ASX: ABX

# Director Presentation at Sydney Mineral Exploration Discussion Group

ABx Group Limited (ASX: ABX) (**ABx** or the **Company**) is pleased to provide the attached material being presented by Director Ian Levy at the Sydney Mineral Exploration Discussion Group (SMEDG) Technical Talk on 23 April 2026. SMEDG is a not-for-profit organisation affiliated with the Australian Institute of Geoscientists.

Mr Levy will present his views on geology and processing of ionic adsorption clay rare earth resources, such as the ABx Deep Leads resource in northern Tasmania, with some personal comments on the future of Australian rare earths industry, based on his 50 years' experience in the growth of and major changes in Australia's resources industry.

Mr Levy's presentation is at 6:00pm AEST on Thursday 23 April at Club York, 99 York St, Sydney.

This announcement is approved for release by Mark Cooksey, Managing Director and CEO.

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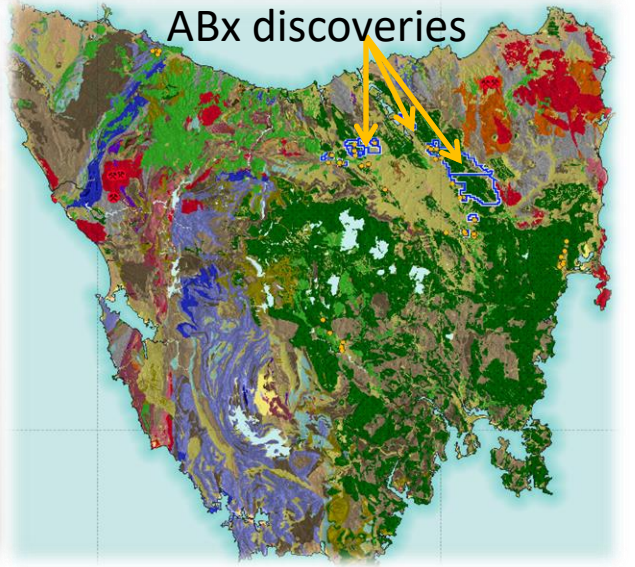
# ABx's ionic clay rare earth deposits in Tasmania, Australia

## The only true ionic clay REE in Australia




Ian Levy 23 April 2026

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**Competent Person 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.

# ABx business : REE, Fluorine & Bauxite for fertiliser & cement

ABx REE research lab Tasmania

- Highest proportion of dysprosium and terbium of any clay-hosted resource in Australia

66 Dy Dysprosium 162.5 + 65 Tb Terbium 158.93

- Extraction process already used commercially for several decades

ABx Group

**Delivering materials for a cleaner future**

**Heavy Rare Earths**

Supplying light and heavy rare earths from Tasmania into Western supply chains

ALCORE

**Clean fluorine chemical production**

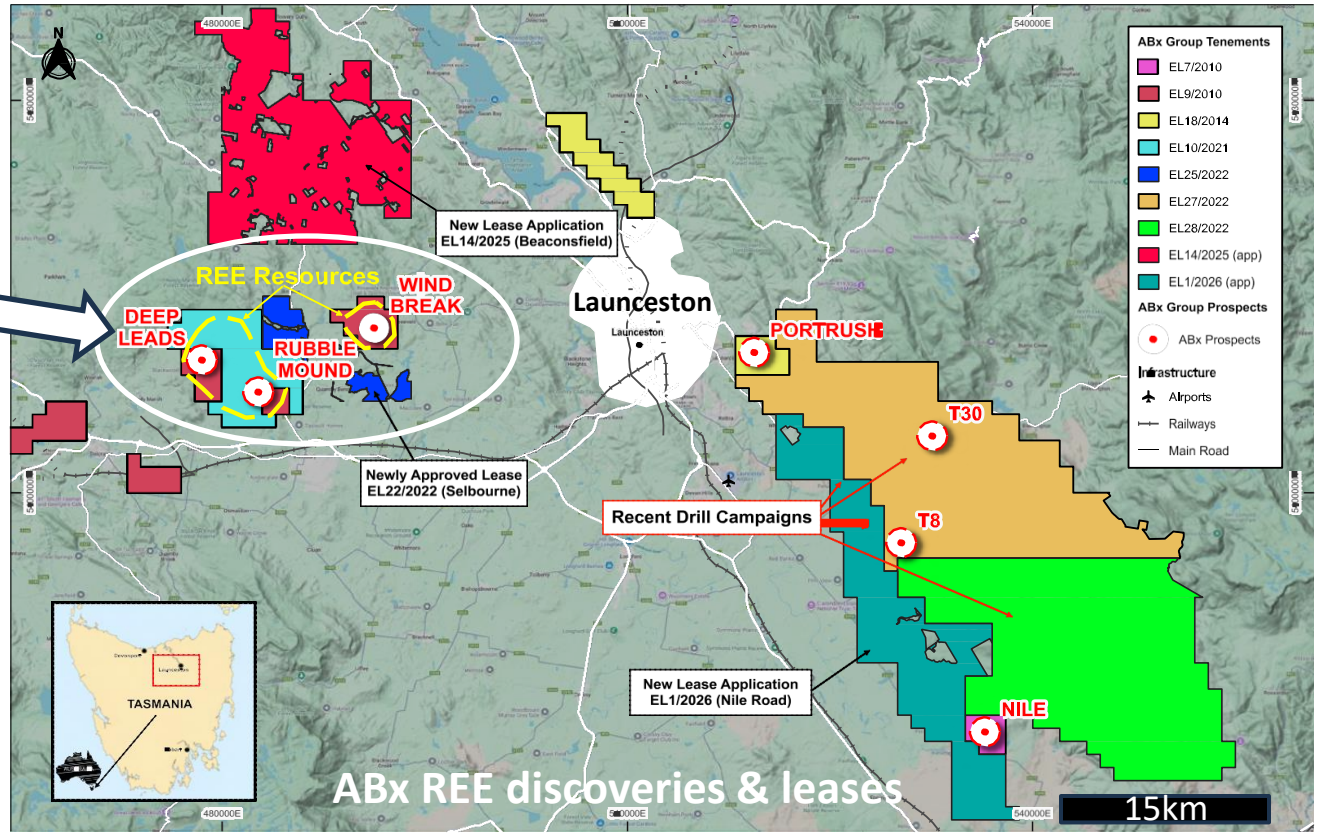
Producing industrial chemicals from aluminium smelter by-product

**Near-term bauxite production**

Mining bauxite resources for the aluminium, cement and fertiliser industries

# ABx rare earths in Tasmania contain the most critical Dy & Tb REEs

- True ionic adsorption clay IAC REE deposits* **
  - Highly enriched in Dy & Tb amongst best globally
  - Highest critical ratio **Dy+Tb/TREO 4% to 6%**
- **Resources 89Mt @ 884ppm TREO & growing****
- Low cost, fast development in pine plantations, ideal roads, rail, ports, hydro-power & towns
- 6m-8m thick REE clay, 0m-5m from surface
- ANSTO confirmed **high extraction ionic type** **
- **Produced highest value MREC of all peers** **
- 7 REE discoveries over 55km area

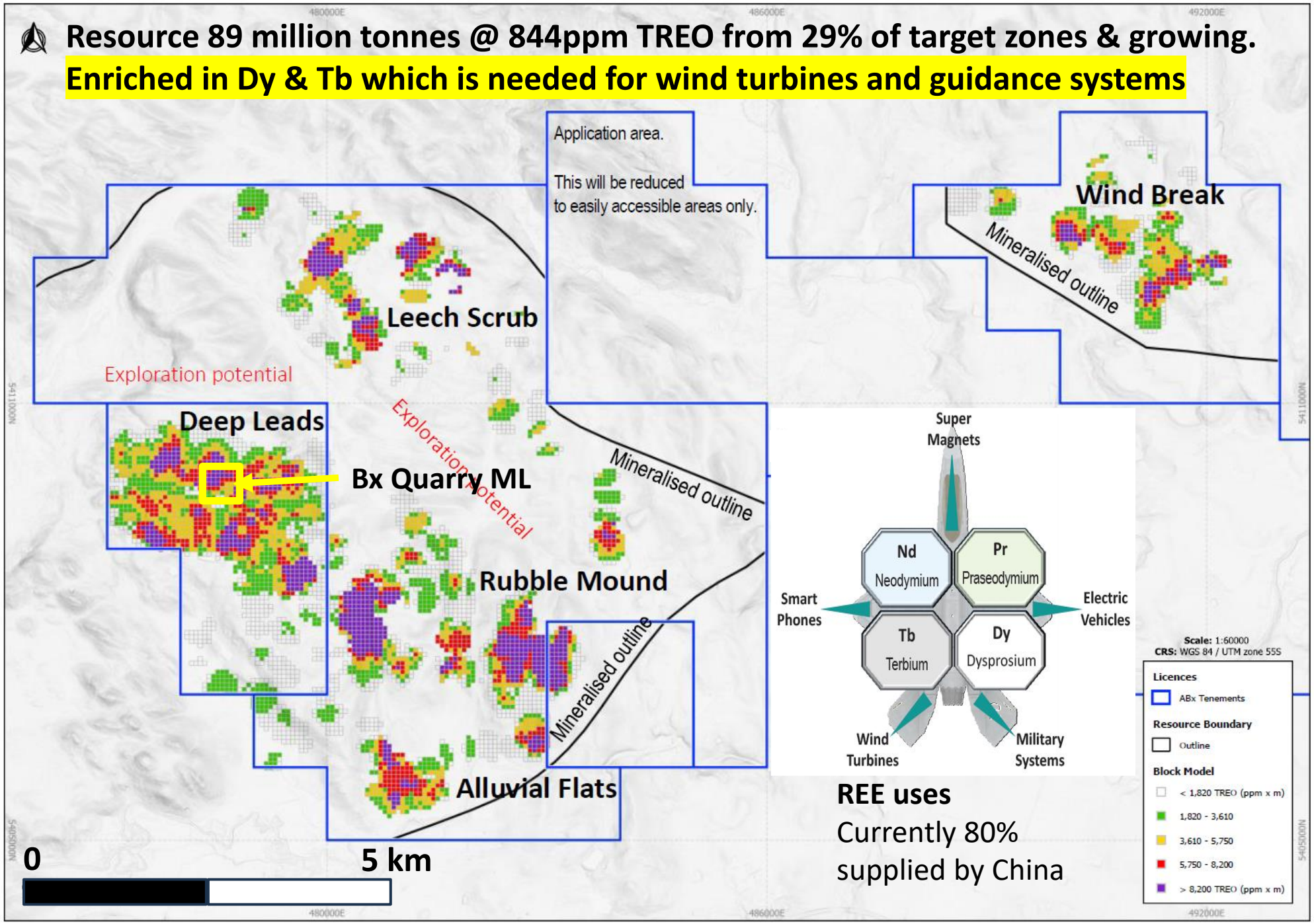



** Only IAC REE ores achieve 50%-75% extraction rates at low cost, using benign, low-cost processing. ABx has discovered the **only true IAC REE resource** in Australia and possibly the **only high Dy & Tb project in a western OECD country.***

*** ASX releases 4/5/24 (resource), ANSTO IAC confirmation 31/5/22, ANSTO Column leach & MREC production 18/12/25, 23/1/26, 2/3/26, 10/3/26*

# Resource 89 million tonnes @ 844ppm TREO from 29% of target zones & growing.

**Enriched in Dy & Tb which is needed for wind turbines and guidance systems**




**REE uses**

Currently 80% supplied by China

**Discovered 2020 (Covid)**

**Drilled Oct'21 to Feb'24**

1,077 holes, 9,742 metres

895 holes REE sampled

3,843 metres REE assayed

**18.4km² is drilled and estimated = 29% of mineralised outline**

ID2 search 120m x 150m for Measured & Indicated. 250m for Inferred

**MoU with Ucore Rare Metals Inc** (Canada & USA)

Ucore favours ABx's REE project because it is enriched in Tb & Dy.

**Ucore is building a REE processing plant in Louisiana USA**

# ABx rare earth resources exceed 89Mt*

* See ASX release 04 May 2024

**Resources at Deep Leads-Rubble Mound & Wind Break @ US$30/t cog**

| Resource Category | Million Tonnes | Avg depth (m) | Avg base (m) | Avg thickness (m) | TREO ppm | TREO-$CeO_2$ ppm | Perm Mag ppm | Permanent Magnet REOs: $Nd_2O_3$ ppm | $Pr_6O_{11}$ ppm | $Tb_4O_7$ ppm | $Dy_2O_3$ ppm | Key Ratios: 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** | **88.6** | **4.2** | **12.0** | **7.8** | **844** | **652** | **221** | **147** | **37** | **5.2** | **31** | **26%** | **4.3%** |

Low radioactivity

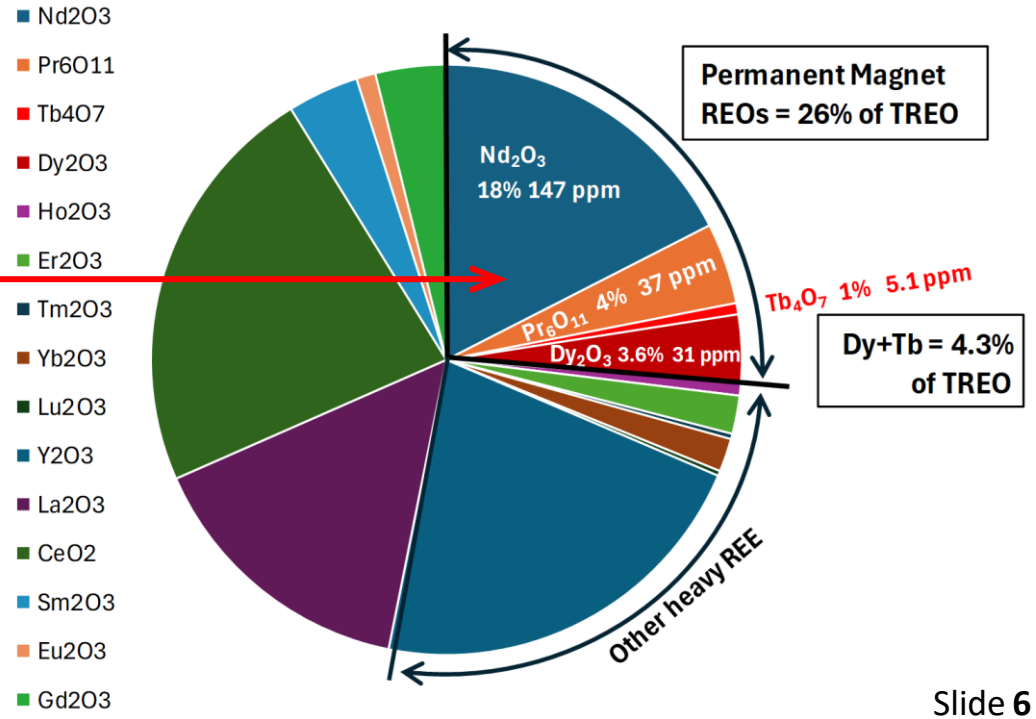
| ThO ppm | $U_3O_8$ ppm |
|---|---|
| 6.6 | 1.8 |
| 6.4 | 1.8 |
| 6.2 | 1.7 |
| **6.5** | **1.8** |

**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.

**Extraction rates** of 30% to 83% **at pH 4 which is benign** (~apple juice) and ideal for low-cost production of REE concentrates

## BEST MIX OF Permanent magnet REE

- ❖ High permanent magnet REEs (Nd, Pr, Tb & Dy) 26% of TREO
- ❖ **Very high Dy & Tb** = 4% to 6% of Total Rare Earths (TREO)
- ❖ Non-radioactive: Free of Uranium & Thorium.
- ❖ 89Mt is from 29% of mineralised outline area



# ABx deposits are aligned with REE market trends

| REE (oxide) | USD$/tonne at 6/3/26 | ABx Deposits |
|---|---|---|
| La | $740 | |
| Ce | $1,990 | |
| Pr | $133,100 | Rich in Pr |
| Nd | $133,500 | Rich in Nd |
| Sm | $2,380 | |
| Eu | $24,900 | |
| Gd | $36,300 | |
| **Tb** | **$908,500** | **Most enriched in Tb** |
| **Dy** | **$215,900** | **Most enriched in Dy** |
| Ho | $80,300 | |
| Er | $58,200 | |
| Yb | $14,400 | |
| Lu | $743,800 | Elevated |
| Y | $10,500 | |

Source: Shanghai Metals Market 06/03/2026

| Rare earth | Rare earth type | Feature |
|---|---|---|
| Neodymium (Nd)<br>Praseodymium (Pr) | Light | Provide magnetic strength |
| Dysprosium (Dy)<br>Terbium (Tb) | Heavy | Retain magnetic strength at high temperatures |

**Tb & Dy are vital but supply is the most uncertain**

- **Hard Rock Projects can supply Pr & Nd**
- **Tb & Dy are in shortest supply – hence their high prices**
- **Tb & Dy come mainly from ionic adsorption clay deposits in Southern China**
- **Southern Chinese resources starting to deplete. Chinese production moving into SE Asia to maintain supply**

# Regional Geology

1. **Cenozoic erosion**, glaciation, young soils developed (unique in Australia). DAMP

2. **Alkali Basalts** filled rivers and gullies 20 to 30Ma. Heavily eroded and bauxitised in places. Often absent

3. **Tholeiitic dolerite sills** intruded 170Ma

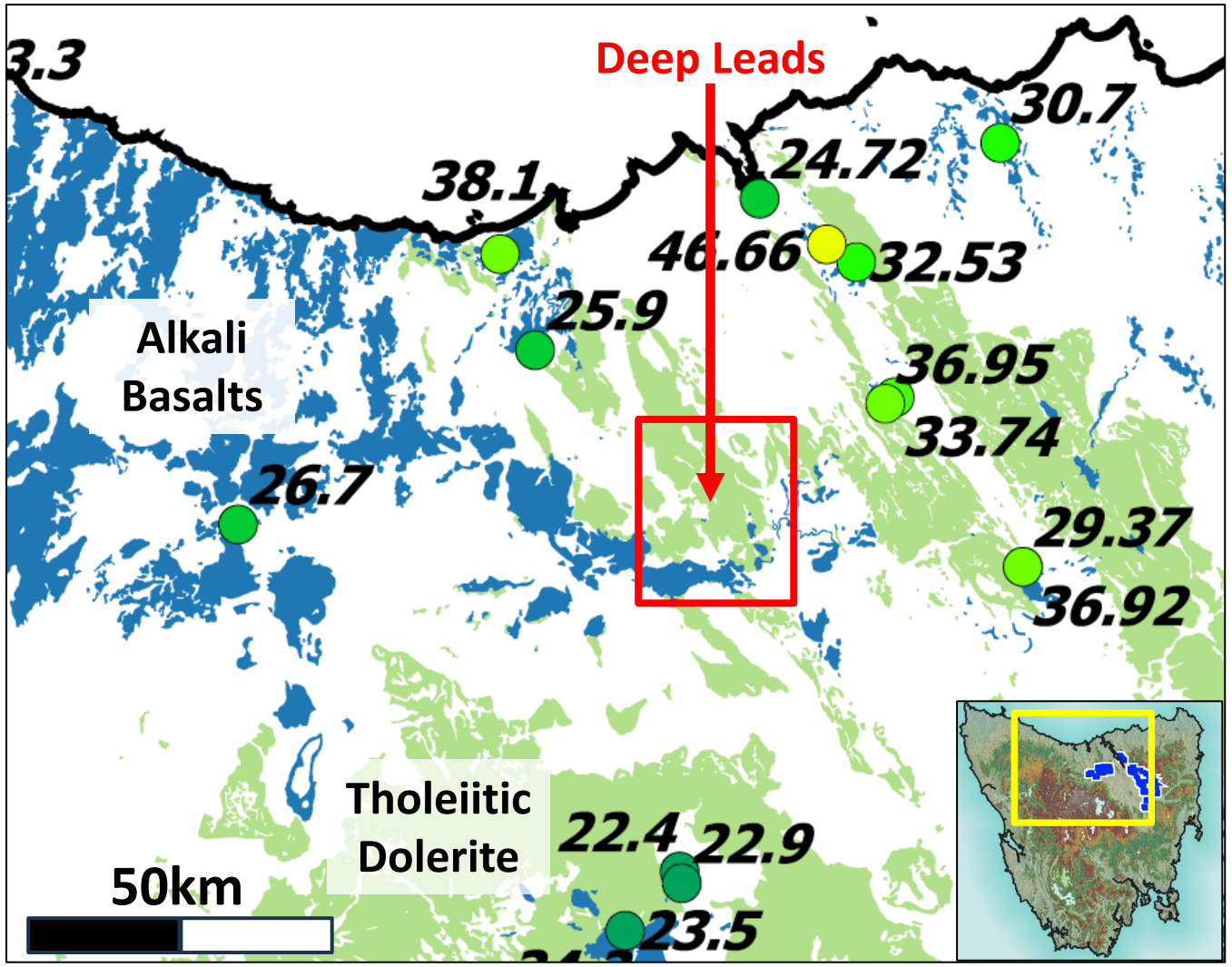
   Ferrar large igneous province" in Tasmania, Antarctica, NZ & Sth Africa formed as Gondwana broke up

4. **Paleozoic** strata hosted dolerite sills

5. **Precambrian** basement further west

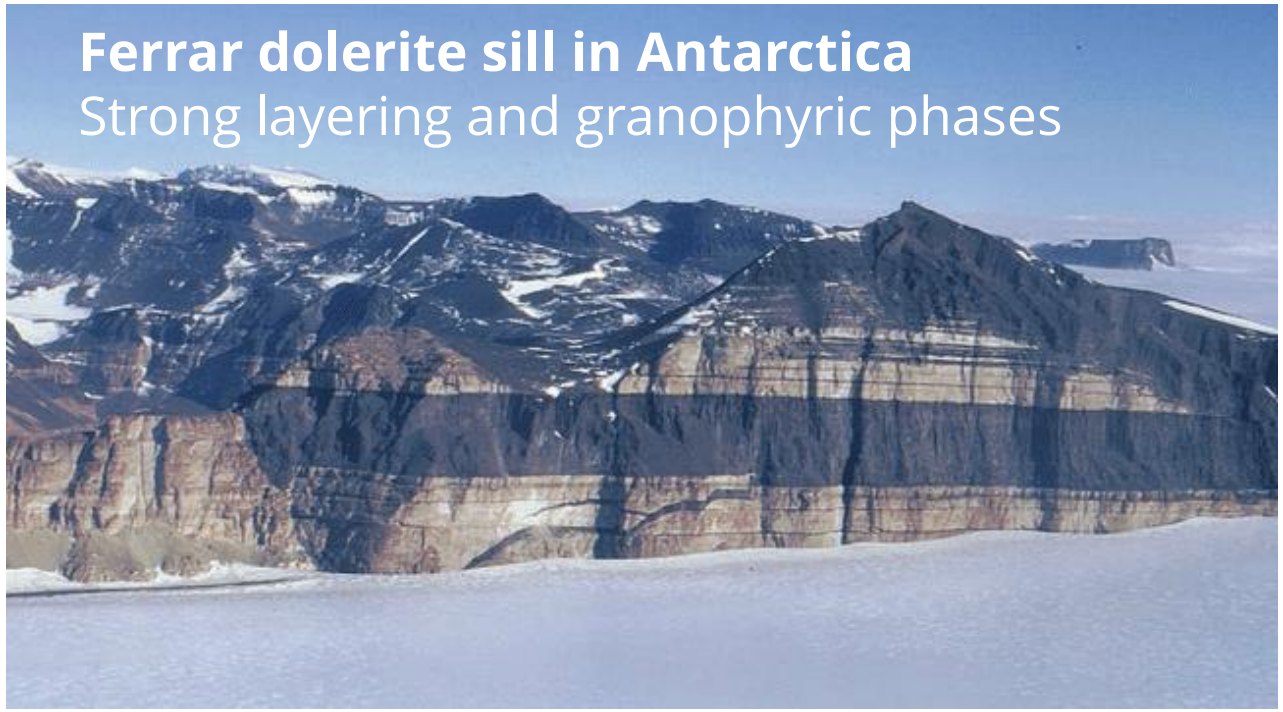
## Basalts & dolerite in northern Tasmania

Ages in Ma

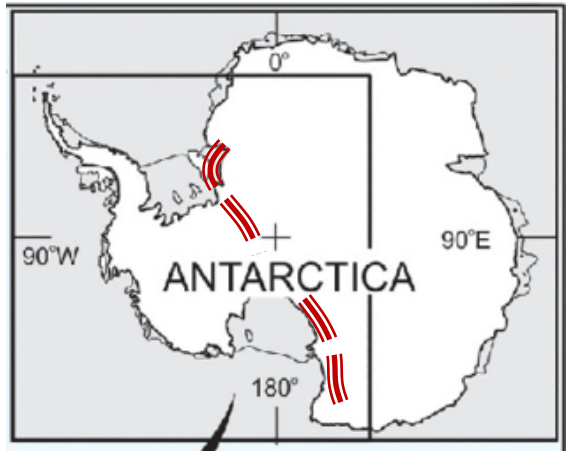



Source: MRT Tas geological map + ABx bauxite discoveries

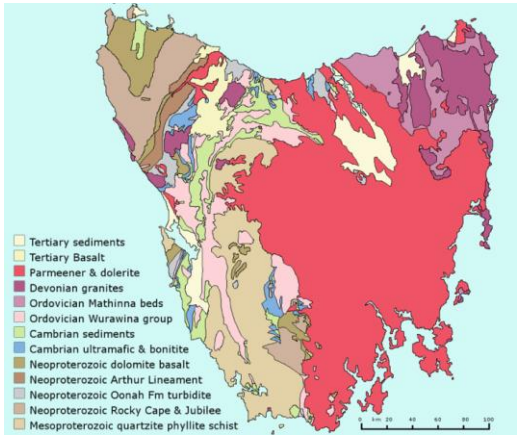
# Ferrar dolerite large igneous province. Jurassic ~170Ma







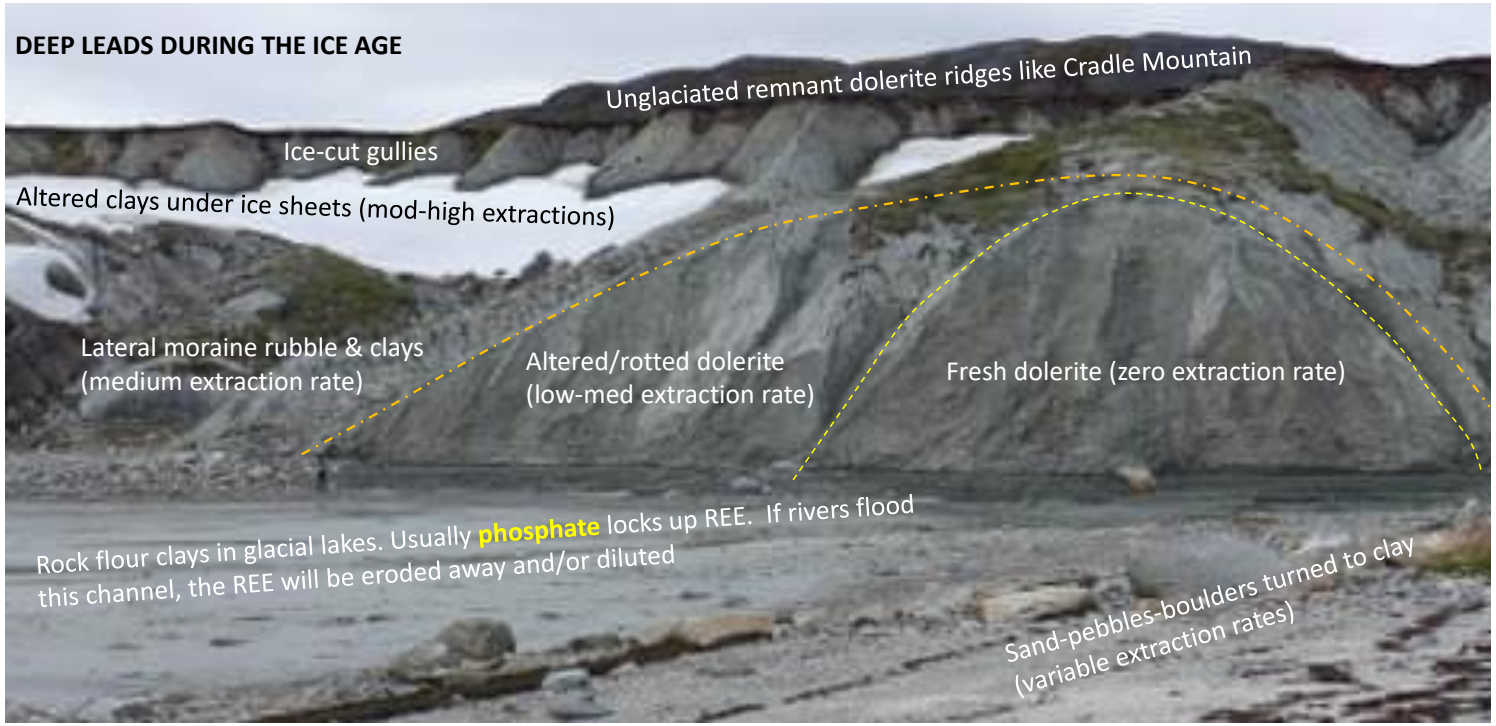

Ferrar dolerite extends along the 3,000km length of the Trans-Antarctic Mountains




Ferrar tholeiitic dolerite covers 1/3$^{rd}$ of Tasmania. 100m – 400m thick sills.

World's 5$^{th}$ largest Large Igneous Province.

# Ferrar Dolerite erosion & weathering

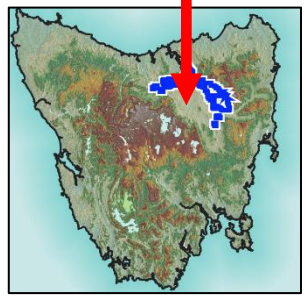



**Ice erosion of dolerite.**

**Spheroidal weathering of dolerite in Antarctica today**


**Spheroidal weathering & clays formed in Tasmania**

Hard to drill

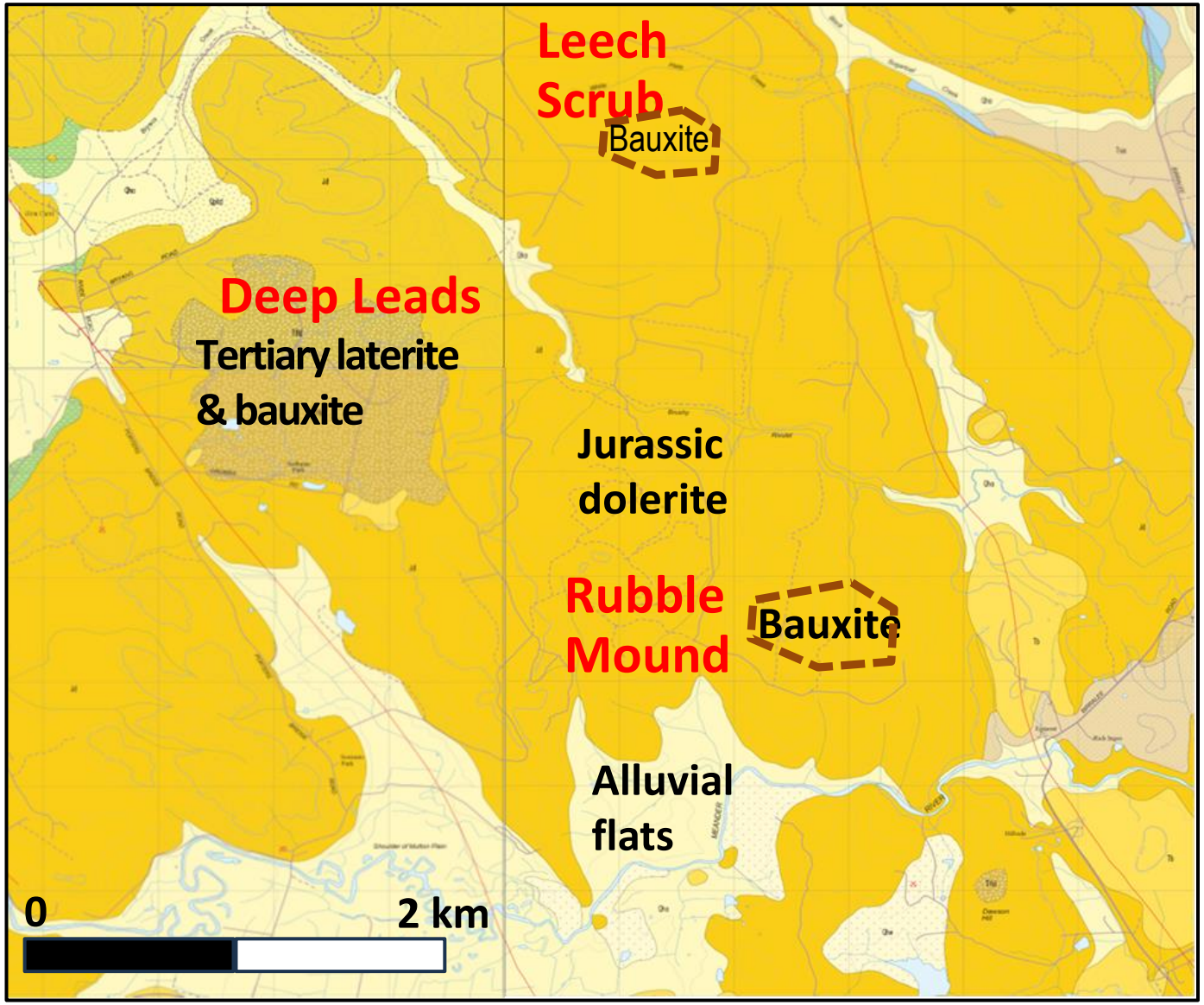


# Deep Leads – Rubble Mound Geology

1. Shallow clay layer: Bauxite-laterite & clays with bauxite & dolerite grains
2. REE clay layer
3. River gravel layers in a few places
4. Weathered dolerite
5. Fresh dolerite - columnar jointed sills hundreds of metres thick

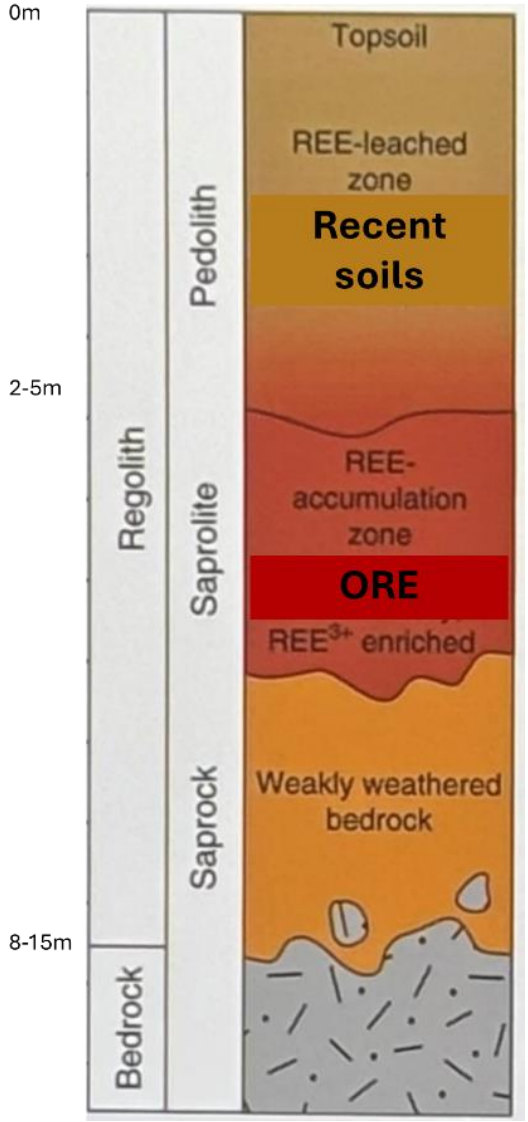
Note:

Remnant alkali basalt along the river valley has been largely eroded away




Source: MRT Tas geological map + ABx bauxite discoveries

# Deep Leads–Rubble Mound Projects + 3rd discovery at Leech Scrub



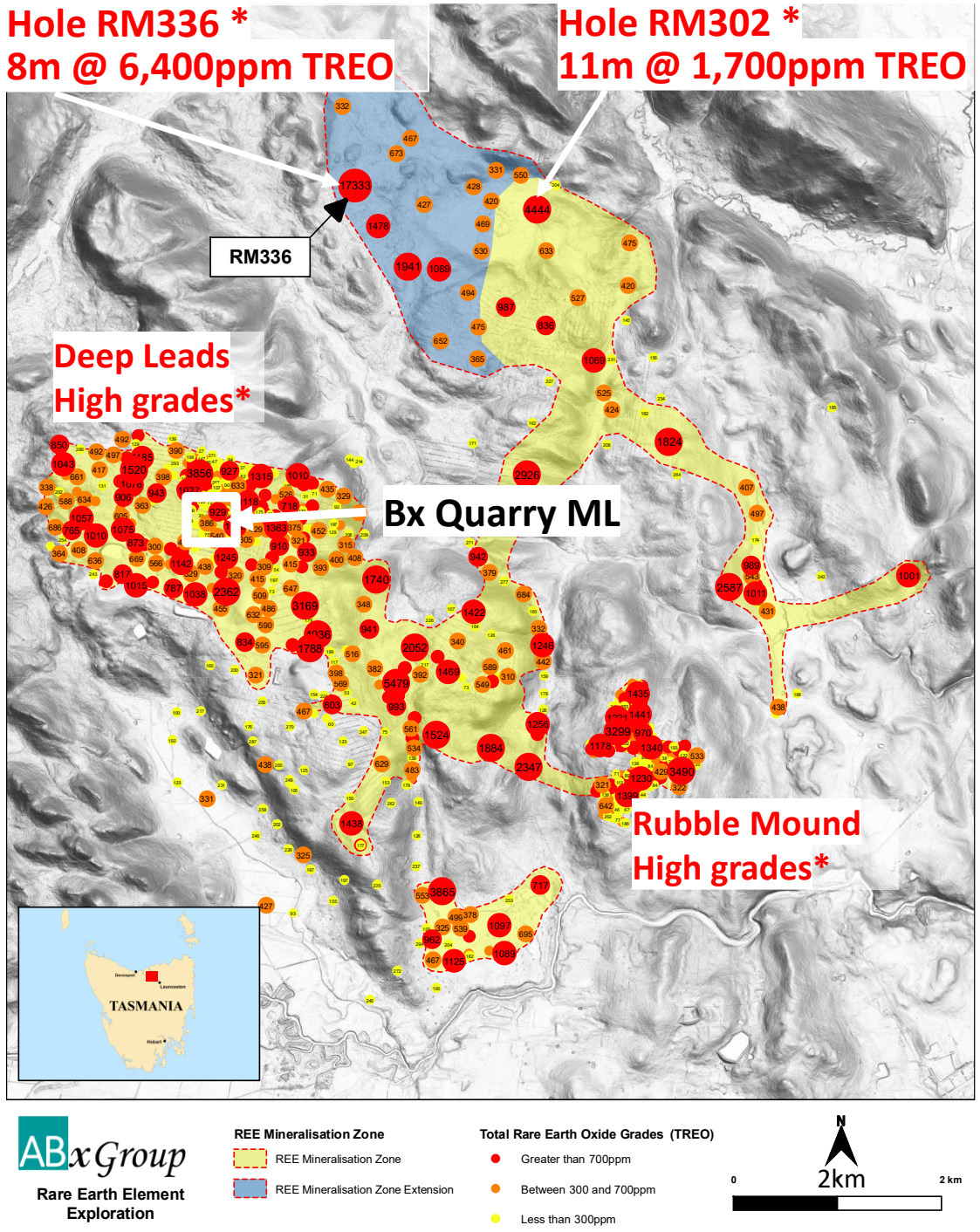

## Deep Leads viability being assessed & engineered

- Overburden 5m thick
- REE horizon avg 8m thick
- Sits on dolerite bedrock
- Located in pine plantation

= **shallow orebody,**

**easily developed & rehabilitated**

Modified from Collerson 2026
OZRE'26 Canberra 18/2/26




* See ASX announcement 27 Sep 2023

# Assays for Leech Scrub discovery hole RM336 (3rd mine centre?)

**Hole RM336** Location - see Map

| From m | To m | Length m | TREO ppm | TREO-$CeO_2$ ppm | Perm Mag REO ppm | $Dy_2O_3$ ppm | $Tb_4O_7$ ppm | Dy+Tb / TREO % | **Other Rare Earth Elements** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | $CeO_2$ 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 | $Nd_2O_3$ ppm | $Pr_6O_{11}$ ppm | $Sm_2O_3$ ppm | $Tm_2O_3$ ppm | $Y_2O_3$ ppm | $Yb_2O_3$ ppm |
| 0 | 1 | 1 | 126 | 79 | 23 | 4 | 0.6 | 3.5% | 47 | 3 | 1 | 3.28 | 0.84 | 16 | 0.41 | 15 | 4 | 3 | 0.4 | 26.3 | 2 |
| 1 | 2 | 1 | 952 | 363 | 101 | 19 | 3 | 2.3% | 590 | 12 | 3 | 15 | 3.91 | 71 | 1.59 | 63 | 17 | 12 | 1.7 | 131 | 10 |
| 2 | 3 | 1 | 6,719 | 5,564 | 2,074 | 235 | 40 | 4.1% | 1,155 | 125 | 69 | 244 | 43.8 | 1,366 | 16.4 | 1,423 | 376 | 282 | 17.4 | 1218 | 108 |
| 3 | 4 | 1 | **17,333** | **16,847** | **6,189** | **819** | **138** | **5.5%** | 486 | 435 | 227 | 818 | 153 | 3,589 | 54.8 | 4,176 | 1,056 | 877 | 59.2 | 4076 | 369 |
| 4 | 5 | 1 | **12,894** | **12,644** | **4,081** | **600** | **99** | **5.4%** | 251 | 359 | 148 | 603 | 122 | 2,709 | 44.8 | 2,718 | 664 | 566 | 47.6 | 3670 | 293 |
| 5 | 6 | 1 | 4,817 | 4,642 | 1,333 | 213 | 35 | 5.1% | 175 | 137 | 48 | 214 | 45.2 | 971 | 17.3 | 874 | 211 | 181 | 18.3 | 1568 | 107 |
| 6 | 7 | 1 | 4,285 | 4,102 | 1,324 | 191 | 32 | 5.2% | 183 | 114 | 48 | 196 | 38.5 | 868 | 13.9 | 883 | 218 | 190 | 15.1 | 1203 | 93 |
| 7 | 8 | 1 | 2,078 | 1,987 | 580 | 91 | 15 | 5.1% | 92 | 59 | 21 | 91.5 | 19.6 | 405 | 7.4 | 380 | 94 | 81 | 7.8 | 669 | 46 |
| 8 | 9 | 1 | 2,167 | 2,061 | 667 | 95 | 16 | 5.1% | 106 | 56 | 25 | 97.4 | 19.5 | 433 | 6.79 | 446 | 110 | 98 | 7.8 | 603 | 48 |
| **1** | **9** | **8** | **6,406** | **6,026** | **2,044** | **283** | **47** | **5.2%** | **380** | **162** | **74** | **285** | **55.7** | **1301** | **20.4** | **1,370** | **343** | **286** | **21.8** | **1642** | **134** |

From ASX announcement 27 Sep 2023

Hole location

| Hole ID | Northing | Easting | Latitude | Longitude | Elevation GPS |
|---|---|---|---|---|---|
| RM302 | 5412740 | 481722 | -41.4367 | 146.7812 | 230 |

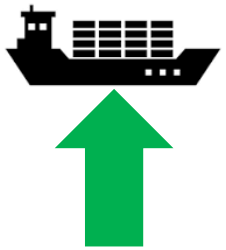
THIS IS EXCEPTIONALLY HIGH GRADE AND THICK

ABx has many similar REE target zones to drill soon

# Discovery hole RM336 (3rd mine centre?): 60t bulk pit confirmed grades


| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TREO ppm | 126 | 952 | 6,719 | 17,333 | 12,894 | 4,817 | 4,285 | 2,078 | 2,167 |
| $Dy_2O_3$ | 4 | 19 | 235 | 819 | 600 | 213 | 191 | 91 | 95 |
| $Tb_4O_7$ | 0.6 | 3 | 40 | 138 | 99 | 35 | 32 | 15 | 16 |

# REE project business concepts for ionic adsorption clay REE



**Mine**

- Dredge, Hydraulic mine & slurry?
- Dig & truck probably
- In situ not studied
- **Must leave land better than found (ABx bauxite technology)**

**Concentrate**

- Simple, low-cost leachate pH 4
- Ionic clay leach
- Tank leach
- Vat leach
- Heap leach
- In-situ leach?

**Sell mixed rare earths carbonate "MREC"**
Australia &/or overseas

**Sample from ANSTO bulk column leach sent to potential customers. "Excellent"**

**Rehabilitate**

- Water treated
- Clays dewatered
- Reinstated to usable land
- Replanting

**Improve**

- Contour land
- Infrastructure
- Better drainage
- Pasture, plantations, offsets, forests?

**Fastest, lowest-cost start-up**

# Processing - critical factor of clay-hosted REEs. MOST DON'T WORK

MREC can be produced from ionic adsorption clay ore using existing commercial 3-step process

**Ionic Adsorption Clay (IAC) Ore**

**3-step process**

1. Leaching
2. Impurity Removal
3. Precipitation

**Mixed Rare Earth Carbonate (MREC)**

**1.Resource Size and Grade**

- Amount of Nd and Pr
- Amount of Dy and Tb

→ Production Cost

**2. Processing Cost**

- Cost of raw materials, labour and utilities
- Proportion of Nd and Pr recovered
- Proportion of Dy and Tb recovered

→ Production Cost

**3. Product Composition**

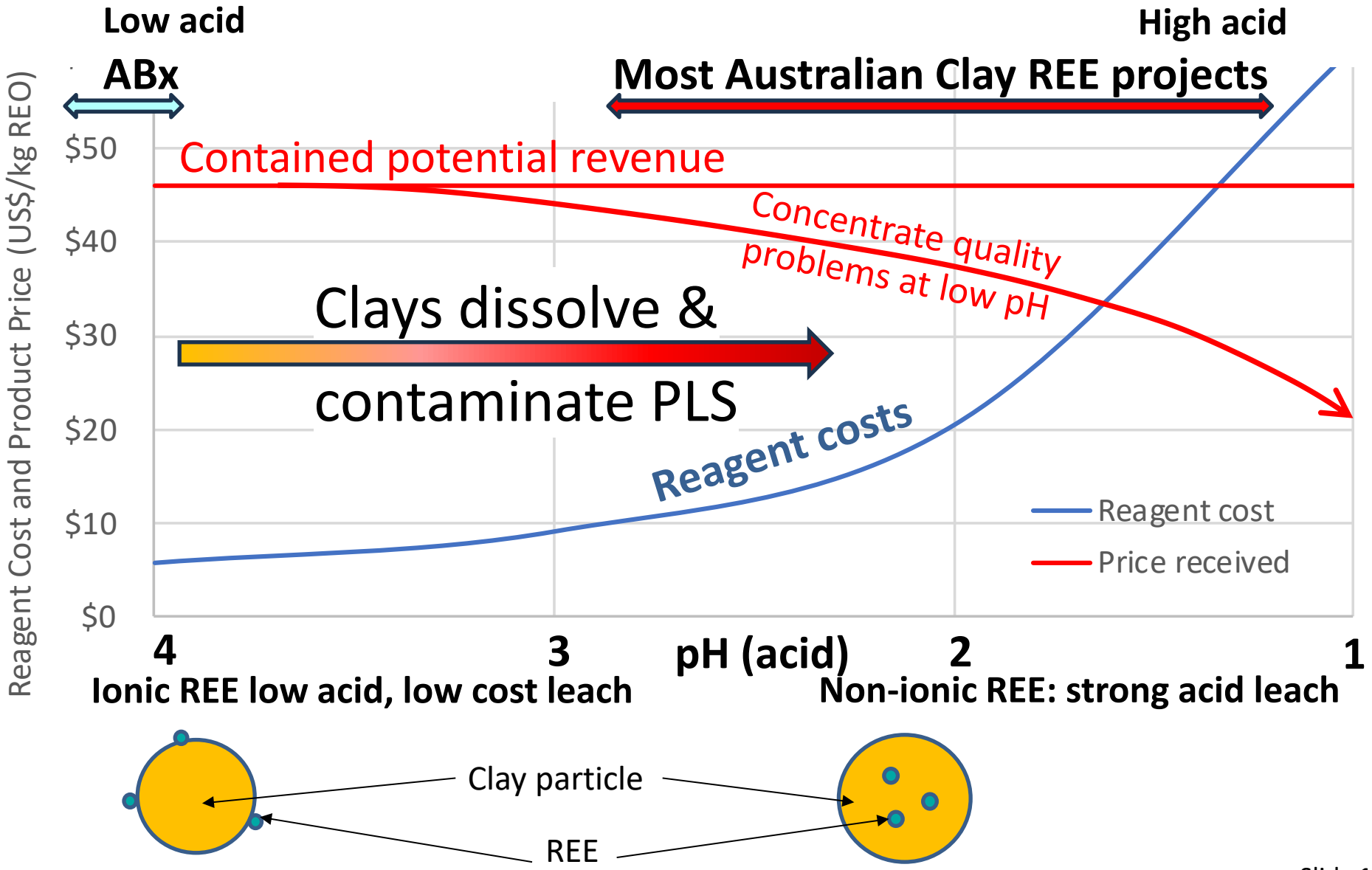
- Proportion of Nd and Pr
- Proportion of Dy and Tb
- Proportion of impurities

→ Product Value

# Not all clays are created equal: pH is most important factor

- Chart based on published data
- As pH decreases, reagent cost alone can be higher than product price

- Position on cost curve depends on pH needed for extraction
- Low pH production cost is likely to be higher than revenue



# Land-Use & Infrastructure Setting

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

IAC REE occurs on poorer land, not cropping land

Replanted pine plantations and some scrubland

Supportive landholders: **Forico** plantations

ABx bauxite quarry here

Good access on highway & all-weather logging roads.

Heavy industry in mines & cities.

Neaby towns, low-cost abundant water & hydro grid electricity power.

# Future of Australian clay-hosted REE deposits

## Lessons from Australia's 175 years of mining success

**1. Metallurgical breakthroughs are happening for mainland clay REE projects**

**Historical examples:**
1. Carbon-in-leach cyanidation for gold
2. Flotation for base metals
3. Heap leach for gold, base metals

**2. Mining breakthroughs**

**Historical examples:**
1. Bulk open pits: gold, coal, iron ore & bauxite mines
2. In-situ leaching for uranium, copper

**3. PRICES FOR REE – Global economic-industrial developments**

**Historical examples:**
1. Gold **1975** US$35/oz, cog 8g/t **2026** US$4,900/oz, cog 0.5g/t
2. Cu price rose when Chilean leachable copper exhausted

**TRENDS**
1. Prices of Dy & Tb RISING STRONGLY as Southern Chinese mines deplete
2. Acid leaching of REE phosphate **rhabdophane** may become viable at higher prices
3. US and EU prices for good quality Dy-Tb rich MREC have been increasing

**Thank you**

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