16 October 2024

AR3 Corporate Presentation

Australian Rare Earths Limited (**ASX:AR3**, or "**Company**") is pleased to provide an updated Corporate Presentation.

Managing Director and CEO, Travis Beinke is attending the Metal Events 20th International Rare Earths Conference in Washington DC this week and engaging with Rare Earths market participants.

The announcement has been authorised for release by the Board of Australian Rare Earths Limited.

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Managing Director and CEO

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Engage and Contribute at the AR3 *investor hub*.

About Australian Rare Earths Limited

Australian Rare Earths is committed to the timely exploration and development of its 100% owned, flagship Koppamurra Project, located in the new Koppamurra rare earths Province in southeastern South Australia and western Victoria. Koppamurra is a prospective ionic clay hosted rare earth deposit, uniquely rich in all the elements required in the manufacture of rare earth permanent magnets which are essential components in electric vehicles, wind turbines and domestic appliances. In addition, AR3 is actively reviewing other potential prospective areas which may also host uranium and ionic clay hosted rare earth deposits throughout Australia.

The Company is focused on executing a growth strategy that will ensure AR3 is positioned to become an independent and sustainable source of energy transition metals, playing a pivotal role in the global transition to a green economy.



AUSTRALIAN RARE EARTHS
Metals for our future

Corporate Presentation

October 2024

Developing a portfolio of Energy Transition Metals

- Leading the Development of Australia's next Rare Earths Province
- Secured Strategic Tenure for Uranium Exploration in South Australia

Travis Beinke – Managing Director & Chief Executive Officer

ASX: AR3

Australian Rare Earths Corporate Presentation

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Some of the statements contained in this presentation are forward-looking statements. Forward looking statements include but are not limited to, statements concerning estimates of expected costs, statements relating to the advancement of the Company's investments and other statements which are not historical facts. Although the Company believes that its expectations reflected in the forward-looking statements are reasonable, such statements involve risk and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. Various factors could cause actual results to differ from these forward-looking statements include the potential that the Company's projects may experience technical, geological, metallurgical and mechanical problems, changes in product prices and other risks not anticipated by the Company or disclosed in the Company's published material.

COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration results is based on information compiled by Australian Rare Earths Limited and reviewed by Mr. Rick Pobjoy who is the Technical Director of the Company and a member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr. Pobjoy has sufficient experience that is relevant to the style of mineralisation, the type of deposit under consideration and to the activities 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. Pobjoy consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement (ASX announcement dated 30 September 2024) and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement (ASX announcement dated 30 September 2024) 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 (ASX announcement dated 30 September 2024).

The information in this report that relates to metallurgical results is based on information compiled by Australian Rare Earths Limited and reviewed by Mr. Jon Weir who is the Technical Director of Wallbridge Gilbert Aztec and a member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr. Weir has sufficient experience that is relevant to the metallurgical testing which was 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. Weir consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.



Developing a Portfolio of Energy Transition Metals

AR3: Leading Multi-generational Rare Earths Province with Expansion into Uranium Exploration

01 **Significant Rare Earth Resource:** 236Mt @ 748ppm TREO with significant upside potential (Exploration Target 500Mt to 3.2Bt)[1]; resource includes 68Mt grading over 1000ppm TREO

02 **Sustainable Development Approach:** Advancing the Koppamurra Rare Earths project with focus on progressive heap leach and rapid rehabilitation approach for reduced environmental impact and lower capex.

03 **Expansion into Uranium Exploration:** Overland Project: 3,000 km² prospective uranium tenure in the Murray Basin of South Australia; Triggs Bore and Hamilton Creek: Securing 450 km² tenure to unlock untapped uranium potential in the Callabonna Sub-basin.

04 **Inaugural Uranium Drill Program:** First drill program targeting sedimentary uranium at Overland, a frontier uranium play commencing in October'24

05 **Growth Focused Strategy:** Multiple exploration projects across South Australia and Queensland with significant potential for future discoveries.



[1] The potential quantity and grade of the Exploration Target is conceptual in nature. Further exploration is required to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource

Team & Corporate Snapshot

Experienced Team, Strong Backing and Well-funded



Angus Barker
Chairman

Over 30 years of professional experience, including at top-tier global investment banks and as a senior adviser to Australian Government Ministers in key economic portfolios.

- Director of Vulcan Energy Resources
- Director of WAM Capital



Pauline Carr
Independent Non-executive Director

Experienced company director in compliance, governance and risk over 30 years in resources sector.

- Chancellor of Adelaide University
- Chair of National Pharmacies
- NED Highfield Resources
- Previous roles with Normandy Mining and Newmont



Travis Beinke
Managing Director & CEO

Over 20 years' experience with both Australian and internationally listed resource companies. Broad range of strategic, commercial, finance and business development experience, particularly in exploration and growth projects.

- Previous roles with OZ Minerals, Ensign Energy Services and ExxonMobil Australia



Rick Pobjoy
Chief Technical Officer & Co-Founder of AR3

Geologist with more 25 years' experience in the mining and minerals exploration industry.

- Extensive experience in definition, development, and production from sedimentary hosted deposits.
- Successful project delivery for VHM Exploration, Murray Zircon, and Heathgate Resources.

Share price

$0.15

11 October 2024

Market capitalisation

$23.7m

Shares on issue

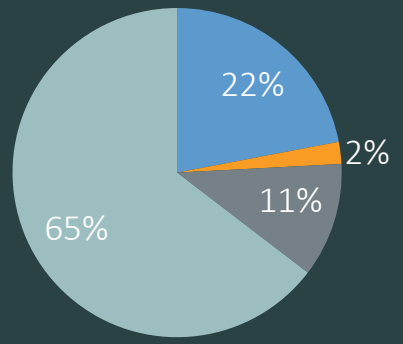
158m

Cash

$5.6m*

30 Sep 2024

Distribution Of Shareholders



* Excludes $0.7m R&D cash refund received 10 October 2024

Diversified Energy Transition Project Portfolio

Securing Australia's Energy Transition Metals for a Sustainable Future



Koppamurra REE Development Project:

- 100% ownership spanning 7,600km^2
- Located ~300km SE of Adelaide, in southern Australia and Victoria
- Resource of 236Mt @ 748ppm TREO with significant upside potential (Exploration Target 500Mt to 3.2Bt)

South Australia Uranium Projects:

- Overland Project: ~3,000km^2 prospective tenure, ~200km south of Honeymoon Mine; Multiple drill targets identified in a frontier uranium play, permits in hand for October'24 start to drill campaign
- Triggs Bore & Hamilton Creek: strategic ~450km^2 brownfields exploration tenure with drill-ready follow-up uranium targets

North Queensland REE Projects:

- Dalrymple Project ~1,200km^2 of prospective tenure
- Kennedy Province ~1,100km^2 of tenure includes the Massie Creek, Oaky Valley, Sandy Tate and Forty Mile Scrub prospects

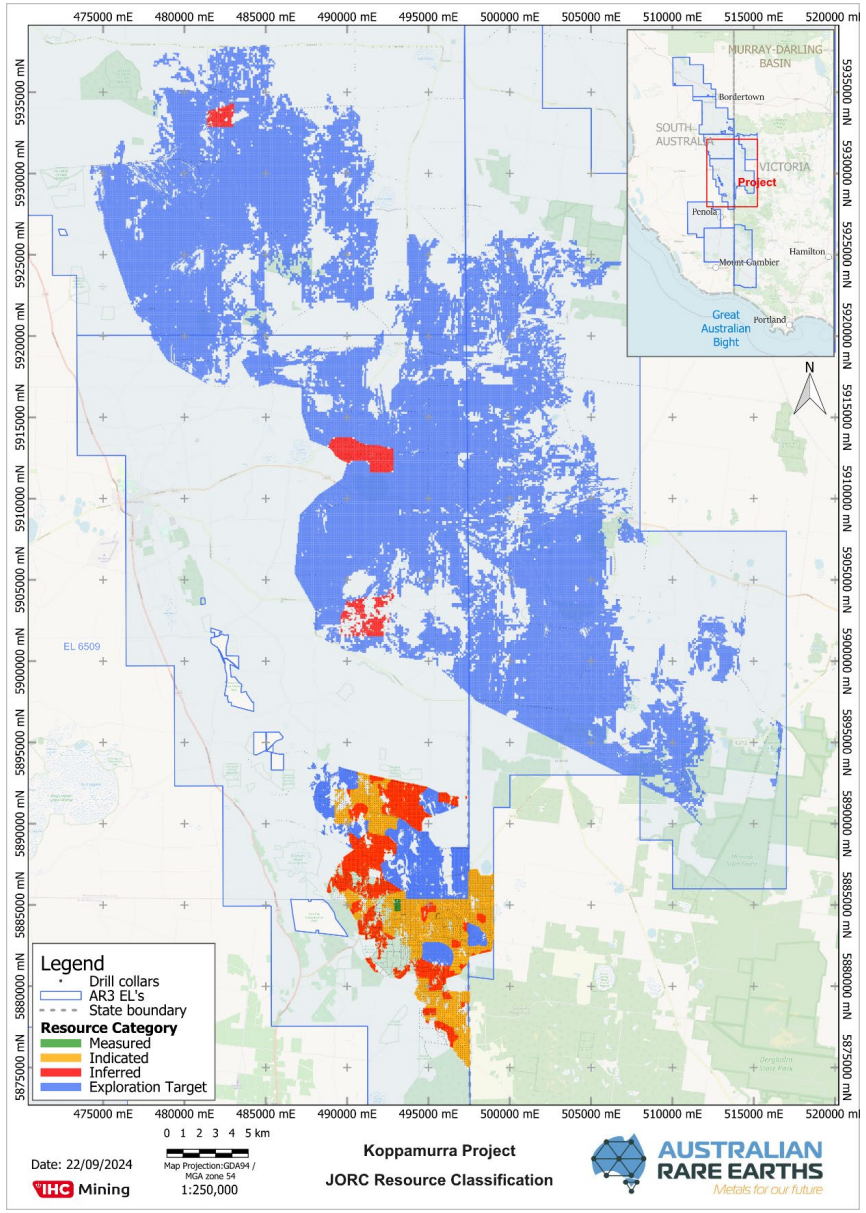


Koppamurra Rare Earths Province

Leading the Development of a Multi-Generational clay hosted Rare Earths Province in Australia

Koppamurra: Advanced ionic clay-hosted Rare Earths project

Multi-generational Rare Earth Province Potential



Koppamurra Mineral Resource and Exploration Target area, SA and Victoria

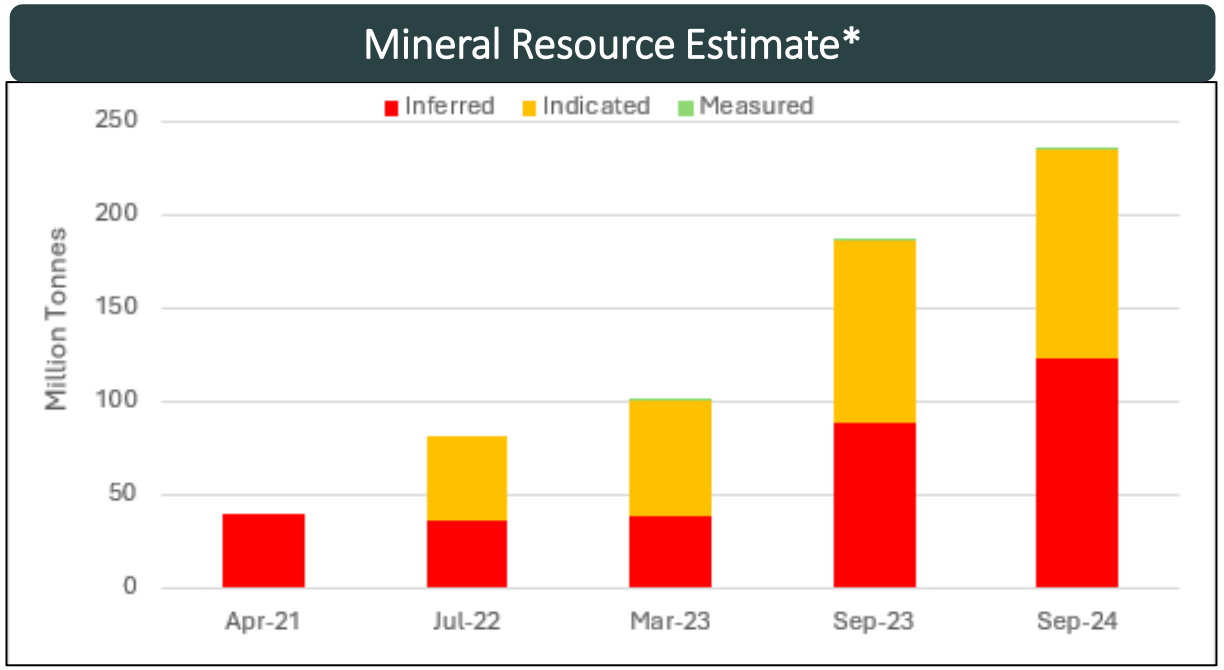
- **100%-owned** clay-hosted critical REE deposit ~300km SE of Adelaide
- **Multi-generational province**: one of the largest ionic clay-hosted REE provinces spanning 7,600km²
- **Total Mineral Resource estimate (MRE)**: of 236Mt with an average TREO grade of 748ppm
- **Resource Growth Potential**: Exploration Target of up to 3.2Bt
- **Cost Advantage**: Favourable capex and low technical risk
- **Potential Offtake agreement:** (Non-binding MOU with NEO)



Koppamurra Mineral Resource and Exploration Target

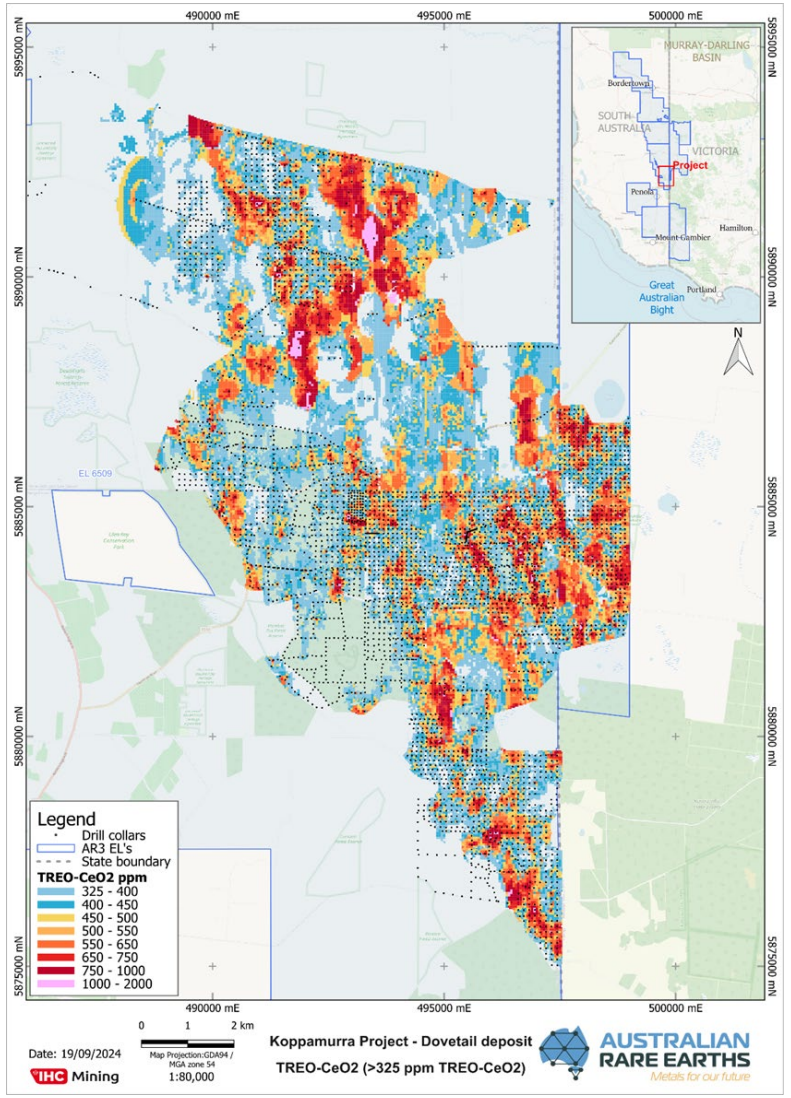
Demonstrating Province Potential with Increased Mineral Resource

- Mineral Resource estimate **increased 27%** to 236 Mt at 748 TREO in Sep'24
- Includes higher-grade subset of **68Mt grading over 1000ppm**
- Valuable **Magnet Rare Earth ~25%** of TREO with all **four key REEs present** (including heavy REE's **Dysprosium & Terbium ~3%**)
- Total of ~64,000 metres drilled since 2021



* Mineral Resource estimate and Exploration Target as at September 2024

Heat map showing high value TREO (TREO-CeO2) for the southern Resource Area

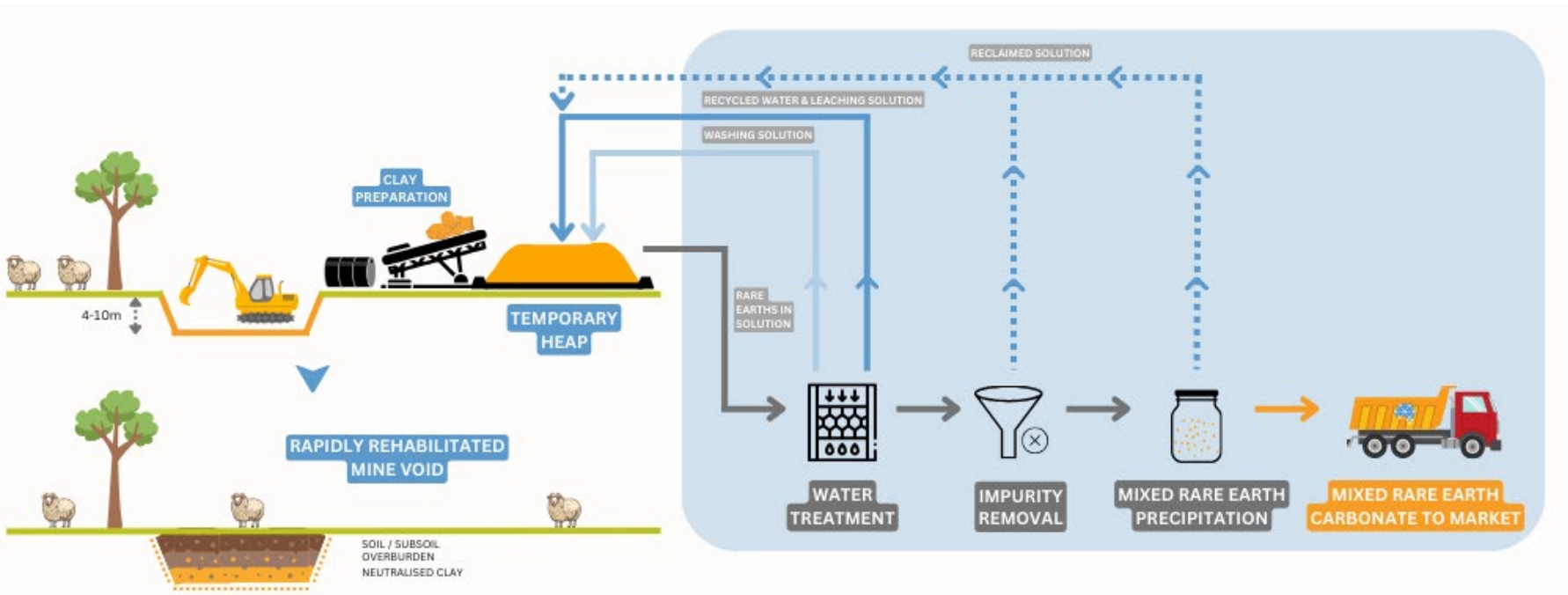


Sustainable Development Pathway for High-Grade Rare Earth Clays

Progressive Heap Leach and Rapid Rehabilitation: A Scalable, Efficient & Sustainable Solution for Koppamurra

- **Scalable, efficient REE production pathway** with staged satellite developments
- Initially **targeting higher-grade zones**
- **Improved environmental sustainability** characteristics:
  - Less water & energy usage
  - Enables rapid, progressive land rehabilitation

KOPPAMURRA CONCEPTUAL PROJECT FLOW SHEET



A SIMPLE PROCESS WITH LOW TECHNICAL RISKS AND IS ENVIRONMENTALLY SUSTAINABLE

Mine Design Incorporating Progressive Land Rehabilitation

Successful Bulk Sample Pit and Rehabilitation Program



April 2022



September 2022



August 2024

Koppamurra Next Steps

01

Flowsheet optimisation including further Heap Leach testwork



02

Finalise baseline environment baseline studies and progress work to support initial Mine Lease Application



03

Advance project studies and engineering



04

Ongoing exploration assessment of recently granted southern tenements



05

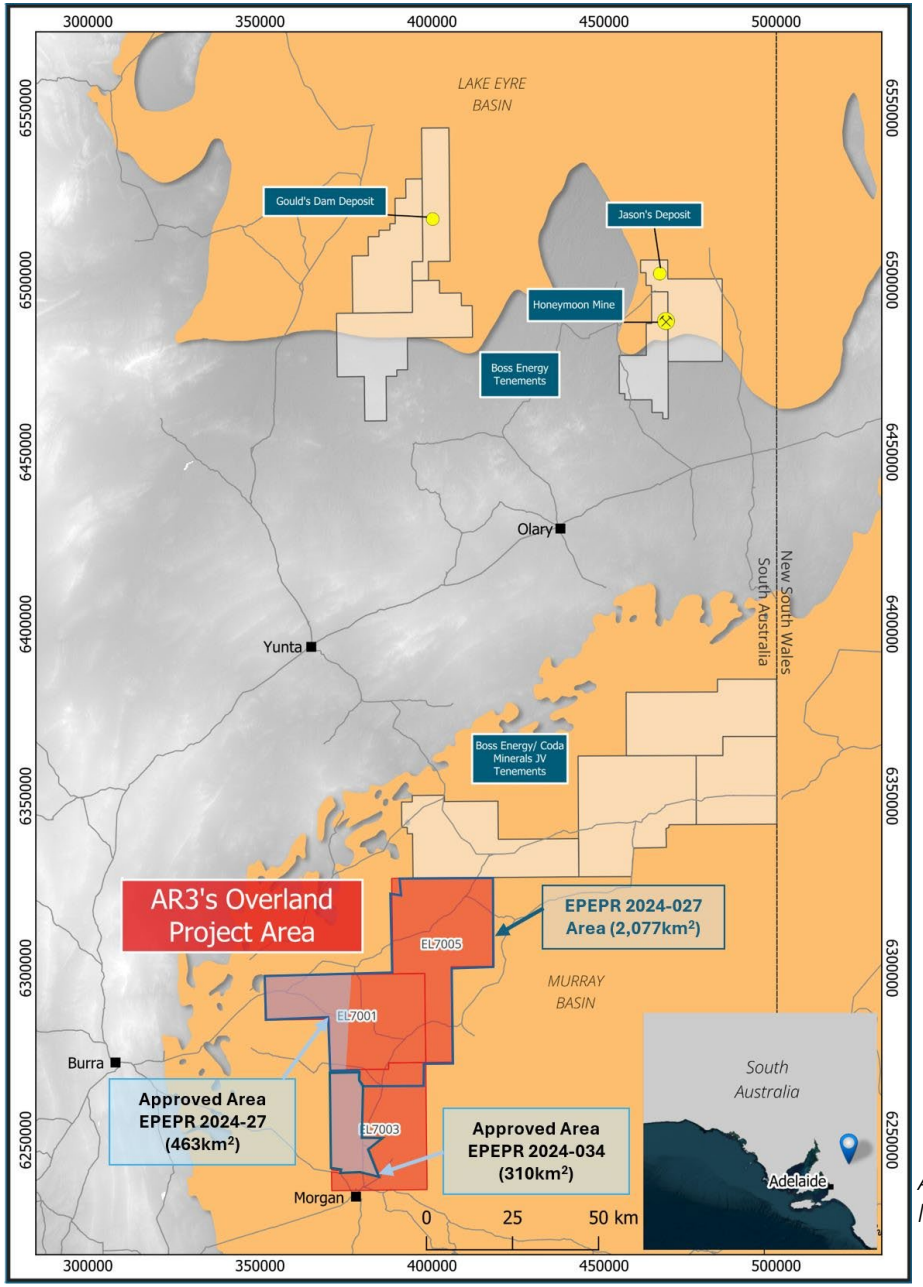
Continue to build strong stakeholder engagement



Uranium Portfolio

Overland Uranium Project: Untapped Uranium Exploration Potential

Drilling to commence in a frontier uranium play

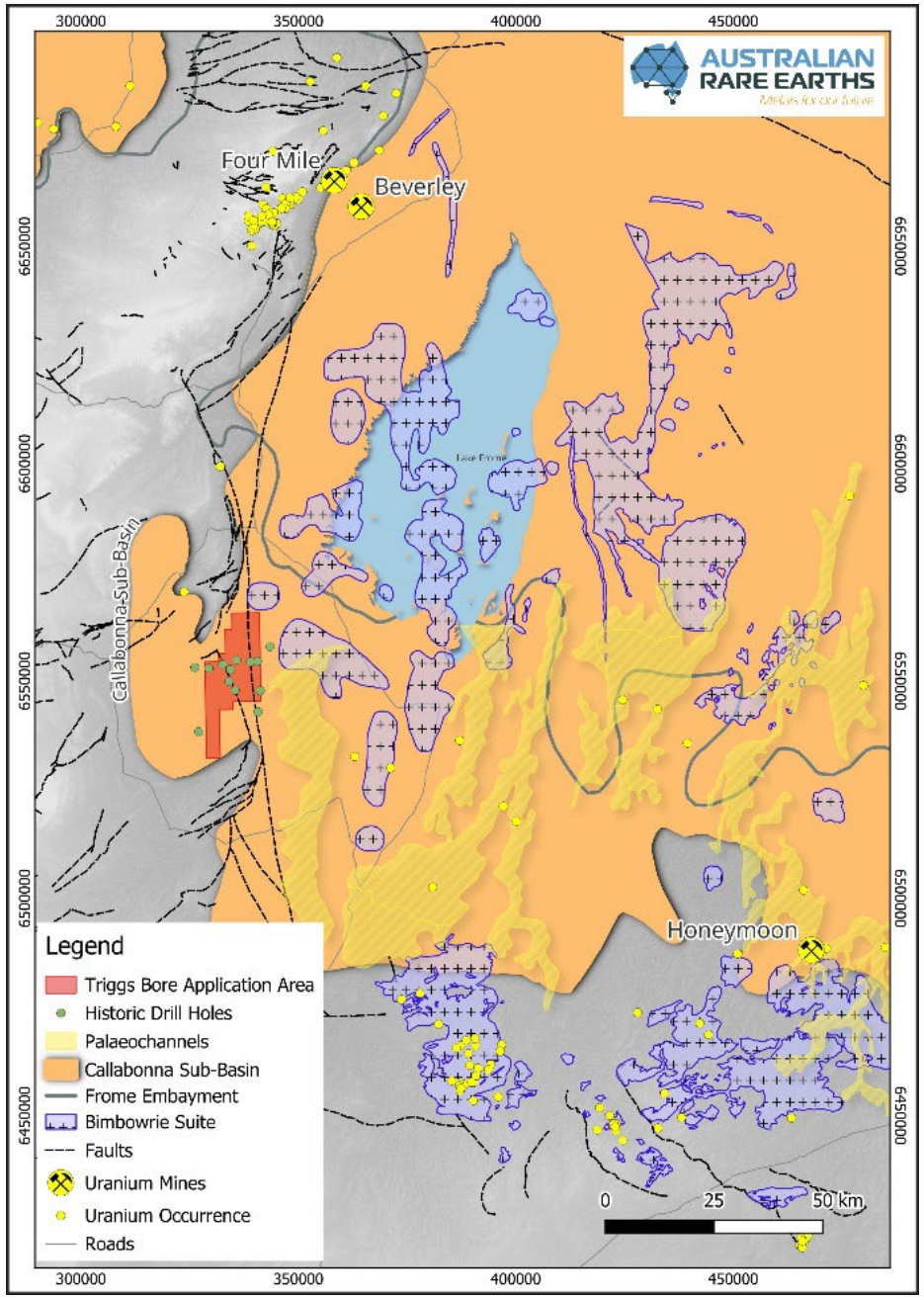


AR3's Overland Project location map

01 **Leveraging expertise:** in uranium exploration and development

02 **Overland Project: 3,000 km² prospective tenure in South Australia:** Targeting Renmark Group sediments similar to successful Lake Eyre Basin

03 **Inaugural Drill Program:** First program to commence mid-October'24; ~30 holes for ~5,000m Air Core drilling; Drilling will target high-priority uranium targets in a frontier uranium play



Triggs Bore relative to regional geology

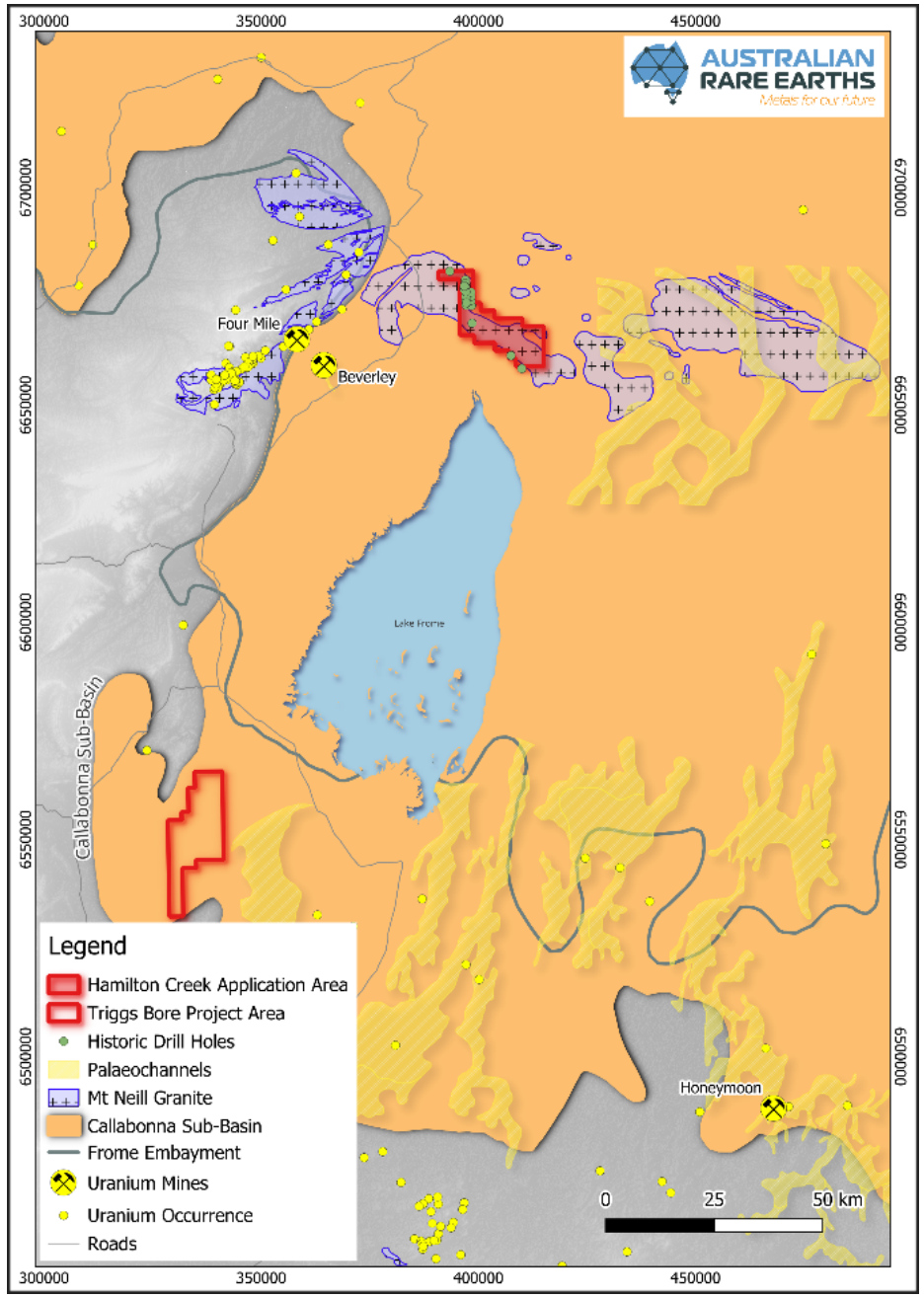
Triggs Bore: Advancing Uranium Exploration

Securing a Strategic 250 km² Tenure position to Unlock Untapped Uranium Potential in the Callabonna Sub-basin

01 **Exploration License:** Granted, covering ~250km² of prospective tenure targeting uranium mineralisation within the Callabonna Sub-basin.

02 **Untested Uranium Potential:** indications of uranium mineralisation previously discovered in 2011 but remain untested.

03 **Eyre Formation Sediments:** Triggs Bore hosted within the Eyre Formation sediments, a known uranium-bearing formation, also host to nearby Four Mile, Beverley and Honeymoon uranium deposits.



Hamilton Creek relative to regional geology

Hamilton Creek: Advancing Uranium Exploration

Securing a Strategic 200 km² Tenure position to Unlock Untapped Uranium Potential in the Callabonna Sub-basin

01 **Exploration License:** Granted covering ~200km² of prospective tenure targeting uranium mineralisation within the Callabonna Sub-basin.

02 **Untested Uranium Potential:** indications of anomalous uranium mineralisation from historic reporting.

03 **Namba Formation Sediments:** Hamilton Creek hosted within the Namba Formation sediments, same formation as the nearby Beverley uranium deposit.

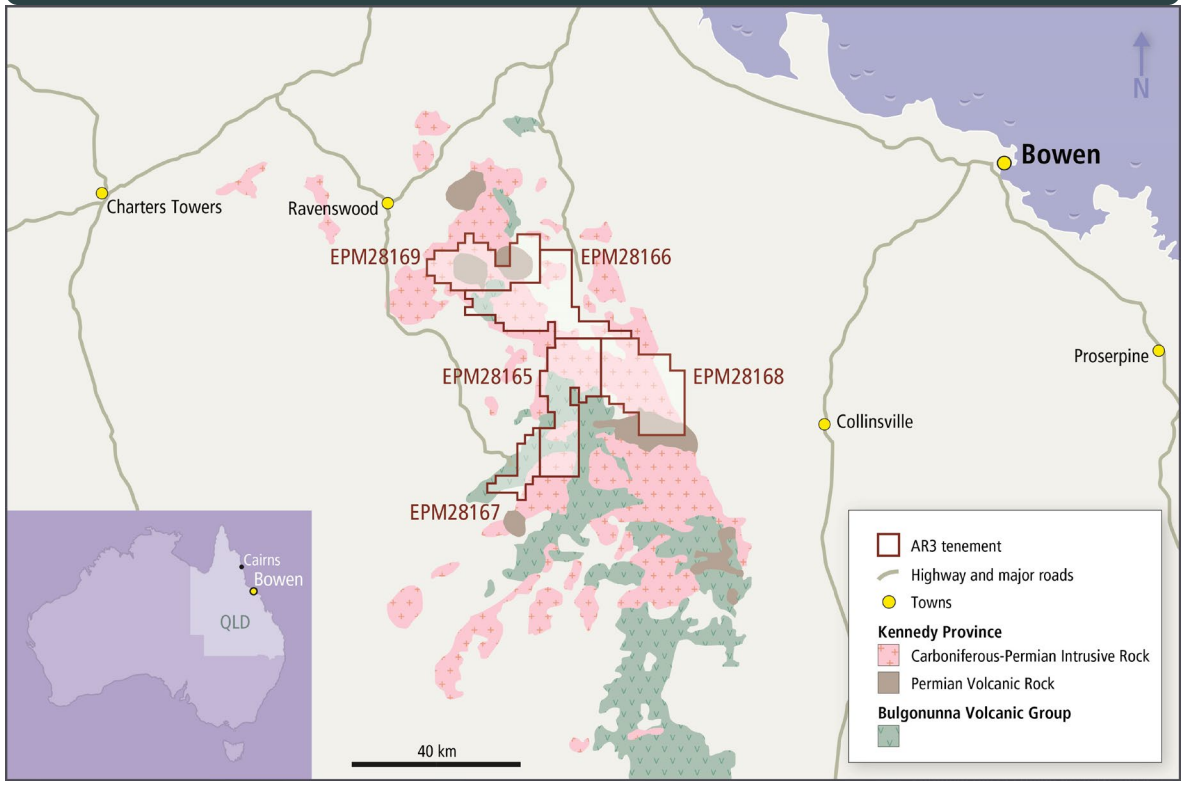


North Queensland Portfolio

Creating a Rare Earth Exploration Portfolio

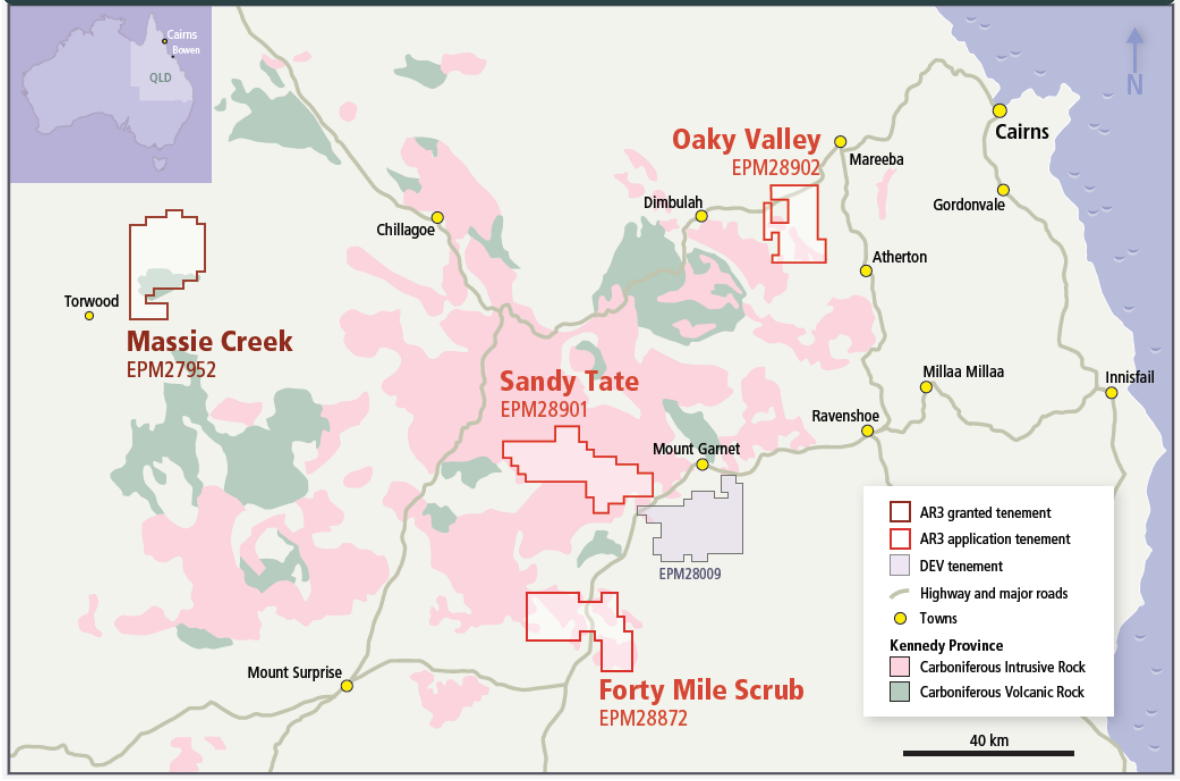
Dalrymple Project and Kennedy Province in Queensland

Dalrymple Project



Next Steps: Follow-up sampling and metallurgical test work

Kennedy Province



Next Steps: Rapid, on-ground, exploration assessment post granting of Exploration Licence applications

Summary: Developing a Portfolio of Energy Transition Metals

AR3: A Leading Multi-generational Rare Earth Province with Expansion into Uranium Exploration

Koppamurra REE Development Project: 01

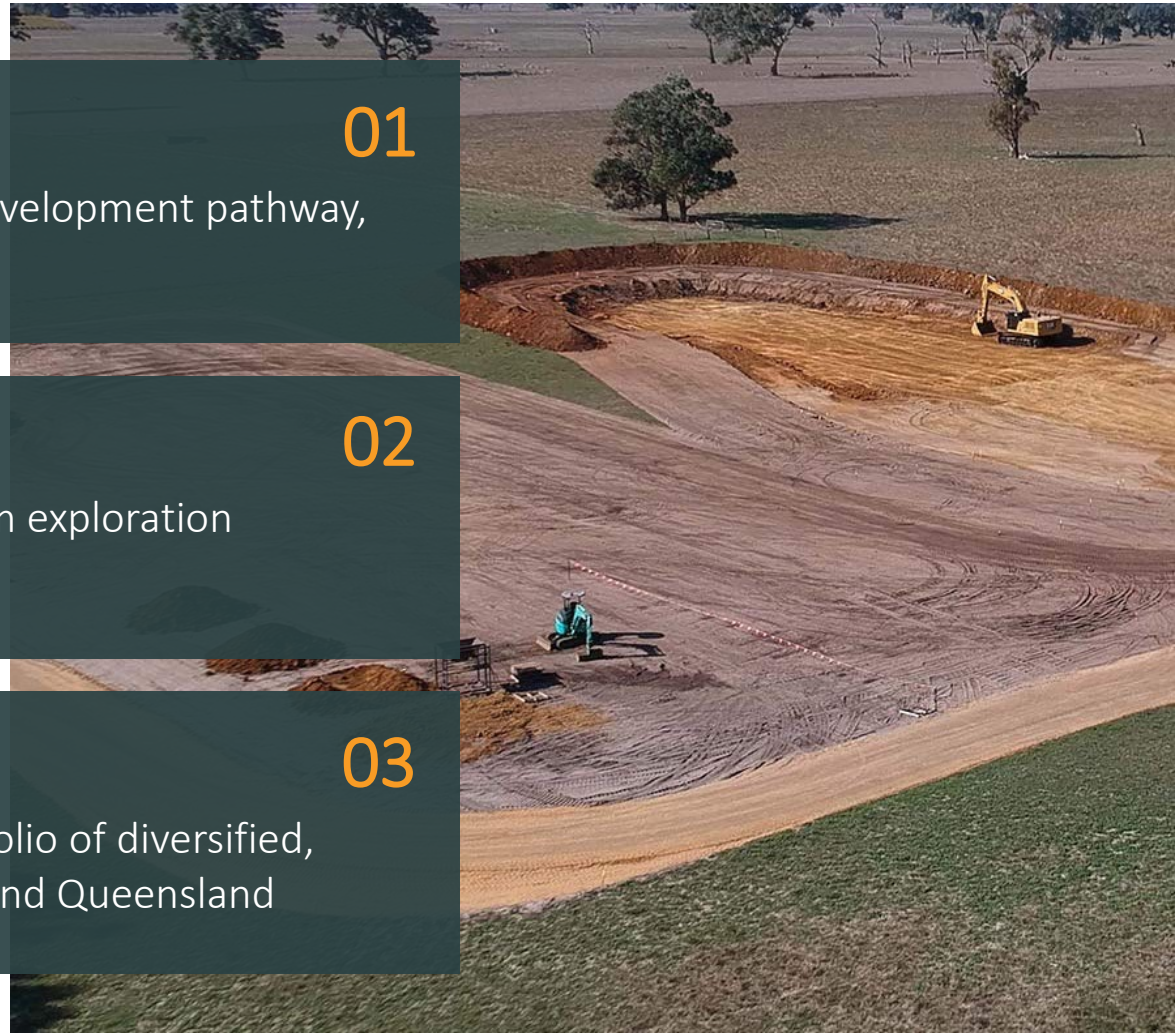
Large, multi-generational REE Mineral Resource with a sustainable development pathway, pioneering clay-hosted rare earths in Australia

Overland, Triggs Bore & Hamilton Creek Uranium Projects: 02

Leveraging internal expertise to advance frontier, prospective uranium exploration projects

Growth focused strategy: 03

Pathway to be Australia's first ionic clay hosted REE mine with a portfolio of diversified, energy transition metals exploration projects across South Australia and Queensland



AUSTRALIAN RARE EARTHS

Metals for our future

Securing Australia's Energy Transition Metals for a Sustainable Future



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