

16<sup>th</sup> July 2014

## Gibbsitic bauxite at South Johnstone confirmed by XRD Laboratory Results

- Suitability of bauxite for low temperature processing confirmed
- Gibbsite shown to be main mineral phase present in South Johnstone bauxites (36-48%)

Queensland Bauxite Limited (ASX:QBL) is pleased to announce that X-ray Diffraction (XRD) results have been received for selected drill samples from our South Johnstone Bauxite Project in Queensland.

This work provides further insight into the nature of the South Johnstone bauxite.

The XRD work confirms gibbsite to be the dominant mineral phase present. This is the preferred form of bauxite as it is easier to process than non-gibbsitic bauxite. The negligible amount of boehmite (0-2%) and diasporite (0-3%) further confirms the suitability and preference of low temperature processing.

Details of QBL's 30 million tonne Inferred Resource at South Johnstone referred to in the announcement released to the market on 3 July entitled 'Update on South Johnstone Bauxite Project' were reported in QBL's announcement addendum of 17 June 2014 with the following parameters

Domain	Area	Thickness	Volume	Tonnage	Grade (Area Avr.)	
Areas	(km <sup>2</sup> )	m	m <sup>3</sup>	tonnes	Av Al <sub>2</sub> O <sub>3</sub>	Rx SiO <sub>2</sub>
A to K	9.226	1.8	17,053,070	30,753,576	25.2	6.8

There have not been any material changes to the information since that time.

Mineral ID	MASS%			
	SJAC 014 0.5-1.0	SJAC 019 1.0-2.0	SJAC 023 1.0-2.0	SJAC 052 1.0-2.0
Clay mineral	5	16	6	9
Zeolite	3	1	6	3
Zeolite (with P)	<1	0	2	0
Serpentine group	1	2	1	1
Clinocllore	2	1	1	0
Kaolinite	2	5	2	2
Mica	1	1	2	1
Alpha quartz	10	5	7	6
Al-phosphate	1	0	0	0
Al-Fe phosphate	2	0	0	0
Gibbsite	36	43	48	47
Boehmite	0	<1	0	2
Diaspore	0	0	<1	3
Goethite	7	4	1	3
Goethite (Al)	4	5	1	3
Hematite	3	3	5	5
Maghemite	0	3	7	5
Magnetite	10	0	0	0
Magnetite (Ti)	5	6	0	4
Anatase	5	2	7	5
Gypsum	0	<1	0	0
Pyrite	0	-1	-1	-1

Table 2. Results of XRD analysis of South Johnstone Samples

In conclusion, XRD testing has shown the South Johnstone bauxites to be predominantly gibbsite with lesser amounts of iron/titanium oxides, clay minerals and quartz.

Yours sincerely,



Pnina Feldman  
Chairperson  
Queensland Bauxite Limited

## **Additional Information**

### **X-ray Diffraction (XRD) Analysis at South Johnstone**

Three bauxite samples SJAC 014 0.5-1.0, SJAC 23 1.0-2.0 and SJAC 32 1.0-2.0, and one of sub-bauxitic grade SJAC 019 1.0-2.0, were selected for XRD analysis to determine the mineralogy present. The depth range of the samples was chosen to start at least 0.5m below the surface so as not to include top soil.

### **Results**

The results presented in Table 2 show that the dominant mineral phase present in the samples is gibbsite (36-48%). Other aluminium phases requiring high temperature processing are either absent or in very low concentration (Boehmite 0-2% and Diaspore 0-3%). Various iron-rich phases are present and clays make up 5-9% of the bauxites, rising to 16% in SJAC 019 1.0-2.0 which explains its higher reactive silica.

Notes on Table 2: The quantitative results shown in the XRD table have been normalised to 100 %, and it should be noted that the values shown represent the relative proportion of the crystalline material in the sample. Totals greater or smaller than 100 % are due to rounding errors.

Negative results in the table indicate normally a larger than usual uncertainty in regard to the quantity of the phase reported; for some of the minor and trace phases it might also indicate an uncertainty in regard of the phase itself, or both.

- Overall crystallinity is low.
- Amorphous material is present.
- A large number of clay minerals are present, including smectite, interlayered smectite, vermiculite, palygorskite. These have been jointly reported under the general heading 'Clay mineral'.
- At least three different zeolites are present, ranging from pure Si-framework to Si/Al framework zeolites.
- 'Zeolite (with P)' has been reported, as there appears to be a framework zeolite with phosphorous present, which is different from the other zeolites. Identification is based on poorly defined peaks and needs to be taken with caution.
- Al-phosphate and Al-Fe phosphate represent simple phosphates ( $\text{AlPO}_4$  and  $(\text{Al,Fe})\text{PO}_4$ ). They are, nonetheless, structurally complex and variable. These might be present in all four samples.
- Boehmite and diaspore identification and quantification is based on largely overlapped patterns, and both presence and quantity are somewhat uncertain. Diaspore might be present in all samples.
- Goethite and Goethite (Al) have been independently quantified; the overall quantity should be reasonably accurate, but individual quantities are uncertain. Goethite might contain some Mn.
- Hematite might contain some Al.
- Maghemite might contain some Ti and possibly Al.
- Anatase is likely overestimated slightly, as only one peak could be used for quantification.
- The presence of pyrite is surprising; the quantities reported are very uncertain, as the pattern shows very strong signs of alteration/weathering. It might be overestimated.

## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (e.g. 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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>Air core drilling: Vertical holes to an average depth of 7.5 m was carried out to recover 0.5 m sample lengths downhole (holes SJAC 001 to 015) and 1 m sample lengths (holes SJAC 016 to 060). Holes were plugged at a depth of 1m (by octoplug) and backfilled. Pulverized material from air core, was collected by cyclone, dry (damp), in a calico bag. The entire drilled sample was collected to assure an appropriate sample size. Each bagged sample weighed approx. 3 kg.</li> <li>Hand held XRF analyser: All samples analysed by Innov-X in the field (calibrated to a bauxite standard of known composition) to provide semi-quantitative element oxides, with a selection of samples sent for assay by ALS Minerals.</li> <li>Sample Prep: In the ALS laboratory. samples were riffle split and 1000g pulverized to 85% &lt; 75 micron.</li> <li>Low Temp Leach for available alumina (according to process AI-LICP01) and reactive silica (Si-LIP01) using an ICP-AES instrument (Leach conditions – 1g leached in 10ml of 90gpl NaOH at 143 degrees for 30 minutes). These results were released in the company's announcement on 17 June 2014.</li> <li>High Temp Leach: High temperature digestion with 8.7% w/w NaOH for Bauxite Analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry according to process BX3/OES</li> <li>Elemental Oxides: Based on above, 10 samples from 5 drill holes from 4 of the Resource areas were analysed by ALS to determine elemental oxide percentages by fusion x-ray diffraction (ME-XRF13n process) and water content/loss on ignition by TGA furnace (TGA furnace).</li> <li>XRD: The samples were pressed into a back-packed sample holder to minimize preferred orientation of the particles. Powder X-ray diffraction (XRD) was used to analyse the</li> </ul>

Criteria	JORC Code explanation	Commentary																				
		<p>samples and a combination of matrix flushing and reference intensity ratio (RIR) derived constants was used in the quantification of the minerals identified in the samples. The instrument parameters are listed as follows:</p> <table><tr><th>XRD</th><th>Panalytical Empyrean</th></tr><tr><td>Radiation</td><td>Cu Kα 1.5406</td></tr><tr><td>Generator</td><td>45 kV 40 mA</td></tr><tr><td>Angular Range</td><td>5° to 65° 2θ</td></tr><tr><td>Time/Step</td><td>1s</td></tr><tr><td>Step Size</td><td>0.02° 2θ</td></tr><tr><td>Divergence Slit</td><td>0.5 mm</td></tr><tr><td>Anti-Scatter Slit</td><td>0.5°</td></tr><tr><td>Slit Type</td><td>Fixed</td></tr><tr><td>Rotation Speed</td><td>120 rpm</td></tr></table> <p>Results for weight percent oxides presented to 0.01% accuracy (Al<sub>2</sub>O<sub>3</sub> &amp; SiO<sub>2</sub> to 0.1% accuracy), Results for available Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub> presented to 0.1% accuracy. XRD results presented to 1% accuracy</p>	XRD	Panalytical Empyrean	Radiation	Cu Kα 1.5406	Generator	45 kV 40 mA	Angular Range	5° to 65° 2θ	Time/Step	1s	Step Size	0.02° 2θ	Divergence Slit	0.5 mm	Anti-Scatter Slit	0.5°	Slit Type	Fixed	Rotation Speed	120 rpm
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Drilling techniques	<ul style="list-style-type: none"><li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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>Air core drilling carried out to industry standard using an Underdale Proline aircore drill rig</li></ul>																				
Drill sample recovery	<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>Samples collected in calico bags labelled with hole number and depth interval, and duplicate label on an aluminium tag included in bag. Representative samples collected in chip trays labelled by hole number and interval.</li><li>The entire sample interval was collected and no loss of fines was noted</li></ul>																				
Logging	<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</li></ul>	<ul style="list-style-type: none"><li>Samples described geologically on site, analysed with hand-held XRF and photographed. Separation between potential bauxite (red/yellow) and weathered basalt (grey/black) was possible</li></ul>																				

Criteria	JORC Code explanation	Commentary
	<p>and metallurgical studies.</p> <ul style="list-style-type: none"> <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>	<p>at this stage. Samples with high alumina and low silica as recorded on the XRF were selected for analysis. All 60 holes were logged as described providing semi-quantitative percent total elemental oxide results for Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, Fe<sub>2</sub>O<sub>3</sub> and TiO<sub>2</sub>, over a total of 460 m.</p>
Sub-sampling techniques and sample preparation	<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> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Bagged samples were not subsampled.</li> <li>Samples were prepared by ALS to industry standards according to the techniques described above in sampling techniques</li> <li>Material soft and friable, grain size fine.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were analysed by ALS Minerals according to their industry standards.</li> <li>A QC certificate (BR14078034) was issued by ALS for the low temperature leach containing 2 standards, 2 blanks and 2 duplicate samples.</li> <li>A QC certificate (BR14078034) was issued by ALS for the high temperature leach containing 2 standards, 2 blanks and 2 duplicate samples</li> <li>A QC certificate (BR14086033) was issued by ALS for total oxide weight percent by fusion XRF and LOI by TGA furnace containing 4 standards, 1 blanks and 3 duplicate samples.</li> <li>A QC certificate (BR14090104_67782-27328381 was issued for for Al<sub>2</sub>O<sub>3</sub> avbl and rx SiO<sub>2</sub> presented to 0.1% accuracy with 2 standards, 2 blanks and 3 duplicates.</li> <li>These certificates show acceptable levels of accuracy (i.e. lack of bias) and precision have been established</li> </ul>
Verification of sampling and	<ul style="list-style-type: none"> <li>The verification of significant</li> </ul>	<ul style="list-style-type: none"> <li>Sampling was carried out by independent</li> </ul>



Criteria	JORC Code explanation	Commentary
assaying	<p><i>intersections by either independent or alternative company personnel.</i></p> <ul style="list-style-type: none"> <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> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<p>laboratory ALS <span style="float: right;">Limited</span></p> <ul style="list-style-type: none"> <li>Twinned sampling was carried out (SJAC 002 and 003) as detailed below and preliminary experiments carried out to test continuity at a distance between holes of 100m and 200m.</li> <li>Results stored by ALS Minerals and in two places in the Company's in-house system</li> <li>Assay results are presented as reported with no adjustment.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill hole collars were located using hand-held GPS (accuracy 5 m)</li> <li>Coordinates recorded in GDA94</li> <li>Topographic control to <math>\pm 10</math>m provided by 1:100,000 topographic sheets; Atherton 7963, Bartle Frere 8063, Ravenshoe 7962 and Tully 8062; contour elevation interval 20m.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>EPM18463 was drilled at a spacing varying between 100m and 5km within the target geological unit (Atherton Basalt Terrain), and at a spacing of 100m to 1.5km surrounding and within the areas defined as containing bauxite resource. The deposit is a surficial deposit formed on flat-lying to gently undulating topography giving reasonable confidence to interpolate geology from hole to hole.</li> <li>Samples were analysed from holes in Area A (SJAC 014), Area D (SJAC 023), Area I (SJAC 052) and Area J (SJAC 019). XRD results are presented in Table 2. Available alumina and reactive silica results of multi-screened fractions are shown in Table 3.</li> <li>No sample compositing has been applied</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The deposit is considered as a planar horizontal sheet of approximately 1 to 3 m thick located at surface (surficial weathered deposit developed on flow basalts of the Atherton Province.</li> <li>Shallow vertical drilling was carried out along the network of roads crossing the deposit sampling the mineralisation at right angles (i.e. yielding a true thickness).</li> </ul>
Sample security	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples were shipped to the company's storage facility (locked and alarmed) in Inverell, NSW, and there stored on pallets</li> </ul>

Criteria	JORC Code explanation	Commentary
		prior to shipment by TNT road transport to ALS minerals in Brisbane.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples were shipped to the company's storage facility (locked and alarmed) in Inverell, NSW, and there stored on pallets prior to shipment by TNT road transport to ALS minerals in Brisbane.</li> </ul>



## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Exploration Permit EPM 18463 is 100% held by Queensland Bauxite Limited</li> <li>The tenement is secure at the present time</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration in the area was carried out by Carpentaria Exploration Company in the 1960s. Znebejanek (1961) reported results for total (acid soluble) alumina rather than for alkali leach and results for silica were not reported.  The reports are based on drilling carried out using a Proline aircore rig and the subsequent analyses. The drill holes were plotted on the Queensland Two Mile Series Sheet 403. QBL transferred these data points to a database, and these data are plotted in Appendix Figure 1 and as cross sections Appendix Figure 2</li> <li>QBL total alumina results lie in the range from 32% to 38% Al<sub>2</sub>O<sub>3</sub> and these results compare directly with the results reported by Carpentaria Exploration Company (CEC) in 1961 of 31% to 37%</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Bauxite mineralisation occurs at surface in a weathering profile that is known from the drilling to extend from 0m to a depth of about 3m. It is found as a continuous blanket overlying flat-lying basalt flows of the Atherton Province within EPM18463. The deposit formed by weathering of the basalt surfaces with resultant leaching of silica downwards and concentration of alumina at the surface of the profile.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Collar coordinates, RL, dip and azimuth for the 60 holes drilled are presented in Table 3.</li> <li>Analytical data for the 4 holes discussed in this report are presented in Tables 2 &amp; 3</li> <li>No material data have been excluded</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>metres) of the drill hole collar</p> <ul style="list-style-type: none"> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> <ul style="list-style-type: none"> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <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 and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• No cut-off grades have been used on these results</li> <li>• No aggregations have been used on these data</li> <li>• No metal equivalent values have been reported</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Bauxite mineralisation occurs as part of a surface weathering layer can be modelled as a thin horizontal tabular body.</li> <li>• Vertical drill holes perforated this horizontal body at right angles, and therefore all down hole mineralisation intercept lengths are true thicknesses.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and 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 and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• See report body for Figure 1</li> </ul>
Balanced	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of</li> </ul>	<ul style="list-style-type: none"> <li>• All exploration data (ALS analytical</li> </ul>

Criteria	JORC Code explanation	Commentary
reporting	<i>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.</i>	results and their location and depth (range, etc.) are presented in the report – number of samples, analytical results, and ranges of values are presented and explained.
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Other exploration results; geologic logging of recovered samples, chip tray photographs and semi-quantitative hand-held XRF results are not included here as they are not material to the calculations presented</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>A shallow auger drilling program on an initial grid of 400 sq. m within the 250 sq. km Atherton Basalt target area is proposed (1600 points) to define the mineralisation within this area, with samples for the upper three metres collected at 0.5m intervals and being sent to ALS Brisbane for analysis for available alumina and reactive silica.</li> <li>At present the undrilled portions of the Atherton basalt remain prospective and a shallow drilling program is proposed as described above</li> </ul>

DATE	HOLE_ID	GDA94 mE	GDA94 mN	Prospect	Dip	From (m)	End of Hole (m)	Sampled from	Sampled to	# Samples
6/10/2011	SJAC001	390023	8049170	EPM18463	90°	0	10	0		
6/10/2011	SJAC002	390849	8051301	EPM18463	90°	0	3.7	0	3	3
6/10/2011	SJAC003	390849	8051301	EPM18463	90°	0	10	0	5	5
7/10/2011	SJAC004	385397	8050088	EPM18463	90°	0	10	0	4	4
7/10/2011	SJAC005	392399	8056117	EPM18463	90°	0	10	0	3	3
7/10/2011	SJAC006	393153	8057781	EPM18463	90°	0	10	0	3	3
8/10/2011	SJAC007	388584	8057721	EPM18463	90°	0	10	0	3	3
8/10/2011	SJAC008	387545	8057565	EPM18463	90°	0	10	0	3	3
8/10/2011	SJAC009	382253	8058734	EPM18463	90°	0	10	0	3	3
8/10/2011	SJAC010	380830	8059227	EPM18463	90°	0	4.7	0	3	3
8/10/2011	SJAC011	380718	8059509	EPM18463	90°	0	10	0	3	3
8/10/2011	SJAC012	377912	8054739	EPM18463	90°	0	10	0	5	5
8/10/2011	SJAC013	389944	8066115	EPM18463	90°	0	10	0	3	3
8/10/2011	SJAC014	393438	8069764	EPM18463	90°	0	10	0	3	3
6/10/2011	SJAC015	388408	8049019	EPM18463	90°	0	10	0	5	5
9/10/2011	SJAC016	387458	8048895	EPM18463	90°	0	10	0	3	3
9/10/2011	SJAC017	385419	8047470	EPM18463	90°	0	10	0	3	3
9/10/2011	SJAC018	384889	8048942	EPM18463	90°	0	10	0	3	3
9/10/2011	SJAC019	386840	8049665	EPM18463	90°	0	10	0	3	3
9/10/2011	SJAC020	387195	8051925	EPM18463	90°	0	10	0	3	3
9/10/2011	SJAC021	391610	8053861	EPM18463	90°	0	10	0	3	3
9/10/2011	SJAC022	391083	8054352	EPM18463	90°	0	10	0	3	3
9/10/2011	SJAC023	392226	8056683	EPM18463	90°	0	10	0	3	3
10/10/2011	SJAC024	390500	8053800	EPM18463	90°	0	10	0	3	3
10/10/2011	SJAC025	390100	8054900	EPM18463	90°	0	6	0	3	3
10/10/2011	SJAC026	390110	8056200	EPM18463	90°	0	6	0	3	3
10/10/2011	SJAC027	3857200	8057200	EPM18463	90°	0	10	0	3	3
13/10/2011	SJAC028	378202	8059729	EPM18463	90°	0	6	0	3	3
13/10/2011	SJAC029	380221	8059342	EPM18463	90°	0	6	0	3	3
13/10/2011	SJAC030	380791	8060443	EPM18463	90°	0	6	0	3	3
13/10/2011	SJAC031	380716	8059657	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC032	386809	8058775	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC033	387210	8058840	EPM18463	90°	0	4	0	3	3
14/10/2011	SJAC034	387264	8057949	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC035	391624	8056258	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC036	392335	8056666	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC037	392911	8056688	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC038	393133	8057119	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC039	392213	8057854	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC040	393040	8059036	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC041	391884	8058980	EPM18463	90°	0	6	0	3	3
14/10/2011	SJAC042	390804	8058922	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC043	390878	8054011	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC044	392288	8056007	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC045	392304	8055711	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC046	392287	8055466	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC047	392224	8054939	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC048	390661	8051283	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC049	390324	8050470	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC050	389841	8050523	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC051	389474	8050584	EPM18463	90°	0	6	0	3	3
16/10/2011	SJAC052	388713	8050515	EPM18463	90°	0	6	0	3	3
17/10/2011	SJAC053	390037	8048263	EPM18463	90°	0	6	0	3	3
17/10/2011	SJAC054	390446	8048543	EPM18463	90°	0	6	0	3	3
17/10/2011	SJAC055	389064	8048690	EPM18463	90°	0	6	0	3	3
17/10/2011	SJAC056	387539	8048508	EPM18463	90°	0	6	0	3	3
17/10/2011	SJAC057	386862	8047816	EPM18463	90°	0	6	0	3	3
17/10/2011	SJAC058	385593	8047473	EPM18463	90°	0	6	0	3	3
17/10/2011	SJAC059	385534	8049107	EPM18463	90°	0	6	0	3	3
17/10/2011	SJAC061	390657	8051278	EPM18463	90°	0	20	0	3	3

Table 3 South Johnstone Drilling Program Collar and Hole details



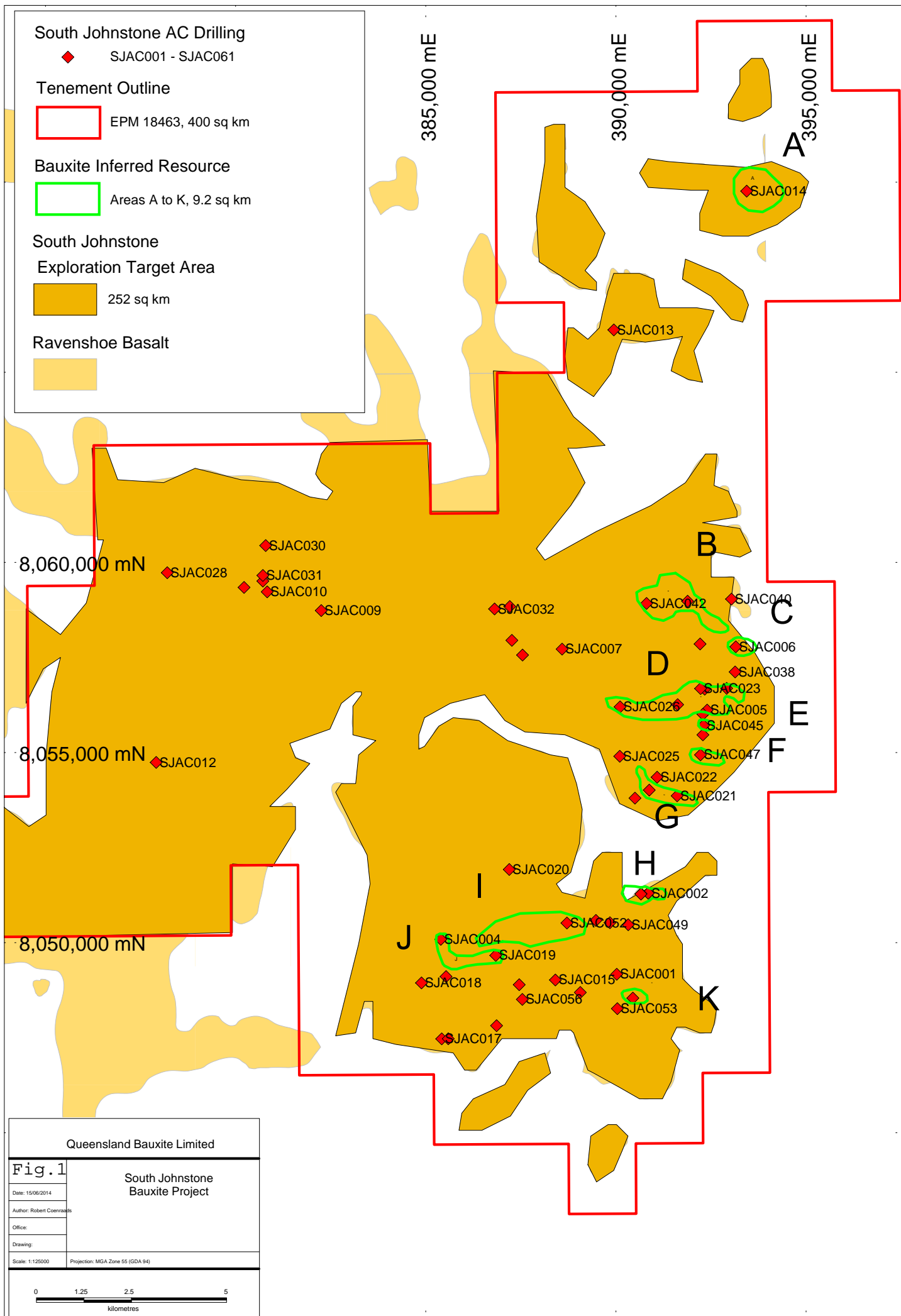
### **Competent Person's Statement**

*The information in this report that relates to exploration results and Mineral Resources is based on, and fairly represent, information and supporting documentation prepared by Dr Robert Coenraads (BA Hons, MSc, PhD). Dr Coenraads is a fellow of the Australasian Institute of Mining and Metallurgy.*

*Dr Coenraads contracts services to QBL.*

*Dr Coenraads has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking and to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code.*

*Dr Coenraads consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*



**Fig. 1**

South Johnstone  
Bauxite Project

Date: 15/06/2014  
 Author: Robert Coenraads  
 Office:  
 Drawing:  
 Scale: 1:125000  
 Projection: MGA Zone 55 (GDA 94)

Queensland Bauxite Limited