

15 July 2025

Geophysical programs underway at Jessica Copper (NT)

Encounter Resources Limited (ASX: ENR) ('Encounter' or 'the Company') is pleased to provide an update on exploration activities at the Jessica Copper Project in the Northern Territory, which is being advanced under a farm-in agreement with a wholly owned subsidiary of South32 Limited ('South32').

Key Highlights:

- Extensive program of geophysics and drilling planned in 2025
- MIMDAS geophysical survey commenced at Zeta
 - Prior drilling intersected zones of hematite alteration and quartz carbonate veining containing chalcopyrite and bornite
- 2,640 line km AEM survey scheduled for August-September 2025, co-funded through the NT Geophysics and Drilling Collaborations program
- Diamond drilling scheduled to commence in October 2025

Executive Chairman, Will Robinson, comments:

"Previous scout drilling at Zeta identified multiple IOCG indicators, including chalcopyrite and bornite veins, and intense, pervasive red rock hematite alteration. These were interpreted as a distal alteration signature to a potential IOCG-style mineral system. MIMDAS is well suited for exploring at depth for less conductive bodies, such as IOCG deposits which are not often associated with massive sulphides.

Additionally, following a review of 2024 drilling, more tenure has been secured along interpreted key structures."

Jessica Copper Project – NT (South32 \$15m Farm-in)

Jessica covers ~8,700km² along key structural corridors east of Tennant Creek and is prospective for sediment-hosted copper and Iron Oxide Copper-Gold (IOCG) style deposits (Figure 1).

Initial exploration activities included the reprocessing of seismic data to provide greater detail of the geology and structure in the upper 1,000m and a large-scale gravity survey.

This seismic reprocessing and gravity data identified a series of targets for drilling including the Zeta IOCG target (“Zeta”). Zeta is a significant and discrete gravity feature coincident with a prominent magnetic feature on the margin of a large interpreted intrusive body.

In 2023, two diamond drill holes (Z23DD001 & Z23DD002) were completed at the Zeta. These holes contained zones of hematite alteration and quartz carbonate veining containing chalcopyrite and bornite.¹

In addition, a 1,443m (three hole) RC/diamond drill program was completed in late 2024 testing targets in the eastern part of the project. Results from this drilling are expected to be reported in August 2025.

Encounter’s wholly owned subsidiary, Baudin Resources Pty Ltd, has lodged an application for tenure over ELA34124 with the intention for the tenure to form part of the Jessica Farm-In Agreement once granted. This application covers the lateral extension of structures targeted in the 2024 drill program.

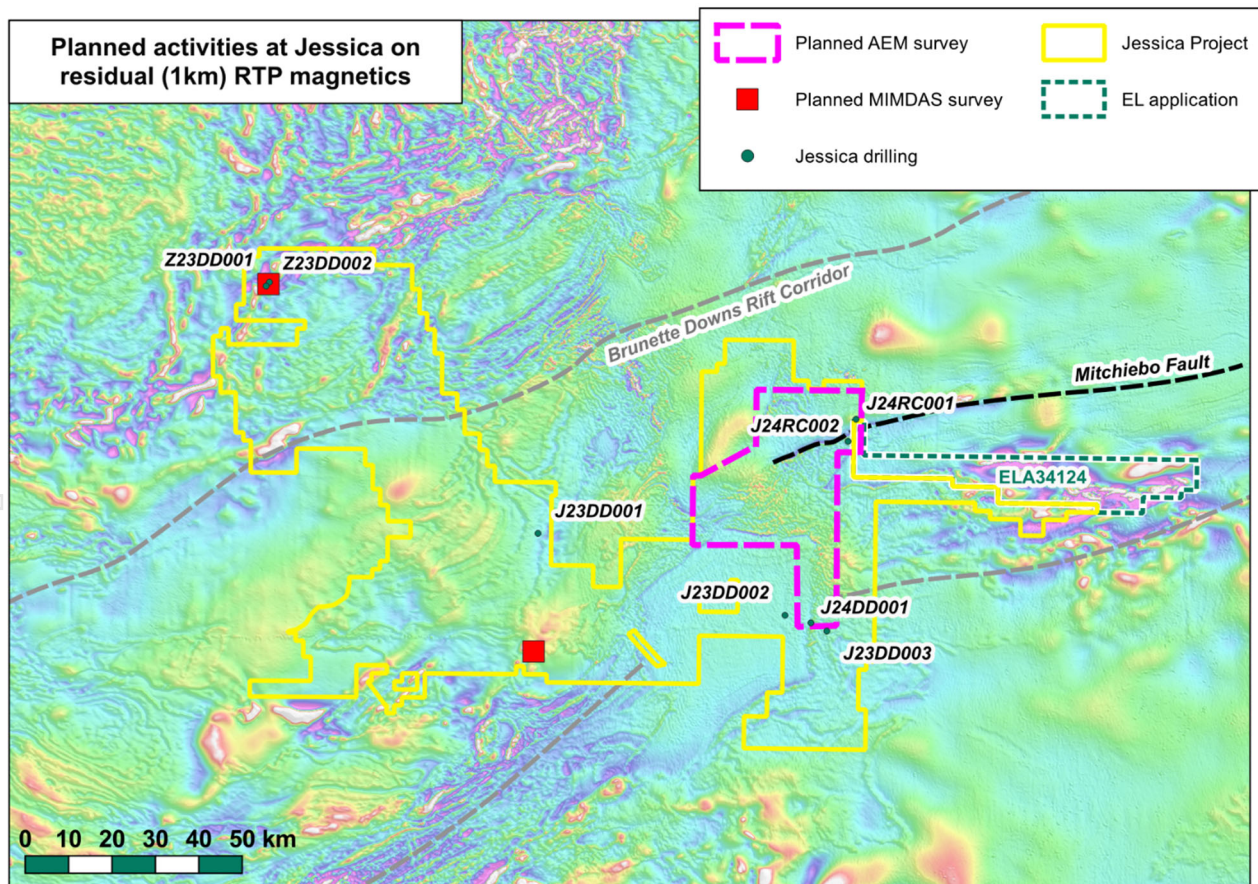


Figure 1 – Jessica 1km residual RTP magnetics with planned geophysical surveys

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2025 Exploration Program

The 2025 exploration program, operated and funded by South32, includes the following key components:

- **Deep seeking MIMDAS geophysical surveys** at Zeta and Jessica Central magnetic anomalies (Figure 1). This program has commenced.
- **An airborne electromagnetic (AEM) survey**, comprising 2,640 line-kilometres, is scheduled for August–September 2025 to build on geological insights from the 2024 drilling (Figure 1).
- **Follow-up drilling** targeting anomalies identified through the MIMDAS and AEM geophysical surveys is planned to commence in October 2025.

¹ ENR ASX announcement 10 April 2024

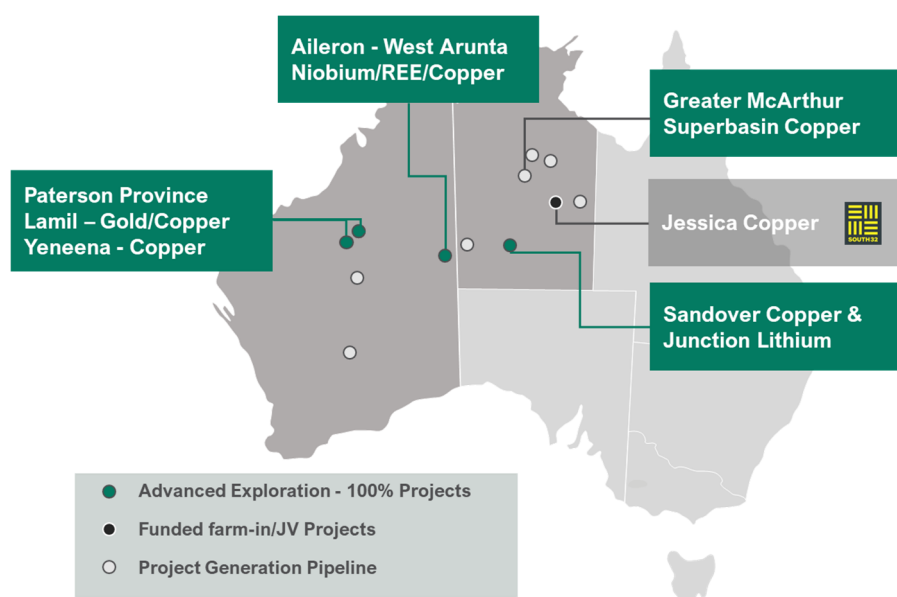
² ENR ASX announcement 14 May 2025

About Encounter

Encounter Resources Limited (ASX:ENR) is a leading Australian mineral exploration company focused on the discovery of major copper and niobium/rare earth element (REE) deposits.

The Company holds a commanding portfolio of 100%-owned projects located in some of Australia's most prospective mineral belts, targeting copper and critical minerals. Key among these is the Aileron Project in the highly endowed West Arunta region of Western Australia—emerging as a significant frontier for critical mineral exploration.

Encounter's strategy is centred on high-impact discovery in Tier 1 jurisdictions, leveraging strong technical capability and a proven track record of attracting leading industry partners.



Deposit	1.0% Nb ₂ O ₅ cut-off (subset of 0.25% Nb ₂ O ₅ cut-off)		0.25% Nb ₂ O ₅ cut-off	
	Tonnage (Mt)	Grade (% Nb ₂ O ₅)	Tonnage (Mt)	Grade (% Nb ₂ O ₅)
Green	12.1	1.63	48.0	0.81
Emily	3.7	1.94	13.9	0.93
Crean	3.5	1.92	5.7	1.38
Total	19.2	1.74	67.6	0.88

Table 1 – Aileron Project Inferred Mineral Resource Estimate ²

Notes:

- The resource is constrained within optimised pit shells based on a price of US\$45 per kilogram Nb (US\$30/kg FeNb) and is reported above a 0.25% Nb₂O₅ cut-off grade.
- The resource reported above a 1% Nb₂O₅ cut-off grade is a subset of the 0.25% Nb₂O₅ cut-off grade.
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

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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 confirms that it is not aware of any new data or information that materially affects the information disclosed in this announcement and previously released by the Company in relation to mineral resource estimates. All material assumptions and technical parameters underpinning the mineral resource estimates in the relevant market announcements 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 announcements.

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

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