

Exposure to Electric Vehicle Raw Materials



57-71
RE
Magnets

15
P
Batteries

James Durrant
October 2023

ASX: REE
rarex.com.au

Disclaimer & Competent Persons' Statements



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Competent Person's Statement – Production Target and Forecast Financial Information: The information in this presentation relating to production targets and forecast financial information (FFI) was first reported on 22 August 2023. REE confirms that the material assumptions underpinning the production target and FFI continue to apply and have not materially changed. The production target is based on a portion of inferred resource. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realized.

Global Resource (JORC 2012)

2.5% P ₂ O ₅ Grade Cut	Tonnes Mt	TREO ppm	P ₂ O ₅ %	NdPr ppm	Nb ₂ O ₅ ppm	HREO ppm
Indicated	66.6	5,010	6.8	1,100	830	290
Inferred	452.7	2,900	4.2	630	550	170
Total	519.3	3,170	4.6	700	580	190

Why Does RareX Exist?

Fundamental Belief In The Electrification Of Things And The Green Energy Revolution

Global net-zero ambitions

- ✓ EU Net zero by 2050 – \$3.8T by 2050¹
- ✓ US net zero by 2050 - \$30T by 2050²
- ✓ Australian critical minerals key to the decarbonization of supply chain³

Massive EV and wind turbine investments

The **generation, storage and use of clean energy** are key technologies driving the critical metals boom for **RE magnets** and **phosphate battery storage**

Electric Vehicles

- ✓ **1T surpassed** in EV investment by automotive manufacturers

Wind turbines

- ✓ **1.7T invested** in clean energy generation in 2023
- ✓ **4T required annually** – IEA⁵

LFP battery investment for EVs and grid firming

Renewable energy generation and electric vehicles have in common the need for rare earth magnets and battery storage. Lithium Iron Phosphate

- ✓ Global **LFP battery market** projected to grow from \$10 billion in 2021 to **\$50 billion by 2028**⁴



57-71
RE
Rare Earths

“RareX focused on rare earths for magnet motors and also found phosphate for LFP batteries – a poetic discovery”

15
P
Phosphorus

Sources:

- 1: <https://www.weforum.org/agenda/2022/04/bnef-european-energy-transition-2022/>
- 2: <https://about.bnef.com/blog/report-shows-that-inflation-reduction-act-alone-wont-set-united-states-on-track-for-net-zero/#:~:text=To%20get%20on%20track%20for,rapidly%20cut%20down%20on%20emissions.>
- 3: <https://www.globalaustralia.gov.au/industries/net-zero/critical-minerals>
- 4: <https://www.fortunebusinessinsights.com/lithium-ion-li-ion-phosphate-batteries-market-102152>
- 5: <https://www.canarymedia.com/articles/clean-energy/chart-clean-energy-investment-to-hit-1-7t-widening-lead-on-fossil-fuels>

RareX Value Proposition

1

2

3

Cummins Range EV raw material project

Low-risk, high value development

Stage-1 \$45M to monetise the pre-strip

Stage-2 \$304M at Y3 for 15 years of Bene production:

- ✓ rare-earth for magnets
- ✓ phosphate for batteries

IRR – 39% pre tax, 27% post tax
NPV– \$549M pre tax, \$333M post tax

Underpinned by Australia's largest undeveloped rare earths project

- ✓ **24Mt** – Contained P₂O₅
- ✓ **1.6Mt** – Contained rare earths

RARE EXPLORATION

Exploration upside on and beyond Cummins Range

Cummins Range “near-mine” anomalies

Kimberley projects

- Mt Mansbridge
- Maude Creek

East Yilgarn

- Weld North
- Red Dragon

Investments in strategic listed companies

- **Kincora** – 5M shares
- **Cosmos** – 10M shares
- **CREC** – 25M shares

Team able to discover, engineer, approve, fund and deliver

Action orientated board

Cameron Henry – Process plant construction
Danny Goeman – Marketing, sales & shipping
Jeremy Robinson – Corporate finance
John Young – Mine developer
Shaun Hardcastle – Corporate Lawyer

Core team with Tier 1 exploration, development and ops experience

Kay Hofmann – Mining and approvals
Guy Moulang – Geology and Exploration
Lu Zhang – Metallurgy and Process
Damien Krebs, Gavin Beer – Metallurgy

BHP, Rio Tinto, FMG, MinRes, Pilbara Lithium, Primero, Mets Engineering

Corporate Snapshot

Well Suited For Value Growth



Capital Structure

ASX Code	REE
Share Price (29.09.2023)	A\$0.033
Shares on Issue	683M
Market Capitalisation	A\$23.2M
Cash (June Qtr)	A\$4.3M
Investments (June Qtr)	A\$5.3M

Key people

Chairman	Jeremy Robinson
CEO	James Durrant

Major Assets

Cummins Range Project	100%
RareXploration tenements	100%
Kincora Copper	5M shares ¹
Cosmos Exploration Limited	10M shares
Canada Rare Earths Corp	25M shares
Various rare earth exploration projects	100%

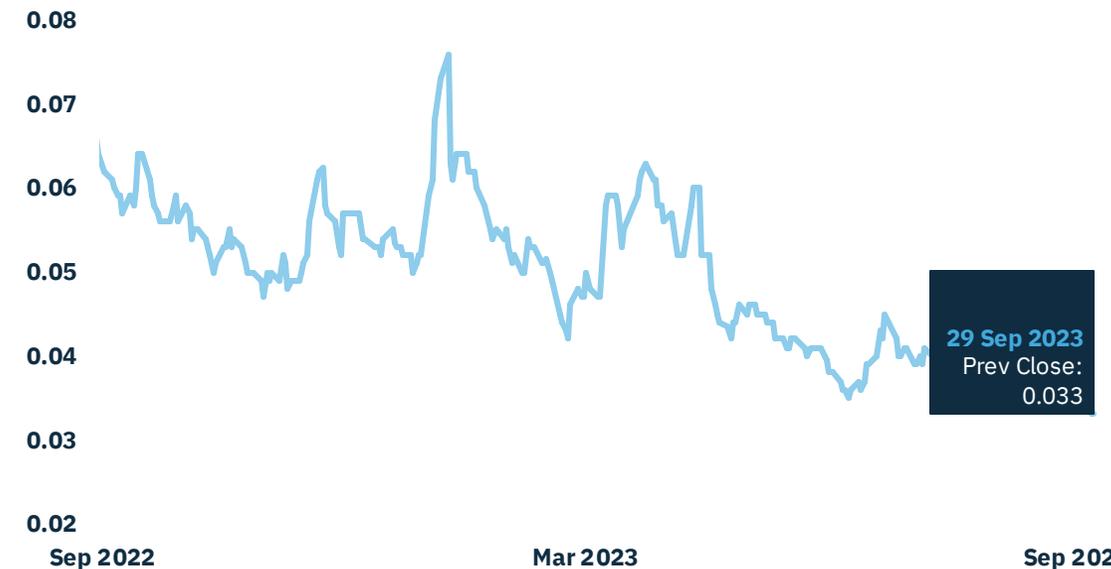
Note:
1: KCC shareholder approved: RareX will transition its free carry in 5 tenements into 40M new shares. Until then RareX maintains a 35% free carry Trundle, Fairholme, Jemalong, Cundumbul and Condobolin exploration licences in NSW, in addition to 5M shares.

Shareholders

Top 50 Shareholders	~38%
Number of Shareholders	~5,400
Major Shareholders	Simon Lee AO (5.2%) Jeremy Robinson (4.3%)

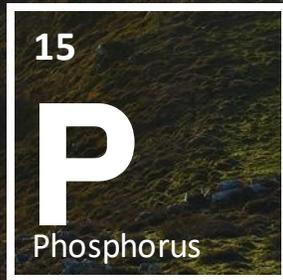
Share Price Information

ASX: **REE**



Cummins Range Project

Critical Minerals
For The Electric
Revolution



RARE 
Phosphate
Enabled
Rare Earths



Flagship Snapshot Cummins Range



Technical

A **magnet-Rare Earths** and **battery-phosphate Critical Minerals Project**, beginning with monetised overburden as **Direct Shipping Ore (DSO)**

- Stage 1:** Monetised DSO pre-strip
- Stage 2:** P-RE mineral con - Bene
- Stage 3:** Fresh rock processing (from 2039)

Scoping Study released for an 18-year mine life at 500ktpa

Supply chain agreements closing:

- Trucking contract and JV
- Stockpiling land option
- Barge loading tolling
- Transhipment

Jaru heritage agreement closing

Regulatory submissions planned in early-mid 2024.

Sources:
ASX Announcement 22 August 2023. The information in this presentation relating to production targets and forecast financial information (FFI) was first reported on 22 August 2023. RARE confirms that the material assumptions underpinning the production target and FFI continue to apply and have not materially changed. The production target is based on a portion of inferred resource. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

Financial

NPV₈ post-tax:	AU\$ 333M
IRR post-tax:	27%
Initial Capex:	AU\$ 45M
Stage 2 Capex:	AU\$ 304M
EBITDA:	AU\$ 1,450M

Conservative cost inputs

- 20% capital contingency
- 5% pa deployed capital sus-cap
- Government taxes and royalties
- Native title contributions and royalties
- Mine closure \$41M

Conservative pricing considering

US \$110/kg NdPr oxide
US \$250/t 32% P₂O₅

Discounted for incentivisation and

value chain position:
REO: 80% basket discount
P₂O₅: 10% discount

2023 JORC Resource

519.3Mt @ 4.6% P₂O₅, 0.32% TREO

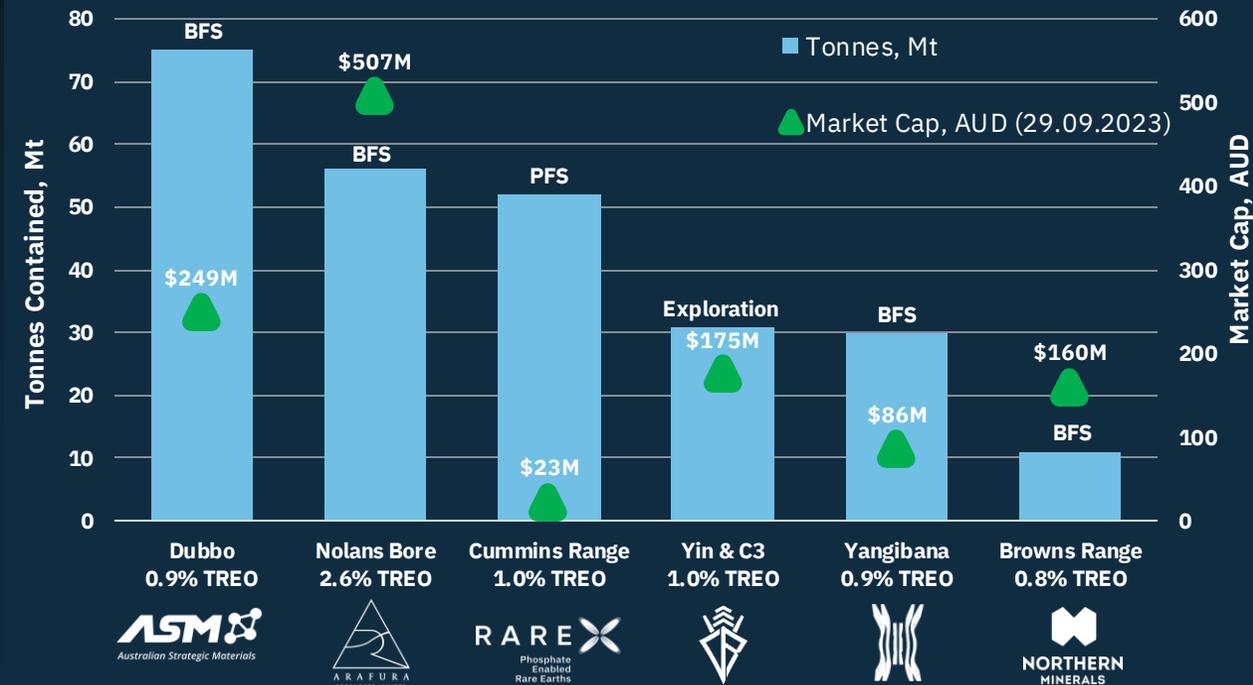
In total: Australia's largest undeveloped rare earths project

- ✓ 1.6M tonnes contained TREO
- ✓ 24M tonnes of contained phosphate

Normalised to 1% TREO:

- ✓ Australia's 3rd largest undeveloped rare earths project

Cummins Range High Grade Resource vs. Peers



“An impressive 24Mt of contained P₂O₅ and 1.6Mt of contained TREO”

Sources:
See slide: List Of Sources For Grade And Resource Graphs
ASX Announcement 01 May 2023



Developing Cummins Range Into A Critical Minerals Project

Focussing On Overburden Approval To Establish A Near Term Operating Platform

YEAR*	2H 2023	1H 2024	2H 2024	1H 2025	2H 2025	2026+
Resource definition	MRE update	Geotech	Reserve		Grade definition	Grade control
Pre-strip approvals	Heritage & enviro pre-requisites		Referral	Assessment	2 nd and 3 rd level approvals	✓ License
Pre-strip readiness	Supply chain contracts	Mine design	Operational contracts	Funding	Road design & build	Installation & ops
Pre-strip offtake	MOUs		Term sheets	Take or pay		
Bene approvals	Enviro pre-requisites			Referral	Assessment	✓ Licence
Bene readiness	Studies & engineering			Commercial contracts	Funding	Construction
Bene offtake	MOUs		Term sheet	Strategic offtake partner		

*The timetable is indicative and subject to change

\$1,450M

Resource definition

- Focus on first 2-5 years on mining
- Multi purpose drilling: definition, Geotech, metallurgy
- Aiming for 1-2 years of Measured

Pre-Strip (Stage-1)

- Monetised overburden
- Direct shipping ore rock phosphate
- >250ktpa FOB Wyndham

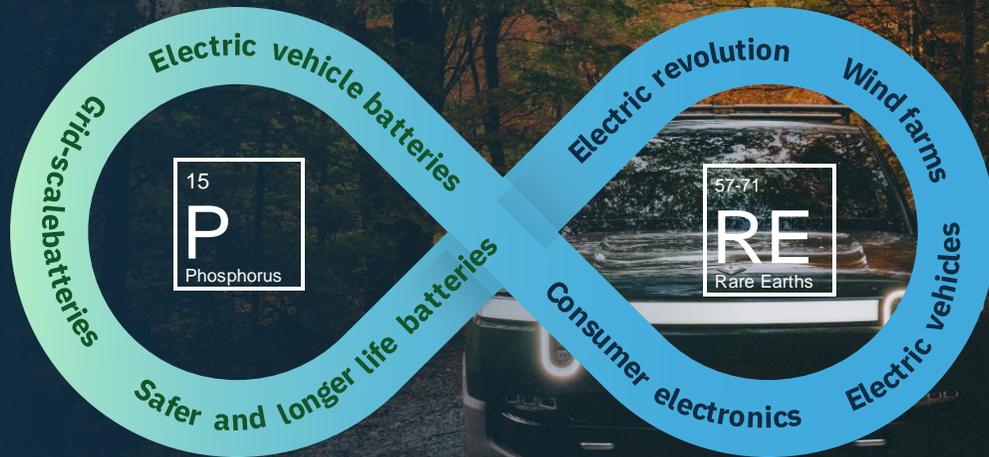
Beneficiation (Stage-2)

- Mineral concentrate product
- Magnet rare earths. Battery phosphate
- c. 500ktpa FOB Wyndham

Batteries

Magnets

Single EV Raw Material Product



Mineral Concentrate

Combined mineral concentrate

- ✓ Single bulk product offering from Wyndham port, north WA

High NdPr grading monazite

- ✓ Low UTh, not affected by leach process

Clean apatite phosphate mineral

- ✓ Low contamination, simple phosphoric acid leach and purification to LFP grade

Magnet Rare Earths

Wind farms

- 200kg NdPr per MW of turbine
- **837,000 MW of installed wind power in 2022¹**
- Net-zero requires the 75 GW installed in 2022 to reach 350 GW in 2030⁴

Electric Vehicles

- 1kg NdPr per vehicle
- 2.3M EVs sold in 1Q2023 c. 35% YoY increase³

Battery phosphates

Huge Growth

- ✓ **25.5 kg phosphate** in each LFP vehicle⁵
- ✓ **35x installed grid-scale battery storage capacity** required between 2022 and 2030 for net zero²

Concentrate supply

- 30% of all EV batteries (2022) are LFP, In 2020 only 6% were LFP!
- >90% made in China⁶.

Pre-strip

- ✓ **Organic Rock Phosphate**
- ✓ 23% P₂O₅, 5x bioavailability
- ✓ c. 1Mt from surface
- ✓ Organic



Sources

- 1: <https://gwec.net/global-wind-report-2022/>
- 2: <https://www.iea.org/energy-system/electricity/grid-scale-storage>
- 3: <https://www.iea.org/energy-system/transport/electric-vehicles> United Nations
- 4: <https://www.iea.org/energy-system/renewables/wind>
- 5: <https://www.nature.com/articles/s43246-022-00236-4>
- 6: <https://www.crugroup.com/lfp-growth-may-require-the-global-purified-phosphoric-acid-industry-to-double-in-size/>

Favourable Project Metrics

Total LOM Production Forecasts



Cummins Range comparable with peers

Scoping study modelled 31.7Mt @ 0.7% TREO from Cummins Range¹

- ✓ TREO grades from monazite comparable to peers
- ✓ Additional benefit of low contaminate phosphate in apatite
- ✓ 18-year mine life and potentially more to come

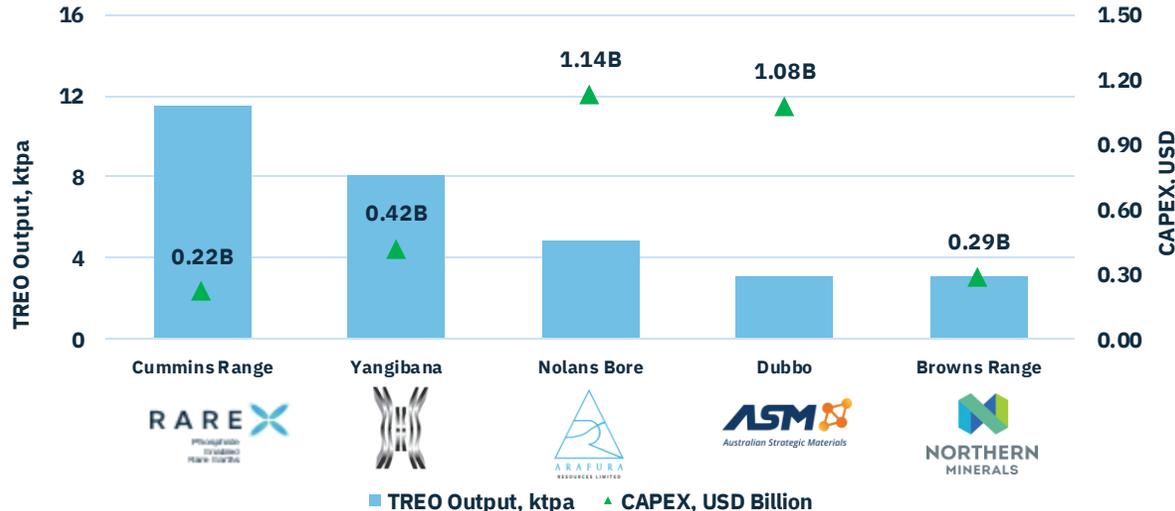
Note:

1: ASX 22 August 2023: The Scoping Study referred to in this release is based on low-level technical and economic assessments and is insufficient to support an estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised. Further evaluation work and appropriate studies are required before RareX will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case

Sources:

See slide: List Of Sources For Production Forecasts and Grade, Economics And Radionuclides

Annual TREO Output vs. Development CAPEX



Low capital intensity

Efficiency of capex deployment - AU\$ 350M capex for:

- 12ktpa of TREO²
- Plus 129ktpa of P₂O₅
- Preceded by monetised pre-strip

- ✓ One of the highest proposed TREO output projects
- ✓ One of the lowest development capital requirements
- ✓ High efficiency, lower risk

Note:

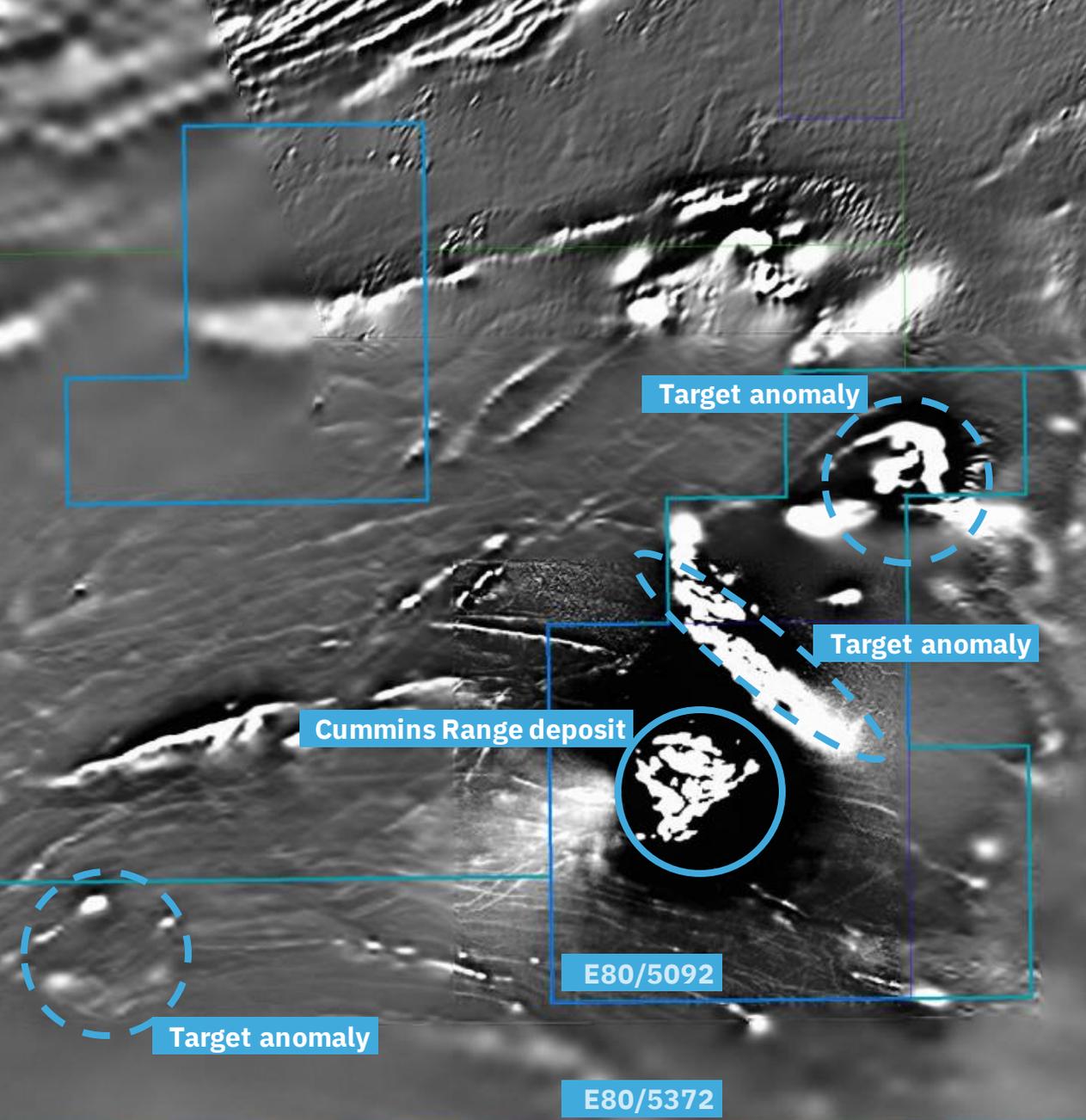
2: Cummins Range is projected to deliver a mineral concentrate. Peer group have various value chain positions.

“A lower risk, lower cost project, for a higher critical mineral output”

RARE  P L O R A T I O N

Cummins Range ‘Near-Mine’ Resource Expansion

The Potential To Expand The Resource At Cummins Range For A Larger Or Longer Life Flagship Project



Background

Multiple historic anomalies on RareX tenements proximate to the Cummins Range deposit

- ✓ **Historical data** review from sub-optimal auger with aqua regia assays
- ✓ **Positive 3rd party review** by Nigel Brand highlighted significant target potential
- ✓ **Pyroxenite bodies** intersected and localised **elevated rare earths** from regional traverses

Exploration Plan

Utilise existing access and facilities to efficiently create exploration targets

- Complete **Gravity and Magnetic surveys** over tenements and locate top 5 targets
- Review and **integrate auger and regional air core drilling** to confirm depth and assay quality can explain the surface anomalies
- Design and **execute infill auger and RC program** over E80/5372 and priority targets in E80/5092 (Q2 2024)

“A desktop study identified 15 anomalies with coincident REE, Nb, base metals, U/Th”

Growing Kimberley Portfolio For Future Project Synergies

Curating And Prioritising Tenements For Target Generation And A Future Hub And Spoke Model Regional Hub

Mt Mansbridge

Heavy rare earths, proximal to Browns Range

- ✓ Killy Killy HRE prospect 15km to the east
- ✓ Xenotime in quartz veins and breccias
- ✓ Brown Range look alike (which is 60km to the NE)

Soils program complete over mag feature – assays pending

Maude Creek¹

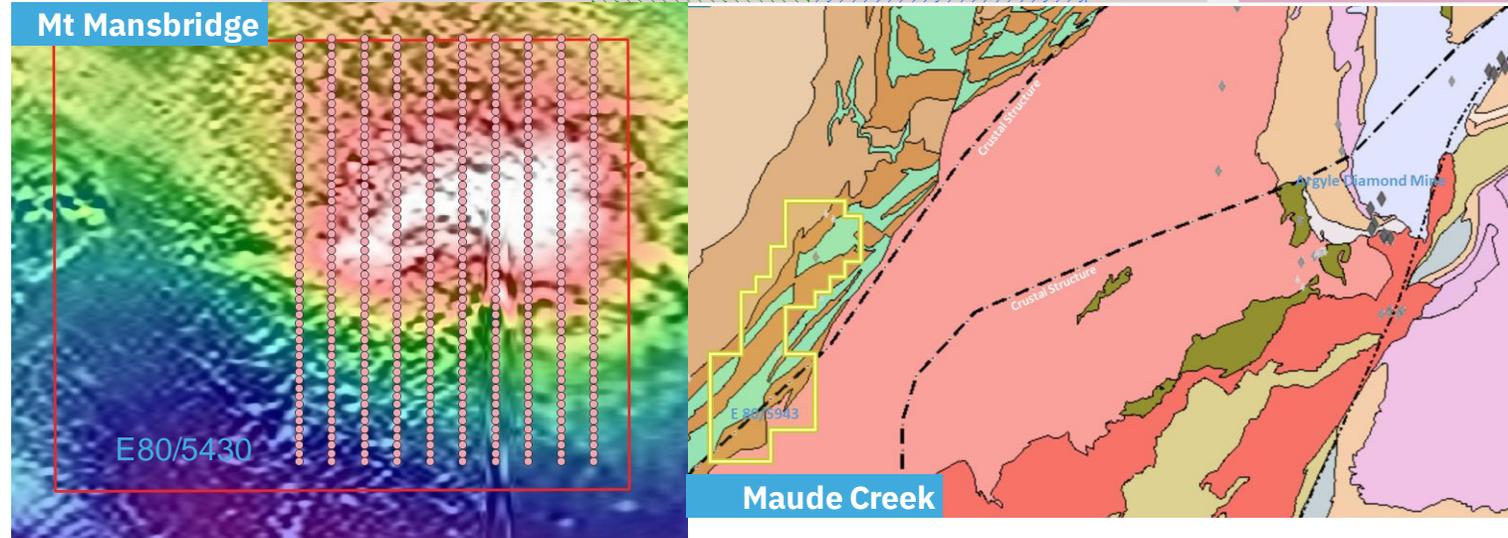
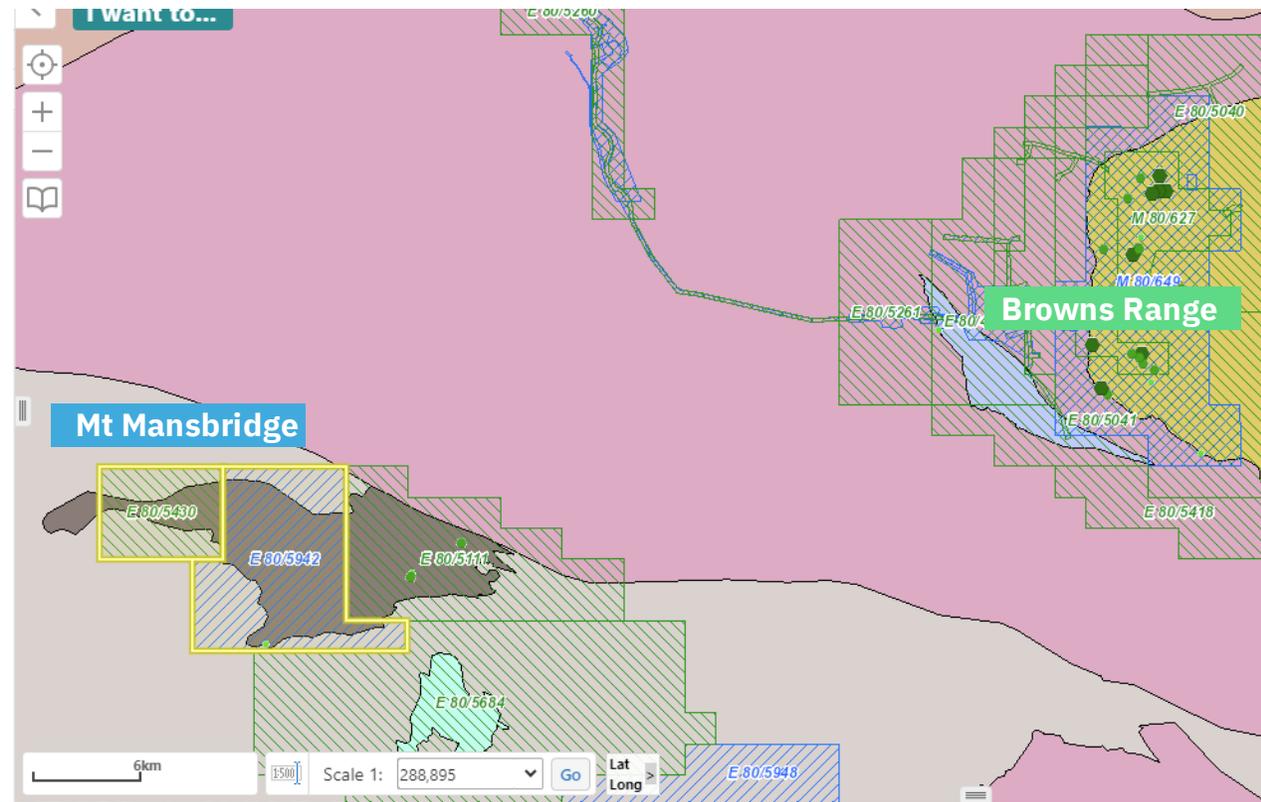
HRE Project with Carbonatite Potential

- ✓ Xenotime in Kimberlite occurrence, no HRE assays
- ✓ Xenotime confirmed in thin sections
- ✓ Proximal to deep crustal structures
- ✓ No drilling on tenement
- ✓ Untested mag feature on a lineament - Crosscutting host stratigraphy

“Projects with regional and potentially operational synergies”

Note:

1: Pending formal grant



Eastern Yilgarn Projects

Under Explored Terrain With Large Areas Of Regolith Hosted Rare Earths

Weld North

Regolith hosted rare earths

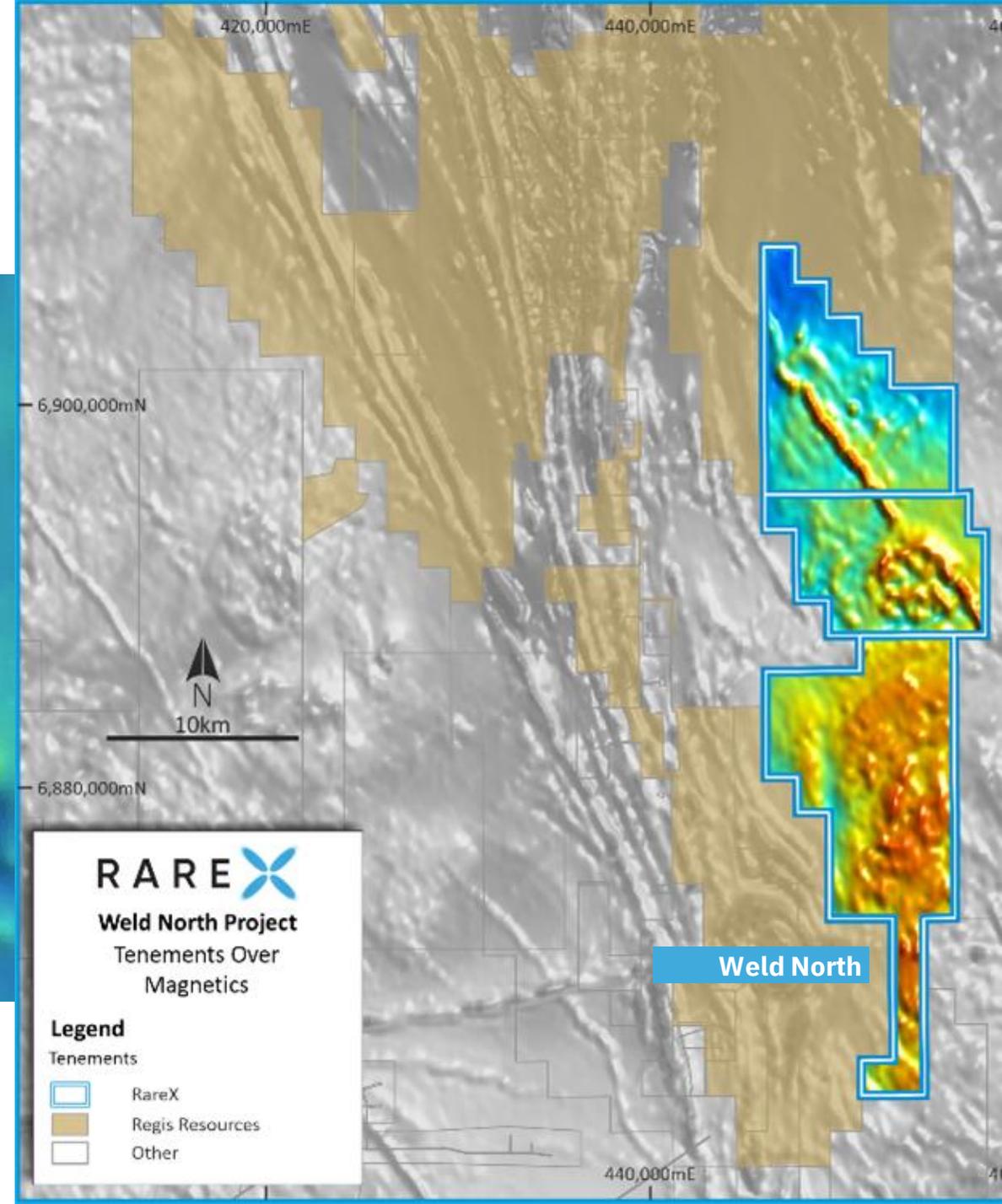
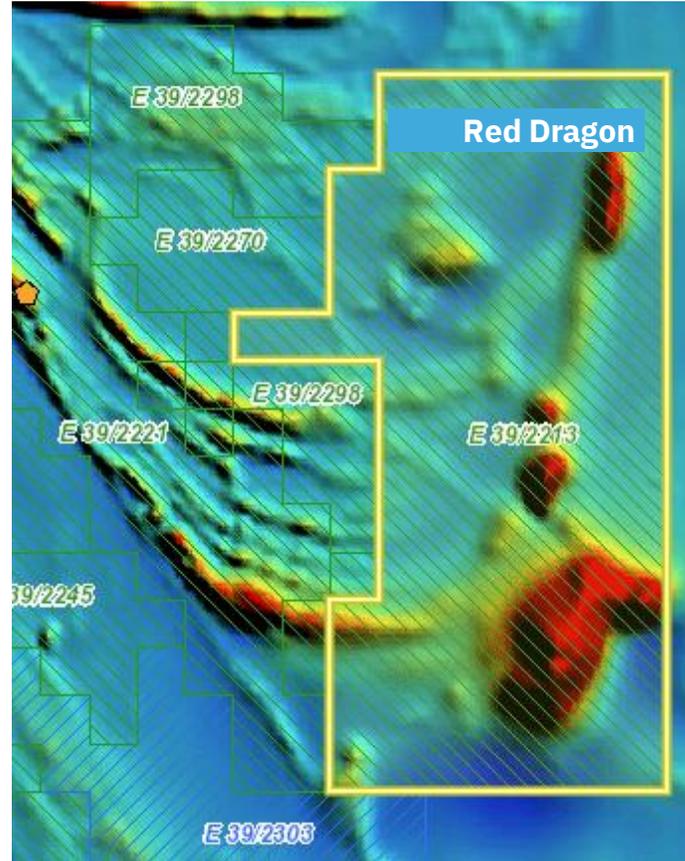
- ✓ 23 air core drill holes in 2021
- ✓ All holes mineralised with significant intercepts of 32m at 1179ppm TREO and 35m at 1017ppm TREO
- ✓ Light rare earths with 20% NdPr

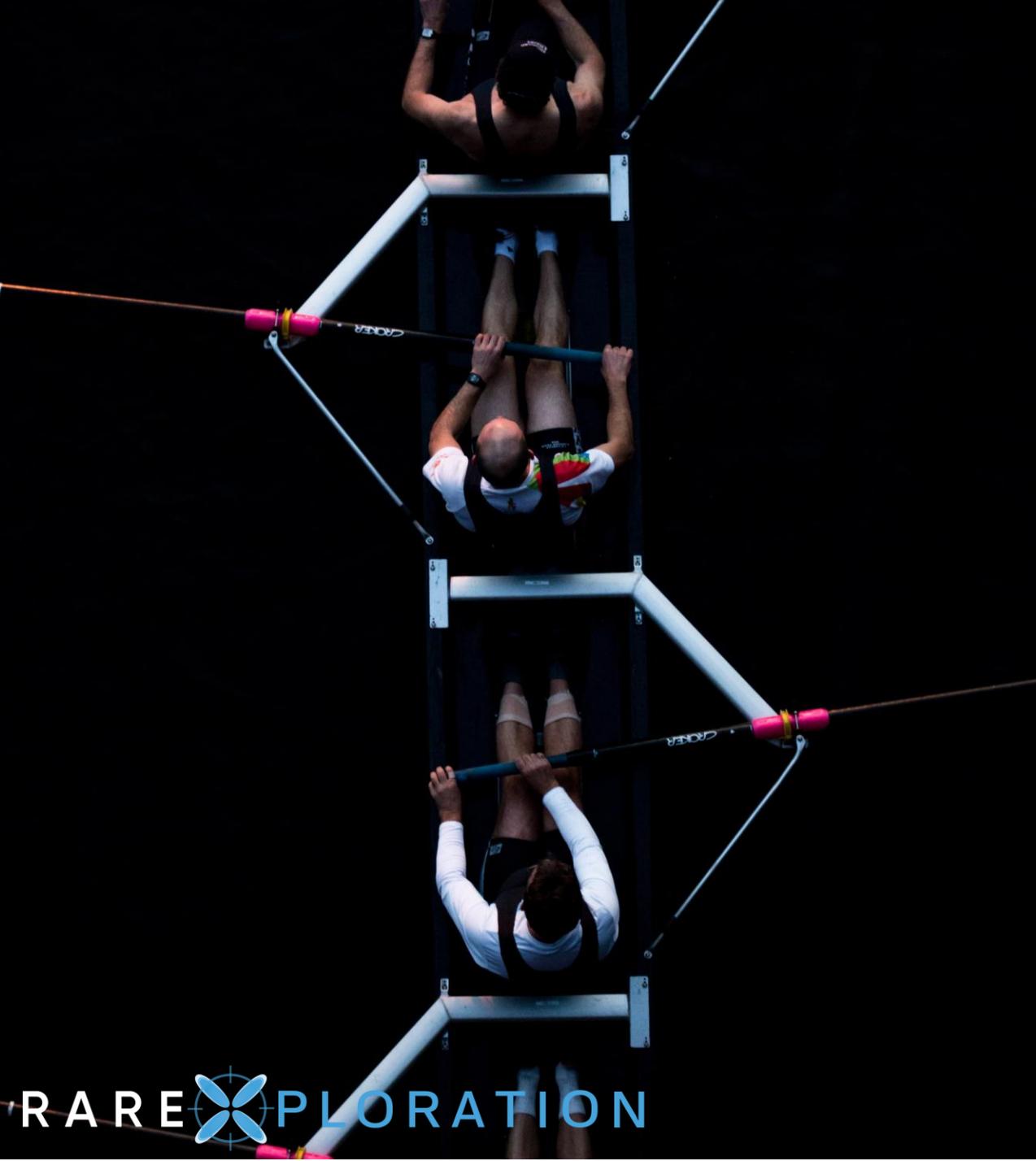
Red Dragon

Regolith hosted rare earths

- ✓ Located 150km south west of Laverton
- ✓ Contains highly elevated soils up to 0.4% TREO
- ✓ Contains several large untested strong magnetic targets

“Kimberley ‘off-season’ exploration projects”





Relevant Investments In Listed Companies

Electrification metals exposure across the globe providing investor upside and funding contingency

Curating good investments

Kincora – Cu-Au

Lead explorer in Macquarie Arc is Australia's foremost, world class, copper porphyry district

- ✓ **Board seat**
- ✓ **45 million shares***
- ✓ **1% NSR on 5 projects**

Cosmos (ASX:C1X) – Li-RE-Cu

Emerging lead explorer in the corvette east district of Ontario Canada, proximate to Patriot Battery Minerals

- ✓ **Board seat**
- ✓ **10 million shares (c. 18%)**
- ✓ **25% free carry to BFS on Orange East, NSW project.**

CREC – Rare Earth trading

Developing a vertically integrated rare earth industry by connecting exploration to mining to refining to customer

- ✓ **No current board seat**
- ✓ **25 million shares**
- ✓ **Canadian based**



CCSMOS



*** Note:**

KCC shareholder approved: RareX will transition its free carry in 5 tenements into 40M new shares totalling 45M shares post transaction. Until then RareX maintains a 35% free carry Trundle, Fairholme, Jemalong, Cundumbul and Condobolin exploration licences in NSW, in addition to 5M shares.

Team to Deliver In The Right Way



An Evolved Board Of Company-Building Directors



Jeremy Robinson
Chairman
*Fund raising, Strategy,
Corporate Development*

Founder of RareX and Managing Director for 5 years leading the Company through massive resource expansion

18 years in corporate finance both in investment firms and in-house

Bachelor of Commerce from the University of Western Australia majoring in Corporate Finance, Investment Finance and Marketing

Danny Goeman
Non-Executive Director
*Offtake, Marketing,
Shipping*

Ex FMG director of sales and marketing and advisor to the CEO, following 20 years with Rio Tinto in management, sales and marketing, strategy development and high level commercial negotiations

As Head of Marketing, then CEO; responsible for the 2018, 10-year binding take-or-pay offtake deal for junior SOP developer Danakali (ASX: DNK)

Holds a Masters in Business Administration and Postgraduate Diploma in leadership & Management from Curtin University



Cameron Henry
Non-Executive Director
*Engineering,
Construction, Operations*

Founding managing director of EPCM engineering firm, Primero Group Limited

Over 20 years' experience in development and delivery of global minerals processing, energy and NPI projects

Holds a Masters in Project Management from Curtin University and is a Member of the Australian Institute of Company Directors (MAICD)



John Young
Non-Executive Director
*Geology, Development,
Growth*

Co-founder and executive director of successful ASX200 lithium producer Pilbara Minerals Limited (ASX: PLS)

Led the growth of Pilbara from a junior ASX-listed company to a globally significant \$2 billion lithium producer in the Pilbara region of Western Australia

Holds a Bachelor of Geology from Curtin University and is a director on a number of ASX listed companies



Shaun Hardcastle
Non-Executive Director
*Corporate Law, Finance
Law, Governance*

Partner at Hamilton Locke law firm covering corporate and finance law, corporate governance, risk management and compliance

Involved in a broad range of cross-border and domestic transactions including joint ventures, corporate restructuring, project finance, resources and asset/equity sales and acquisitions

Bachelor of Law from UWA and currently a non-executive director of a number of ASX listed companies

Growing in-house capability

Discovery, development, ops



James Durrant
Chief Executive Officer

Mining and Mechanical Engineer with nearly 20 years across Tier 1 operations and junior company project development in Africa and Australia



Guy Moulang
Head of Geology

Geologist and AIG Member with 20 years experience in technology metals, base metals and gold exploration. 5 years with RareX on Cummins Range



Kay Hofmann
Study & Approvals Manager

Ex Mineral Resources Limited and BHP. Lead engineering and operational teams across mine planning, production, drill & blast, A&I, hydrogeology and environmental baselines

Greg Wynne
Senior Geologist

Geologist, project manager and mines rescue qualified

Lu Zhang
Process & Product Engineer

Metallurgist and process engineer. Ex Mets Group

Damien Krebs
Lead Metallurgist

Rare Earth and Phosphate metallurgist

Gavin Beer
Consultant Metallurgist

Rare Earth process designer and metallurgist



Monetising in a sustainable manner

ESG Framework

- **WEF consistent** designed by Top5 advisor
- **Aligned to stakeholders'** expectations
- **Mapped out** through exploration, development and **into operations**

Social Performance Framework

- Designed to **International standards** UN and IFC
- Maximises potential for **positive indigenous relations**
- Provides for **progressive development of social performance** for all project stages

What we're currently doing

- ✓ **TO negotiations** towards a Mining Heritage Agreement
- ✓ **Environmental Baselines** +50% complete
- ✓ **Aboriginal impact assessment** defined for execution
- ✓ Recruitment process to **remove barriers for aboriginals** and minority groups
- ✓ Employment and Contracting of **local and regional TOs**
- ✓ **Jaru Ranger programme** being investigated in conjunction with KLC

“Doing the right things, the right way and holding ourselves accountable”

Environmental, Social & Governance Framework Sustainability and Self-Assessment Report

2023

Catalysing RareX Through Cummins Range And RareXploration

2023

Cummins Range

- Updated MRE (November)
- Supply chain contracts
- Mining heritage agreement
- Approval submission pre-requisites
- Pre-strip product trials and offtake

2024

- Feasibility study
- Approval submissions
- Haul road construction
- Mineral concentrate strategic offtake
- Completion of crop trials for pre-strip

2025

- Grade definition & control drilling
- First Ore from pre-strip
- FID for Bene plant
- Construction readiness

RARE PLORATION

- Cummins Range “near-mine” targets
- Field programme Mt Mansbridge HREO
- Tenement portfolio growth and rationalisation
- Investment growth and rationalisation
- Cummins Range new target drilling
- Mt Mansbridge target drilling
- Red dragon geophysics, geochemistry and drilling
- TBD

Board of Directors

Jeremy Robinson – Non-Executive Chairman

John Young – Non-Executive Director

Danny Goeman – Non-Executive Director

Shaun Hardcastle – Non-Executive Director

Cameron Henry – Non-Executive Director

Company Secretary

Oonagh Malone

Chief Executive Officer

James Durrant

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ASX: REE

RARE 
Phosphate
Enabled
Rare Earths



**Thank
you**

Facts, Figures & Analysis

Cummins Range JORC 2012 Mineral Resource

Cummins Range Deposit

Remote But Well Connected



Deposit Location Overview

130km SW of Halls Creek
access via Tanami Road

Deposit at surface
ease of exploration

Jaru Traditional Owners
consulted and supportive

Part of the Great Sandy Desert
on unused pastoral lease

Connected to Wyndham Port
via established mineral corridor

1 Port
Wyndham

2 Lake Argyle,
Ord River
Hydro Plant



2023 JORC Resource

519.3Mt:

4.6% P₂O₅; 0.32% TREO

1.6Mt TREO
contained

24Mt P₂O₅
contained

Basis of Resource

Estimated by industry experts at CSA Global

Phosphate CoG used to capture the extensive Phosphate mineralisation and low to high-grade rare-earths

c. 70Mt of Indicated resource located within the regolith, top 100m

Highlights

- ✓ Large igneous, low deleterious, Phosphate deposit discovered from surface
- ✓ High grade Rare Earth core still remains: concentrated around the Dykes: +50Mt at >1% TREO
- ✓ Underlying fresh rock resource with higher-grade Rare Earths and favourable mineralogy



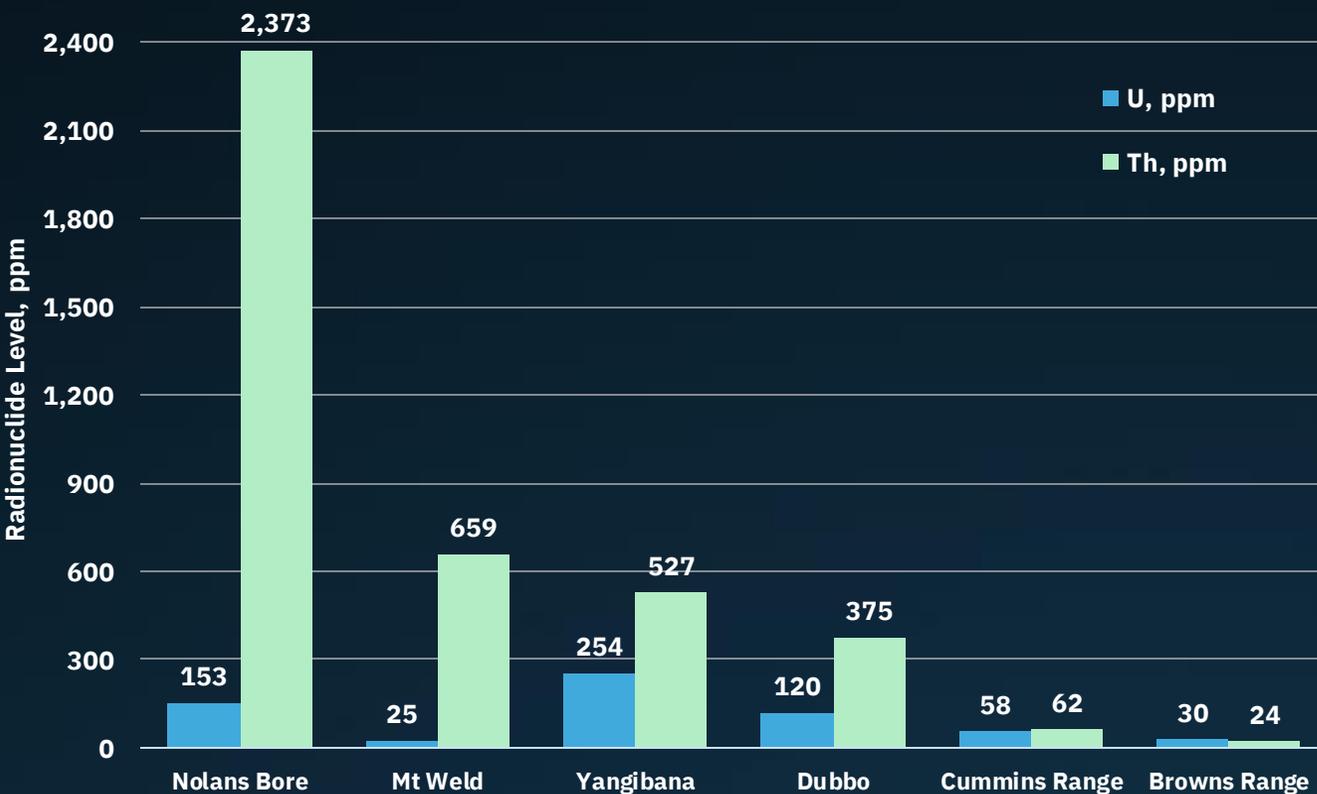
Global Resource (JORC 2012)

2.5% P ₂ O ₅ Grade Cut	Tonnes Mt	TREO ppm	P ₂ O ₅ %	NdPr ppm	Nb ₂ O ₅ ppm	HREO ppm
Indicated	66.6	5,010	6.8	1,100	830	290
Inferred	452.7	2,900	4.2	630	550	170
Total	519.3	3,170	4.6	700	580	190

“This new resource reframes the project as one of Australia’s most significant rare earth projects”

Cummins Range Radionuclides

Radionuclides Comparison



Sources:
See slide: List Of Sources For Production Forecasts and Grade, Economics And Radionuclides



“Cummins Range is one of the lowest radionuclides containing deposit”

Detailed Project Economics Cummins Range

Key Inputs And Assumptions

General Parameters and Assumptions	
Discount Rate	8%
Owners Costs	8% of direct and indirect capital costs for each stage
Sustaining Capital	2% of deployed capital each operating year
Product Price	Pricing as indicated in result tables below
Product Payability	90% for P2O5 20% for REE
State Royalties	7.5% for DSO; 5% for Concentrate
Native Title Royalties	Based on draft Heritage Mining Agreement
Depreciation	Reducing balance method applied over 20yrs
Mine Closure	10% of all CAPEX applied after the last operating period
Contingency	20% applied to direct and indirect capital costs





Phosphate
Enabled
Rare Earths



Costs

CAPEX	Stage 1 [A\$m]	Stage 2 [A\$m]	Stage 3 [A\$m]
Mine	0.5	17	-
Processing	0.25	164	63
NPI	10	4	-
New road	15	-	-
TSF	-	12	-
Port upgrades	9	-	-
Owners Costs (incl. EPCM)	3	56	-
Subtotals	37	253	63
Contingency (20%)	7	51	-
Total	45	304	63

OPEX	Stage 1 [A\$/t product]	Stage 2a [A\$/t product]	Stage 2b [A\$/t product]	Stage 3 [A\$/t product]
Mining	40	18	36	57
Beneficiation	13	115	167	201
Haulage	54	54	54	54
Transshipping	16	16	16	16
Total	123	203	273	328

Product Pricing	Low-Case [A\$/t]	Mid-Case [A\$/t]	High-Case [A\$/t]
Stage 1 - DSO Rock Phos	203	254	304
Stage 2a – High Phos-RE Con	515	584	652
Stage 2b – Mid Phos-RE Con	480	545	611
Stage 3 - RE-Phos Con	404	468	532

Outcomes

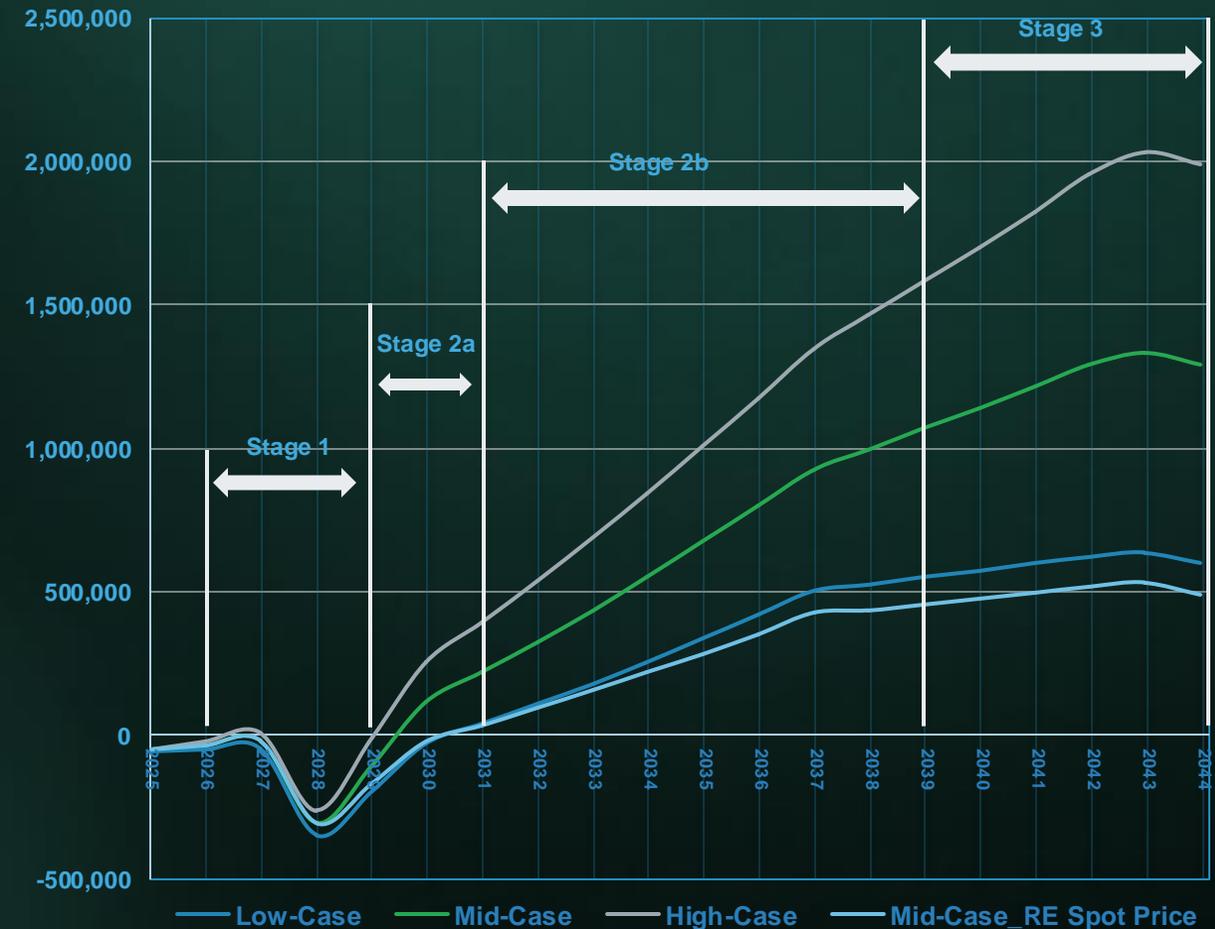


Product Pricing	Low-Case [A\$/t]	Mid-Case [A\$/t]	High-Case [A\$/t]
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Stage 3 - RE-Phos Con	404	468	532

Economic Performance	Low-Case	Mid-Case	High-Case
NPV8 (pre-tax), [A\$m]	227	549	872
NPV8 (post-tax), [A\$m]	101	333	562
IRR (pre-tax), [%]	23%	39%	54%
IRR (post-tax), [%]	15%	27%	38%
Stage 1 Average EBITDA, [A\$m/a]	12	23	33
Stage 2a Average EBITDA, [A\$m/a]	173	216	259
Stage 2b Average EBITDA, [A\$m/a]	69	97	125
Stage 3 Average EBITDA, [A\$m/a]	8	35	61
Average EBITDA LOM, [A\$m/a]	54	81	107

Tax and Royalties	Low-Case [A\$m]	Mid-Case [A\$m]	High-Case [A\$m]
Government tax (30%)	212	406	607
Government royalty (7.5% DSO, 5% Con)	178	205	231
Native title contributions	74	84	94

Cumulative Cashflows before Tax [A\$m]



RARE  P L O R A T I O N

RareX tenements and prospectivity

Tenement ID	Name	Jurisdiction	Locality	Prospectivity
E80/5092	Cummins Range	WA	Kimberley	Rare Earths and Phosphate
M80/0648	Cummins Range	WA	Kimberley	Rare Earths and Phosphate
E80/5372	Cummins Range	WA	Kimberley	Rare Earths and Phosphate
E80/5888	Cummins Range	WA	Kimberley	Rare Earths and Phosphate
E80/5943	Maude Creek	WA	Kimberley	Heavy Rare Earths
E80/5430	Mt Mansbridge	WA	Mt Mansbridge	Heavy Rare Earths
E80/5942	Mt Mansbridge	WA	Mt Mansbridge	Heavy Rare Earths
E39/2213	Red Dragon	WA	Red Dragon	Rare Earths
E38/3455	Weld North	WA	Laverton	Rare Earths
E38/3530	Weld North	WA	Laverton	Rare Earths
E38/3531	Weld North	WA	Laverton	Rare Earths

References

List Of Sources For Grade And Resource Graphs

Resource	 Source of data	 Source of data	 Source of data	 Source of data
Measured Resource, Mt	0 https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf	5 https://wcsecure.weblink.com.au/pdf/ARU/02651944.pdf	43 https://asm-au.com/dubbo-project/resources-and-reserves/	0 https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf
Indicated Resource, Mt	67 https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf	30 https://wcsecure.weblink.com.au/pdf/ARU/02651944.pdf	0 https://asm-au.com/dubbo-project/resources-and-reserves/	14 https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf
Inferred Resource, Mt	453 https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf	21 https://wcsecure.weblink.com.au/pdf/ARU/02651944.pdf	32 https://asm-au.com/dubbo-project/resources-and-reserves/	38 https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf
Measured TREO Grade, %	0.00% https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf	3.20% https://wcsecure.weblink.com.au/pdf/ARU/02651944.pdf	0.88% https://asm-au.com/dubbo-project/resources-and-reserves/	0.00% https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf
Indicated TREO Grade, %	0.50% https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf	2.70% https://wcsecure.weblink.com.au/pdf/ARU/02651944.pdf	0.00% https://asm-au.com/dubbo-project/resources-and-reserves/	1.25% https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf
Inferred TREO Grade, %	0.29% https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf	2.30% https://wcsecure.weblink.com.au/pdf/ARU/02651944.pdf	0.88% https://asm-au.com/dubbo-project/resources-and-reserves/	0.94% https://wcsecure.weblink.com.au/pdf/REE/02660886.pdf
Measured TREO Contained, Mt	0.00 Calculation	0.16 Calculation	0.38 Calculation	0.00 Calculation
Indicated TREO Contained, Mt	0.33 Calculation	0.81 Calculation	0.00 Calculation	0.17 Calculation
Inferred TREO Contained, Mt	1.31 Calculation	0.48 Calculation	0.28 Calculation	0.36 Calculation
Market Capitalisation, AUD Billion (29.09.2023)	0.023 https://www2.asx.com.au/markets/company/ree	0.51 https://www2.asx.com.au/markets/company/aru	0.25 https://www2.asx.com.au/markets/company/asm	0.02 https://www2.asx.com.au/markets/company/ree

Resource	 Source of data	 Source of data	 Source of data
Measured Resource, Mt	4.97 https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf	0 https://www.investi.com.au/api/announcements/dre/2c555d82-089.pdf	0.14 https://wcsecure.weblink.com.au/pdf/NTU/02649250.pdf
Indicated Resource, Mt	20 https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf	6 https://www.investi.com.au/api/announcements/dre/2c555d82-089.pdf	5 https://wcsecure.weblink.com.au/pdf/NTU/02649250.pdf
Inferred Resource, Mt	5 https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf	25 https://www.investi.com.au/api/announcements/dre/2c555d82-089.pdf	6 https://wcsecure.weblink.com.au/pdf/NTU/02649250.pdf
Measured TREO Grade, %	0.96% https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf	0.00% https://www.investi.com.au/api/announcements/dre/2c555d82-089.pdf	0.70% https://wcsecure.weblink.com.au/pdf/NTU/02649250.pdf
Indicated TREO Grade, %	0.88% https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf	1.23% https://www.investi.com.au/api/announcements/dre/2c555d82-089.pdf	0.78% https://wcsecure.weblink.com.au/pdf/NTU/02649250.pdf
Inferred TREO Grade, %	1.05% https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf	0.97% https://www.investi.com.au/api/announcements/dre/2c555d82-089.pdf	0.73% https://wcsecure.weblink.com.au/pdf/NTU/02649250.pdf
Measured TREO Contained, Mt	0.05 Calculation	0.00 Calculation	0.00 Calculation
Indicated TREO Contained, Mt	0.17 Calculation	0.07 Calculation	0.04 Calculation
Inferred TREO Contained, Mt	0.06 Calculation	0.25 Calculation	0.04 Calculation
Market Capitalisation, AUD Billion (29.09.2023)	0.09 https://www2.asx.com.au/markets/company/has	0.17 https://www2.asx.com.au/markets/company/dre	0.16 https://www2.asx.com.au/markets/company/ntu

List Of Sources For Production Forecasts And Grade, Economics And Radionuclides

Parameter	 RAREX Precious Metals Rare Earths	Source of data	 KRAJORA MINERALS	Source of data	 Lynas Rare Earths Ltd	Source of data
Total LOM Production Forecast						
Tonnage, Mt	31.7	https://investors.rarex.com.au/announcements/4396391	29.5	https://wcsecure.weblink.com.au/pdf/ARU/02712231.pdf	20.9	https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf
TREO Grade, %	0.7%	https://investors.rarex.com.au/announcements/4396391	2.9%	https://wcsecure.weblink.com.au/pdf/ARU/02712231.pdf	0.9%	https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf
Project Economics						
TREO Output, ktpa	11.5	https://investors.rarex.com.au/announcements/4396391	4.9	https://wcsecure.weblink.com.au/pdf/ARU/02597137.pdf	8.1	https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf
CAPEX, USD Billion	0.22	https://investors.rarex.com.au/announcements/4396391	1.14	https://wcsecure.weblink.com.au/pdf/ARU/02597137.pdf	0.42	https://www.investi.com.au/api/announcements/has/befee282-f7d.pdf
Radionuclides						
U, ppm	58	https://investors.rarex.com.au/announcements/4396391	153	https://www.arultd.com/wp-content/uploads/2022/11/202211_Fact_Sheet_-_RADIATION-Optimised.pdf	254	https://www.investi.com.au/api/announcements/has/cd45de38-d0f.pdf
Th, ppm	62	https://investors.rarex.com.au/announcements/4396391	2,373	https://www.arultd.com/wp-content/uploads/2022/11/202211_Fact_Sheet_-_RADIATION-Optimised.pdf	527	https://www.investi.com.au/api/announcements/has/cd45de38-d0f.pdf

Parameter	 ASM Australian Strategic Minerals	Source of data	 NORTHERN MINERALS	Source of data	 Lynas Rare Earths Ltd	Source of data
Total LOM Production Forecast						
Tonnage, Mt	18.9	https://asm-au.com/dubbo-project/resources-and-reserves/	3.3	https://northernminerals.com.au/browns-range/resource-and-exploration/#:-:text=Northern%20Minerals%20has%20100%25%20ownership,held%20100%25%20by%20Northern%20Minerals.	-	-
TREO Grade, %	0.9%	https://asm-au.com/dubbo-project/resources-and-reserves/	0.7%	https://northernminerals.com.au/browns-range/resource-and-exploration/#:-:text=Northern%20Minerals%20has%20100%25%20ownership,held%20100%25%20by%20Northern%20Minerals.	-	-
Project Economics						
TREO Output, ktpa	3.1	https://asmd.irmau.com/site/PDF/ad9dcf23-41ca-4ebb-a779-b2cbc200217e/DubboProjectOptimisationDeliversStrongFinancials	3.1	https://announcements.asx.com.au/asxpdf/20150302/pdf/42wzybv98y8n.pdf	-	-
CAPEX, USD Billion	1.08	https://asmd.irmau.com/site/PDF/ad9dcf23-41ca-4ebb-a779-b2cbc200217e/DubboProjectOptimisationDeliversStrongFinancials	0.29	https://wcsecure.weblink.com.au/pdf/NTU/01708988.pdf	-	-
Radionuclides						
U, ppm	120	https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-5251%2120190227T000941.536%20GMT	30	https://announcements.asx.com.au/asxpdf/20150302/pdf/42wzybv98y8n.pdf	25	https://www.rainbowrareearths.com/wp-content/uploads/2023/01/Rainbow-Investor-Presentation_February-2023.pdf
Th, ppm	375	https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-5251%2120190227T000941.536%20GMT	24	https://announcements.asx.com.au/asxpdf/20150302/pdf/42wzybv98y8n.pdf	659	https://www.rainbowrareearths.com/wp-content/uploads/2023/01/Rainbow-Investor-Presentation_February-2023.pdf

Note:

1: Radionuclide levels are for element U and Th. Oxide to element conversion factors of 1.1792 (U to U₃O₈) and 1.1379 (Th to ThO₂) were used to convert to element levels where oxides were reported.

2. ASM U & Th levels is calculated as average of the reported range.

3, Northern Minerals TREO output and CAPEX based on 2015 DFS, 2016 business plan and 2018 annual report