



## ASX RELEASE

21 JANUARY 2015

### HIGH GRADE BAUXITE CONFIRMED ADJACENT TO METALLICA'S URQUHART POINT HMS DEVELOPMENT ON CAPE YORK

#### Urquhart Point Project – New “Area A” Drill Results:

- Significant area of high grade pisolitic bauxite identified from 21 of a 23 hole drilling program at Area A at the Urquhart Point Project near Weipa, on Qld's Cape York
- Drilling on Area A on a 320m by 320m spacing has confirmed a defined pisolitic bauxite area with approximate dimensions of 3.5km by 600m (see Figure 2), for an area of bauxite of 2km<sup>2</sup> at an average thickness of 2.4m
- Average grades of the 21 holes within this defined area returned aluminium oxide (Al<sub>2</sub>O<sub>3</sub>) of 56.0% with average silicon dioxide (SiO<sub>2</sub>) of 8.0% SiO<sub>2</sub>. The grades are based on beneficiated screening +1.2mm fraction, with an excellent average yield of 65.5%, see Table 1.
- Average 2.4m thickness of bauxite mineralisation at an average of approximately 1.5 metre overburden to 1 metre bauxite mineralisation
- Strong synergies and cost savings are expected for the exploration, evaluation and potential future development of this bauxite deposit (and possibly Area B) adjacent to the Company's Urquhart Point Heavy Mineral Sands (“HMS”) mining project now under development for first mining and heavy mineral sand (HMS) production mid-2015
- The Urquhart Point Area A bauxite deposit is less than 14km from protected waters ideal for simple barge to ship export operation

#### Next Steps:

- Drilling results for nearby Urquhart Point Area B south of Area A (see Fig. 1) expected shortly
- Apply for a mining lease over Area A (and Area B or portion of Area B)
- Low temperature caustic leaching testwork on representative Area A bauxite samples for available alumina and reactive silica
- Larger samples collected that are representative for potential Direct Shipping Ore (“DSO”) to be supplied to potential bauxite off takers for their assessment
- Commence resource estimation and assessment studies
- Develop conceptual development plan (subject to appropriate permitting) to evaluate low cost bauxite mining, simple screening, trucking, barging and shipping operation using the Urquhart Point HMS mine infrastructure facilities

#### Bauxite Market outlook:

- Increasing bauxite demand and prices are expected to continue to intensify in 2015 due to the simultaneous major reduction in bauxite supply from Indonesia's export ban on bauxite and a recovery in the alumina market



Metallica Minerals Ltd (ASX: "MLM") is pleased to announce that high grade bauxite has been confirmed in initial total oxide assay results received from the ALS Brisbane laboratory for drill holes completed late last year in two target areas of the Company's Urquhart Point Bauxite Project south of Weipa on Queensland's Cape York Peninsula (see Figure 1).

The targets, Area A and Area B, are immediately southeast of the Urquhart Point HMS mining project currently under development by Metallica and due to commence first production of heavy mineral concentrate from mid-year this year.

In all, 81 holes were drilled using a Wallis Drilling Aircore rig on a nominal 320 x 320m grid pattern (*Refer to ASX Release dated 3 December 2014*), (see Figure 1).

The Area A program comprised 23 holes for a total of 167.5m, with an average depth of 7.3m. High grade pisolitic bauxite was encountered in 21 of these holes. The area is located adjacent to the boundary of Rio Tinto Australia's mining lease covering the South of the Embley bauxite project, an extensive bauxite plateau (see Figure 2).

Area B comprised 61 holes (total 300m drilled, average depth 4.9m) of which 7 holes were 160m spaced infill drill holes and 3 were duplicate holes. Assays for Area B holes are expected shortly.

The Area A and Area B schedule was a follow-up program to the initial exploration auger drill program in mid-2014 (*refer to ASX Release Date 11 July 2014*).

The Area A drill results are set out in Table 1, with drill hole locations shown in the Figure 2 with respective bauxite drill intercepts.

The drill results for Area A averaged 56.0% aluminium oxide ( $\text{Al}_2\text{O}_3$ ) and 8.0% silicon dioxide ( $\text{SiO}_2$ ).

The Company believes the close proximity of this significant new bauxite mineralisation to its planned new barge site facility at Urquhart Point suggests the Urquhart Point Bauxite deposits could be capable of supporting a low-cost, export barge and shipping bauxite operation of pisolitic Weipa-style bauxite.

The Urquhart Point Project is currently held 66.66% by Oresome Australia Pty. Ltd (a wholly owned subsidiary of Metallica Minerals Limited), and 33.33% its Joint Venture partner, Ozore Resources Pty. Ltd. Ozore Resources has contributed \$5m in funds into the Joint Venture, and upon funding a further \$2.5 million, will hold a 50% interest in the Joint Venture (*Refer to ASX Release dated 1 August 2014*). In addition to Urquhart Point HMS project near Weipa, which has a granted mining lease over a shallow high grade HMS deposit, Oresome holds a further ~2,500km<sup>2</sup> of exploration tenements in the Western Cape York region, prospective for HMS and bauxite.

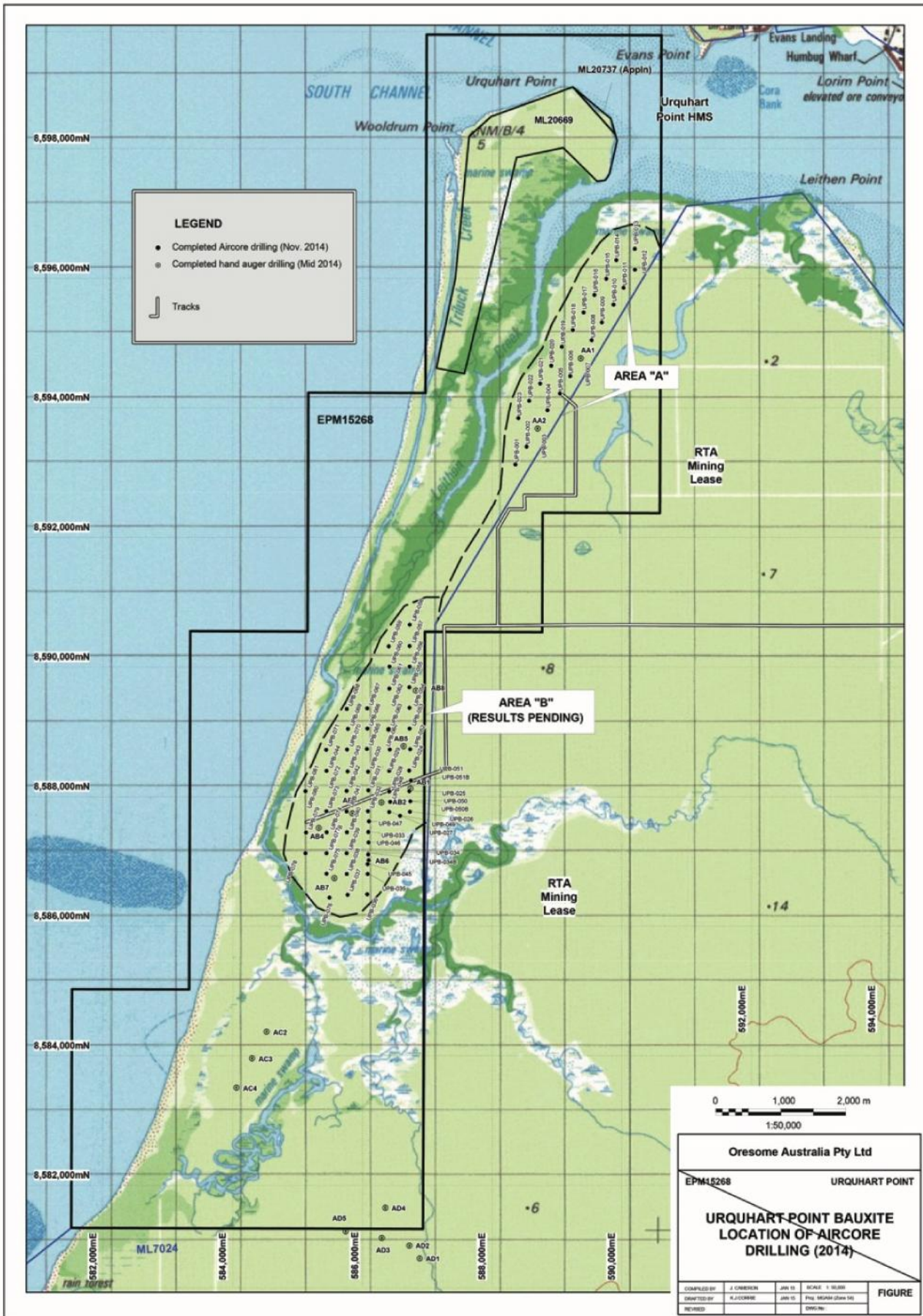


Figure 1: Urquhart Point HMS & Bauxite project Area A & B drill hole location



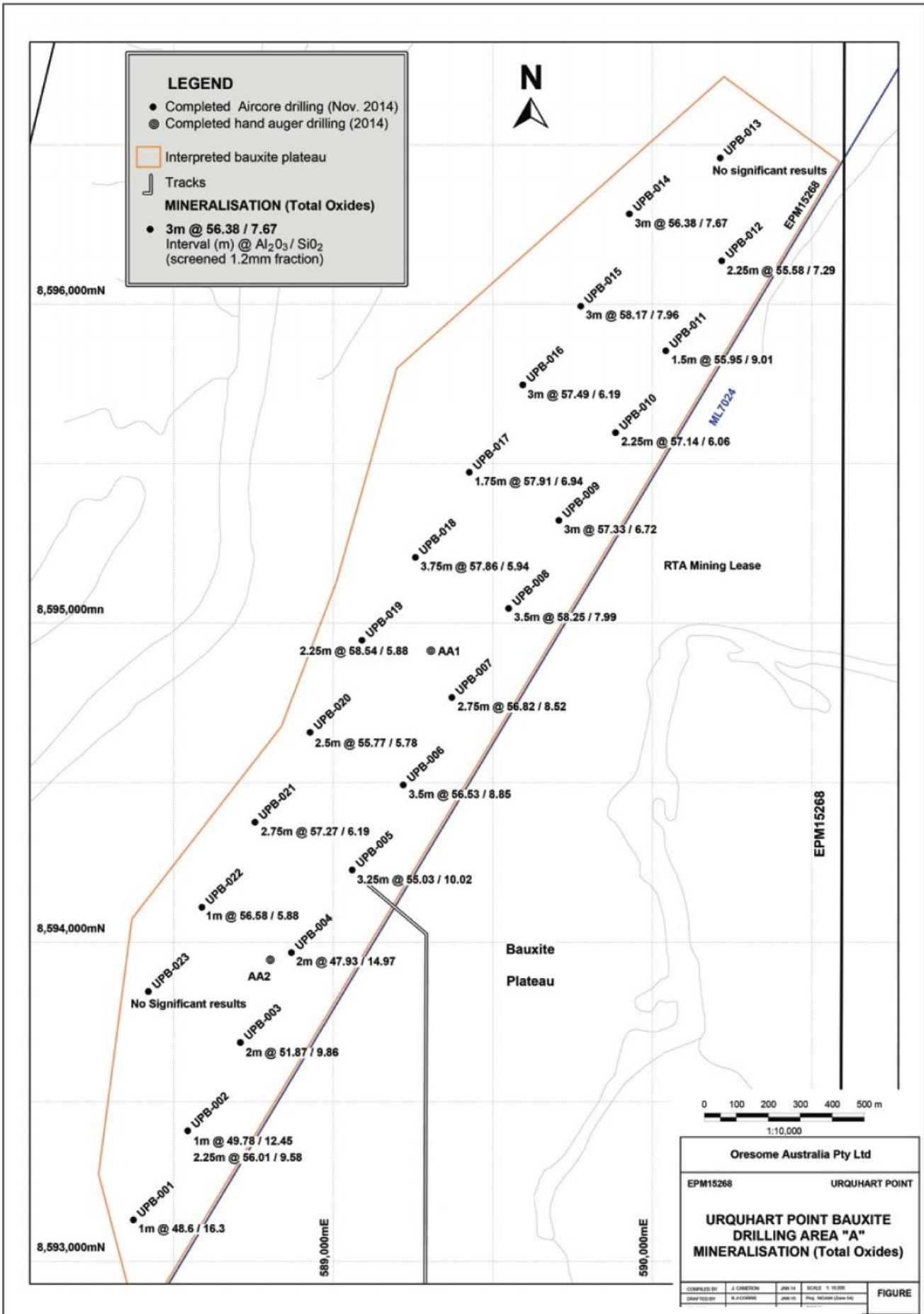


Figure 2: Area A drill hole locations and bauxite intercepts .

**Metallica Minerals' Managing Director, Mr Andrew Gillies:**

*"The Company is very pleased to report this significant value-add result and opportunity to our Cape York tenements (currently 66.66% interest through the Cape York Bauxite and HMS Joint Venture) as we have two exciting commodities (Bauxite and Heavy Minerals Sands (HMS)) to evaluate in parallel.*

*"The high grade bauxite drill results from Area A are a great start towards establishing an export bauxite operation. Having considerable pisolitic Weipa type bauxite grading  $>50\%$   $Al_2O_3$  and  $<10\%$   $SiO_2$  close to protected deep waters and given the excellent outlook for bauxite demand, is an opportunity we are excitably progressing.*

*"Metallica's Cape York bauxite strategy will prioritise the areas that are readily accessible, close to bargeable waters and which exhibit the best potential to host Direct Shipping Ores (DSO). "Our conceptual development strategy is to establish low cost, shallow dig, truck, simple mineral processing, and barge-ship bauxite and/or HMS operations. These are relatively simple low capital and operating cost and can be commenced small-scale and easily scaled up.*

*"As a result, this allows us to capture strategically located or modest size bauxite deposits for potential exploitation provided they are close to a barging and or ship loading site.*

*"We are very confident about the region's bauxite potential and are particularly excited for the bauxite potential adjacent to our Urquhart Point HMS project - given that Metallica plans to already have a barge and shipping HMS concentrate operation there by mid-year.*

*"Metallica, through the Cape York Joint Venture, is evaluating a number of opportunities/projects within arguably the world's best bauxite province and at a very good time with rising bauxite demand and prices stemming from substantial growth in aluminium production and the substantial growth in seaborne trade of bauxite, especially now that China's principal bauxite supplier, Indonesia, has put an export ban on bauxite in place.*

*"In essence, we believe there is excellent scope to develop and further define attractive bauxite deposits in the Joint Venture area of Western Cape York."*



### **Current Seaborne Bauxite Market**

Early in 2014, the Indonesian Government confirmed its ban on bauxite exports, legislated to restrict bauxite exports from Indonesia, and reinforced that laws encouraging down-stream processing in Indonesia would remain in place. Indonesia was at that point, China's largest external provider of bauxite.

It is estimated that approximately 40 million tonnes of bauxite was exported from Indonesia to China in calendar 2013. Combined with other imports, China had built up an estimated 12 month stockpile of required bauxite imports. Once these stockpiles are exhausted, it is expected that China will require several new significant sources of imported bauxite to satisfy demand.

China is the world's largest alumina producer and consumer, but is short in bauxite, which is being consumed at an ever-increasing rate. As a result, bauxite demand and prices are increasingly based on the continuing growth of the Chinese market and China is looking for a reliable, alternative, long-term supply of high-quality bauxite. Australia logistically is well placed to supply this demand.

Aluminium is now a more competitively priced metal than ever before and its consumption is rising faster than other metals. China has insufficient domestic bauxite to feed its burgeoning aluminium industry and imports 40% of its bauxite, mainly from Indonesia, Australia and India. Some bauxite is being imported from Guinea in West Africa, costing US\$90 per tonne (imported to China) – a clear indication of market stress about security of supply.

Cape York's proximity to China means Australia provides a logistical advantage over many other alternative supply sources and therefore positions Metallica through its 50% interest in the Cape York Joint Venture to take advantage of any increase in demand for Australian bauxite.

### **For more information please contact:-**

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**Competent Persons Statement**

*The Technical information contained in this report has been compiled and/or supervised by Mr Andrew Gillies B.Sci (Geology) M.AusIMM (Managing Director of Metallica Minerals Ltd) who is a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (M.AusIMM). Mr Gillies has relevant experience in the mineralisation, exploration results, being reported on to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Gillies consents to the inclusion of this information in the form and context in which it appears in this release.*

*The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by John Cameron (a geologist of over 25 years experience), and a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and a contract consultant to Metallica Minerals Ltd. Mr Cameron has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cameron consents to the inclusion of this information in the form and context in which it appears in this release/report.*

**Caution regarding Forward Looking Statements**

Certain statements made in this announcement contain or comprise certain forward-looking statements. Although Metallica believes that the estimates and expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in commodity prices and exchange rates and business and operational risk management. Metallica undertakes no obligation to update publically or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events.

<p>See attached respective <b>Table 1</b> JORC Code, 2012 Edition <b>Section 1</b> (Sampling Techniques and Data) and <b>Section 2</b> (Reporting of Exploration Results) for Urquhart Point drilling.</p>
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**Table 1: EPM15268 Urquhart Point Bauxite Exploration Drillhole Results**

Drillhole	Date Drilled	Easting MGA94 Z54	Northing MGA94 Z54	RL metres	Dip degrees	TD metres	Interval From metres	Interval To metres	Interval metres	Yield (+1.2mm) %	Al2O3 %	SiO2%	Fe2O3%
UPB-001	1/11/2014	588375	8593132	16	-90	6.00	4.00	5.00	1.00	31.55	48.59	16.29	13.9
UPB-002	1/11/2014	588546	8593408	13	-90	7.50	2.50	3.50	1.00	59.13	49.78	12.45	14.72
							4.00	6.25	2.25	77.22	56.01	9.58	10.41
UPB-003	2/11/2014	588710	8593685	11	-90	7.25	4.00	6.00	2.00	68.70	51.87	9.86	14.03
UPB-004	2/11/2014	588870	8593970	17	-90	5.75	2.25	4.25	2.00	30.34	47.93	14.97	14.91
UPB-005	2/11/2014	589060	8594228	8	-90	7.00	2.50	5.75	3.25	56.58	55.03	10.02	9.58
UPB-006	2/11/2014	589220	8594494	10	-90	6.00	2.50	6.00	3.50	70.26	56.53	8.85	8.71
UPB-007	2/11/2014	589375	8594768	9	-90	6.00	2.00	4.75	2.75	58.06	56.82	8.52	6.81
UPB-008	2/11/2014	589553	8595049	14	-90	7.00	2.25	5.75	3.50	73.68	58.25	7.99	4.49
UPB-009	2/11/2014	589708	8595324	13	-90	6.00	2.00	5.00	3.00	76.02	57.33	6.72	6.67
UPB-010	2/11/2014	589889	8595599	14	-90	7.00	3.50	5.75	2.25	86.19	57.14	6.06	6.58
UPB-011	2/11/2014	590043	8595857	12	-90	6.00	4.00	5.50	1.50	38.90	55.95	9.01	8.01
UPB-012	2/11/2014	590218	8596137	12	-90	8.00	4.75	7.00	2.25	67.31	55.58	7.29	8.75
UPB-013	2/11/2014	590217	8596459	12	-90	6.00	No bauxite intersection						
UPB-014	2/11/2014	589930	8596285	12	-90	9.00	5.75	8.75	3.00	66.07	56.38	7.67	5.79
UPB-015	2/11/2014	589777	8595998	7	-90	9.00	6.00	9.00	3.00	62.48	58.17	7.96	4.58
UPB-016	2/11/2014	589595	8595749	2	-90	10.00	6.00	9.00	3.00	70.87	57.49	6.19	6.02
UPB-017	3/11/2014	589428	8595475	12	-90	9.00	5.75	7.50	1.75	56.09	57.91	6.94	4.84
UPB-018	3/11/2014	589259	8595207	15	-90	10.00	4.75	8.50	3.75	71.72	57.86	5.94	5.54
UPB-019	3/11/2014	589092	8594947	10	-90	8.00	4.25	6.50	2.25	66.22	58.54	5.88	5.20
UPB-020	3/11/2014	588928	8594656	13	-90	7.00	4.00	6.50	2.50	70.18	55.77	5.78	8.61
UPB-021	3/11/2014	588757	8594378	16	-90	7.00	3.25	6.00	2.75	70.26	57.27	6.19	6.87
UPB-022	3/11/2014	588587	8594113	12	-90	7.00	5.25	6.25	1.00	62.13	56.58	5.88	6.85
UPB-023	3/11/2014	588422	8593846	16	-90	6.00	No bauxite intersection						
							<b>Average*</b>	<b>2.42</b>	<b>65.48</b>	<b>56.01</b>	<b>8.00</b>	<b>7.92</b>	

**Note:** \* Interval average is simple average of interval metres, Yield average is weighted for interval thickness, Al2O3/SiO2/Fe2O3 averages are weighted for Yield.



# JORC Code, 2012 Edition – Table 1 report template

## 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>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.</li> <li>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>	<p>Reverse Circulation aircore drillhole samples representing 0.25m intervals were collected in plastic bags through a cyclone mounted on the drill rig. The entire sample was collected in plastic bags to ensure, as much as possible, the representivity of the drilled material. All samples were geologically logged at the time of drilling to determine 1) the type of bauxite material, 2) when to stop the hole, 3) which samples to retain for analysis and 4) which samples to composite over 0.5m intervals.</p> <p>Samples were collected as individual 0.25m samples or composited over 0.5m intervals where the geologically logged material was similar.</p> <p>Samples that contained pisolites in significant volume were logged as bauxitic and retained for analysis. These samples were placed in polywoven sacks for dispatch to the laboratory.</p> <p>A small representative sub-sample (approx. 50g) was collected for each 0.25m interval and stored in a plastic sample tray as a reference.</p>
Drilling techniques	<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>	<p>Drilling was carried out by Wallis Drilling Pty Ltd using a Wallis Mantis 80 Aircore drill rig mounted on a 6x6 Toyota. Shallow (up to 10m) holes were drilled vertically using NQ rods with an NQ aircore drill bit with an OD of 93mm.</p>
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>	<p>Reverse Circulation aircore drilling was used due to its proven reliability in producing high sample recoveries, drilling of accurate sample intervals and recovery of representative samples.</p> <p>To ensure representivity of the material being drilled the entire sample was collected for each 0.25m interval of the drillhole.</p>
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 and metallurgical</li> </ul>	<p>All drilled intervals were geologically logged at 0.25m intervals. The logging was undertaken in a qualitative manner and focussed on documenting the amount and nature of the overburden, the pisolitic</p>

Criteria	JORC Code explanation	Commentary
	<p><i>studies.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>intervals and the floor to mineralisation. The bauxitic horizons were defined by the presence of pisolites and the absence of ferricrete/ironstone/clays.</p> <p>Logging included visual estimates of pisolitic bauxite concentration and pisolite size and nature.</p>
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximize 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>No sub-sampling of material was undertaken at the time of collection. The entire sample was collected over each 0.25m intervals directly from the cyclone on the drill rig. Sample weights were on average between 2-3 kg for the 0.25m samples and 4-6kg for the composited 0.5m samples.</p> <p>The samples were dispatched to and received by ALS laboratory at its sample preparation facility in Virginia, Brisbane. The samples were prepared for assay using the following method:</p> <ul style="list-style-type: none"> <li>• sort and report weight of received sample;</li> <li>• Riffle split samples into an A and B fraction of approximate equivalent weight. Retain and store Split B;</li> <li>• Weigh and dry Split A at 105°C and reweigh to determine sample moisture content;</li> <li>• Wet-screen Split A at 1.2mm, dry at 105°C and then pulverise to a nominal 85% passing 75 microns;</li> <li>• split off 50g fractions for total oxide analysis and retain residue.</li> </ul> <p>This preparation is regarded as being appropriate for bauxite analyses.</p> <p>As the entire sample was collected in the field no duplicate sampling was possible or deemed to be required.</p>
<p><i>Quality of assay data and laboratory tests</i></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</i></li> </ul>	<p>Sample analyses were undertaken by ALS laboratory at its Stafford facility in Brisbane.</p> <p>The analytical methods applied to the pulverised sample were as follows:</p> <ul style="list-style-type: none"> <li>• Total oxides by XRF (ALS code ME-XRF13n). Al<sub>2</sub>O<sub>3</sub>, BaO, CaO, Cr<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub>, SO<sub>3</sub>, SiO<sub>2</sub>, SrO, TiO<sub>2</sub>, V<sub>2</sub>O<sub>5</sub>, Zn, ZrO<sub>2</sub>.</li> <li>• H<sub>2</sub>O/LOI by TGA furnace (ALS code ME-GRA05)</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>of accuracy (ie lack of bias) and precision have been established.</i>	<p>No field duplicate samples were collected as the total sample was collected for analysis.</p> <p>In the laboratory as a Quality Control measure, one in every 9 samples was analysed in duplicate and seven laboratory standards and one blank were run in conjunction with the samples and the results reported.</p>
Verification of sampling and assaying	<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> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<p>One in every 9 samples was analysed in duplicate by ALS.</p> <p>No twinned holes were drilled due to the early stage nature of this investigation into assessing the presence of mineralisation.</p> <p>ALS provided the analytical data in csv and pdf format. The data were compiled by Oresome Australia into Excel spreadsheets and combined with geological logs, sample intervals and drill hole location data.</p>
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>	<p>Drill collars were located by hand held Garmin GPS considered to have an accuracy of <math>\pm 4</math> m.</p> <p>The grid system used was GDA94 Zone 54L.</p> <p>The base topographic control is the local 1:50,000 topographic maps (Weipa and Winda Winda Creek) which is adequate to identify overall and specific locations.</p>
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>	<p>23 holes were drilled on a nominal 320m x 320m grid.</p> <p>The aim of the program was to determine the presence or not of significant bauxite mineralization. The spacing was adequate for this purpose and is deemed sufficient to establish the degree of geological and grade continuity appropriate for an Inferred Mineral Resource estimate if required at a later date.</p> <p>Samples were collected as individual 0.25m samples or composited over 0.5m intervals where the geologically logged material was similar. No additional compositing of samples was undertaken at the laboratory analysis stage.</p>
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 mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<p>All drillholes are vertical and intersect the mineralisation at an approximate <math>90^{\circ}</math> angle. Considering the deposit type the sampling has shown the presence of broad zones of continuity of mineralisation in an unbiased manner. The mineralisation is regarded as horizontal due to the tabular nature of the style of deposit as demonstrated elsewhere on the Weipa Plateau and as the holes are vertical all intercepts are</p>

Criteria	JORC Code explanation	Commentary
		regarded as having True Width.
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	The samples were collected in large plastic sample bags on site which were secured using cable ties and bagged into white polywoven sacks and stored in a locked compound. The sacks were palleted and shrink-wrapped for shipment. It is considered that due to the nature (bauxite) and the value of the mineralisation potential, security interference was extremely remote.
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No independent audits of the drilling and sampling have been undertaken due to the early stage nature of the project.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <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> <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>	<p>Urquhart Point EPM15268 is located some 5 km west of the township of Weipa on the western side of Cape York. EPM 15268 is currently held 66 2/3% by Oresome Australia Pty Ltd (a 100% owned subsidiary of Metallica Minerals Limited), and 33 1/3% by its Joint Venture Partner, Ozore Resources Pty. Ltd. Ozore can increase its JV interest to 50% upon contribution of a further A\$2.5 million to the Joint Venture. There is an exploration access agreement with the local Indigenous Groups represented by the Wik and Wik Way. The area is covered by the Cape York Regional Plan (CYRP).</p> <p>EPM15268 is unaffected by the current CYRP and the tenement is in good standing.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	An appraisal has been undertaken of previous exploration for bauxite. Although some widespread sampling existed there was no evidence of systematic, grid-based drilling. Oresome undertook a maiden auger drilling and sampling program within the tenement in 2014. Refer ASX Release dated 11 July 2014.
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralization.</li> </ul>	The deposit type is bauxite laterite derived from the tropical to sub-



Criteria	JORC Code explanation	Commentary
		tropical weathering of aluminous sediments.
Drill hole Information	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <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>	Refer to Table 1 below.
Data aggregation methods	<ul style="list-style-type: none"> <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 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>	<p>For each drillhole, bauxite intervals are based on a cut-off of 45% total Al<sub>2</sub>O<sub>3</sub> and 15% total SiO<sub>2</sub> based on the results of analyses of beneficiated (+1.2mm) samples. A minimum interval thickness of 0.5m was applied.</p> <p>Down-hole assays were weighted on the basis of both intercept thickness and intercept recovery (Weight % 1.2mm) to determine the weighted average assay for the bauxite zone in each drill intercept. No upper cut-off grades were applied.</p>
Relationship between mineralization 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 mineralization 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 (eg 'down hole length, true width not known').</li> </ul>	<p>The mineralisation is regarded as horizontal due to the tabular nature of the style of deposit and as the holes are vertical all intercepts are regarded as having True Width.</p> <p>The down hole depths are True Widths.</p>
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>	Refer to Figures 1 and 2.
Balanced reporting	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades</li> </ul>	Representative reporting of both low and high grade results are reported (See Table 1 in this release).

Criteria	JORC Code explanation	Commentary
	<p><i>and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>	
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>The drilled area was identified due to its recognised proximity to known bauxite deposits within the adjoining Rio Tinto ML, desk-top mapping of potential bauxite plateau features in satellite image studies and encouraging results from limited hand auger drilling completed in 2014. Refer ASX Release dated 11 July 2014.</p>
<p><i>Further work</i></p>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<p>It is envisaged that further drilling will be carried out later in 2015 and may include infill drilling of areas already drilled and testing of their lateral extensions.</p>