

MAIDEN 18.2Mt INFERRED BAUXITE RESOURCE DEFINED AT NORTH DARLING RANGE PROJECT, WA

- * **JORC-compliant Inferred Resource of 18.2 million tonnes at 43.1% Total Al₂O₃, 31.6% Available Al₂O₃ and 3.2% Reactive SiO₂**
- * **Preliminary results of Mineralogical Characterisation work from the “Bindoon Region” confirm favourable metallurgy of bauxite mineralisation being gibbsitic with low Reactive SiO₂**
- * **Exploration in the “Bindoon Region” is to target new areas of bauxite mineralisation and increase the confidence level of the resource category.**

Bauxite Resources Ltd (“BRL”) (ASX: BAU) today announces that an assessment of BRL’s Bindoon and Avon granted and pending exploration licences in the Darling Range, Western Australia hosts a JORC-Compliant Inferred Resource of 18.2 million tonnes at 43.1% Total Al₂O₃, 31.6% Available Al₂O₃ and 3.2% Reactive SiO₂ (Table 1).

The maiden resource has been estimated by Ravensgate Mineral Industry Consultants and represents a major step forward for the company in achieving its Stage 1 objective of exporting Direct Shipping Ore (DSO) bauxite at an initial rate of 1 million tonnes per annum (Mtpa) in 2009, increasing to 3Mtpa in 2010.

The bauxite mineralisation present in the Bindoon (E70/3064) and Avon (E70/3003, E70/3159, E70/3433) regions, situated in its North Darling Range Project area, consist of gibbsitic bauxite laterites that were drill tested by CSR Ltd / Pacminex Pty Ltd (Pacminex) in the 1960s/1970s. Pacminex’s drilling targeted two areas, firstly in Bindoon and secondly in Avon. Bauxite mineralisation has been identified within three drill grid patterns at 100m x 100m drill spacing, 200m x 200m and 300m x 300m drill spacing. The reported maiden Inferred Resource represents mineralised material confined within the 100m x 100m grid spacing.

Initial results from Mineralogical Characterisation studies on representative samples from the Bindoon region confirmed that mineralisation present is premium bauxite, being gibbsitic in nature with low reactive silica. This type of bauxite is suitable for digestion in a conventional Bayer Refinery at low temperature and low pressures with low caustic soda consumption.

BRL will target future exploration, testing for bauxite mineralisation continuity in areas with wider spaced drill patterns to define new areas with bauxite mineralisation. Wide spread areas of bauxite laterites remain to be drill tested for the establishment of DSO bauxite and the company remains confident for exploration potential in the area. The Mineral Resource subject to the resource estimation, are within granted and pending BRL exploration licences as expressed in Table 1 & Figure 1.



A breakdown of the Inferred Resources by area utilising a 28% Available Al₂O₃ lower cut-off is presented in Table 1. Location of resource areas is shown in Figure 1. Resource Modelling parameters are attached in Appendix 1.

Table 1: Breakdown of Inferred Resource by Area utilising a 28% Available Al₂O₃ lower cut off.*

Region	Licence Status	Model Name	Tonnes	Total Al ₂ O ₃	Available* Al ₂ O ₃	Reactive SiO ₂	LOI
Bindoon	Granted	Area 2	3,806,677	43.0	32.5	2.6	21.2
Bindoon	Granted	Area 3	6,998,620	45.7	32.1	3.4	20.1
Avon	Pending	Area 4	4,301,808	40.0	30.4	3.3	21.3
Avon	Pending	Area 5	2,810,583	41.3	30.4	3.2	20.6
Avon	Pending	Area 6	362,329	45.0	32.9	2.0	20.3
Total			18,280,017	43.1	31.6	3.2	20.7

* Available Al₂O₃ is calculated by historic Pacminex regression based on a large number of analytical results by digestion of material in caustic soda at 143°C.

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BACKGROUND

Bauxite Resources Limited was founded in May 2006 for the purpose of securing tenements over land deemed prospective for bauxite mineralisation. BRL listed on the ASX on 22 October 2007 after closing its A\$7.5 million IPO early and oversubscribed.

The Company is establishing itself in the bauxite and alumina industries in Western Australia and is the only ASX-listed junior explorer in the highly prospective Darling Range. This area in Western Australia is acknowledged as the largest producing alumina region in the world supplying approximately 18% of the world's alumina and the location of Alcoa's Huntly Mine, the largest producing bauxite mine in the world. The Darling Range is also the site of four alumina refineries; three of these are in the top five for lowest operating costs globally which is principally due to the gibbsite composition of the Darling Range bauxite, and its low reactive silica.

To date, the WA-owned Company has applied for 59 tenements in the four project areas of North Darling Range, South Darling Range, East Darling Range and Kimberley. The Darling Range tenements cover over 11,000km² and the Kimberley tenements cover approximately 1,100km².

Bauxite Resources is primarily focused on defining an initial sustainable economic bauxite resource sufficient to support a >3Mtpa DSO bauxite project. In the longer term the Company is reviewing opportunities for the development of an alumina refinery and possible smelter.

The recent signing of MOU's with state-sanctioned Chinese interests has further strengthened BRL's firm position as an emerging and significant resource entity.

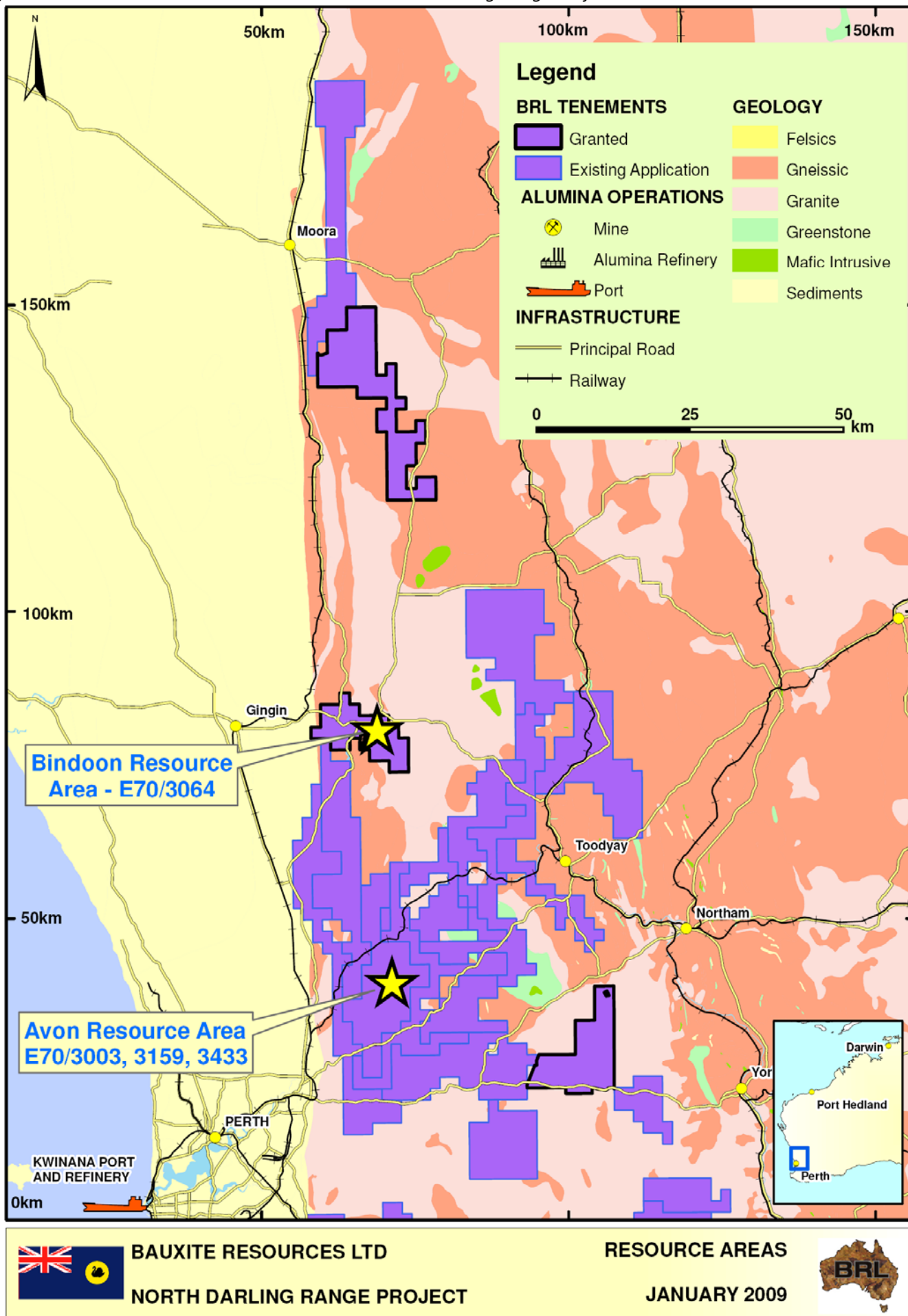
EXPLORATION

The Company is currently carrying out drilling and exploration on areas of degraded freehold farmland where it has been granted access and relevant permits as it pursues its Stage 1 DSO operation.

For more information please visit our website at www.bauxiteresources.com.au

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Figure 1: Bindoon and Avon resource areas in the North Darling Range Project



Appendix 1

January 2009 Resource Estimation Parameters

The resource was estimated using Ordinary Kriging - 3D block modelling with Medsystem / Minesight software.

Data

Geological data and information were incorporated into the estimation process:

- Drill hole data (drill hole locations, assay data, geology data)
- Geological data from drill logs
- Topographic Survey Data

Pacminex conducted a large number of analytical results by digestion of material in caustic soda at 143°C from various prospect areas and found that the following regression produced a good estimate of Available Al₂O₃.

$$\text{Available Al}_2\text{O}_3 = 1.31619 \text{ LOI} + 0.59895 \text{ Total Al}_2\text{O}_3 - 0.62073 \text{ Reactive SiO}_2 - 19.51642$$

BRL have submitted 197 rockchip and 720 drill samples for analysis by bomb digest at 145 °C in caustic soda (87 grams per litre) for Available Al₂O₃ and Reactive SiO₂. Samples were also assayed for Total Al₂O₃ by XRF and Loss-on Ignition by Thermo-Gravimetric Analysers. A review of estimated Available Al₂O₃ (Pacminex regression) versus bomb digest Available Al₂O₃ for all samples analysed to date, found the Available Al₂O₃ estimated by the Pacminex regression gave a lower estimate for Available Al₂O₃ than assay results received by Bauxite Resources Limited.

Modelling Technique, Block Size, Bulk Density

Ordinary Kriging 3D Block Modelling Medsystem / Minesight Software

Block Size - 20mN x 20mE x1m RL

Bulk Density - 1.8 t/m³ (dry)

The top 0.5 m of surface material has been excluded from resource estimations.

Inferred Resource Estimation

The 3D block model resource estimation has mineralisation constrained by domain shells to meet adequate levels of drilling and sample density, reliability and consistency of bauxite mineralisation zones with reference to geology. Down hole semi variogram calculations have been carried out in the differing domain areas.

All drill data has been used for interpretation of bauxite mineralisation and the reported resource has been confined to data from the drill hole grid pattern at 100 m x 100 m spacing. Bauxite mineralisation reported on wider spaced 200m x 200m drill hole spacing is excluded from the Inferred Resource estimate.

In accordance with the Australian Stock Exchange requirements, the technical information contained in this report has been reviewed by Mr. Neil Lithgow, a director of the company. The information in the report to which this statement is attached that relates to Mineral Resources and Mineralisation is based on information reviewed by Mr. Lithgow, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Lithgow has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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 Reserves." Mr. Lithgow consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.