

# BAUXITE RESOURCES LIMITED



## BRL'S 100% FORTUNA BAUXITE RESOURCE INCREASED TO 39.5Mt BRL AND PARTNER DARLING RANGE RESOURCES IN EXCESS OF 250Mt

### Highlights:

- BRL 100% Fortuna resource increased by 47% to: 39.5Mt @ 37.3% Total Al<sub>2</sub>O<sub>3</sub> (28.8 % available @ 148°C), 5.2% SiO<sub>2</sub> (1.6% reactive @148°C) (all grades are unbeneficiated)
- BRL and Partner resources total 256.4Mt
- Resource is near surface, situated close to existing road and rail infrastructure
- BRL 100% Resource now supports development evaluation for supply into the international bauxite market

Bauxite Resources Limited (ASX:BAU) ("BRL" or the "Company") is pleased to announce a resource upgrade for the Fortuna bauxite deposit in the Darling Range, Western Australia. BRL retains 100% beneficial interest to the bauxite.

The resource is located on a small number of large private landholdings (farms) located approximately 60km north east of Perth, and 10km from the township of Wundowie (Figure 1). Existing rail infrastructure exists approximately 12km to the north providing a link to Kwinana around 120km away.

**Table 1: Total Fortuna Deposit Resource Classification**

JORC classification	Quantity (Mt)	Al <sub>2</sub> O <sub>3</sub> % (total)	Al <sub>2</sub> O <sub>3</sub> % <sup>#</sup> (available)	SiO <sub>2</sub> % (total)	SiO <sub>2</sub> % <sup>#</sup> (reactive)
Inferred	39.5	37.3	28.8	5.2	1.6
<b>Total</b>	<b>39.5</b>	<b>37.3</b>	<b>28.8</b>	<b>5.2</b>	<b>1.6</b>

*Note - all grades are unbeneficiated*

*# Represents low temperature (148°) bomb digestion.*

The previous resource estimate announced in May 2013 stood at 26.8Mt. The current increase of 12.7Mt has resulted from the inclusion of an additional 220 vacuum drill holes completed in June and July 2013 (11.1Mt), and from remodelling the previously drilled property following reinterpretation of the lower contact of the bauxite horizon (1.6Mt).

The BRL Fortuna bauxite project area is:

- situated on a small number of private landholdings;
- located approximately 60km north east of Perth, being 10km from the town of Wundowie;
- existing rail infrastructure ~12km to the north, providing a link to Kwinana Port approximately 120km away

BRL is encouraged by the very low total SiO<sub>2</sub> (5.2%) observed in the deposit, and plan to investigate the impact of high temperature digestion, and the resultant available alumina achieved.

Peter Canterbury, BRL CEO commented on the resource, "The 100% BRL Fortuna bauxite resource offers the Company a variety of opportunities for possible future development. The resource is predominantly gibbsitic in nature and displays low reactive silica - attractive attributes for alumina refining.

**DATE: 4 September 2013**

**ASX Code: BAU**

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ABN: 72 119 699 982**

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Alternatively, it may be possible to realise higher available alumina with a higher temperature digest, something the company is currently investigating. The resource is shallow with excellent infrastructure nearby". The company now has a significant resource outside its joint venture arrangements to support the commercialisation of this bauxite into the international bauxite market. Additional drilling planned over the coming nine months at the Fortuna deposit has potential to substantially grow resources further, with the company now moving into a development phase with the evaluation of approvals, logistics and marketing of direct shipment of the BRL 100% bauxite.

Fortuna lies to the southeast of the 147.3Mt Felicitas resource (see Table 2). Combined resources of the two are now in excess of 180Mt, confirming the northern Darling Range as a significant bauxite province.

### **Company now Entering Development Evaluation Phase for 100% owned tenements**

Whilst still working closely with its joint Venture Partners Yankuang Resources and HD Mining, the Company now has a resource in place to support its plan to export bauxite to the international markets.

With this resource upgrade and the planned drilling over the coming months the company is now turning its focus onto development evaluation for its existing resources. The Company has already commenced preliminary engagement with the State Government on its development plans and will now commence the following:

- Engagement with local, state and federal authorities on the relevant approvals
- Commence logistical evaluation of the defined JORC resource along existing infrastructure
- Undertake mine planning and metallurgical studies to optimize the resource for the international bauxite market

The company's existing 100% owned bauxite resources sits on two private landholdings where the company has existing land access agreements for exploration. The Company will now commence discussions on Mining Agreements with these landowners and engagement with the local community in the Northam and Toodyay Shires.

In addition to commencing the evaluation and development phase for the Fortuna Deposit the company has some 1,100km<sup>2</sup> of granted tenements in the Eastern Darling Ranges region. Whilst the company will begin scout drilling on some of these tenements over the next 6 months it is also looking for further JV partners in this region which is located close to the existing rail line to the port of Albany. The Company will also be evaluating the logistics to support the potential of shipping bauxite out of the port at Albany.

### **Bauxite Market Update**

According to CRU\* the bauxite market is in the midst of a structural change which will see a sizable number of new entrants into the market in the next decade, in the form of junior miners. Australia is expected to dominate the group in the export of bauxite and become the largest exporter of bauxite to the Chinese import bauxite market which CRU\* forecasts reach 60 million tonnes in 2013 and 95 million tonnes by 2022. This is a substantial increase from the 38 million tonnes imported into China in 2012.

Compounding the increase in bauxite demand from China is the proposed Indonesian ban on bauxite. Whilst it is still expected bauxite will continue to be exported the general consensus is that exports of bauxite from Indonesia will not increase from their current levels and are likely to drop.

CRU\* expects Australia and Africa will supply the bulk of the increased Chinese bauxite import demand and that the price of bauxite will increase to reflect the long run marginal cost of production which is predicted by CRU\* to stay in the \$65-70/t range in the longer term.

Given the significant bauxite resource already defined and the proximity of BRL's bauxite deposits to existing infrastructure the Company is very well placed to supply the increasing demand from the Chinese imported bauxite market.

\*CRU – Bauxite Long Term Market Outlook 2013 Edition



## Resource Details

Drilling was completed immediately south of the existing resource, on a nominal 160m x 80m spaced grid pattern. The Fortuna resource now extends across 658Ha (6.58km<sup>2</sup>) of private landholding. The geological setting is laterite over a predominantly granitic basement with mineralisation tabular in nature, formed by the weathering of the granite or mafic rocks. The deposit is similar in style to many other bauxite deposits in the region. The resource comprises a bauxite horizon up to 13m thickness that is typically covered by 0.5 to 2m of loose overburden. The current resource estimate, completed by RungePincockMinarco (RPM), was based on 510 vacuum holes drilled for 5,146 metres on a nominal 160 x 80m drill pattern (Figure 2). All holes were drilled vertically, with intersected thicknesses considered as true thickness, given the relatively flat lying nature of mineralisation. All samples were analysed using FTIR. To validate the FTIR results, approximately 10% of samples returning greater than or equal to 23% available alumina underwent low temperature caustic (148°) digestion (BOMB) for analysis by ICP-OES using 1.0 ± 0.04g samples to determine available alumina and reactive silica, and X-Ray Fluorescence Spectrometry (XRF) to determine total Al<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, TiO<sub>2</sub> and a variety of trace elements. Results reported as available alumina and reactive silica represent low temperature digestion analyses.

Wireframes for the resource study were generated using cross sectional interpretations based on mineralised envelopes constructed using down hole geochemistry and associated lithological logging. Ordinary Kriging (OK) was used to estimate the resource. Full details are attached below. The resource is likely to be mined by conventional open cut mining methods. No assumptions have been made regarding metallurgy other than the material could be refined using the industry recognised Bayer processing method.

Figure 1: Bauxite Resources Ltd tenement holding showing Fortuna Resource location

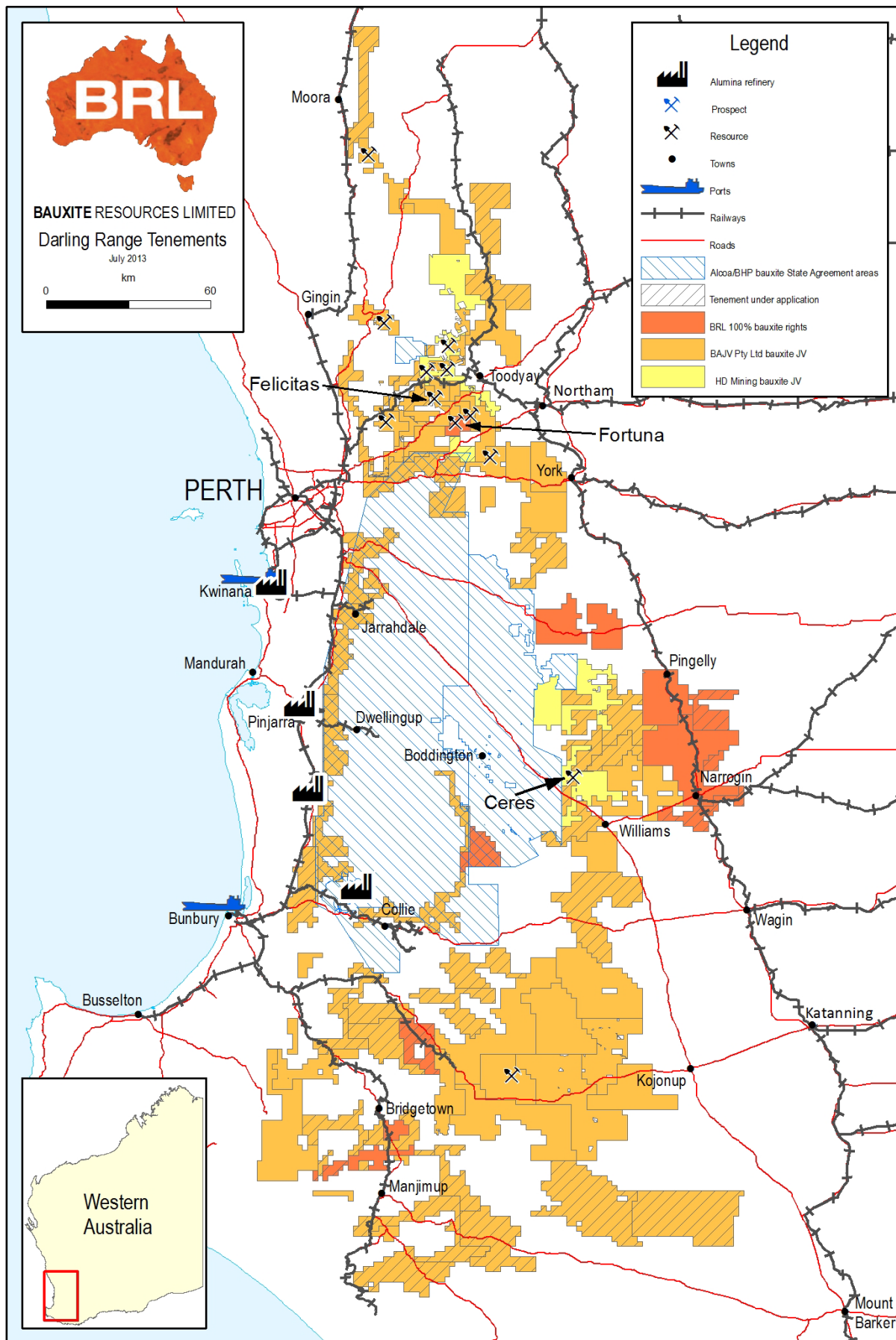
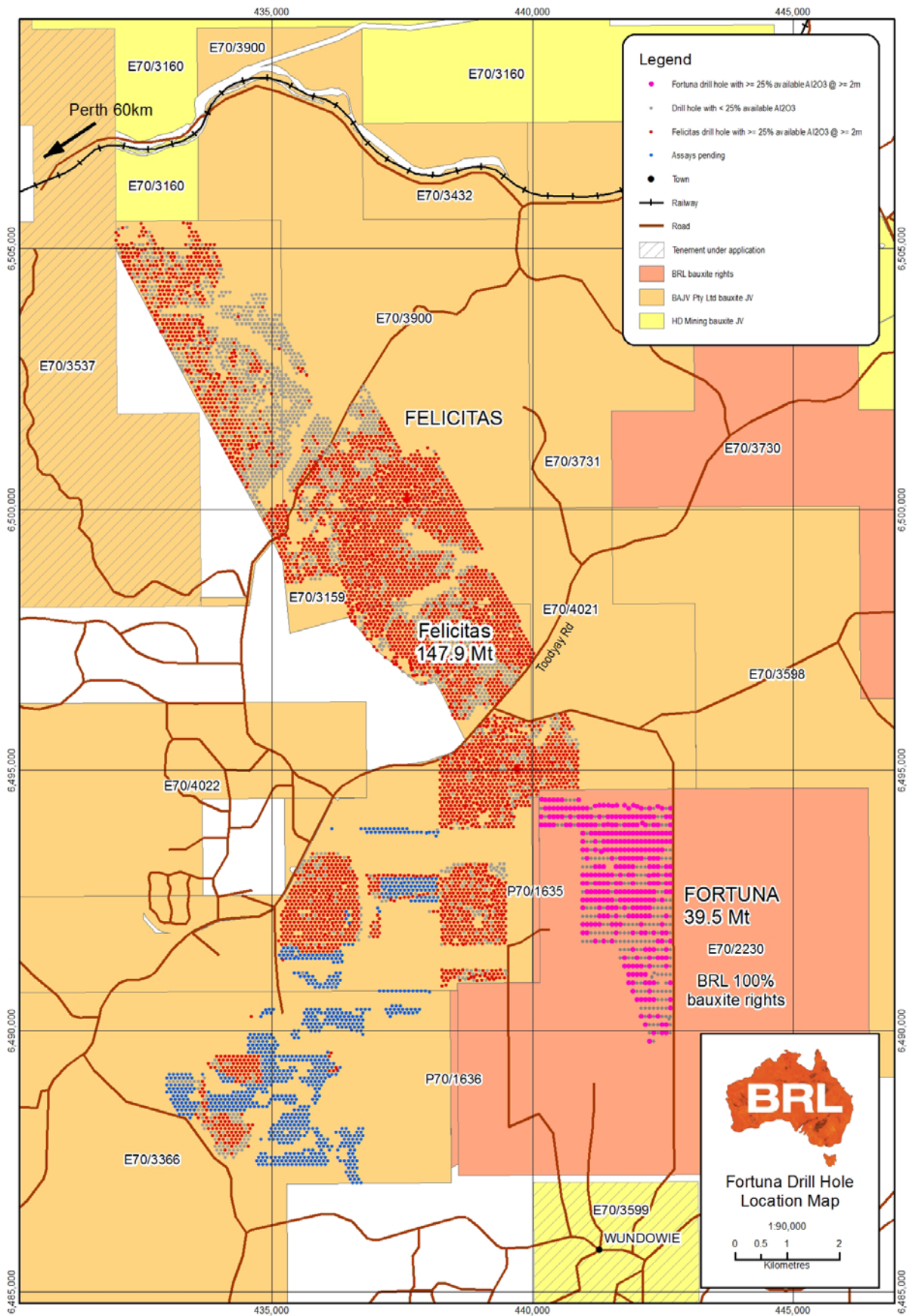




Figure 2: Fortuna Resource drill hole location map





**Table 2: BRL Bauxite Projects in south west Western Australia – Resource Summary Table**

Deposit & Classification	Size Mt	Al <sub>2</sub> O <sub>3</sub> (total) %	Al <sub>2</sub> O <sub>3</sub> (available) %	SiO <sub>2</sub> (total) %	SiO <sub>2</sub> (reactive) %	JV & Resource Details
Fortuna						
Inferred	39.5	37.3	28.8	5.2	1.6	BRL (August 2013) JORC 2012
<b>BRL 100% sub-total</b>	<b>39.5</b>	<b>37.3</b>	<b>28.8</b>	<b>5.2</b>	<b>1.6</b>	
Felicitas						
Measured	35.3	39.0	30.5	5.8	1.3	BAJV (May 2013) JORC 2004
Indicated	65.3	39.8	30.4	9.0	1.8	BAJV (May 2013) JORC 2004
Inferred	47.3	39.2	29.6	12.4	2.6	BAJV (May 2013) JORC 2004
Cardea 3 (BAJV)						
Indicated	3.5	42.5	31.1	11.6	3.2	BAJV (Nov 2011) JORC 2004
Inferred	7.0	41.0	30.1	12.6	3.5	E70/3432
Minerva						
Inferred	2.2	38.7	28.9	20.3	3.9	BAJV (Aug 2011) JORC 2004
Aurora						
Indicated	7.0	43.5	33.0	9.1	3.1	BAJV (Apr 2011) JORC 2004
Inferred	4.4	41.3	30.2	14.4	4.0	
Rusina						
Inferred	3.7	40.3	29.1	15.7	5.3	BAJV (Apr 2011) JORC 2004
Juturna						
Inferred	8.2	40.2	29.9	23.1	3.9	BAJV (Jun 2011) JORC 2004
Vallonia						
Inferred	1.5	36.6	28.0	22.6	3.9	BAJV (Jun 2011) JORC 2004
Cronus						
Inferred	2.8	39.3	28.3	13.3	2.8	BAJV (Jul 2012) JORC 2004
<b>BAJV sub-total</b>	<b>188.2</b>	<b>39.7</b>	<b>30.2</b>	<b>10.6</b>	<b>2.3</b>	
Cardea (1&2)						
Inferred	6.4	41.8	29.3	15.7	4.3	HDMJV (Aug 2011) JORC 2004
Cardea 3 (HDM)						
Indicated	1.1	42.8	30.0	16.8	4.0	HDMJV (Nov 2011) JORC 2004
Inferred	6.2	40.3	28.9	17.0	4.4	E70/3160
Ceres						
Inferred	15.0	40.9	31.7	19.5	3.0	HDMJV (Jul 2012) JORC 2004
<b>HDM sub-total</b>	<b>28.7</b>	<b>41.0</b>	<b>30.5</b>	<b>18.0</b>	<b>3.6</b>	
<b>Total Measured</b>	<b>35.3</b>	<b>39.2</b>	<b>30.5</b>	<b>5.8</b>	<b>1.3</b>	Aug-13
<b>Total Indicated</b>	<b>76.9</b>	<b>40.3</b>	<b>30.7</b>	<b>9.2</b>	<b>2.0</b>	Aug-13
<b>Total Inferred</b>	<b>144.2</b>	<b>39.2</b>	<b>29.6</b>	<b>12.5</b>	<b>2.8</b>	Aug-13
<b>South West WA TOTAL Bauxite</b>	<b>256.4</b>	<b>39.5</b>	<b>30.0</b>	<b>10.6</b>	<b>2.4</b>	Aug-13

# Fortuna grades based on FTIR analysis with ~10% samples validated by low temperature (148°) caustic digest and ICP analysis. All other resources were based on low temperature (148°) caustic digest and ICP analysis. This method simulates the low temperature Bayer process.

#Available Alumina figures were based on low temperature (148°) caustic digest- High temperature digestion may result in higher available alumina however the exact extent of this increase is not known at this time

BRL - BRL retain 100% beneficial interest in bauxite

BAJV - Bauxite Alumina Joint Venture area with Yanguang Resources Ltd where the BRL retains 30% beneficial interest in the bauxite rights.

HDMJV – Resources within joint venture with HD Mining & Investments Pty Ltd, the wholly owned subsidiary of Shandong Bureau No.1 Institute for Prospecting of Geology & Minerals. At the time of writing the Company retains 100% beneficial interest. HD Mining can earn up to 60 % of bauxite rights upon completion of certain milestones including completion of a BFS leading to a decision to mine.



## COMPETENT PERSON STATEMENT

The information in this report that relates to **Cardea1&2, Juturna, Minerva, Rusina and Vallonia Mineral Resources** is based on information compiled by Peter Senini who is a Member of the Australian Institute of Geoscientists. Mr Senini was an employee of the Company at the time of resource estimation and remains competent person for the above mentioned resources. He 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 Senini consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to **Felicitas, Cardea3, Aurora, Ceres, Cronus and Fortuna Mineral Resources** is based on information compiled by Graham de la Mare who is a Member of the Australian Institute of Geoscientists. Mr de la Mare is employed by RungePincocKMinarco (RPM). Mr de la Mare 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 de la Mare consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

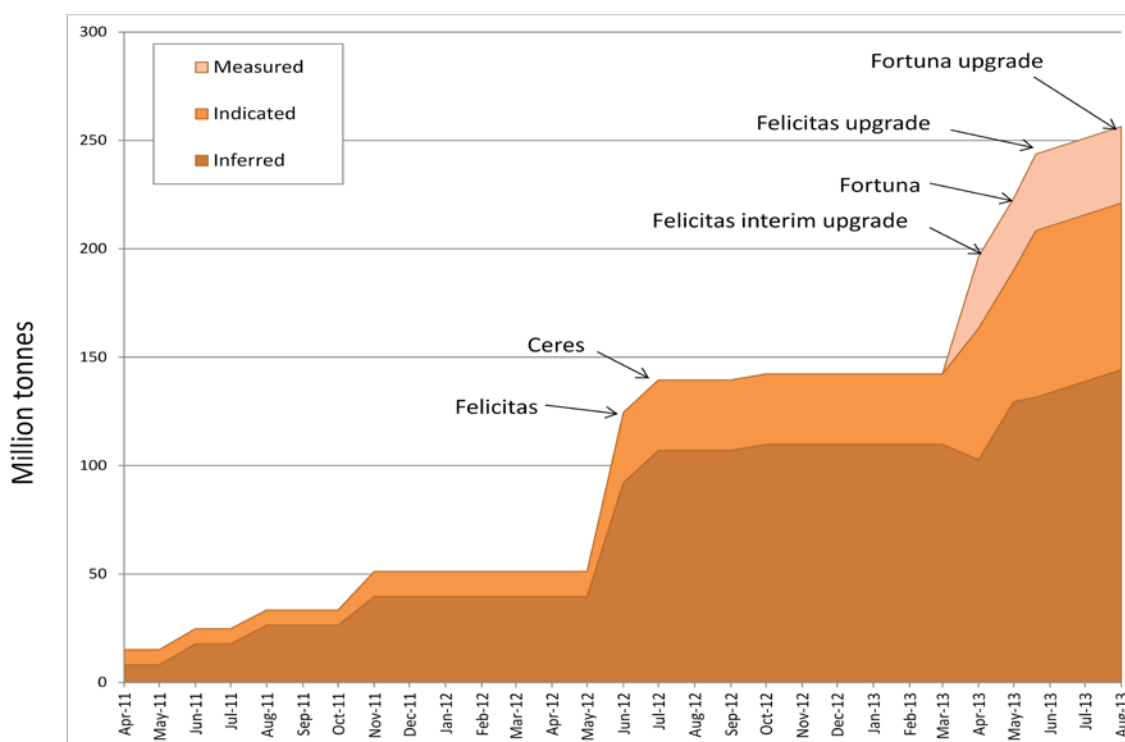
The information in this announcement that relates to **Exploration results** is based on information compiled by Mark Menzies, who is a member of the Australian Institute of Geoscientists. Mr Menzies is a qualified geologist and a full time employee, and has sufficient experience which is relevant to 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 Menzies has consented to the inclusion in this announcement of the Exploration Information in the form and context in which it appears.

## JORC Compliant Resource Statements

The following are Joint Ore Reserve Code (JORC) compliant Public Reports released to the ASX declaring the JORC resources referred to. These can be viewed on both the ASX and the Company websites, free of charge.

02/05/2011	Aurora, Rusina: Progress Report - Resource Upgrade. JORC 2004
21/06/2011	Vallonia, Juturna: Progress Report - Resource Upgrade. JORC 2004
22/08/2011	Cardea 1&2, Minerva: Resource Upgrade. JORC 2004
02/11/2011	Cardea3: Resource Update. JORC 2004
05/06/2012	Felicitas: 73Mt New Bauxite Resource at Felicitas Deposit
30/07/2012	Ceres: New Bauxite Resource at Williams Project Western Australia. JORC 2004
26/10/2012	Cronus: Annual Report to Shareholders. JORC 2004
02/05/2013	Felicitas: Upgrade of Darling Range Bauxite Resource, Felicitas
09/05/2013	Fortuna: 26.8Mt Bauxite Resource at BRL's Darling Range Fortuna Project
28/05/2013	Felicitas: Darling Range Bauxite Total Resources Increases to 243.7Mt, Felicitas JV Resource With Yankuang Increases to 147.9Mt. JORC 2004

**BRL and Partner resource growth (see Table 2 for resource details)**



## JORC list of reporting criteria for Fortuna resource, reported under 2012 reporting guidelines

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes included in the resource were sampled using Vacuum (VAC) drill holes on a nominal 160m by 80m grid spacing. A total of 510 holes were included in the resource for a total of 2,416m within the resource wireframes. Holes were drilled vertical to optimally intersect the mineralised zones.</li> <li>All drill hole collars in the supplied database have been accurately located with coordinates in MGA94 grid system. Down hole surveys have not been taken as drill holes are all less than 23m in depth and drilled vertically through the predominantly flat lying laterite.</li> <li>Vacuum samples were collected at 0.5m intervals. Whole samples were taken when sample return was less than 2kg. A twin riffle splitter was used for samples weighing more than 2kg, with one split collected in a calico bag for analysis and the remainder dropped on the ground. Sampling and QAQC procedures were carried out to industry standards.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>All drilling was undertaken using a tractor mounted vacuum drill rig utilising a 45mm drill bit.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were weighed. This provides an indirect record of sample recovery.</li> <li>All VAC samples were visually checked for recovery, moisture and contamination.</li> <li>No relationship exists between sample recovery and grade.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All holes were field logged by company supervised geologists. Weathering, lithology, alteration and mineralogy information were recorded.</li> <li>No diamond core was drilled.</li> <li>All drill holes were logged in full.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>No diamond core was drilled.</li> <li>All 0.5m VAC samples are collected at the rig. Typically, entire samples were analysed, however those weighing more than 2kg were split using a twin riffle splitter (50:50) used at the rig.</li> <li>Samples were submitted to Nagrom Laboratories in Perth for a variety of analysis techniques. Samples at Nagrom are dried in a convection oven for 12 hours at 105°C. Dried samples are weighed to determine that they are less than 2kg and any overweight samples were crushed to -6.3mm if necessary then split to less than 2kg. Samples are then pulverised in a vibrating disc LM-5 pulveriser to produce a 150µm pulp. These</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>pulps are split into 100g samples for retention and analysis.</p> <ul style="list-style-type: none"> <li>• Field QC procedures involved the use of certified reference materials (1 in 40), and field duplicates (1 in 20 for samples &gt;2kg in weight). The field duplicates have accurately reflected the original assay. Recognised laboratories have been used for analysis of samples. In the recent drilling campaign, 16 standards received an XRF analysis with 15 of the 16 standards passing within the control limits for the seven major elements. Certified standards analysed by FTIR show fluctuating values around the XRF acceptable limits.</li> <li>• The standard sampling procedure used by BRL is to submit the entire sample to Nagrom for analysis. Samples are only split at the rig when the sample weight exceeds 2kg. A twin riffle splitter is used to collect a sample for analysis with the remainder dropped on the ground. Field duplicates are collected from these split samples at a rate of 1:20</li> <li>• Sample sizes are considered appropriate to correctly represent the bulk tonnage mineralisation based on: the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and assay value ranges for bauxite.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples are analysed at Nagrom Laboratory in Perth by Fourier-Transform Infrared (FTIR) Spectroscopy or X-Ray Fluorescence Spectrometry (XRF) techniques. To validate the FTIR results, approximately 10% of samples returning greater than or equal to 23% available alumina underwent low temperature caustic analysis (148°) bomb digestion (BOMB) for analysis by ICP-OES using 1.0 ± 0.04g samples to determine available alumina and reactive silica, and X-Ray Fluorescence Spectrometry (XRF) to determine total Al<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, TiO<sub>2</sub> and a variety of trace elements.</li> <li>• No geophysical tools were used to determine any element concentrations used in this resource estimate.</li> <li>• Laboratory QAQC includes the use of internal standards using certified reference material, laboratory duplicates and pulp repeats. The field duplicates have accurately reflected the original assay. Certified standards have generally reported within acceptable limits although bias in the FTIR results show the need for careful calibration when using this analytical technique. The QAQC results confirm the suitability of the drilling data for use in the resource estimation.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RPM has not independently verified significant intersections of mineralisation.</li> <li>• No twin holes were drilled.</li> <li>• BRL geologists logged all drill samples at the rig, with a minimum logging interval of 0.5m. Regular chip-tray samples were collected as permanent physical records for audit and validation purposes, and all holes photographed for future reference and reconciliation of assay results with geology. All logging data was captured in digital logging devices to ensure consistency of coding and minimise data entry errors. Logging is described using the BRL Bauxite Logging Codes preloaded into the data logger.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Assay values that were below detection limit were adjusted to equal half of the detection limit value. Intervals with no samples were left blank in the database.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All the drill holes used in the resource estimate have been accurately surveyed in MGA grid co-ordinates. Down hole surveys have not been taken as drill holes are all less than 23m in depth and drilled vertically through the predominantly flat lying laterite.</li> <li>Collars have been located in UTM, MGA94, Zone 50S co-ordinates.</li> <li>Topographic surface based on Geoscience Australia's 250K topography series containing 5m contour data. The 520 surveyed Fortuna collar points were used to adjust the surface over the deposit area.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>The nominal drill hole spacing is 160m by 80m.</li> <li>The mineralised domains have demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource, and the classifications applied under the 2012 JORC Code.</li> <li>Samples have been composited to 0.5m lengths using best fit techniques. There were no residual sample lengths.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes are drilled vertical, which is approximately perpendicular to the orientation of the flat-lying mineralisation.</li> <li>No orientation based sampling bias has been identified in the data.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody is managed by BRL. Samples are stored on site prior to being trucked to Nagrom in Perth by courier. BRL employees have no further involvement in the preparation or analysis of the samples.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>A desktop review of sampling techniques was carried out by RPM. From the reports provided, the sampling appears to be conducted to industry standards.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The database is validated by rOREdata before sending to BRL geologists. All drill logs are validated digitally by the database geologist once assay results are returned from the laboratory.</li> <li>RPM also performed data audits in Surpac and checked collar coordinates, down hole surveys and assay data for errors. No errors were found.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Site visits have not been conducted by RPM.</li> <li>A site visit has not been conducted as the deposit only meets the criteria for Inferred Mineral Resource. If ongoing work allows for an upgrade to the Mineral Resource, a site visit will be undertaken by RPM.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> </ul>	<ul style="list-style-type: none"> <li>The confidence in the geological interpretation is considered to be good. The geological setting is laterite overlying granitic basement. The bauxite mineralisation is related to the weathering of granite or mafic rocks. The deposit is similar in style to many bauxite deposits in the region.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>Geochemistry has been used to assist identification of the rock type applied in the interpretation process.</li> <li>The deposit is tabular in geometry, with clear boundaries which define the mineralisation. Extensional drilling has supported and refined the model and the current interpretation is considered robust.</li> <li>Outcropping of mineralisation has supported geochemistry. The mineralised domains are wireframed based on geochemistry and geological logging.</li> <li>Extensional drilling has confirmed geological and grade continuity.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Fortuna resource area extends over a strike length of 5.1km (from 6,489,680mN to 6,494,800mN), has an average width of 1.8km (from 440,910mE to 442,700mE) and was modelled from surface to a depth of approximately 13m below surface.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> </ul>	<ul style="list-style-type: none"> <li>Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades within the bauxite domain using Surpac software for 7 elements; available alumina, reactive silica, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, Fe<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub> and LOI. No high grade cuts were deemed necessary. Drill hole sample data was coded using mineralisation wireframes and composited to 0.5m lengths using the fixed length technique. Maximum extrapolation distance from data points was 80m, half of the 160m drill hole spacing.</li> <li>No previous mining activity has taken place at Fortuna. A previous estimate of Fortuna was completed on the Cook property in April, 2013. Wireframes were modified on the Cook property and extended to the south onto the Adamson property as a result of the additional drilling. Reporting of the updated Mineral Resource verifies the previous Mineral Resource reported on the Cook property.</li> <li>It is assumed that there will be no by-products recovered from the mining of bauxite. The non-grade elements estimated are Fe<sub>2</sub>O<sub>3</sub>, and TiO<sub>2</sub>. The deleterious elements estimated are reactive silica, whole rock SiO<sub>2</sub> and LOI.</li> <li>The parent block size is 80m NS by 40m EW by 1m vertical with sub-cells of 40m by 20m by 0.5m. The parent block size was selected on the basis of being approximately 50% of the average drill hole spacing in the deposit. Block discretisation was set to 4 by 4 by 2. An orientated 'ellipsoid' search was used to select data and was based on parameters taken from the variography. Two passes were used; the first pass used a range of 200m, with a minimum of 10 samples. For the second pass, the range was extended to 400m, with a minimum of 10 samples. A maximum of 32 samples was used for each pass. A maximum of 4 samples per hole was used. A hard boundary was applied to the estimation.</li> <li>No assumptions were made on selective mining units.</li> <li>There is a strong positive correlation between Al<sub>2</sub>O<sub>3</sub> and available alumina and also between available alumina and LOI. Both Al<sub>2</sub>O<sub>3</sub> and available alumina show a strong negative correlation with Fe<sub>2</sub>O<sub>3</sub>. There is a strong negative correlation between LOI and Fe<sub>2</sub>O<sub>3</sub>. The remaining elements are un-correlated.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>The deposit mineralisation was constrained by wireframes constructed using down hole geochemistry and associated lithological logging. The optimum bauxite mineralisation is characterised by high available alumina and very low reactive silica (preferably with a ratio of better than 10:1). The basal extent of the bauxite was determined by a noticeable increase in reactive silica with associated decrease in available alumina across a 0.5m interval. This geochemical change generally coincided with intervals logged as transitional or clay material. The base of logged gravel coincided with the upper limit of the bauxite material. The wireframe was applied as a hard boundary in the estimate.</li> <li>To assist in the selection of appropriate high grade cuts, log-probability plots and histograms were generated. The data from the bauxite domain typically showed normal distributions for all the elements except for reactive silica and total silica which showed a slight positive skewness. The lack of any distinct breaks in the shape of each distribution on the log probability plots and population histograms, and the very low CV values, suggest that no high grade cuts are required.</li> <li>A three step process was used to validate the model. A qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling. A quantitative assessment of the estimate was completed by comparing the average grades of the composite file input against the block model output for the mineralised domain. A trend analysis was completed by comparing the interpolated blocks to the sample composite data within the bauxite domain. This analysis was completed for 160m northings and 4m bench heights. Validation plots showed good correlation between the composite grades and the block model grades.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource has been reported at a 25% available alumina cut-off grade.</li> <li>BRL is operating in its own right and under two Joint Ventures, with Yankuang (BAJV) and HD Mining (HD Mining JV) respectively. The purpose of BRL activity is to explore for bauxite, where bauxite is defined under the JV's as heterogeneous material composed primarily of one or more aluminium hydroxide minerals and having more than 25% available alumina. BRL extend this requirement to its 100% bauxite exploration activities, which includes the Fortuna Mineral Resource. BRL believes that the selected cut off at Fortuna (25% available alumina) results in a product that is viable for alumina refining.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of</i></li> </ul>	<ul style="list-style-type: none"> <li>RPM has assumed that the deposit could potentially be mined using medium to large scale open pit techniques. The minimal amount of overburden and shallow nature of the deposit could allow mining to be carried out with surface mining equipment, but this has not been verified with an economic study.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Metallurgical factors or assumptions</b>	<p><i>the mining assumptions made.</i></p> <ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>No assumptions have been made regarding metallurgy other than the material could be refined using the industry recognised Bayer Processing method.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and 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 and 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 made.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Fortuna Project is not subject to any environmental liabilities.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>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 and representativeness of the samples.</i></li> <li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>Bulk density is assumed. A value of 2.17t/m<sup>3</sup> was assigned to bauxite and waste material. This was based on 89 reported measurements on diamond core samples analysed from the BAJV drill program on the adjacent Felicitas deposit. Samples were weighed using the water immersion technique.</li> <li>The 89 measurements have been recorded from 16 diamond drill holes at the Felicitas deposit. The samples have returned specific gravity values between 1.55t/m<sup>3</sup> and 2.85t/m<sup>3</sup> with an average bulk density figure of 2.32t/m<sup>3</sup>. The first quartile value of 2.17t/m<sup>3</sup> has been applied to the block model. This is considered a conservative assignment of bulk density to allow for void spaces present in the material.</li> <li>The bulk density of the mineralisation and waste material was assigned. This is considered adequate for an Inferred Mineral Resource.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li><i>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 and metal values, quality, quantity and distribution of the data).</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012). From the information provided the deposit displays reasonable geological and mineralisation continuity, however due to the wide drill spacing, both geological and grade continuity is assumed rather than verified. The deposit meets the criteria for Inferred Mineral Resource.</li> <li>The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of a single mineralised domain. This model has been confirmed by extensional drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource</i></li> </ul>	<ul style="list-style-type: none"> <li>Internal audits have been completed by RPM which verified the technical inputs, methodology,</li> </ul>



Criteria	JORC Code explanation	Commentary
<p><b>Discussion of relative accuracy/confidence</b></p>	<p><i>estimates.</i></p> <ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and 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 and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<p>parameters and results of the estimate.</p> <ul style="list-style-type: none"> <li>• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>• The Mineral Resource statement relates to global estimates of tonnes and grade.</li> <li>• The deposit has not previously been mined and is not currently being mined.</li> </ul>