# Scout drillholes discover new Rare Earth province

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Scout holes 52 km east of ABx's Deep Leads rare earth resource in northern Tasmania intersected 5,000ppm TREO at 1 metre depth, with high levels of Tb & Dy

The grades of Tb & Dy in all of ABx's rare earth resources are the highest of any ionic adsorption clay deposit in Australia and amongst the highest globally

ABx is uniquely positioned to take advantage of trade policies of USA and China

ABx already has strong relationships with potential customers in the USA

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ABx Group Limited (ASX: ABX) has acted in response to three recent events:

1. The USA issued Executive Orders to incentivise the processing of critical minerals, including rare earth elements (REE), in the USA[1,2]
2. China restricted exports of rare earths[3], notably dysprosium (Dy) and terbium (Tb), critical for military technologies and offshore wind turbines and almost 100% produced in China
3. Support for bold exploration initiatives by the Tasmanian government's EDGI grants

ABx's Tasmanian rare earth projects are suited to this opportunity because they are shallow, ionic absorption clay rare earth resources enriched in Tb & Dy. ABx already has strong relationships with planned processing operations in the USA, such as Ucore.[4]

Eight scout holes targeted by ABx's REE exploration method were drilled in an area 52 km east of ABx's Deep Leads REE resource (see Figure 1). Three of the eight holes intersected REE mineralisation that meet the cut-off grade used to estimate the Deep Leads resource, with the intercept in hole TB008 being highest grade as shown in Table 1.

***Table 1: REE discovery hole TB008 in tenement EL27/2025. Hole ended still in the mineralised layer***

| TB008 | | East 530787 Nth 5395777 | | | | Permanent Magnet REE | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| From (m) | To (m) | **TREO ppm** | TREO-$CeO_2$ ppm | Perm Mags ppm | Dy+Tb / TREO % | $Nd_2O_3$ ppm | $Pr_6O_{11}$ ppm | $Tb_4O_7$ ppm | $Dy_2O_3$ ppm | Other REE ppm |
| 0 | 1 | **276** | 165 | 57 | 3.2% | 39 | 10 | 1 | 8 | 219 |
| 1 | 2 | **5,318** | 3,113 | 1,218 | 2.9% | 849 | 213 | **22** | **134** | 4,100 |
| 2 | 3 | **1,404** | 1,045 | 322 | 4.6% | 206 | 51 | **8** | **56** | 1,082 |

[1] https://www.whitehouse.gov/presidential-actions/2025/03/immediate-measures-to-increase-american-mineral-production/
[2] https://www.whitehouse.gov/presidential-actions/2025/04/ensuring-national-security-and-economic-resilience-through-section-232-actions-on-processed-critical-minerals-and-derivative-products/
[3] https://www.hklaw.com/en/insights/publications/2025/04/china-imposes-export-controls-on-medium-and-heavy-rare-earth-materials
[4] ASX Announcement, 4 September 2024



**ABx Group Limited**
Level 4, 100 Albert Road, South Melbourne, VIC 3205
ABN 14 139 494 885
P: +61 3 9692 7222 | F: +61 2 9956 7355

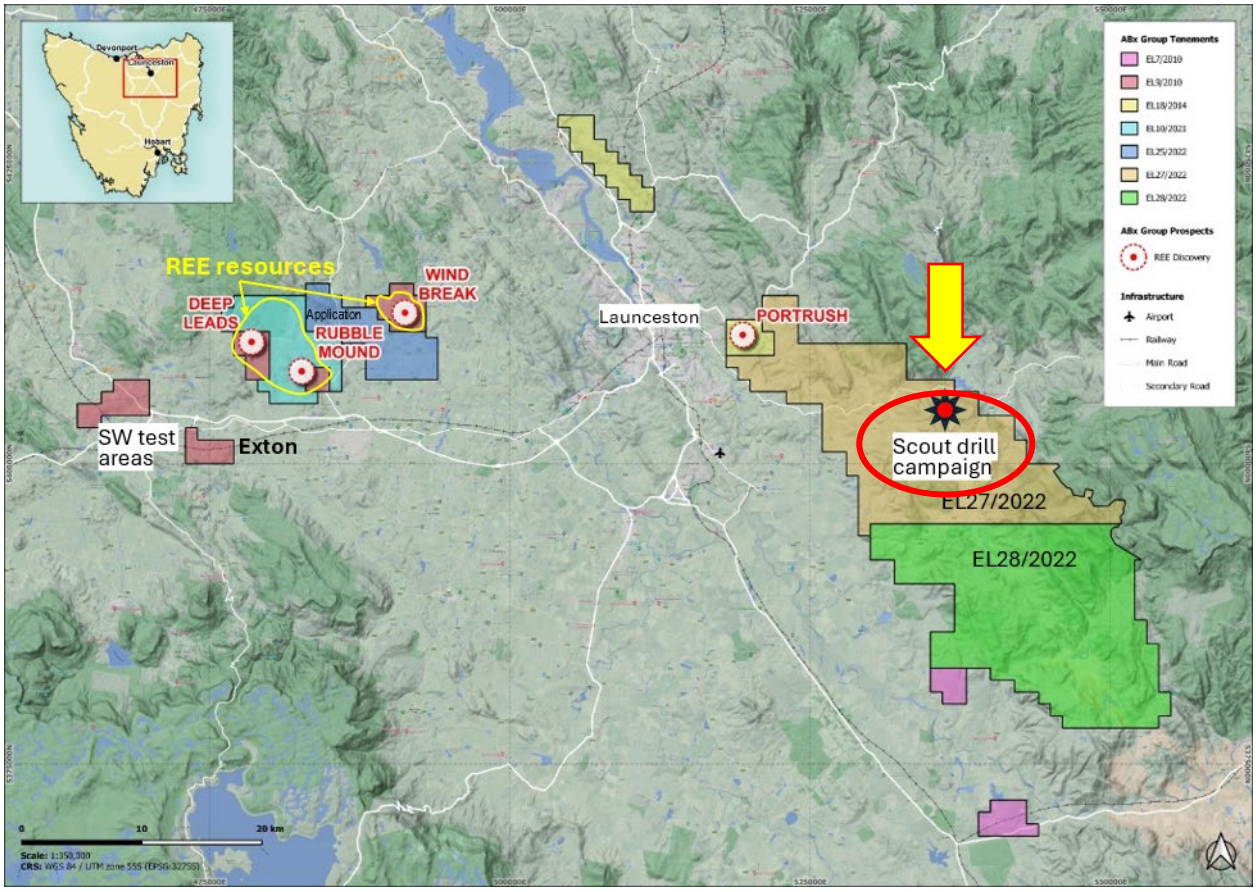



***Figure 1: Location of REE Scout Drilling campaign discoveries 52 km east of the ABx's REE Resources***

**Conclusion:** ABx believes it holds a province of clay-hosted REE mineralisation that is exceptionally enriched in Tb & Dy, which makes this province globally significant.

ABx's Deep Leads rare earth project near Exton in northern Tasmania contains an 89 Mt resource grading 844 ppm total rare earth oxides (TREO) from only 29% of the mineralised outline.[5] Notably, desorption tests conducted by ANSTO found the highest extractions under relatively neutral conditions reported from any clay-hosted resource in Australia.[6,7]

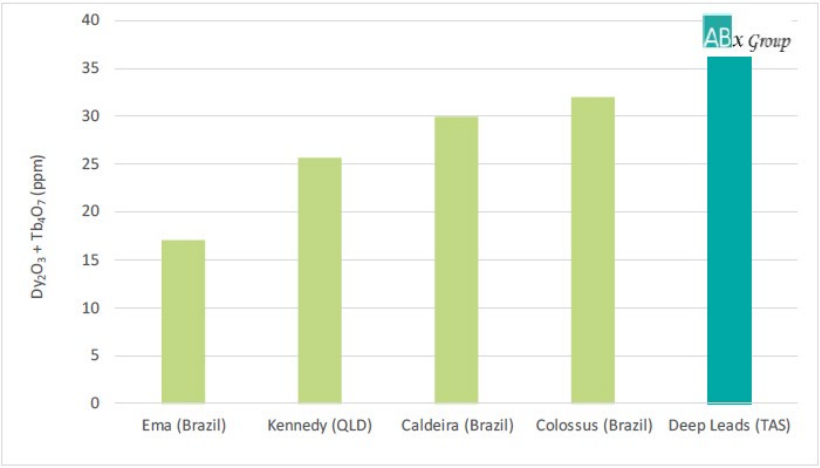
Furthermore, the deposit contains 36 ppm Tb + Dy, which is the highest grade of any ionic clay REE deposit in Australia and among the highest globally (Figure 2). This positions ABx well to help diversify the global Tb & Dy supply chain.

**Exploration initiative:** Once ABx's rare earth resources grew substantially, ABx developed a sophisticated exploration technology which tested successfully at four REE sites.

This exploration technology identified several rare earth targets in ABx's unexplored tenements EL27 and EL28 over 52 km east of ABx's Deep Leads REE resources (Figure 1). The 8-hole scout drilling campaign* tested two of the targets, using a low-impact auger drillrig which sampled shallow layers but did not always reach bedrock.

* ABx acknowledges a 50% co-funding of drilling costs under Tasmania's Exploration Drilling Grant Initiative (EDGI). ABx has responded by discovering a new mineral province for Tasmania.

[5] ASX Announcement, 2 May 2024 and Table 3 below
[6] ASX Announcement, 31 May 2022
[7] ASX Announcement, 2 February 2023




**PRICES**
**Tb is the highest-priced REE**

The current price of Terbium is US$1.98 million per tonne, up 42% YTD

Since Jan 2020 the Terbium price has risen by 197%

**Dy is the 2nd highest priced REE**

The current price of Dysprosium is US$0.454 million per tonne up 29% YTD

Since Jan 2020 the Dysprosium price has risen by 31%

*Source: https://strategicmetalsinvest.com/current-strategic-metals-prices/ date: 03/05/2025*

***Figure 2: Deep Leads REE Project Dy+Tb grades compared to global ionic adsorption clay projects***

## Key drilling results in the 3 discovery holes (Locations in Figure 3, full results in Table 5)

***Table 2: REE discovery holes TB002, TB006 and TB008 in tenement EL27/2025. Holes ended still in the mineralised layer***

| | | | | WGS84 55S | | | | | | | Permanent Magnet REE "PermMags" | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| From (m) | To (m) | Metre (m) | Max depth (m) | East | North | RL LiDAR (m) | TREO ppm | TREO-$CeO_2$ ppm | Perm Mags ppm | Dy+Tb TREO % | $Nd_2O_3$ ppm | $Pr_6O_{11}$ ppm | $Tb_4O_7$ ppm | $Dy_2O_3$ ppm | Other REE ppm |
| **Hole TB002. Intersected 2m of high-grade REE mineralisation at 6m depth. Hole ended in mineralisation** | | | | | | | | | | | | | | | |
| 0 | 1 | 1 | 8 | 530707 | 5405358 | 333 | **279** | 172 | 62 | 3.3% | 42 | 10 | 1.4 | 7.9 | 217 |
| 5 | 6 | 1 | 8 | 530707 | 5405358 | 333 | **215** | 137 | 39 | 3.6% | 25 | 6 | 1.1 | 6.8 | 175 |
| 6 | 7 | 1 | 8 | 530707 | 5405358 | 333 | **478** | 261 | 96 | 3.0% | 67 | 15 | 2.0 | 12.2 | 382 |
| 7 | 8 | 1 | 8 | 530707 | 5405358 | 333 | **750** | 481 | 166 | 3.8% | 111 | 26 | 3.7 | 24.8 | 584 |
| **Hole TB006. Intersected 2m of shallow high-grade REE mineralisation at 1m depth. Hole ended in mineralisation** | | | | | | | | | | | | | | | |
| 0 | 1 | 1 | 3 | 529849 | 5397509 | 299 | **227** | 179 | 55 | 4.4% | 36 | 9 | 1.3 | 8.6 | 172 |
| 1 | 2 | 1 | 3 | 529849 | 5397509 | 299 | **974** | 487 | 154 | 3.7% | 95 | 23 | **4.7** | **31.3** | 819 |
| 2 | 3 | 1 | 3 | 529849 | 5397509 | 299 | **945** | 751 | 230 | 4.5% | 151 | 36 | **5.6** | **37.0** | 715 |
| **Hole TB008. Intersected 2m of exceptionlly high-grade REE mineralisation at 1m depth. Hole ended in mineralisation** | | | | | | | | | | | | | | | |
| 0 | 1 | 1 | 3 | 530787 | 5395777 | 282 | **276** | 165 | 57 | 3.2% | 39 | 10 | 1.2 | 7.5 | 219 |
| 1 | 2 | 1 | 3 | 530787 | 5395777 | 282 | **5,318** | 3,113 | 1,218 | 2.9% | 849 | 213 | **22.3** | **134.3** | 4,100 |
| 2 | 3 | 1 | 3 | 530787 | 5395777 | 282 | **1,404** | 1,045 | 322 | 4.6% | 206 | 51 | **8.4** | **56.0** | 1,082 |

The EL27/2022 Temple Bar tenement is immediately south of ABx's Portrush rare earth discovery, where hole PR033 returned similar exceptionally high-grade assay results of 2m averaging 3,057ppm total rare earth oxides (TREO)[8] at 10m depth, including 1m at 4,812ppm at 11m depth, which is similar to these new discovery results.

Holes TB008 and TB006 have the same geology as the Portrush mineralisation and the rare earths are near surface, immediately beneath a thin soil. Both holes ended in mineralisation.

The mineralisation in hole TB002 is most similar to the Deep Leads type of mineralisation.

The area has excellent infrastructure and is about 30 km south of Launceston city by sealed roads. The land is mainly sheep and cattle grazing properties. ABx has more than 15 years' experience working with graziers, always leaving the land better than found and operating in accordance with sound agricultural practices.

[8] ASX Announcement, 10 February 2022

Because this tenement is very large, an easily transported trailer-mounted low-impact geotechnical auger rig was used, which could not always penetrate the full depth of the rare earth clay horizon. Nevertheless, these auger samples have confirmed that high-grade rare earth mineralisation has been discovered in this area. A more powerful drill rig may be deployed in future, subject, as always, to landholder approval. ABx has several more targets to test in the eastern tenements EL27/2022 and EL28/2022.

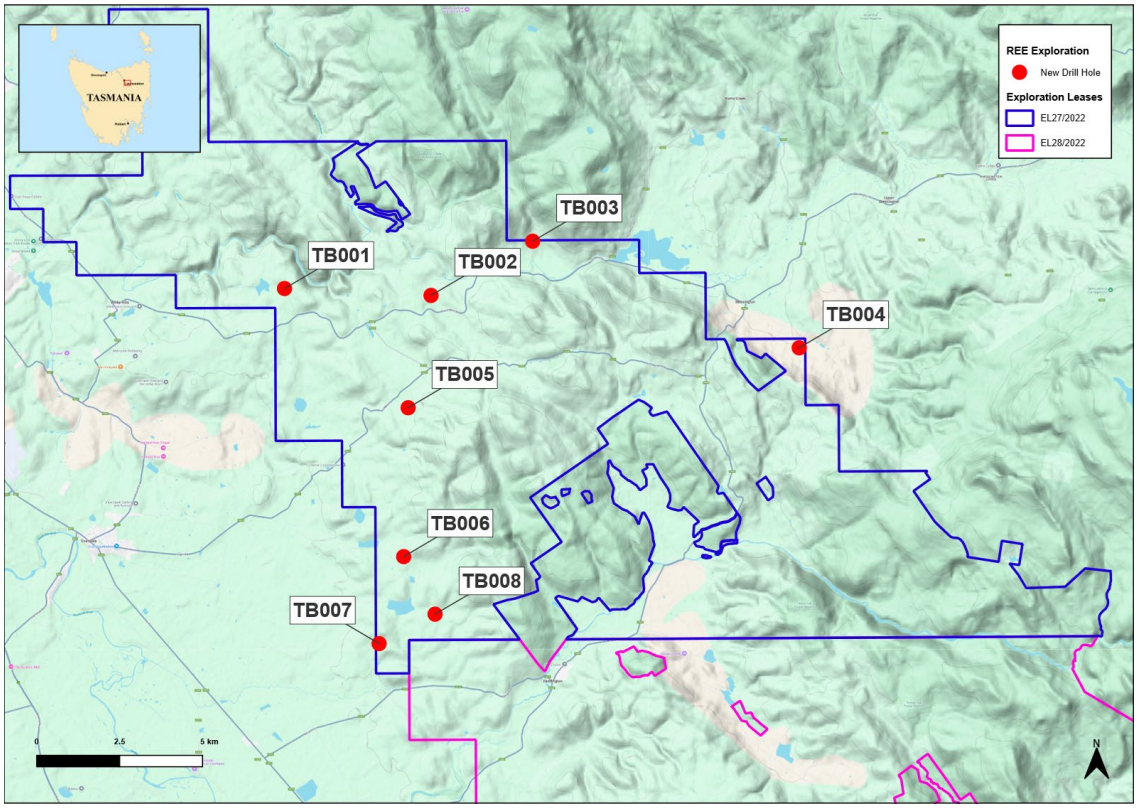



***Figure 3: Location of the 8 scout drillholes TB001 to TB008***

***Figure 4: REE scout drilling of discovery hole TB008 in EL27/2022 Temple Bar***

***Figure 5: auger sample from discovery hole TB008***

This shallow mineralised layer starts immediately below the thin grey soil and is dry

**Dr Mark Cooksey, Managing Director and CEO of ABx Group, commented:**

*"ABx is stunned and delighted by discovering this shallow, high grade rare earth mineralisation so early in its exploration of the eastern tenements. It is especially exciting that all of ABx's rare earth resources and discoveries in northern Tasmania are exceptionally high grade in Dy & Tb.*

*"No other Australian company holds an entire rare earth province that is so enriched in Dy & Tb, which is potentially globally significant. Our mission is to devise a low cost, low impact method of exploiting this rare earth province.*

*"China's latest move to restrict exports of critical heavy rare earths, especially Dy & Tb, sends a clear message to the global market. ABx is in a unique position with a high-grade, clay-hosted rare earth deposit in a stable jurisdiction, with particularly high concentrations of Dy & Tb that are vital for the production of military technologies and offshore wind turbines. This is recognised by the industry, for example our MoU to supply rare earth feedstock to Ucore which is planning a Strategic Metals Complex in Louisiana with the support of the US Government.*

*"Meanwhile, ABx will explore new ground with strong geological potential and advance our strategy to become a long-term supplier of rare earths. These developments put ABx at the forefront of Australia's rare earths sector at a time of escalating global demand."*

ABx looks forward to updating shareholders about progressing its rare earths business.

See the ABx Investor Hub to watch a video of this announcement and ask questions of management.

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

**– ENDS –**

## For further information please contact:

Dr Mark Cooksey
MD & CEO
ABx Group
+61 447 201 536
mcooksey@abxgroup.com.au
www.abxgroup.com.au

**Media**
Chapter One Advisors
David Tasker / Alex Baker
+61 433 112 936 / +61 432 801 745
dtasker@chapteroneadvisors.com.au /
abaker@chapteroneadvisors.com.au

## About ABx Group Limited

ABx Group Limited (ABx) is a uniquely positioned Australian company delivering materials for a cleaner future.

The three priority projects are:

- **Rare earths**: Supplying light and heavy rare earths from Tasmania into Western supply chains
- **Fluorine waste recycling**: Producing industrial chemicals from aluminium smelter waste (ALCORE)
- **Bauxite**: Mining bauxite resources for the aluminium, cement and fertiliser industries

ABx endorses best practices on agricultural land and strives to leave land and environment better than we find it. We only operate where welcomed.

**Table 3 Mineral resources at Deep Leads – Rubble Mound – Wind Break (US$30/t ~350 ppm cut-off grade)**

| Resources at Deep Leads-Rubble Mound & Wind Break @ US$30/t cog | | | | | | | | Permanent Magnet REOs | | | | Key Ratios | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | **Million Tonnes** | Avg depth (m) | Avg base (m) | Avg thickness (m) | TREO ppm | TREO-$CeO_2$ ppm | Perm Mag ppm | $Nd_2O_3$ ppm | $Pr_6O_{11}$ ppm | $Tb_4O_7$ ppm | $Dy_2O_3$ ppm | PermMag TREO % | Tb+Dy TREO % |
| Inferred | 41.4 | 4.2 | 12.3 | 8.0 | 811 | 629 | 212 | 141 | 36 | 5.0 | 30 | 26% | 4.3% |
| Indicated | 41.6 | 4.2 | 11.8 | 7.7 | 856 | 656 | 225 | 150 | 38 | 5.2 | 31 | 26% | 4.2% |
| Measured | 5.6 | 4.1 | 11.4 | 7.3 | 998 | 790 | 263 | 174 | 43 | 6.6 | 39 | 26% | 4.6% |
| **Totals** | **89** | **4.2** | **12.0** | **7.8** | **844** | **652** | **221** | **147** | **37** | **5.2** | **31** | **26%** | **4.3%** |

| Other Rare Earth oxides | | | | | | | | | | | | Low radioactivity | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resource Category | $CeO_2$ ppm | $Er_2O_3$ ppm | $Eu_2O_3$ ppm | $Gd_2O_3$ ppm | $Ho_2O_3$ ppm | $La_2O_3$ ppm | $Lu_2O_3$ ppm | $Sm_2O_3$ ppm | $Tm_2O_3$ ppm | $Yb_2O_3$ ppm | $Y_2O_3$ ppm | ThO ppm | $U_3O_8$ ppm |
| Inferred | 182 | 17 | 8.3 | 31 | 6.0 | 124 | 2.2 | 31 | 2.4 | 15 | 180 | 6.6 | 1.8 |
| Indicated | 200 | 18 | 9.0 | 33 | 6.2 | 131 | 2.3 | 34 | 2.5 | 15 | 181 | 6.4 | 1.8 |
| Measured | 209 | 22 | 11.3 | 41 | 7.8 | 150 | 2.8 | 40 | 3.0 | 19 | 229 | 6.2 | 1.7 |
| **Totals** | **192** | **18** | **8.8** | **33** | **6.2** | **129** | **2.3** | **33** | **2.5** | **15** | **183** | **6.5** | **1.8** |

**Parameters: Note 1 ppm = 1 gram/t**: Block cut-off grade (cog) = US$30/t (~350ppm TREO-$CeO_2$) Min thickness = 2 metres Density = 1.9 t/metre$^3$
Search ellipse = 120 x 150m (Meas & Ind), 250 x 250m (Inf). TREO = total rare earth elements as oxides. TREO-CeO2 = TREO minus cerium oxide.

## 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.

## Competent Persons Statement

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

Mr Levy has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which he is 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 Levy has consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

**Table 4 - Summary of resource estimation information of 20 November 2023 referred to above, in accordance with LR 5.8.1**

| | |
|---|---|
| **Geology and geological interpretation** | REE mineralisation occurs in clay layers that overlie a Jurassic age dolerite basement in a district with some residual weathered Tertiary age alkali basalt. Jurassic age tholeiitic dolerite and Tertiary age bauxite-laterite are the main bedrock geological units. Paleochannels host thicker clay zones which host the rare earth element mineralisation. |
| **Sampling and sub-sampling techniques** | Sampling was at 1 metre intervals. Subsampling for assaying is by quartering the clay samples twice and each time, mixing diagonally opposite quarters. Assay results from resampling correspond satisfactorily. |
| **Drilling techniques** | Auger drilling |
| **Criteria used for classification, including drill and data spacing and distribution.** | Not applicable for this report on a test of exploration technology. |
| **Sample analytical method** | Assay samples are analysed by standard NATA-approved induction coupled plasma analytical methods for rare earth elements at ALS labs in Brisbane (method ME-MS81) and LabWest in Perth (method MMA04). Interlab comparisons proved satisfactory. |
| **Estimation methodology** | Not applicable for this report about a scout drilling campaign |
| **Cut-off grade** | Not applicable for this report about a scout drilling campaign |
| **Mining and metallurgical methods and parameters, and other modifying factors** | Not applicable at this initial discovery stage. |

## Table 5: Full assay results

| | | | | | WGS84 55S | | | | | | | Permanent Magnet REE "PermMags" | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hole ID | From (m) | To (m) | Metre (m) | Max depth (m) | East | North | RL LiDAR (m) | **TREO ppm** | TREO-$CeO_2$ ppm | Perm Mags ppm | Dy+Tb TREO % | $Nd_2O_3$ ppm | $Pr_6O_{11}$ ppm | $Tb_4O_7$ ppm | $Dy_2O_3$ ppm | $CeO_2$ ppm | $Er_2O_3$ ppm | $Eu_2O_3$ ppm | $Gd_2O_3$ ppm | $Ho_2O_3$ ppm | $La_2O_3$ ppm | $Lu_2O_3$ ppm | $Sm_2O_3$ ppm | $Tm_2O_3$ ppm | $Yb_2O_3$ ppm | $Y_2O_3$ ppm |
| TB001 | 0 | 1 | 1 | 2 | 526282 | 5405582 | 178 | **96** | 67 | 22 | 3.7% | 14 | 4 | 0.5 | 3.1 | 29 | 2 | 1 | 3 | 1 | 14 | 0 | 3 | 0 | 2 | 19 |
| TB001 | 1 | 2 | 1 | 2 | 526282 | 5405582 | 178 | **91** | 66 | 21 | 4.1% | 14 | 3 | 0.5 | 3.2 | 25 | 2 | 1 | 3 | 1 | 13 | 0 | 3 | 0 | 2 | 20 |
| TB002 | 0 | 1 | 1 | 8 | 530707 | 5405358 | 333 | **279** | 172 | 62 | 3.3% | 42 | 10 | 1.4 | 7.9 | 106 | 4 | 3 | 10 | 1 | 35 | 0 | 11 | 1 | 3 | 42 |
| TB002 | 1 | 2 | 1 | 8 | 530707 | 5405358 | 333 | **74** | 44 | 14 | 3.6% | 9 | 2 | 0.4 | 2.3 | 30 | 1 | 1 | 3 | 0 | 7 | 0 | 2 | 0 | 1 | 14 |
| TB002 | 2 | 3 | 1 | 8 | 530707 | 5405358 | 333 | **62** | 36 | 9 | 4.2% | 5 | 1 | 0.3 | 2.3 | 25 | 2 | 0 | 2 | 0 | 5 | 0 | 1 | 0 | 2 | 14 |
| TB002 | 3 | 4 | 1 | 8 | 530707 | 5405358 | 333 | **77** | 40 | 11 | 3.2% | 7 | 2 | 0.3 | 2.1 | 37 | 1 | 0 | 2 | 0 | 6 | 0 | 2 | 0 | 1 | 16 |
| TB002 | 4 | 5 | 1 | 8 | 530707 | 5405358 | 333 | **83** | 44 | 11 | 3.9% | 7 | 2 | 0.4 | 2.9 | 38 | 2 | 1 | 2 | 1 | 6 | 0 | 2 | 0 | 2 | 18 |
| TB002 | 5 | 6 | 1 | 8 | 530707 | 5405358 | 333 | **215** | 137 | 39 | 3.6% | 25 | 6 | 1.1 | 6.8 | 78 | 4 | 2 | 7 | 2 | 22 | 1 | 6 | 1 | 5 | 49 |
| TB002 | 6 | 7 | 1 | 8 | 530707 | 5405358 | 333 | **478** | 261 | 96 | 3.0% | 67 | 15 | 2.0 | 12.2 | 217 | 7 | 3 | 13 | 3 | 48 | 1 | 15 | 1 | 8 | 65 |
| TB002 | 7 | 8 | 1 | 8 | 530707 | 5405358 | 333 | **750** | 481 | 166 | 3.8% | 111 | 26 | 3.7 | 24.8 | 269 | 15 | 7 | 25 | 5 | 77 | 2 | 26 | 2 | 15 | 141 |
| TB003 | 0 | 1 | 1 | 3 | 533784 | 5406974 | 384 | **143** | 90 | 30 | 3.3% | 20 | 5 | 0.6 | 4.1 | 54 | 3 | 1 | 4 | 1 | 19 | 0 | 4 | 0 | 2 | 24 |
| TB003 | 1 | 2 | 1 | 3 | 533784 | 5406974 | 384 | **200** | 130 | 42 | 3.3% | 28 | 7 | 0.8 | 5.8 | 71 | 4 | 1 | 5 | 1 | 28 | 0 | 6 | 1 | 3 | 38 |
| TB004 | 0 | 1 | 1 | 2 | 541818 | 5403726 | 421 | **195** | 123 | 43 | 2.5% | 30 | 8 | 0.7 | 4.1 | 73 | 3 | 1 | 5 | 1 | 33 | 0 | 6 | 0 | 3 | 28 |
| TB004 | 1 | 2 | 1 | 2 | 541818 | 5403726 | 421 | **216** | 136 | 50 | 2.6% | 35 | 9 | 0.8 | 4.8 | 79 | 3 | 1 | 5 | 1 | 35 | 0 | 8 | 0 | 3 | 30 |
| TB005 | 0 | 1 | 1 | 2 | 530002 | 5401983 | 352 | **183** | 120 | 40 | 3.3% | 27 | 7 | 0.7 | 5.4 | 63 | 3 | 1 | 5 | 1 | 26 | 0 | 5 | 1 | 3 | 34 |
| TB005 | 1 | 2 | 1 | 2 | 530002 | 5401983 | 352 | **189** | 119 | 41 | 3.2% | 28 | 7 | 0.8 | 5.3 | 70 | 3 | 1 | 5 | 1 | 28 | 0 | 6 | 1 | 3 | 31 |
| TB006 | 0 | 1 | 1 | 3 | 529849 | 5397509 | 299 | **227** | 179 | 55 | 4.4% | 36 | 9 | 1.3 | 8.6 | 49 | 5 | 2 | 9 | 2 | 33 | 1 | 8 | 1 | 5 | 58 |
| TB006 | 1 | 2 | 1 | 3 | 529849 | 5397509 | 299 | **974** | 487 | 154 | 3.7% | 95 | 23 | **4.7** | **31.3** | 486 | 22 | 6 | 27 | 6 | 63 | 3 | 26 | 3 | 22 | 154 |
| TB006 | 2 | 3 | 1 | 3 | 529849 | 5397509 | 299 | **945** | 751 | 230 | 4.5% | 151 | 36 | **5.6** | **37.0** | 194 | 25 | 7 | 38 | 8 | 145 | 3 | 34 | 3 | 22 | 236 |
| TB007 | 0 | 1 | 1 | 3 | 529096 | 5394900 | 239 | **131** | 90 | 28 | 3.6% | 18 | 5 | 0.6 | 4.2 | 40 | 3 | 1 | 4 | 1 | 18 | 0 | 4 | 0 | 3 | 28 |
| TB007 | 1 | 2 | 1 | 3 | 529096 | 5394900 | 239 | **106** | 77 | 24 | 4.1% | 16 | 4 | 0.5 | 3.8 | 29 | 2 | 1 | 4 | 1 | 15 | 0 | 4 | 0 | 3 | 23 |
| TB007 | 2 | 3 | 1 | 3 | 529096 | 5394900 | 239 | **114** | 84 | 26 | 4.2% | 17 | 4 | 0.6 | 4.2 | 30 | 3 | 1 | 4 | 1 | 15 | 0 | 5 | 0 | 3 | 25 |
| TB008 | 0 | 1 | 1 | 3 | 530787 | 5395777 | 282 | **276** | 165 | 57 | 3.2% | 39 | 10 | 1.2 | 7.5 | 112 | 5 | 2 | 7 | 2 | 33 | 1 | 9 | 1 | 5 | 43 |
| TB008 | 1 | 2 | 1 | 3 | 530787 | 5395777 | 282 | **5,318** | 3,113 | 1,218 | 2.9% | 849 | 213 | **22.3** | **134.3** | 2205 | 71 | 37 | 150 | 24 | 774 | 8 | 186 | 9 | 67 | 568 |
| TB008 | 2 | 3 | 1 | 3 | 530787 | 5395777 | 282 | **1,404** | 1,045 | 322 | 4.6% | 206 | 51 | **8.4** | **56.0** | 359 | 35 | 11 | 56 | 11 | 188 | 4 | 50 | 4 | 30 | 335 |

Assay results concluded:

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## JORC Code Appendix 1

### 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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 hole samples from auger drilling to 12 metres maximum depth but typically 3 to 5 metres depth. Most holes did not reach bedrock. |
| *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).* | • Auger holes. |
| *Drill sample recovery* | • *Method of recording & assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery & ensure representative nature of the samples.*<br>• *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 except for first metre in soils (not used in resource estimates)<br>• No relationship between sample recovery and grade has been observed to date. |
| *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.*<br>• *Whether logging is qualitative or quantitative. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • Geologically logged by senior geologists. Every sample photographed, with photos, 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.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Chips are subsampled using bauxite shovel and quartering method in accordance with ISO standards for fine damp clay material. |
| *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.*<br>• *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.*<br>• *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.* | • Assaying done at NATA-registered commercial labs of ALS Brisbane Australia and Labwest Minerals Analysis in Western Australia. Duplicate interlab assays and different lab assaying procedures corresponded well. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *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.<br>• Duplicate interlab assays corresponded well.<br>• No adjustment of assay data done. |
| *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • GPS hole locations have been tested for accuracy on many prospects, all satisfactorily – usually within 1m.<br>• Grid Coordinates are GDA94<br>• Topographic control by Lidar topography |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • Drilling of scout holes at wide spacing up to 2 km<br>• Geological continuity is not yet assessable by this wide-spaced scout drilling campaign<br>• Grade continuity is not yet established<br>• Sample compositing not applied |
| *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.*<br>• *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 horizontal clay layers is appropriate<br>• Clay layer drapes over topography and accumulates in gullies. Vertical holes is the appropriate orientation. |
| *Sample security* | • *The measures taken to ensure sample security.* | • Samples collected and bagged at every hole site and assembled onto pallets daily, shipped to lab weekly. |
| *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.*<br>• *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 in force, unencumbered and securely held by ABx<br>• All drilling is on freehold land with access approvals by landholders |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • ABx is the first company to explore for Rare Earth Elements in northern Tasmania. No prior work has been done by other parties |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • Bauxite deposit formed on Lower Tertiary basalts overlying Jurassic dolerite<br>• REE of interest are all in clays |
| *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:*<br>  ○ *easting and northing of the drill hole collar* | • GPS location.<br>• Airborne Radar RL and LiDAR topography<br>• Lidar topography contoured at 1m height intervals |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *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.* | • 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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • All data are presented as received from labs<br>• Intercept summaries, if and when presented, are length-weighted arithmetic averages<br>• Total Rare Earth Oxides (TREO) are an aggregate of all rare earth oxides. TREO-$CeO_2$ is TREO minus Cerium oxide values. |
| *Relationship between mineralisation widths & intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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<br>• Horizontal layers drilled by vertical holes means intercept thickness is true thickness |
| *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.* | • Diagrams presented give appropriate information |
| *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 and reference made to previous tabulation of data |
| *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. Information provided is appropriate. |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Still under assessment.<br>• ABx used this area as a test of ABx's exploration technology and needs to assess the consequences of these discoveries. |