. PDM with the right characteristics has many commercial uses and could be process to produce a premium product.

During the current reporting period, ABx4 began hiring a warehouse in Launceston as a centralised base for all field operations. Samples from drilling in early 2014 and earlier Conara drilling programs were moved from storage places proximal to respective drill sites and moved into the Launceston warehouse. During the move, most samples were re-bagged and many were re-sampled and sent to ALS Brisbane for assaying.

A robust desktop analysis of the Bald Hill Bauxite Project was undertaken in order to facilitate the writing of the Development Proposal and Environmental Management Plan (DPEMP) for the Bald Hill Mining Lease Application, which was recently granted on 22 September, 2014.

Recommendations for future work:

Recommendation for future work include further:

1. Detailed geological mapping, including geomorphological mapping and study of satellite images to define the areas with the 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 sieving.
4. 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.
5. Pit testing of the Fingal Rail target to test mineability of the deposit.
6. Sieve testing to find optimal sieve size for Tasmanian bauxites.
7. Testing new sample processing techniques to improve silica reduction.
8. Constant monitoring of rehabilitated pit locations.
9. New application for a Mining Lease over the Fingal Rail Deposit.
10. Commence detailed discussions with land holders in the Fingal Rail Area.

2 INTRODUCTION

Exploration Rationale

ABx4 Pty Ltd the holder of Category 1 Exploration Licences EL 7/2010 wholly owned subsidiary of Australian Bauxite Ltd. Australian Bauxite Limited (ABx) (ASX: ABX) 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.

EL 7/2010 “Conara” 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 7/2010 “Conara” 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 original Mineral Category 1 licence was 238sq km, however, ABx4 chose to relinquished 85sq km in 2012 bringing the total area to 153sq km.

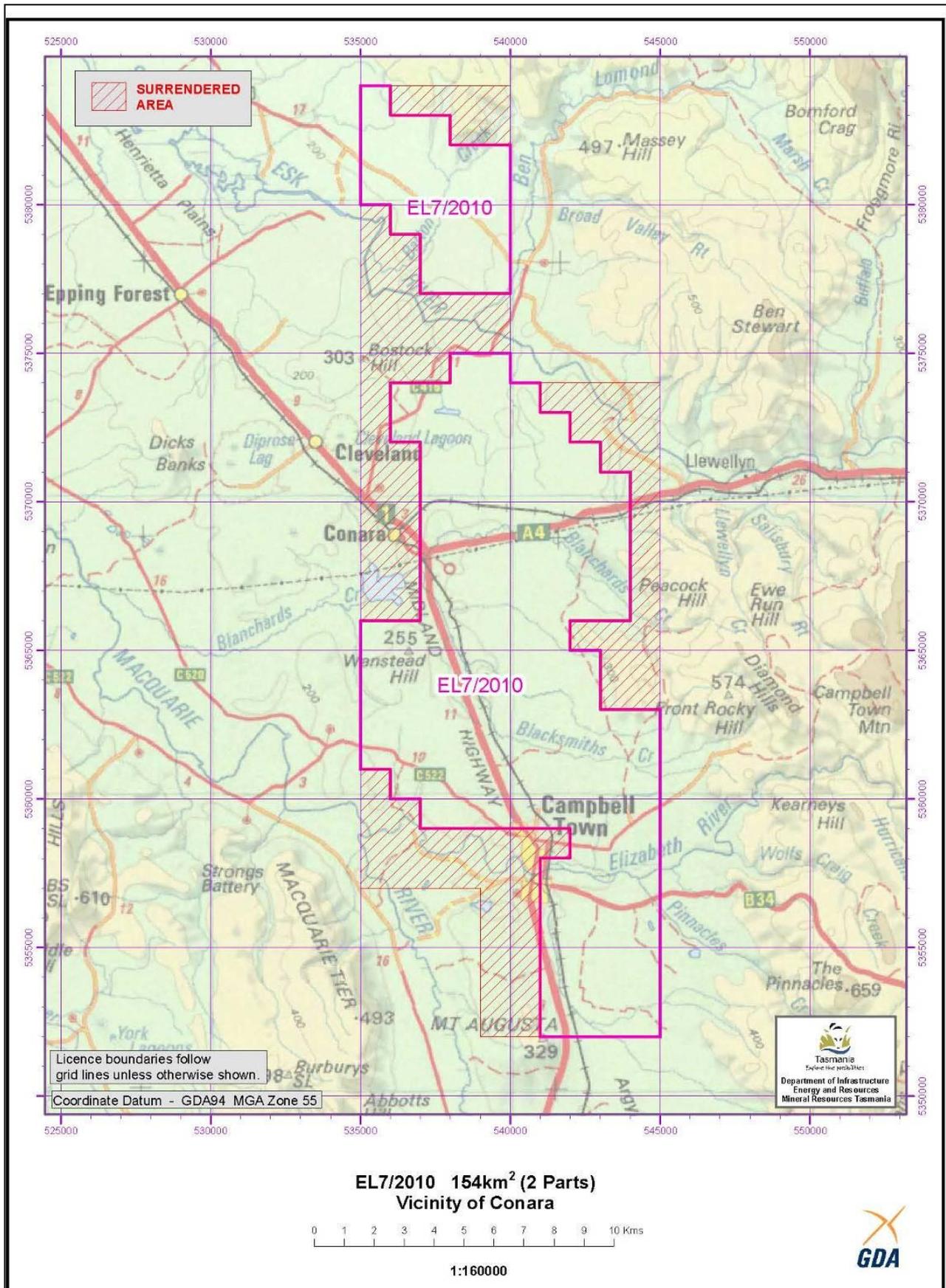
Tenure, including joint venture details and title transfers

EL7/2010 “Conara” is 100% owned by ABx4 which is a wholly-owned subsidiary of Australian Bauxite Limited.

Location

The Conara tenement is centred on the railway town of Conara where there is a railway siding and active railway. The tenement is only 90km from the large operating port at Bell Bay and the Midlands highway passes through the centre of the tenement. The Conara tenement is ideally located for both rail and road transport to the port. EL 7/2010 is close to the City of Launceston which could offer a wide range of services and skilled work force.

The majority of the land usage in the tenement is private reserves, natural forest and agricultural land with land categories 4-6.



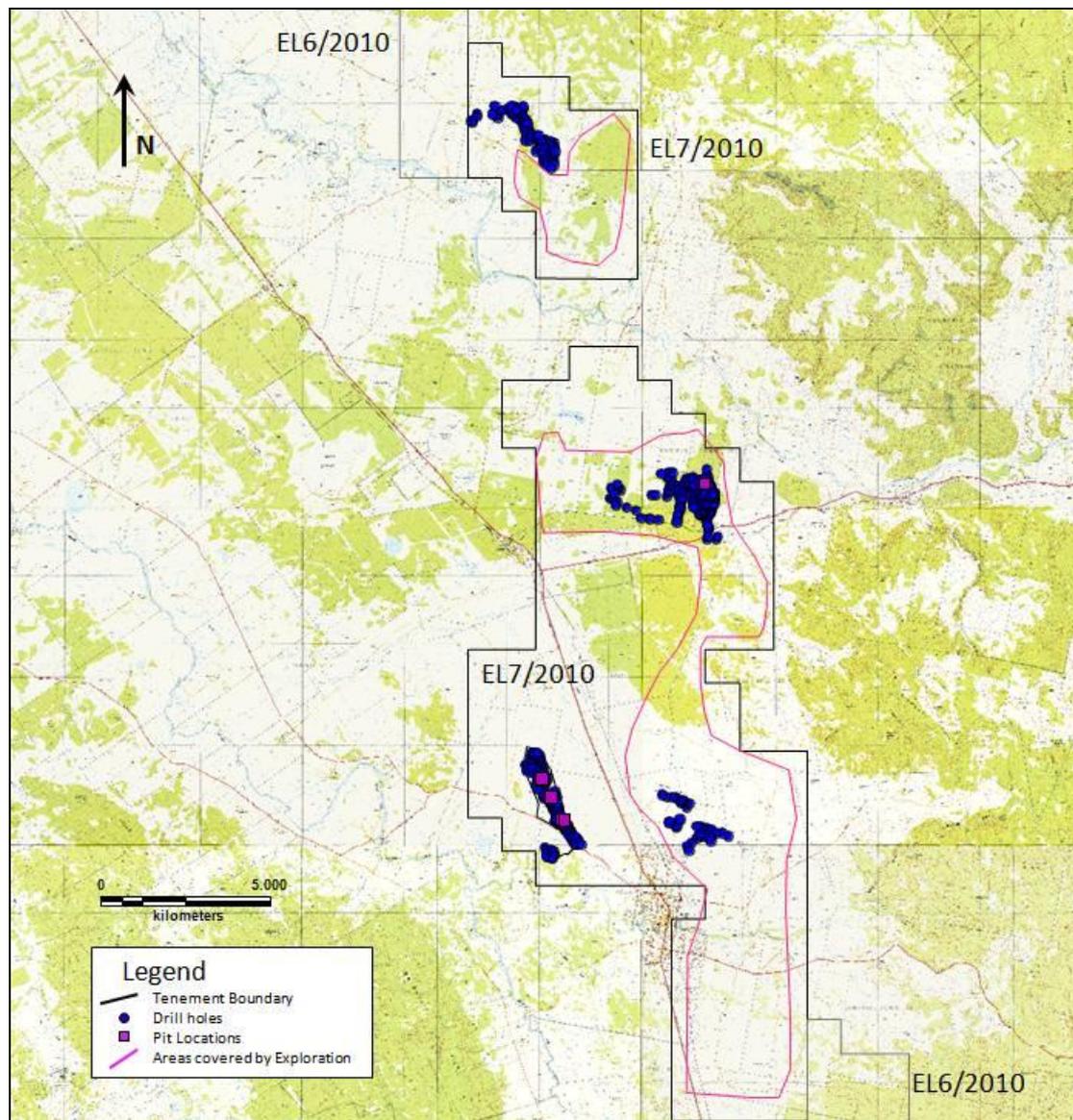
Map 1. Location of EL7/2010 "Conara". Datum GDA94 (MGA94 Zone 55).

3 REVIEW OF PREVIOUS WORK

Work completed during first three years of Tenure

In the first two years of tenure, a total of 143 holes were drilled in the Conara Tenement for a total of 1,238m. Most holes intercepted bauxite mineralization averaging 3m in thickness to a maximum of 10m but varied in grade. A total of 708 samples were selected for analysis by XRF and analysed for available alumina and reactive silica after wet screening at 260 microns.

In the third year of tenure a further 474 holes were drilled for a total of 5652m and drilling samples were assayed at ALS Brisbane. These holes were drilled in the Bald Hill, Nile Road and Fingal Rail Bauxite deposits. Furthermore, four pits were excavated, sampled and assessed (three at Bald Hill, one at Fingal Rail – see Map below), and another pit was excavated only. The pits confirmed that extraction is best done using surface mining (“harvesting”) methods rather than full-depth truck and shovel methods.



Map 2. Exploration activities - drilling and pit work – which occurred prior to current reporting period. Datum GDA94 (MGA94 Zone 55).

4 EXPLORATION COMPLETED DURING THE REPORTING PERIOD

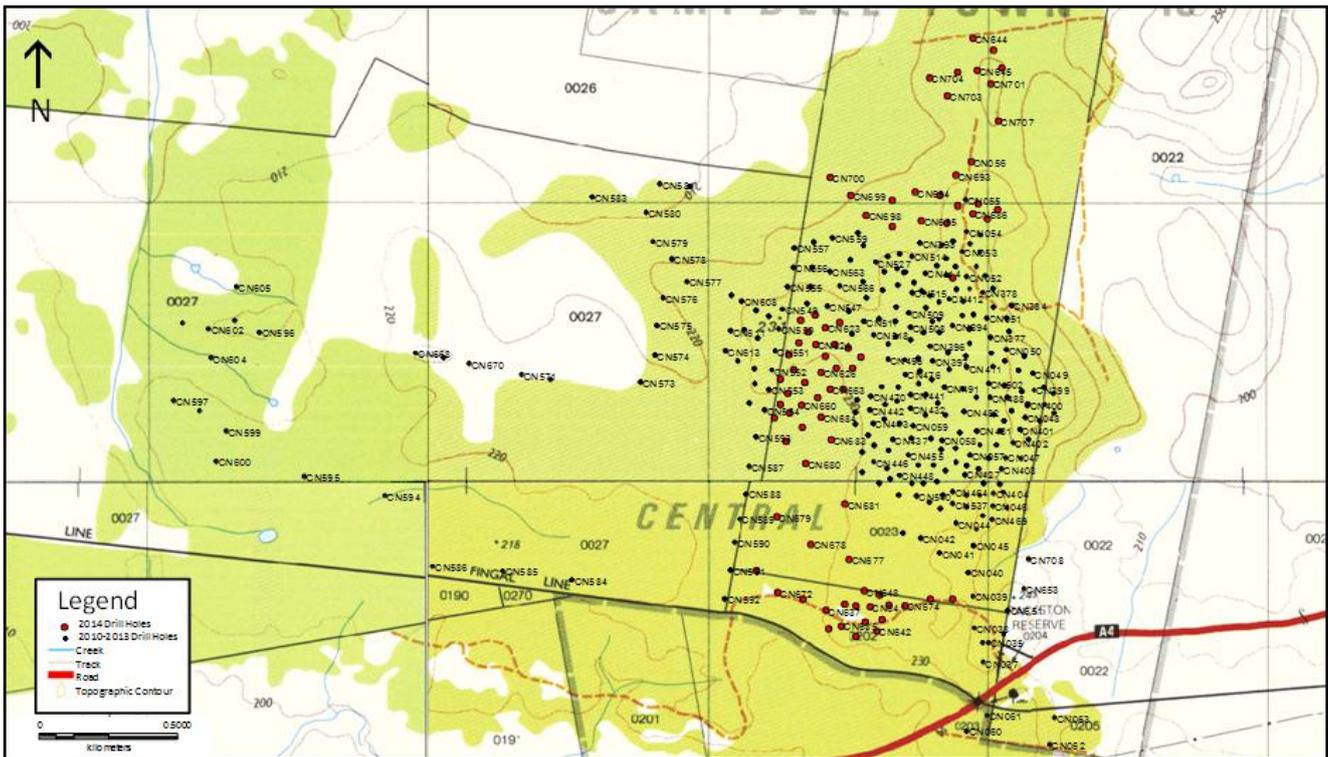
Fingal Rail Bauxite Project

Australian Bauxite Limited subsidiary company ABx4 completed drill testing of the Fingal Rail bauxite targets in EL7/2010 in early 2014. The targets are located on freehold land. A total of 90 holes for 1197m were drilled between February and April 2014 (CN618-CN708) bringing the total to 361 holes for the Fingal Rail area. 202 samples were selected for sieved assay and 80 samples were selected for whole assay at ALS Brisbane.

Drilling was undertaken using the contracting company Underdale Drillers who provided an Air core rig mounted on a light Mitsubishi 12 tonne truck with a driller and offsider. Drilling was carried out in a semi-random pattern with typical spacing's between 50-500m. Drilling recovery is generally good and consistent and all drill hole locations were surveyed at the time of drilling using hand held GPS, with accuracy of ± 5 m. Drill holes were 75mm in diameter and averaged 15m in length.

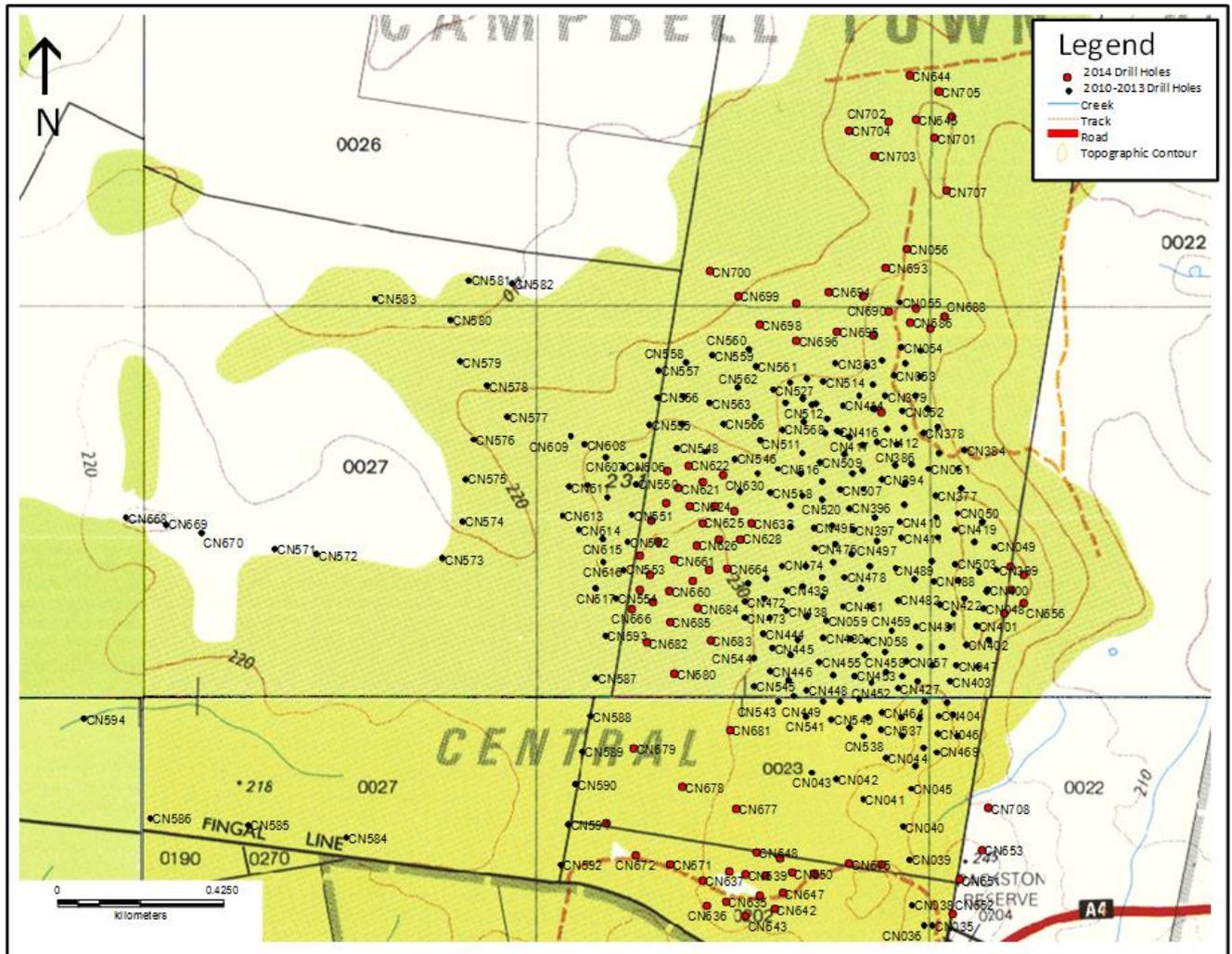
Samples were collected by placing a bag at the base of the cyclone and drilling at 1m intervals. Bauxite samples were firstly mixed well by hand then split for analysis at the ALS laboratory in Brisbane. Additional samples were taken for Hand held XRF analysis onsite. A small sample was also added to a chip tray at meter long intervals for geological logging. All chip trays, bauxite and non-bauxite samples, are stored in a nearby storage shed.

The rig accessed drill sites via farm access roads and fence lines, and then cleared tracks by hand and with a chainsaw to remove any fallen trees, branches and saplings to provide access. All machinery and equipment were washed down before and after accessing the target. All personnel were briefed and given relevant documentation before commencing work. All sites were rehabilitated on completion including removal of all rubbish, samples and plugging and backfilling of drill holes.



Map 3. (Above) Holes drilled at Fingal Rail Bauxite Deposit in previous (black) and current (red) reporting periods. Datum WGS84 (UTM Zone 55).

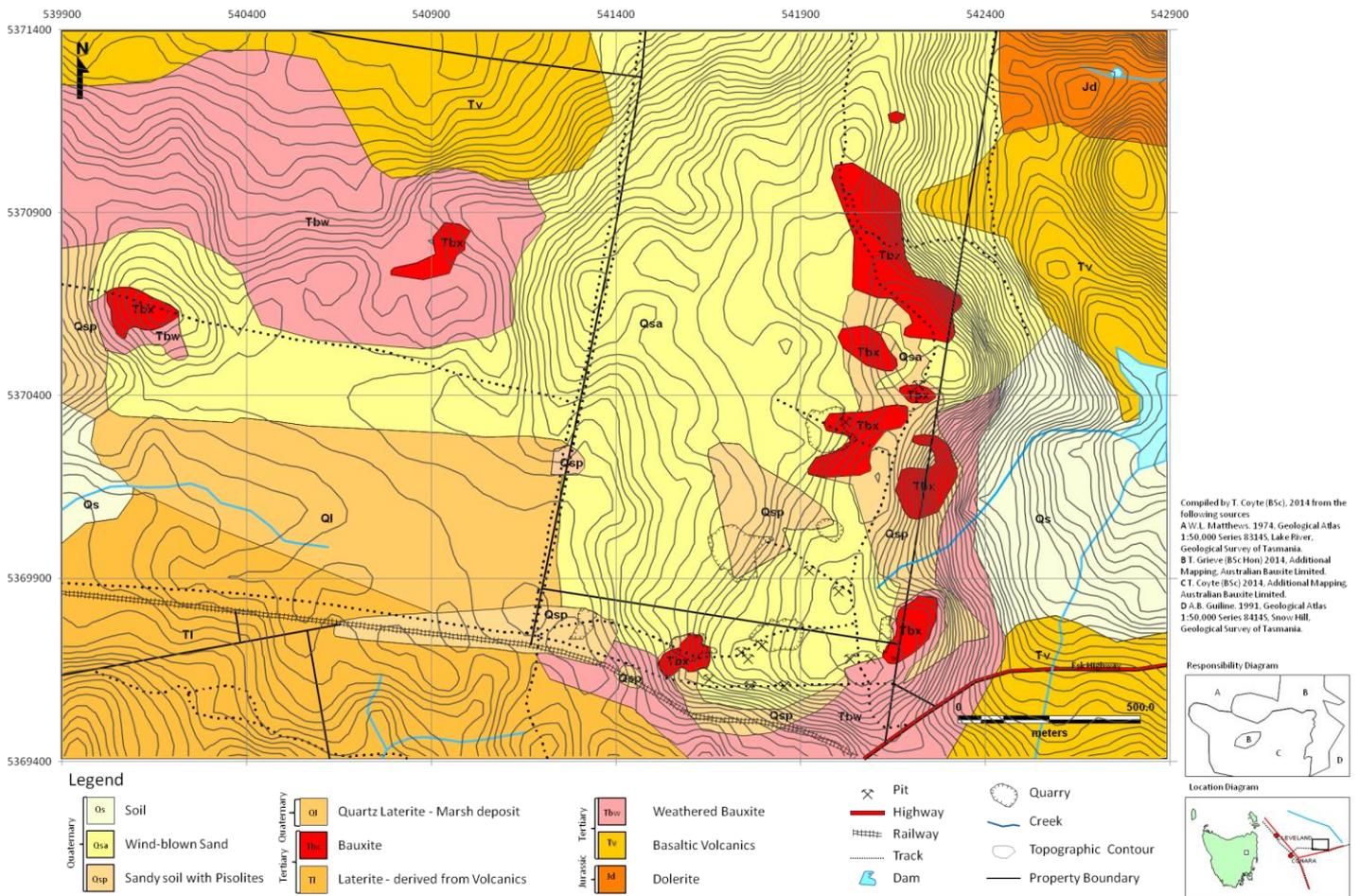
Map 4. (Below) Holes drilled at Fingal Rail Bauxite Deposit in previous (black) and current (red) reporting periods – zoomed in on area drilled at 50m spacing. Datum WGS84 (UTM Zone 55).



Results

The bauxite layer at Fingal Rail has an overburden made up of sand, clay and detrital bands of pisolitic bauxite. The bauxite profile consists of the Upper bauxite zone, and lower bauxite zone which is low grade and high grade respectively. The lower bauxite contact grades into the Kaolin rich footwall, and then weathered basaltic volcanics which is believed to be the parent rock type.

The bauxite is on average 2-3m thick and is comprised of gibbsite, hematite, maghemite, kaolin, and PDM material with minor anatase and goethite. The Fingal Rail deposit is low grade but the DSO bauxite could be selectively mined and sieved to produce a moderate-high grade ore. The upper bauxite layer contains large amounts of PDM. PDM with the right characteristics has many commercial uses and could be processed to produce a premium product.



Map 5. Surface Geology of the Fingal Rail Bauxite Project area – compiled by T. Coyte (2014) – incorporating geological mapping done by T. Grieve and T. Coyte of Australian Bauxite Limited. Datum GDA94 (MGA94 Zone 55).

The pit sampling program completed in 2013 characterised the top layers of the Fingal Rail Deposit and recent drilling was able to confirm that the deposit contains a similar profile throughout. Layers present in the bauxite profile include (from top down):

1. Overburden.

The Fingal Rail bauxite is concealed beneath a layer of post-glacial wind-blown sand and clay. Wind-blown sand generally makes up the first 0.5-2m of overburden. Detrital pisolitic bauxite sometimes occurs at the base of the wind-blown sand and is 0.1-2m in thickness, but rarely contains enough alumina to make ore grade. The distribution of this layer shown in the map below characteristically occurs adjacent to gaps in the deposit. The gaps in the deposit may have once been outcropping bauxite and have possibly been eroded to form the detrital bauxite layers. The lower part of the overburden is a layer of yellow muddy sediments which can have a layer of remobilised pisolites at the base that sometimes contains halloysite infiltrations.

2. Upper Bauxite Zone

As the main bauxite type encountered, this bauxite type can be very hard and sometimes required the hammer drill bit to drill through the layer. This bauxite appears to be cemented by hematite, gibbsite and PDM dispersed as discrete layers or bands. The bauxite mostly occurs as large hard nodules at depth. Cemented bauxite nodules because larger and more cemented with depth with increasing amounts of PDM which significantly increases the hardness. The matrix is light grey; low iron material as random halos around hard nodules, possibly due to deposition-conditions or iron migration during cementation. This bauxite layer could potentially be detrital in some areas of the deposit.

3. Lower Bauxite Zone

This bauxite is the main economic ore zone at Fingal Rail and is significantly higher grade than the upper layer. The bauxite is typically dark red to yellow and softer than the upper layer, with a variety of textures. It generally grades from Earthy slightly pisolitic (PDM) in to a vuggy breccia of hematite and gibbsite with increased clay content towards the lower contact. It occurs typically in the far east and far west of the deposits close to the edge of the 'plateau'.

4. Gradational Contact

The basal bauxite contact appears to be gradational and often contains large blebs of bauxite below the contact; this is frequently logged as Tx (transitional bauxite) and frequently contains available alumina above 10% with sieving, but cannot be upgraded further.

5. Kaolin Zone

The Kaolin Zone sits between the basaltic volcanics and bauxite. The gradational contact with the bauxite means it often contains lumps of vuggy cemented semi-bauxitised material. The Kaolin zone is generally 20m thick and in some areas has a pure white band of kaolin clay about 5m below the lower bauxite contact. The bottom contact is also gradational, with an increasing number of hard vuggy altered volcanic lumps occurring towards the contact.

6. Basaltic Volcanics

The Volcanics underlie the entire sequence and was frequently intersected in deep holes greater than 25m below the bauxite layer. The top contact is gradational with the clay rich zone characterised by hard vuggy altered volcanic lumps. The basal contact has not been intersected in drill hole but the basement rock type is most likely Jurassic dolerite which

outcrops in the surrounding area. The volcanics grade from altered purple mottled lumps of kaolin to weathered vuggy grey volcanic with white coatings filling the vughs.

Fingal Rail Bauxite Profile – Pit Work

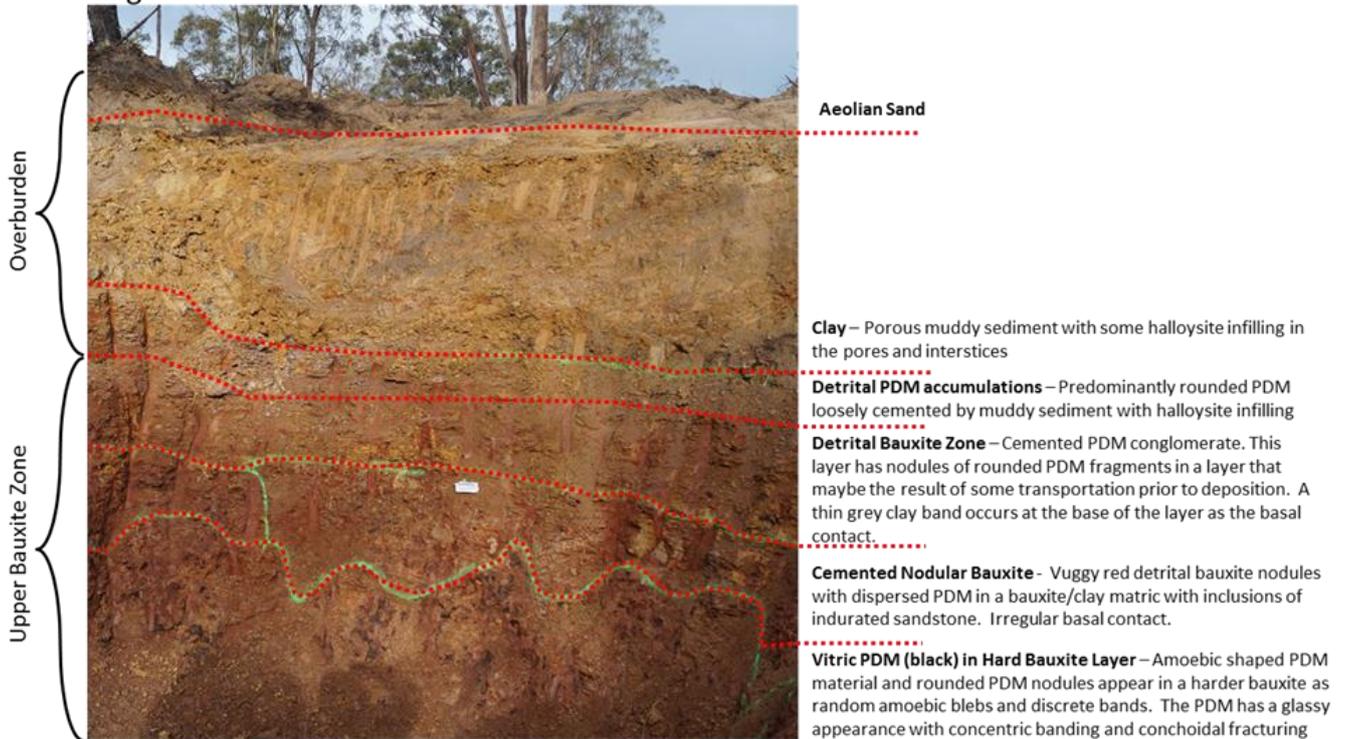
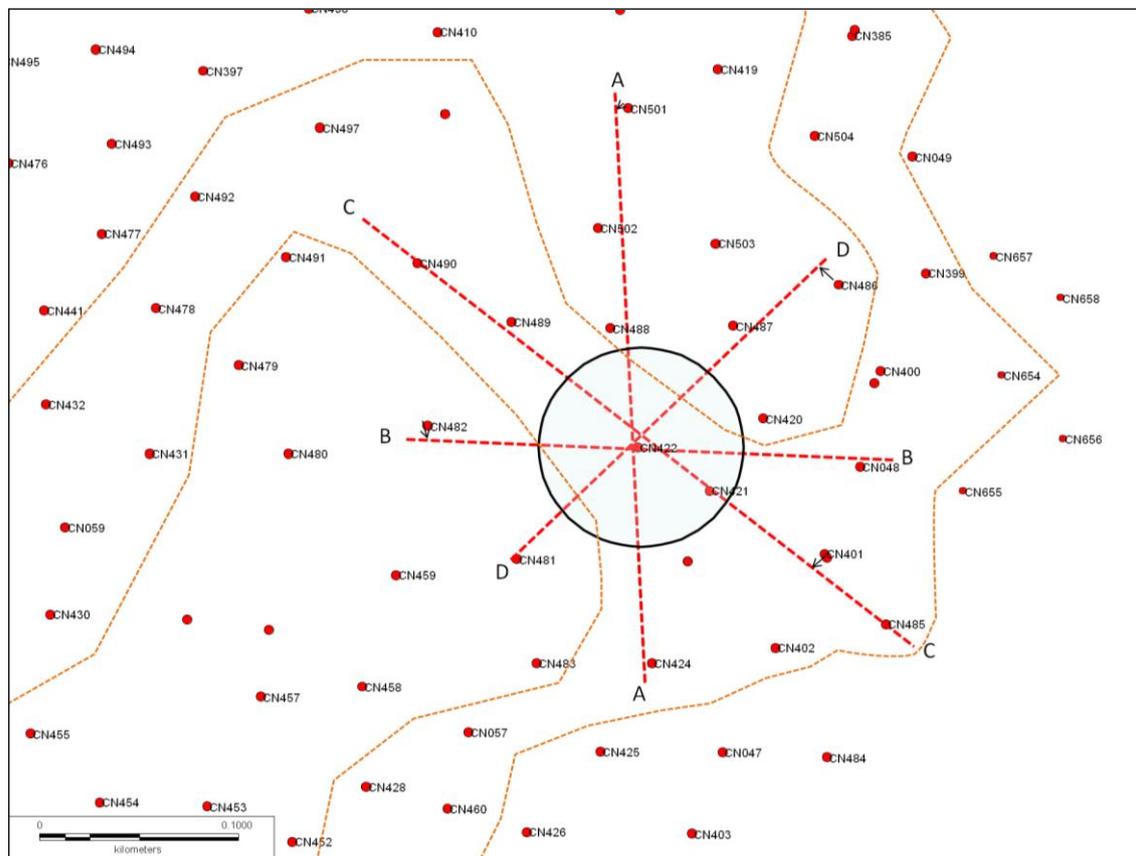
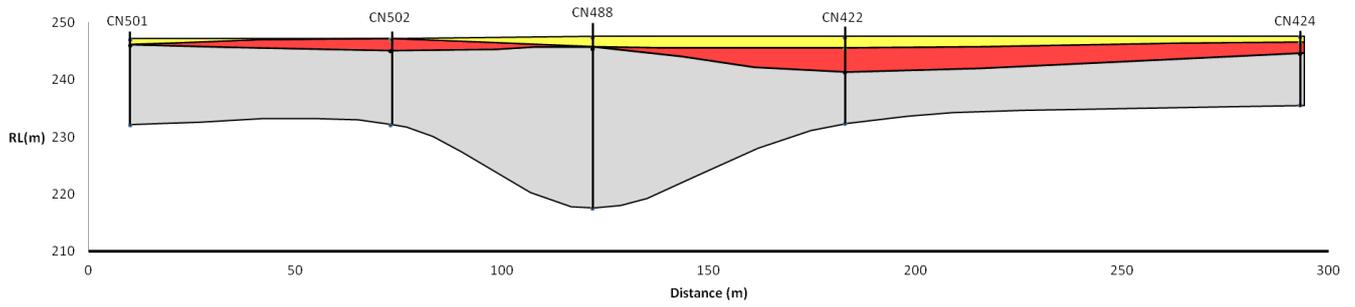


Figure 1. Composition of the overburden and upper bauxite zone from pit work done at FRP001.

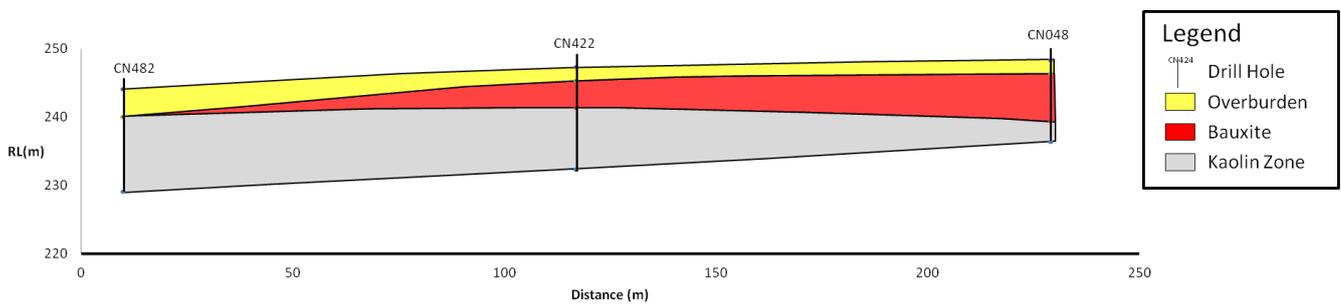


Map 6. Cross sections of the Fingal Rail Deposit centred on drill hole CN422. Datum GDA94 (MGA94 Zone 55).

A-A Cross Section N-S



B-B Cross Section E-W



D-D Cross Section NE-SW

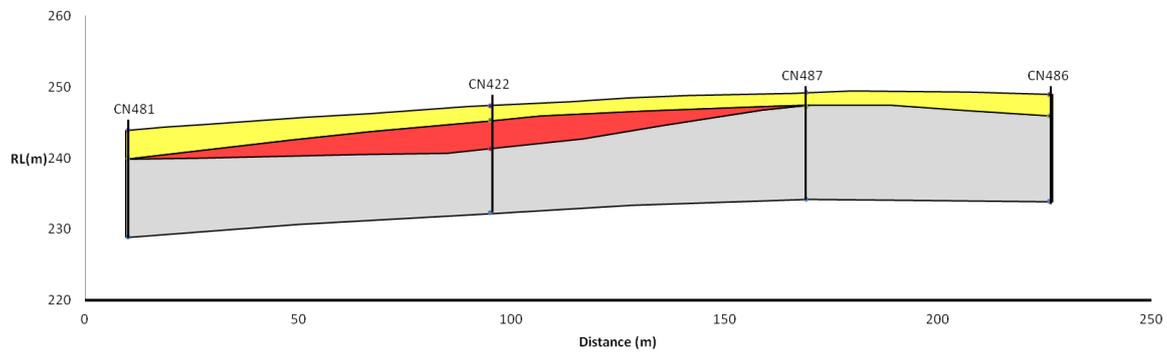


Figure 2. Cross sections of bauxite zone centred on drill hole CN422 – see previous map for description.

5 DISCUSSION OF RESULTS

During the current reporting period, ABx4 began hiring a warehouse Launceston as a centralised base for all field operations. Samples from drilling in early 2014 and earlier Conara drilling programs were moved from storage places proximal to respective drill sites and moved into the Launceston warehouse. During the move, most samples were re-bagged and many were re-sampled and sent for assaying.

A robust desktop analysis of the Bald Hill Bauxite Project was undertaken in order to facilitate the writing of the Development Proposal and Environmental Management Plan (DPMP) for the Bald Hill Mining Lease Application, which was recently granted on 22 September, 2014.

Fingal Rail: Bauxite Types and Mineralogy at Fingal Rail

Three types of bauxite were identified from drilling and two of these were characterised by pit work. The bauxite at Fingal Rail appears to be derived from basaltic volcanics which underlies the area.

Detrital Bauxite in Overburden

Detrital pisolite accumulations have been intersected in many drill holes at Fingal Rail. The accumulations sometimes contain economic bauxite grades. The layer/s are occurring above and below the clay overburden at an average depth between 1-4m. The pisolites predominantly consist of rounded PDM fragments but when accumulations are up to 3m thick it can also contain some pisolitic (PDM-rich) hematitic bauxite nodules.

PDM stands for 'poorly diffracting material' (as defined by X-ray diffraction – 'XRD') and is the main component of shiny black glassy pisolites and the other amoebic shaped glassy material found in the bauxite. The pisolites contain maghemite, hematite, spinel and other minor constituents but comprises approximately 70-80% PDM. The PDM component is almost pure alumina in the possible form of a poorly crystalline alumina spinel.

Upper Bauxite Zone

This bauxite appears to be 'nodular' type bauxite cemented by hematite and gibbsite with PDM dispersed as discrete layers or bands. Cemented bauxite nodules become larger and harder with depth. The bauxite has light-grey, low-iron matrix material as random halos around hard nodules. No quartz or sand particles were observed when examined in hand specimen.

The bauxite is generally high in iron in the forms of magnetite and hematite with kaolin decreasing as the bauxite moves away from the hanging wall contact.

Amoebic shaped PDM material and spherical (normal) PDM appear in the harder bauxite as random amoebic blebs and discrete bands. The PDM is glass-like in nature and has the appearance of the concentric banding and conchoidal fracturing found in other deposits.



Figure 3. Photo of PDM in the hard bauxite layer.

Lower Bauxite Zone

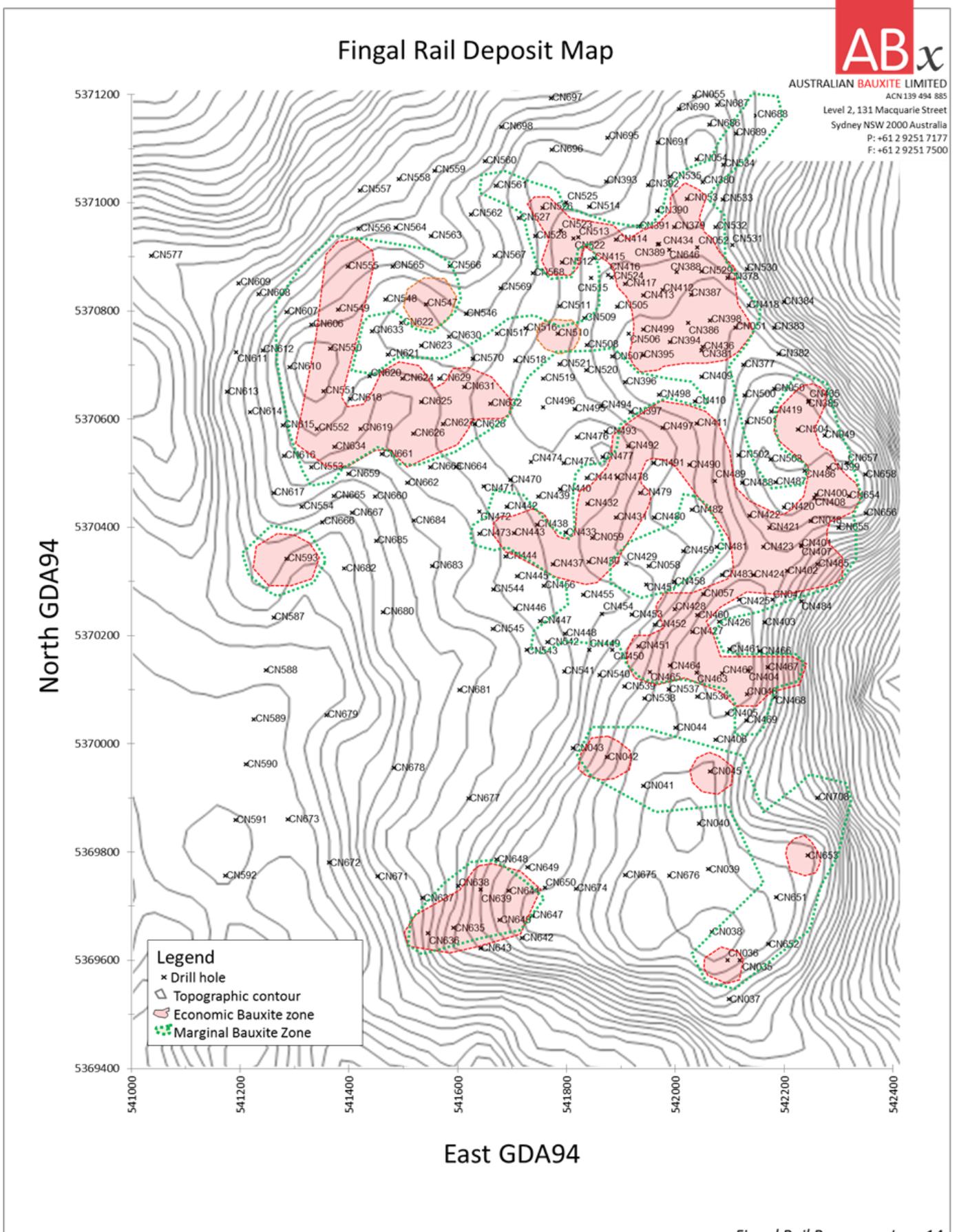
The lower bauxite zone is a dark red to yellow hematitic, gibbsitic and PDM bauxite breccia. This layer is often earthy near the top with a small amount of PDM present near the contact with the upper bauxite zone and grades into softer vuggy bauxite with relic crystal textures from the parent volcanic and some sugary gibbsite crystals present in hand specimen. Vughs decrease in size near the basal contact. This bauxite contains less hematite and magnetite than the upper zone and more gibbsite, with kaolin increasing near the lower contact.

Fingal Rail: Grade, Sieve Yields and Tonnage

Bauxite at the Fingal Rail deposit has an average thickness of 2-3m with approximately 3m of overburden. There will be significant tonnage but the resource is low grade. The majority of the bauxite requires screening, but generally the contact with the footwall is where most of the screening is required. See Map 7 for bauxite ore outlines.

Direct shipping bauxites, or 'DSO'-grade layers, tend to be at the base of the deposit and make up approximately 25% of the deposit. The DSO bauxite can be significantly upgraded by sieving. Shallow bauxite layers above the DSO layers tend to be kaolin and iron-rich and therefore low grade.

Screening Yield of the ALS laboratory assays averaged around 46% but pit sampling showed the dry screened Yield at 85%. A pit is planned for 2014 to test the mineability of the Fingal Rail deposit which will cover recoveries with different types of screening.



Map 7. Fingal Rail Economic and Marginal Bauxite Zones (T. Coyte, 2014). 1m contours are from DEM-S grid downloaded from NEDF portal. Datum GDA94 (MGA94 Zone 55).

6 CONCLUSIONS AND RECOMMENDATIONS

Fingal Rail

The Fingal Rail deposit is low grade with a portion of DSO bauxite. The DSO bauxite could be selectively mined and sieved to produce a moderate to high grade ore. This would significantly reduce the size of the deposit but would improve saleability.

The Fingal Rail upper bauxite layer which is lower grade contains a significant amount of PDM. PDM with the right characteristics has many commercial uses and could be processed to produce a premium product from otherwise lower grade ore. The exposures of bauxite at Fingal Rail occur only where there has been erosion of the deposit on the edges of the plateau.

Bald Hill

Many samples from Bald Hill were resampled and assayed during the moving of samples to the Launceston warehouse. An updated report is currently being written on Bald Hill incorporating this new data but it was not completed at the time of this report.

A mining lease was granted for Bald Hill on 19 September 2014.

Recommendations for future work include:

1. Detailed geological mapping, including geomorphological mapping and study of satellite images to define the areas with the 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 sieving.
4. 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.
5. Pit testing of the Fingal Rail target to test mineability of the deposit.
6. Sieve testing to find optimal sieve size for Tasmanian bauxites.
7. Testing new sample processing techniques to improve silica reduction.
8. Constant monitoring of rehabilitated pit locations.
9. New application for a Mining Lease over the Fingal Rail Deposit.
10. Commence detailed discussions with land holders in the Fingal Rail Area.

7 ENVIRONMENT

Surface Disturbing Operations:

ABx4's surface disturbing operations are in general, minimal.

Drilling is conducted by an RC drill rig mounted on a light 12 tonne truck. All drill holes are filled immediately after completion and photographed.

Existing tracks are used wherever possible. In the event that any specific access is required for drill rigs and/or service vehicles, track construction will be minimised and in accordance with directions of landowners or the department. Saplings and over hanging branches were removed when necessary and fallen trees and braches were pushed aside.

Rehabilitation of pit work completed in the previous reporting period was completed in accordance with the Minerals Exploration Code of Practice 5th edition. However, monitoring of all pervious pit rehabilitation is ongoing and is aimed at ensuring the original vegetation regrows sufficiently.

Surveys (archaeological, botanical):

An Ecological Assessment of the Fingal Rail area was undertaken by ECOtas; completed on 19 May 2014. This report is attached as an appendix.

Rehabilitation:

ABx4 has a policy that all drill holes and tracks are fully rehabilitated immediately after drilling. Drillholes are plugged using "octo-plugs" at a depth of 1.5m and re-filled using innocuous material from the drill hole.

Rehabilitation of pit work completed in the previous reporting period was completed in accordance with the Minerals Exploration Code of Practice 5th edition. Monitoring of all pervious pit rehabilitation is ongoing and is aimed at ensuring the original vegetation regrows sufficiently.

8 EXPENDITURE

Table 1 – Exploration Activity and Expenditure Table for 14 September 2013 – 13 September 2014.

Exploration Category	Description of Activity	Quantity	Expenditure
Office Administration	General		\$8,127
Authority Management	Rehabilitation		\$3,324
	Land Access & Landowner Liason		\$19,514
	Native Title - Surveys, etc.		\$11,951
Office Activities	Data Compilation & Report Preparation inc. Compliance		\$1,628
Field Activities	Geological Mapping		
	Sampling		\$1,569
	Equipment Hire	Vehicle Hire / Other	\$27,731
	Travel and Accommodation	Days	\$84,404
	Field Supplies		\$39,478
	Other		
	Geophysics		
	Airborne		
	Type		
	Ground		
	Type		
	Drilling (program cost)		
	RAB/AC		
	RC	90 Holes for 1197m	\$71,906
	Diamond		
	Other		
Laboratory	ME-XRF 13B, Reactive Silica & Available Alumina	202 Samples	\$60,223
Salaries / Wages	Employees & Contractors	Geologists	\$66,611
		Field Assistance	\$27,568
		Engineering	\$82,866
		Drilling Supervision	\$348,000
		Geochemical	\$1,822
		Grand Total	\$856,721

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

9 REFERENCES

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