ABx Group

ASX ANNOUNCEMENT
23 November 2021
ASX: ABX

ABx highest rare earth grades from drilling at Deep Leads Tasmania

- ABx has once again discovered a new record high grade of Rare Earth Elements (**REE**) in the first drill results from its recent step-out drilling campaign at **Deep Leads** in northern Tasmania
- Hole DL392 returned a grade of **493 ppm Nd_2O_3**, our highest neodymium grade to date from the Deep Leads discovery and had 1,878 ppm total rare earths oxide (TREO) – see Figures 2 & 3
- The thickness of the mineralised zone has been shown to be at least 3 metres thick
- Hole DL392 represents a 250 metre easterly extension of the REE mineralisation
- Hole DL392 revealed the geological setting of the REE at Deep Leads and has shown that drillholes need to penetrate further into broken, altered bedrock in areas of high water flow
- A specialist multi-purpose drill technology is being assembled for efficient drilling through this mixed zone of mineralised clays, wet clays, clay-broken rock mixture and harder bedrock
- The strike length of the Deep Leads REE exceeds 3.25 km and is open in several directions. Similar prospects exist across the region in the tenements held by ABx
- A large number of assays from drillholes recently drilled on the western flank of Deep Leads are pending, some from thicker zones of prospective geology
- Our soluble rare earths deposit differs from traditional hard rock REE deposits, being lower cost and dominated by the four super-magnet type of REEs, which are the highest value REE
- Results to date are consistent with the Ionic Adsorption Clay (IAC) type of REE mineralisation which can be rapidly developed and processed at low cost. ABx is advised that ABx is one of very few publicly listed discoverers of IAC deposits

ABx Group (ASX:ABX) is pleased to report recent assay results from its Deep Leads rare earth element (**REE**) discovery at the DL130 bauxite deposit in northern Tasmania, which is now proven to extend for more than 3.25 kilometres - see Figure 3.

Highest grade of super magnet REE to date and thicker intercepts

The intercept in hole DL392 has the highest grades of all four super-magnet REE to date, including 493ppm of neodymium oxide (Nd_2O_3), which is the main super-magnet REE [1].

The mineralisation in recent holes DL392 and DL393 is at least three metres thick, but the drill rig was unable to drill all the way through the mineralised zone due to mixtures of wet clays and broken, altered rock with high water flow rates. Hole DL393 is the first hole drilled into Target 2 (see Figure 3).

Results from the next 20 drillholes are pending

ABx awaits assay results from 20 more recent drillholes that can materially expand the areal extent of the Deep Leads REE mineralisation. These 20 holes with assays pending are shown on Figure 3.

[1] See JORC Statement Appendix 1

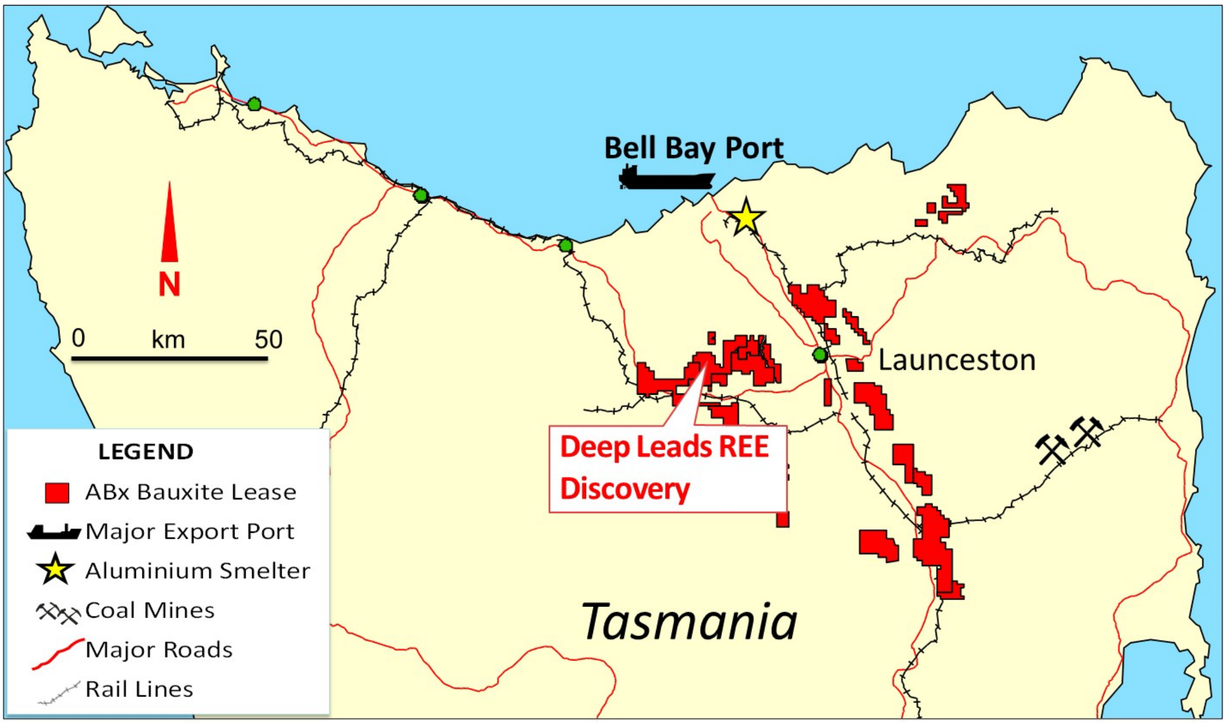

Figure 1: Location of ABx's Deep Leads REE Discovery in Northern Tasmania

Hole DL392 summary

Depth To (m)	Geology	Wet	Rock structure	REE Grade (Total Rare Earth Oxides TREO ppm)	Super Magnet REE Nd_2O_3 (ppm)	Super Magnet REE Pr_2O_3 (ppm)	Super Magnet REE Dy_2O_3 (ppm)	Super Magnet REE Tb_2O_3 (ppm)	Other REE (ppm)	TREO (ppm)
6	Damp clay				**9.1**	2.4	2.0	0.3	**66**	**79**
7	Damp clay & wet clay				**19.7**	5.2	4.0	0.7	**122**	**152**
8	Wet clay				**92.4**	24.8	16.3	2.8	**478**	**615**
9	Very wet clay & rock				**493.4**	**121.7**	**76.8**	**14.3**	**1,171**	**1,878**
10	Wet, broken altered rock				**258.9**	**70.5**	**40.3**	**7.4**	**608**	**985**

Drillhole could not penetrate firm bedrock

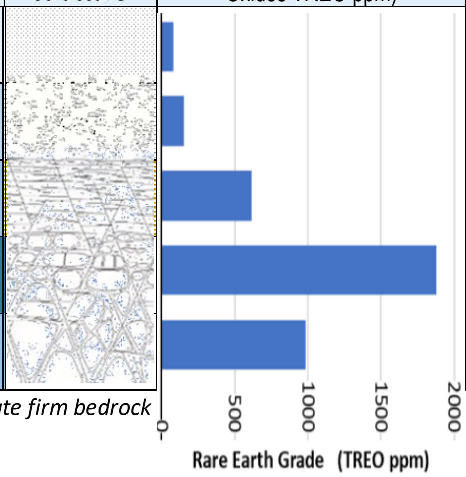

Figure 2: Drill log and REE grades of the mineralised intercept in hole DL392

Legend:	REE	= rare earth elements
	TREO	= total rare earth oxides
Super-magnet REE:	Nd_2O_3	= neodymium oxide
	Pr_2O_3	= praseodymium oxide
	Dy_2O_3	= dysprosium oxide
	Tb_2O_3	= terbium oxide

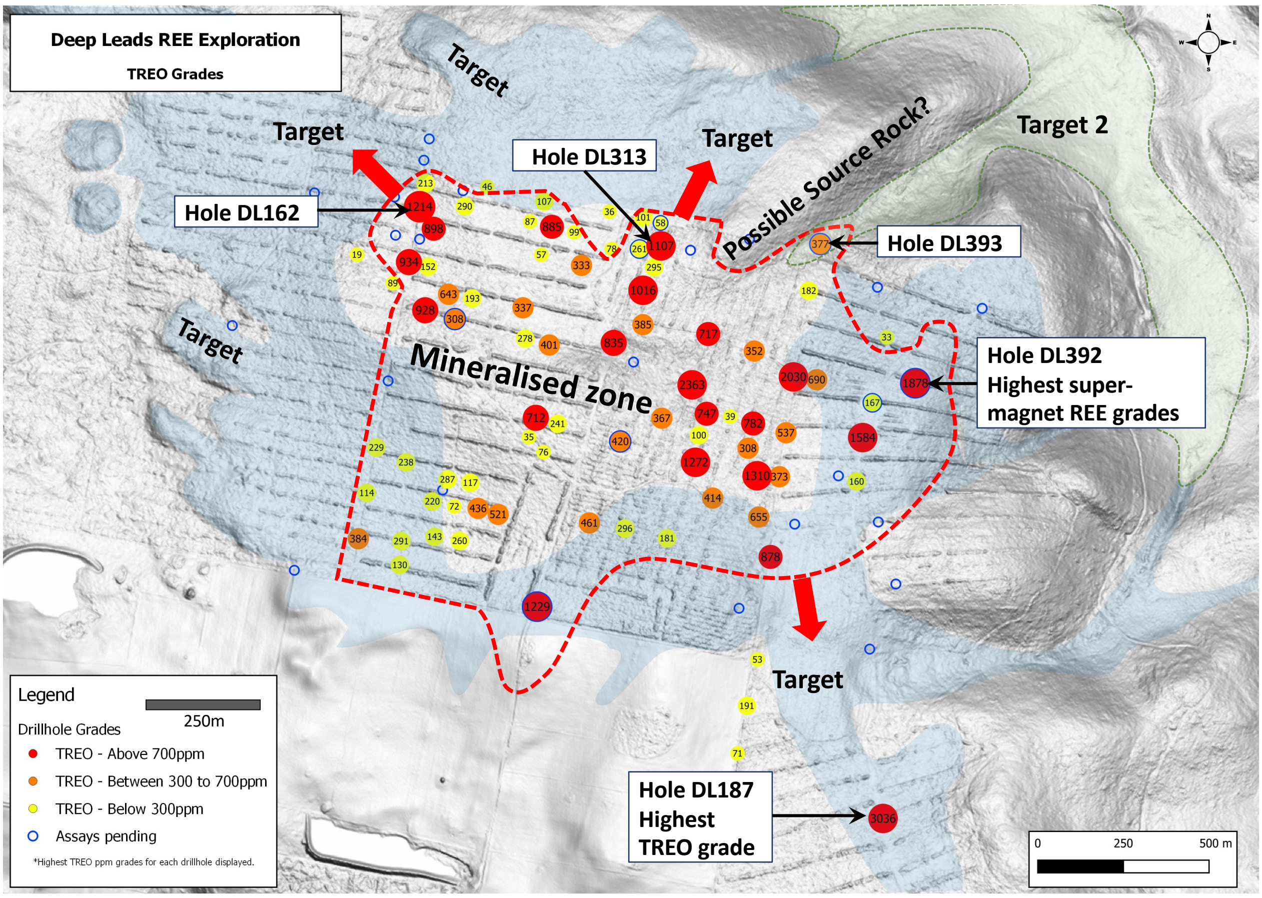

Figure 3: Drillhole grades of Total Rare Earth Element Oxides (ppm TREO) at Deep Leads Discovery.

Note 1: Most early drillholes were not deep enough to test the full REE horizon which occurs at the boundary between REE-rich clays and broken, altered basement rock where groundwater flows are strongest. This difficult drill target requires specialist drilling technology to efficiently drill this discovery.

Note 2: The mineralised zones in holes DL392 and DL393 were at least 3 metres thick. Hole DL393 is the first drillhole into "Target 2" clays that have shed off the plateau (see green zone in Figure 3).

Significance of these results

1. ABx's REE mineralisation is enriched in the super-magnetic rare earth elements neodymium (Nd), praseodymium (Pr), terbium (Tb) and dysprosium (Dy), which are strategically important, high priced metals needed for electric vehicles, wind turbines, smart phones and military electronics. Prices are rising rapidly as demand grows strongly.
2. ABx's REE exploration is identifying a large, low-grade mineralised zone that appears strongest where the flow rates of the saline groundwater are strong.
3. Like low-grade open pit gold deposits, this REE mineralisation can be easily processed.
4. ABx believes it has discovered "water-soluble" ionic adsorption clay REE resources that can be concentrated into a saleable precipitate by low-cost leaching with dilute water-based solutions (see ASX release 13/09/2021).
5. Some drillholes need to be drilled to 25 metres depth in places to ensure that the entire REE mineralised clay and altered bedrock mineralised horizon is revealed and sampled.

Summary comments

ABx Exploration Manager, Paul Glover said; "As Covid travel restrictions ease, we can introduce new technologies for this REE exploration project, including high resolution geophysics to map the groundwater channels that host the best REE exploration targets and a multi-purpose drill rig to reveal the full thickness and geology of the mineralised zones.

We await the granting of our new Exploration License application that covers several attractive REE targets that exist to the east of our current Deep Leads discovery."

This announcement is authorised by the Board of Australian Bauxite Limited.

For further information please contact:

Ian Levy, CEO
ABx Group
Mobile: +61 407 189 122
Email: ilevy@australianbauxite.com.au

ABx Group

Table 1: REE drill results Deep Leads Discovery

Hole	From (m)	To (m)	Super Magnet REE Nd_2O_3 (ppm)	Pr_2O_3 (ppm)	Dy_2O_3 (ppm)	Tb_2O_3 (ppm)	Other REE (ppm)	TREO (ppm)
DL389	13	14	**23.6**	6.3	2.9	0.6	**139**	**172**
DL389	14	15	**17.7**	4.7	3.1	0.6	**129**	**155**
DL389	15	16	**11.3**	2.7	3.7	0.6	**80**	**99**
DL389	16	17	**29.3**	6.8	7.3	1.3	**142**	**187**
DL389	17	18	**106.3**	25.4	20.9	4.0	**439**	**595**
DL389	18	19	**209.9**	48.7	52.7	9.7	**908**	**1229**
DL389	19	20	**159.8**	36.7	42.2	7.7	**735**	**981**
Drill hole did not reach firm bedrock								
DL390	12	13	**19.9**	5.4	3.5	0.7	**192**	**222**
DL390	13	14	**24.6**	6.5	4.9	0.9	**383**	**420**
DL390	14	15	**25.2**	6.0	7.8	1.3	**257**	**297**
DL390	15	16	**30.6**	7.1	9.2	1.5	**287**	**336**
Drill hole stopped at top of firm bedrock								
DL391	5	6	**2.8**	0.7	0.9	0.1	**22**	**27**
DL391	6	7	**2.4**	0.6	0.7	0.1	**21**	**25**
DL391	7	8	**2.3**	0.6	0.7	0.1	**27**	**31**
DL391	8	9	**6.2**	1.6	1.4	0.2	**154**	**163**
DL391	9	10	**6.0**	1.5	1.3	0.2	**158**	**167**
Drill hole stopped at top of firm bedrock								
DL392	5	6	**9.1**	2.4	2.0	0.3	**66**	**79**
DL392	6	7	**19.7**	5.2	4.0	0.7	**122**	**152**
DL392	7	8	**92.4**	24.8	16.3	2.8	**478**	**615**
DL392	8	9	**493.4**	**121.7**	**76.8**	**14.3**	**1171**	**1878**
DL392	9	10	**258.9**	**70.5**	**40.3**	7.4	**608**	**985**
Drill hole could not penetrate firm bedrock								
DL393	4	5	**60.1**	16.3	11.4	2.0	**282**	**372**
DL393	5	6	**64.4**	17.4	11.7	2.0	**282**	**377**
DL393	6	7	**60.9**	16.2	12.4	2.2	**269**	**361**
Drill hole stopped at top of firm bedrock								
DL394	7	8	**8.7**	2.6	2.5	0.4	**107**	**122**
DL394	8	9	**5.4**	1.5	1.5	0.3	**175**	**184**
DL394	9	10	**12.1**	3.0	3.0	0.5	**289**	**308**
DL394	10	11	**28.7**	7.2	5.8	1.0	**203**	**246**
DL394	11	12	**16.6**	4.3	3.5	0.6	**215**	**240**
Drill hole stopped at top of firm bedrock								
DL395	5	6	**5.4**	1.5	0.9	0.2	**65**	**72**
DL395	6	7	**2.3**	0.6	0.5	0.1	**20**	**24**
DL395	7	8	**3.0**	0.7	0.6	0.1	**38**	**42**
DL395	8	9	**3.2**	0.9	0.7	0.1	**39**	**44**
DL395	9	10	**5.3**	1.5	1.2	0.2	**120**	**129**
DL395	10	11	**25.3**	1.4	1.1	0.2	**90**	**98**
DL395	11	12	**21.0**	3.9	4.0	0.6	**237**	**261**
DL395	12	13	**2.6**	7.1	5.1	0.9	**219**	**258**
DL395	13	14	**6.6**	5.8	4.2	0.6	**195**	**226**
DL396	2	3	**1.9**	0.7	0.6	0.1	**17**	**21**
DL396	3	4	**3.2**	1.8	1.1	0.2	**43**	**53**
DL396	4	5	**5.2**	0.5	0.5	0.1	**55**	**58**
DL396	5	6	**14.9**	0.8	0.8	0.1	**47**	**52**
Drill hole stopped at top of firm bedrock								

Qualifying statements

General regarding exploration data and reporting

Information in this report that relates to Exploration Information is based on information compiled by Ian Levy who is a Fellow of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and a qualified geologist. Mr Levy is a director of Australian Bauxite Limited trading as ABx Group.

Nathan Towns, the Operations Manager who conducted the sampling and testwork at the ABx Research Laboratory in Western Junction, near Launceston Airport has been conducting research projects to ISO standards at both the ABx Research Laboratory in Tasmania and the advanced Alcore Research Centre at Berkeley Vale, Central Coast NSW for more than 7 years.

Ian Levy has sufficient experience relevant to the mineralisation style and deposit type under consideration and to the activity being undertaken 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'. Ian Levy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Tasmania

The information relating to Exploration Information and Mineral Resources in Tasmania has been prepared or updated under the JORC Code 2012. Mr Levy has sufficient experience, which is relevant to the mineralisation style and deposit type under consideration and to the activity undertaken 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 Levy has consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

Disclaimer Regarding Forward Looking Statements

This ASX announcement (Announcement) contains various forward-looking statements. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements are inherently subject to uncertainties in that they may be affected by a variety of known and unknown risks, variables and factors which could cause actual values or results, performance or achievements to differ materially from the expectations described in such forward-looking statements.

ABx does not give any assurance that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.

JORC Code, 2012 Edition – Table 1 report

See ASX release dated 04 May 2021 and update in Appendix 1 following.

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	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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.*	• Drill holes samples to 25 metres maximum depth but typically to 12 metres depth
Drilling techniques	• *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).*	• Reverse circulation rotary percussion
Drill sample recovery	• *Method of recording & assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery & ensure representative nature of the samples.* • *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.*	• Weight tests indicated reliable sample recovery
Logging	• *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.* • *Whether logging is qualitative or quantitative. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Geologically logged in detail by senior professional geologists. Every sample photographed, with photos and logs and assays entered into ABx's proprietary ABacus database.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Chips are subsampled using bauxite shovel method in accordance with ISO standards

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external lab checks) & whether acceptable levels of accuracy (ie lack of bias) & precision have been established.*	• 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. • Round robin assays with 4 other major laboratories confirmed accuracy and precision meets industry standards.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• 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.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• GPS hole locations have been tested for accuracy on many prospects, all satisfactorily – within 1m.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Drilling typically at 50 to 75 metre spacing on mineralised prospects
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• Vertical holes through flat-dipping bauxite is as good as it gets
Sample security	• *The measures taken to ensure sample security.*	• Samples collected and assembled onto pallets every day
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Several audits confirmed reliability

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	• *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.* • *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.*	• Satisfactory to excellent. All tenements are unencumbered....
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 3 industry majors and two customers have approved exploration methods and data collection, interpretation and reporting
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Bauxite deposit formed on Lower Tertiary basalts
Drill hole Information	• *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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *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.*	• GPS location. • Airborne Radar RL topography • All holes are short straight vertical holes
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• All data is presented. To enable comparisons between different mixtures of valuable elements, an aggregation into a price-weighted equivalence of Neodymium oxide was used as follows: **Nd_2O_3 equivalent** = Nd_2O_3 + 1.01 x Pr_2O_3 + 11.89 x Tb_2O_3 + 4.64 x Dy_2O_3.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Mineralisation typically 3 to 6 metres thick and Drillholes are sampled at 1 metre intervals
Diagrams	• *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.*	• N.A.
Balanced reporting	• *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.*	• All new results are reported in this report
Other substantive exploration data	• *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.*	• N.A.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• To be planned