

## Fourth discovery confirms Rare Earths province ABx tenement coverage increased

### Discovery of high grade REE at Rubble Mound 6 km southeast of Deep Leads

New rare earth element (REE) prospect discovered at Rubble Mound located 6 km east of ABx's Deep Leads REE project in northern Tasmania

Rubble Mound results include hole RM161 grading 1,620 ppm total rare earth oxides (TREO)

Rubble Mound discovery and the new tenement EL10/2021 confirm that ABx now controls an REE province that is at least 52 kms wide. Several other targets are still to be tested

ABx Group Limited (ABX) is pleased to announce the discovery of a new rare earth element (REE) prospect at Rubble Mound in northern Tasmania (see Figure 1).

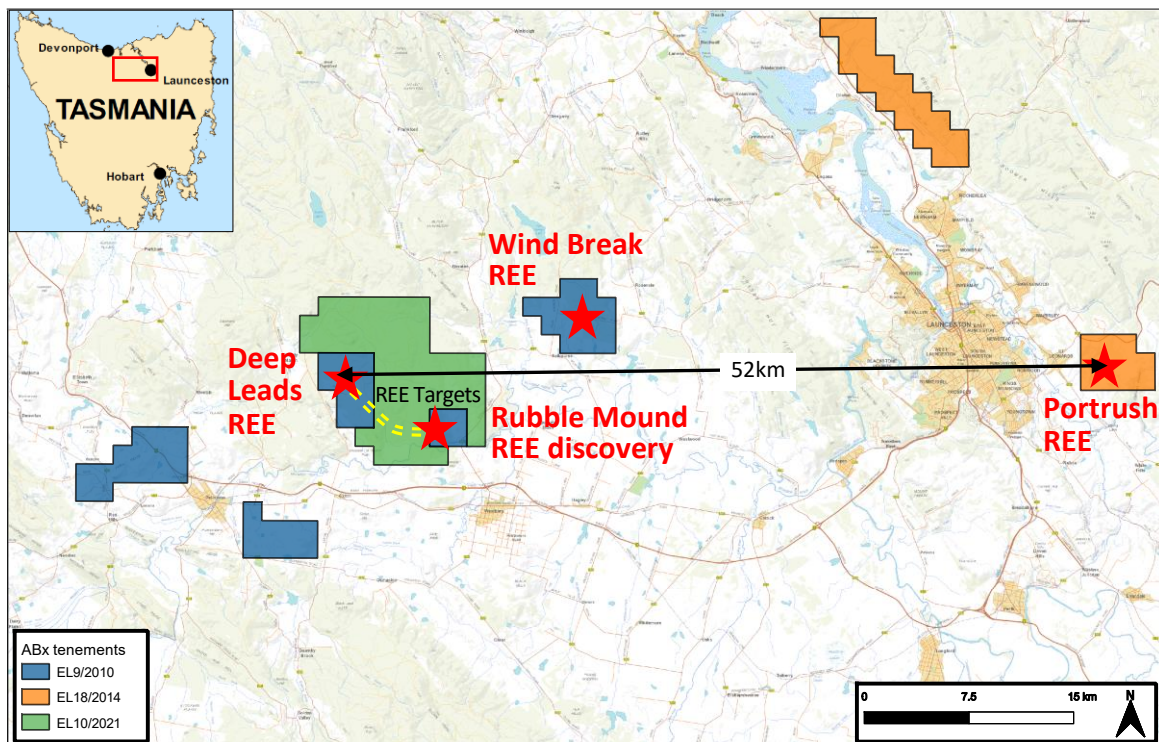


Figure 1: ABx leases in the 52km wide REE province. Deep Leads REE trends towards Rubble Mound (yellow dashes)

Rubble Mound REE discovery lies 6km southeast of Deep Leads. The line of lode from Deep Leads trends through the newly granted EL10/2021 to Rubble Mound in hardwood plantations. ABx's REE discoveries at Portrush and Wind Break are 52km and 16km from Deep Leads respectively.<sup>1</sup>

ABx CEO, Mark Cooksey commented; "Our new EL10/2021 secures the gap between Deep Leads and Rubble Mound which significantly increases the potential size of REE resources. Deep Leads REE mineralisation could connect to Rubble Mound.

Our exploration manager, Paul Glover and national operations manager, Nathan Towns are also assembling a bulk sample for metallurgical testwork to learn more about our potential to produce a saleable REE concentrate using simple leaching processes"; he said.

<sup>1</sup> see ASX releases 10<sup>th</sup> & 14<sup>th</sup> February 2022

## ABx REE discoveries across northern Tasmania

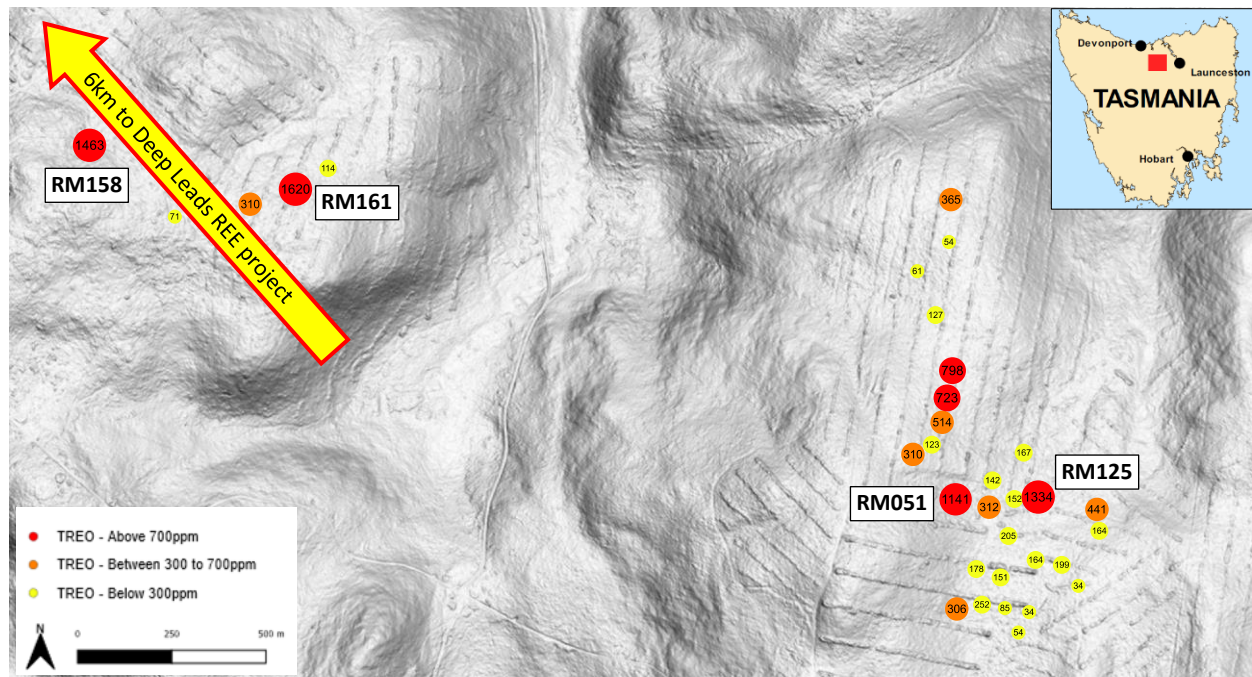
ABx is an emerging hi-technology and explorer-developer company that is the first company to discover clay-hosted REE in northern Tasmania, initially at Deep Leads. ABx's latest discovery at Rubble Mound confirms that ABx has at least four REE discoveries, as shown in Figure 1:

1. Deep Leads project (see ASX releases 10<sup>th</sup> & 14<sup>th</sup> February 2022)
2. Rubble Mound located 6 km southeast of Deep Leads (new discovery reported here)
3. Wind Break project 16 km northeast of Deep Leads (ASX releases 10<sup>th</sup> & 14<sup>th</sup> February 2022)
4. Portrush project located 52 km east of Deep Leads (ASX releases 10<sup>th</sup> & 14<sup>th</sup> February 2022)

## New REE discovery at Rubble Mound

These initial drilling results from Rubble Mound have identified similar REE mineralisation to that of the main REE discovery at Deep Leads and suggest that there is a 6 km long line of lode targets between Deep Leads and the new Rubble Mound discovery.

The newly granted exploration licence EL10/2021 secured this potential connection between Deep Leads and Rubble Mound, which is a series of ridges in hardwood plantation land. Like the Deep Leads REE, the Rubble Mound REE mineralisation is mainly in clays at the gradational boundary between a thick clay horizon and the weathered bedrock.



**Figure 2:** Initial assay results from the Rubble Mound REE discovery shown as total rare earth oxide (TREO). The geology of the line of lode is prospective for REE mineralisation over a distance of 6km to Deep Leads

**Table 1:** REE results of the 4 holes that reached the mineralised horizon at Rubble Mound<sup>2</sup>

Hole	From m	To m	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Other REE ppm	TREO ppm
RM051	6	7	314	94	37	7	66	622	<b>1,141</b>
RM125	12	13	255	65	56	8	50	899	<b>1,334</b>
RM158	13	14	267	63	83	12	65	973	<b>1,463</b>
RM161	6	7	17	4	4	1	4	1,591	<b>1,620</b>

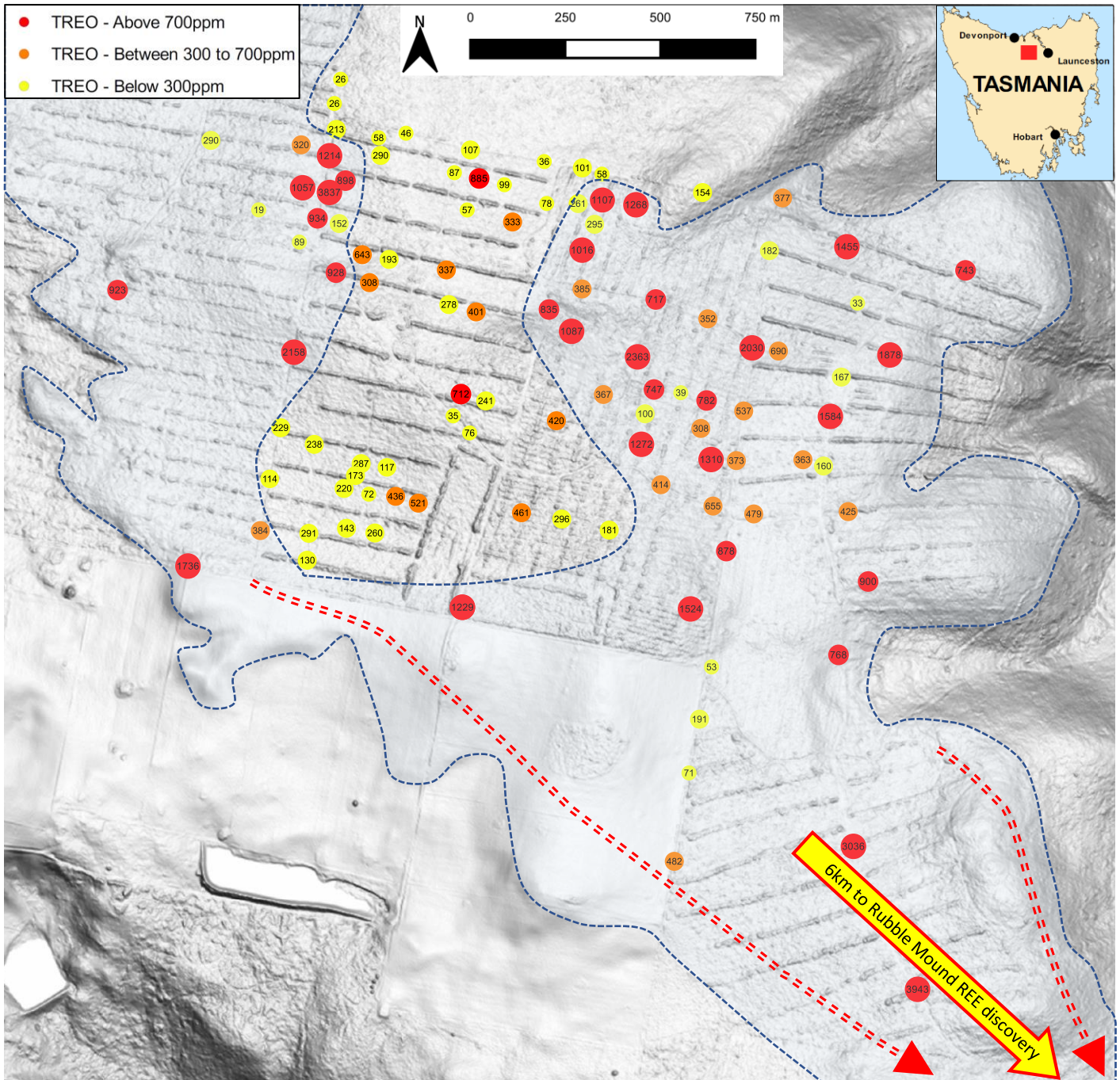
<sup>2</sup> See JORC Appendix 1 and Table 2: results & locations.

Note: the sample from the bottom of hole RM161 is rich in cerium (Ce) which usually occurs above the main REE zone in this REE province

## Deep Leads project and south-eastern trending line of lode

Deep Leads REE mineralisation extends over a 3.5km strike length and has a southeast trending line of lode heading towards Rubble Mound as shown in Figure 1 and 3.

The line of lode between Deep Leads and Rubble Mound has similar geology to Deep Leads and the newly granted tenement EL10/2021 allows ABx to explore the line of lode which occurs in recently harvested hardwood plantations.



**Figure 3:** Deep Leads drillholes with REE grades shown as total rare earth oxide (TREO). The geology of the line of lode is prospective for REE mineralisation over a distance of at least 6km from Deep Leads to Rubble Mound. This prospective ground is now secured by the recently granted tenement EL10/2021 (see Figure 1).

## Rare Earth Element market continues to exceed expectations

Prices of the super-magnet rare earth elements are rising strongly due to a significant shortage of supply and aggressive buying by the major consumers and governments. China currently controls 86% of global REE supply but is not expanding production at the same rate that demand for the critical REEs has risen.

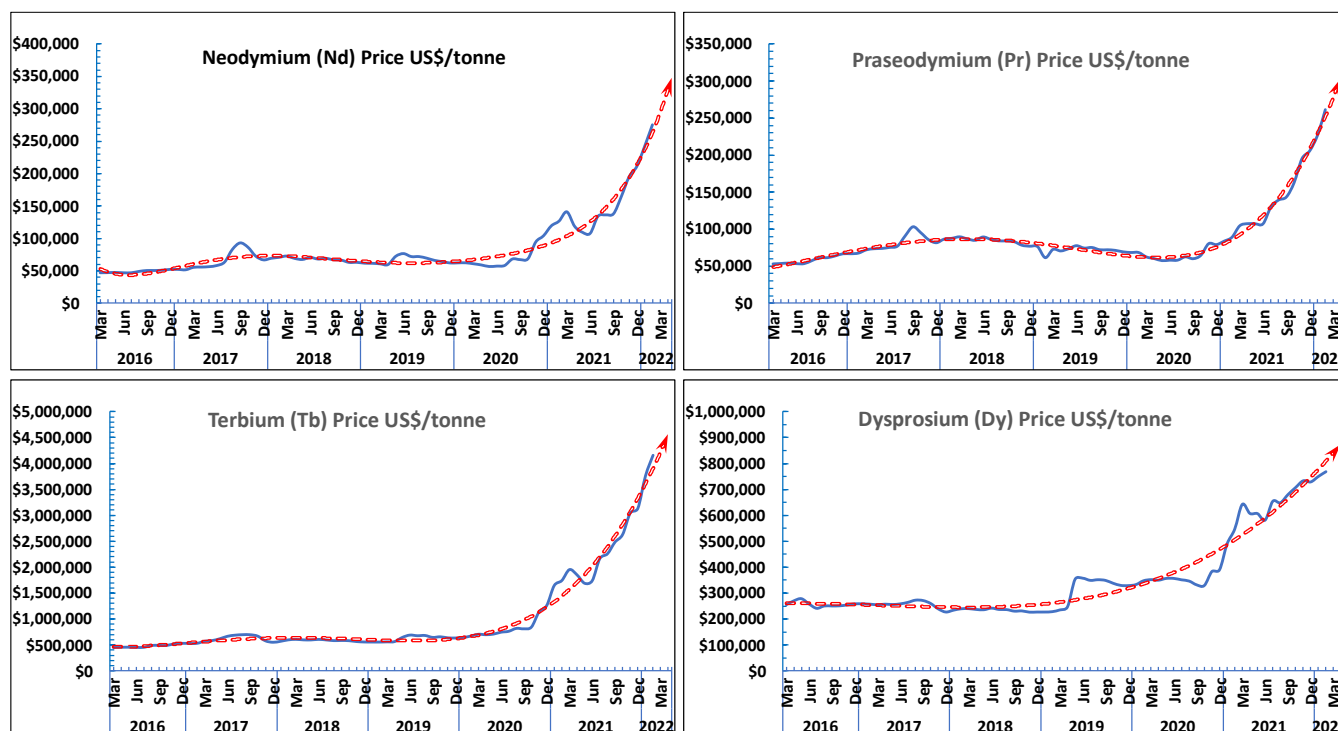


Figure 4: Market prices are rising strongly for the super-magnet suite of rare earth elements (REE) neodymium (Nd), praseodymium (Pr), dysprosium (Dy) and terbium (Tb)

The super-magnet suite of REE comprise neodymium (Nd), praseodymium (Pr), dysprosium (Dy), terbium (Tb) and samarium (Sm). They are in short supply and are needed for use in electric vehicles, wind turbines, mobile phones, computers and military applications. ABx's REE mineralisation is enriched in this super-magnet suite of REE, especially Nd and Pr.

ABx is exploring where welcomed and in land that may be amenable to early development.

ABx is increasing its ability to identify REE prospects in this province which has been subjected to a range of intense geological events. ABx has discovered a province that contains several prospects with strongly enriched clay-hosted REE mineralisation.

This announcement is approved for release by the board of directors.

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## Qualifying statements

**General:** The information in this report that relate to Exploration Information and Mineral Resources are based on information compiled by Jacob Rebek and Ian Levy who are members of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Rebek and Mr Levy are qualified geologists and Mr Levy is a director of ABx Group Limited.

**Tasmania:** The information relating to Exploration Information and Mineral Resources in Tasmania has been prepared or updated under the JORC Code 2012. Mr Rebek and Mr Levy have sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Rebek and Mr Levy have consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

**Table 2: drilling results & location data**

Hole	From m	To m	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Other REE ppm	TREO ppm
RM009	11	12	5	1	1	0	1	31	41
RM009	12	13	17	5	4	1	4	279	310
RM015	13	14	13	3	4	1	4	102	127
RM018	7	8	4	1	1	0	1	47	54
RM019	4	5	5	1	2	0	2	37	48
RM019	7	8	7	2	2	0	2	352	365
RM022	8	9	6	2	1	0	1	30	40
RM022	18	19	6	1	2	0	2	54	65
RM022	19	20	16	4	6	1	4	92	123
RM023	9	10	29	8	6	1	7	463	514
RM024	6	7	15	4	3	0	3	697	723
RM025	7	8	17	5	4	1	4	200	231
RM025	9	10	122	30	23	4	29	589	798
RM051	6	7	314	94	37	7	66	622	1,141
RM052	3	4	9	2	2	0	2	27	42
RM052	9	10	24	6	6	1	6	268	312
RM053	3	4	5	1	1	0	1	50	59
RM053	4	5	9	2	2	0	2	126	142
RM058	8	9	8	2	2	0	2	191	205
RM058	10	11	10	3	2	0	2	155	171
RM059	9	10	9	2	2	0	2	148	164
RM061	9	10	7	2	2	0	2	37	49
RM061	10	11	8	2	2	0	2	136	151
RM062	3	4	15	4	3	0	3	152	178
RM064	5	6	5	1	1	0	1	25	34
RM065	5	6	6	2	1	0	1	51	63
RM065	6	7	10	2	2	0	3	67	85
RM066	6	7	9	2	2	0	2	145	160
RM066	8	9	11	3	2	0	2	233	252
RM067	8	9	22	6	5	1	5	195	233
RM067	10	11	42	11	10	2	10	232	306
RM119	5	6	6	2	1	0	1	50	61
RM120	5	6	11	3	2	0	2	134	152
RM122	9	10	24	6	7	1	6	121	167
RM125	7	8	21	6	6	1	6	115	155
RM125	12	13	255	65	56	8	50	899	1,334
RM129	7	8	20	5	4	1	5	406	441
RM129	14	15	38	9	11	2	10	153	223
RM130	13	14	13	3	3	1	4	141	164
RM132	8	9	3	1	1	0	1	24	30
RM132	10	11	6	1	1	0	1	190	199
RM133	4	5	2	1	0	0	0	14	18
RM133	6	7	2	1	1	0	1	29	34
RM156	4	5	4	1	1	0	1	22	29
RM156	6	7	9	2	2	0	2	39	54
RM158	10	11	21	5	7	1	6	119	158
RM158	13	14	267	63	83	12	65	973	1,463
RM160	4	5	4	1	1	0	1	302	310
RM161	6	7	17	4	4	1	4	1,591	1,620
RM162	3	4	9	2	3	0	2	55	71
RM163	5	6	15	4	3	0	3	89	114
RM166	19	20	54	13	13	2	12	177	271
RM166	21	22	33	8	10	2	8	146	207

Hole	Northing	Easting
	Coordinates GDA94	
RM009	5407681	482573
RM015	5407967	482619
RM018	5408117	482646
RM019	5408204	482650
RM022	5407701	482612
RM023	5407747	482633
RM024	5407797	482643
RM025	5407853	482654
RM051	5407589	482661
RM052	5407573	482730
RM053	5407628	482737
RM058	5407514	482770
RM059	5407465	482826
RM061	5407429	482754
RM062	5407446	482704
RM064	5407358	482813
RM065	5407366	482763
RM066	5407373	482716
RM067	5407364	482664
RM119	5408057	482581
RM120	5407590	482782
RM122	5407685	482801
RM125	5407594	482831
RM129	5407569	482952
RM130	5407525	482957
RM132	5407455	482880
RM133	5407412	482914
RM156	5407316	482791
RM158	5408311	480877
RM160	5408191	481208
RM161	5408222	481301
RM162	5408165	481053
RM163	5408265	481368
RM166	5405869	480830

## APPENDIX 1

## JORC Code, 2012 Edition – Table 1 report

## 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>	<ul style="list-style-type: none"> <li>Drill holes samples to 25 metres maximum depth but typically to 12 metres depth</li> </ul>
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>	<ul style="list-style-type: none"> <li>Reverse circulation rotary percussion</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording &amp; assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery &amp; 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>Weight tests indicated reliable sample recovery</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 and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative. 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>Geologically logged in detail by senior professional geologists. Every sample photographed, with photos and logs and assays entered into ABx's proprietary ABacus database.</li> </ul>
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>Chips are subsampled using bauxite shovel method in accordance with ISO standards</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 (eg standards, blanks, duplicates, external lab checks) &amp; whether acceptable levels of accuracy (ie lack of bias) &amp; precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>All assaying done at NATA-registered commercial laboratories of ALS Brisbane Australia and Labwest Minerals Analysis Pty Ltd in Western Australia. Duplicate interlab assays done.</li> <li>Round robin assays with 4 other major laboratories confirmed accuracy and precision meets industry standards.</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>All assaying done at NATA-registered commercial laboratories of ALS Brisbane Australia and Labwest Minerals Analysis Pty Ltd in Western Australia. Duplicate interlab assays showed excellent correspondence.</li> </ul>
Location of data points	<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>GPS hole locations have been tested for accuracy on many prospects, all satisfactorily – within 1m.</li> </ul>
Data spacing and distribution	<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>Drilling typically at 50 to 75 metre spacing on mineralised prospects</li> </ul>
Orientation of data in relation to geological structure	<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>Vertical holes through flat-dipping bauxite is as good as it gets</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples collected and assembled onto pallets every day</li> </ul>
Audits or reviews	<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>Several audits confirmed reliability</li> </ul>

## 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>	<ul style="list-style-type: none"> <li>Satisfactory to excellent. All tenements are unencumbered....</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>3 industry majors and two customers have approved exploration methods and data collection, interpretation and reporting</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Bauxite deposit formed on Lower Tertiary basalts</li> </ul>

Criteria	JORC Code explanation	Commentary
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>	<ul style="list-style-type: none"> <li>GPS location.</li> <li>Airborne Radar RL topography</li> <li>All holes are short straight vertical holes</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 (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>	<ul style="list-style-type: none"> <li>All data are presented.</li> </ul>
Relationship between mineralisation widths & 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 (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation typically 3 to 6 metres thick and Drillholes are sampled at 1 metre intervals</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>N.A.</li> </ul>
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 and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All new results are reported in this report</li> </ul>
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>N.A.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg 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>Step-out drilling over a wider area has been planned, work plans submitted and new drill rig has been mobilised.</li> </ul>

END