

Investor Update

Resources Roadhouse Roadshow 24 April 2024

Building shareholder value through the discovery of copper and critical minerals in Australia

ASX:ENR



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The information in this report that relates to Exploration Results is based on information compiled by Mr. Mark Brodie who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Brodie holds shares and options in and is a full time employee of Encounter Resources Ltd and has sufficient experience which is relevant to the style of mineralisation under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Brodie consents to the inclusion in the report of the matters based on the information compiled by him, 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 in the relevant ASX releases and the form and context of the announcement has 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 announcements.

This announcement has been approved for release by the Board of Encounter.

Encounter at a glance

Creating value through project generation and discovery



Capital structure

ASX ticker	ENR
Share price (22/04/2024)	\$0.35
Shares on issue	450M
Options	19M
Market capitalisation	~\$158M
Cash	~\$16M
Enterprise value	~\$142M

Board of Directors



Mr Will Robinson Executive Chairman B.Comm, MAusIMM



Dr Jon Hronsky OAM Non-Executive Director BAppSci, PhD, MAusIMM, FSEG



Mr Peter Bewick Non-Executive Director B.Eng (Hons), MAusIMM



Mr Philip Crutchfield Non-Executive Director B.Comm., LL.B (Hons), LL.M LSE

Major shareholders

Board and Management	~13.2%
IGO	~6.3%

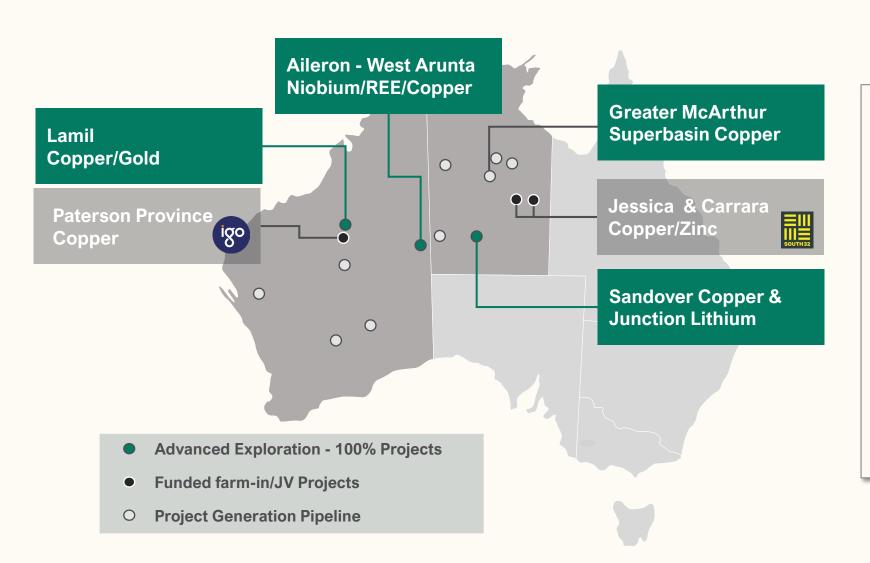
Share price 12 months



A premier exploration portfolio



Early mover positions into world-class and emerging minerals belts attracting Tier 1 partners



- Large portfolio of 100% owned projects in Australia's most exciting mineral provinces
- Numerous large scale copper projects being advanced in partnership and funded through farm-in agreements with leading miners: South32 and IGO
- Aileron niobium-REE-copper project in the West Arunta region of WA

The Encounter business model



Foundations of a leading Australian minerals exploration company



Targeting the discovery of new, world-class mineral deposits



Significant and consistent in-ground exploration investment



Early mover into new regions with the application of new datasets



Collaborating with high-quality exploration teams at major companies

Copper and critical mineral focus



Exploring for commodities highly leveraged to growth and the energy transition

Cu Nb REE

Copper

The most important metal for the global energy transition

Supply being impacted by steadily declining head grades at major operations and geopolitical issues

Major new discoveries needed to meet upcoming demand

Niobium

A micro alloy for lighter, stronger and more corrosion resistant steel

Enhances next generation batteries with super-fast charging, high energy density and improved safety

Market constrained with only three operating mines

Rare Earth Elements

Used across critical technology, military and energy applications

Majority of supply controlled by Chinese companies

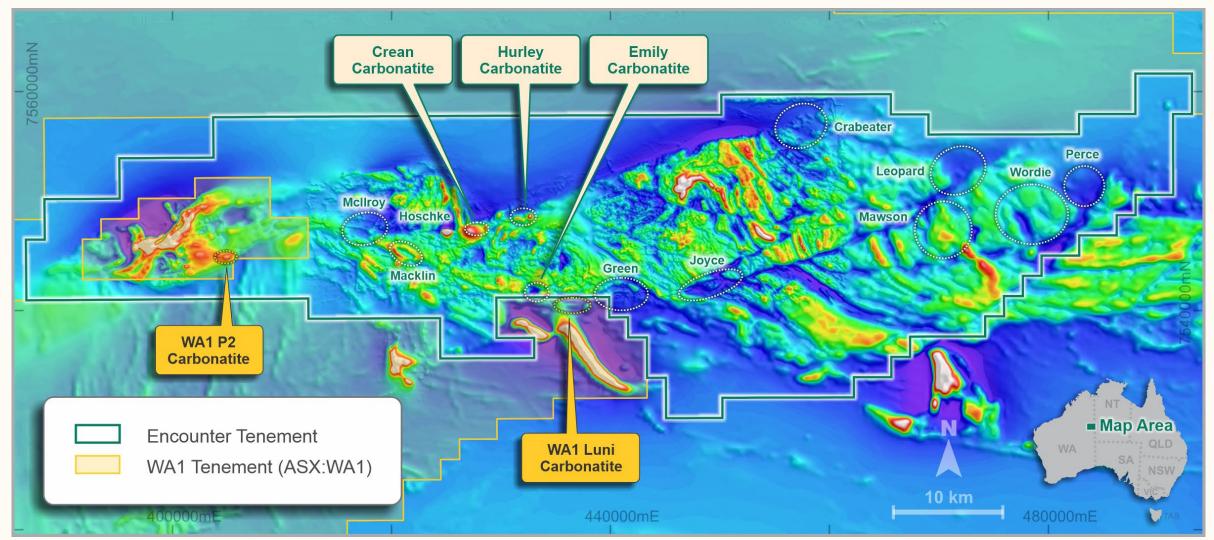
Highly strategic commodities which are the focus of global efforts to encourage new sources of supply



Aileron Project - West Arunta



New niobium-REE discoveries in the region that hosts the Luni discovery of WA1 Resources Ltd (ASX:WA1)



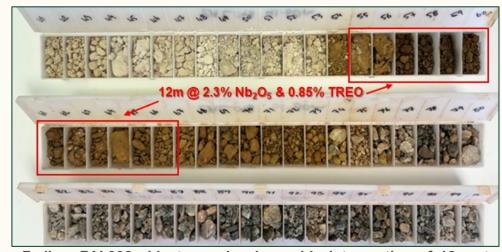
Aileron project – Magnetics (RTP)

Aileron Project - 2023 Outcomes



First pass exploration defined four new niobium-REE mineralised carbonatites

- Shallow, high-grade niobium-REE mineralised carbonatites at several prospects including:
 - Emily 12m @ 2.3% Nb₂O₅ from 54m (EAL098)
 - Crean 4m @ 3.8% Nb₂O₅ from 56m (EAL008)
- Discovery of large-scale primary niobium-REE carbonatitehosted mineralisation along a 5km corridor from Crean to Hurley:
 - Crean 282m @ 0.54% Nb₂O₅ from 64m to EOH (EAL007)
 - Hurley 74m @ 0.53% Nb₂O₅ from 64m (EAL034)
- Priority, untested carbonatite targets adjacent to the Luni discovery including large targets at Green and Joyce



Emily - EAL098 chip trays showing oxide intersection of 12m at 2.3% $\rm Nb_2O_5$ and 0.85% TREO from 54m



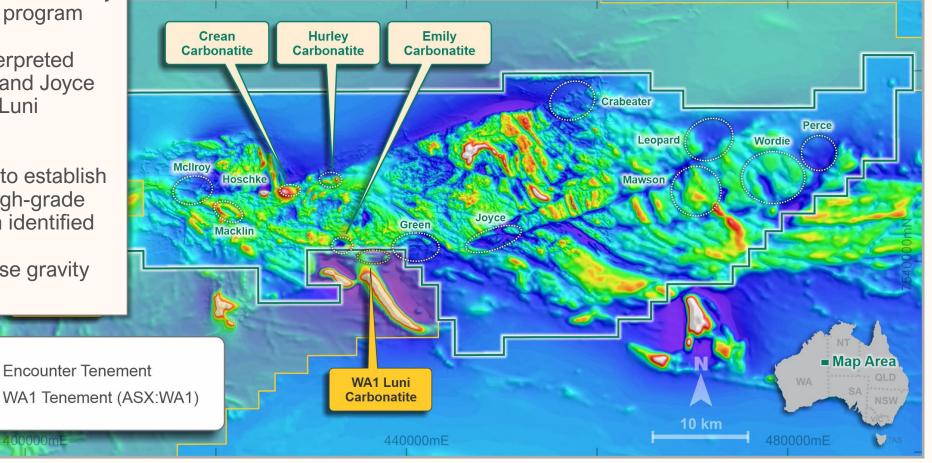
Crean - EAL007 Niobium-REE carbonatite 68-71.7m (part of 18.7m @ $1.0\% \text{ Nb}_2\text{O}_5$ from 65m)

Aileron Project - Upcoming Drilling



Major aircore/diamond drilling programs commencing in May 2024

- Large scale targets to be systematically tested in ~20,000m aircore program
- First drilling at the large interpreted intrusive features at Green and Joyce located directly east of the Luni discovery
- Drilling at Emily and Crean to establish the extent of the shallow, high-grade niobium-REE mineralisation identified
- First drill hole into the intense gravity feature identified at Perce

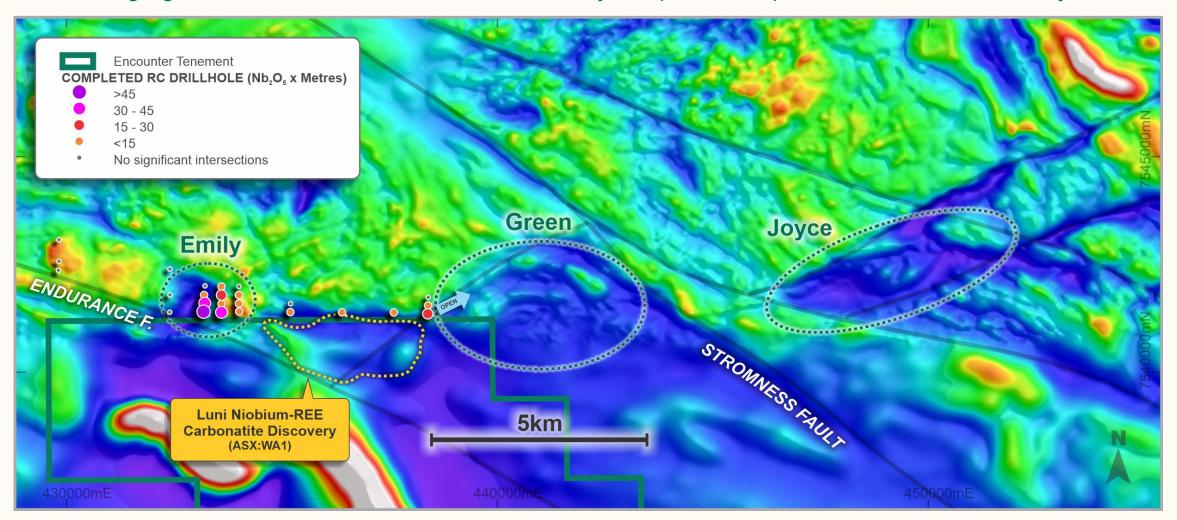


Aileron project – Magnetics (RTP) – Numerous compelling targets to be tested in 2024

Aileron Project – Southern Targets



Shallow, high-grade niobium-REE mineralisation at Emily has positive implications for Green and Joyce



Aileron RTP magnetics with targets Emily, Green and Joyce low magnetic, circular interpreted intrusive features at intersections of major regional structures

Refer to ENR ASX announcement 30 January 2024

Aileron Project - Northern Targets



New mineralised niobium-REE carbonatites discovered at Crean, Hoschke and Hurley in the first phase of drilling

Crean

- Large & depth extensive carbonatite
- High grade, near surface niobium-REE mineralisation intersected

Hurley

 Mineralised carbonatite, over 1km in strike, that remains open

Macklin

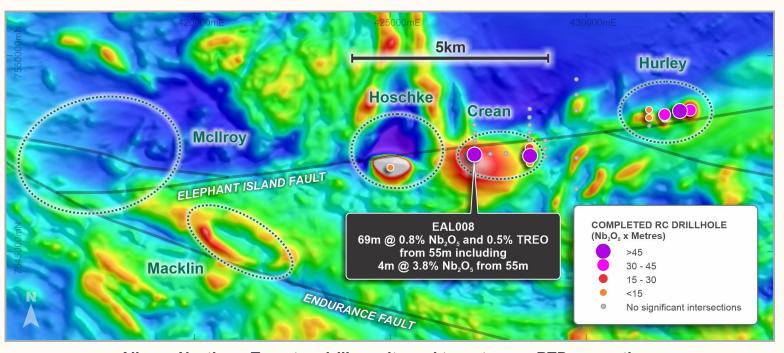
 Untested interpreted intrusive body on Endurance Fault that hosts Luni

Hoschke

 Magnetic low may represent favourable lithology for shallow, niobium-REE enriched mineralisation

McIlroy

 Magnetic low at the intersection of two major regional faults that host niobium-REE mineralised carbonatites

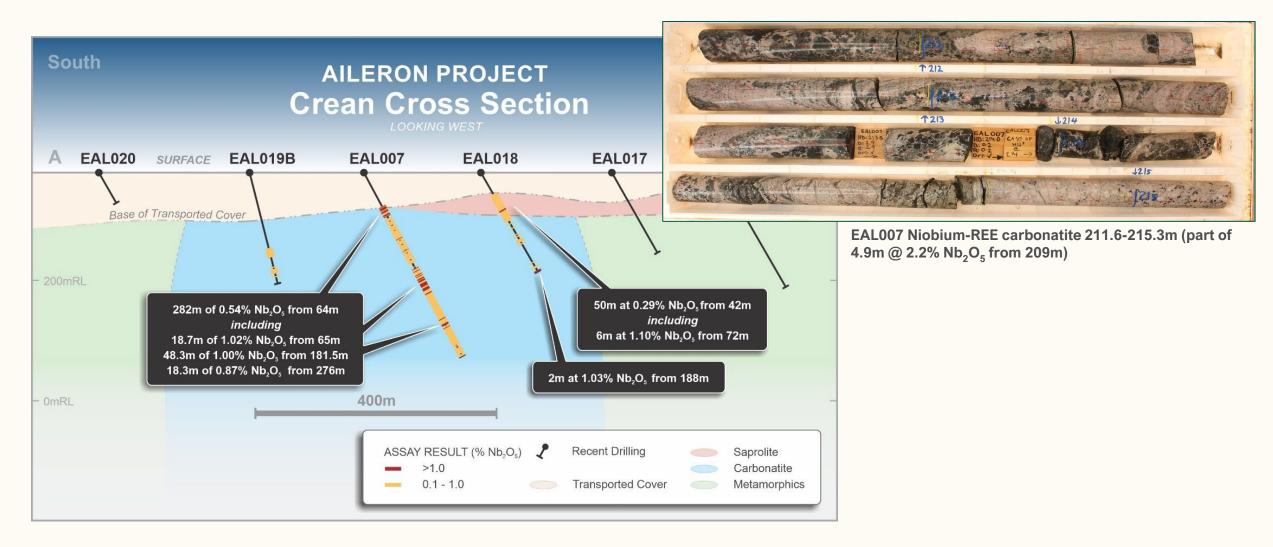


Aileron Northern Targets - drill results and targets over RTP magnetics

Aileron Project - Northern Targets



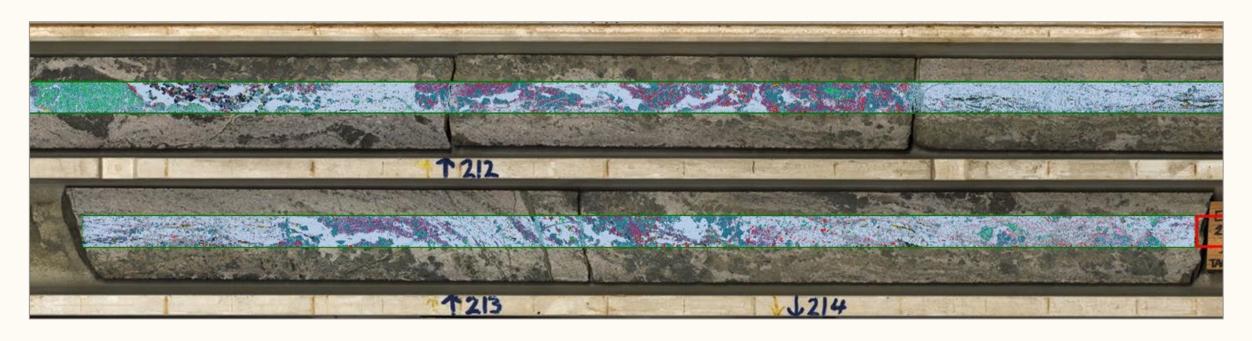
First drill program intersected high grade, near surface and depth extensive niobium-REE mineralisation



Crean Carbonatite



LIBS mineral map completed on 48.1m @ 1% Nb₂O₅ from 181m from EAL007



Colour Code	Mineral	Description
#E50000	CaPyrochlore	Nb Oxide with high Ca, low Na. No F-POH molecular band.
#FF00FF	NaPyrochloreF	Nb oxide with intermediate Na-Ca. F-POH molecular band indicates presence of fluorine.
#B3A2C7	Apatite1	Pure apatite with high molecular band of F-POH. Detected Sr content
#604A7B	Apatite2	Impure apatite with Fe and Mg. Detected Sr content as well.
#632523	llmenite1	Ilmenite with higher Ti lower Fe
#943734	Ilmenite2	Ilmenite with lower Ti higher Fe
#0F243E	TiMagnetite	Magnetite with high amount of Ti, traces of V detected
#256E83	Amphibole	Sodium amphibole family. Richterite/Riebeckite/Arfvedsonite
#07D1EC	Fluorite	Ca and F-POH molecular band greatly high, no detected P. Likely be fluorite
#B7DEE8	Calcite	Calcite with no Mg nor Fe. Low level of Sr detected.
#B9CDE5	CalciteNa	Calcite with high Na and weak Mg peaks, possible spectral mixture with that of salts.

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Ankerite	Fe and Mg content in Ca-dominating carbonate. Indication of ankeritic composition
Pyrrhotite	Fe sulphide
Chlorite	Intermmediate composition Fe-Mg
Pyrite	Fe sulphide
NaFeSilicate	Possible member of the pyroxene group Aegirine
Biotite	Biotite of intermediate Mg-Fe composition
NaPhase	High Na response, believed to come from hypersaline solution impregnated in the cores.
CaNaPhase	Predominant Na signal with Ca and traces of Fe.
NoData	Areas of no spectral response (i.e. voids, empty space, open fractures)
	Pyrrhotite Chlorite Pyrite NaFeSilicate Biotite NaPhase CaNaPhase

EAL007 - 209.08m-213m - 2.92m @ 2.45% Nb₂O₅

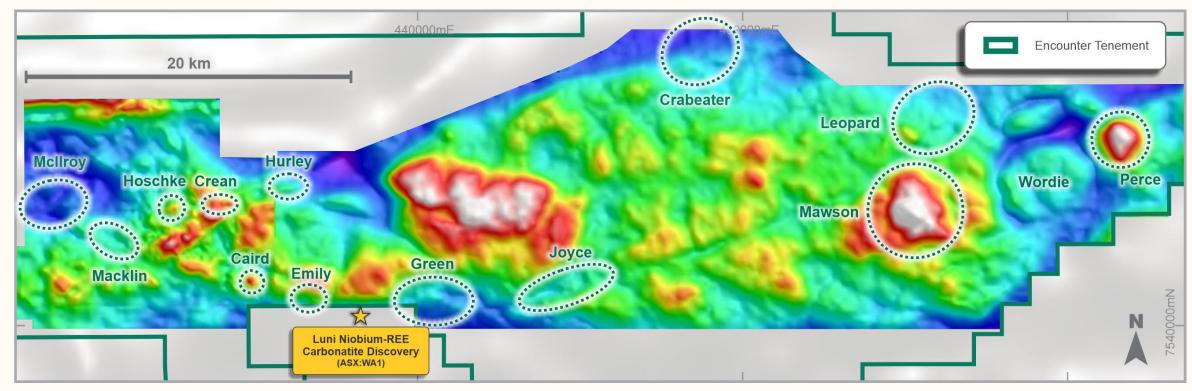
(near-balance Ca/Na pyrochlore), high apatite, moderate calcite zone)

Aileron Project –Eastern Targets



Falcon airborne gravity survey defines a suite of new, large-scale carbonatite and IOCG targets

- Significant gravity anomalies (up to ~6 mGal) identified in the eastern part of Aileron
- Potential alkaline/carbonatite intrusions or hematite alteration prospective for IOCG mineralisation
- Diamond drilling (EIS co-funded) to commence in May 2024 at Perce



Falcon gravity survey has highlighted a number of high priority targets

Aileron Project – what's coming up....



Apr 24 Re-mobilisation of field crew and equipment to Aileron Heritage survey to facilitate detailed drilling at Green and Joyce Apr 24 Diamond drilling starting at Perce (EIS co-funded) May 24 May - June 24 Aircore drilling - Southern Targets (Emily, Green & Joyce) Aircore - Northern Targets (McIlroy, Macklin, Crean-Hoschke and Hurley) May – Jun 24 Jun - Jul 24 Reconnaissance aircore drilling Eastern Targets Metallurgical assessment of Crean carbonatite Mar-Jun 24 Follow up RC/diamond drilling to quantify discoveries Jul – Nov 24

About Encounter

encounter resources

One of Australia's leading mineral explorers advancing ambitious projects in emerging new provinces

An **exceptionally high discovery rate** in a new critical minerals province in the West Arunta

Upcoming West Arunta program has transformational potential from both the close-spaced drilling of 2023 carbonatite discoveries and testing new targets

Large, externally funded exploration programs targeting Tier 1 copper discoveries with major partners



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