

16 October 2025

REE Intersections Accumulate in the West Arunta

Encounter Resources Limited (ASX: ENR) ('Encounter' or 'the Company') has intersected rare earth element ("REE") fluorocarbonate minerals (bastnaesite, synchysite and parasite) in untargeted diamond drilling at Green. First-pass aircore drilling at the Juan Prospect has also returned highly anomalous REE, over 10km from existing niobium-REE deposits. The results highlight the REE potential of the large carbonatite intrusions discovered in the West Arunta.

Key Highlights:

- REE fluorocarbonate minerals including bastnaesite intersected in untargeted diamond drilling at Green for metallurgical samples
 - First bedrock drill test of the prospective basal contact at Green included multiple intersections of primary REE mineralisation
- New REE mineralised prospect at Juan where first-pass, wide-spaced aircore drilling returned 6m @ 0.9% TREO from 48m, with REE anomalism to the end of hole
- District-scale potential emerging with REE mineralisation intersected in multiple carbonatites over 40km apart
- Prior TREO intercepts across Aileron include:

Crean: 7m @ 6.3% TREO within 49.3m @ 1.5% TREO from 90.7m to EOH (EAL474a)

- 16m @ 3.3% TREO from 81m within 52m @ 1.7% TREO from 81m (EAL256)
- 4m @ 3.9% TREO from 67m within 32m @ 1.8% TREO from 67m to EOH (EAL155)
- 4m @ 2.1% TREO from 98m within 46m @ 1.2% TREO from 81m (EAL239)

Green: 19m @ 1.7% TREO from 46m (EAL901)

- ° 5m @ 2.7% TREO within 13m @ 1.4% TREO from 46m (EAL955)
- ° 8m @ 1.3% TREO within 32m @ 0.7% TREO (EAL330)

Emily: 12m @ 2.1% TREO from 48m (EAL259)

° 6m @ 1.2% TREO from 40m (EAL94)

Hurley: 6m @ 1.2% TREO from 64m (EAL268)

- Initial Aileron Mineral Resource Estimate ("MRE") includes REE content:
 - 19.2Mt @ 0.65% TREO, incl. 3.5Mt @ 1.05% TREO at Crean
 - Dy/Tb concentrations compare favourably with leading Australian REE projects
- High-grade REE zones intersected outside the current MRE at Green:
 - 18m @ 1.6% TREO from 64m (EAL550) and 2m @ 2.1% TREO (EAL326) from 41m
- REE exploration underway alongside infill and extensional niobium targeted drilling



Executive Chairman, Will Robinson, comments:

"REE mineralisation is consistently being intersected in untargeted drilling within the large carbonatite complexes of the West Arunta.

Zones of high-grade rare earth and niobium mineralisation are often found proximal to one another within mineralised carbonatite complexes. This is true at the world's largest niobium deposit at Araxá in Brazil and at the Mt Weld rare earth deposit in Australia that has a niobium deposit proximal to its high-grade rare earth mine. Given the frequency of REE intersections in untargeted drilling in the West Arunta, focussed exploration has a high probability of identifying high-grade REE zones.

Accordingly, there's probably no better place in Australia right now to be exploring for rare earths than the large, recently discovered carbonatites of the West Arunta".



Photo 1 - EAL1370 - 266.25m - 266.52m - coarse red REE fluorocarbonate minerals in drillcore (1.1% TREO)

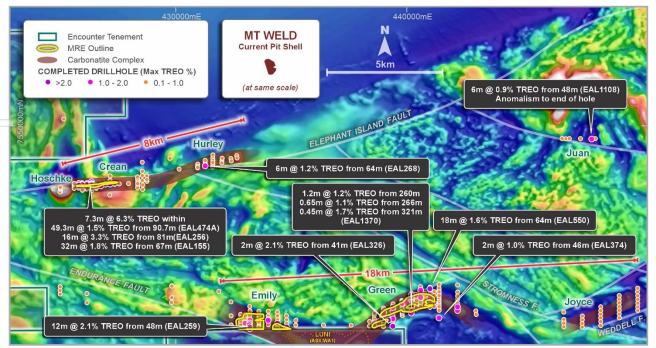


Figure 1 - Aileron Project - REE trends (1VD Magnetic)1



West Arunta Emerging as a Major Niobium-REE Province

Many of the world's major carbonatite complexes host both niobium and rare earth element (REE) deposits, and often in separate parts of the carbonatite intrusions, such as:

REE mine with adjacent niobium resource:

Mt Weld (Lynas, ASX: LYC) – 32 Mt @ 6.44% TREO² and 37.7 Mt @ 1.07% Nb₂O₅³

Niobium mines with adjacent REE resources:

- Araxá (St George, ASX: SGQ) 40.6 Mt @ 4.13% TREO⁴
- St Honoré (Magris) 466.8 Mt @ 1.65% TREO⁵

In the **West Arunta**, carbonatite complexes containing both niobium and REE have been identified over a distance of more than 40km, indicating similar enrichment processes across multiple mineralised systems. These latest results at Green demonstrate geological processes which form high-grade primary REE mineralisation.

High-grade REE mineralisation has been intersected across multiple carbonatite complexes at **Crean, Green, Emily and Hurley**:

Crean:

- o 7m @ 6.3% TREO within 49.3m @ 1.5% TREO from 90.7m to EOH (EAL474a)
- o 16m @ 3.3% TREO from 81m within 52m @ 1.7% TREO from 81m (EAL256)
- 4m @ 3.9% TREO from 67m within 32m @ 1.8% TREO from 67m to EOH (EAL155)
- o 4m @ 2.1% TREO from 98m within 46m @ 1.2% TREO from 81m (EAL239)

Green:

- o 19m @ 1.7% TREO from 46m (EAL901)
- 5m @ 2.7% TREO within 13m @ 1.4% TREO from 46m (EAL955)
- 8m @ 1.3% TREO within 32m @ 0.7% TREO (EAL330)
- 18m @ 1.6% TREO from 64m (EAL550)
- o 2m @ 2.1% TREO from 41m (EAL326)
- 2m @ 1.0% TREO from 46m (EAL374)

Emily:

- 12m @ 2.1% TREO from 48m (EAL259)
- 6m @ 1.2% TREO from 40m (EAL94)

Hurley:

6m @ 1.2% TREO from 64m (EAL268)

Heavy Rare Earth Concentrations

Prior shallow drilling across Crean, Green and Emily shows an elevated composition of Dysprosium (Dy_2O_3) and Terbium (Tb_2O_3) , which compares favourably with existing large Australian REE projects^{3,4,5}. The reason for the higher ratio of heavy REE (Dysprosium + Terbium) is being investigated through mineralogical analysis.



The Juan Prospect

Reconnaissance aircore drilling was completed across an interpreted structure at the Juan prospect. EAL1108 returned a highly anomalous result of 6m @ 0.9% TREO from 48m, with REE anomalism continuing to the end of hole (Figure 1). Other drill holes along this line also returned anomalous REE above 0.1% TREO. These results affirm Encounter's targeting model and provide another intersection of near surface mineralisation in a new area in early reconnaissance drilling in the West Arunta.

The results continue to demonstrate the exceptional scale and potential of the West Arunta, positioning Encounter at the forefront of Australia's next major niobium–rare earth province.

REE Fluorocarbonate minerals at Green

Drill hole EAL1370 was drilled to a depth of 421m. The top part of the hole successfully secured enriched niobium oxide metallurgical samples for the Company's ongoing testwork program to 194.6m. EAL1370 then proceeded to drill into the fresh rock towards the interpreted southern basal margin of the carbonatite complex. Lithologies were dominated by dolomitic and calcite-rich carbonatite interspersed with fresh fenite altered rocks. Multiple intervals were observed to contain REE-rich fluorocarbonate minerals including bastnaesite and synchysite.

The Company confirmed the presence of REE-rich fluorocarbonate minerals with ECORE LIBS Analysis (Photo 2) and TORNADO Micro-XRF (Photo 3). Selected samples were run with TESCAN Integrated Mineral Analyzer (TIMA) and results reported REE-rich fluorocarbonate mineralogy of bastnaesite, parasite and synchysite. TIMA results reported that over 80% of the REE fluorocarbonate grains were above 100µm and approximately 50% were above 250 µm. This coarse-grained nature is considered a positive feature of this mineralisation. Intersections include:

- 1.2m @ 1.2% TREO from 260m
- 0.27m @ 1.1% TREO from 266.3m
- 0.65m @ 1.1% TREO from 281.9m
- 0.34m @ 1.8% TREO from 299.8m
- 0.27m @ 1.4% TREO from 317m
- 0.45m @ 1.7% TREO from 321.2m

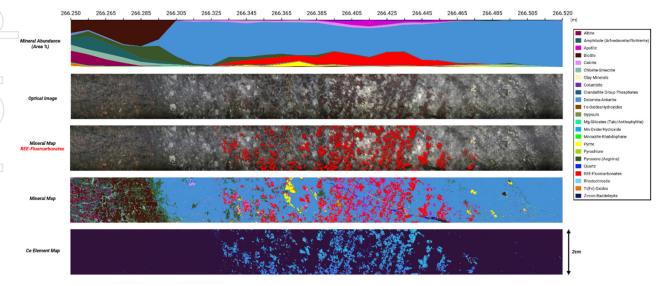


Photo 2 - EAL1370 - 266.25m - 266.52m - ECORE LIBS Analysis (1.1% TREO) completed by AXT PTY LTD, Perth.



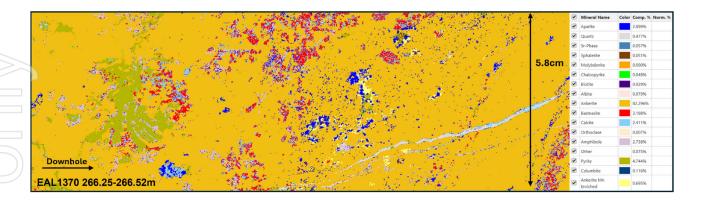


Photo 3 - EAL1370 - 266.25m - 266.52m - TORNADO Micro-XRF (1.1% TREO) completed by Portable Spectral Services, Perth

EAL1370 has confirmed the geological process to form REE fluorocarbonates in fresh rock at Green. Widespread REE fluorocarbonates have been observed in hand specimen during geological logging downhole, particularly at contact zones between carbonatite and fenite, and within the carbonatite. Importantly, these REE-fertile carbonatite—fenite contact zones occur beyond the niobium-dominant carbonatite zones which have not been tested with drilling to date.

The importance of the carbonatite-country rock contact is demonstrated by the Mountain Pass deposit in the United States, owned by MP Materials. Mountain Pass is a strike extensive carbonatite with high-grade bastnaesite-dominant REE mineralisation hosted at a similar contact across a strike of approximately 1 km, with a true width ranging from 5 to 85m⁶.

With Green extending over more than 3km of strike, this contact represents a large, new search space for high-grade REE mineralisation within the West Arunta.



Figure 2 - Green Deposit - REE trends (1VD Magnetic)¹



For further information, please contact:

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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 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.

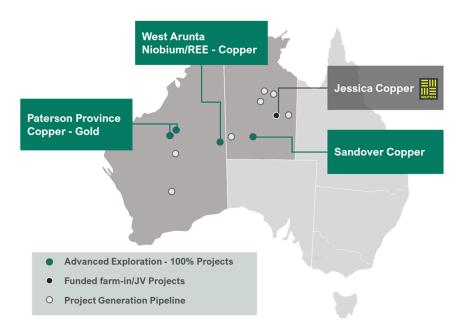


About Encounter

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.



| | | 1.0% Nb ₂ O₅ cut-off | | | | | |
|---------|-----------------|---------------------------------------|--|-------------|--------------|--------------------------------------|---------------------------------------|
| Deposit | Tonnage (Mt) | Nb ₂ O ₅ (%) | Nb ₂ O ₅ (kt) | TREO (%) | TREO (kt) | P ₂ O ₅ (%) | P ₂ O ₅ (kt) |
| Green | 12.1 | 1.63 | 196 | 0.55 | 66 | 9.23 | 1,112 |
| Emily | 3.7 | 1.94 | 71 | 0.61 | 22 | 11.24 | 414 |
| Crean | 3.5 | 1.92 | 67 | 1.05 | 36 | 8.15 | 283 |
| Total | 19.2 | 1.74 | 334 | 0.65 | 125 | 9.42 | 1,809 |

Table 1 - Aileron Project Inferred Mineral Resource Estimate 7

| Inferred Mineral Resource Estimate (JORC 2012) | | | | | |
|--|----------------|------------------------|-----------------------------------|--|--|
| Domain | Tonnes (Mt) | Copper Grade (%) | Contained Copper Metal (kt) | | |
| HG | 1.1 | 1.27% | 8.2 | | |
| LG | 1.7 | 0.48% | 14.0 | | |
| Total | 2.9 | 0.79% | 22.6 | | |

Table 2 – Tyrell Copper Oxide Mineral Resource Estimate⁸



Notes

Table 1:

- 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.

Table 2

- The resource is constrained within an optimised pit shell based on a Cu price of A\$17,000 per tonne and is reported above a 0.25% Cu cut-off grade.
- All tonnages reported are dry metric tonnes.
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

| | Hole ID | from (m) | to (m) | interval (m) | Nb₂O₅ % | TREO % | Nd ₂ O ₃ + Pr ₂ O ₃ (ppm) | Tb ₂ O ₃ + Dy ₂ O ₃ (ppm) | NdPr/ TREO | DyTb/ TREO | P ₂ 0 ₅ | Prospect |
|---|------------------------|-------------|--------|-----------------|------------|-----------|---|---|---------------|---------------|-------------------------------|----------|
| | EAL0326# | 41 | 43 | 2 | 0.21 | 2.06 | 5568 | 100 | 27.0 | 0.5 | 1.4 | GREEN |
| | EAL0330 | 37 | 69 | 32 | 0.18 | 0.75 | 1666 | 105 | 22.1 | 1.4 | 9.5 | GREEN |
| | including | 41 | 49 | 8 | 0.27 | 1.25 | 2850 | 179 | 22.7 | 1.4 | 7.7 | GREEN |
| | EAL0374 | 46 | 48 | 2 | 0.00 | 1.04 | 1946 | 482 | 18.7 | 4.6 | 0.5 | GREEN |
| | EAL0550 | 64 | 82 | 18 | 0.20 | 1.56 | 3291 | 263 | 21.2 | 1.8 | 16.5 | GREEN |
| | including | 64 | 78 | 14 | 0.14 | 1.76 | 3697 | 302 | 21.0 | 1.9 | 16.7 | GREEN |
| | EAL0901 | 38 | 76 | 38 | 2.37 | 1.23 | 2668 | 173 | 21.8 | 1.4 | 14.3 | GREEN |
| | including | 41 | 42 | 1 | 4.85 | 1.60 | 3634 | 179 | 22.7 | 1.1 | 8.0 | GREEN |
| | also including | 46 | 65 | 19 | 3.25 | 1.70 | 3634 | 246 | 21.5 | 1.5 | 16.3 | GREEN |
| | EAL0955 | 42 | 55 | 13 | 3.32 | 1.43 | 3308 | 180 | 23.3 | 1.2 | 14.6 | GREEN |
| | including | 42 | 47 | 5 | 6.25 | 2.67 | 6165 | 340 | 23.2 | 1.3 | 10.3 | GREEN |
| | EAL1370 | 196.9 | 197.92 | 1.02 | 0.01 | 0.79 | 1149 | 11 | 14.6 | 0.1 | 2.0 | GREEN |
| | and | 235 | 235.65 | 0.65 | 0.05 | 0.81 | 1001 | 4 | 12.3 | 0.0 | 0.9 | GREEN |
| | and | 242.77 | 243.49 | 0.72 | 0.12 | 0.52 | 710 | 4 | 13.8 | 0.1 | 0.7 | GREEN |
| | and | 260 | 261.19 | 1.19 | 0.27 | 1.22 | 1680 | 16 | 13.8 | 0.1 | 2.6 | GREEN |
| | and | 266.25 | 267.58 | 1.33 | 0.07 | 0.63 | 876 | 8 | 15.3 | 0.3 | 1.7 | GREEN |
| | including | 266.25 | 266.52 | 0.27 | 0.05 | 1.06 | 1400 | 8 | 13.2 | 0.1 | 0.7 | GREEN |
| | and | 277.06 | 278.34 | 1.28 | 0.04 | 0.75 | 1122 | 15 | 15.1 | 0.2 | 1.5 | GREEN |
| | and | 280 | 282.57 | 2.57 | 0.07 | 0.55 | 809 | 16 | 16.4 | 0.7 | 1.8 | GREEN |
| ı | including | 281.92 | 282.57 | 0.65 | 0.03 | 1.10 | 1520 | 12 | 13.8 | 0.1 | 1.0 | GREEN |
| | and | 299.75 | 300.09 | 0.34 | 0.21 | 1.77 | 2352 | 19 | 13.3 | 0.1 | 5.3 | GREEN |
| | and | 308.7 | 309.18 | 0.48 | 0.16 | 0.99 | 1430 | 13 | 14.5 | 0.1 | 3.5 | GREEN |
| | and | 317 | 317.27 | 0.27 | 0.03 | 1.41 | 2023 | 15 | 14.4 | 0.1 | 3.8 | GREEN |
| | and | 321.22 | 321.67 | 0.45 | 0.03 | 1.67 | 2574 | 18 | 15.4 | 0.1 | 4.6 | GREEN |
| | and | 323.45 | 323.77 | 0.32 | 2.65 | 1.22 | 2093 | 16 | 17.2 | 0.1 | 7.1 | GREEN |
| | EAL0094 | 40 | 46 | 6 | 0.37 | 1.17 | 2687 | 196 | 22.9 | 1.7 | 13.1 | EMILY |
| | including | 40 | 44 | 4 | 0.47 | 1.31 | 3016 | 215 | 23.0 | 1.6 | 11.1 | EMILY |
| | EAL0259 | 40 | 60 | 20 | 4.62 | 1.56 | 3447 | 256 | 22.1 | 1.6 | 13.2 | EMILY |
| | including | 48 | 60 | 12 | 6.31 | 2.11 | 4676 | 350 | 22.2 | 1.7 | 20.3 | EMILY |
| | also including ^ | 50 | 54 | 4 | 12.30 | 4.06 | 8947 | 672 | 22.0 | 1.6 | 15.0 | EMILY |
| | EAL0268 | 84 | 90 | 6 | 0.40 | 1.22 | 2627 | 148 | 21.5 | 1.2 | 3.4 | EMILY |



| and | 102 | 104 | 2 | 0.57 | 0.65 | 1246 | 48 | 19.1 | 0.7 | 1.3 | EMILY |
|---------|-----|-----|----|------|------|------|----|------|-----|-----|-------|
| EAL1108 | 48* | 58 | 10 | 0.00 | 0.61 | 1301 | 47 | 21.2 | 0.9 | 0.3 | JUAN |
| EAL1108 | 48 | 54 | 6 | 0.00 | 0.86 | 1865 | 63 | 21.4 | 0.7 | 0.4 | JUAN |

Table 1. Drillhole assay intersections above 0.5% TREO. Intervals greater than 1% TREO have been reported as included intervals. ^Selected interval greater than 2% TREO has been reported. *drill hole ends in mineralisation. #updated from previous release to correct an error.

| Hole_ID | Hole_Type | Grid_ID | MGA_North | MGA_East | MGA_RL | EOH Depth (m) | Dip | Azimuth | Prospect |
|---------|-----------|----------|-----------|----------|--------|---------------|--------|---------|----------|
| EAL1370 | DDH | MGA94_52 | 7542131 | 440204 | 387 | 421 | -60.37 | 180.13 | GREEN |
| EAL1100 | AC | MGA94_52 | 7549454 | 446725 | 389 | 64 | -90 | 0 | JUAN |
| EAL1101 | AC | MGA94_52 | 7549442 | 446886 | 388 | 74 | -90 | 0 | JUAN |
| EAL1102 | AC | MGA94_52 | 7549452 | 447041 | 388 | 54 | -90 | 0 | JUAN |
| EAL1103 | AC | MGA94_52 | 7549452 | 447204 | 387 | 54 | -90 | 0 | JUAN |
| EAL1104 | AC | MGA94_52 | 7549449 | 447365 | 386 | 51 | -90 | 0 | JUAN |
| EAL1105 | AC | MGA94_52 | 7549451 | 447524 | 386 | 60 | -90 | 0 | JUAN |
| EAL1106 | AC | MGA94_52 | 7549450 | 447686 | 385 | 64 | -90 | 0 | JUAN |
| EAL1107 | AC | MGA94_52 | 7549446 | 447845 | 386 | 52 | -90 | 0 | JUAN |
| EAL1108 | AC | MGA94_52 | 7549425 | 448006 | 386 | 58 | -90 | 0 | JUAN |
| EAL1109 | AC | MGA94_52 | 7549451 | 448165 | 386 | 62 | -90 | 0 | JUAN |
| EAL1110 | AC | MGA94_52 | 7549447 | 448323 | 386 | 72 | -90 | 0 | JUAN |
| EAL1111 | AC | MGA94_52 | 7549451 | 448487 | 386 | 68 | -90 | 0 | JUAN |

Table 2. Drillhole collar table.

ENR ASX announcement 6 October 2025

ENR ASX announcement 1 September 2025

ENR ASX announcement 19 August 2025

ENR ASX announcement 14 May 2025

ENR ASX announcement 22 January 2025

ENR ASX announcement 13 December 2024

ENR ASX announcement 21 November 2024

ENR ASX announcement 14 October 2024

ENR ASX announcement 16 September 2024

ENR ASX announcement 5 August 2024

ENR ASX announcement 31 July 2024

ENR ASX announcement 16 July 2024

ENR ASX announcement 8 July 2024

ENR ASX announcement 24 June 2024

ENR ASX announcement 29 January 2024 ENR ASX announcement 31 October 2023

ENR ASX announcement 29 September 2023

ENR ASX announcement 25 July 2023

ENR ASX announcement 28 June 2023

¹ Prior drilling at Aileron reported in the following ENR announcements:

² Lynas Rare Earths. 2024 Mineral Resource and Ore Reserve Update. 5 August 2024

³ Lynas Rare Earths. A New Niobium Rich Rare Metals Resource at Mt Weld. 6 October 2004

⁴ St George Mining Limited. High-Grade Niobium and REE JORC Resource for Araxá. 1 April 2025

⁵ IAMGOLD Corporation. IAMGOLD declares rare earth inferred resource. February 2012

⁶ SEC Technical Report Summary, Mountain Pass Mine, San Bernardino County, California. February 19, 2025

⁷ ENR ASX announcement 14 May 2025

⁸ ENR ASX announcement 26 September 2025

ASX Announcement



16 October 2025

SECTION 1 SAMPLING TECHNIQUES AND DATA

| Criteria | JORC Code explanation | Commentary | | |
|---------------------|---|--|--|--|
| Sampling techniques | Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the | Reported diamond drilling (EAL1370) has been completed at the Green Deposit to obtain samples for metallurgical testwork, geological logging and assaying. Reported AC drilling (EAL1100-1111) has been completed at | | |
| | minerals under investigation, such as down hole gamma sounds, or handheld XRF instruments, etc). These examples should not be taken as | the Juan Prospect to obtain samples for geological logging and assaying. | | |
| | limiting the broad meaning of sampling. | Additional AC and RC drilling has been previously completed at the Green, Emily and Hurley Prospects and have been reported to ASX at Nb ₂ O ₅ cut off grades specified in previous releases. Selected holes are now reported for their high grade TREO intersections. Drilling and sampling methods for these holes have been described in their original ASX releases. | | |
| | | All samples underwent routine pXRF analysis using a Bruker S1 TITAN to aid in logging and identifying zones of interest. | | |
| | | No pXRF data is being reported. | | |
| | Include reference to measures taken to ensure sample representivity and the appropriate | All samples are considered to be representative. Industry standard workflows for Diamond, RC and AC drilling have been followed. | | |
| | calibration of any measurement tools or systems used | Drill hole collar locations were recorded by handheld GPS, which has an estimated accuracy of $\pm5\text{m}$. | | |
| | | Diamond drillhole EAL1370 obtained PQ drillcore from surface to 194.6m to obtain samples for metallurgical testwork. No results are being reported from PQ drillcore in this announcement. | | |
| | Aspects of the determination of mineralisation that are Material to the Public Report. In cases where | Diamond drillhole EAL1370 obtained HQ drillcore from 194.6 to 421m (EOH). Samples were marked up at nominal 1m intervals and samples were constrained to within geological boundaries. HQ drill core was cut and sampled as half core samples. | | |
| | 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant | AC drilling at Juan was used to obtained 1m samples each approximately 1-2kg. Assays reported are from 2 metre composite samples which were created using a scoop to collect a sample in a pre-numbered calico. Geological logging and pXRF data were used to guide which intervals downhole have been sent to the lab. Selected drillholes (EAL1103, 1104, 1106, 1110 and 1111) were not sampled in full and only had a sample sent to the lab from the bottom of the hole. | | |
| | disclosure of detailed information | All samples were submitted to ALS Laboratories in Adelaide or Perth where they were crushed and pulverised for analyses. | | |
| | | Samples were analysed in Perth using ALS method ME-MS81hD with overlimit determination via ME-XRF30. (ME-MS81hD reports high grade REE elements by lithium metaborate fusion and ICP-MS. This method produces | | |



| | | quantitative results of all elements, including those encapsulated in resistive minerals.) | | | |
|---|--|---|--|--|--|
| Drilling techniques | Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, tiple or | Diamond drillhole EAL1370 was drilled by DDH1 using PQ3 and HQ equipment. | | | |
| | standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc). | AC holes at Juan were drilled at diameter of 90mm by Bullion Drilling. | | | |
| Drill sample recovery | Method of recording and assessing core and chip sample recoveries and results assessed | Diamond core recoveries were recorded each drill run by drill crews and validated by Encounter Geologists. There were minor sections of lost core noted by the diamond drillers and this was validated and recorded by Encounter staff. | | | |
| | | Diamond core recovery for the reported section of EAL1370 was 99.5%. | | | |
| | Measures taken to maximise sample recovery and ensure representative nature of the samples | AC drillers used appropriate measures to minimise downhole and/or cross-hole contamination in drilling. Where contamination of the sample was suspected this was noted by Encounter field staff as a percentage. | | | |
| | Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. | methods and twinned drillholes has determined that there is | | | |
| | | No analysis has been undertaken for Juan AC drilling recovery and relationship to grade. | | | |
| Logging | Whether core and chip samples have been geologically and geotechnically logged to a | Encounter geologists have completed geological logs on all holes where assays are reported. All reported holes have been logged in full with lithology, alteration and mineralisation recorded. | | | |
| | level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. | Geological logging has been reviewed using multi element geochemistry to verify geological observations. | | | |
| | • | Geological logging has been used to guide sampling intervals. | | | |
| | Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. | Geological logging is qualitative in nature and records interpreted lithology, alteration, mineralisation and other geological features of the samples. | | | |
| | The total length and percentage of the relevant intersections logged | Encounter geologists have completed geological logs on all holes reported in this announcement | | | |
| Sub-sampling techniques and sample preparation | If core, whether cut or sawn and whether quarter, half or all core taken. | Samples submitted from the diamond drillhole EAL1370 were half core. | | | |
| | If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. | AC drilling at Juan obtained 1m samples each approximately 1.5-2kg. Assays reported are from 2 metre composite samples created using a scoop to collect a sample in a pre-numbered calico. These samples were sent for lab analysis. | | | |
| | ш у. | Samples were recorded as being dry, moist or wet by Encounter field staff. | | | |



| | For all sample types, the nature, quality and appropriateness of the sample preparation technique. | Sample preparation and analysis was completed at ALS Laboratories in Perth. Samples were crushed and pulverised to enable a subsample for analyses. This is considered appropriate for the analysis undertaken. |
|---|---|--|
| | Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. | Field QC procedures involve the use of commercial certified reference materials (CRMs) and blanks. The insertion rate of the CRM is 1:50. The results from QC procedures are assessed on a periodical basis. |
| | Measures taken to ensure that the sampling is representative of the in situ material collected, | No field duplicates were taken for Diamond core samples. No coarse split duplicates were taken from the diamond drillcore. |
| | including for instance results for field duplicate/second-half sampling. | Field duplicates are taken during AC sampling at a rate of approximately 1:50. |
| | Whether sample sizes are appropriate to the grain size of the material being sampled. | The sample sizes, sub-sampling techniques and sample preparation are considered to be appropriate for the material being sampled. |
| Quality of assay | | All samples were submitted to ALS Laboratories in Perth for analysis. |
| data and laboratory tests | The nature, quality and appropriateness of the assaying and laboratory procedures used and | Samples were submitted for multiple laboratory analyses. Assays have been reported from ALS method ME-MS81h when completed (ME-MS81h reports high grade REE elements by lithium meta-borate fusion and ICP-MS. This method is considered a complete digestion allowing resistive mineral phases to be liberated. This method produces quantitative results of all elements, including those encapsulated in resistive minerals.) Samples were analysed for Ce, Dy, Er, Eu, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Ta, Tb, Th, |
| | whether the technique is considered partial or total. | Tm, U, W, Y, Yb, Zr) All samples were also analysed using ALS method ME-MS61r (4-Acid digest on 0.25g sample analysed via ICP-MS and ICP-AES, elements Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr, Dy, Er, Eu, Gd, Ho, Lu, Nd, Pr, Sm, Tb, Tm, Yb). |
| | | Standard laboratory QAQC was undertaken and monitored by the laboratory. |
| | For geophysical tools, spectrometers, | Samples underwent routine pXRF analysis at 1m intervals using a Bruker S1 TITAN to aid in geological logging and identifying zones of interest. |
| | handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading | All pXRF readings were taken in GeoExploration mode with a 30 second 3 beam reading. |
| | times, calibrations factors applied and their derivation, etc. | OREAS supplied standard reference materials were used to calibrate the pXRF instrument. |
| | | No pXRF results are being reported. |
| | | Standard field and laboratory QAQC was undertaken and monitored. |
| | Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks | Encounter submits an independent suite of certified reference materials and blanks at average ratio of 1:30. |
| | and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. | ALS Laboratory QAQC involves the use of internal lab standards using certified reference material and blanks as part of in-house laboratory procedures. |
| | | A formal review of this data is completed on a periodic basis. |
| Verification of sampling and assaying | The verification of significant intersections by either independent or alternative company personnel. | Geological observations included in this report have been verified by Sarah James (Principal Geologist) |
| | | |



| | The use of twinned holes. | Diamond drillhole EAL1370 was completed at Green for the purpose of twinning and verifying EAL914 RC drill results and to provide material for mineralogical and metallurgical work in the oxide profile. Results are reported from fresh rock beyond the depth extent of existing drillhole EAL914. |
|-------------------------------|--|--|
| | Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. | Primary logging and sampling data is collected for drillholes on toughbook computers using Maxwell Geoservice's LogChief software and using excel templates (physical and electronic). Data is sent offsite by email to be loaded or direct synced to Encounter's SQL Database (Datashed software), which is backed up daily. |
| | Discuss any adjustment to assay data. | Standard stoichiometric calculations have been applied to convert element ppm data to relevant oxides. Industry standard calculation for TREO as follows La ₂ O ₃ + CeO ₂ + Pr ₂ O ₃ + Nd ₂ O ₃ + Sm ₂ O ₃ + Eu ₂ O ₃ + Gd ₂ O ₃ + Tb ₂ O ₃ + Dy ₂ O ₃ + Ho ₂ O ₃ + Er ₂ O ₃ + Tm ₂ O ₃ + Yb ₂ O ₃ + Y ₂ O ₃ + Lu ₂ O ₃ Conversion factors La ₂ O ₃ 1.1728 CeO ₂ 1.2284 Pr ₂ O ₃ 1.1703 Nd ₂ O ₃ 1.1664 Sm ₂ O ₃ 1.1596 Eu ₂ O ₃ 1.1579 Gd ₂ O ₃ 1.1526 Tb ₂ O ₃ 1.151 Dy ₂ O ₃ 1.1477 Ho ₂ O ₃ 1.1477 Ho ₂ O ₃ 1.1435 Tm ₂ O ₃ 1.1435 Tm ₂ O ₃ 1.1421 Yb ₂ O ₃ 1.1387 Y ₂ O ₃ 1.2699 Lu ₂ O ₃ 1.1371 Nb ₂ O ₅ 1.4305 |
| Location of data points | Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. | Drill hole collar locations are determined using a handheld GPS. Down hole surveys were collected for diamond drillhole EAL1370 at approximately 30m intervals downhole. No downhole surveys were collected during AC drilling. |
| | Specification of the grid system used. | Horizontal Datum: Geocentric Datum of Australia1994 (GDA94) Map Grid of Australia 1994 (MGA94) Zone 52 |
| | Quality and adequacy of topographic control. | RLs were assigned using a DTM created during the detailed aeromagnetic survey. |
| Data spacing and distribution | Data spacing for reporting of | Drillhole spacing for AC results at Juan is from approximately 160m spaced holes along a single East-West drill traverse. |
| | Exploration Results. | EAL1370 was collared approximately 5m west of EAL914. |
| Criteria | JORC Code explanation | Commentary |
| | Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation | Existing drill data spacing at Green has been determined by the Competent Person to be sufficient in both geological and grade continuity appropriate for the Mineral Resource estimation classification applied in previously released Inferred MRE. |



| | procedure(s) and classifications applied. | Mineralisation at Juan has not yet demonstrated to be sufficient in both geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications to be applied | | | |
|---|--|---|--|--|--|
| | Whether sample compositing has been applied. | Downhole intervals have been composited using a length weighted methodology. | | | |
| Orientation of data in relation to geological | | Carbonatite intrusions have exploited interpreted structural corridors including the Weddell Fault at Green. | | | |
| structure | | At Green the orientation of oxide-enriched mineralisation is sub- horizontal and derives from primary fresh carbonatites by deflationary and regolith processes. | | | |
| | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. | The orientation of carbonatite intrusions at Green follow approximate ENE-WSW strike with a gentle curve towards E-W. The dip of the primary carbonatites below the top of fresh rock at Green is poorly constrained due to the limited number of drillholes that have sufficiently tested at depth. Initial observations suggest these fresh rock intervals are sub vertical in orientation. | | | |
| | | Juan is early-stage exploration drilling and the orientation of the holes with respect to key structures and intrusions is not fully understood. Additional infill drilling is planned to test the orientation and continuity of mineralisation. | | | |
| | If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. | The relationship between drilling orientation and the orientation of oxide-enriched mineralisation is not considered to have introduce any sampling bias. | | | |
| Sample security | The measures taken to ensure sample security. | The chain of custody is managed by Encounter. Samples were transported by Encounter personnel and reputable freight contractors to the assay laboratory. | | | |
| | The results of any audits or reviews of | Sampling techniques and procedures are regularly reviewed internally, as is data. | | | |
| Audits or reviews | sampling techniques and data. | A project QAQC audit was completed prior to Mineral Resource Estimat by Snowden Optiro on Aileron drilling data and sampling techniques. | | | |



SECTION 2 REPORTING OF EXPLORATION RESULTS

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| Mineral tenement and land tenure status | Type, reference name/number, location and | The Aileron project is located within the tenements E80/5169, E80/5469, E80/5470 and E80/5522 which are held 100% by Encounter Resources |
| | ownership including agreements or material issues with third parties including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park | The tenements are contained within Aboriginal Reserve land where native title rights are held by the Parna Ngururrpa and the Tjamu Tjamu. |
| | and environmental settings. | Mineral Resources are defined at Green (E80/5469), Crean (E80/5169) and Emily (E80/5469) wholly within Parna Ngururrpa native title determination area. |
| Exploration done by other parties | Acknowledgment and appraisal of exploration by other parties. | Prior to Encounter Resources, no previous on ground exploration has been conducted on the tenement other than government precompetitive data. |
| Geology | | The Aileron project is situated in the Proterozoic West Arunta Province of Western Australia. The geology of the area is poorly studied due to the lack of outcrop and previous exploration. |
| | | A 2024 GSWA report (using 2023 Encounter EIS drill cores) has documented Paleoproterozoic gneisses and metasedimentary rocks in the region. A younger, Mesoproterozoic garnet-bearing granitic gneiss has now been documented in the belt. Granulite facies metamorphism occurred soon after this Mesoproterozoic magmatic emplacement. In the Neoproterozoic gneissic rocks were intruded by post metamorphic, cogenetic carbonatite, lamprophyre and aillikite-type lamprophyres. |
| | Deposit type, geological setting and style of mineralisation | The extensive geological history in the belt is still being unravelled by ongoing research studies. The belt is prospective for carbonatite-hosted critical mineral deposits, IOCG style copper deposits and orogenic gold. |
| | | Green, Crean and Emily are carbonatite related niobium deposits. Oxide-enriched mineralisation has derived from primary niobium enriched carbonatites through deflationary and regolith weathering processes. |
| | | The Aileron carbonatites have intruded into gneisses and metasedimentary basement rocks along interpreted structural corridors including the Elephant Island (at Crean) and the Weddell Fault (at Emily and Green). Carbonatite intrusions have intensely fenitised (altered) surrounding basement rocks. Lamprophyre intrusions interpreted as cogenetic with carbonatites are present, particularly near the margins of carbonatite intrusions. Preferential weathering of carbonatites has accelerated oxidation and resulted in niobium enrichment at Green, Crean and Emily. |



| Drill hole information | A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes: | |
|--|---|---|
| | Easting and northing of the drill hole collar Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar Dip and azimuth of the hole Down hole length and interception depth Hole length | Refer to tabulation in the body of this announcement |
| Data aggregation methods | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. | All reported assays have been length weighted, with a nominal 0.5% TREO lower limit and include up to 4m of internal dilution. Intervals greater than 1% TREO have been reported as including. A selected interval greater than 2% TREO has been reported separately. No upper cutoffs have been applied. |
| | Where aggregated intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. | All reported assays have been length weighted, with a nominal 0.5% TREO lower limit and include up to 4m of internal dilution. Intervals greater than 1% TREO have been reported as including. A selected interval greater than 2% TREO has been reported separately. No upper cutoffs have been applied. |
| | The assumptions used for any reporting of metal equivalent values should be clearly stated. | No metal equivalents have been reported in this announcement. |
| Relationship between mineralization widths and intercept lengths | These relationships are particularly important in the reporting of exploration results. If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). | Reported results are downhole length. True width geometry of the mineralisation is not yet known. |
| Criteria | JORC Code explanation | Commentary |
| Diagrams | Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plane view of drill hole collar locations and appropriate sectional views. | Refer to body of this announcement |
| Balanced Reporting | Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. | All reported assays have been length weighted, with a nominal 0.5% TREO lower limit and include up to 4m of internal dilution. Intervals greater than 1% TREO have been reported as including. A selected interval greater than 2% TREO has been reported separately. No upper cutoffs have been applied. |
| Other substantive exploration data | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock | All meaningful and material information has been included in the body of the text. |

