



# AUSTRALIAN BAUXITE LIMITED

ASX: ABZ

## ASX ANNOUNCEMENT

9 February 2012

### Drilling Confirms 30 metres True Thickness of Bauxite at Taralga, NSW

- Four follow-up holes have confirmed the unusually thick bauxite which exceed the 28 metres true thickness discovered at Mt Rae, Taralga NSW in December in hole TG626
- A new record true thickness of 33 metres of continuous bauxite was intersected in hole TG680 located 45 metres from discovery hole TG626
- A near-record true thickness of 32 metres of continuous bauxite was also intersected in holes TG678 & TG679 located 15 & 22 metres from discovery hole TG626 respectively
- Hole TG677 located 10 metres from discovery hole TG626 intersected 23 metres true thickness of bauxite – further deeper drilling is being planned in this thick zone
- This thick bauxite zone was concealed beneath less than 1 metre of soil-clay

Emerging bauxite exploration and development company, Australian Bauxite Limited (ABx, ASX Code ABZ) has drilled 4 new vertical holes TG677 to TG680 around hole TG626 at Mt Rae (see Figures 2 & 3 for locations) which, in December 2011, discovered the company's then record thickest high-grade bauxite intersection - possibly one of the thickest bauxite intersections in Australia. Thicker bauxite was found.

New hole TG680 intersected a new record 33 metres true thickness of bauxite from surface to 33m depth whilst hole TG677 intersected 24 metres and holes TG678 & TG679 intersected 32 true thickness of bauxite. Holes and bauxite thicknesses are shown in Figure 4 with results to hand summarised in Table 1.

Most Australian bauxite deposits are less than 4 metres thick and some are less than 2 metres thick whereas holes TG626, TG677 to TG680 average **30 metres** true thickness.

Table 1: Summary of Recent Drill Intercepts at Mt Rae, Taralga, Southern NSW

HOLE	From m	To m	Thick-ness m	Total analyses for samples sieved at 0.26mm						Leach 143 deg C analyses			Wet Screen Yield %
				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 %	Al <sub>2</sub> O <sub>3</sub> Avl %	Rx SiO <sub>2</sub> %	Avl/Rx Ratio	
TG 626 (ended in bauxite)	1	29	28	41.25	1.79	23.0	33.3	3.4	19.4	31.4	0.7	43.7	75.0
TG 628 (ended in bauxite)	0	13	13	40.73	1.33	30.5	31.4	3.8	21.9	35.9	0.7	53.7	64.5
TG 677	1	24	23	Assays pending									
TG 678	1	33	32	Assays pending									
TG 679	1	33	32	Assays pending									
TG 680	0	33	33	Assays pending									
TG 681	6	11	5	Assays pending. Hole may need deepening.									
TG 682	3	11	8	Assays pending. Hole may need deepening.									

"PDM" are dense grains of emery that are easily recovered by gravity and sold, leaving DSO bauxite as the main product. "A/S" ratio is Al<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub>. Values above 10 are excellent. Leach conditions for available Al<sub>2</sub>O<sub>3</sub> avl & reactive Rx SiO<sub>2</sub> is 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 mins. "Avl/Rx" ratio is (Al<sub>2</sub>O<sub>3</sub> avl)/(Rx SiO<sub>2</sub>). Yield is for wet screening at 0.26mm. Different beneficiation methods will have different yields. Bauxite requiring no upgrade will have 100% yield.

ABx and Marubeni Corporation are conducting a \$1.5 million pre feasibility study of the Goulburn Bauxite Project. This zone of thick bauxite increases the resource potential of the Taralga bauxite areas, near Goulburn NSW.

The district's deposits contain thick zones of premium grade bauxite, with good potential for more discoveries. All deposits are gibbsite-rich (trihydrate) bauxite and free of clays and boehmite (monohydrate-free). All horizons produce Direct Shipping or "DSO" bauxite (see Definitions).

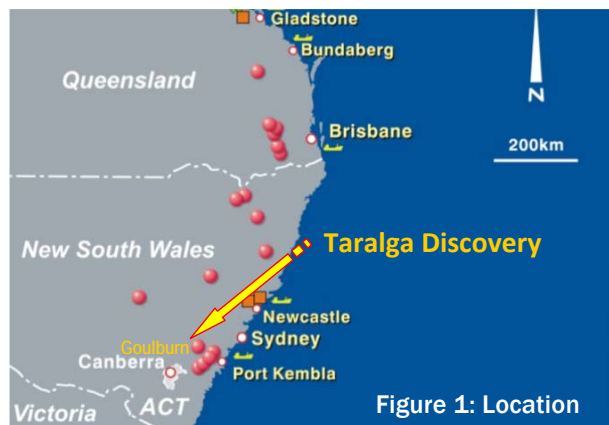


Figure 1: Location

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Figure 2: District Locations & Infrastructure

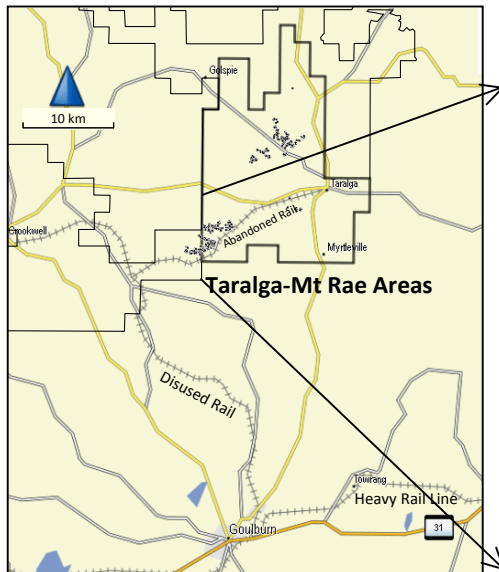


Figure 3: Taralga – Mt Rae Area Bauxite Drillholes  
Circle Size is Proportional to Bauxite thickness x Al<sub>2</sub>O<sub>3</sub>

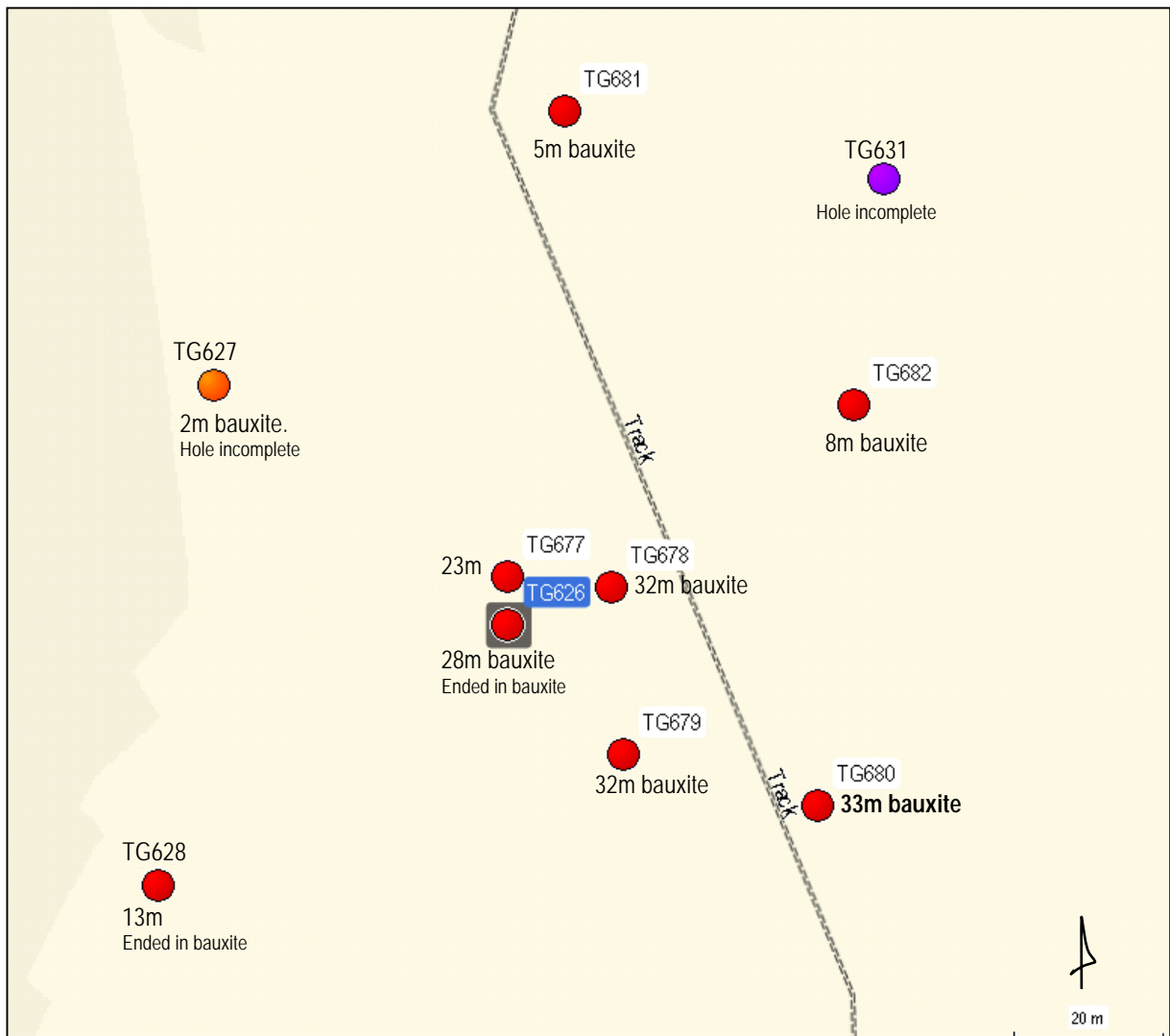
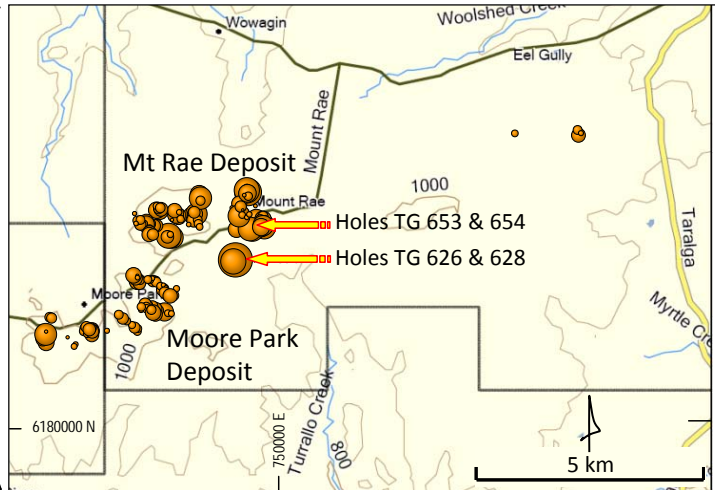


Figure 4: Mt Rae Area – Recent Thick Bauxite In Drillholes Around Discovery Hole TG626

## Resource Estimation Update

Areas of thick, good quality bauxite continue to be discovered across the Taralga - Mt Rae Areas. It is intended to upgrade the resource estimate for Taralga before the end of the current Pre Feasibility Study (“PFS”), which is scheduled to conclude at the end of March. Como Engineers of Perth have been appointed to coordinate cost estimations and prepare the PFS report.

Current bauxite resources at Taralga total 25 million tonnes (see Resource Statement page 4 below).

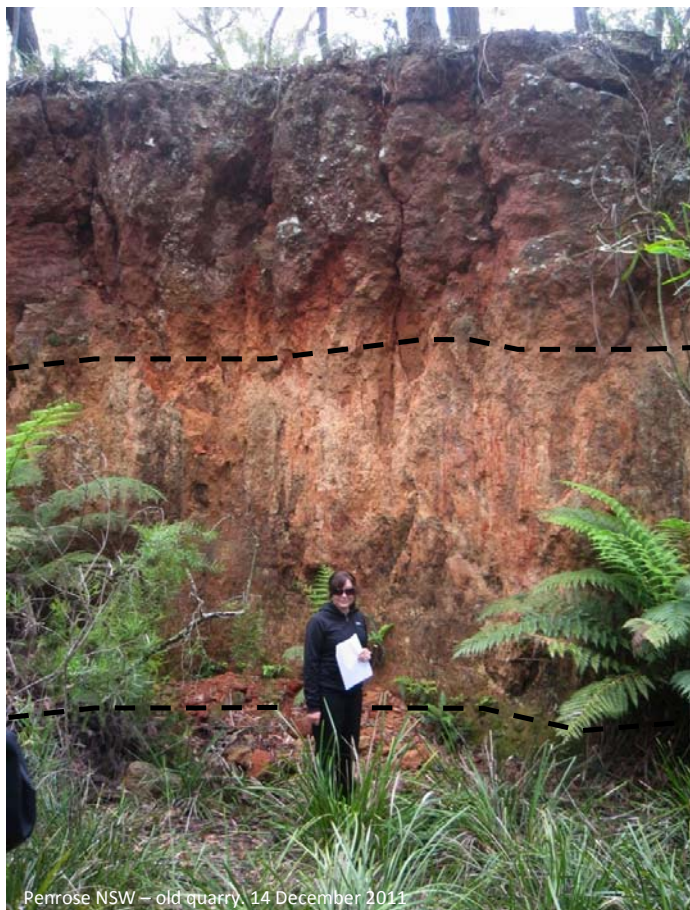
## Metallurgical Results Encouraging: Main Production is DSO Bauxite

Metallurgical tests on large samples have been done as part of the Pre Feasibility Study, with METS Engineers of Perth coordinating and summarising the testwork (report in progress).

The Goulburn district bauxite deposits typically have an upper half that contains nodules or “pisoliths” of a black, glassy material which is an emery, comprising mainly fused alumina and trace iron oxides (see Figure 4 below). Well-known bauxite mineralogist, Professor Eggleton of the Australian National University coined the term “PDM” for these black pisoliths which he found in bauxites from Weipa, Northern QLD. PDM stands for “poorly diffracting material” when subjected to X-ray diffraction.

Metallurgical tests on the PDM-bearing bauxite (“PDM-DSO Bx”) from the Taralga area have been able to recover the PDM by gravity methods and the remaining bauxite is good-quality DSO bauxite, similar to the DSO bauxite that typically occurs in the lower half of the deposits (see Figure 4). This means that overall, DSO will represent approximately 75% to 85% of total tonnes produced from the Goulburn Bauxite Project. The recovered PDM emery material can be sold at good prices for industrial uses.

Because this PDM-bauxite layer typically has less than 15% Loss on Ignition “LOI” (see Appendix details), it was previously referred to as “Dehydrated” bauxite. It is now called PDM-DSO Bx bauxite.



### LAYERED BAUXITES OF SOUTHERN NSW

2 to 3 m layer of “PDM-DSO Bx” or emery-bearing pisolithic bauxite.

Comprises 15% to 30% of 5 to 50mm pisoliths of “PDM” which are nodules of dense fused alumina & maghemite-hematite dust in low-density, high quality DSO bauxite.

2 to 4 m layer of DSO bauxite.

Gibbsite plus moderate levels of iron minerals, mainly hematite and limonite (little or no goethite).

Needs no processing – direct shipping bauxite (“DSO”) – see Definitions.

1 to 3m layer of white bauxite in places.

Gibbsite plus low iron (3% to 8% Fe<sub>2</sub>O<sub>3</sub>). May be refractory grade bauxite.

TERTIARY QUARTZ SAND OR CLAY BELOW

Figure 4: Typical Bauxite Layers



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#### Qualifying statement

The information in this announcement that relate to Exploration Information are based on information compiled by Jacob Rebek and Ian Levy who are members of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Rebek and Mr Levy are qualified geologists and are directors of Australian Bauxite Limited.

Mr Rebek and Mr Levy have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of exploration Results, Mineral Resources and Ore Resources. Mr Rebek and Mr Levy have consented to the inclusion in this announcement of the Exploration Information in the form and context in which it appears.

#### JORC Compliant Resource Statement

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> 02/09/2010 ASX Inverell JORC Resource Update, 36 Million Tonnes
- <sup>2</sup> 12/05/2011 ASX Taralga Bauxite Resource Doubled to 25 Million Tonnes
- <sup>3</sup> 15/08/2011 ASX Maiden Guyra Resource, 6 Million Tonnes
- <sup>4</sup> 12/10/2011 ASX Binjour Maiden Resource, 17 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 for Appendix

DSO bauxite	Bauxite that can be exported directly with minimal processing
PDM-DSO Bx	Bauxite containing nodules of emery, termed PDM as pisoliths which are recoverable by gravity and are generally saleable. The remaining 60% to 70% of material is DSO Bauxite
PDM-DSO-Fe	Iron enriched PDM-DSO Bx - may contain recoverable haematite grains, also recoverable by gravity. The remaining 45% to 55% of material is DSO Bauxite.
Averaging method	Aggregated average grades in the table are yield-weighted averages of each metre grades & yields.

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

Australian Bauxite Limited (ABx) holds the core of the newly discovered Eastern Australian Bauxite Province. Its 38 bauxite tenements in Queensland, NSW and Tasmania covering 8,250 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.

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 84 million tonnes.** At the company's first drilling prospect in Inverell, northern NSW, an interim resource of 36 million tonnes<sup>1</sup> has been reported from drilling 15% to 20% of the area prospective for bauxite and a resource of 25 million tonnes<sup>2</sup> of bauxite has been reported at the Taralga project in southern NSW. 6 million tonnes maiden resource was declared at Guyra<sup>3</sup>. A 16.8 million tonnes<sup>4</sup> maiden 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. 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.**