

## Drilling of 6.5km Rare Earth Channel Underway

- ❖ 70-hole drilling campaign has commenced, targeting the 6.5km contiguous mineralised corridor between Deep Leads and Rubble Mound Rare Earth (REE) discoveries<sup>1</sup> to amalgamate and enlarge the mineralised areas
- ❖ This 3<sup>rd</sup> drilling campaign is to expand the NW-SE trending REE mineralisation channel discovered in the final holes of the 2<sup>nd</sup> campaign in August<sup>1</sup>
- ❖ Drilling will also test key in-fill targets identified between Deep Leads and Rubble Mound and inspect a new style of REE mineralisation encountered in river flats to the south
- ❖ Rig mobilisation took place on 7-10 October 2022 and drilling is anticipated to take 6 weeks with assays coming in batches during and after the campaign
- ❖ Maiden JORC Resource Estimation based on previous drill results to be finalised in the next few weeks and is expected to be updated in early 2023



**Figure 1**

eDrill aircore rig and its support equipment entering the Deep Leads – Rubble Mound project area to commence the 3<sup>rd</sup> drilling campaign

ABx Group Limited (ASX: ABX) (“ABx” or the “Company”) is pleased to announce the commencement of its 3<sup>rd</sup> drilling campaign to test a 6.5km mineralised corridor connecting the Company’s Deep Leads and Rubble Mound rare earth discoveries, located in northern Tasmania.

Mobilisation of the RC rig to site was completed on 10<sup>th</sup> October 2022 with the 70-hole campaign anticipated to take 6 weeks to complete, with assay results expected to be received in batches from early November and into early CY2023.

<sup>1</sup> Refer to ASX announcement dated 20<sup>th</sup> September 2022

This 3<sup>rd</sup> drilling campaign will consist of approximately 70 holes of aircore RC drilling and push-tube coring totalling 800 metres. The campaign is designed to follow-up on the previous campaigns of first-pass exploratory drilling that discovered a continuation of the REE mineralisation for the entire distance between Deep Leads and Rubble Mound Rare Earth discoveries. That exploratory drilling confirmed a 6.5km contiguous mineralised corridor<sup>2</sup> (see Figure 2) which remains open for possible extensions to the east, north and south that all warrant further drill testing, as is planned in this 3<sup>rd</sup> drilling campaign.

The previous drilling campaign results highlighted clay-hosted REE that occur within a shallow channel structure that increased the prospect size by 27% to 5.1 km<sup>2</sup> and demonstrated the potential for the mineralised zone to deliver thick intersections. Assay results and ABx's knowledge of this REE mineralisation have also seen the project expand significantly, increasing the combined prospective area to be drill tested to more than 30km<sup>2</sup> (see Figure 2).

Follow-up drilling will primarily focus on widening the mineralised corridor by drilling holes that step out from the known northwest trending channel.

The campaign will also test in-fill targets between Deep Leads and Rubble Mound, as well as inspect a new style of REE mineralisation encountered in river flats to the south of the project.<sup>3</sup>

In addition, ABx anticipates finalising a maiden JORC Resource Estimation based on drilling results to date in the next few weeks with results from the upcoming drilling campaign to feed into an expanded resource estimate anticipated in 1Q CY2023.

**ABx Group MD and CEO Dr Mark Cooksey said:**

*"ABx is highly excited to get the drill bit turning again to further test this mineralised corridor and increase the potential for further mineralisation by extending the channel.*

*"This third campaign has all the hallmarks of a major expansion of the mineralised area with results anticipated to continue early into the new year and I look forward to keeping the market abreast of our progress."*

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

**For further information please contact:**

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<sup>2</sup> Refer to ASX announcement dated 20<sup>th</sup> September 2022

<sup>3</sup> Refer to ASX announcement dated 6<sup>th</sup> September 2022

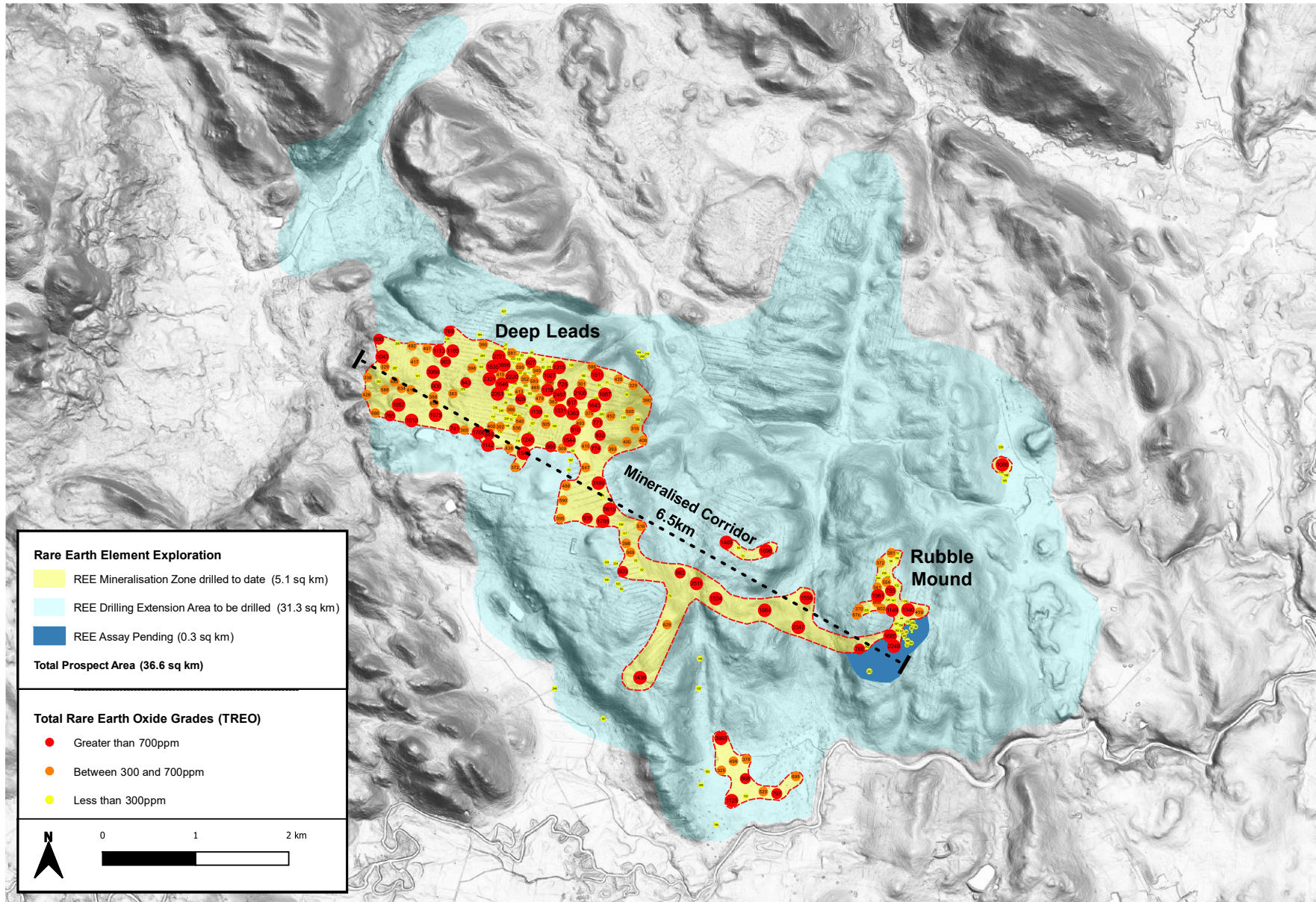


Figure 2: Mineralisation patterns in the 6.5km long mineralised corridor connecting the Deep Leads and Rubble Mound REE discoveries (yellow) and extension areas (light blue)



**Figure 3:** the eDrill RC drill rig entering the pine plantation area of the Deep Leads – Rubble Mound discovery area



**Figure 4:** eDrill senior driller, Brodie Linger driving the eDrill RC drill rig off the low loader by remote controls

## Glossary of technical terms

**Rare earth elements:** (REE) are lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), promethium (Pm), samarium (Sm), europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb) and lutetium (Lu). Yttrium (Y) is also typically grouped with the REE.

**TREO:** is total rare earth element oxides in the sample, with the REE metals expressed as rare earth element oxides, which is a common method for summarising the total grade.

**TREO-CeO<sub>2</sub>:** are TREO minus the amount of cerium oxide in the sample. CeO<sub>2</sub> is relatively low in value.

**ppm:** is parts per million by mass, which is the standard unit for reporting REE grades. 10,000ppm = 1.0%.

**Permanent magnets:** are used in electronic and computing equipment, batteries, electric vehicles, wind turbines, mobile phones and military systems. Nd & Pr are used in high-power permanent magnets. Dy, Sm & Tb are used in high-temperature permanent magnets. Some reporters called them “**Super Magnet**” REE.

**Ionic adsorption clay (IAC) REE:** In contrast with hard-rock REE ores, ionic adsorption clay REE mineralisation forms when REE attach loosely to clays and can be recovered by low-cost leaching methods. IAC REE deposits have been mined in southern China and Myanmar. ABx is one of the very few listed companies to discover true IAC REE mineralisation in Australia.

**Extraction rates from desorption tests:** To assess the potential of extracting REEs from these prospects, tests carried out by ANSTO in Sydney, which has extensive experience in metallurgical testing of clay-hosted rare earth deposits worldwide, were conducted at “standard” desorption conditions of 0.5 M ammonium sulfate at pH 4 which are low-acid, low-cost processing conditions for ionic adsorption clay REE.

The “extraction rate” is the proportion of REE contained in the sample that is extracted and reports to the leach solution. Very few other REE occurrences in Australia have achieved extraction rates that have been achieved on ABx’s REE mineralisation in the channels at the Deep Leads project area in northern Tasmania.

## Qualifying statements

**General:** The information in this report that relates to Exploration Information is 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 is a director of ABx Group Limited.

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 style of mineralisation and type of deposit under consideration, and to the activity, which has been 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.