# ASX ANNOUNCEMENT 24 March 2015

AUSTRALIAN BAUXITE LIMITED ASX. ARX

## About Australian Bauxite Limited ASX Code ABX

Australian Bauxite Limited (ABx) operates its first bauxite mine in Tasmania & holds the core of the Eastern Australian Bauxite Province. ABx's 37 bauxite tenements in Queensland, NSW & Tasmania exceed 5,000 km<sup>2</sup> & were selected for (1) good quality bauxite; (2) low cost transport to export ports & (3) free of socio-environmental constraints. All tenements are 100% owned, unencumbered & free of third-party royalties.

ABx's discovery rate is increasing as knowledge. technology & expertise grows.

The Company's bauxite is high quality gibbsite trihydrate bauxite that processes into alumina at low temperature - the type in short-supply globally.

ABx has declared large Mineral Resources at Inverell & Guyra in northern NSW, Taralga in southern NSW, Binjour in central QLD & in Tasmania confirming that ABx has discovered significant bauxite deposits including some of outstandingly high quality.

In Tasmania, at Bald Hill, the Company's first bauxite mine commenced operations on schedule on 9 December 2014 - the first new Australian bauxite mine for more than 35 years, with first shipments targeted for 2<sup>nd</sup> Quarter, 2015.

ABx aspires to identify large bauxite resources in the Eastern Australian Bauxite Province, which is emerging as a globally significant bauxite province. ABx has created significant bauxite developments in 3 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.

## Directors / Officers

Paul Lennon	Chairman
lan Levy	CEO & MD
Ken Boundy	Director

Leon Hawker Rob Williams Jacob Rebek Henry Kinstlinger Julian Rockett

Chief Operating Officer General Manager Chief Geologist Secretary Secretary

## ASX Symbol: ABX

Latest News: www.australianbauxite.com.au

# AUSTRALIAN BAUXITE LIMITED

- Australian Bauxite Limited (ABx)'s Bald Hill mine near Campbell Town, Tasmania has mined about 10,000 tonnes, screened 7,000 tonnes and is proceeding to full scale production and export from Bell Bay Port
- · Initial bauxite resources for the Campbell Town production centre total 3.5 million tonnes
- Total Tasmanian resources are now more than 9 million tonnes (an increase of 61%)

Region	Resource Category	Million Tonnes	Thick- ness	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> 0 <sub>3</sub>	LOI	<b>Al<sub>2</sub>O<sub>3</sub></b> Avi @143° C	Rx SiO <sub>2</sub>
		mt	т	%	%	%	%	%	%
CAMPBELL TOWN	Inferred	1.8	3.0	42.6	3.5	25.4	24.6	36.7	3.0
AREA TAS MANIA <sup>7</sup>	Indicated	1.7	3.2	42.5	3.2	26.4	24.5	36.2	2.8
	Total	3.5	3.1	42.5	3.3	25.9	24.5	36.5	2.9
DL-130 AREA TAS <sup>1</sup>	Inferred	5.7	3.8	44.1	4.3	22.8	25.0	37.6	3.2
	Total Tas	9.2	3.5	43.5	3.9	24.0	24.8	37.2	3.1

- Operating experience and bulk test pits in mid-2013 indicate yields range from 65% to 75%
- Extensions of the Bald Hill deposit have been found and will be exploited during mining
- Deposits at Fingal Rail and Nile Road are known to extend beyond the resource limits used in these estimates and will be further explored when required
- These initial resources from the Campbell Town production centre increase ABx's total resource base for all regions to 119 million tonnes, of which 9.2 million tonnes are in Tasmania<sup>1</sup>
- Drilling is in progress in the DL-130 area and revised resource estimation will be conducted over coming months, especially for the newly discovered Rubble Flat deposit
- The DL-130 area is scheduled to be ABx's second bauxite production centre, commencing in 2016

## For further information please contact:

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<sup>1</sup> See Resources Summary

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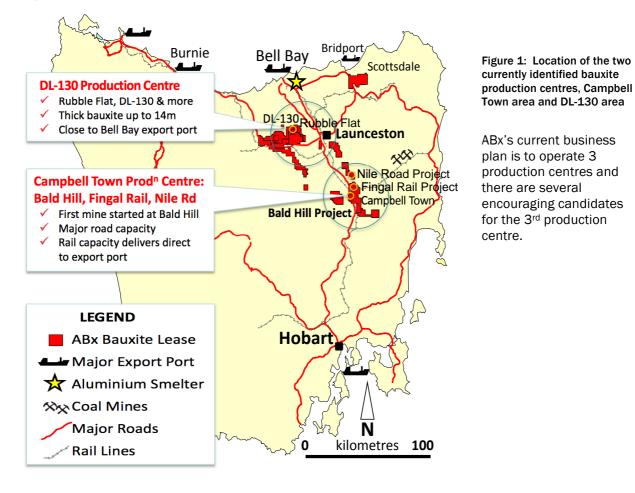


## **Tasmanian Production Centres**

## 1. Campbell Town Production Centre

This production centre is based at Campbell Town, northern Tasmania and has recently commenced operations. Operations will extract and blend bauxite from several locations and transport it by rail to Bell Bay Port for export. The production team that has been based in Campbell Town since December 2014 will manage operations.

Mining and screening has commenced on Mining Lease ML1961 at Bald Hill Bauxite Project, 5km west of Campbell Town in northern Tasmania. A second mine lease has been defined at Fingal Rail 11 kms north of Bald Hill and a resource has been discovered at Nile Road, 10kms north of Fingal Rail – see Figure 1. This report summarises the initial resources for these 3 deposits.



## 2. DL-130 Production Centre

This production centre is centred mainly on harvested and disturbed hardwood plantation land west and northwest of Launceston – see Figure 1. It includes the bauxite discoveries at DL-130, Rubble Flat and other encouraging discoveries that are being intensively drilled at this time. Results are awaited from several hundred holes before that estimation can be completed. Detailed resource estimations have commenced for these areas to update a Maiden Resource estimate of 5.7 million tonnes that was announced on 8/11/2012 (see Resource Statement and Table 6 below).

The DL-130 production centre has existing haulage roads and a relatively short heavy duty trucking route to Bell Bay port via the Batman Bridge. It is not yet decided which township in this area will become the base for the production team for this area.



# **RESOURCE ESTIMATES FROM CAMPBELL TOWN PRODUCTION CENTRE**

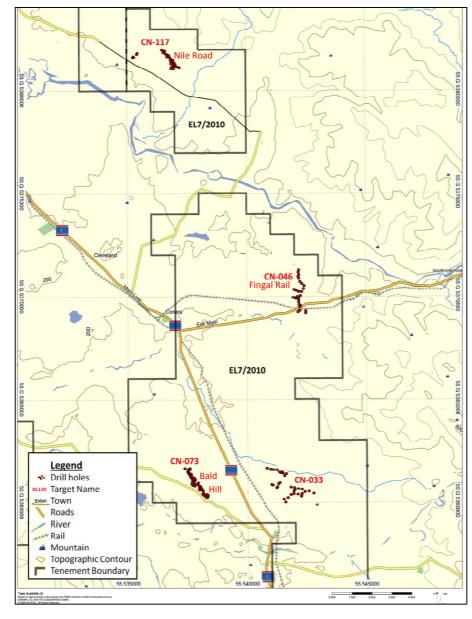


Figure 2: Location of identified bauxite deposits managed from Campbell Town, northern Midlands, Tasmania

Current bauxite resources have been estimated for (from south to north):

- 1. Bald Hill
- 2. Fingal Rail

3. Nile Road

Fingal Rail is known to extend into a plateau area south of the Esk Highway.

Several other significant occurrences of bauxite are known but not yet drilled.



								Sieved	1 0.26r	nm					1				Uns	ieved	"Raw"			
Region	Resource Category	Million Tonnes	Thick- ness	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	Al <sub>2</sub> O <sub>3</sub> Avi @143° C	Rx SiO <sub>2</sub>	Avl/ Rx	Lab Yield	O'Bur den	Int. Waste	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	Al <sub>2</sub> O <sub>3</sub> Avi @143° C	Rx SiO <sub>2</sub>	Avl/ Rx
	-	mt	т	%	%	ratio	%	%	%	%	%	ratio	%	т	т	%	%	ratio	%	%	%	%	%	ratio
Bald Hill	Inferred	0.42	3.2	42.3	3.8	11	26.4	2.9	24.4	34.3	3.5	10	54	1.1	0.1	37.2	9.2	4.0	28.0	3.5	21.3	26.5	8.2	3.2
Bald Hill	Indicated	1.18	3.3	43.6	3.5	12	25.0	2.7	24.9	36.8	3.1	12	55	1.0	0.1	37.2	9.2	4.1	28.0	3.5	21.3	26.6	8.2	3.3
Totals		1.60	3.3	43.3	3.6	12	25.4	2.7	24.8	36.1	3.3	11	55	1.0	0.1	37.0	9.0	4.1	28.3	3.5	21.3	26.5	8.0	3.3
Fingal Rail	Inferred	0.69	2.0	40.9	3.1	13	28.1	3.6	23.8	35.6	2.7	13	52	3.18	0.03	37.9	6.0	6.9	29.1	4.5	21.9	29.9	5.3	6.5
Fingal Rail	Indicated	0.50	2.7	39.9	2.4	17	29.8	3.8	23.4	35.0	2.0	18	56	3.74	0.06	37.6	4.9	7.6	29.9	4.4	22.2	30.6	4.2	7.3
Totals		1.18	2.3	40.4	2.8	15	28.9	3.7	23.6	35.3	2.3	15	54	3.45	0.04	37.8	5.5	6.9	29.5	4.4	22.0	30.2	4.8	6.4
Nile Rd	Inferred	0.73	3.8	44.4	3.6	12	22.2	3.8	25.4	39.1	3.0	13	46	1.71	0.19	34.4	8.7	4	30.7	5.6	20.1	23.8	8.0	3
Totals		0.73	3.8	44.4	3.6	12	22.2	3.8	25.4	39.1	3.0	13	46	1.71	0.19	34.4	8.7	4	30.7	5.6	20.1	23.8	8.0	3
Total fo	or Campb	ell Tow	n				Ş	Sieved	l 0.26r	nm									Uns	ieved	"Raw"			
Total	Inferred	1.84	3.0	42.6	3.5	12	25.4	3.5	24.6	36.7	3.0	12	50	2.13	0.11	36.3	7.8	5.1	29.5	4.7	21.1	26.7	7.0	4.4
Total	Indicated	1.67	3.2	42.5	3.2	14	26.4	3.0	24.5	36.2	2.8	14	55	1.80	0.09	37.3	7.9	5.1	28.6	3.7	21.6	27.8	7.0	4.4
Totals		3.51	3.1	42.5	3.3	13	25.9	3.3	24.5	36.5	2.9	13	52	1.98	0.10	36.7	7.8	5.0	29.2	4.3	21.3	27.2	6.9	4.3



## **Bald Hill Bauxite Project Resources**

**Location:** 4km northwest of Campbell Town, central northern Tasmania, serviced by sealed haulage roads Macquarie Road, West Street and joining the heavy duty Midland Highway (see Figure 3). Bauxite product will be trucked in half-height containers to be transferred to rail at Conara rail siding, 12km north of Campbell Town, thence railed to Bell Bay Port.

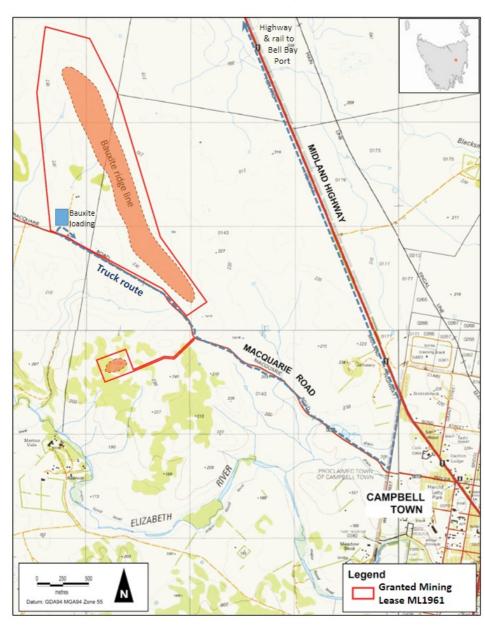


Figure 3 Location of Bald Hill Bauxite Project

**Geology:** the bauxite forms a remnant ridge top above clayaltered volcanic tuffs of Lower Tertiary age.

Dolerite plugs and sills of mid Jurassic age occur in the area.

Tenement: Bald Hill is now an operating granted and fully permitted Mining Lease ML1961.

**Discovery:** ABx began exploring for bauxite in 2010 and took out large exploration leases across prospective areas.

ABx encountered bauxite in the Campbell Town area forming ridge tops, usually with sparse vegetation.

Land use: Bald Hill has been largely cleared and farmed for over 160 years.

**Drill Statistics see Figure 4:** 708 holes were drilled using the reverse circulation aircore technique for a total of 7,867 metres. 90% of samples were collected at 1m downhole intervals and the rest at 0.5m.

66 holes returned ore grade bauxite totalling 212 metres of fully assayed, bauxite-grade samples.

139.5 metres were in low-grade bauxite, mainly classified as overburden and internal dilution material. These low-grade bauxite metres were excluded from the resource estimate but contain bauxite nodules.

An additional 174 metres of very weakly mineralised and non-mineralised material were assayed and tested for mine geotechnical and environmental approval information.



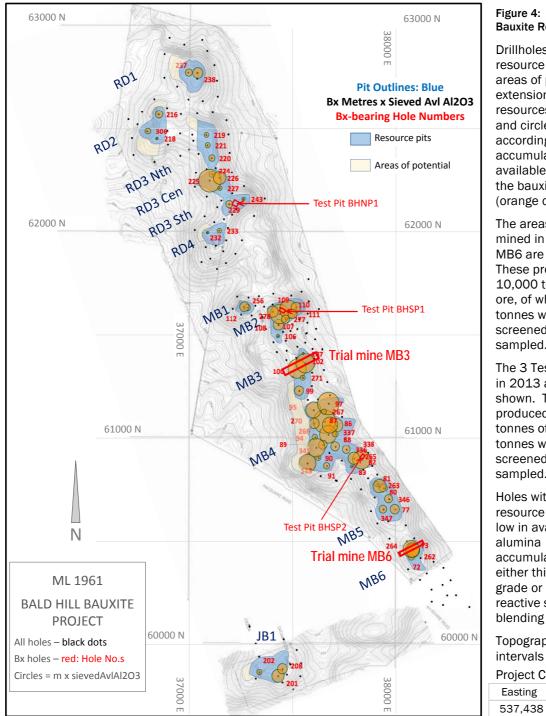


Figure 4: Bald Hill **Bauxite Resources** 

Drillholes, defined resource pits (blue), areas of potential extensions outside of resources (yellow) and circles sized according to accumulation of available alumina in the bauxite hole (orange circles).

The areas recently mined in pits MB3 & MB6 are shown. These produced 10,000 tonnes of ore, of which, 7,000 tonnes were screened and bulk sampled.

The 3 Test Pits mined in 2013 are also shown. These produced 1,500 tonnes of which, 600 tonnes were screened and bulk sampled.

Holes within the resource pits that are low in available alumina accumulation are either thin, moderate grade or low in reactive silica for blending purposes.

Topographic contour intervals 0.5m.

**Project Centroid:** Easting Northing 5,361,424

Mineralisation: The bauxite has lumps of bauxite in clay forming an irregular, tight-packed formation. Soil is typically rubbly, thin or absent. Overburden up to 2m thick, where it occurs, is usually low grade bauxite mixed with loose clay material and is excluded from resources as is similar internal waste. A firm clay horizon with nodules of bauxite lies beneath the bauxite formation and is also excluded.

Cutoff Grades: Because of the tight formation, bauxite nodules are pulverised to dust by the drilling process. Samples are wet screened at 0.26mm to recover clay-free bauxite material for assaying. Lowclay bauxite is selected by reactive silica (Rx SiO<sub>2</sub>) below 11%. Those low silica zones with more than 30% available alumina (Al<sub>2</sub>O<sub>3</sub> AvI) are selected as bauxite. Minimum mining thickness cutoff was 1.5 metres. No minimum stripping ratio was applied.



#### SUMMARY RESOURCES

#### By Resource Pits (see Figure 4)

Bald Hill	Bauxite	2.0	SG				:	Sieved	0.26	nm									Uns	ieved	"Raw"			
Region	Resource Category	Tonnes	Thick- ness	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	<b>Al<sub>2</sub>O<sub>3</sub></b> Avl @143° C	Rx SiO <sub>2</sub>	Avl/ Rx	Lab Yield	O'Bur den	Int. Waste	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	<b>Al<sub>2</sub>O<sub>3</sub></b> Avi @143° C	Rx SiO <sub>2</sub>	Avl/ Rx
		tonnes	т	%	%	ratio	%	%	%	%	%	ratio	%	т	т	%	%	ratio	%	%	%	%	%	ratio
RD1	Inferred	96,243	3.5	38.0	2.2	17	33.0	2.9	24.3	30.4	2.5	12	65	1.0	0.0	33.8	6.3	5.3	34.3	3.9	20.8	25.1	5.5	4.6
RD2	Indicated	58,768	2.0	41.9	3.1	14	28.3	2.3	24.9	32.2	3.1	10	65	0.7	0.0	36.8	7.5	4.9	30.2	3.1	21.6	26.6	6.7	4.0
RD3Nth	Indicated	64,404	2.1	40.0	1.7	24	31.0	3.3	24.6	32.9	2.0	16	64	1.6	0.0	35.5	5.2	6.9	32.8	4.3	21.4	27.0	4.4	6.1
RD3Cent	Indicated	123,190	4.1	41.1	3.7	11	28.2	2.6	24.0	33.6	3.4	10	53	0.8	0.4	36.8	10.2	3.6	27.4	3.7	21.1	24.7	9.5	2.6
RD3Sth	Indicated	45,540	2.4	41.0	2.4	17	29.4	2.9	24.6	32.8	2.7	12	64	0.7	0.0	36.2	7.1	5.1	30.6	3.8	21.4	26.7	6.2	4.3
RD4	Inferred	27,920	1.6	39.3	2.6	15	30.5	3.1	24.9	29.3	3.0	10	65	0.4	0.0	34.9	7.4	4.7	31.4	4.1	21.5	24.2	6.8	3.6
MB1	Inferred	18,383	2.5	45.7	3.1	15	22.6	2.6	26.1	39.8	2.9	14	61	0.4	0.0	38.3	7.9	4.8	26.9	3.4	22.4	31.2	7.0	4.5
MB2	Indicated	141,178	3.5	46.4	5.1	9	19.3	2.5	26.3	39.4	4.5	9	47	0.8	0.1	38.6	12.1	3.2	23.6	3.0	22.1	26.5	10.9	2.4
MB3	Inferred	142,369	3.8	44.3	5.5	8	23.5	2.5	23.6	35.9	4.6	8	44	0.4	0.3	37.0	12.7	2.9	26.3	3.1	20.3	22.0	11.1	2.0
MB4	Indicated	544,819	3.8	44.1	3.4	13	24.1	2.7	25.4	38.5	2.9	13	51	1.2	0.0	37.1	9.0	4.1	28.4	3.3	21.4	27.2	8.1	3.4
MB5	Indicated	130,810	3.1	43.7	3.6	12	27.2	3.0	22.3	34.1	3.1	11	61	0.8	0.2	38.0	8.4	4.5	29.2	3.8	19.7	26.7	7.2	3.7
MB6	Indicated	68,936	3.9	44.3	3.4	13	23.2	2.6	25.8	38.9	2.9	14	63	0.0	0.4	37.8	7.7	4.9	28.1	3.3	22.3	30.7	6.9	4.4
JB1	Inferred	134,816	3.2	43.4	3.6	12	24.5	3.2	25.1	35.6	3.4	10	55	2.3	0.0	37.8	7.5	5.1	27.2	4.1	22.5	28.0	6.7	4.2
Totals		1,597,374	3.3	43.3	3.6	12	25.4	2.7	24.8	36.1	3.3	11	55	1.0	0.1	37.0	9.0	4.1	28.3	3.5	21.3	26.5	8.0	3.3

## **Totals for reporting**

Bald Hill	Bauxite	2.0	SG					Sieveo	d 0.26i	nm									Uns	ieved	"Raw"			
Region	Resource Category	Million Tonnes	Thick- ness	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	<b>Al<sub>2</sub>O<sub>3</sub></b> Avl @143° C		Avi/ Rx	Lab Yield	O'Bur den	Int. Waste	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	<b>Al<sub>2</sub>O<sub>3</sub></b> Avi @143° C	Rx SiO <sub>2</sub>	Avl/ Rx
		mt	т	%	%	ratio	%	%	%	%	%	ratio	%	т	т	%	%	ratio	%	%	%	%	%	ratio
Bald Hi	II Inferred	0.42	3.2	42.3	3.8	11	26.4	2.9	24.4	34.3	3.5	10	54	1.1	0.1	37.2	9.2	4.0	28.0	3.5	21.3	26.5	8.2	3.2
Bald Hi	II Indicated	1.18	3.3	43.6	3.5	12	25.0	2.7	24.9	36.8	3.1	12	55	1.0	0.1	37.2	9.2	4.1	28.0	3.5	21.3	26.6	8.2	3.3
Totals		1.60	3.3	43.3	3.6	12	25.4	2.7	24.8	36.1	3.3	11	55	1.0	0.1	37.0	9.0	4.1	28.3	3.5	21.3	26.5	8.0	3.3

Explanations: All resources 100% owned & unencumbered. Resource tonnage estimates are quoted as in-situ, pre mined tonnages. All assaying done at NATA-registered ALS Laboratories, Brisbane. Chemical definitions: Leach conditions to measure available alumina "Al2O3 AvI" & reactive silica "Rx SiO2" is 1g leached in 10ml of 90gpl NaOH at 143°C for 30 minutes. LOI = loss on ignition at 1000°C. "AvI/Rx" ratio is (Al2O3 AvI)/(Rx SiO2) and "A/S" ratio is Al2O3/SiO2. Values above 6 are good, above 10 are excellent. Tonnage is for bauxite in-situ. Lab Yield is for drill dust samples screened by ALS lab at 0.26mm. Production yields are not directly related and are typically between 60% and 75%. Tonnages requiring no upgrade will have 100% yield. Resource estimates exclude large tonnages of potential extensions, overburden & interburden detrital bauxite and underlying transitional bauxite mineralisation. Production will clarify these materials.

## Production reconciliation: MB3 Resource Estimate versus production results

Screening of bauxite from Pit MB3 in January to early March achieved yields + 4mm of 64% and grades as per Table 3 (improving with operator experience):

Bulk	$AI_2O_3$	SiO <sub>2</sub>	$Fe_2O_3$	TiO <sub>2</sub>	LOI	$AI_2O_3 AvI$	Rx SiO <sub>2</sub>	Gibbsite	Clay	Qtz		
Samples	%	%	%	%	%	%	%	%	%	%		
Middlings	39.1	5.4	28.2	3.6	23.0	31.4	5.0	48	11	0.4		
Lump	43.6	4.6	23.3	2.7	25.2	38.2	4.1	58	9	0.5		
Leach condit	tions to r	neasure	e availab	le alum	ina "Al <sub>2</sub>	O3 Avl" & re	active silio	a "Rx SiO	<sub>2</sub> " is 1g	5		
leached in 1	0ml of 9	Ogpl Na	OH at 14	43 deg	rees C f	or 30 mins.	Mineralog	gy is estim	ated by	y		
ABxQuant al	BxQuant algorithm estimations based on chemistry. LOI = loss on ignition at 1000 degrees C											

Table 3: results for bauxite from Pit MB3, Bald Hill Bauxite Project (from ASX announcement 19/03/2015)

#### For comparison, the resource estimate for Resource Pit MB3 is:

Pit MB3	Resource					Sieved	0.26r	nm									Unsie	ved "F	law"			
Region	Resource Category	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	<b>Al<sub>2</sub>O<sub>3</sub></b> Avi @143° C	Rx SiO <sub>2</sub>	Avl/ Rx	Lab Yield	O'Bur den	Int. Waste	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	<b>Al<sub>2</sub>O<sub>3</sub></b> Avi @143° C	Rx SiO <sub>2</sub>	Avl⁄ Rx
		%	%	ratio	%	%	%	%	%	ratio	%	т	т	%	%	ratio	%	%	%	%	%	ratio
MB3	Inferred	44.3	5.5	8	23.5	2.5	23.6	35.9	4.6	8	44	0.4	0.3	37.0	12.7	2.9	26.3	3.1	20.3	22.0	11.1	2.0

Reconciliation between Inferred Resource estimate and actual mine-screen production is considered fair to good, and will be closely monitored as production increases.

#### Table 2: Resources at Bald Hill Bauxite Project



## **Fingal Rail Resources**

**Location:** 14km by road north of Campbell Town via the heavy duty Midland Highway and Esk Highway (see Figures 1, 2 & 5). Bauxite product will be loaded onto rail that passes through the project area to Bell Bay Port.

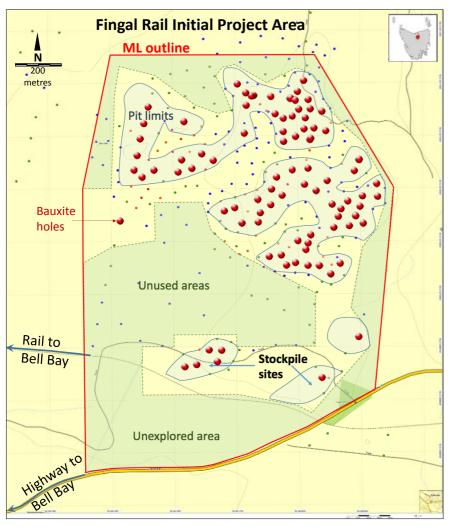


Figure 5 Fingal Rail Bauxite Project

**Drillholes:** red holes intersected the bauxite layer.

**Geology:** bauxite occurs on a remnant plateau, generally covered in loose sand layer up to 4 metres thick. Basement is a clay zone with variable amounts of bauxite nodules. This clay grades into basal Volcanic tuffs of Lower Tertiary age at depth. Dolerite plugs and sills of mid Jurassic age occur in the area.

**Tenement:** Fingal Rail lies within the Conara Exploration Licence area EL 7/2010. A Mining Lease application is in preparation.

**Discovery:** ABx encountered bauxite in the area in 2011 but did not find the main deposit until 2012.

Land use: firewood harvesting & hunting.

**Project Centroid:** 

Easting Northing 541841 5370543

**Drill Statistics see Figure 5:** 361 holes were drilled using the reverse circulation aircore technique for a total of 4,987 metres. 92% of samples were collected at 1m downhole intervals and the rest at 0.5m.

93 holes returned ore grade bauxite totalling 262 metres of fully assayed, bauxite-grade samples.

110 metres were in low grade bauxite, mainly classified as overburden and internal dilution material. These low-grade bauxite metres were excluded from the resource estimate but contain bauxite nodules. A further 134 metres were weakly mineralised and assayed.

An additional 326 metres of non-mineralised material were assayed and tested for mine geotechnical information and to search for vectors to ore concealed beneath the sand layer.

**Mineralisation**: Tasmanian bauxite has lumps of bauxite in clay forming an irregular, tight-packed formation. Soil is thin. Overburden up to 4m thick is approximately 2 metres of unconsolidated sand and approximately 1.5 metres of low grade bauxite mixed with loose clay material and is excluded from resources – see Figure 6 overleaf. Internal waste is very rare. A firm clay horizon with nodules of bauxite lies beneath the bauxite formation and is also excluded.

Avl/

Rx

6.5

7.3

% ratio

4.8 6.4

30.2



**Cutoff Grades:** Because of the tight formation, bauxite nodules are pulverised to dust by the drilling process. Samples are wet screened at 0.26mm to recover clay-free bauxite material for assaying. Low-clay bauxite is selected by reactive silica (Rx SiO<sub>2</sub>) below 12.6%. Those low silica zones with more than 30% available alumina (Al<sub>2</sub>O<sub>3</sub> Avl) are selected as bauxite. Minimum mining thickness cutoff was 1.25 metres. Because the sand overburden is loose sand and may be sellable, no minimum stripping ratio was applied.

## SUMMARY RESOURCES Fingal Rail Project

1.18

2.3 40.4 2.8

15 28.9 3.7 23.6

Fingal Rail Indicated

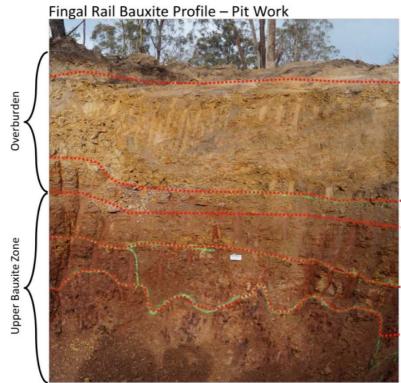
Fingal F	Rail Proje	ect																						
	ĺ	2.0	SG				9	Sieved	l 0.26r	nm									Unsi	ieved	"Raw"			
Region	Resource	Million	Thick-	AL 0	s:0	A /S	Fe <sub>2</sub> O <sub>3</sub>	TiO		Al <sub>2</sub> O <sub>3</sub> Avi	Rx	Avl/	Lab	O'Bur	Int.	AL 0	5:0	A /S	Eo 0	TiO	101	$Al_2O_3$ Avi	Rx	ĺ
Region	Category	Tonnes	ness	Al <sub>2</sub> U <sub>3</sub>	5102	A/ 3	re <sub>2</sub> 0 <sub>3</sub>	1102	LUI	@143°C	${\rm SiO}_2$	Rx	Yield	den	Waste	Al <sub>2</sub> U <sub>3</sub>	3102	A/ 3	Fe <sub>2</sub> O <sub>3</sub>	1102	LUI	@143° C	SiO <sub>2</sub>	
		mt	т	%	%	ratio	%	%	%	%	%	ratio	%	т	т	%	%	ratio	%	%	%	%	%	1
Fingal Rail	Inferred	0.69	2.0	40.9	3.1	13	28.1	3.6	23.8	35.6	2.7	13	52	3.18	0.03	37.9	6.0	6.9	29.1	4.5	21.9	29.9	5.3	
Fingal Rail	Indicated	0.50	2.7	39.9	2.4	17	29.8	3.8	23.4	35.0	2.0	18	56	3.74	0.06	37.6	4.9	7.6	29.9	4.4	22.2	30.6	4.2	

35.3

Table 4: Resources at Fingal Rail Bauxite Project

Explanations: All resources 100% owned & unencumbered. Resource tonnage estimates are quoted as in-situ, pre mined tonnages. All assaying done at NATA-registered ALS Laboratories, Brisbane. Chemical definitions: Leach conditions to measure available alumina "Al2O3 AvI" & reactive silica "Rx SiO2" is 1g leached in 10ml of 90gpl NaOH at 143°C for 30 minutes. LOI = loss on ignition at 1000°C. "AvI/Rx" ratio is (Al2O3 AvI)/(Rx SiO2) and "A/S" ratio is Al2O3/SiO2. Values above 6 are good, above 10 are excellent. Tonnage is for bauxite in-situ. Lab Yield is for drill dust samples screened by ALS lab at 0.26mm. Production yields are not directly related and are typically between 60% and 75%. Tonnages requiring no upgrade will have 100% yield. Resource estimates exclude large tonnages of potential extensions, overburden & interburden detrital bauxite and underlying transitional bauxite mineralisation. Production will clarify these materials.

2.3 15 54



Aeolian Sand

3.45 0.04 37.8 5.5 6.9 29.5 4.4 22.0

 $\ensuremath{\textbf{Clay}}$  – Porous muddy sediment with some halloysite infilling in the pores and interstices

Detrital PDM accumulations – Predominantly rounded PDM loosely cemented by muddy sediment with halloysite infilling

Detrital Bauxite Zone – Cemented PDM conglomerate. This layer has nodules of rounded PDM fragments in a layer that maybe the result of some transportation prior to deposition. A thin grey clay band occurs at the base of the layer as the basal contact.

**Cemented Nodular Bauxite** - Vuggy red detrital bauxite nodules with dispersed PDM in a bauxite/clay matric with inclusions of indurated sandstone. Irregular basal contact.

Vitric PDM (black) in Hard Bauxite Layer – Amoebic shaped PDM material and rounded PDM nodules appear in a harder bauxite as random amoebic blebs and discrete bands. The PDM has a glassy appearance with concentric banding and conchoidal fracturing

Figure 6: a 4.5m high pit wall at Fingal Rail (the top sand layer had mainly been cleaned away for safety) An adjacent drill hole encountered a further 4 metres of hard bauxite below the pit floor. Fingal Rail's black PDM nodules appear to have largely reverted to gibbsite over time





## **Nile Road Resources**

**Location**: 10.5km north of Fingal Rail via unsealed roads. Bauxite may be loaded onto the main rail line that passes a few km west of the Nile Road deposit to Bell Bay Port. See Figures 1 & 2.

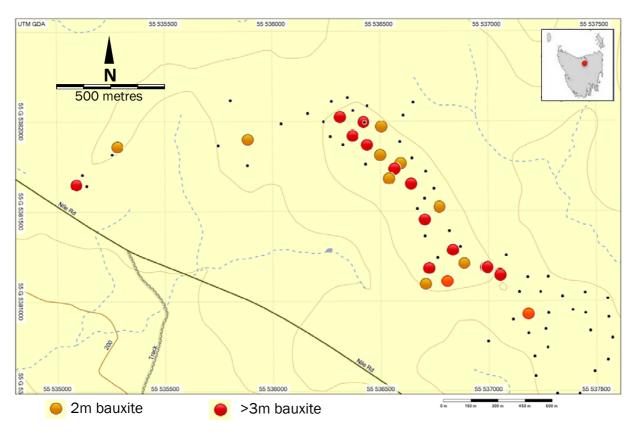


Figure 7: drilling at the Nile Road bauxite deposit

**Drillholes:** red holes intersected thick bauxite layer more than 3m thick whilst the orange holes intersected 2m of bauxite.

**Geology:** bauxite occurs at surface beneath a thin soil and clay-bauxite overburden up to 2.5m deep and averaging 1.7m on a remnant plateau. Basement is a clay zone with variable amounts of bauxite nodules which grades into basal Volcanic tuffs of Lower Tertiary age at depth.

**Tenement:** Nile Road lies within the Conara Exploration Licence area EL 7/2010. A Mining Lease application is in preparation.

**Discovery:** ABx encountered bauxite in the area in 2011 but did not find the main deposit until 2012.

**Land use**: farming and firewood harvesting. Gorse weed infestation affects some areas. Pockets of remnant native vegetation will be surveyed during the Spring season to determine significance.

Project Centroid: Easting Northing 536712 5381477

**Drill Statistics see Figure 7:** 86 holes were drilled using the reverse circulation aircore technique for a total of 732 metres. Samples were collected at 1m downhole intervals and 313 samples were assayed.

19 holes returned ore grade bauxite totalling 59 metres of fully assayed, bauxite-grade samples.

80 metres were in low grade bauxite, mainly classified as overburden and internal dilution material. These low-grade bauxite metres were excluded from the resource estimate but contain bauxite nodules. A further 78 metres were weakly mineralised and assayed.



An additional 96 metres of non-mineralised material were assayed and tested for mine geotechnical and environmental information.

**Mineralisation**: Tasmanian bauxite has lumps of bauxite in clay forming an irregular, tight-packed formation. Soil is thin. Overburden up to 4m thick is approximately 1.7m of low grade bauxite mixed with loose clay material and is excluded from resources. Internal waste is very rare. A firm clay horizon with nodules of bauxite lies beneath the bauxite formation and is also excluded from resources.

**Cutoff Grades:** Because of the tight formation, bauxite nodules are pulverised to dust by the drilling process. Samples are wet screened at 0.26mm to recover clay-free bauxite material for assaying. Low-clay bauxite is selected by reactive silica (Rx SiO<sub>2</sub>) below 9%. Those low silica zones with more than 30% available alumina (Al<sub>2</sub>O<sub>3</sub> Avl) are selected as bauxite. Minimum mining thickness cutoff was 1.5 metres. No minimum stripping ratio was applied.

## Table 5: Resources at Fingal Rail Bauxite Project

## SUMMARY RESOURCES Nile Road Deposit

		1.95	SG					Sieved	l 0.261	nm									Uns	ieved	"Raw"			
Region	Resource	Million	Thick-	AL 0	SiO	A/S	Eo 0	TiO	1.01	Al <sub>2</sub> O <sub>3</sub> Avi	Rx	Avl/	Lab	O'Bur	Int.		SiO	٨/٩	Eo 0	TiO	1.01	Al <sub>2</sub> O <sub>3</sub> AM	Rx	Avl/
Region	Category	Tonnes	ness	Al <sub>2</sub> U <sub>3</sub>	3102	H/ 3	Fe <sub>2</sub> 0 <sub>3</sub>	1102	LUI	@143°C	SiO <sub>2</sub>	Rx	Yield	den	Waste	Al <sub>2</sub> O <sub>3</sub>	3102	A/ 3	FC203	1102	LUI	@143° C	$SiO_2$	Rx
		mt	т	%	%	ratio	%	%	%	%	%	ratio	%	т	т	%	%	ratio	%	%	%	%	%	ratio
Nile Rd	Inferred	0.73	3.8	44.4	3.6	12	22.2	3.8	25.4	39.1	3.0	13	46	1.71	0.19	34.4	8.7	4	30.7	5.6	20.1	23.8	8.0	З
Totals		0.73	3.8	44.4	3.6	12	22.2	3.8	25.4	39.1	3.0	13	46	1.71	0.19	34.4	8.7	4	30.7	5.6	20.1	23.8	8.0	3

Explanations: All resources 100% owned & unencumbered. Resource tonnage estimates are quoted as in-situ, pre mined tonnages. All assaying done at NATA-registered ALS Laboratories, Brisbane. Chemical definitions: Leach conditions to measure available alumina "Al2O3 AVI" & reactive silica "Rx SiO2" is 1g leached in 10ml of 90gpl NaOH at 143°C for 30 minutes. LOI = loss on ignition at 1000°C. "AvI/Rx" ratio is (Al2O3 AvI)/(Rx SiO2) and "A/S" ratio is Al2O3/SiO2. Values above 6 are good, above 10 are excellent. Tonnage is for bauxite in-situ. Lab Yield is for drill dust samples screened by ALS lab at 0.26mm. Production yields are not directly related and are typically between 60% and 75%. Tonnages requiring no upgrade will have 100% yield. Resource estimates exclude large tonnages of potential extensions, overburden & interburden detrital bauxite and underlying transitional bauxite mineralisation. Production will clarify these materials.



#### **Resource Statement**

Tabulated below are the Mineral Resources for each ABx Project. The initial ASX disclosure for these Resources is given in the footnotes to the table. Refer to these announcements for full details of resource estimation methodology and attributions. The Mineral Resources have increased since December 2013 following declaration of the Mineral Resources at Campbell Town Area, Tasmania on 24 March 2015.

Region	Resource Category	Million Tonnes	Thick- ness	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	A/S	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI	<b>Al<sub>2</sub>O<sub>3</sub></b> Avl @143° C	Rx SiO <sub>2</sub>	Avl/ Rx	Lab Yield	O'Bur den	Int. Waste
		mt	т	%	%	ratio	%	%	%	%	%	ratio	%	т	т
CAMPBELL TOWN	Inferred	1.8	3.0	42.6	3.5	12	25.4	3.5	24.6	36.7	3.0	12	50	2.1	0.1
AREA TAS MANIA <sup>7</sup>	Indicated	1.7	3.2	42.5	3.2	14	26.4	3.0	24.5	36.2	2.8	14	55	1.8	0.1
	Total	3.5	3.1	42.5	3.3	13	25.9	3.3	24.5	36.5	2.9	13	52	2.0	0.1
DL-130 AREA TAS <sup>1</sup>	Inferred	5.7	3.8	44.1	4.3	10	22.8	3.1	25.0	37.6	3.2	12	55	1.5	0.1
	Total Tas	9.2	3.5	43.5	3.9	11	24.0	3.2	24.8	37.2	3.1	12	54	1.7	0.1
BINJOUR QLD <sup>2</sup>	Inferred	9.0	3.9	43.7	4.5	10	22.4	3.6	24.2	38.0	3.8	10	59	8.2	0.3
	Indicated	15.5	5.3	44.2	3.1	15	23.4	3.7	24.9	39.5	2.6	15	62	9.4	0.3
	Total	24.5	4.8	44.1	3.6	12	23.1	3.7	24.6	39.0	3.0	13	61	8.9	0.3
TOONDOON QLD <sup>3</sup>	Inferred	3.5	4.9	40.2	7.2	6	25.3	4.9	21.7	32.8	5.2	6	67	1.5	0.0
TARALGA S. NSW <sup>4</sup>	Inferred	9.9	3.1	40.4	5.7	7	24.6	4.1	22.2	35.2	1.9	18	54	0.1	0.2
	Indicated	10.2	3.7	41.3	5.3	8	25.9	4.0	22.9	36.1	1.9	19	55	0.7	0.4
	Total	20.1	5.6	40.8	5.5	7	25.3	4.0	22.6	35.7	1.9	19	55	0.5	0.3
PDM-DS0*	Inferred	7.6	2.5	37.0	6.0	6	38.4	3.5	13.3	$22.1^{*}$	1.3	17	72	0.2	0.1
	Indicated	10.3	3.1	37.6	3.9	10	40.4	3.7	13.5	22.4*	1.1	20	71	0.7	0.4
	Total	17.8	5.8	37.3	4.8	8	39.6	3.6	13.5	22.3*	1.2	18	72	0.5	0.3
	Total Taralga	37.9	5.7	39.2	5.2	8	32.0	3.8	18.3	35.4	1.6	23	63	0.5	0.3
INVERELL N. NSW <sup>5</sup>	Inferred	17.5	4.7	39.8	4.8	8	27.7	4.3	22.2	31.0	4.2	7	61	2.3	
	Indicated	20.5	4.8	40.6	4.7	9	26.9	4.1	22.5	32.0	4.0	8	60	2.4	
	Total	38.0	4.8	40.2	4.7	9	27.3	4.2	22.4	31.6	4.1	8	61	2.4	
guyra n. NSw <sup>6</sup>	Inferred	2.3	4.2	41.4	3.6	12	26.2	3.3	24.6	35.0	2.8	13	56	3.4	
	Indicated	3.8	5.9	43.1	2.6	16	27.3	3.9	24.5	37.4	2.0	18	61	4.4	
	Total	6.0	5.3	42.5	3.0	14	26.9	3.7	24.5	36.5	2.3	16	59	4.0	
GRAND TOTAL A	LL AREAS	119.1								* PDM is Al	<sub>2</sub> O <sub>3</sub> spin	el. Al <sub>2</sub> O	<sub>3</sub> Avl at 2	25°C is >	35%

## Table 6: ABx JORC Compliant Resource Estimates

Explanations: All resources 100% owned & unencumbered. Resource tonnage estimates are quoted as in-situ, pre mined tonnages. All assaying done at NATA-registered ALS Laboratories, Brisbane. Chemical definitions: Leach conditions to measure available alumina "Al2O3 AvI" & reactive silica "Rx SiO2" is 1g leached in 10ml of 90gpl NaOH at 143°C for 30 minutes. LOI = loss on ignition at 1000°C. "AvI/Rx" ratio is (Al2O3 AvI)/(Rx SiO2) and "A/S" ratio is Al2O3/SiO2. Values above 6 are good, above 10 are excellent. Tonnage is for bauxite in-situ. Lab Yield is for drill dust samples screened by ALS lab at 0.26mm. Production yields are not directly related and are typically between 60% and 75%. Tonnages requiring no upgrade will have 100% yield. Resource estimates exclude large tonnages of potential extensions, overburden & interburden detrital bauxite and underlying transitional bauxite mineralisation. Production will clarify these materials.

Tabulated Resource numbers have been rounded for reporting purposes. The Company conducts regular reviews of these Resources and Reserve estimates and updates as a result of material changes to input parameters such as geology, drilling data and financial metrics. **Global Mineral Resources declared to** 24/03/2015 total 119.1 million tonnes.

Avl  $Al_2O_3$  = available  $Al_2O_3$  at 143 °C Rx = reactive SiO<sub>2</sub> Avl/Rx = available alumina to reactive silica ratio, A/S = alumina/silica ratio, LOI = loss on ignition, OB = overburden, Int W = internal waste, DSO = Direct Shipping Bauxite, PDM = poorly diffracting material (under XRD), Lab Yield = wet screen yield from drill dust The information above relates to Mineral Resources previously reported according to the JORC Code (see Competent Person Statement) as follows:

<sup>1</sup> Maiden Tasmania Mineral Resource, 5.7 million tonnes announced on 08/11/2012

<sup>2</sup> Binjour Mineral Resource, 24.5 million tonnes announced on 29/06/2012

- <sup>2</sup> QLD Mining Lease 80126 Maiden Resource, 3.5 million tonnes announced on 03/12/2012
- <sup>\*</sup> Goulburn Taralga Bauxite Resource Increased by 50% to 37.9 million tonnes announced on 31/05/2012

Inverell Mineral Resource update, 38.0 million tonnes announced on 08/05/2012

<sup>°</sup> Guyra Maiden Mineral Resource, 6.0 million tonnes announced on 15/08/2011

*Initial resources for 1<sup>st</sup> Tasmanian mine, 3.5 million tonnes announced on 24/03/2015* 



## Governance arrangements and internal controls - Mineral Resources

ABx has ensured that the Mineral Resource estimates quoted above are subject to governance arrangements and internal controls. The resource estimates have been externally derived by an independent consulting organisation whose staff have exposure to best practice in modelling and estimation techniques. Geology models have been generated by ABx staff and have been reviewed by the external resource consultant. The consultant has also carried out reviews of the quality and suitability of the data underlying the Mineral Resource estimate. In turn, ABx management and executives have carried out numerous internal reviews of the Mineral Resource estimate to ensure that it honours the ABx geological model and has been classified and reported in accordance with the JORC Code (2004) and in the case of Tasmania in accordance with the JORC Code (2012).

ABx confirms in this report that it is not aware of any new information or data that materially affects the information included in the previously released reports. In the case of estimates of Mineral Resources or Ore Reserves, the company confirms that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

## 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 tables are length-yield-weighted averages of each metre's yields & grades.

## **Qualifying statements**

## General

The information in this report that relate to Exploration Information and Mineral Resources 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 Mr Levy is a director of Australian Bauxite Limited.

## Mainland

The information relating to Mineral Resources on the Mainland was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

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

#### Tasmania

The information relating to Mineral Resources in Tasmania has been prepared or updated under the JORC Code 2012.

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 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Rebek and Mr Levy have consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.



## Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves "The JORC Code": Table 1

# Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling	Reverse circulation aircore drillhole samples at 1 metre depth intervals.
	<ul> <li>Measures to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	• Representivity verified by twinned holes, drill sampling tests at 0.5 metre intervals, core holes and bulk pits. Correlations are moderate to good.
	<ul> <li>Material aspects of the determination of mineralisation.</li> </ul>	<ul> <li>Bauxite identified geologically &amp; field lab tests, ¼ samples sent to ALS Laboratories Brisbane. Wet-screened at 0.26mm; recovered bauxite is assayed. Representative unscreened bauxite-samples are assayed. Laboratory yields bear an indirect relationship with actual production yields which have averaged above 65% in bulk tests &amp; mining.</li> </ul>
Drill method	Drill type	Reverse circulation aircore drilling.
Drill sample recovery	<ul> <li>Recording and assessing chip sample recoveries and results assessed.</li> </ul>	<ul> <li>Weigh samples, volume estimates, comparisons with bulk pits.</li> </ul>
	Measures taken to maximise sample     recovery & ensure representative samples.	Lowest practical air pressure used, steady drill speed. Drilling contractor is paid per day not per metre.
	<ul> <li>Relationship between sample recovery and grade and possible sample bias.</li> </ul>	<ul> <li>No relationship has been observed between core recovery &amp; grade.</li> </ul>
Logging	<ul> <li>Have chip samples been geologically &amp; geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies &amp; metallurgical studies.</li> </ul>	<ul> <li>Every metre of drill chips is logged geologically, photographed, assayed and all data recorded in ABacus database. Geotechnical tests are done during bulk test pits and trial mining.</li> </ul>
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul> <li>Geological logging &amp; field lab tests. Channel sampling, bulk sampling &amp; screened samples of bulk pits. All samples are photographed &amp; stored in database.</li> </ul>
	<ul> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>100% logged. Report lists total metres drilled, sampled &amp; assayed.</li> </ul>
Sub-sampling techniques and sample	<ul> <li>For non-core samples, whether riffled, tube sampled, rotary split, etc &amp; if sampled wet or dry.</li> </ul>	• Quartered sampling done on undried aircore chip samples, as drilled. Bauxite is dry.
preparation	<ul> <li>Nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>Sample preparation technique suits bauxite type. Confirmed by multi-tests.</li> </ul>
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	• Repeated sub-sampling and twinned holes produces comparable laboratory results within natural variance range.
	<ul> <li>Measures to ensure sampling representa- tiveness of the in situ material collected.</li> </ul>	Repeated sub-sampling & twinned holes produces comparable results within natural variance range.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>Sample sizes are appropriate to the grain size of the material being sampled. Complies with sampling theory.</li> </ul>
	<ul> <li>Nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul> <li>ALS uses industry-standard techniques for total analysis for trihydrate bauxite types. Confirmed by inter-lab tests &amp; customers are satisfied with ALS laboratory results after testing many samples.</li> </ul>
Quality of assay data and laboratory	<ul> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make, model, reading</li> </ul>	<ul> <li>Handheld XRF results in field laboratory used to select samples for ALS laboratory analyses.</li> <li>Calibration studies done and standards used.</li> </ul>
tests	times, calibrations factors applied & their derivation, etc.	Machine is serviced regularly.
	<ul> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) &amp; whether acceptable levels of accuracy (ie lack of bias) &amp; precision have been established.</li> </ul>	<ul> <li>Repeated sub-sampling &amp; twinned holes produces comparable laboratory results within natural variance range.</li> <li>Laboratory standards statistically assessed during resource estimation.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul> <li>Repeated sub-sampling and twinned holes produces comparable laboratory results within natural variance range.</li> </ul>
	<ul> <li>The use of twinned holes.</li> </ul>	Twinned holes done often.



Criteria	JORC Code explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<ul> <li>Well-established professional database procedures, including links back to Lab data certificates, original logging sheets and sample photos.</li> </ul>
	Discuss any adjustment to assay data.	<ul> <li>When not material, some in-situ data can be estimated mathematically from screened lab results of the same samples.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul> <li>Drill holes sited using hand-held GPS accurate within 2 metres horizontally and within 3 metres vertically.</li> <li>No down-hole surveys required for 15 metre deep vertical holes.</li> </ul>
	Specification of the grid system used.	• MGA94
	Quality and adequacy of topographic control.	<ul> <li>Digital 5 metre topographic contours</li> <li>Pre-mining, landform is professionally surveyed, accurate to within 0.1 metres by Leica GS15 dual frequency receiver.</li> </ul>
Data spacing	Data spacing for reporting of Exploration Results.	Not specified.
and distribution	• Is data spacing and distribution sufficient to establish degrees of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation?	<ul> <li>Drill spacing is suitable for estimation of Inferred &amp; Indicated resources but not Measured which may need mine confirmation.</li> <li>Spacings confirmed geostatistically.</li> </ul>
	Has sample compositing been applied?	No sample compositing done.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	<ul> <li>Shallow vertical holes are used to test surface layer of bauxite as done by all bauxite companies.</li> <li>Comparisons with bulk pits samples are satisfactory</li> </ul>
	Has orientation of drilling & key mineralised structures introduced a sampling bias?	<ul> <li>No bias has been detected from comparisons between drillhole results and bulk pit results.</li> </ul>
Sample security	<ul> <li>Measures taken to ensure sample security.</li> </ul>	<ul> <li>Chain of custody methods, wire-tying &amp; plastic wrapping of pallets of samples.</li> </ul>
Audits or reviews	<ul> <li>Results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>Audits by major firms and potential customers have been satisfactory.</li> </ul>

# Section 2 – Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>	<ul> <li>Exploration Licences are listed in this report and all held 100% by ABx4 Pty Limited, a wholly owned subsidiary of Australian Bauxite Limited and free of 3rd party encumbrances, joint ventures, royalties, native title, historical sites, wilderness or national parks or socio-environmental constraints.</li> </ul>
	<ul> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>All tenements are in good standing. A licence to operate requires a landholder access agreement, a granted Mining Lease and an acceptable Development Plan and Environmental Management Plan.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The bauxite deposits are new discoveries by ABx using its proprietary exploration technology.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	Bauxite formed on Tertiary volcanic tuffs.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>coordinates of hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length &amp; interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul> <li>Material exploration results are reported in the release.</li> </ul>



ASX: ABX		
Criteria	JORC Code explanation	Commentary
	<ul> <li>If the exclusion of this information is justified, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>The Bauxite deposits have hundreds of holes, thousands of samples &amp; assays; too many data to list in this manner.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material &amp; should be stated.</li> </ul>	<ul> <li>Uncut assays used due to normal distribution.</li> <li>Cut-off grades are documented in the report, including 30% available Al2O3 for screened samples</li> </ul>
	<ul> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated.</li> </ul>	<ul> <li>Not applicable: simple length weighting of standard 1 metre long samples grading above the cut-off grades is used.</li> </ul>
	Metal equivalent value assumptions.	None used.
Relationship between	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	<ul> <li>Intercept length down hole equals the bauxite mineralisation true width.</li> </ul>
mineralisation widths and intercept lengths	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Holes are vertical and the bauxite is horizontal geometry.
	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</li> </ul>	Not applicable: bauxite mineralisation is horizontal; perpendicular to the vertical holes.
Diagrams	<ul> <li>Appropriate maps &amp; sections (with scales) &amp; tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations &amp; appropriate sectional views.</li> </ul>	Summarised maps are shown in the report.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>Summarised in the report, with examples shown as appropriate.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful &amp; material, (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size &amp; method of treatment; metallurgical test results; bulk density, groundwater, geotechnical &amp; rock characteristics; potential deleterious or contaminating substances.</li> </ul>	Material exploration data included in the report.
Further work	Nature & scale of planned further work.	Summarised in the report.
	<ul> <li>Diagrams clearly highlighting areas of possible extensions, including the main geological interpretations &amp; future drilling areas.</li> </ul>	Summarised in the report except where commercially sensitive.

## Section 3 Estimation & Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure data has not been corrupted by, for example, transcription or keying errors, between its initial collection &amp; its use for Mineral Resource estimation purposes.</li> </ul>	<ul> <li>Random QA-QC checks done quarterly</li> <li>Data or lab errors usually obvious during estimation due to conflicts with geological logging.</li> <li>Hand-held XRF readings double-check</li> </ul>
	Data validation procedures used.	<ul> <li>Lab data entered electronically &amp; signed-off. Written logs &amp; sample photos also in database</li> </ul>
Site visits	Comment on any site visits undertaken by the Competent Person & outcome of those visits.	<ul> <li>Competent persons visit at discovery, mapping, drilling, bulk sampling &amp; mining. All satisfactory.</li> </ul>
	• If no site visits, why.	All sites visited
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	<ul> <li>Geology is simple strata. Drillholes determine degree of variation, especially where concealed by soil or covering layers.</li> </ul>
	Nature of the data used & of any assumptions made.	<ul> <li>Outcrops mapped &amp; sampled. Drillholes complete the subsurface mapping.</li> </ul>
	Effect, if any, of alternative interpretations on Mineral Resource estimation.	<ul> <li>Outlines can vary estimate by 10% to 15% so we do 2 different methods to double-check</li> </ul>
	• The use of geology in guiding & controlling	Method 1 = geological model outlines



ASX: ABX Criteria	IOPO Code evaluation	Commontany
Chiena	JORC Code explanation Mineral Resource estimation.	Commentary
	<ul> <li>Factors affecting continuity both of grade a geology.</li> </ul>	<ul> <li>Method 2 = voronoi polygon statistics</li> <li>Continuity is assumed to be semi random or highly variable, as is normal for bauxite</li> </ul>
Dimensions	<ul> <li>Extent &amp; variability of the Mineral Resource expressed as length (along strike or otherwise plan width, &amp; depth below surface to the upper lower limits of Mineral Resource.</li> </ul>	e • Bauxite channels 100 to 250m wide meander over 1 to 2km strike. Dissected by erosion channels. Bauxite
Estimation & modelling techniques	<ul> <li>Nature &amp; appropriateness of estimation technique(s) applied &amp; key assumptions including treatment of extreme grade values domaining, interpolation parameters of maximum distance of extrapolation from data points. If a computer assiste estimation method was chosen include description of computer software of parameters used.</li> </ul>	<ul> <li>geological boundaries. Thickness set by intercepts in holes.</li> <li>Grades interpolated Gemcom software by inverse distance squared methods. Search ellipse 250m along strike by 150m.</li> <li>Method 2: each drill sample is allocated an area half way to next holes, to a limit of 50 metres. Tonnage is density x area x</li> </ul>
	<ul> <li>Availability of check estimates, previou estimates &amp;/or mine production records of whether the Mineral Resource estimat takes appropriate account of such data.</li> </ul>	estimations after additional drilling.
	The assumptions made regarding recovery of by-products.	• By-products are not reported but will be produced & sold. Viability not dependent on by-products.
	Estimation of deleterious elements or othe non-grade variables of economic significance	and a second
	<ul> <li>In the case of block model interpolation, th block size in relation to the average sampl spacing &amp; the search employed.</li> </ul>	
	<ul> <li>Any assumptions behind modelling of selective mining units.</li> </ul>	<ul> <li>Minimum thickness of 1.25m, 1.5m &amp; 2m to suit ore geometry &amp; depth. Mine has achieved 1.25m</li> </ul>
	Assumptions about correlation between variables.	• Nil
	<ul> <li>Description of how the geological interpretation was used to control th resource estimates.</li> </ul>	
	<ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>	<ul> <li>Bauxite grades are major elements &amp; normally distributed without outliers :. best left uncut.</li> </ul>
	<ul> <li>Process of validation, checking process used comparison of model data to drill hole data &amp; use of reconciliation data if available.</li> </ul>	
Moisture	<ul> <li>Whether the tonnages are estimated on a dr basis or with natural moisture, &amp; the metho of determination of the moisture content.</li> </ul>	· · · · · · · · · · · · · · · ·
Cut-off parameters	The basis of the adopted cut-off grade(s) of quality parameters applied.	<ul> <li>Mine &amp; pits show screened silica is best for first selection of ore, then refined by alumina +30%.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining method minimum mining dimensions &amp; internal (or externa mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potentia mining methods, but the assumptions made regarding mining methods &amp; parameters when estimating Miners Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul> <li>Screen performance results to date suggest yields of bauxite will range between 65% &amp; 75%</li> <li>Mining &amp; screening are less than 10% of costs (logistics +90%) so exact estimations of yields are not as important as logistics and grades of products.</li> <li>All subgrade bauxite treated as overburden or internal</li> </ul>
Metallurgical factors or assumptions	<ul> <li>Basis for assumptions or predictions regardim metallurgical amenability. It is always necessary as pa of the process of determining reasonable prospects for eventual economic extraction to consider potentii metallurgical methods, but the assumptions regardim metallurgical treatment processes &amp; parameter made when reporting Mineral Resources may no always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul> <li>g Screen performance results to date suggest yields of bauxite will range between 65% &amp; 75%</li> <li>Mining &amp; screening are less than 10% of costs (logistics +90%) so yield prediction is less important than logistic costs &amp; product grade predictions.</li> <li>Production yields tend to exceed laboratory wet screened yields at 0.26mm but product grades are</li> </ul>



Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste &amp; process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining &amp; processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions.</li> </ul>	<ul> <li>All material extracted is either saleable or returned to exhausted pit areas. Bauxite is widely used because it is chemically benign.</li> <li>Soils over bauxite are invariably dry and thin but are easily reinstated immediately a pit is exhausted and reformed.</li> <li>Area selection criteria is to be free of socio-environmental constraints. ABx gets environmental clearances before any drilling.</li> <li>Land access agreements are in place for all near-term development areas.</li> </ul>
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size &amp; representativeness of the samples.</li> </ul>	<ul> <li>Measured densities – dry in-situ by volumetric methods from bulk pit samples</li> <li>Broken density &amp; stowage factors for transport, plus the angle of repose for stockpiling also measure in early stages of mining</li> </ul>
	<ul> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture &amp; differences between rock &amp; alteration zones within the deposit.</li> </ul>	<ul> <li>Measured volumetrically by diamond blade sawing of precise channels, drying &amp; weighing.</li> <li>9 diamond drill cores measured and weighed dry corroborated pit channel sample estimates of 1.9 to 2.1 tonnes per cubic metre (high due to high Fe<sub>2</sub>O<sub>3</sub>)</li> </ul>
	• Assumptions for bulk density estimates used in evaluation of the different materials.	No assumptions. ABx uses measured densities.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	<ul><li>Method 1: number of data points per block</li><li>Method 2: nearness to next holes</li></ul>
	<ul> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology &amp; metal values, quality, quantity &amp; distribution of the data).</li> </ul>	<ul> <li>Resources will not be classified as measured until mining experience is gained sufficient to correlate resource predictions with actual production outcomes. Data variability is similarly high in holes and in mine openings.</li> </ul>
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	<ul> <li>Estimation results appropriately reflects Competent Persons' views of deposits</li> </ul>
Audits or reviews	Results of any audits or reviews of Mineral Resource estimates.	• None. Mine reconciliations are the key reviews/audits
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy &amp; confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy &amp; confidence of the estimate.</li> </ul>	<ul> <li>All Competent Persons do manual, volume-based checks of estimates to be satisfied with results from Method 1 (geostatistical block modelling) &amp; Method 2 (voronoi polygon estimation).</li> <li>Competent Persons have signed approvals for publicly released resource reports.</li> <li>No objections to date &amp; comments are welcomed</li> </ul>
	<ul> <li>Statement should specify whether it relates to global or local estimates, &amp;, if local, state the relevant tonnages, which should be relevant to technical &amp; economic evaluation. Documentation should include assumptions made &amp; the procedures used.</li> </ul>	<ul> <li>Each deposit is estimated individually.</li> <li>Each 25m x 25m block in Method 1 (geostatistical block modelling) is individually estimated locally</li> </ul>
	<ul> <li>Statements of relative accuracy &amp; confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>Is always being done, in accordance with industry practice &amp; common sense triple-checking.</li> </ul>