



AUSTRALIAN **BAUXITE** LIMITED

**ASX ANNOUNCEMENT**

**5 March 2013**

ASX Code: ABZ

## **Progress Towards Production From Tasmania in 2014: MoU Signed For Bell Bay Port & Drilling Scottsdale Targets Commenced**

- A Memorandum of Understanding (MoU) signed with Tasmanian Ports Corporation Pty Ltd for access to Bell Bay Port in northern Tasmania for the export of bauxite
- Approval has been granted for drilling the Scottsdale bauxite tenement, 65 kilometres east of Bell Bay Port. Drilling is focusing on defining the boundaries of a Bauxite Mining Lease in suitable areas with good infrastructure
- The Mining Lease application process, which commenced in late November 2012, will be enhanced by an early determination of these Mining Lease boundaries.

Australian Bauxite Limited (ASX Code ABZ) has more than 7,500 km<sup>2</sup> of tenements over the core of the Eastern Australian Bauxite Province (see Figure 7). ABZ's Tasmanian Project, based on bauxite deposits located within 100 km of Bell Bay Port (see Figures 1 to 4), may come into production ahead of ABZ's other mainland projects and early access to the Bell Bay export port is an important part of this strategy.

The bauxite discovered by ABZ is gibbsite-rich, low silica bauxite occurring as a surface gravel layer in blocks throughout the Tasmanian northern midlands area surrounding Bell Bay where Australia's first alumina refinery and first aluminium smelter were established. The deepwater Bell Bay Export Port has sufficient spare capacity to handle bauxite exports up to several million tonnes per year, without major capital works being required.

### **MoU Signed With Tasmanian Ports Corporation For Bell Bay Access**

On Friday 1 March, Australian Bauxite and Tasmanian Ports Corporation Pty Ltd executed an MoU to co-operate regarding road and rail movement, discharge and storage of product and ship loading equipment for the export of bauxite from Bell Bay Port.



**Figure 1**

Australian Bauxite Chief Operating Officer, Leon Hawker (left) and Paul Weedon, Chief Executive Officer of Tasmanian Ports Corp signing the MoU in Hobart 1 March 2013

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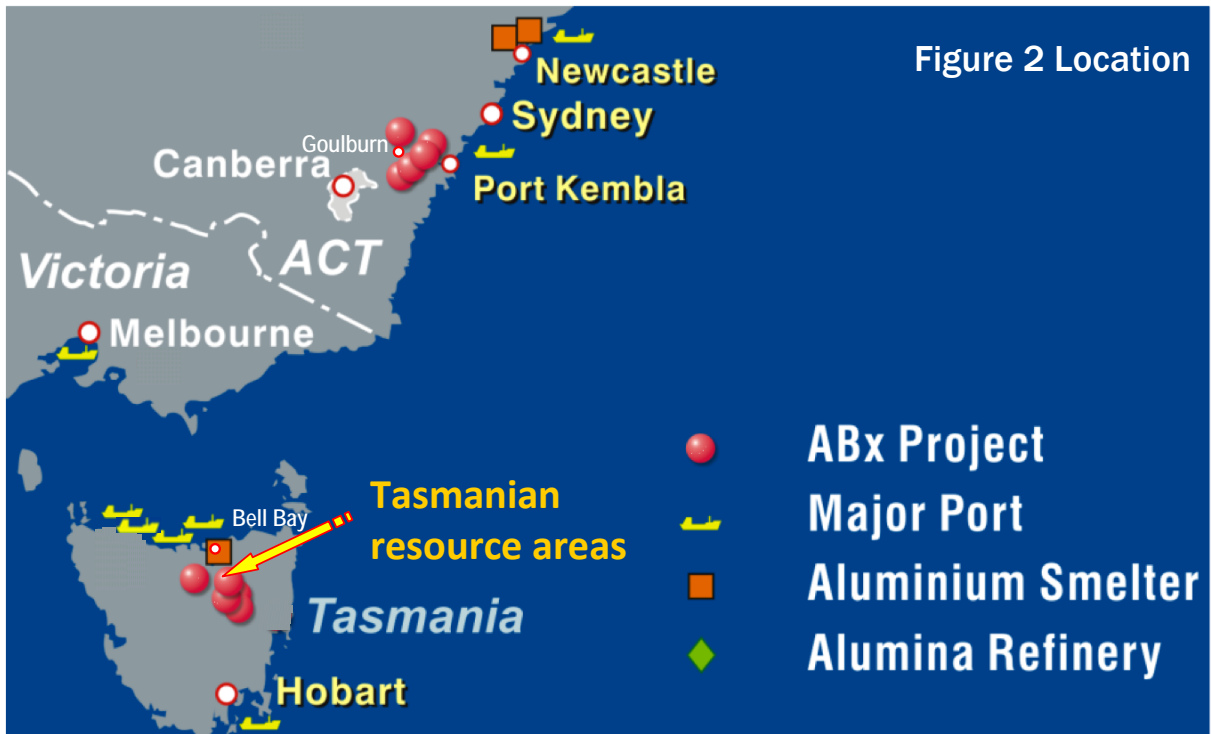
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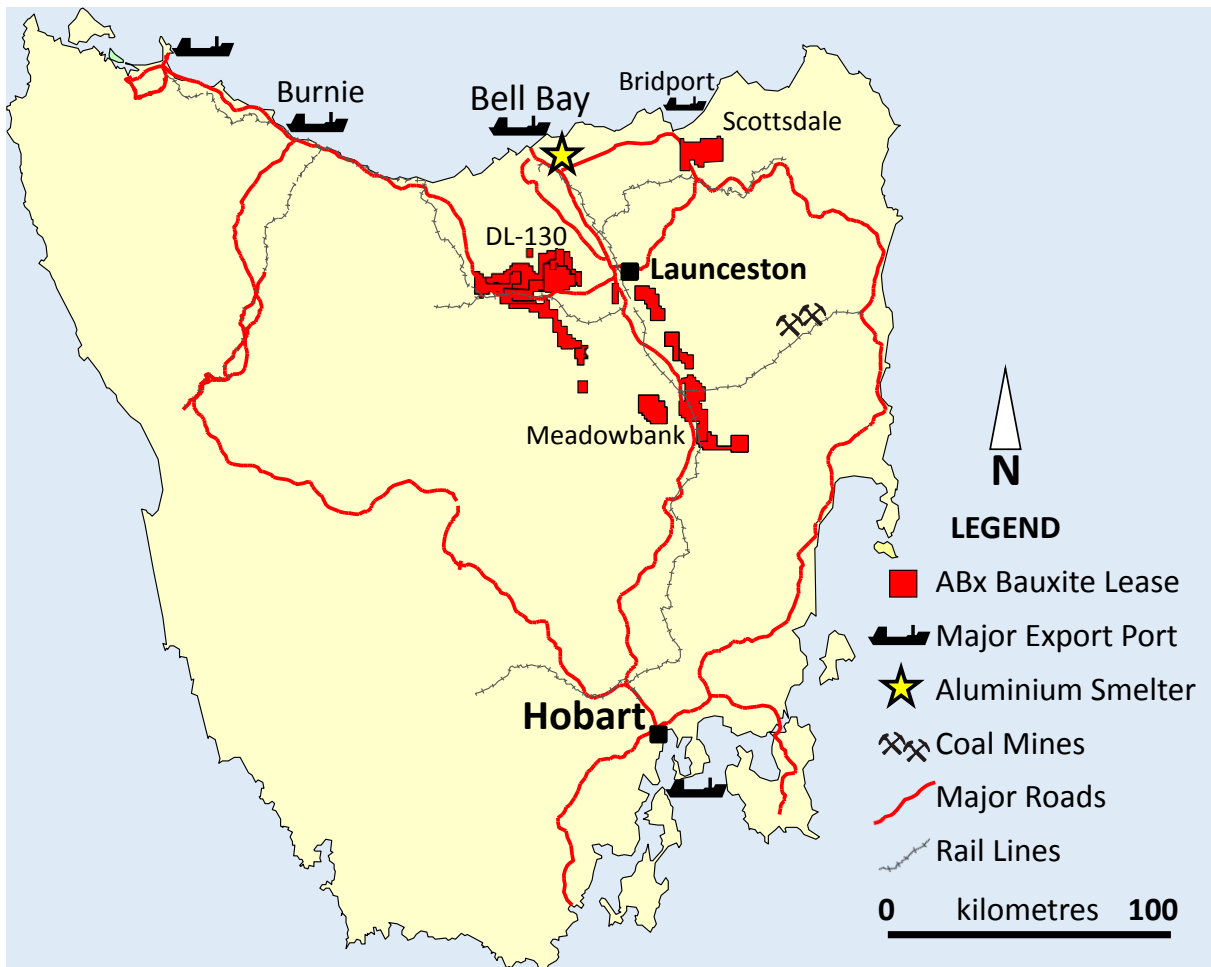
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Bell Bay Port is a heavily industrialised port precinct comprising the multi-berth Bell Bay Port facilities, an aluminium smelter, a manganese smelter, wood products manufacturing plants and general industry. There are no residential areas nearby and it has existing power, water, heavy duty road and rail facilities servicing the port area with sufficient spare capacity for a bauxite export business.



**Figure 4: ABZ Tasmanian Bauxite Tenements, Deposits and Infrastructure**

#### **Drilling Commenced at Scottsdale and Focussed on Mining Lease Determination**

Access has been granted to the new Scottsdale tenement located 65 kilometres east of Bell Bay (see Figure 4 above). Drilling for the next 3 months will focus on determining the boundaries of the major deposits targeted for inclusion in the first Mining Lease which is to contain sufficient bauxite resources for the first five years of production of suitable grade bauxite in areas that are suitable for bauxite extraction without adverse socio-environmental impacts. Once the main bauxite boundaries are defined, the Mining Lease boundaries, including space needed for operations and access, can be finalised for the formal Mining Lease application.

The process of making a Mining Lease application commenced in November 2012 and it would appear from the work done to date by ABZ's engineering consultants that there are many areas containing bauxite around Bell Bay Port where all native vegetation has already been cleared and are in areas of industrial activity with heavy transport infrastructure.

Once the first Mining Lease is defined, drilling will then continue later in 2013 to define other bauxite resources in areas, which are suitable for bauxite extraction without adverse socio-environmental impacts.

## PROJECT DESCRIPTION

### Current JORC-compliant resources<sup>1</sup>

**Table 1: Summary of Maiden Bauxite Resources, Tasmania**

Tasmanian Bauxite Resources			Sieved at 0.26mm												
Resource category	Tonnes millions	Bauxite Thickness	Al <sub>2</sub> O <sub>3</sub> Avl % 225°	Al <sub>2</sub> O <sub>3</sub> Avl % 143°	Rx SiO <sub>2</sub> %	Avl/Rx Ratio	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	A/S Ratio	Fe <sub>2</sub> O <sub>3</sub> %	TiO <sub>2</sub> %	LOI %	Yield %	Overburden m	Internal Waste m
Inferred	5.7 Mt	3.8 m	39.5	37.6	3.2	11.9	44.1	4.3	10.4	22.8	3.1	25.0	55%	1.5 m	0.1 m
<b>TOTAL</b>	<b>5.7 Mt</b>	<b>3.8 m</b>	<b>39.5</b>	<b>37.6</b>	<b>3.2</b>	<b>11.9</b>	<b>44.1</b>	<b>4.3</b>	<b>10.4</b>	<b>22.8</b>	<b>3.1</b>	<b>25.0</b>	<b>55%</b>	<b>1.5 m</b>	<b>0.1 m</b>

Cut-off grades applied: Minimum 30% available Al<sub>2</sub>O<sub>3</sub> at 143 degrees, 2m thickness, 350m search ellipse for each 25m x 25m block. Leach conditions to measure available alumina "Al<sub>2</sub>O<sub>3</sub> Avl" & reactive silica "Rx SiO<sub>2</sub>" is 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 mins. "Al<sub>2</sub>O<sub>3</sub> Avl % 225°" is estimated available alumina at 225 degrees C based on metallurgical testwork. "Avl/Rx" ratio is (Al<sub>2</sub>O<sub>3</sub> Avl)/(Rx SiO<sub>2</sub>) and "A/S" ratio is Al<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub>. Values above 10 are excellent. Tonnage is for bauxite in-situ. Yield is for screening all samples at 0.26mm. The significant tonnages requiring no upgrade will have 100% yield.

**Table 2: Summary of Direct Shipping<sup>2</sup> ("DSO") Bauxite Resources, Tasmania**

In-Situ DSO Bauxite			Raw, unsieved in situ bauxite												
Resource category	Tonnes millions	Bauxite Thickness	Al <sub>2</sub> O <sub>3</sub> Avl % 225°	Al <sub>2</sub> O <sub>3</sub> Avl % 143°	Rx SiO <sub>2</sub> %	Avl/Rx Ratio	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	A/S Ratio	Fe <sub>2</sub> O <sub>3</sub> %	TiO <sub>2</sub> %	LOI %	Yield %	Overburden m	Internal Waste m
Inferred	3.0 Mt	4.0 m	34.2	32.6	4.6	7.0	40.5	5.6	7.2	24.9	3.9	23.2	100%	1.8 m	0 m
<b>TOTAL</b>	<b>3.0 Mt</b>	<b>4.0 m</b>	<b>34.2</b>	<b>32.6</b>	<b>4.6</b>	<b>7.0</b>	<b>40.5</b>	<b>5.6</b>	<b>7.2</b>	<b>24.9</b>	<b>3.9</b>	<b>23.2</b>	<b>100%</b>	<b>1.8 m</b>	<b>0 m</b>

Cut-off grades applied: Minimum 30% available Al<sub>2</sub>O<sub>3</sub> at 143 degrees for raw in-situ bauxite, 2m thickness, 350m search ellipse for each 25m x 25m block. Leach conditions to measure available alumina "Al<sub>2</sub>O<sub>3</sub> Avl" & reactive silica "Rx SiO<sub>2</sub>" is 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 mins. "Al<sub>2</sub>O<sub>3</sub> Avl % 225°" is estimated available alumina at 225 degrees C based on metallurgical testwork. "Avl/Rx" ratio is (Al<sub>2</sub>O<sub>3</sub> Avl)/(Rx SiO<sub>2</sub>) and "A/S" ratio is Al<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub>. Values above 6 are good for raw bauxite. Tonnage is for direct-shipping DSO bauxite in-situ.

- <sup>1</sup> see JORC Compliant Resource Statements box
- <sup>2</sup> see Definitions box

### DSO Bauxite Resources

DSO Bauxite would typically be the first bauxite shipped because it requires no processing on site. However, if bauxite production proceeds successfully, other parts of the deposits will be extracted, screened and blended into the stockpile at the port. Once the screening and blending is established, a high quality gibbsite-rich bauxite product suitable for low-temperature alumina refineries can be exported from Bell Bay, Tasmania.

### Rehabilitation

Typically there is 0.5 to 2 metres of soil and overburden above the bauxite gravel layer which will be selectively removed during bauxite extraction and replaced as soon as possible to ensure that seeds and soils remain viable.

Bauxite tends to produce a poorer quality soil and many bauxite areas have been used for plantations of imported tree species because it is not suitable for other agriculture. Some areas can be improved when rehabilitated. ABZ endorses best practices on agricultural land, strives to leave land and environment better than we find it. We only operate where welcomed.

### Location and Infrastructure

Central Northern Tasmania has good infrastructure, with operating rail lines and heavy-duty haulage highways passing through the bauxite areas, linking directly to the efficient operating mineral export port of Bell Bay that has spare port capacity (see Figure 4).

Tasmania has a well-developed electric power grid based mainly on hydroelectric power and has ample water supplies. Natural gas from the Bass Strait field is distributed throughout Tasmania and there are many well-established population centres with experienced, skilled workforces.

Tasmania has a proud mining heritage. Coal mining occurs in the Fingal Valley area east of the main bauxite areas and large cement works are operating in the area west of the bauxite areas. The aluminium smelter at Bell Bay is operated by Rio Tinto Alcan (see Figures 2 to 4). Central Northern Tasmania has engineering workshops and experienced contractors.

In summary, the Tasmanian bauxite project areas in central northern Tasmania are supplied with power, water, communications and transport infrastructure, near industrial centres serviced by efficient mineral export ports that operate all year round without seasonal interruptions.

### Environmental Baseline Work

Environmental baseline work commenced in November 2012 during the Spring season. Some intensive plantations of imported tree species are unlikely to present socio-environmental impediments but they are being assessed by independent environmental experts nonetheless.

### Deposit Geology

The main deposits lie on plantation forests that are being harvested. Bauxite forms slight ridges with lesser quality, thin soils that are best suited for plantation forest development.

The bauxite is a layer that is interpreted as having formed on the volcanic rocks of the lower Tertiary era (40 to 55 million years old). Recent erosion, especially after the Ice Age has dissected the deposits and the remnant ridges of bauxite are typically 1 to 2 kilometres long but occur in clusters that represent an ancient continuous plateau.

Cross sections in Figures 5 and 6 below show the geology of the two typical deposits, DL-130 and Meadowbank.

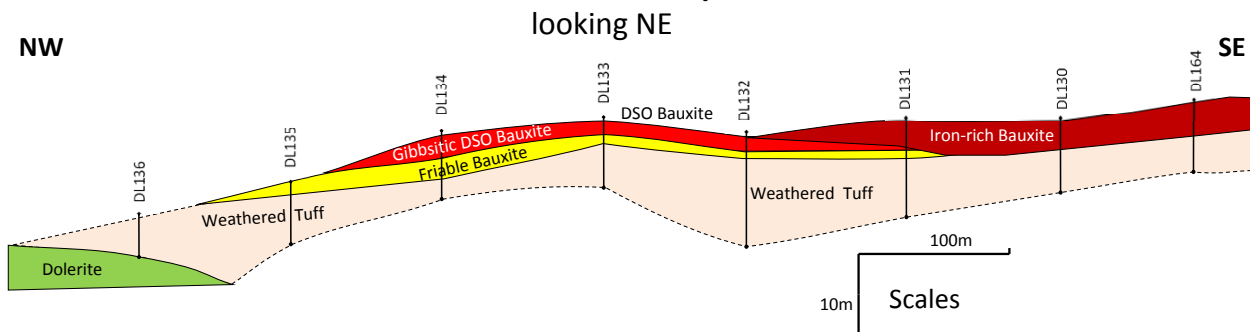


Figure 5: Cross Section Of The Northwest Part of Bauxite Deposit DL-130

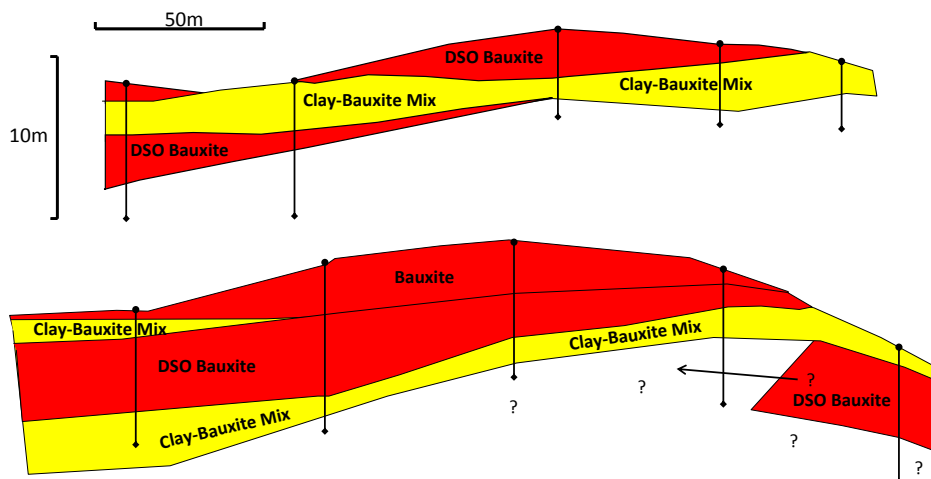


Figure 6: Two Cross-Sections Through a Small Part of The Meadowbank Bauxite Deposit



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#### JORC Compliant Resource Statements

The following are Joint Ore Reserve Code ("JORC")-compliant Public Reports released to the ASX declaring the JORC resources referred to. These can be viewed on the ASX website and the Company will provide these reports, free of charge on request.

- <sup>1</sup> 08/05/2012 ASX Inverell JORC Resource Update, 38.0 Million Tonnes
- <sup>2</sup> 30/05/2012 ASX Taralga Bauxite Resource Increased 50% to 37.9 Million Tonnes
- <sup>3</sup> 15/08/2011 ASX Maiden Guyra Resource, 6.0 Million Tonnes
- <sup>4</sup> 29/07/2012 ASX Binjour Resource Update, 24.5 Million Tonnes
- <sup>5</sup> 08/11/2012 ASX Maiden Tasmania JORC Resource, 5.7 Million Tonnes
- <sup>6</sup> 03/12/2012 ASX Maiden QLD Mining Lease JORC Resource, 3.5 Million Tonnes

#### Direct Shipping Bauxite or "Direct Shipping "Ore"

All references in this report to direct shipping bauxite or direct shipping ore (DSO) refers to the company's exploration objective of defining or identifying DSO grade mineralisation.

#### True Width

The true-width of the deposit is not known and will be determined by further resource definition drilling.

#### Definitions

DSO bauxite	Bauxite that can be exported directly with minimal processing
Averaging method	Aggregated average grades in the table are length-yield-weighted averages of each metre's yields & grades.

#### About Australian Bauxite Limited: ASX Code ABZ

Australian Bauxite Limited (ABx) holds the core of the newly discovered Eastern Australian Bauxite Province. Its 42 bauxite tenements in Queensland, NSW and Tasmania covering 7,537 km<sup>2</sup> were rigorously selected on 3 principles:

1. good quality bauxite;
2. proximity to infrastructure connected to export ports; and,
3. free of socio-environmental or native title land constraints.

All tenements are 100% owned and free of obligations for processing and third-party royalties. ABx has already discovered many bauxite deposits and new discoveries are still being made as knowledge and expertise grows. ABx conducts vigorous reviews of the commercial viability of its projects and tenements, resulting in new acquisitions, but also reductions in area as exploration is conducted.

The company's bauxite is high quality and can be processed into alumina at low temperature – the type that is in short-supply globally. **Global resources declared to date total 115.6 million tonnes.** At the company's first drilling prospect in Inverell, northern NSW, a resource of 38.0 million tonnes<sup>1</sup> has been reported from drilling 35% to 40% of the area prospective for bauxite and a resource of 37.9 million tonnes<sup>2</sup> of bauxite has been reported at the Taralga project in southern NSW. A 6.0 million tonnes<sup>3</sup> maiden resource was declared at Guyra. A 24.5 million tonnes<sup>4</sup> resource has been declared at the Binjour Plateau in central QLD, confirming that ABx has discovered a significant bauxite deposit including some bauxite of outstandingly high quality. A 5.7 million tonnes<sup>5</sup> maiden resource has been declared for Tasmania. Australian Bauxite Limited aspires to identify large bauxite resources in the Eastern Australian Bauxite Province, which is emerging as one of the world's best bauxite provinces.

ABx has the potential to create significant bauxite developments in three states - Queensland, New South Wales and Tasmania. Its bauxite deposits are favourably located for direct shipping of bauxite to both local and export customers.

**ABx endorses best practices on agricultural land, strives to leave land and environment better than we find it. We only operate where welcomed.**



Figure 7: ABx Project Locations