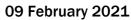
## ASX ANNOUNCEMENT





ASX ABX

### Rare Earth Elements in ABx's Bauxite Horizon

Australian Bauxite Limited (ASX:ABX) (**ABx** or **Company**) is pleased to report on early results from an exploration project carried out over the last 15 months involving rare earth elements (**REE**) that occur within the ABx bauxite horizon. Assaying is by the NATA-registered ALS commercial laboratory, Brisbane.

This exploration project was undertaken despite the difficult pandemic year and major results are:

- Clays at Binjour bauxite deposit in QLD were found to contain soluble REE and ABx's exploration technology was used to identify other REE prospects in Eastern Australia
- Two Tasmanian prospects, DL130 and Fingal Rail, were identified and REE assay results for 26 random drillhole samples have shown that DL130 is enriched
- The DL130 prospect returned REE values that averaged six times higher grade than both the Binjour clays and from the Fingal Rail project, indicating a different origin of the REE at DL130
- Enriched zones at DL130 are 4 to 18 metres thick and extend with good continuity over distances
  exceeding 1 kilometre. Best results at DL130 came from a specific rock unit and mineralisation is
  relatively enriched in light rare earth elements (LREE) see Tables 1 & 2
- ABx has identified more than 4,500 metres of samples that warrant REE assessment
- The solubility and ease of concentration of ABx's REE mineralisation is being assessed at ABx's bauxite research laboratory in Launceston, and concentrates will be tested at the Alcore Research Centre in Central Coast NSW using Alcore's fluorine chemical technologies
- Early testwork indicates that this type of REE mineralisation leaches in weak mineral acids and the grades were upgraded by 172% on average in a single pass see Tables 1 & 2
- Like all ABx bauxites, deleterious elements, including uranium and thorium, are usually low

Table 1	Light	Rare Earth	Element	s "LREE"	Heavy					
Summary of REE results	Yttrium	Lanthanum	Cerium	Neodymium	Terbium	Dysprosium	Erbium	Ytterbium	TOTAL	
	oxide	oxide	oxide	oxide	oxide	oxide	oxide	oxide	IOIAL	
	Y2O3	La2O3	CeO2	Nd2O3	Tb407	Dy2O3	Er2O3	Yb2O3	REE Ox	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Fingal Rail Project	Fingal Rail Project									
Best third of samples	9	9	23	9	1	2	1	1	60	
DL130 Project										
Best third of samples	49	31	224	41	4	11	6	5	409	
Binjour testwork in December 2019										
Clays	11	11	21	11	0.5	1.7	1.2	1.4	66	
Clay leach	15	16	37	22	0.9	2.7	1.7	1.7	113	
Clay upgrade%	143%	145%	181%	204%	174%	163%	142%	119%	172%	

ABx Exploration Manager, Paul Glover commented; "ABx's exploration technology was reinvigorated in mid 2020 while pandemic regulations restricted our field work. Within a year, we found REE enrichment in a widespread rock unit at the DL130 Project, and early testwork indications are that the rare earth elements are easily leached and could be concentrated at low cost, with no deleterious elements.

"We have also adjusted the exploration technology to start exploring for zones with enriched scandium grades that may be important for some bauxite customers."

ABN 14 139 494 885

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Figure 1: Location of Binjour Bauxite Project where ABx's REE exploration began

ABx considers Binjour Project to be the best source of gibbsite-rich, trihydrate bauxite in Queensland (QLD) and has a Mining Lease Application over the Sunrise Bauxite Project on Binjour Plateau that is now being assessed.

Port of Bundaberg
Deep-water anchorage
within port

ABx Permits
Towns
Roads
Railways

Binjour Project
Biggenden

Maryborough

Toondoon Mining Lease

O 25 50 75 100 km

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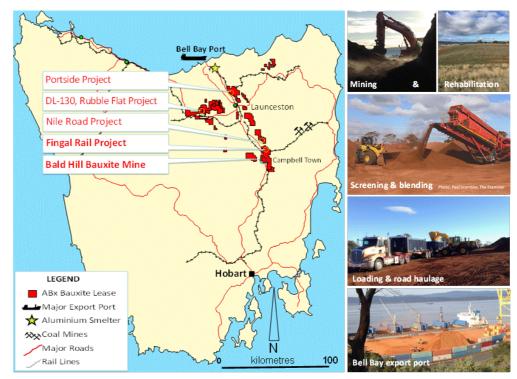
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Figure 2:
Location of ABX's
Tasmanian Bauxite
Projects.
DL130 and Rubble Flat
Projects are considered
most prospective for

REE enriched rock units



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

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Table 2: Rare Earth Element Results

All assays are done by the NATA-registered ALS Commercial Laboratories, Brisbane Australia

			1	Light Rare Earth Elements as oxides "LREE"								Heavy Rare Earth Elements as oxides "HREE"						1	
Uala	Hole Depth (metres)		nt=ns.\	Yttrium	Lanthanum	Cerium		Neodymium			Gadolinium	Terbium				Thulium	Ytterbium	Lutetium	TOTAL
ное	Бер	tn (me	etres)	oxide	oxide	oxide	ium oxide	oxide	oxide	oxide	oxide	oxide	oxide	oxide	oxide	oxide	oxide	oxide	IOIAL
	From	To	Length	Y2O3	La2O3	CeO2	Pr6O11	Nd2O3	Sm2O3	Eu2O3	Gd2O3	Tb407	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	REE Ox
			Length	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	ingal Rail Project											т 1							
CN052	2	5	3	5.3	4.0	11.2	1.3	5.0	1.2	0.3	1.0	0.4	1.1	0.2	0.7	0.1	0.8	0.1	33
CN053	0	2	2	9.0	8.3	19.3	2.1	7.6	1.6	0.3	1.4	0.5	1.6	0.3	1.0	0.2	1.0	0.2	54
CN053	5	6	1	3.2	1.9	9.1	0.6	2.7	0.8	0.2	0.7	0.3	0.8	0.2	0.4	0.1	0.5	0.1	22
CN379	1	3	2	6.1	4.7	9.8	1.1	3.7	0.9	0.2	0.8	0.3	1.1	0.2	0.7	0.1	0.7	0.1	31
CN388	4	6	2	6.7	5.9	16.1	1.7	6.6	1.5	0.4	1.3	0.4	1.4	0.3	0.8	0.1	0.9	0.1	44
CN389	3	5	2	5.6	4.7	20.3	1.2	5.0	1.0	0.2	0.9	0.3	1.0	0.2	0.7	0.1	0.6	0.1	42
CN434	3	6	3	4.2	3.8	7.1	0.7	2.6	0.5	0.2	0.6	0.2	0.7	0.1	0.4	0.1	0.5	0.1	22
CN499	2	4	2	11.2	12.1	27.9	3.1	13.8	2.5	0.5	2.1	0.7	2.0	0.4	1.2	0.2	1.2	0.2	79
CN554	5	8	3	4.3	3.8	13.9	0.8	5.6	1.0	0.3	0.9	0.4	1.1	0.2	0.6	0.1	0.6	0.1	34
CN646	2	5	3	10.0	8.1	28.0	2.0	7.2	1.6	0.4	1.5	0.5	1.6	0.3	0.9	0.1	1.0	0.2	64
CN646	5	8	3	4.7	3.5	9.7	0.8	3.1	0.8	0.1	0.6	0.3	0.8	0.2	0.5	0.1	0.6	0.1	26
Best 3	3% of	sampl	les	9.2	8.6	22.8	2.2	8.8	1.8	0.4	1.6	0.5	1.7	0.3	1.0	0.2	1.1	0.2	60
DL130 P	roject																		
DL133	5	6	1	12.7	3.6	30.1	1.0	3.7	1.3	0.4	1.6	0.6	2.0	0.4	1.2	0.2	1.3	0.2	60
DL133	8	9	1	8.3	25.8	92.6	3.7	10.6	2.4	0.7	1.9	0.7	2.3	0.4	1.2	0.2	1.4	0.2	152
DL134	0	1	1	9.9	43.2	89.4	6.0	16.6	3.3	1.0	2.5	0.9	2.7	0.5	1.5	0.2	1.6	0.2	180
DL134	7	8	1	4.8	9.1	30.1	1.4	4.4	1.0	0.3	0.9	0.3	1.1	0.2	0.7	0.1	0.8	0.1	55
DL171	3	4	1	3.3	3.2	14.4	0.8	2.8	0.7	0.2	0.6	0.2	0.7	0.1	0.4	0.1	0.5	0.1	28
DL171	5	7	2	15.0	13.8	303.4	3.9	14.3	3.3	0.9	2.9	1.0	3.1	0.6	1.7	0.3	1.9	0.3	367
DL219	2	3	1	6.5	5.2	30.1	1.4	5.2	1.6	0.5	1.5	0.6	1.8	0.3	1.1	0.2	1.3	0.2	57
DL219	7	8	1	11.8	9.6	136.3	3.1	12.6	3.4	1.0	2.9	1.0	3.0	0.5	1.7	0.3	1.7	0.2	189
DL221	1	2	1	23.0	8.4	86.1	2.1	7.9	2.5	0.9	3.2	1.1	3.5	0.7	2.2	0.3	2.2	0.3	144
DL221	11	12	1	95.0	49.1	122.2	15.2	66.1	17.1	6.0	19.2	5.9	16.8	3.2	8.4	1.1	6.6	0.9	433
DL228	8	9	1	44.3	35.7	243.2	11.7	47.6	12.8	4.2	11.5	4.2	12.6	2.3	6.8	1.1	7.3	1.0	446
DL239	2	3	1	6.1	25.8	40.3	5.2	18.0	3.7	1.0	2.7	0.7	1.9	0.3	0.7	0.1	0.8	0.1	107
DL239	7	8	1	77.5	45.2	315.7	15.2	64.5	19.2	6.1	18.3	6.2	18.7	3.5	9.7	1.5	9.5	1.3	612
DL279	5	6	1	4.4	4.9	77.1	1.0	3.6	1.2	0.3	0.9	0.4	1.1	0.2	0.6	0.1	0.8	0.1	97
DL279	11	12	1	11.0	11.0	51.0	2.1	7.2	1.8	0.6	2.0	0.7	2.3	0.5	1.3	0.2	1.3	0.2	93
Best 3	3% of	sampl	les	48.7	30.7	224.2	9.8	41.0	11.2	3.6	11.0	3.7	10.9	2.0	5.7	0.8	5.4	0.8	409
Testwo	rk on E	Binjou	r sample	es in Dec	.'19														
Clays			•	10.5	11.1	20.5	2.9	10.8	2.1	0.5	1.6	0.5	1.7	0.4	1.2	0.2	1.4	0.2	66
Clay le	each			15.1	16.2	37.2	5.3	22.2	4.4	1.1	3.4	0.9	2.7	0.6	1.7	0.3	1.7	0.3	113
Clay upgrade%		143%	145%	181%	185%	204%	209%	194%	217%	174%	163%	153%	142%	122%	119%	110%	172%		



#### **Qualifying statements**

#### General regarding exploration data and reporting:

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 Australian Bauxite Limited.

lan Levy has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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'. 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.

#### Mainland:

The information relating to Mineral Resources on the Mainland was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

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 2004 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.

#### 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.

### **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 template

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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>	Drill holes samples to 25 metres depth
Drilling techniques	<ul> <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>	Reverse circulation rotary percussion
Drill sample recovery	<ul> <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>	Weight tests indicated reliable sample recovery
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Geologically logged in detail by senior professionals. Every sample photographed, with photos and logs and assays entered into ABx's ABacus database.</li> </ul>
Sub-sam- pling tech- niques and sample preparation	<ul> <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>	Chips are subsampled using bauxite shovel method in accordance with SO standards



Criteria	JORC Code explanation	Commentary
Quality of assay data and labora- tory tests	<ul> <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 laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>All assaying done at NATA-registered commercial laboratory of ALS Brisbane Australia. Round robin assays with 4 other major laboratories confirmed accuracy and precision meets industry standards.</li> </ul>
Verification of sampling and assay- ing	<ul> <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> <li>All assaying done at NATA-registered commercial laboratory of ALS Brisbane Australia. Round robin assays with 4 other major laboratories confirmed accuracy and precision meets industry standards.</li> </ul>
Location of data points	<ul> <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> <li>GPS hole locations have been tested for accuracy on many prospects, all satisfactorily.</li> </ul>
Data spac- ing and dis- tribution	<ul> <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> <li>Drilling typically at 50 to 75 metre spacing on mineralised prospects</li> </ul>
Orientation of data in relation to geological structure	<ul> <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>	Vertical holes through flat-dipping bauxite is as good as it gets
Sample se- curity	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 sta- tus	<ul> <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>	Satisfactory to excellent. All tenements are unen- cumbered
Exploration done by other par- ties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>3 industry majors and two customers have approved exploration methods and data collection, interpretation and reporting</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Bauxite deposit on Lower Tertiary basalts
Drill hole Information	<ul> <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> <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 Compe-</li> </ul>	<ul> <li>GPS location.</li> <li>Airborne Radar RL topography</li> <li>All holes are short straight vertical holes</li> </ul>
Data ag- gregation methods	<ul> <li>tent Person should clearly explain why this is the case.</li> <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>	No data aggregation used.



Criteria	JORC Code explanation	Commentary
Relation- ship be- tween min- eralisation widths and intercept lengths	<ul> <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>	Mineralisation typically 3 to 6 metres thick and Drillholes are sampled at 1 metre intervals
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be in- cluded for any significant discovery being reported These should include, but not be lim- ited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	• N.A.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representa- tive reporting of both low and high grades and/or widths should be practiced to avoid mis- leading reporting of Exploration Results.</li> </ul>	All new results are reported in this report
Other sub- stantive ex- ploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey re- sults; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	• N.A.
Further work	<ul> <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>	To be planned