

## Presentation – General Meeting

Northern Minerals Ltd (ASX: NTU) advises that Executive Chairman Nicholas Curtis is addressing shareholders at the General Meeting at 10 am AWST today.

Attached is a copy of the Chairmans address and presentation.

*Authorised by Nicholas Curtis AM – Executive Chairman*

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### Powering Technology.

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**NORTHERN MINERALS LIMITED  
GENERAL MEETING  
OF SHAREHOLDERS  
MONDAY, 12 DECEMBER 2022 AT 10 AM**

**CHAIRMANS ADDRESS:**

**By Executive Chairman, Mr Nicholas Curtis**

Good morning everyone, my name is Nick Curtis, and I would like to welcome you all to today's meeting.

The past year has been transformational for Northern Minerals. We are putting in place the platform that will allow us to achieve our vision of becoming a leading producer of ethically produced rare earth elements, especially the heavy rare earths dysprosium and terbium, often referred to by their symbols of Dy and Tb, respectively.

These "heavies" are essential ingredients in neodymium iron-boron magnets used in high value equipment, such as electric vehicle motors and magnets used in wind turbines. These are usually subject to significant variations in their temperature operating conditions and require 7-10% of the neodymium / praseodymium content as dysprosium and terbium to resist demagnetisation due to the change in operating temperature. There is no known alternative.

Double-digit growth from EV and wind power sectors is forecast by independent strategic metals and minerals research firm Adamas Intelligence to grow global demand for NdFeB magnets at an average annual rate of 8.6% a year between 2022 and 2035, but this growth may be stunted by a global shortage of Dy and Tb. This is the background to the exciting future we see for Northern Minerals as we move to develop our Dy and Tb rich Wolverine deposit at Browns Range and accelerate our evolution from explorer to producer.

The strategic partnership we announced with Iluka Resources is a key component of our strategy, which is initially focused on prioritising the rich Wolverine deposit and aiming to bring forward plans for commercial production. The partnership with Iluka reinforces the Board's confidence in its strategy and the enormous potential of the precinct.

This is a mutually beneficial partnership, with Iluka agreeing to purchase all available concentrate from the Browns Range project, until the delivery of contained rare earth oxide (REO) has reached 30.5kt. This covers the initial 8 years plus mine life based on the current known mineral resource. The supply agreement with Iluka de-risks and accelerates the development of the Browns Range Project, significantly reducing our likely capex.

Iluka has initially invested \$20 million in Northern Minerals via a \$15 million convertible note and a \$5 million share placement. This will provide our Company with the funding required to complete a definitive feasibility study (DFS), promoting delivery of a final investment decision (FID) on Browns Range over the next year.

In addition to its initial investment, Iluka has committed to provide additional equity funding towards Browns Range post FID through a further placement, subject to certain conditions. Subject to shareholder approval, Iluka and Northern Minerals have also agreed to the grant of put and call options over additional Northern shares. This provides Iluka with a pathway up to an ultimate 19.9% shareholding in Northern Minerals.

For Iluka, the Browns Range concentrate will be an additional source of quality differentiated feedstock for the integrated rare earths refinery it is building at Eneabba in Western Australia and will be a significant contributor to establishing the Eneabba refinery as a long-term producer of highly valued heavy, as well as



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light, permanent magnet REOs. Having the concentrate processed at Eneabba will be the first time that the value addition will occur in Australia and demonstrates the refinery's strategic importance in fostering a new critical minerals supply chain.

The first three motions we are asking you to vote on today ratify the initial investment made by Iluka and to authorise the subsequent investments, subject to other performance conditions being met.

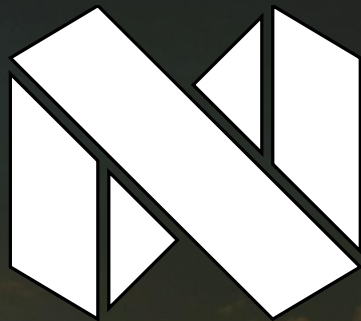
It is important for me to also explain that while we are accelerating the development of Wolverine to bring us to cash flow, we continue to be excited about the significant potential of other commercial deposits of xenotime within the Browns Range system. We do not consider developing Wolverine as the end but see it as just the beginning of what we hope will be a rare earth district producing essential elements well into the future. Exploration to date has only examined approximately 15% of the Browns Range Dome, while the Company has two other highly prospective projects, the John Galt Project in Western Australia and the Boulder Ridge Project in the Northern Territory.

Before I move to the formal business, I would like to introduce you to Shane Hartwig, who joined us this month as Executive Director – Finance. Shane is a vastly experienced finance executive with a proven track record and is an important member of the Company's new management team. He is based with me in the Company's Corporate Office in Sydney.

In conclusion, Northern Minerals now has a clear path towards production underpinned by a strategic relationship with Iluka Resources. We own an orebody rich in the strategic heavy rare earths dysprosium and terbium, and an aspiration – together with Iluka – to create an Australian-based supply chain for prized rare earth metals critical in the production of the permanent magnets used in high performance electric vehicles and wind turbines.

I will now move to the business of this meeting.





# NORTHERN MINERALS

General Meeting

12 December 2022

# Strategic Overview

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Aiming to be a leading ex-China supplier of Dysprosium and Terbium, which have strong tailwinds from decarbonisation

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2

Strategic partnership with Iluka de-risks and accelerates the project development via a supply agreement and significantly reduced capex

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3

Strong geological potential at Browns Range from Wolverine deposit and surrounding tenements, with ambition to grow mine life >20 years

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# Dy + Tb are critical in the high end magnet supply chain

- Permanent magnets play a critical role in electrification and decarbonisation, creating strong long-term demand for key magnet minerals
- Batteries are critical as they store energy, but permanent magnets transform that energy into kinetic energy
  - Permanent magnets and catalysts responsible for ~65% of global rare earths demand by volume, and permanent magnets only, ~95% by value (in 2021)<sup>1</sup>
  - Value of magnet rare earths market is expected to triple by 2035<sup>1</sup>
- Dy and Tb are key components in the manufacture of performance technology solutions for clean energy
  - High-end uses such as wind turbines and electric vehicle motors are expected to have higher demand growth
- Not enough Dy and Tb to source projected demand forecasts
  - By 2035, expectation of a shortage equal to 2-3x 2021 global output<sup>1</sup>

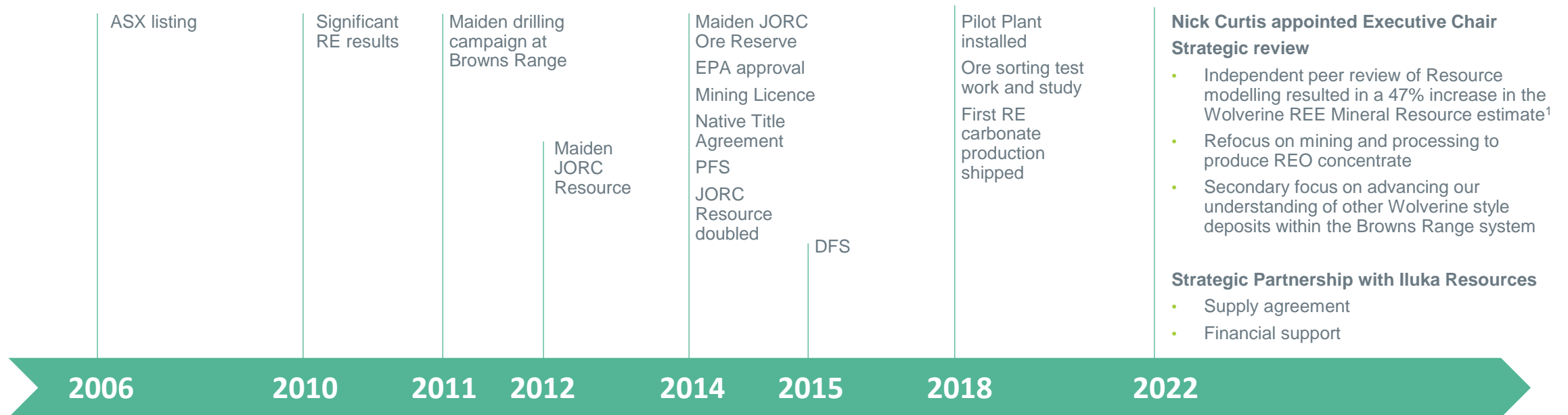
## Northern Minerals owns high quality field, hosting Dy + Tb

- Geological system rich in Dy and Tb, containing three types of mineralisation traps
  - Occurrence of shear zones (vertical structure, high grade)
  - Horizontal strata bound (near surface, lower grade)
  - Unconformity related Dazzler style (high grade)
- Wolverine is understood to be the highest grade Dy and Tb orebody in Australia
- Existing near mine infrastructure (access to camp, roads, power, etc.)
- Wolverine Mineral Resource estimated at 61,492 tonnes of TREO in 6.44 million tonnes @ 0.96% TREO<sup>1</sup>
- Significant potential for further mineralised shear zones within the Browns Range Project
- Native Title co-existence agreement in place with the Jaru Native Title Holders

1. Classified and reported according to Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, The JORC Code 2012 Edition, Effective December 2013, Prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC Code). See ASX announcement on 10 October 2022 for further details



# Evolution – from exploration to aspiring producer



- The arrangements under the Iluka Strategic Partnership allow Northern Minerals to focus on being an upstream producer, with a refined project scope reducing capital expenditure and participation in upside in the pricing of our Rare Earths, including highly valued Dysprosium and Terbium
- The company is now focused on updating our DFS on the path to production of REO concentrate to be processed at Iluka's Eneabba plant

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# Moving Wolverine deposit towards production

- ◆ NTU is assembling an experienced team to update the DFS, which will leverage work undertaken in the 2015 DFS. Incremental work will focus on:
  - Assessing mining costs of the revised mining method (sub level caving)
  - Mining Wolverine as a shear zone
  - Inclusion of an ore sorter to increase product grade and de-risk mining dilution – demonstrated 60% improvement in ore sorter product grade from pilot plant operation
  - Establishing a concentrate beneficiation plant
  - Maintaining exposure to REO price upside through terms of Supply Agreement with Iluka, rather than constructing capex intensive downstream processing plant
- ◆ Indicative timeline:
  - Updating DFS expected to take 12 – 15 months
  - Targeting Wolverine Project FID in Q1 2024 with first production forecast to occur in 2026, subject to receipt of customary approvals
- ◆ Brown Range Project further de-risked with long term supply and funding agreements with Iluka
- ◆ Supply agreements with Iluka provides a solution for downstream processing which changes project scope and reduces upfront capex spend; the take or pay agreement also provides commitment by its foundation customer
- ◆ Aiming to become an important alternative supplier of Dy and Tb

## Ore Sorter at Browns Range Project



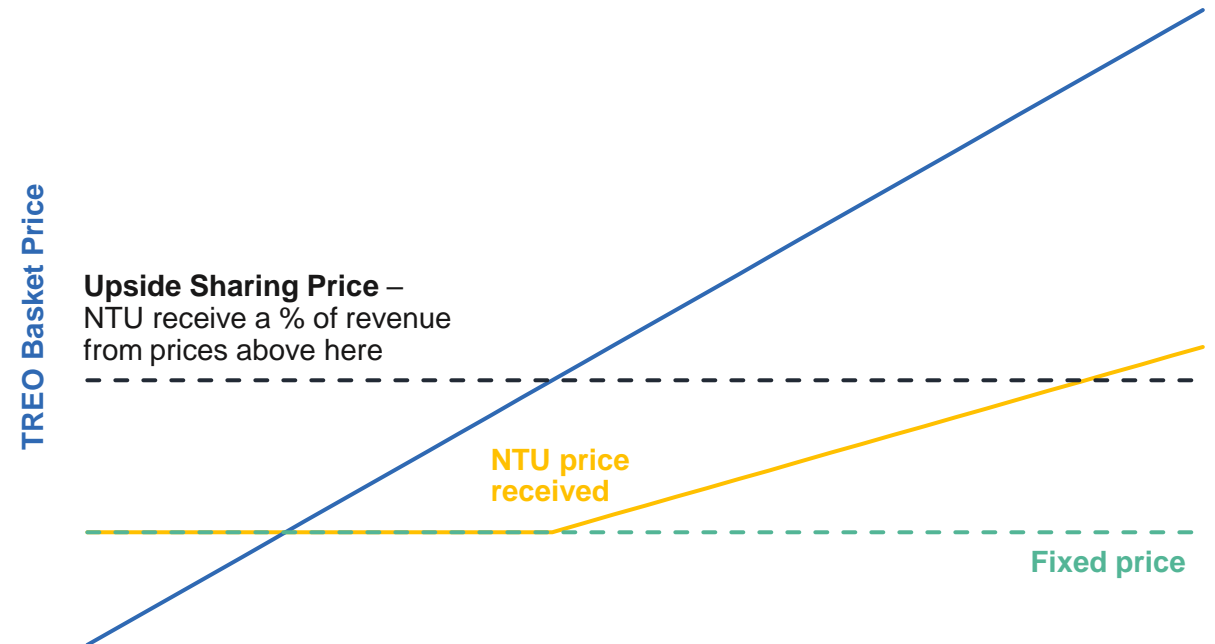


# Iluka Supply Agreement

## Xenotime Concentrate Sale And Purchase Agreement

- ◆ Northern Minerals to produce Xenotime concentrate from its Browns Range Project and sell to Iluka for use in its Eneabba Refinery
- ◆ Proposed annual production to be delivered to Iluka (post commissioning and ramp up) initially not greater than 5,500 tonnes of contained REO in Product (Maximum Annual Quantity)
- ◆ Northern Minerals must sell and deliver to Iluka, and Iluka must purchase and take, 100% of the product that is produced from Northern Minerals in each year within agreed bands of Minimum and Maximum Quantities that meets the specifications under the Iluka Supply Agreement
- ◆ The Iluka Supply Agreement provides ILU with a right of first refusal in respect of Product from the Browns Range Project in excess of the maximum annual amount for a contract year and material that do not meet Product specifications.
- ◆ If the Iluka Supply Agreement is terminated for failure to satisfy or waive a condition precedent (other than a failure to satisfy a condition by ILU), ILU has a right of first refusal to purchase Product from the Brown Range Project for a two-year period from the date the agreement is terminated.
- ◆ Northern Minerals free to sell excess production to third parties if Iluka does not purchase pursuant to its ROFR

## Pricing mechanism illustration



# Iluka Subscription and Option Agreement

<b>Tranche 1 Placement and Convertible Note</b>	<ul style="list-style-type: none"> <li>NTU issued Iluka 125.0 million NTU new ordinary shares at an issue price of \$0.04 per share to raise \$5.0 million on 28 October 2022 (Iluka Tranche 1 Placement)</li> <li>Iluka also subscribed for a \$15.0 million convertible note. The convertible note has a coupon of 7.0%, a maturity date of 31 December 2024 and is convertible into approximately 365.6 million New Shares (including assumed capitalised interest) at a conversion price of \$0.048 per New Share, subject to conditions and various adjustment events (<b>Iluka Convertible Note</b>)</li> </ul>
<b>Tranche 2A Placement and Tranche 2B Call Option / Put Option</b>	<ul style="list-style-type: none"> <li><b>Iluka Tranche 2A Placement</b>, 230 million shares<sup>1</sup> at the lower of:             <ul style="list-style-type: none"> <li>the subscription price of any equity raising to raise additional equity funding required for the total pre-production costs of the Browns Range Project, such funding being additional to the moneys committed pursuant to the SPP and various Iluka subscriptions set out above (<b>Additional Browns Range Equity Fundraising</b>); and</li> <li>\$0.052 per share (being a 30% premium to the Iluka Tranche 1 Placement price of \$0.04 per share), or, if NTU shareholders vote in favour of the issue of the Iluka Tranche 2B Call Option (see below), then \$0.06 per share (being a 50% premium to that price)</li> </ul> </li> <li><b>Iluka Tranche 2B Call Option / Put Option arrangement</b>, reciprocal put and call options over up to 653.3 million shares<sup>1</sup> exercisable at the lower of:             <ul style="list-style-type: none"> <li>the subscription price for the Additional Browns Range Equity Fundraising (see above); and</li> <li>\$0.06 per share (being a 50% premium to the Iluka Tranche 1 Placement price of \$0.04 per share)</li> </ul> </li> <li>The Iluka Tranche 2A Placement and exercise of the Iluka Tranche 2B Put Option are subject to the satisfaction of certain conditions precedent, including: NTU making a positive FID in relation to the Browns Range Project provided that the Browns Range Project as approved in that FID is reasonably likely to be capable of producing xenotime concentrate in sufficient quantities to substantially meet NTU's obligations under the Iluka Supply Agreement; NTU having sufficient funds to fully fund the pre-production costs of the Browns Range Project; ILU completing due diligence in respect of NTU's DFS to ILU's satisfaction (acting in good faith); and the Iluka Supply Agreement having not been terminated             <ul style="list-style-type: none"> <li>Grant and exercise of the Iluka Tranche 2B Put Option by the Company is conditional on NTU shareholder approval of the Iluka Tranche 2B Call Option.</li> </ul> </li> </ul>
<b>General Meeting (GM)</b>	<ul style="list-style-type: none"> <li>NTU has issued or agreed to issue the following securities pursuant to its existing placement capacity under ASX Listing Rule 7.1: Iluka Tranche 1 Placement, Iluka Convertible Note and Iluka Tranche 2A Placement</li> <li>In contrast, the issue of the Iluka Tranche 2B Call Option is subject to approval by NTU shareholders as NTU does not have sufficient existing placement capacity to agree to undertake that issuance without shareholder approval             <ul style="list-style-type: none"> <li>Once issued, the exercise of the Iluka Tranche 2B Call Option is not subject to any conditions, and may be exercised by ILU at any time until 31 December 2025.</li> </ul> </li> </ul>
<b>Participation rights</b>	<ul style="list-style-type: none"> <li>Subject to the ASX Listing Rules and any policy, guidance or requirement published or notified by ASX from time to time, NTU has agreed:             <ul style="list-style-type: none"> <li>to use reasonable endeavours to, and enter into good faith negotiations with ILU to, seek to agree terms and the extent to which ILU can participate in any Additional Browns Range Equity Fundraising (endeavouring to maximise ILU's participation up to 19.9%); and</li> <li>to provide ILU with a reasonable opportunity to participate pro-rata in certain other equity raisings for up to 3 years following NTU making a positive FID in relation to the Browns Range Project, provided ILU maintains a 10% shareholding in NTU,</li> </ul> <p>in each case, subject to customary exceptions, and at the same price and on the same terms as other participants in the applicable equity raising</p> </li> </ul>

1. In each case, the number of shares and issue prices are subject to any adjustment pursuant to a share consolidation or share split and satisfaction or waiver of the applicable conditions – refer to page 24 of this presentation for further details



# Sources and uses

Sources		Uses	
Iluka Tranche 1 Placement	\$5.0m	Browns Range DFS (Incl. potential Wolverine resource definition drilling)	\$14.1m
Iluka Convertible Note	\$15.0m	Browns Range Site Maintenance	\$3.0m
Share Purchase Plan	\$3.6m	Corporate	\$6.5m
<b>Total Sources</b>	<b>\$23.6m</b>	<b>Total Uses</b>	<b>\$23.6m</b>

- Iluka Tranche 2A Placement and Iluka Tranche 2B Call Option / Put Option are not included in the initial sources given these proceeds of up to \$53m are conditional on:
  - the Company among other things taking a Final Investment Decision (FID) on the Browns Range project;
  - Iluka final diligence;
  - funding having been secured for the Browns Range project; and
  - approval by Northern Minerals shareholders in respect of the issue of the Tranche 2B Call Option.



# Refocused strategy under new management team



## Nick Curtis (Executive Chairman)

- Over 35 years experience in mining and finance
- Demonstrated track record of identifying opportunity and delivering
- 25 years of rare earths experience
- Previous Executive Chairman of Lynas Corporation
  - In 2001 Nick took control of Lynas and refocused it as a rare earths company, developing the Mt Weld rare earth deposit in Western Australia and building a large downstream processing plant in Malaysia
  - Helped grow it into the market leading rare earths company ex-China
  - Attracted to Northern Minerals' ore body, which contains Dysprosium ("Dy") and Terbium ("Tb")
- In 2011 Nick founded Forge Resources, a junior ASX mining exploration company which acquired the Balla Balla Mine in the Pilbara in Western Australia. The company was privatised in 2014
- Nick also founded Sino Gold which listed on the ASX in 2001 and was taken over by Eldorado Gold



## Robin Jones (COO)

- Has held the role of COO at Northern Minerals for ~10 years and was the Project Director for the 2015 DFS
- Over 30 years' experience in the mining industry
- Has held senior positions globally across various mining companies
- 10 years experience in rare earths



## Shane Hartwig (Executive Director – Finance)

- A senior finance executive with a proven track record working as a trusted strategic corporate and commercial advisor to companies operating in small and mid-cap sector of the Australian listed market across a broad range of industries
- More recently CFO and commercial lead for a proposed greenfield integrated infrastructure and mining project
- Worked with Nick Curtis over several years as a key commercial adviser and CFO
- Experienced ASX listed Director/Co-Sec





# Summary

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- 1 Northern Minerals has a clear pathway towards production, now focused on updating the DFS and being a rare earths concentrate producer
  - 2 Strategic partnership with Iluka de-risks and accelerates the development of the Browns Range Project, significantly reducing capex
  - 3 Aiming to be a leading ex-China supplier of Dysprosium and Terbium which are critical in the production of permanent magnets required in high performance electric vehicles and wind turbines
  - 4 Strong demand tailwinds for Northern Minerals' rare earths due to the acceleration of decarbonisation and electrification globally
  - 5 Orebody uniquely rich in Dysprosium and Terbium, with Wolverine understood to be the highest grade Dy and Tb orebody in Australia
  - 6 Well understood geology, metallurgy and processing, following ~16 years of exploration studies (~134,500m of drilling) and 3 years of pilot plant operation
  - 7 Experienced Board and Management team led by Nick Curtis, with extensive experience in developing mining projects, including rare earths (Lynas/Mt Weld)
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