ASX ANNOUNCEMENT
2 September 2010

AUSTRALIAN **BAUXITE** LIMITED
ASX: ABZ

Resource increases to 36 Million tonnes at Inverell

- **Identified resources on EL 6997 (Inverell) increased by 64% to 36 million tonnes of gibbsite-rich bauxite**
- **Resource is based on drilling of less than 15% of known bauxite areas**
- **Gibbsitic bauxite resource upgrades to premium grades at high yields with simple screening**
- **Large parts of the resource are Direct-Shipping Grade (DSO) requiring no processing**
- **First-pass testing of several additional deposits has identified new areas warranting resource infill drilling**
- **Resource target is between 200 and 300 million tonnes of bauxite***

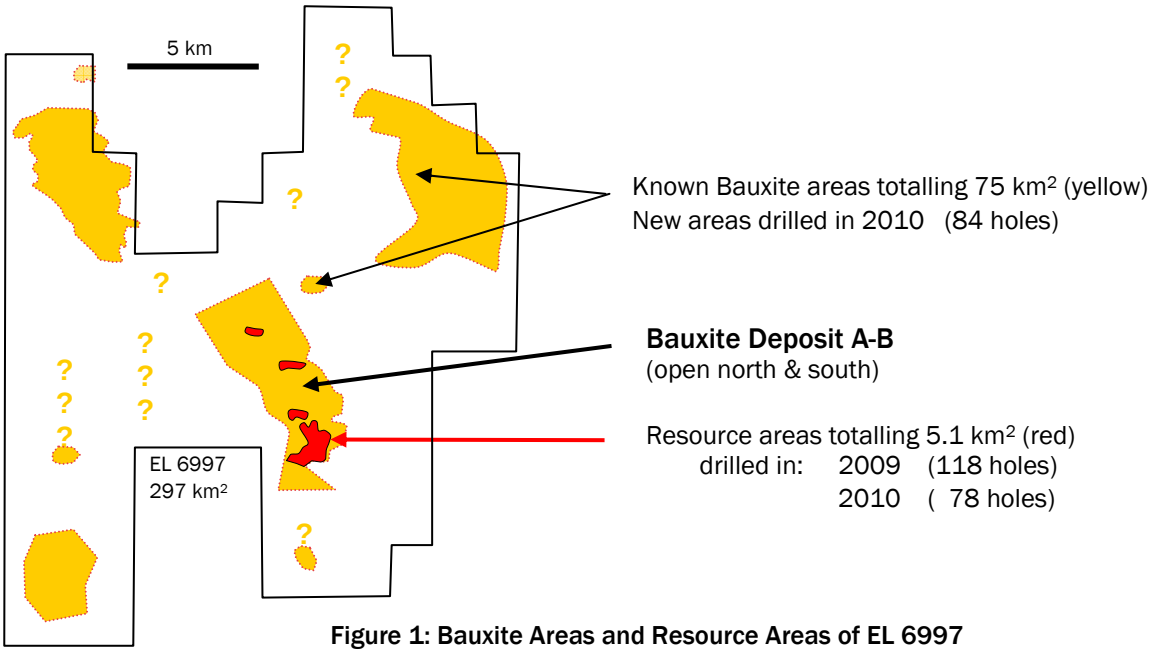

Figure 1: Bauxite Areas and Resource Areas of EL 6997

Australian Bauxite Limited (**ABx, ASX Code ABZ**) has increased the Inferred and Indicated Resources of its bauxite deposit A-B by 64% to 36 million tonnes of gibbsite-rich bauxite in tenement EL 6997 at Inverell in northern NSW. This resource update is based on 78 new holes drilled into A-B deposit in May-June 2010 and the 118 holes drilled in 2009 - a total of 196 holes with 2,748 metres drilled and sampled. Deposit A-B is only one of 4 major bauxite areas identified to date on EL 6997 and the area drilled for resources to date represents less than 15% of the bauxite areas identified. At least 50% of the large EL 6997 tenement is yet to be explored for bauxite (see Figure 1).

Parts of the deposit have been confirmed as high grade, Direct Shipping Grade ("DSO" bauxite) up to 9.4 metres thick and averaging 6 metres thick. The A-B deposit is a relatively consistent, thick, high quality bauxite deposit averaging 5.6 metres in bauxite thickness and approximately 1 metre of overburden.

ABx drilled a further 84 holes in May-June 2010 as first pass testing of the 3 other known bauxite deposits on EL 6997 which now warrant resource drilling. ABx also drilled 18 holes in its nearby Pindaroi tenement, encountering thick bauxite in places that also warrant future resource drilling.

ABx has 29 bauxite exploration tenements in eastern Australia covering 7,000 sq kms (see Figure 2).

* see Exploration Target Statement

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Resource estimates after application of cut-off grades for the drilled resource areas on the A-B deposit are summarised as follows:

In situ bauxite (unscreened):

Resource category	Tonnes millions	Avl Al_2O_3 %	SiO_2 Rx %	Avl/Srx ratio	Al_2O_3 %	SiO_2 %	A/S ratio	Fe_2O_3 %	TiO_2 %	LOI %
Inferred	11.7	34.3	5.6	7.2	39.3	6.1	6.9	27.5	4.5	21.7
Indicated	24.4	31.5	5.5	6.0	37.1	6.1	6.6	25.5	4.2	20.5
Total	**36.1**	**32.4**	**5.6**	**6.4**	**37.8**	**6.1**	**6.7**	**26.1**	**4.3**	**20.9**

Leach conditions to measure available Avl Al_2O_3 & reactive SiO_2 rx were 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 mins. "Avl/Srx" ratio is (Available Al_2O_3)/(Reactive SiO_2). "A/S" ratio is (Total Al_2O_3)/(Total SiO_2). Values above 10 are excellent

Cut-off grades applied: 2 metres minimum thickness, 32% minimum Al_2O_3 & 8% maximum SiO_2

Appendix 1 gives more details of the estimation.

GOOD BENEFICIATION CHARACTERISTICS

Beneficiation: Bauxites tested to date show excellent potential for simple crushing, washing and screening to produce premium-grade beneficiated bauxite at high yields estimated to range between 60% and 75%. The coarse grainsize and loose structure of the bauxite is thought to be responsible for these favourable beneficiation characteristics.

Screened bauxite at 0.26mm mesh:

Resource category	Yield %	Avl Al_2O_3 %	SiO_2 Rx %	Avl/Srx ratio	Al_2O_3 %	SiO_2 %	A/S ratio	Fe_2O_3 %	TiO_2 %	LOI %
Inferred	60%-70%	38.7	4.4	9.3	38.9	5.6	7.3	26.9	4.3	22.2
Indicated	65%-75%	35.6	4.2	9.1	34.7	5.3	6.8	25.1	4.0	21.1
Total	**60%-75%**	**36.6**	**4.2**	**9.2**	**37.1**	**5.4**	**6.9**	**25.7**	**4.1**	**21.4**

Leach conditions to measure available Avl Al_2O_3 & reactive SiO_2 rx were 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 mins. "Avl/Srx" ratio is (Available Al_2O_3)/(Reactive SiO_2). "A/S" ratio is (Total Al_2O_3)/(Total SiO_2). Values above 10 are excellent

Available alumina at low temperature is relatively high at more than 85% of total Al_2O_3 – see Appendix 1.

Reactive silica proportions at low temperatures is relatively low (a good feature) at 61% to 92% of total SiO_2.- see Appendix 1.

Low goethite: Mineralogical studies of the bauxite suggest that abundances of the problematic iron hydroxide mineral species called goethite are very low to absent.

Direct Shipping Ore (DSO) is bauxite that is of sufficiently good quality that it can be mined and sold in its raw form after simple crushing and sizing. Approximately 70% of the deposit tested to date meets DSO grades and one part of the deposit .

Australian Bauxite Limited CEO, Ian Levy said; "The Inverell deposit is proving to be the predictable, thick, high quality bauxite that we hoped it would be. In mid 2010, we drilled 78 additional holes into the first resource area that had been drilled by 118 holes in 2009. This 66% increase in the number of resource drillholes has expanded resources by 64% whilst also increasing the proportion of Indicated Resources 67% of the deposit – a simultaneous increase in both tonnage and confidence in the deposit."

"Drilling in 2011 will continue expanding the drill tested area of deposit A-B and we will commence resource drilling of the other 3 major deposits that are known on EL 6997. There were also some new discoveries of bauxite encountered in the additional 84 exploratory holes drilled in mid 2010 that warrant follow-up drilling. We also hope to commence resource estimation drilling in the nearby Pindaroi bauxite deposits discovered in the 18 first-pass exploratory drillholes completed in mid 2010."

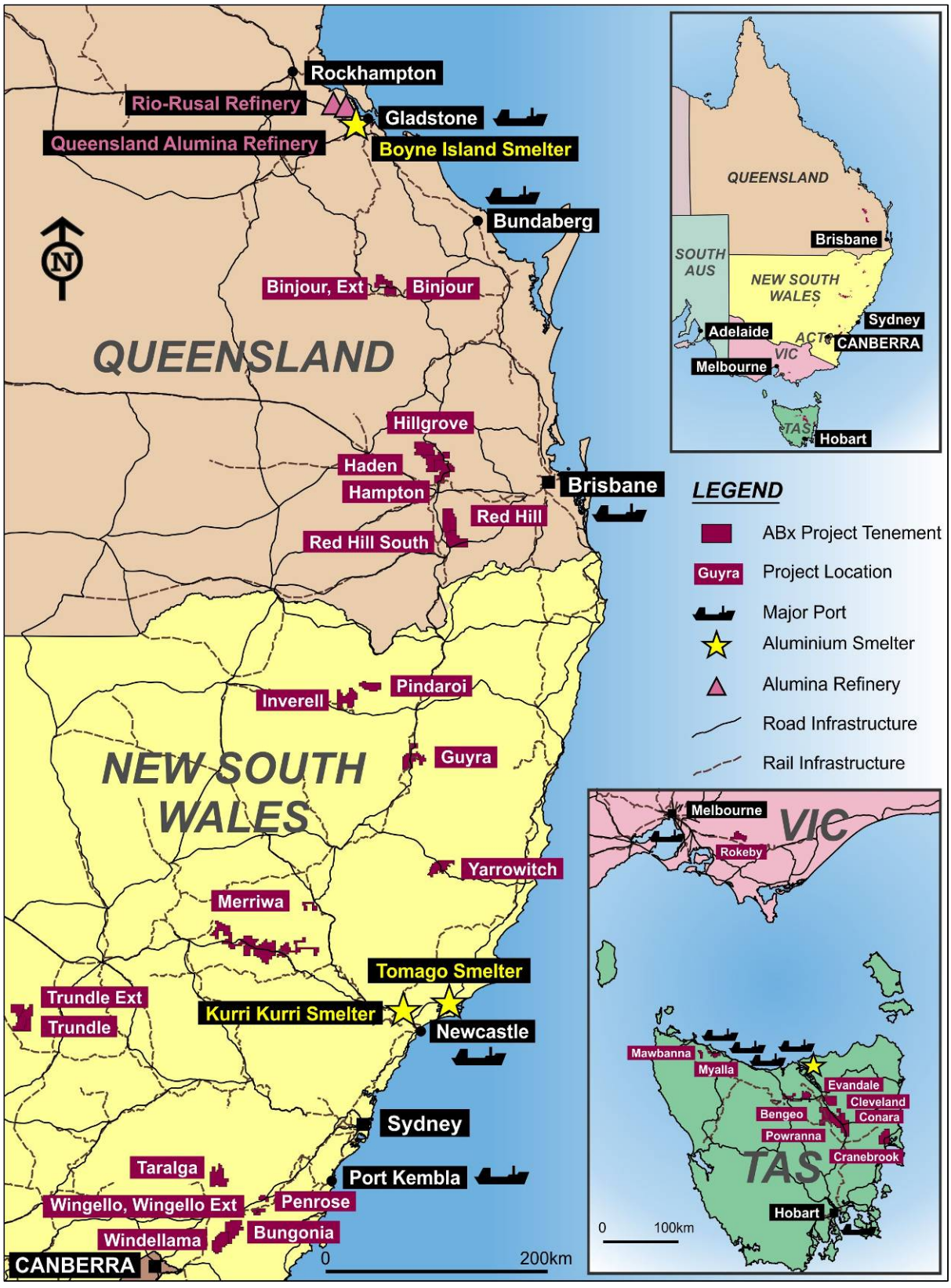


Figure 2: ABx Project Tenements

Drilling Across the Eastern Australian Bauxite Province

Australian Bauxite Limited (**ABx, ASX Code ABZ**) has been conducting a major, full-time drilling program since April 2010 and has successfully completed its first-pass drilling campaigns on all of its QLD projects and its second-pass drilling campaign at Inverell in northern NSW along with a first-pass exploratory drilling of Pindaroi near Inverell. Results are considered satisfactory, and, in some places, better than expected. Drilling is continuing in southern NSW near Goulburn with a high success rate.

At ABx's northernmost bauxite deposit at Binjour in central QLD, encouraging thicknesses of a concealed bauxite layer up to 15 metres thick were encountered and two-stages of drilling were completed in July. A thick bauxite layer has been discovered at Binjour with early assays indicating high qualities.

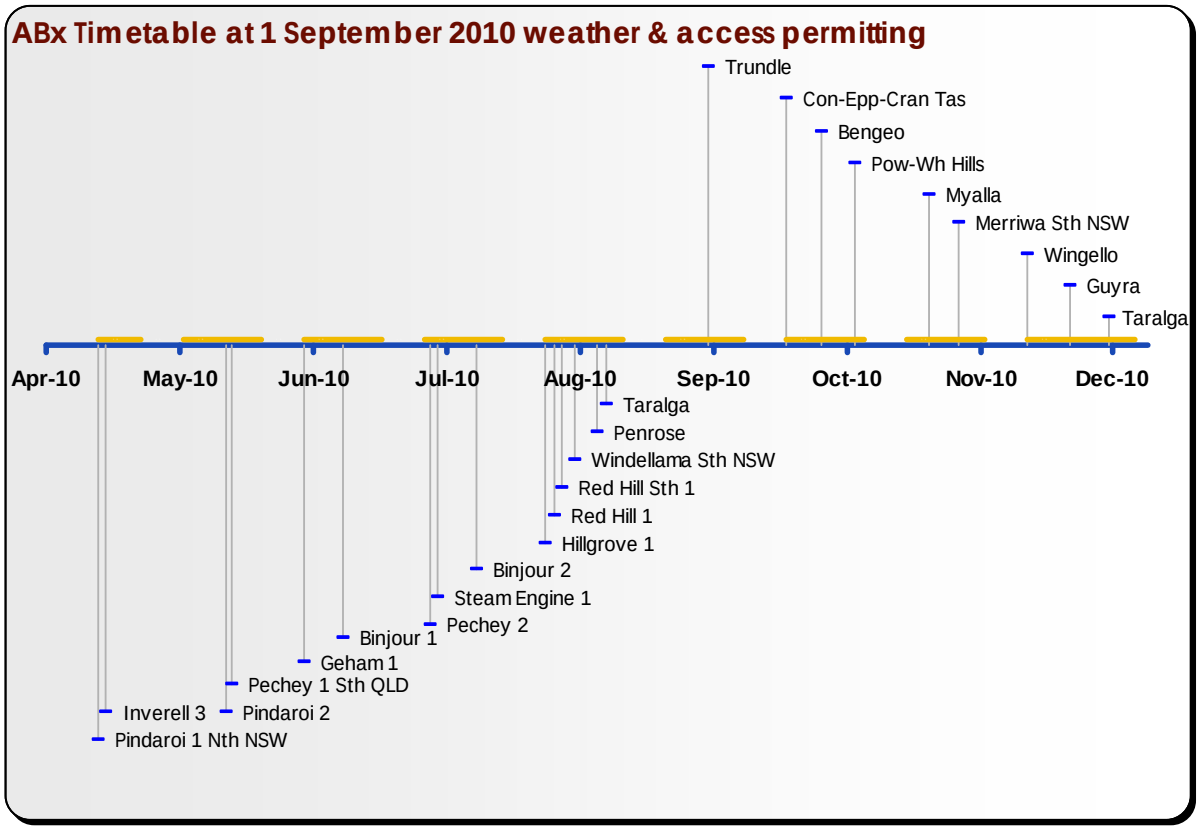
A new deposit averaging 3 to 5 metres thick has been discovered near Haden, 40km north of Toowoomba, south-eastern QLD but laboratory results are still awaited.

The drilling rig and crews have moved to the Goulburn area, southern NSW where application of improved geological understanding of these bauxite occurrences has led to a significant increase in the frequency of bauxite intercepts. Good thicknesses of bauxite up to 7 metres thick are being intersected in most drillholes. The consistency and extent of the bauxite is impressive but laboratory results are still awaited.

The drill rig is being relocated to commence drill testing of the large bauxite target areas discovered at Trundle in mid-west NSW this week.

ABx issues periodic Drilling Update Reports when sufficient results have been received and assessed by the geologists that are supervising the drilling programs in each area.

The following timeline shows the drilling schedule as completed to date and as planned until year end. If this schedule is achieved, ABx may end the year having achieved first pass testing of all of its 29 tenements 6 months ahead of the original 2009 IPO schedule. The plan is to complete 1,000 drillholes during 2010 and then increase the rate of exploration further so as to complete 1,400 holes during calendar year 2011.



About Australian Bauxite Limited: ASX Code ABZ

Australian Bauxite Limited (**ABx**) holds the core of the newly discovered Eastern Australian Bauxite Province. Its 29 bauxite tenements in Queensland, NSW and Tasmania covering 7,039 km^2 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. At the company's first drilling prospect in Inverell, northern NSW, a maiden resource of 22 million tonnes has been reported from drilling 10% of the area prospective for bauxite. Australian Bauxite Limited aspires to identify bauxite resources in excess of 200 million tonnes in 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. The ABx discoveries of bauxite in Tasmania are yet to be evaluated by drilling but bauxite is confirmed to extend over relatively large areas.

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Qualifying statement

The information in this announcement that relate to Exploration Information are based on information compiled by Jacob Rebek, Ian Levy and Tim Callaghan 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 Callaghan is a qualified, independent consulting geologist specialising in mine geology and geostatistical resource estimation.

Mr Rebek, Mr Levy and Mr Callaghan 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, Mr Levy and Mr Callaghan have consented in writing to the inclusion in this announcement of the Exploration Information in the form and context in which it appears.

Exploration Target Statement

ABx has an exploration target of 200 to 300 million tonnes of bauxite, based on the Mineral Resources totalling 36 million tonnes of bauxite from 196 drillholes drilled across an area that is less than 15% of the known bauxite deposits on a single Exploration Lease EL 6997 at Inverell in northern NSW. In accordance with the JORC Code, readers are advised that with regards this exploration target of 200 to 300 million tonnes, "the potential quality and grade is conceptual in nature, that there has been insufficient exploration to define full Mineral Resources and that it is uncertain if further exploration will result in the determination of a Mineral Resource". Inverell tenement EL 6997 was the first of 29 tenements to be drilled and has since discovered sizeable, good quality bauxite occurrences on sev-

APPENDIX 1

RESOURCE ESTIMATE UPGRADE FOR BAUXITE DEPOSIT A-B: INVERELL EL 6997

Drilling on a random pattern governed by site availability was done in the southwestern part of EL 6997 at a location selected because of a prominent bauxite plateau and ease of access. This first bauxite deposit has been named the A-B bauxite deposit and is one of 4 large bauxite occurrences on EL 6997.

During 2009, 118 holes were drilled into the A-B bauxite deposit totalling 1,773 metres. During mid 2010, 162 holes totalling 1,701 metres were drilled across the tenement EL 6997, of which, 78 holes totalling 975 metres were drilled on Deposit A-B" which has been mapped for more than 6 kilometres to date and is open to the north, south and west (see Figure 1). Large areas of Deposit A-B are still untested by drilling and overall in EL 6997, less than 15% of the known bauxite areas have been drilled sufficient for resource estimation.

Drill samples were collected at 1 metre intervals from the aircore drillholes and analysed at ALS Laboratories in Brisbane including trihydrate (THA) available alumina (Avl Al_2O_3) and reactive silica (SiO_2 Rx) measurements. Leach conditions to measure available Avl Al_2O_3 and reactive SiO_2 Rx were 1g leached in 10ml of 90gpl NaOH at 143 degrees C for 30 minutes

Estimation was done by 3-dimensional geostatistical block modelling using Ordinary Kriging with extrapolations up to 300 metres from data points for Inferred Resources and 150 metres for Indicated Resources, constrained by geological boundaries. An independent polygonal resource estimate was also done as a cross-check of the geostatistical estimation and comparisons were satisfactory.

Bauxite density was conservatively assumed at 1.8 dry tonnes per cubic metre in situ.