Browns Range Heavy Rare Earths Project

New York / Toronto Roadshow

For personal use only

NORTHERN MINERALS

ASX NTU

Presented by:

Mark Tory

CEO

June 2022

Disclaimer

For personal use only

This document has been prepared by Northern Minerals Limited ("Northern Minerals" or the "Company").

This document is of a summary form only and therefore contains general background information which may not be complete. It should be read in conjunction with and full review made of Northern Minerals disclosures and releases lodged with the Australian Securities Exchange ("ASX") and available at www.asx.com.au.

This document contains certain statements which may constitute "forward-looking statements." Such statements are only expectations or beliefs and are subject to inherent risks and uncertainties which could cause actual values, results or performance achievements to differ materially from those expressed or implied in this document. No representation or warranty, express or implied is made by Northern Minerals that any forward-looking statement contained in this document will occur, be achieve or prove to be correct. You are cautioned against relying upon any forward-looking statement. Except for statutory liability which cannot be excluded, each of Northern Minerals and its related body corporates and their officers, employees and advisers expressly disclaims any responsibility for the accuracy or completeness of the material contained in this document and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this document or any error in it or omission from it. Northern Minerals accepts no responsibility to update any person regarding any inaccuracy, omission or change in information in this document or any other information made available to a person, nor any obligation to furnish the person with any further information.

This document does not constitute an offer of any securities in Northern Minerals, in any jurisdiction, nor an invitation to apply for such securities, in any jurisdiction, and will not form part of any contract for the acquisition of Northern Minerals shares.

This document does not provide investment advice or financial product advice. You should obtain professional advice and carry out your own independent investigations and assessment of the information in this document (including any assumptions) before acting. Information in this document which is attributed to a third-party source has not been checked or verified by Northern Minerals.

Compliance Statement

The information in this document that relates to the Mineral Resource Estimate for the Dazzler deposit is extracted from the Company's ASX Announcement dated 7 May 2020 entitled "Over 50% increase in Dazzler high-grade mineral resource" and is available to view on the Company's website (www.northernminerals.com.au) and at www.asx.com.au, and was completed in accordance with the guidelines of the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource Estimates in the original market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The information in this report relating to Exploration Results was compiled by Mr Simon Pooley who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Pooley is a full time employee of Northern Minerals Limited and has sufficient experience 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' (the JORC Code). Mr Pooley consents to the inclusion of this information in the form and context in which it appears.

TREO = Total Rare Earth Oxides – La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3

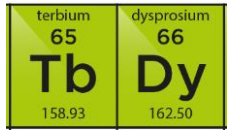
HREO = Heavy Rare Earth Oxides – Total of Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3

Browns Range East Kimberley, WA

For personal use only

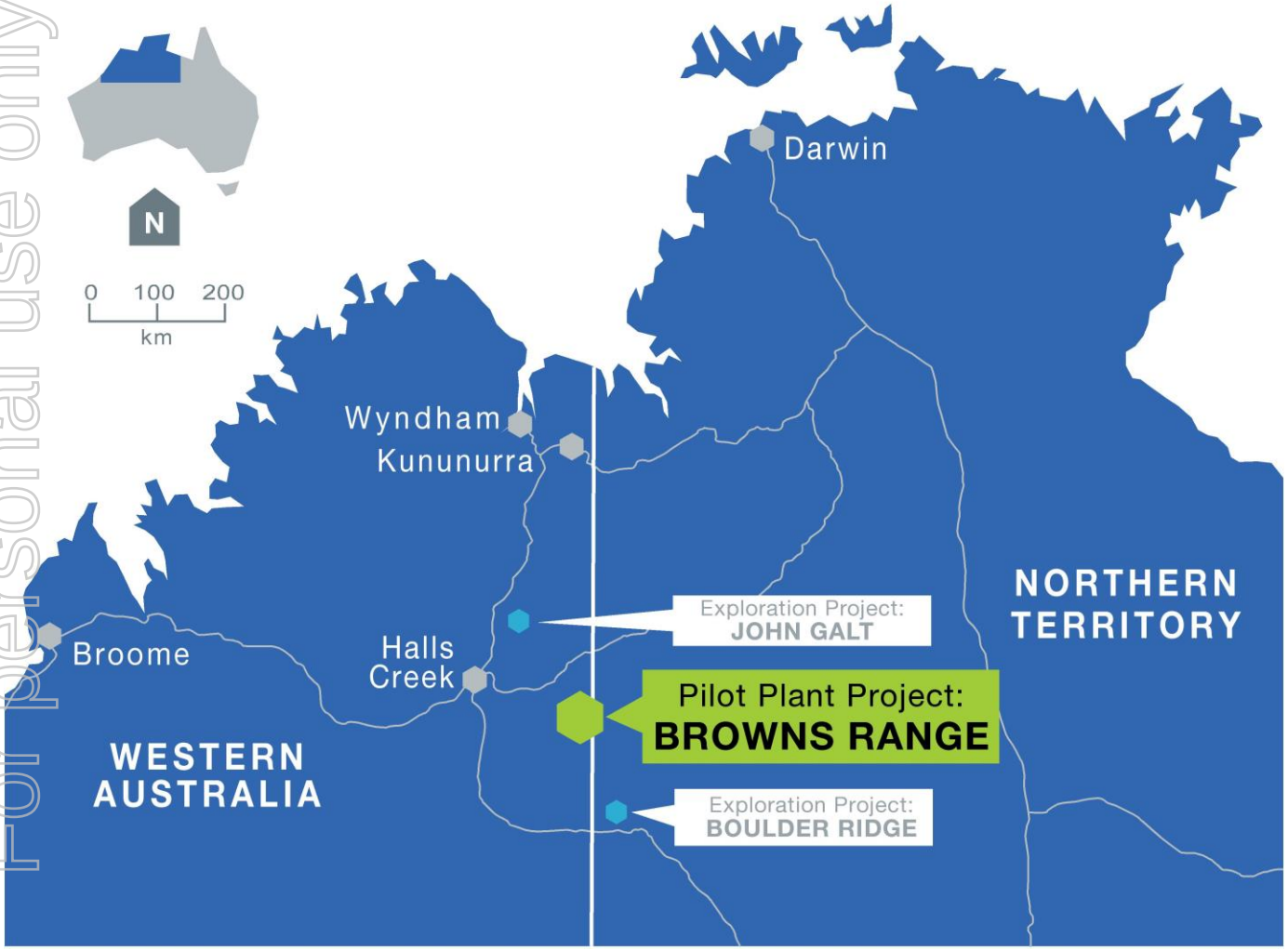
Rare earth applications

- NdFeB Permanent magnets require dysprosium (Dy) and terbium (Tb)
- Electric drivetrains in passenger cars are forecast to account for the majority of increased demand through to 2040
- Dy and Tb also have a range of military applications
- Rare earths are also used in other applications such as technology, medical and robotics



Tier 1 resources jurisdiction

For personal use only



- Australia is one of the world's most proven, safe and reliable jurisdictions for mining and mineral processing
- Northern Minerals is actively engaging with Critical Minerals Facilitation Office established in Canberra in January 2020
- Secure tenement legislation and environmental approvals framework benefits local operators
- Established trade, export and logistics network and supporting economy

For personal use only

Australian HREE production is ethical

- Browns Range produces HREE from hard rock xenotime ore at a grade of 600 – 800 ppm Dy
- Mining and processing methods in China, due to low grade ore, operate at just 20 – 40 ppm Dy
- 98% of world's heavy rare earths are currently produced by China
- Many are unconstrained in situ leach operations, which are environmentally harmful

Southern China in situ leach mining operation

Browns Range Pilot Plant

NORTHERN MINERALS

NORTHERN MINERALS

Our Aspiration

Principal supplier of ethically produced rare earth separated products with a world class heavy rare earth element inventory

A twelve year $300m+ journey

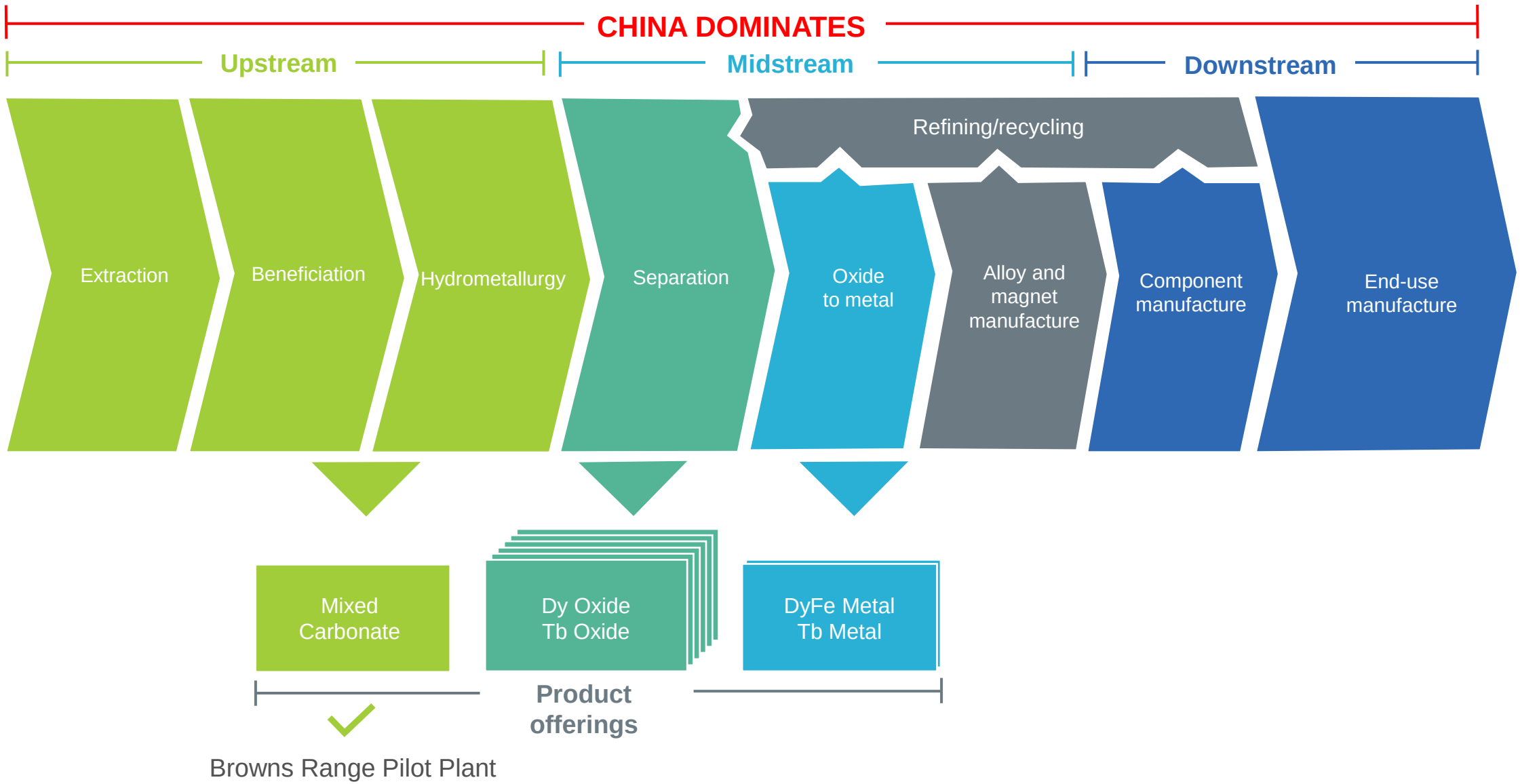
DISCOVERY	EXPLORATION	EVALUATION AND APPROVALS			DFS	NEW PLAN	DEVELOPMENT		TESTWORK		
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021

Our main focus for 2022:

- Complete strategic review of processing potential;
- Exploration aiming to expand the resource base;
- Evaluate other corporate opportunities
- Continue with feasibility study for full scale beneficiation plant
- Long term offtake agreement for concentrate sales

For personal use only

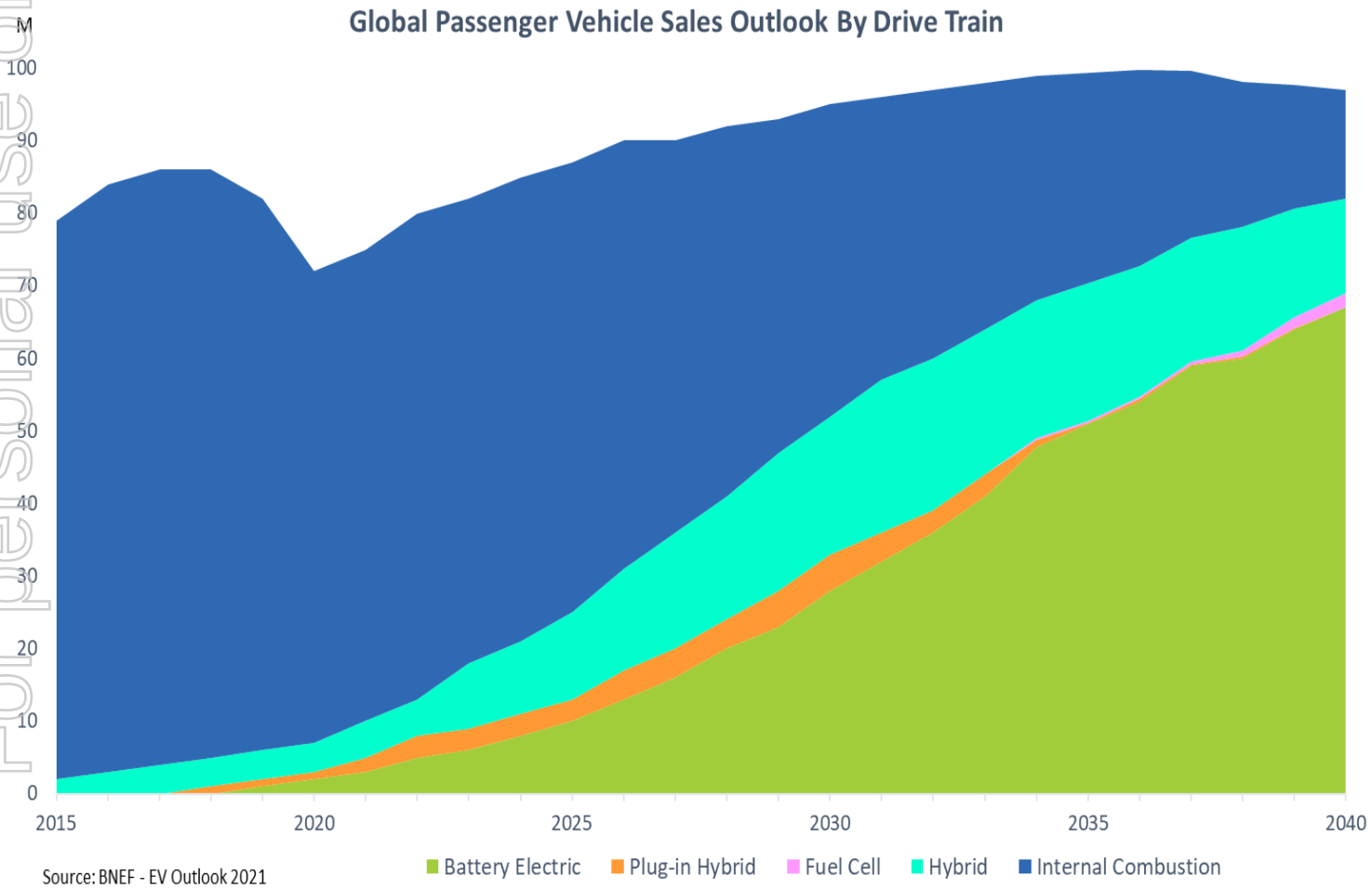
Rare earth magnet supply chain



For personal use only

Demand for EV's continues to grow which means increase in Dy and Tb

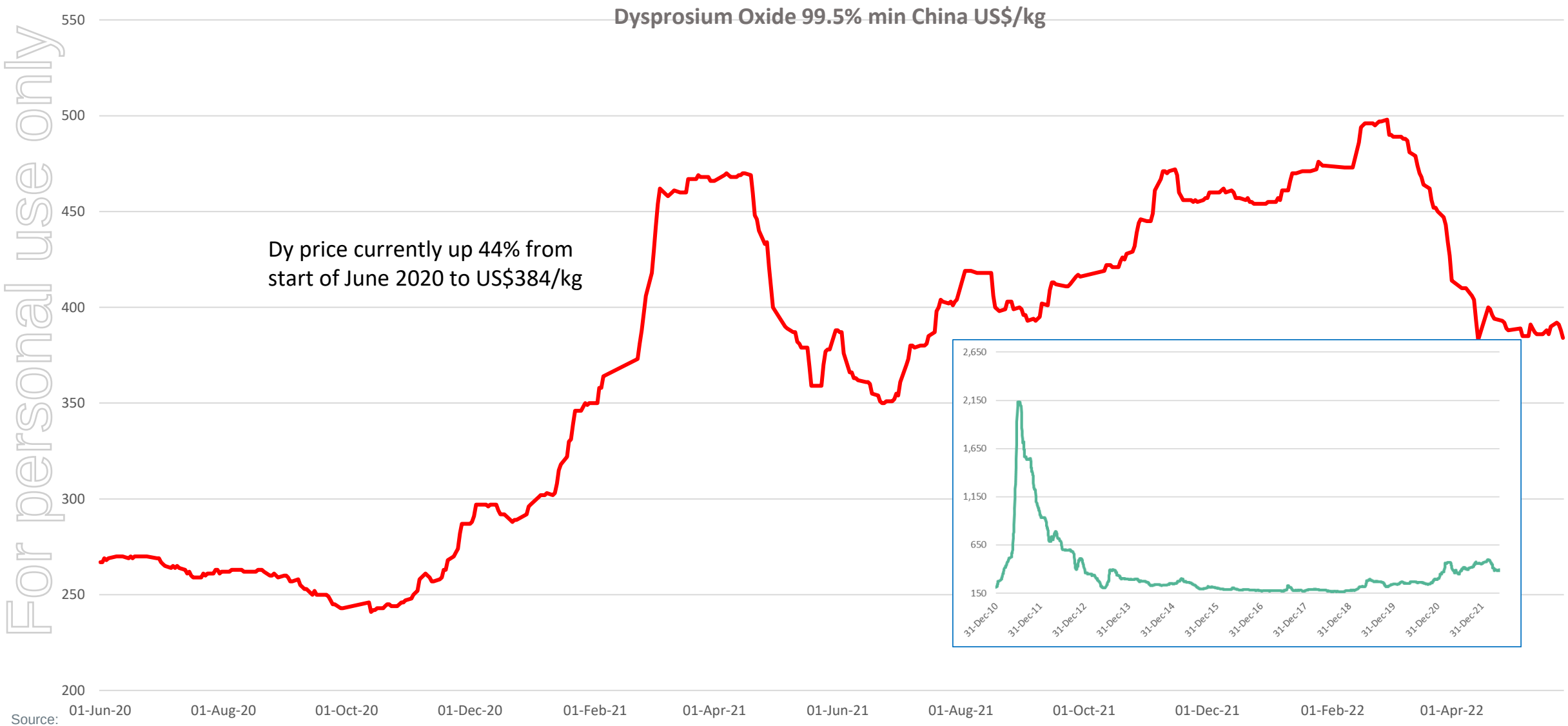
For personal use only



Source: BNEF - EV Outlook 2021

- Electric vehicle (EV) and renewables demand is increasing, (UK announced no sales of petrol and diesel vehicles by 2030)
- EV sales and growth will be limited by access to raw and finished commodities – particularly Heavy Rare Earths (HRE)
- Rare earths have been classified as critical minerals as there are limited supply options for HRE - China has a monopoly position
- Northern Minerals' Browns Range Project is an advanced heavy rare earth project that has the potential to fill some of the market gap and provide surety of supply

Dysprosium Pricing



Source:

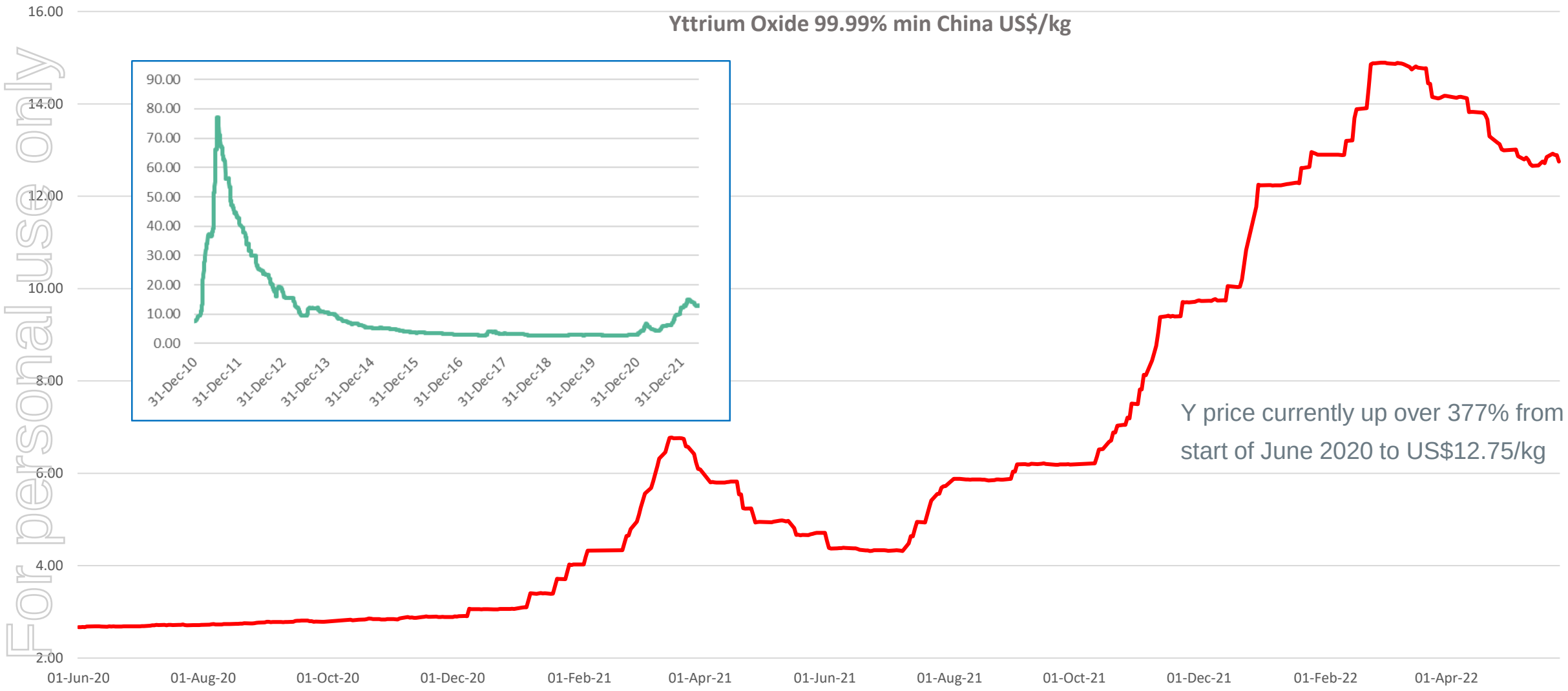
For personal use only

Terbium Pricing

Source: Asian Metal

For personal use only

Yttrium Pricing



Y price currently up over 377% from start of June 2020 to US$12.75/kg

For personal use only

Source: Asian Metal

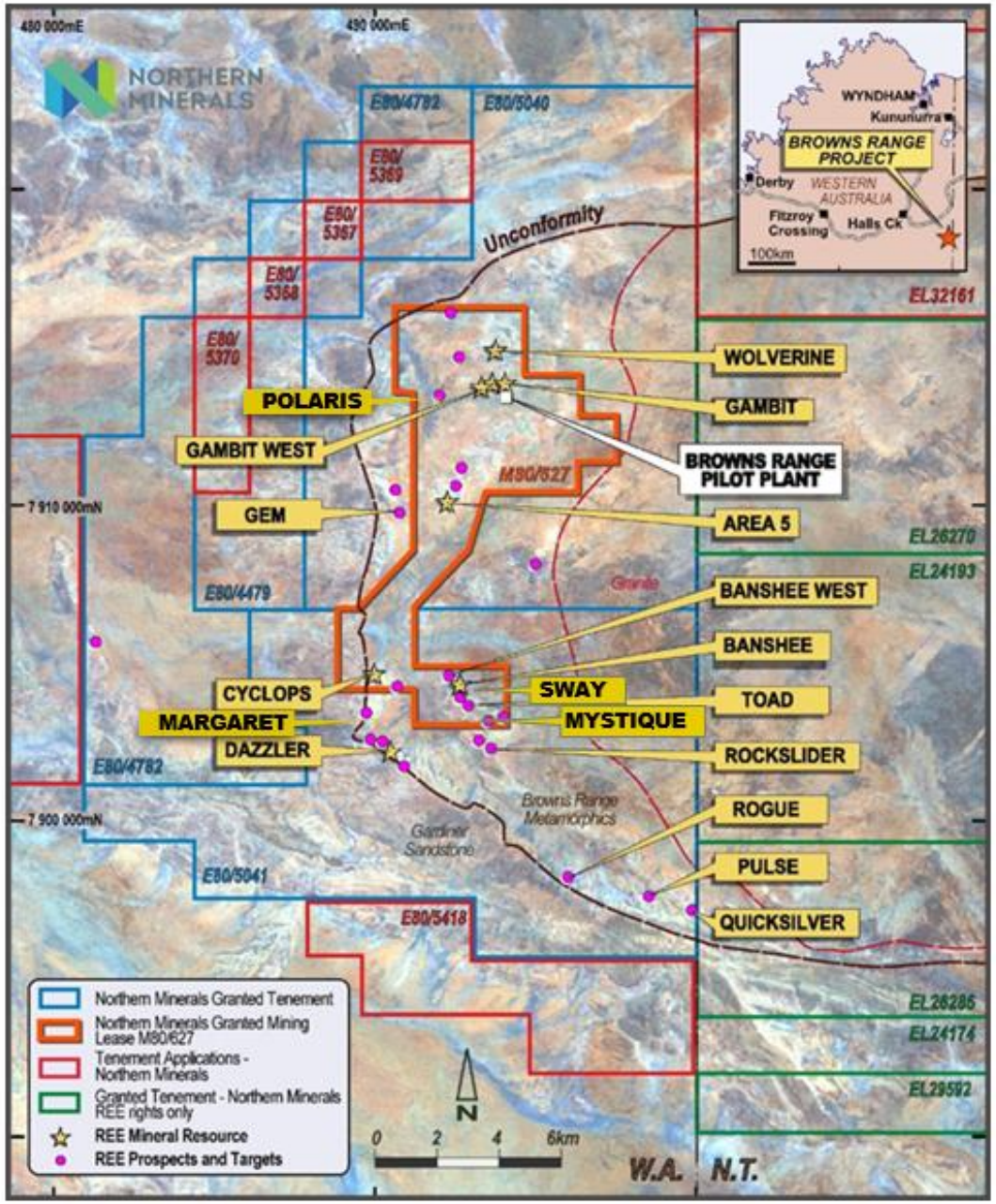
For personal use only

Strategy for Downstream Processing

- Review completed in relation to strategy for downstream processing
- Only full-scale beneficiation plant would be built at site
- Selling concentrate from beneficiation plant to be reviewed with view of long term contract
- Long term strategy of potential metal making / magnet production
- Corporate transactions and joint ventures to be investigated

2021 / 22 Exploration Results

- Since 30 June 2021 spent nearly A$7m on exploration
- Total of 17,500 metres RC drilling and over 2,000 metres of diamond drilling since end of June 2021
- Continued to get good results from Dazzler resource
- Encouraging results Banshee drilling to increase the Inferred Resource
- Prospectivity demonstrated at Cyclops and Rockslider
- Encouraging assay results from Toad, Polaris and Mystique
- High value rock chip results to follow up at Margaret and Sway



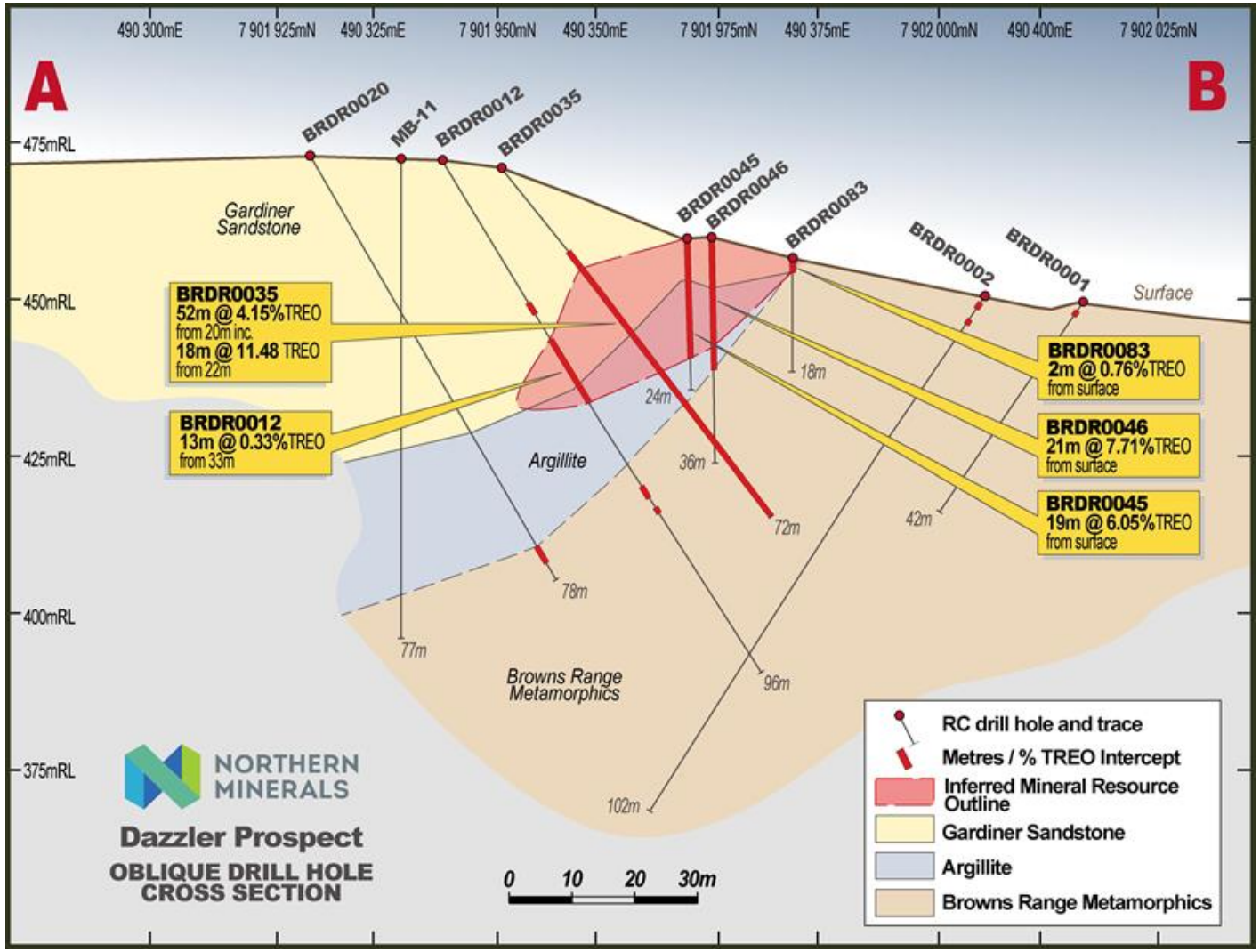
NORTHERN MINERALS

For personal use only

Dazzler – Grade is King

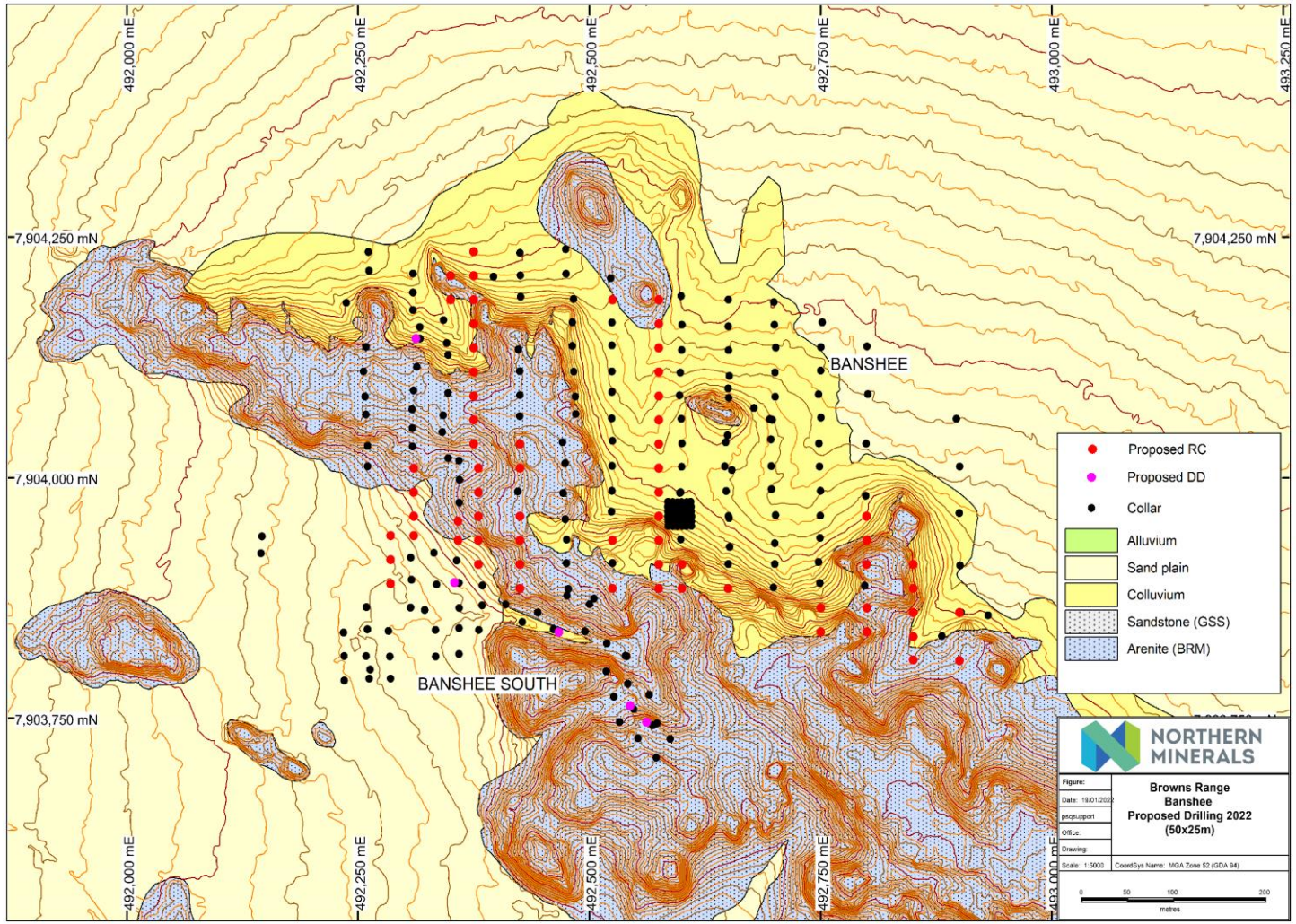
For personal use only

- Exploration results from Dazzler show grades up to 10x the average Browns Range resource grade
- Dazzler 'lookalikes' to be a focus of the exploration program
- Dazzler Inferred Mineral Resource of 0.21Mt @ 2.33% TREO
- Dazzler intercepts to date include:
  - 19m @ 6.05% TREO
  - 21m @ 7.71% TREO
  - 52m @ 4.15% TREO



Banshee Prospect

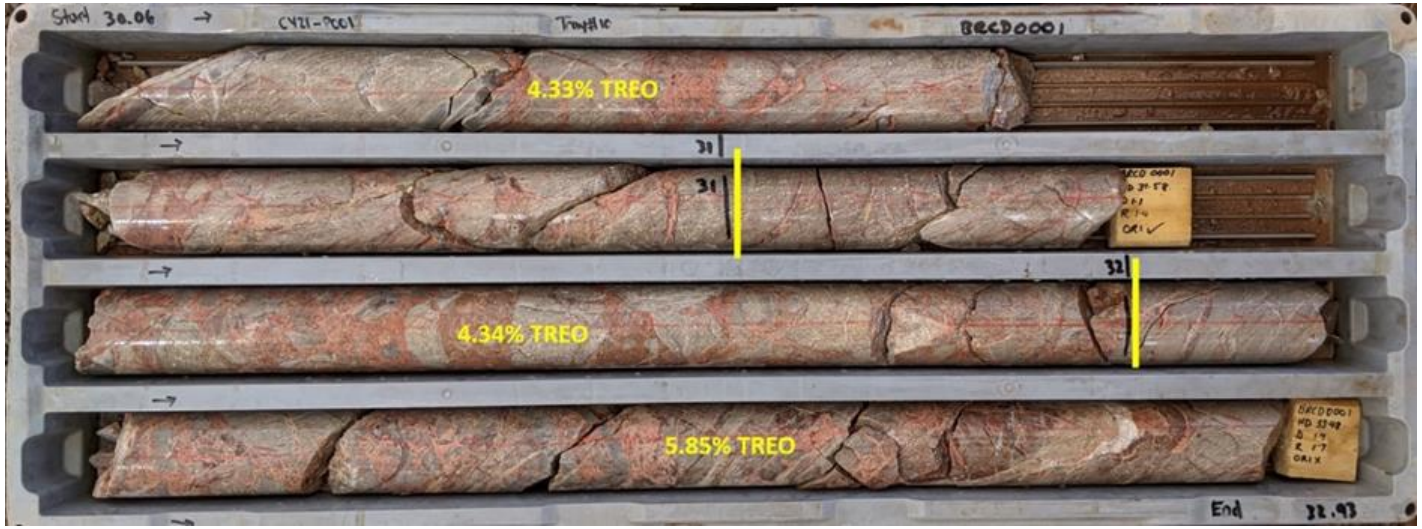
- Combining Banshee, Banshee West and Banshee South
- 2021 / 22 drilling indicates mineralization continuous over a 400m by 400m area (compared to exiting resource 175m by 150m)
- Bulk samples tested through ore sorter at pilot plant



For personal use only

Cyclops Prospect

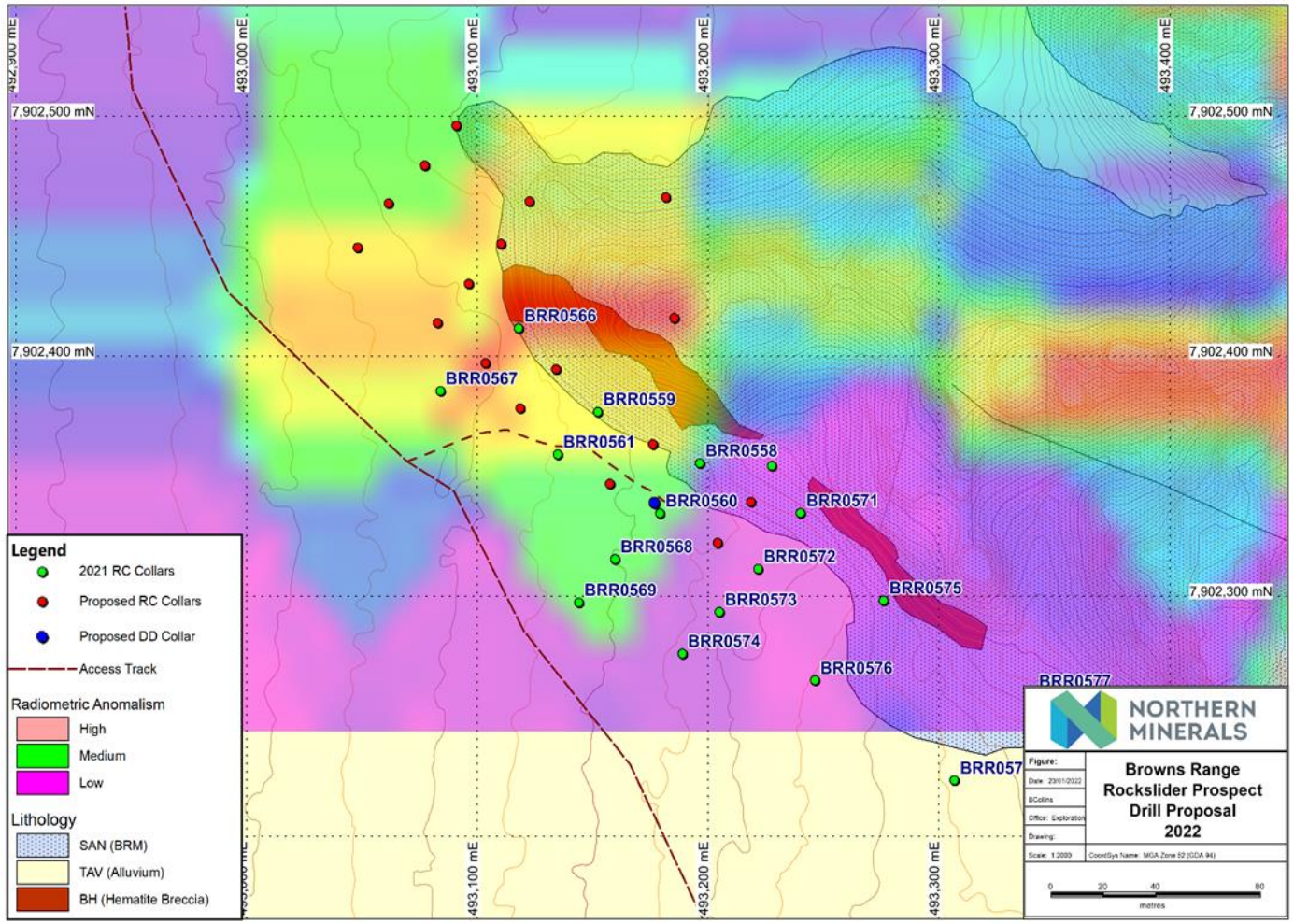
- Wolverine style hematite-xenotime breccia
- Diamond drilling grades have seen 15.65m @1.83% TREO from 24m
- Strong potential to extend high grade intercepts at depth
- Shallow intercepts improve economic viability
- Follow up drilling in 2022 / 23



For personal use only

Rockslider Prospect

- Strong pXRF and radiometric anomalism with hematite breccia
- RC drilling results returned 103m @ 0.32% TREO from 15 metres
- 100 metre + strike in length and open to the N-NW
- Follow up in 2022 / 23

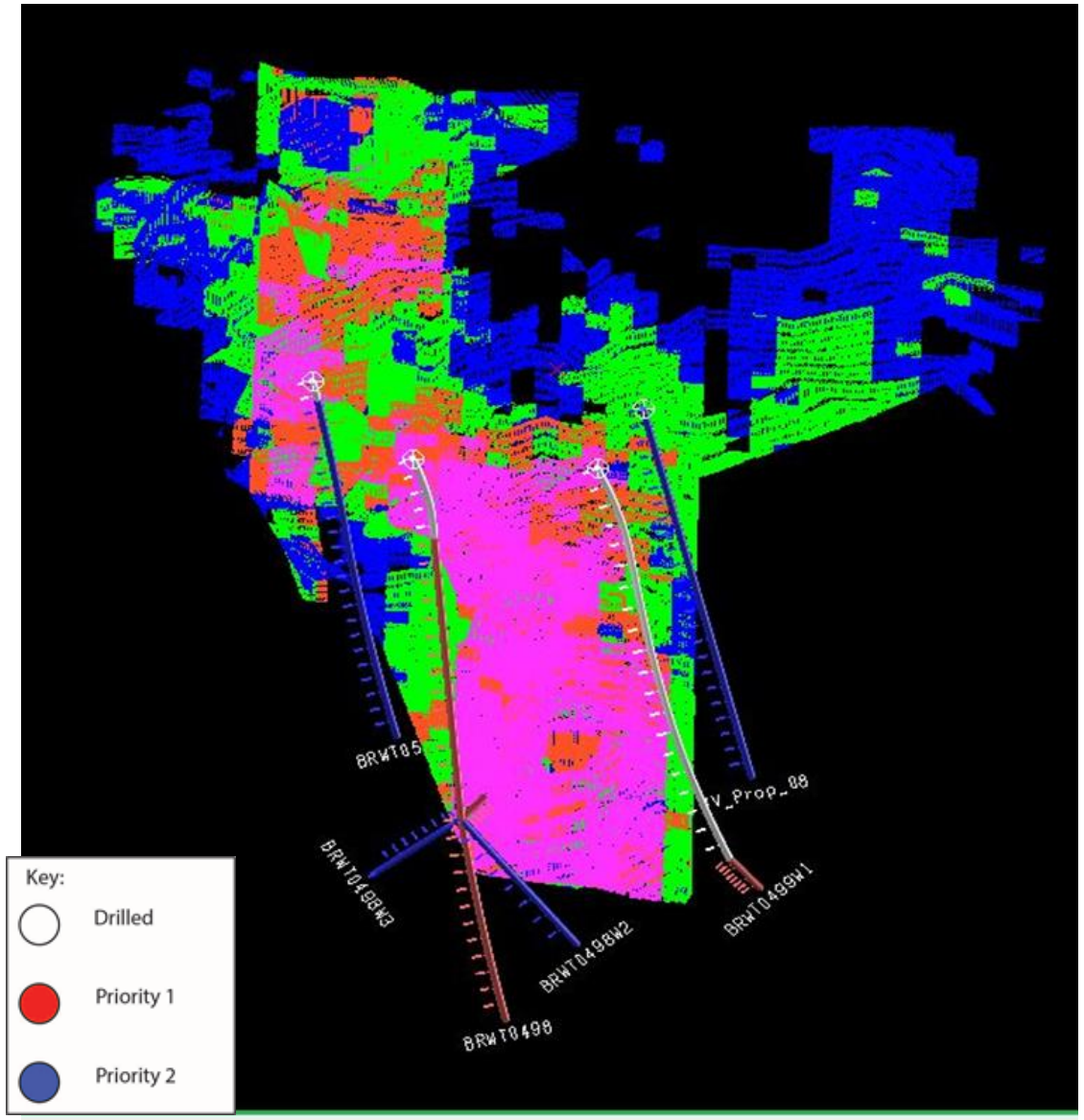


For personal use only

For personal use only

Wolverine Resource

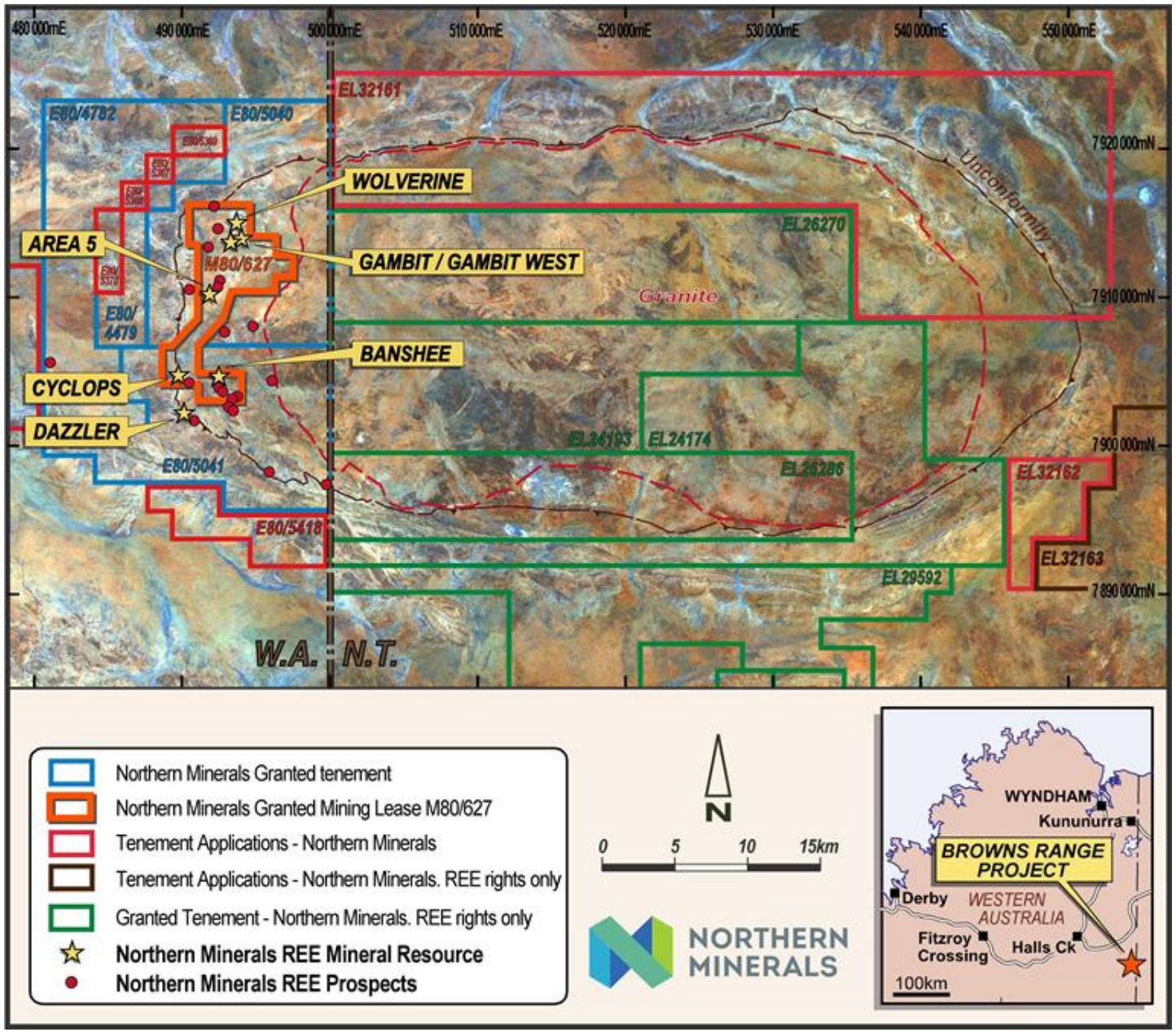
- High grade intercepts trending NW have not been closed off at depth
- Strong potential for continuation along primary mineralized structure
- Last hole hit 28.6m @ 4.06% TREO from 480 metres and open to the West
- Priority holes for follow up in 2022 / 23



Exploration – "Own the Dome" strategy

- 100% owned tenure and/or 100% rare earth rights over the Browns Range Dome
- More than 2,300 square kilometres of tenure to evaluate
- Strategy to increase Mineral Resource and the life of mine potential at Browns Range to 20+ years

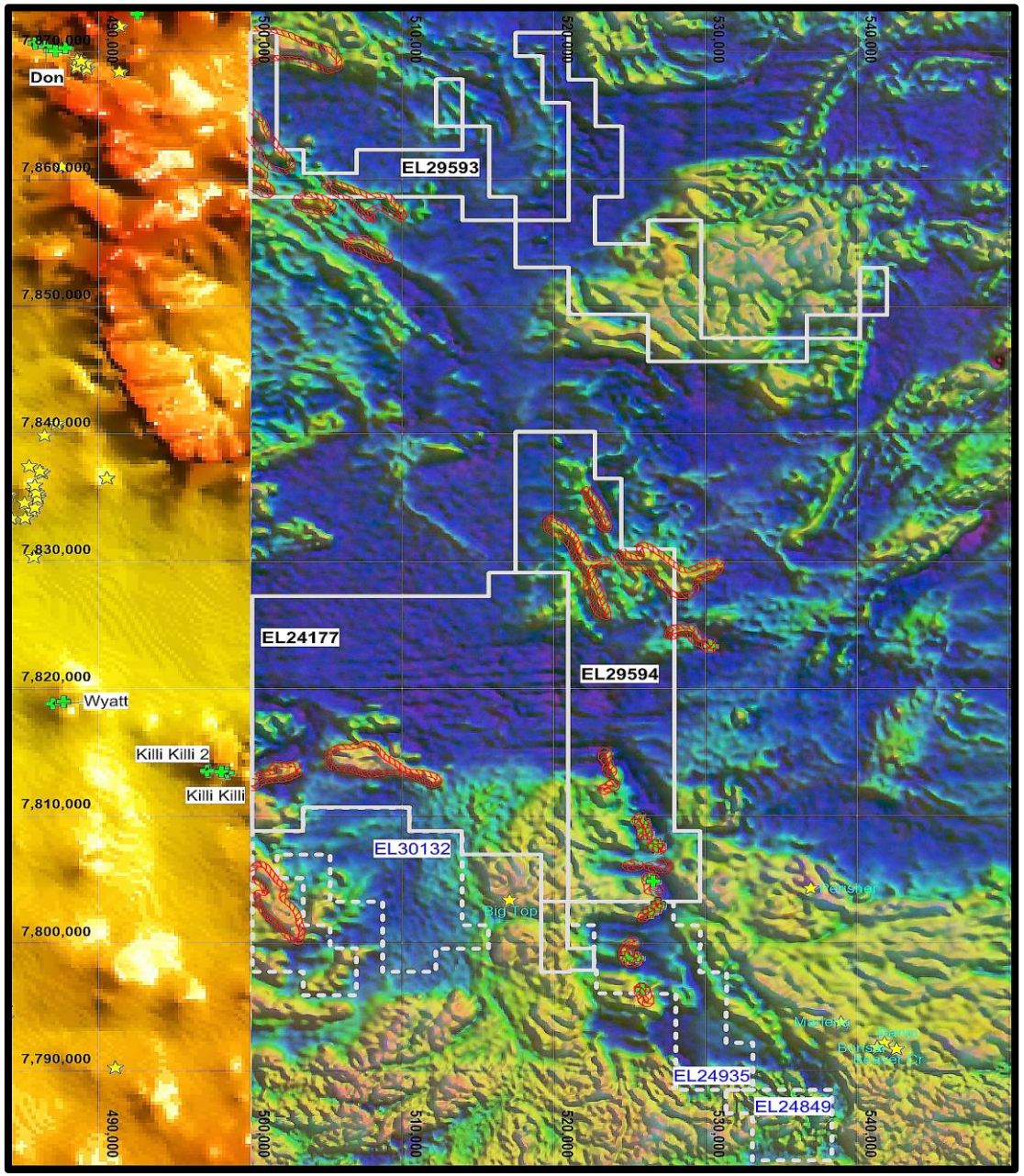
NORTHERN MINERALS



For personal use only

Boulder Ridge NT Project

- Boulder Ridge previous rock chip results exceeding 12% TREO including up to 1.15% Dy
- Work plan completed of mapping and collecting rock chips
- Future RC scout drilling in 2022 / 23



HREE targets plotted onto Radiometrics anomaly and DEM.

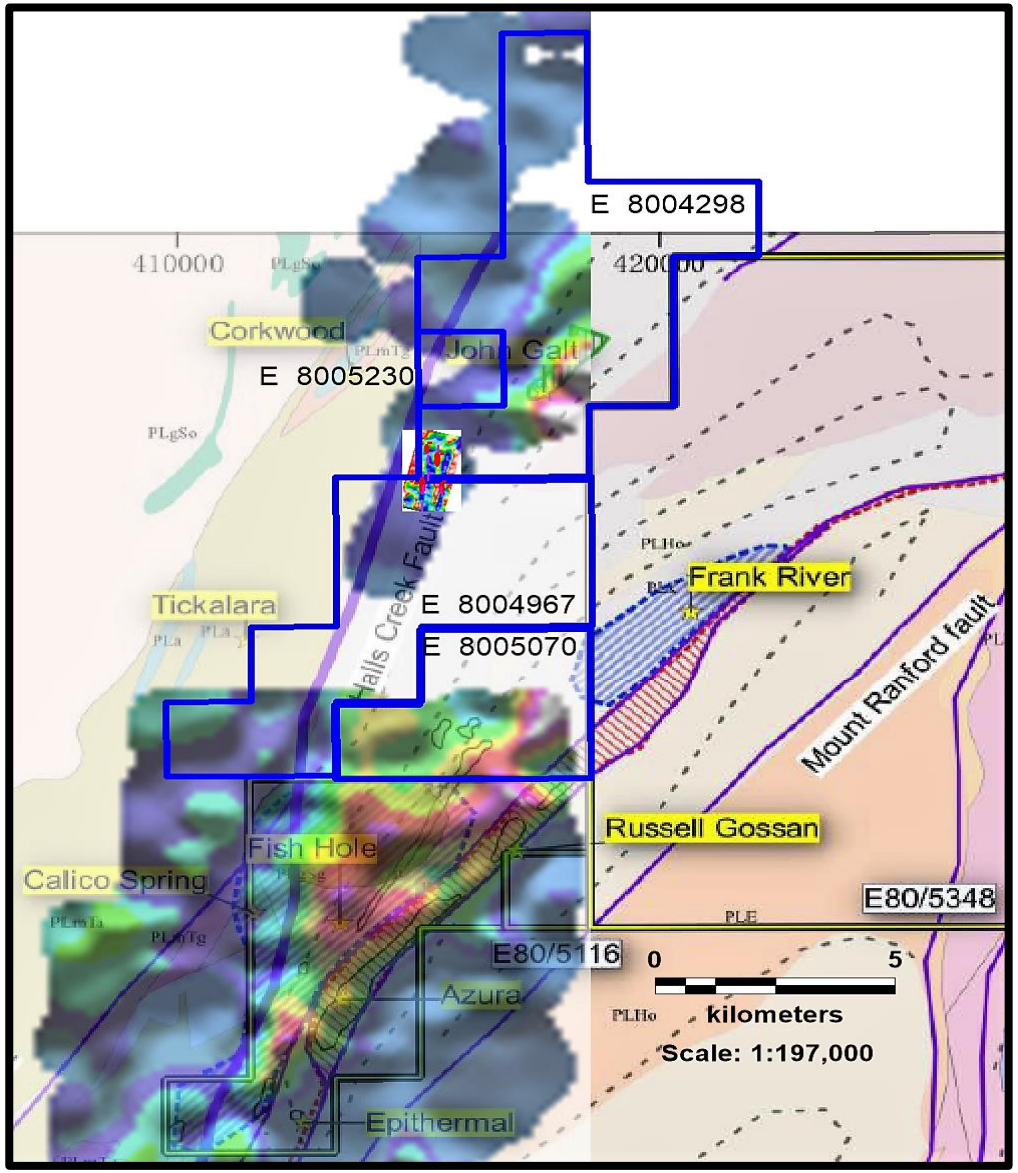
NORTHERN MINERALS

For personal use only

John Galt WA Project

- John Galt previous rock chip results up to 42% TREO with approximately 95% Heavy REO
- Copper anomalies identified to be followed up
- Work program of detailed mapping, geochemical sampling and RC scout drilling to be undertaken

Cu-in-stream anomaly map and ground gravity @SE of Corkwood Yard.



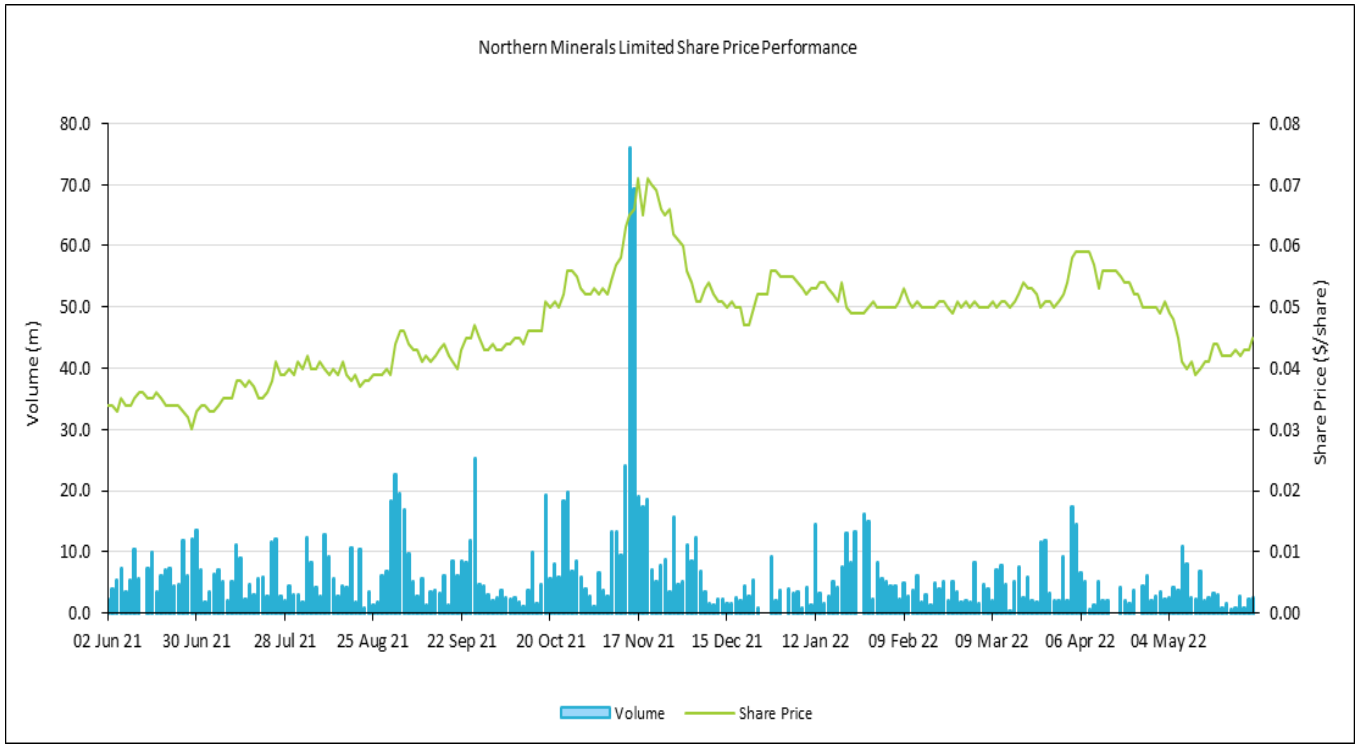
For personal use only

Corporate Details

For personal use only

Major shareholders	31 May 2022
Citicorp Nominees Pty Ltd	16.57%
Vastness Investment Group	7.71%
Mr Yongquan He	5.14%
Ms Yunzen Ma	4.63%
Mr Conglin Yue	4.33%
Remaining Top 20	24.81%
Other	36.81%

Ordinary Shares as at 31 May 2022	4,864M
Options and Performance Rights as at 31 May 2022	258.8M
Market Capitalisation as at 31 May 2022	$218.9M
Cash (as at 31 March 2022)	$4.2M
Debt (as at 31 March 2021):	Nil
12 month low – high	$0.03 - $0.071
Average daily volume (12 month avg)	6.40M



Why Northern Minerals has potential

- Has been only significant producer of HREE outside of China over the last 4 years
- Working on feasibility study for full scale beneficiation plant at site with view to enter into long term concentrate sale contract
- The Company's IP on production of Heavy Rare Earth Carbonate
- Strong balance sheet, with no debt
- Browns Range is in leading tier one mining and mineral processing jurisdiction in WA

For personal use only

For personal use only

Contact details

Mark Tory

Chief Executive Officer

mtory@northernminerals.com.au

northernminerals.com.au