

## Magnetic survey upgrades Cu-REE targets - West Arunta

- 8,000 line km airborne magnetic-radiometric survey completed at the 100% owned Aileron Copper-REE project (“Aileron”) in the West Arunta region of WA
- An initial assessment has identified new targets including:
  - Hurley – a discrete magnetic target highlighted east of the Worley and Crean targets on the major Elephant Island fault
  - Macklin – an interpreted intrusion on the key Endurance fault north-west of the Caird gravity target and WA1’s recent mineralised carbonatite discovery at Luni
- In addition, the structural context of the existing targets (Caird, Crean, Shackleton and Worsley) has been upgraded (Figure 1).
- Expanded gravity coverage is planned for early in the 2023 field season followed by drilling to commence in April-June 2023, co-funded by the WA Govt. Exploration Incentive Scheme

The directors of Encounter Resources Ltd (“Encounter”) are pleased to announce that the magnetic-radiometric survey recently completed at the Aileron Cu-REE project (100% ENR) in the West Arunta region of WA has identified new high-quality targets as well as upgrading existing targets.

**Commenting on the magnetic survey, Encounter Managing Director Will Robinson said:** “Modern geophysics is revealing exceptional targets in the West Arunta critical minerals province. We now have high-quality magnetics and radiometrics over 50 strike kilometres of the project and we will expand our detailed gravity coverage early in the new year. At this stage, the first drill program of the 2023 field season is planned to include the Worsley, Crean and Caird targets.”

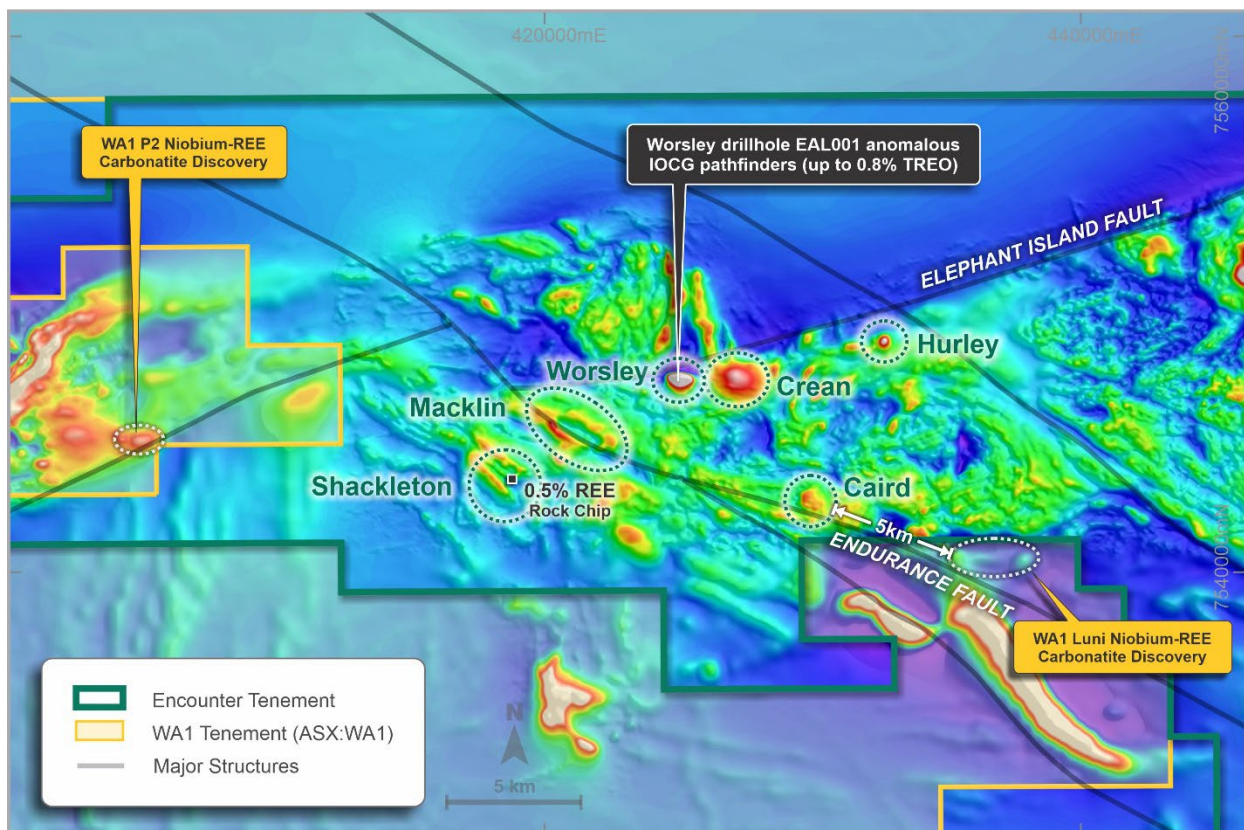
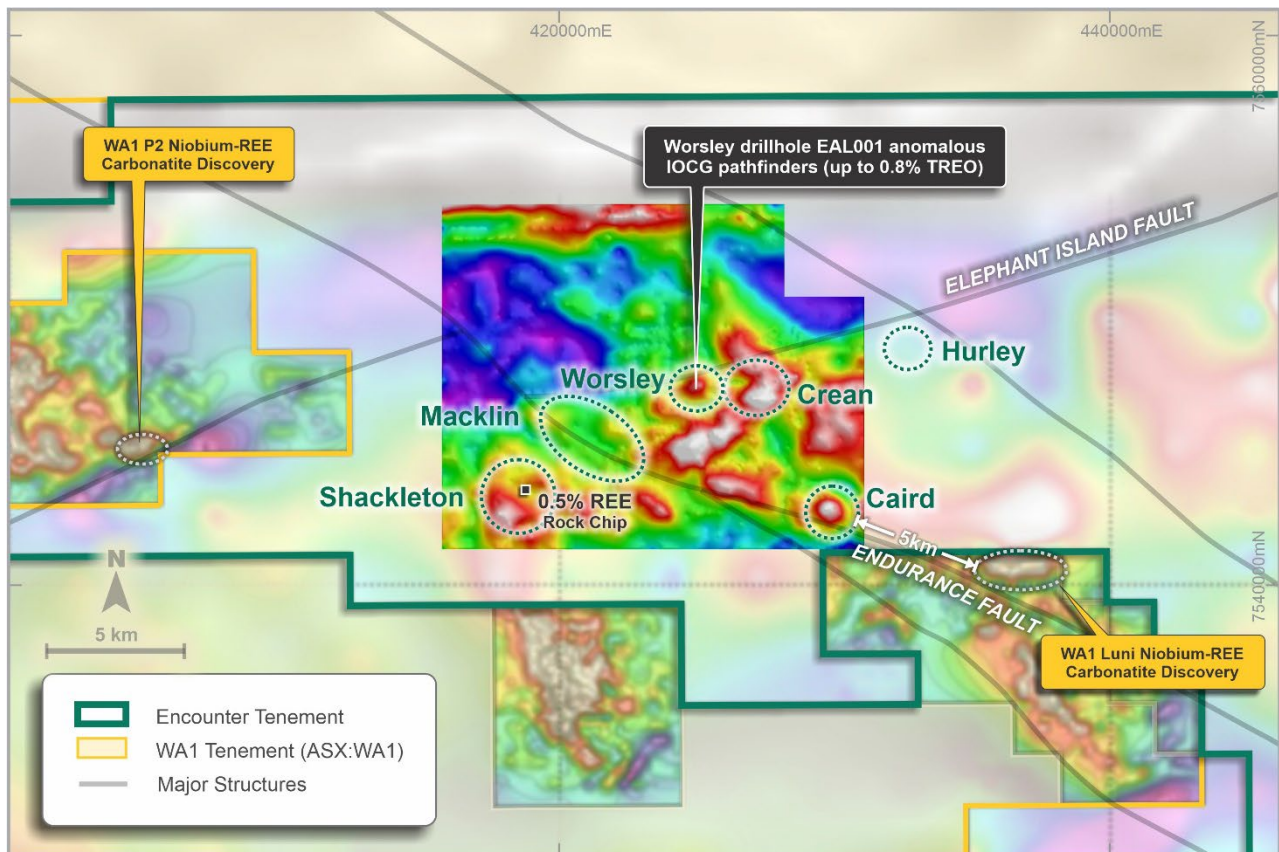


Figure 1 – Magnetic image (RTP) with the six Cu-REE targets identified to date in the western part of >100km long Aileron project



**Figure 2 - Detailed residual gravity image with interpreted structures and the identified targets in the western part of >100km long Aileron project <sup>1,2,3,4</sup>**

## Background

Aileron is located in the West Arunta region of WA ~600km west of Alice Springs. Prior to the recent magnetic-radiometric survey, several structural and geophysical targets had been identified through aerial magnetic and gravity surveys.

To date, only one diamond hole, EAL001, has been drilled within the project which targeted a discrete magnetic anomaly at the Worsley target. EAL001 was partially completed to a depth of 158m in October 2020 and drilled through 5m of shallow cover followed by a brecciated hydrothermal hematite-chlorite-altered granite with a narrow mafic intrusion.

Assays from EAL001 include zones of anomalism in copper (up to 0.1% Cu), gold (up to 48ppb Au), molybdenum (up to 155ppm Mo), niobium (up to 773ppm Nb) and highly elevated rare earth elements (up to 0.8% TREO) consistent with the IOCG deposit model (*refer ASX release 28 January 2021*).

The presence of highly anomalous REE at Aileron and the recent mineralised carbonatite discoveries by WA1 Resources Ltd. (ASX:WA1) indicate that an alkaline magmatic hydrothermal system has been active in the region. Such systems are known to play an important role in the formation of both IOCG and carbonatite-hosted REE deposits.

## Magnetic-Radiometric Survey

In November 2022, an 8,000 line km airborne magnetic-radiometric survey was completed at Aileron. The 100m spaced survey covered ~50 strike km of the western part of the project. The survey was designed to provide detailed structural and geological information and to identify new carbonatite and IOCG targets.

An initial assessment has identified new targets including (Figure 1):

- Hurley – a discrete magnetic target highlighted east of the Worley and Crean targets on the major Elephant Island fault
- Macklin – an interpreted intrusion located on the key Endurance fault that hosts the Caird gravity target and WA1’s recent mineralised carbonatite discovery at Luni

In addition, the structural context of the existing targets (Caird, Crean, Shackelton and Worsley) has been upgraded (Figure 1).

- Caird – ‘bullseye’ coincident magnetic and density anomaly on the Endurance fault, 5km north-west of WA1’s recent mineralised carbonatite discovery at Luni
- Crean – regional scale magnetic anomaly at a key structural location on the major Elephant Island fault
- Shackelton – gravity anomaly where reconnaissance rock chip sampling returned 0.5% REE
- Worsley – the region’s standout magnetic feature with a coincident gravity anomaly. Single drill hole was terminated without testing the magnetic-gravity anomalies but intersected highly anomalous Cu, Au, Mo, Nb and REE (up to 0.8%) in the top of the hole.

The interpretation and integration of the new data is ongoing with expanded gravity coverage planned for early in the 2023 field season.

### Drill Ready

In addition to diamond drilling at Caird and Worsley, drilling plans for the Crean target are also well advanced. Diamond drilling is scheduled to commence in April-June 2023, co-funded by the WA Government Exploration Incentive Scheme.

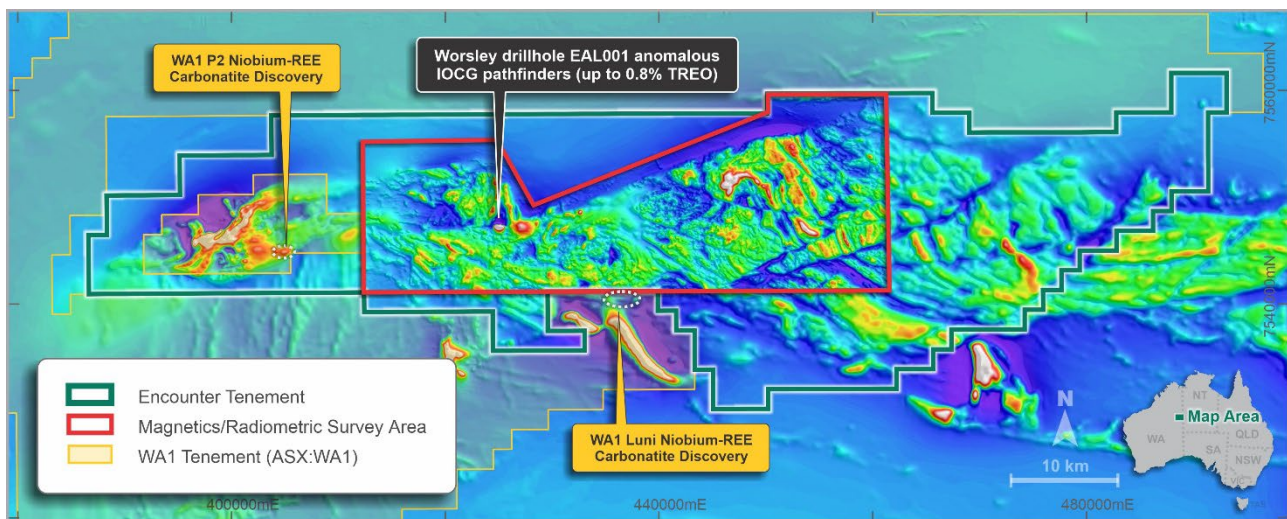


Figure 3 - Aileron Cu-REE project – Magnetics (RTP)

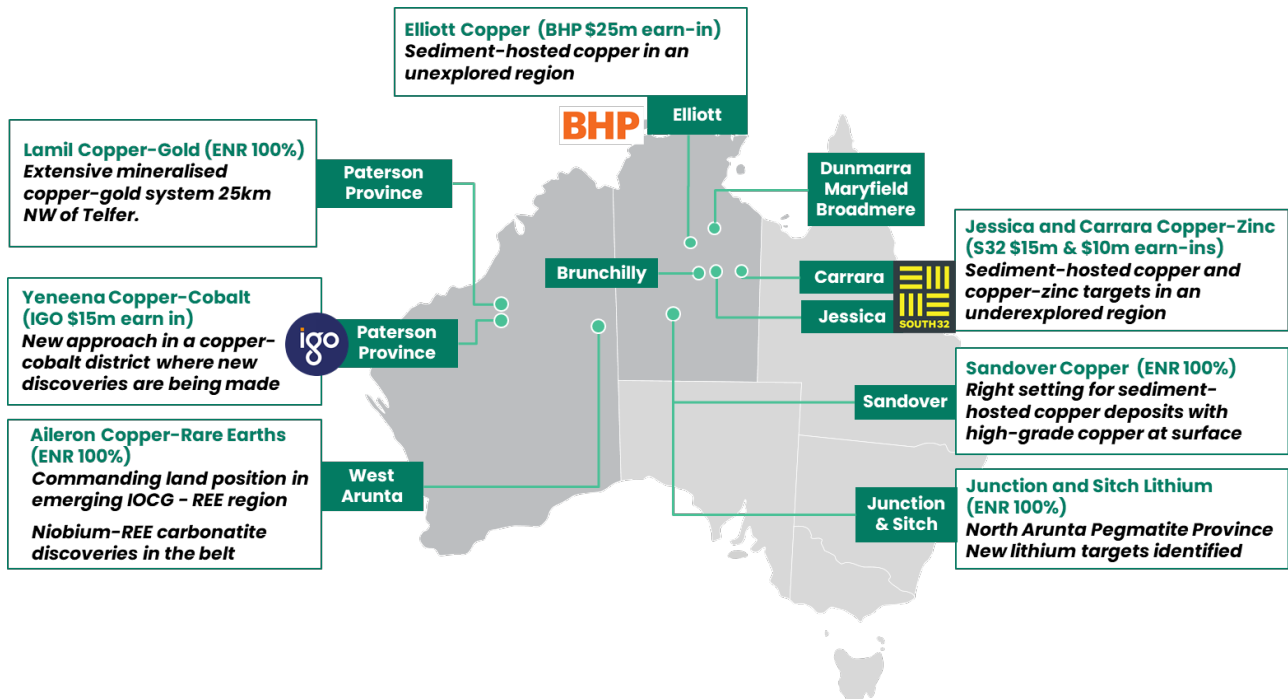
<sup>1</sup> refer ASX release 28 January 2021

<sup>2</sup> refer ASX release by WA1 - 26 October 2022

<sup>3</sup> refer ASX release 14 February 2022

<sup>4</sup> refer ASX release by WA1 – 16 November 2022

## About Encounter



Encounter is one of Australia’s leading mineral exploration companies listed on the ASX. Encounter’s primary focus is on discovering major copper dominant deposits in Australia.

Encounter partners with leading mid-tier and major producers to advance its extensive project pipeline with more than \$25m of project funding contributed by partners over the past decade. Currently, Encounter has farm-in agreements in place with world leading resources companies to provide up to \$65m in initial exploration funding. Encounter’s assets include:

### 100% ENR projects

#### Aileron Copper-Rare Earths Project –WA

- IOCG style copper-gold-REE in drilling
- Olympic Dam age mineralisation events
- New niobium-REE discovery adjacent to Aileron

#### Sandover Copper Project – NT

- Key geological units and processes for sediment-hosted copper
- Bornite identified in historical drill core

#### Lamil Copper-Gold Project – Paterson Province WA

- Diamond drilling completed Sep 22
- Assay results Dec 22

#### Junction Lithium Project – NT

- North Arunta Pegmatite Province
- New lithium targets identified
- Field assessment commencing

### Farm-in partners

#### Elliott Copper Project – NT (up to \$25m farm-in funding)

- Targeting sediment hosted copper
- Diamond drill program Oct–Nov 2022



#### Jessica and Carrara Projects – NT (up to \$25m farm-in funding)

- Two farm-in agreements completed Jun 22
- Eight new targets identified



#### Yeneena Project – Paterson Province WA (up to \$15m farm-in funding)

- 4,000m diamond & 1,500m aircore drilling
- Six diamond drill holes completed

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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 Persons 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.*

## SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sounds, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where '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 disclosure of detailed information</i></p>	<p>The aircraft used for the survey was a Cessna 210, specially modified for geophysical survey with a tail boom and various other survey configuration modifications.</p> <p>The magnetic geophysical sampling was collected via a stinger mounted G-823A caesium vapour magnetometer. Nominal traverse separation of 100m, with an average ground clearance of 40m. Sampling rate was at approximately 20Hz. Base station was a GSM-19 Overhauser &amp; Scintrex EnviMag proton precession unit sampling at 1 Hz intervals.</p> <p>For the radiometric spectrometer an RSI RS-500 gamma-ray spectrometer incorporating 2x RSX-4 detector packs, 32 litre crystal, sampling interval of 2 Hz was used.</p>
<b>Drilling techniques</b>	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>No new drilling is being reported in this announcement.</p>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i></p> <p><i>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</i></p>	<p>No new drilling is being reported in this announcement</p>
<b>Logging</b>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged</i></p>	<p>No new drilling is being reported in this announcement</p>

**Sub-sampling techniques and sample preparation**

*If core, whether cut or sawn and whether quarter, half or all core taken.*

*If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*

*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*

*Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*

No new drilling is being reported in this announcement

*Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*

*Whether sample sizes are appropriate to the grain size of the material being sampled.*

**Quality of assay data and laboratory tests**

*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*

*For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*

No new drilling is being reported in this announcement

*Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*

Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	
	<i>The use of twinned holes.</i>	
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	No new drilling is being reported in this announcement
	<i>Discuss any adjustment to assay data.</i>	
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	
	<i>Specification of the grid system used.</i>	Integrated Novatel OEM719 DGPS receiver was used to provide navigation information to the pilot via an LCD steering indicator. All data were synchronised to a one pulse per second triggered by the GPS time.
	<i>Quality and adequacy of topographic control.</i>	

<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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 procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	Line spacing of the airborne survey is 100m which is considered appropriate for the level of geological and structural interpretation that was completed.
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	No new drilling is being reported in this announcement
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	No new drilling is being reported in this announcement
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No new drilling is being reported in this announcement

## SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	<p>The Aileron project is located within the tenements E80/5169, E80/5469, E80/5470 and E80/5522 which are held 100% by Encounter Resources</p> <p>This tenement is contained completely within Aboriginal Reserve land where native title rights are held by the Parna Ngururpa.</p> <p>No historical or environmentally sensitive sites have been identified in the work area.</p>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Prior to Encounter Resources, no previous on ground exploration has been conducted on the tenement other than government precompetitive data.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation</i>	The Aileron project is situated in the Proterozoic West Arunta Province of Western Australia. The geology of the area is poorly understood due to the lack of outcrop and previous exploration. The interpreted geology summarises the area to be Paleo – Proterozoic in age and it is considered prospective for IOGC style and carbonatite-hosted REE deposits.
<b>Drill hole information</b>	<p><i>A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>• <i>Easting and northing of the drill hole collar</i></li> <li>• <i>Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</i></li> <li>• <i>Dip and azimuth of the hole</i></li> <li>• <i>Down hole length and interception depth</i></li> <li>• <i>Hole length</i></li> </ul>	No new drilling is being reported in this announcement

Criteria	JORC Code explanation	Commentary
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<b>Data aggregation methods</b>	<i>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.</i>	No new drilling is being reported in this announcement
	<i>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.</i>	No new drilling is being reported in this announcement
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No new drilling is being reported in this announcement
<b>Relationship between mineralisation widths and intercept lengths</b>	<i>These relationships are particularly important in the reporting of exploration results. If the geometry of the mineralisation 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').</i>	No new drilling is being reported in this announcement
<b>Diagrams</b>	<i>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.</i>	No new drilling is being reported in this announcement
<b>Balanced Reporting</b>	<i>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.</i>	No new drilling is being reported in this announcement
<b>Other substantive exploration data</b>	<i>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 characteristics; potential deleterious or contaminating substances.</i>	No other meaningful and material results to report
<b>Further Work</b>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large – scale step – out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	The targets will be refined and prioritised in the coming months with diamond or RC drilling targeted to commence in April-June 2023.