



*Jupiter on the way to becoming
Australia's largest High-Grade
Clay Hosted REE discovery*

ASX | VMS
www.ventureminerals.com.au

**RIU SYDNEY
RESOURCES ROUND-UP
7-9 MAY 2024**

Disclaimer and Competent Persons Statement

FORWARD LOOKING STATEMENT

- This presentation may contain certain forward-looking statements and projections regarding: estimated, resources and reserves; planned production and operating costs profiles; planned capital requirements; and planned strategies and corporate objectives.
- Such forward-looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of Venture Minerals Limited. The forward-looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved;
- Venture Minerals Limited does not make any representations and provides no warranties concerning the accuracy of the projections, and disclaims any obligation to update or revise any forward-looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws;

COMPETENT PERSONS STATEMENT

- The information in this report that relates to Exploration Results, Exploration Targets and Minerals Resources is based on information compiled by Mr Andrew Radonjic, a fulltime employee of the company and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Andrew Radonjic has sufficient experience which is relevant to the style of mineralisation and type of deposits 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 Andrew Radonjic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.
- The information in this report that relates to Mineral Resources for the Mount Lindsay and Livingstone Projects is based on information compiled by Mr Andrew Radonjic, a fulltime employee of the company and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Andrew Radonjic has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 and 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Andrew Radonjic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

NO NEW INFORMATION OR DATA

- All material assumptions and technical parameters underpinning the Minerals Resource and Reserve estimate referred to in previous ASX announcements continue to apply and have not materially changed since last reported. The company is not aware of any new information or data that materially affects the information included in the announcement.

Authorised for release to the ASX by the Managing Director.

Investment Highlights

- Jupiter drilling delivers record drill intersection of 48 metres @ 3,025 ppm TREO. The highest, clay hosted REE intersection in Australia. In addition, there are very high-grade results in other drill holes including assays up to 20,538 ppm & 26,958 ppm TREO, with the latter being one of the highest clay hosted REE assay results in Australia to date;
- Jupiter REE discovery has standout proximity to infrastructure and processing plants, being situated between Lynas's existing and Iluka's planned Rare Earths processing facilities;
- Curtin University is working on extracting tin and boron, from tin-rich borates, to potentially increase tin recovery and produce a high value boron by-product to increase revenues for the Mount Lindsay Tin-Tungsten Underground Feasibility Study;
- Appointment of Argonaut PCF as advisor on the Riley Iron Ore Mine to undertake a strategic review of the asset.



Corporate Snapshot

Shares on Issue
2,266m

Share Price
A\$0.02

Market Cap
A\$43.1m

Cash (31 Mar 24)
A\$2.9m

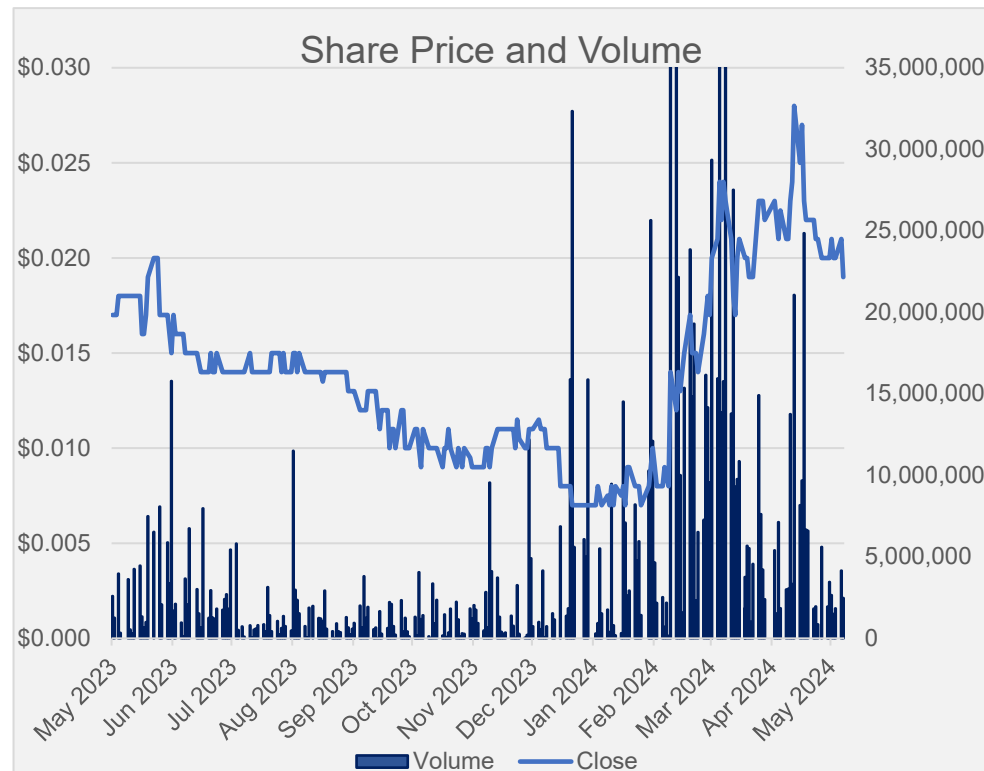
Debt (31 Mar 24)
Nil

Enterprise Value
A\$40.2m

Unlisted Options¹
90.5m

Listed Options
@ \$0.036
346.8m

1. 5.5m @ Var Prices and 85m incentive options.



Major Shareholders	%
Top 20	20.74
Directors and Management	2.50
Elphinstone Holdings Pty Ltd	2.32
WGS Pty Ltd	2.25

Directors and Key Management

A dedicated management team with a wealth of experience and credited with a number of discoveries both in Australia and internationally



Tim Lindley
Non-Executive Chairman

- MComm, BA, RMC-D, GAICD, FAICD
- Experienced ASX board director and previous senior investment banker who brings a proven track record in resource company equity raising, project finance, debt, and M&A.
- 25-year executive career, having held several senior and executive roles in both Australia and internationally, including Country Head (Australia) of Barclays Bank and a Managing Director of Morgan Stanley (Australia).



Andrew Radonjic
Managing Director

- Mine Geologist and Mineral Economist;
- >35 years experience with a focus on gold and nickel in the Eastern Goldfields of Western Australia;
- Instrumental in three significant gold discoveries north of Kalgoorlie that led to the pouring of over 1.5 million ounces;
- Co-lead the exploration team during the discovery of the Mount Lindsay Tin-Tungsten-Magnetite deposits, Tasmania;
- Held Managing Director role at Nickelore Limited;
- Co-founded Blackstone Minerals Limited.



Philippa Leggat
Non-Executive Director

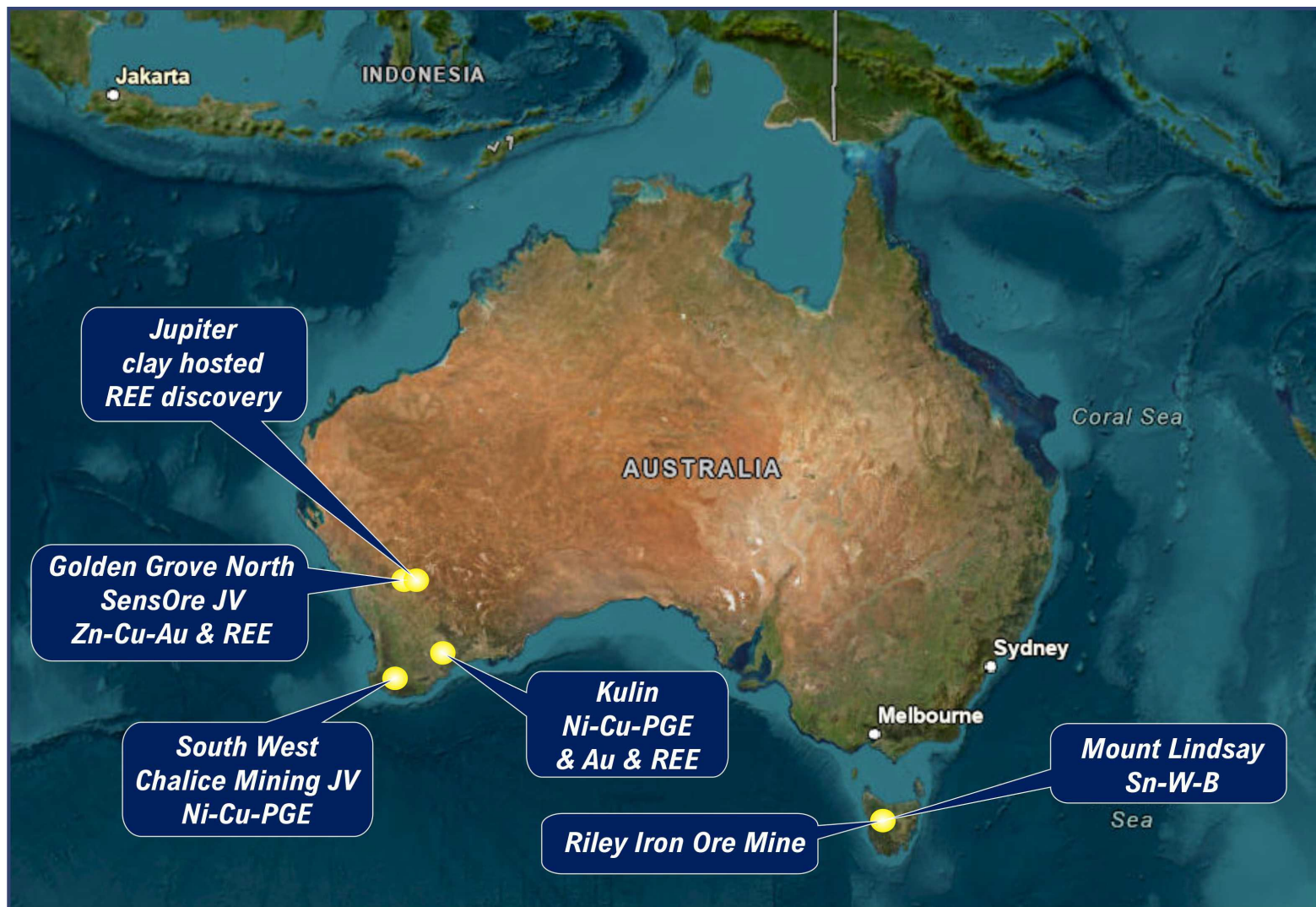
- Corporate and commercial professional with over 20 years of experience in adding value to international resource projects.
- Acted as an advisor to listed companies from juniors to multinationals incl Xstrata, MMG and AngloGold Ashanti.
- Held executive and non-executive roles with Geopacific Resources, Kula Gold, Ensurance Limited and Comet Resources.
- Qualifications in BCom (Financial management, strategy & risk) and. Undertaking a masters through RMIT. Graduate AICD member.



Dr Stuart Owen
Exploration Manager

- BSc & PhD in Geology, member of the AIG and over 25 years of experience in mineral exploration which included gold and nickel;
- Senior Geologist in the exploration team that discovered and delineated the Paulsens Gold Deposit in the Ashburton region of WA;
- Exploration Manager in the Adamus team that discovered and delineated the Southern Ashanti Gold Deposits, Ghana;
- Exploration Manager for Venture during the discovery of the Mt Lindsay Tin-Tungsten-Magnetite deposits, Tasmania.

Project Locations

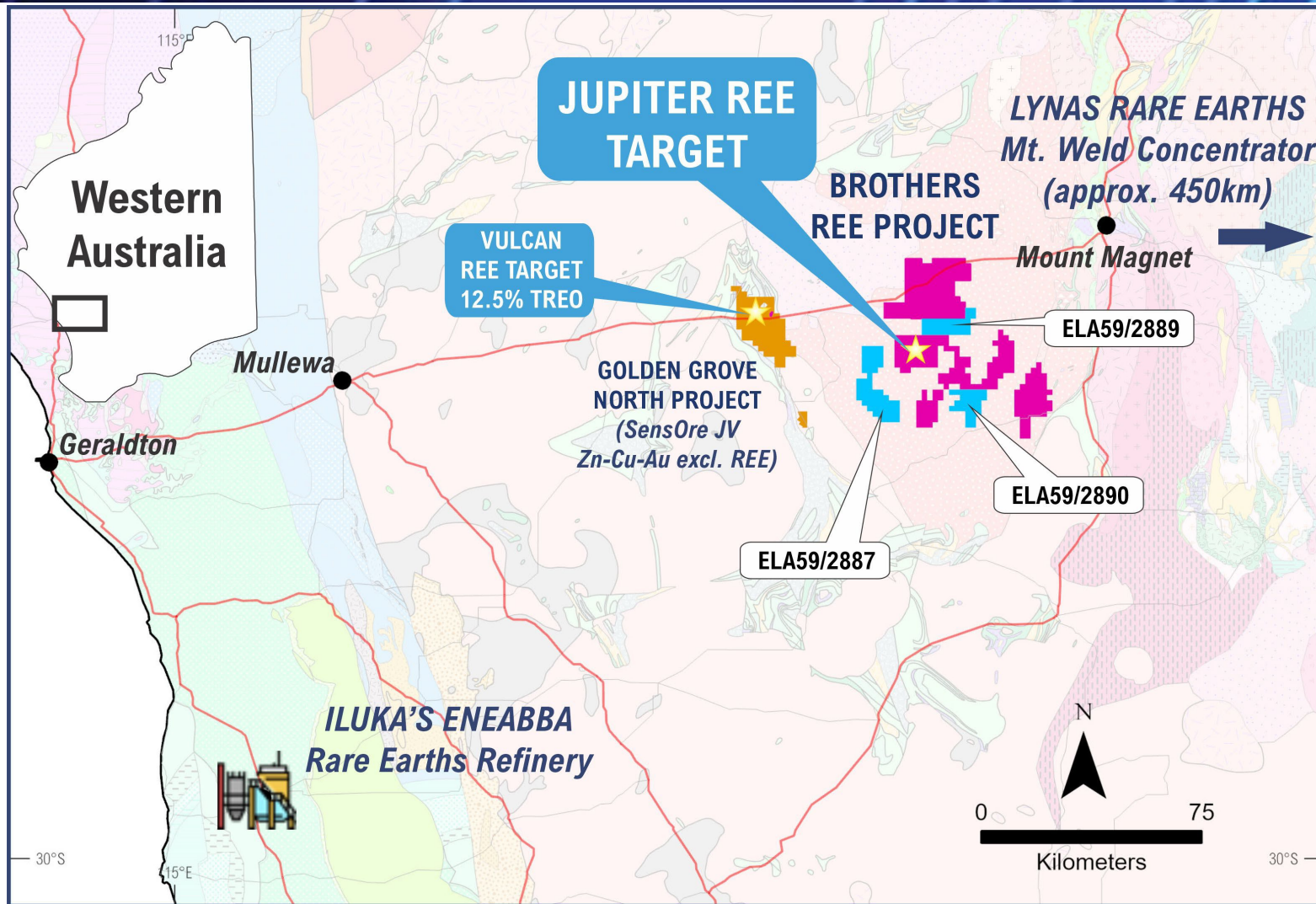


What are Rare Earth Elements (REE)



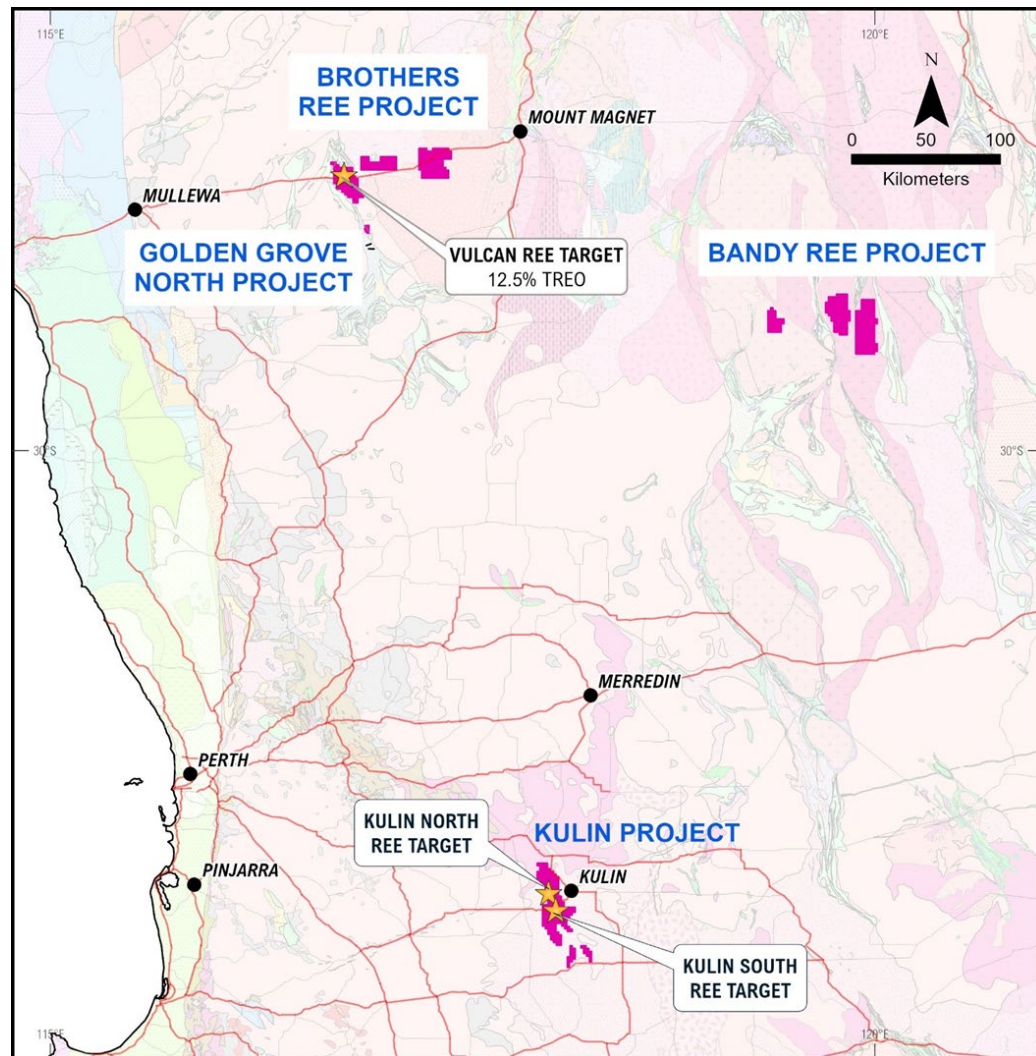
- REE comprise the 15 lanthanide series of elements as well as yttrium (Y). Often referred as Total rare earth oxides (TREO), rare-earth elements have unique catalytic, metallurgical, nuclear, electrical, magnetic and luminescent properties.
- Split into light and heavy REE. With values varying widely due to the application and market demand for each REE.
- The Magnet Rare Earth Oxides (MREO) are the most valuable, with applications for the fast-growing decarbonisation EV and wind turbine markets, smartphones, glass display screens, and defence.
- REE are mostly produced from mines in China (60% of global production), with a significant proportion from clays.
- Governments have listed REE as critical minerals including Australia, US, EU, Canada and the UK for their strategic and economic importance in the transition to renewable energy.

Jupiter- Location, Location, Location



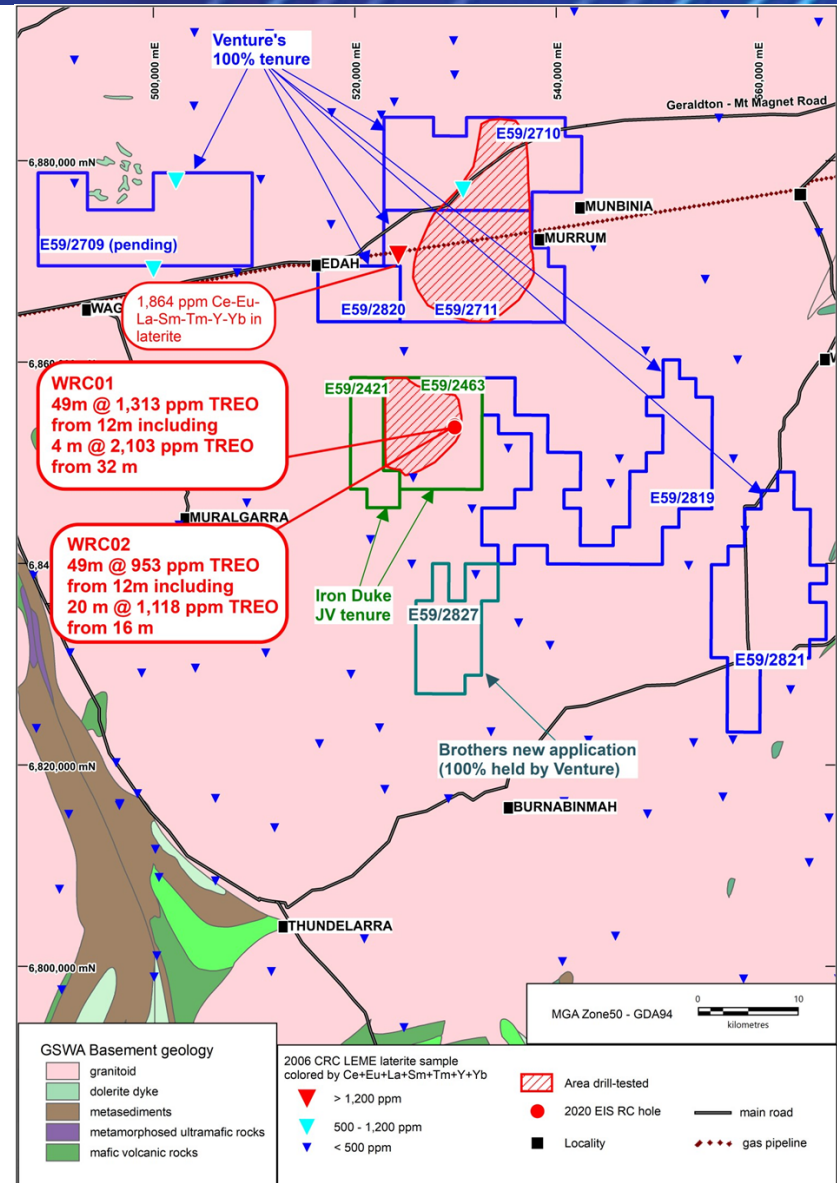
How Jupiter came about

- Acquired and identified new priority Rare Earth targets to increase exposure in the REE space, with a particular focus on clay hosted mineralisation.
- Brothers 511 km² tenement package adjacent to the Vulcan Prospect which has very high grade REE results up to 12.5% TREO. It contains surface laterite samples grading up to 1,864 ppm combined REE from the State Government dataset.



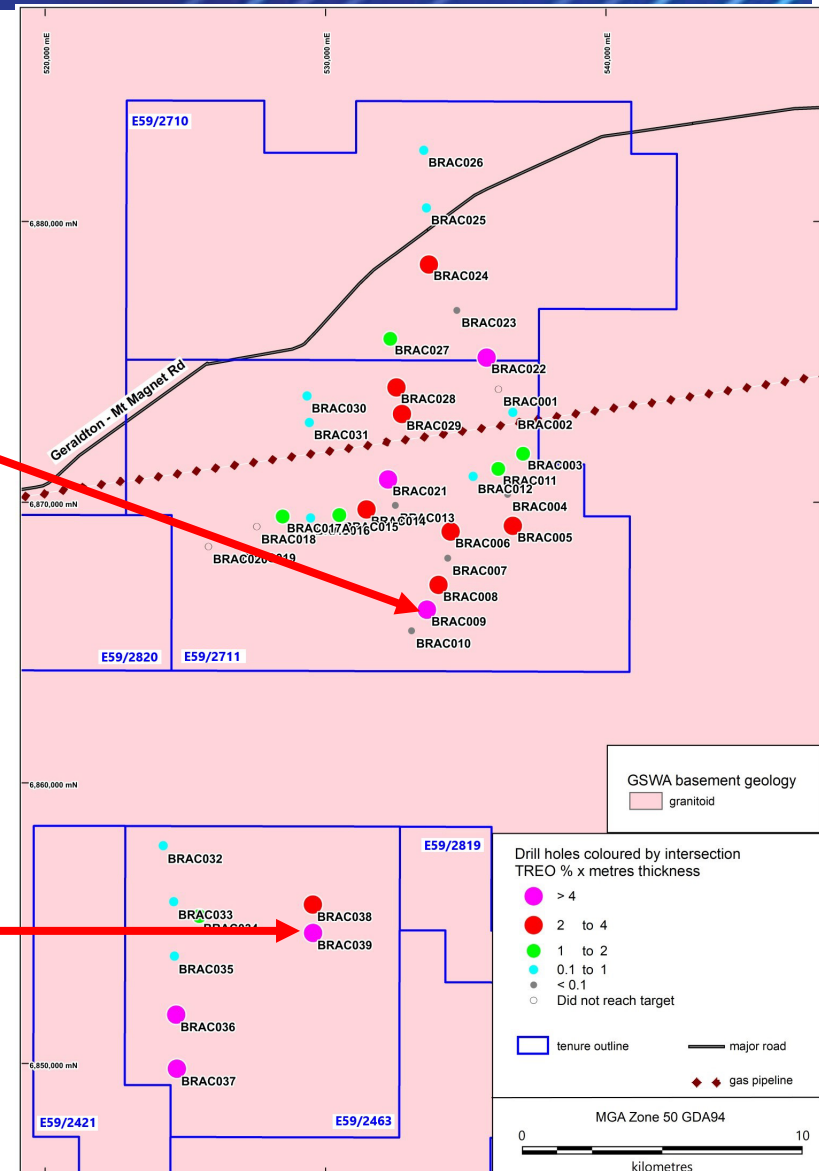
JV on Iron Duke REE project (Jupiter Prospect) hosting shallow hits up to 49m @ 1,313 ppm TREO

- Signed a JV agreement in May 2023 to earn into the Iron Duke REE Project (**Jupiter Prospect**), which hosts two shallow historic drillholes, both of which have broad, high grade intersections of TREO.
- Located immediately south of the 100% owned Brothers REE Project**, the Project is very well positioned for a new REE discovery.
- Pegged an additional 504 km² tenement package adjacent to both the Brothers and Iron Duke Projects (**Jupiter Prospect**), bringing the total project area up to 1,165 km² of prospective REE tenure.



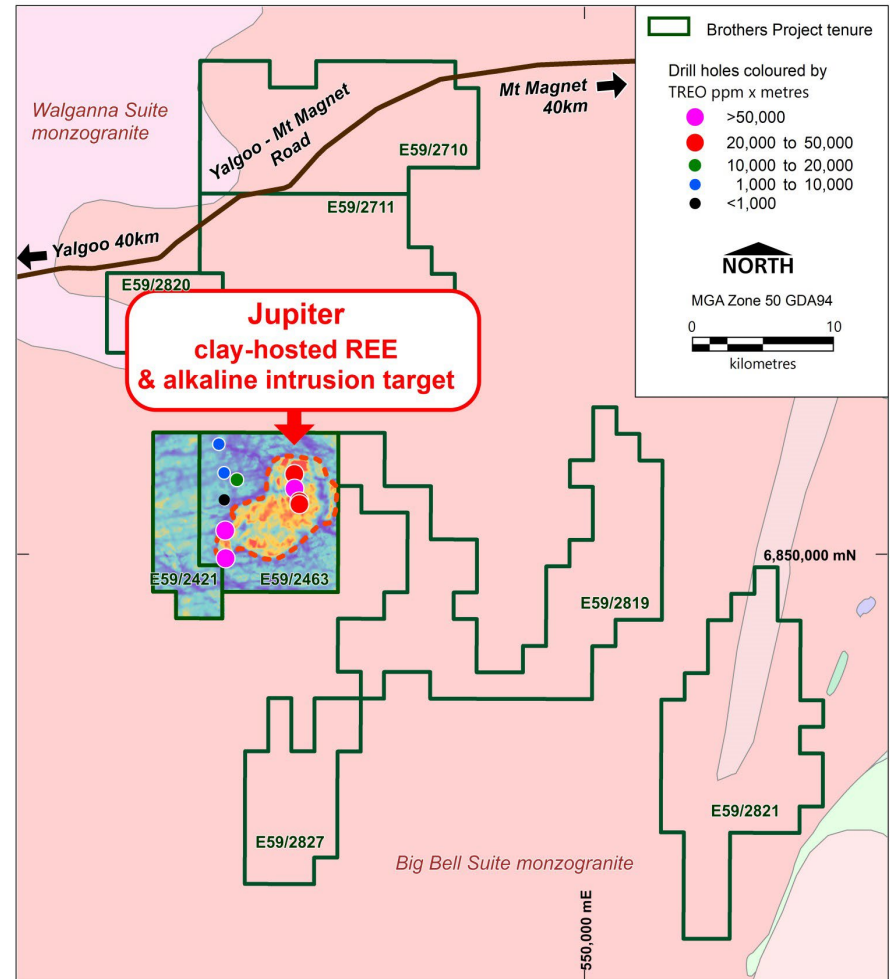
Maiden Drilling program confirms High Grade clay hosted REE discovery at Brothers (incl. Iron Duke with Jupiter prospect)

- Maiden Drilling program has confirmed High Grade clay hosted REE mineralisation has been discovered at the **Greater Brothers Project (Brothers including Iron Duke with prospect Jupiter)** with several intersections of up to 15 metres at 2,500 ppm TREO within broader zones of up to 45 metres at ~1,500ppm TREO throughout an extensive area.
- **BRAC009 45 m @ 1,455 ppm TREO from 70 m to EOH, Including 15 m @ 2,105 ppm TREO from 80 m.**
- BRAC024 19 m @ 1,931 ppm TREO from 55 m to EOH including 5 m @ 3,380 ppm TREO from 60 m.
- BRAC036 30 m @ 1,982 ppm TREO from 35 m to EOH including 15 m @ 2,672 ppm TREO from 40 m.
- BRAC037 40 m @ 1,832 ppm TREO from 25 m to EOH including 10 m @ 2,725 ppm TREO from 30 m.
- **BRAC039 42 m @ 1,619 ppm TREO from 5 m to EOH including 10 m @ 2,595 ppm TREO from 30 m.**

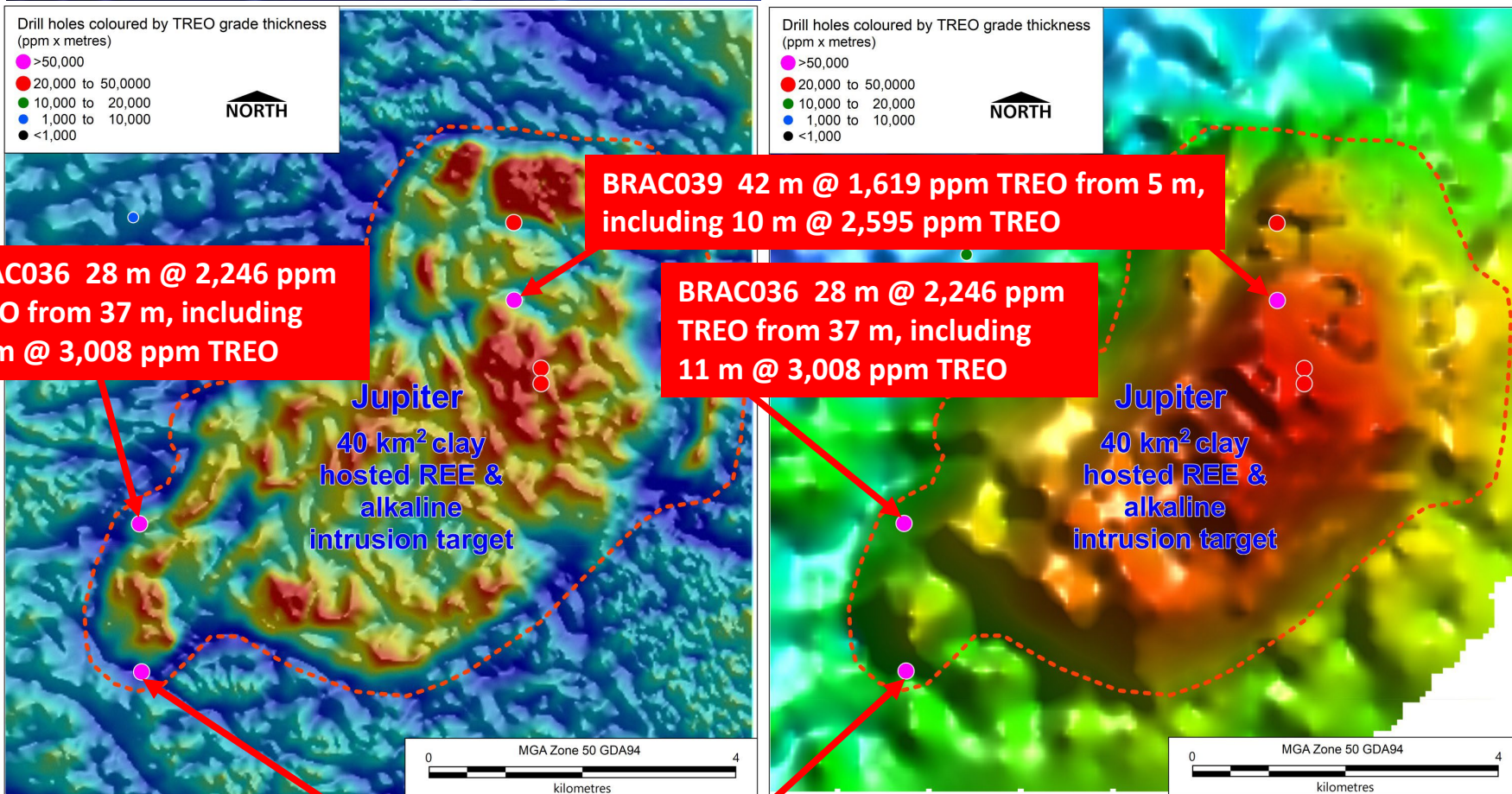


Massive new REE Target (Jupiter Prospect) identified at Brothers with results up to 3,969 ppm TREO

- **Identification of a new large REE target at Brothers named the “Jupiter Prospect” located within the Iron Duke JV ground.** The target is defined by a coincident gravity and magnetic anomaly extending over 40 square kilometres which hosts extensive REE rich clays.
- Reconnaissance aircore drilling has shown a strong correlation between the magnetic/gravity highs and the broad widths of near-surface, high-grade TREO results.
- The potential to deliver a substantial resource is apparent from these results with follow up drilling to come.
- Venture has already earned 51% interest in the Iron Duke tenure holding the Jupiter prospect and is now moving to the second stage of the earn-in by spending a further \$500,000 within the next 24 months to earn 70% of the two tenements.



Jupiter REE Target defined by a coincident magnetic/gravity anomaly over 40 sq. km hosting extensive REE rich clays.

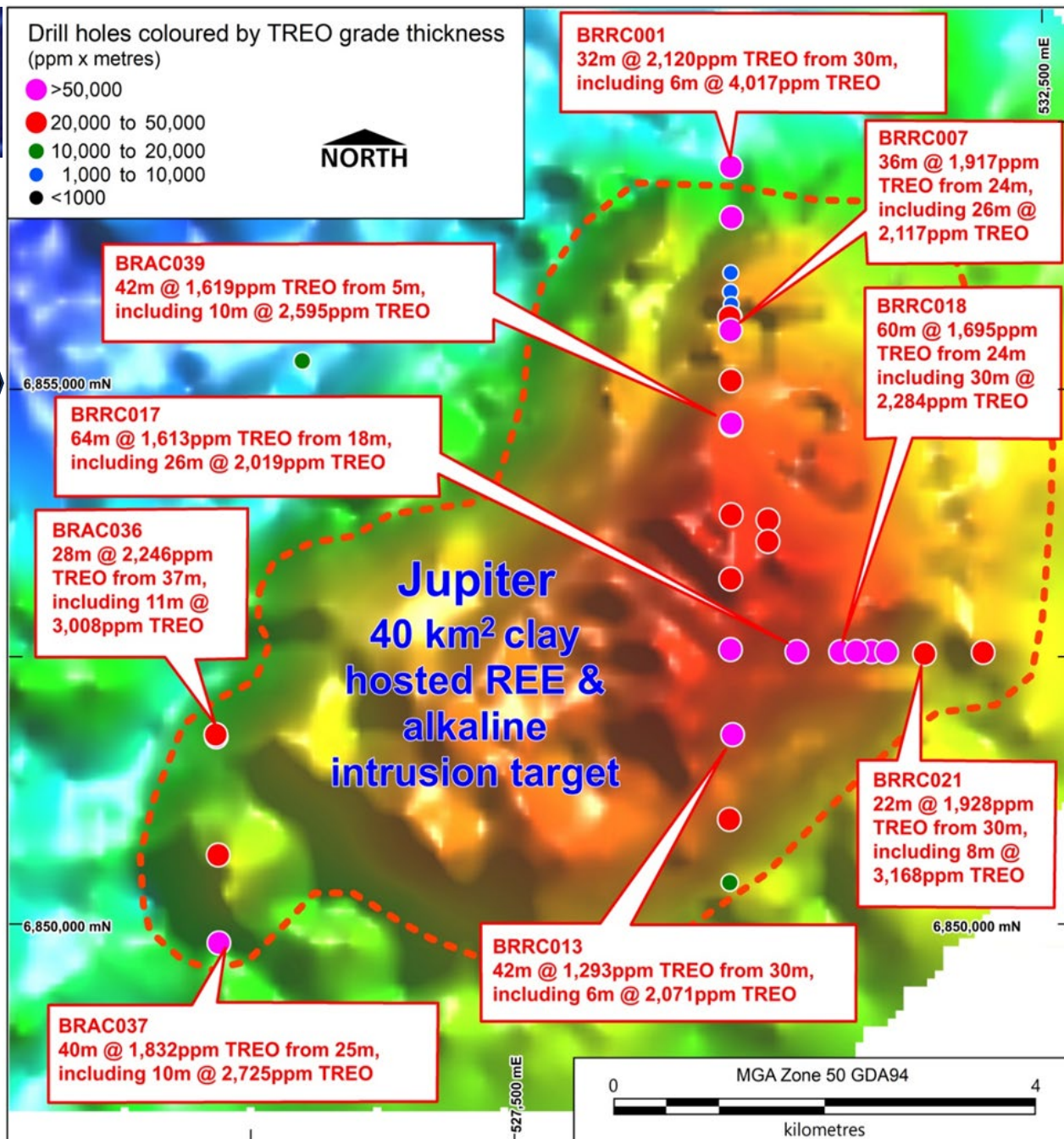


BRAC037 40 m @ 1,832 ppm TREO from 25 m, including 10 m @ 2,725 ppm TREO

Brothers/Jupiter

Jupiter Delivers over 7,000 ppm TREO assays in clay hosted mineralisation from Maiden RC Drill Program

- Initial RC program at Jupiter delivers clay hosted REE mineralisation in all 25 holes.
- Compelling assays across Jupiter target.
- Consistent 20-30 m widths of REE mineralisation grading over 2,000 ppm TREO within broader zones up to 64 m grading over 1,000 ppm TREO.
- MREO av. 23%.
- Extremely low Thorium and Uranium.
- Potential for resources with significant grade and scale confirmed.
- Stage 1 Resource Definition Drilling to be completed before the end of 2023.



Jupiter Drilling Results

0 2
kilometres

BRRC034

60m @ 1,487ppm
TREO from 12m,
incl. 4m @ 2,046ppm
TREO from 46m

BRRC074

79m @ 1,805ppm
TREO from 20m,
& 14m @ 6,054ppm
TREO from 80m,
incl. 2m @ 2.05%
TREO from 84m

BRAC037

40m @ 1,832ppm
TREO from 25m

BRRC072

50m @ 1,722ppm
TREO from 34m,
incl. 20m @ 2,519ppm
TREO from 36m

BRRC018

60m @ 1,695ppm
TREO from 24m,
incl. 30m @ 2,284ppm
TREO from 48m

BRRC069

42m @ 1,839ppm
TREO from 18m,
incl. 28m @ 2,067ppm
TREO from 26m

BRRC017

64m @ 1,613ppm
TREO from 18m,
incl. 26m @ 2,019ppm
TREO from 30m

BRRC031

30m @ 3,142ppm
TREO from 56m,
incl. 12m @ 4,673ppm
TREO from 62m

BRRC078

56m @ 1,607ppm
TREO from 28m,
incl. 24m @ 2,060ppm
TREO from 42m

BRRC071

48m @ 3,025ppm
TREO from 36m

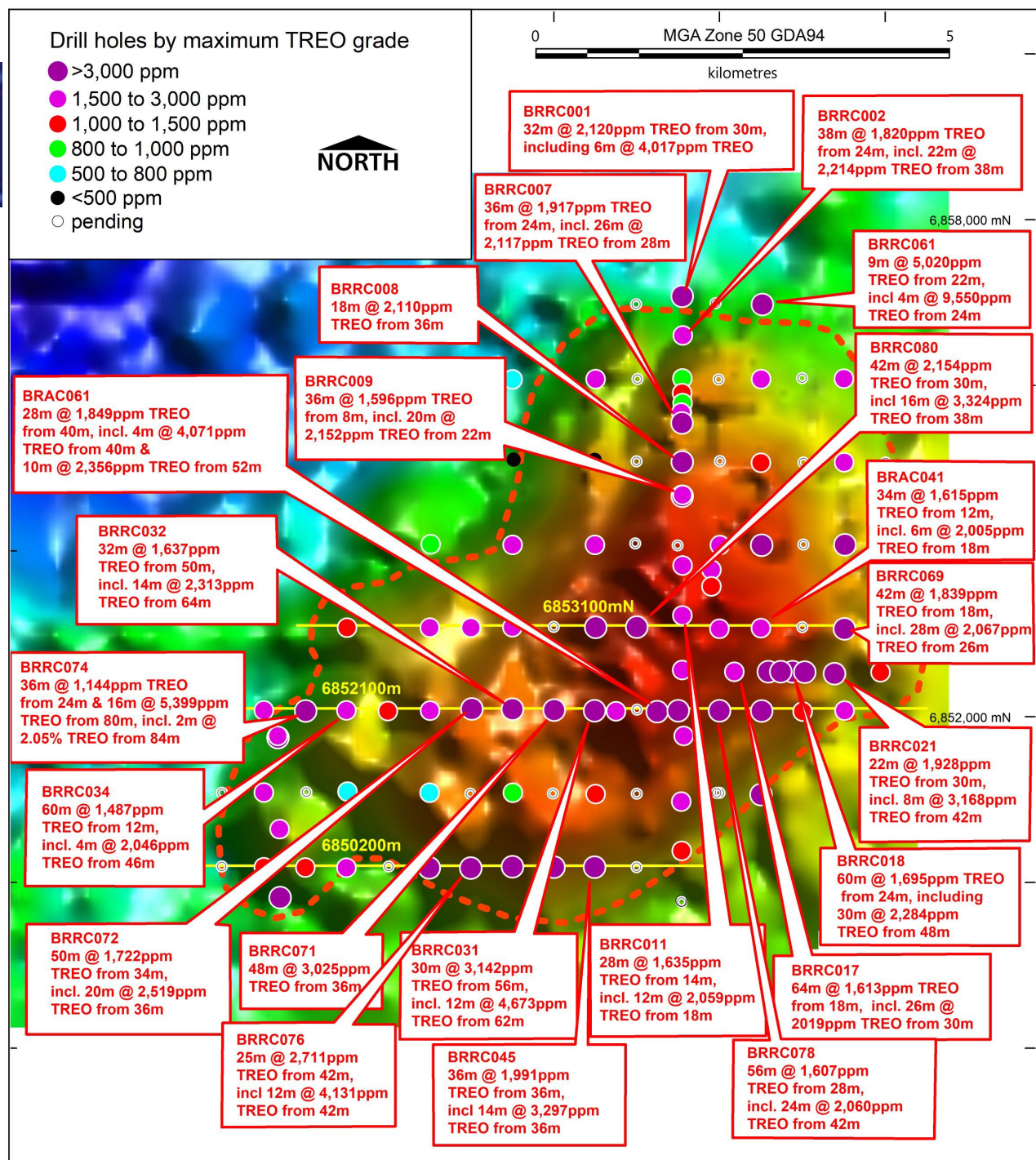
Drill holes by TREO intersection grade

- >3,000 ppm
- 1,500 to 3,000 ppm
- 1,000 to 1,500 ppm
- 700 to 1,000 ppm
- <700 ppm
- pending



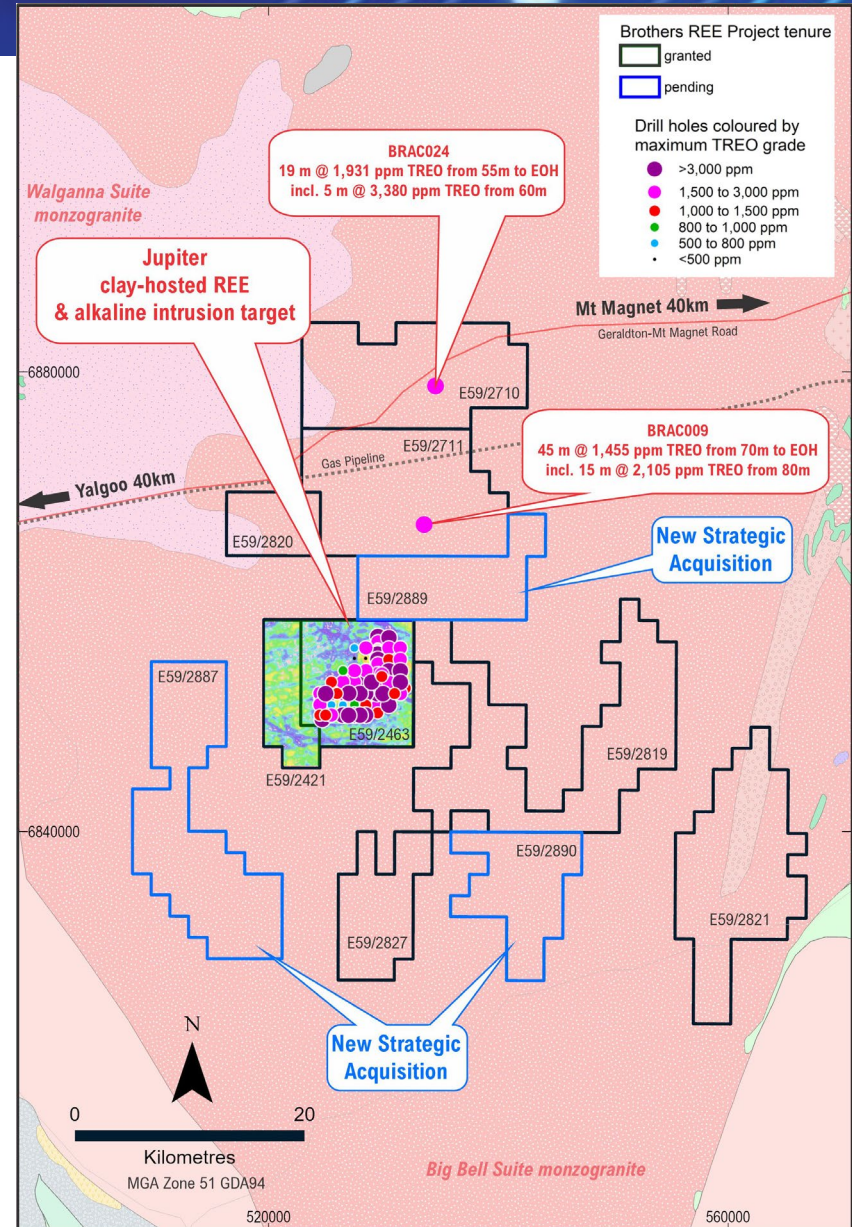
More Jupiter Drilling Results

- Drilling continues to deliver consistent high-grade zones (+2,000ppm TREO) over 20-30 m widths.
- Record intersection of **5,056 ppm NdPr oxides** in BRRC 061 with: **3,824 ppm Nd_2O_3 (Neodymium) & 1,232 ppm Pr_6O_{11} (Praseodymium)**.
- Several high-grade results over 1,000 ppm NdPr oxides.
- Very high-grade results in BRRC 061 & 076 including **assays up to 13,906 ppm TREO**.
- High grade zones sit within broader zones up to 72 m grading well over 1,000 ppm TREO.
- MREO continue to average 23% in intersections over +1,000 ppm TREO.
- Elevated levels of Samarium, used in defence applications, grading up to 389 ppm Sm_2O_3 .
- Thorium and Uranium remain consistently, extremely low.



Strategic Acquisition Adjacent to Jupiter Rare Earths Discovery

- **Secured strategic landholding adjacent to Jupiter Rare Earths Discovery.**
- **Key landholding connects Jupiter with mineralisation located 10 kilometres to the north** including drill intersections up to 45 m @ 1,455 ppm TREO including 15 m @ 2,105 ppm TREO.
- **Provides direct unencumbered access from Jupiter to a major bitumen road.**
- Acquisition secures remaining priority clay hosted, Rare Earth targets within vicinity of Jupiter.
- The project has been increased in size by 36% to 1,353 km².

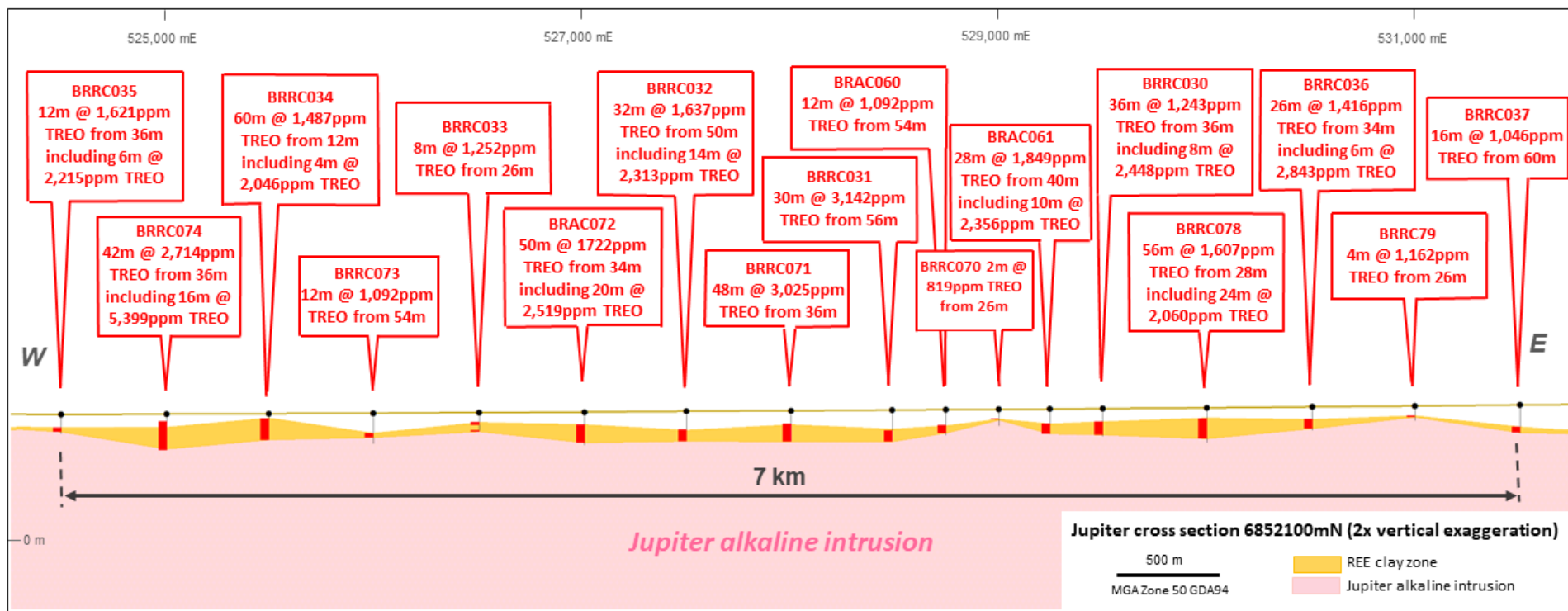


Latest Jupiter Drilling Results

- Third batch delivers the **2nd, 3rd & 4th best drill intersections (BRAC044, BRAC047 & BBRC074) seen at Jupiter to date.**
- Very high-grade results in BRAC 047 including **assays up to 26,958 ppm TREO.**
- Stage Two Drill Program completed, well ahead of schedule with 246 Aircore holes drilled.
- Drilling continues to deliver consistent high-grade zones (+2,000ppm TREO) over 20-30m widths.
- High grade zones sit within broader zones up to 79 m grading well over 1,000 ppm TREO.
- MREO average of 23% in intersections over +1,000 ppm TREO has been maintained.
- Thorium and Uranium remain consistently, extremely low.



Jupiter Drilling Cross Section 6852100mN



Jupiter in Summary

- Jupiter sits within the Brothers Project which is 1,353 km² in area, located 300 kms east of Geraldton in Western Australia;
- Jupiter is a 40 km² clay hosted REE mineralisation and alkaline intrusion target;
- Of the assays received for the 112 drill holes to date, 90% have results >1,000 ppm TREO, including a record drill intersection of 48 metres @ 3,025 ppm TREO. The highest, clay hosted REE intersection in Australia;
- Jupiter has consistently delivered high-grade zones of 20-30 m widths over 2,000 ppm TREO within broader zones up to 79 m grading well over 1,000 ppm TREO over the 40 km² target;
- On average 23% of TREO is MREO with up to 3,824 ppm Nd₂O₃ , 1,232 ppm Pr₆O₁₁ , 674 ppm Dy₂O₃ , 101 ppm Tb₂O₃ and 614 ppm Sm₂O₃ ;
- Jupiter has standout proximity to infrastructure and processing plants, being situated between Lynas's existing and Iluka's planned rare earth processing facilities.

Jupiter is remote and yet close to infrastructure



Jupiter – Next Steps

- The Stage Two Resource definition drill program of approx. 250 drill holes has just been completed.
- The first batch of assay results from the Stage Two Program are expected in the next week or so.
- Metallurgical Testwork has begun with initial results expected soon.
- Targeting Maiden Clay Hosted REE estimation for Jupiter to be completed later this quarter.

Project Locations



Conclusions

- ❶ Jupiter's breakthrough record ultra-high grade REE clay results and consistent high-grade zones of 20-30 m widths over 2,000 ppm TREO across the 40 km² target has propelled this project well above its peers in terms of both grade and scale and has become Venture's immediate focus;
- ❷ Jupiter's immediate value proposition to shareholders lies in quickly delivering a cost-effective Maiden Resource of high-grade, critical REE minerals that are in demand in a strategically secure location like Western Australia;
- ❸ The advanced Mount Lindsay Tin-Tungsten Project is well positioned to take advantage of the strong EV and critical mineral markets as it targets sustainable Tin and Tungsten production to capitalize on the global demand for decarbonisation commodities;
- ❹ Venture is looking to extract short term value out of the Riley Iron Ore Mine whilst the iron ore price remains strong.



***Jupiter on the way to becoming
Australia's largest High-Grade
Clay Hosted REE discovery***

ASX | VMS
www.ventureminerals.com.au

**THANK YOU,
SEE US AT BOOTH 73.**