

Targets defined for April 2023 diamond drilling - West Arunta

- Three priority geophysical targets at Aileron have been modelled with diamond drilling to commence in April 2023. The initial program will include:
 - Caird – ‘bullseye’ coincident magnetic and density anomaly 5km north-west of the Luni mineralised carbonatite discovery (ASX:WA1)
 - Crean – regional scale magnetic anomaly with an offset gravity anomaly similar to the Prominent Hill IOCG deposit
 - Worsley – the region’s standout magnetic and coincident gravity anomaly with anomalous Cu, Au, Mo, Nb and REE (up to 0.8%) in prior incomplete drillhole EAL0001
- 3,300 line km airborne Falcon gravity survey will be completed in May 2023 to extend detailed gravity over the entire project.
- Diamond drilling commencing in April 2023, co-funded by the Exploration Incentive Scheme

Encounter Resources Ltd (“Encounter”) is pleased to announce that geophysical modelling has refined targets for drilling to commence in April 2023 at the Aileron Cu-REE project (100% ENR) in the West Arunta region of WA.

Commenting on the upcoming drilling, Encounter Managing Director Will Robinson said: “Encounter has completed major gravity, magnetics and radiometric surveys at Aileron. These surveys have defined three priority drill targets. The Crean, Worsley and Caird targets are exceptional, large scale magnetic and gravity anomalies in an unexplored emerging critical minerals province.

These anomalies have similar geophysical characteristics to the IOCG deposits in South Australia, such as Prominent Hill, and the recently discovered mineralised carbonatites in the West Arunta. The drill targets have been modelled as sub-vertical features at explorable depth. Diamond drilling will commence in April 2023.”

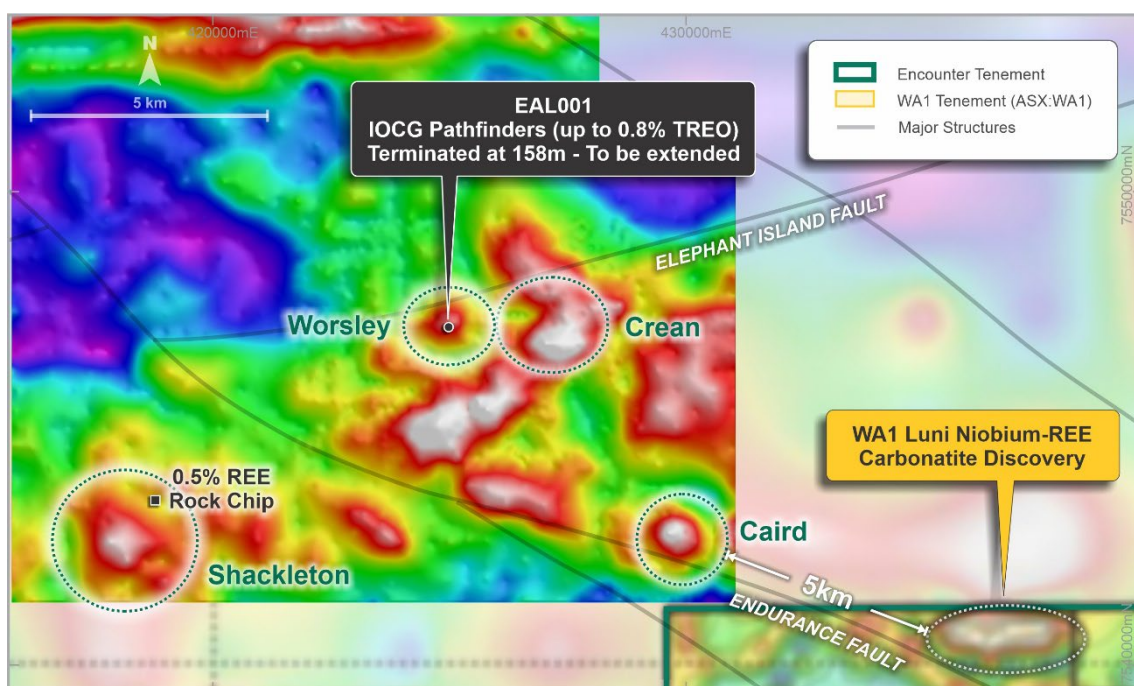


Figure 1 - Residual gravity image with interpreted structures and targets to be drilled commencing April 2023 in the western part of >100km long Aileron project ^{1,2,3}

Background

Aileron is located in the West Arunta region of WA ~600km west of Alice Springs. 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 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 copper-gold-REE in the first hole at Aileron and the recent mineralised carbonatite discoveries by 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.

Encounter completed large gravity, magnetic and radiometric surveys at Aileron during 2021 and 2022. These surveys have defined three priority drill targets for 2023: Caird, Crean and Worsley.

Caird

Caird is a 'bullseye' coincident magnetic and density anomaly on the Endurance fault, 5km north-west of WA1's recent mineralised carbonatite discovery at Luni (see Figure 1).

Geological reconnaissance noted that the gravity high was covered by aeolian sand and was surrounded by a semi-circular series of low lying ferruginous duricrust hills.

Gravity and magnetic modelling have defined the first hole to test Caird (see Figure 2). Additional drill sites have been heritage cleared for follow up drilling.

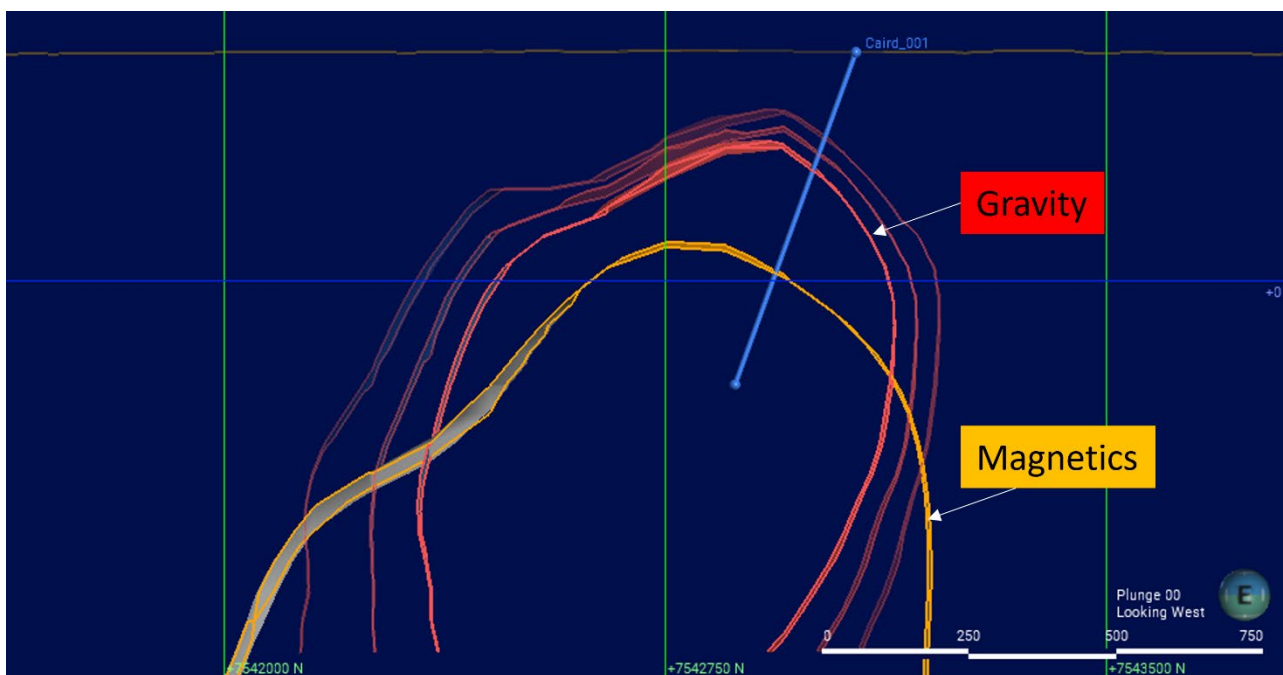


Figure 2 – Caird modelled gravity and magnetic shells with first drill hole location.

Crean

Crean is a regional scale magnetic anomaly at a key structural location on the major Elephant Island fault which has an offset gravity anomaly, a similar geophysical footprint to the Prominent Hill IOCG deposit in South Australia.

Two holes will be drilled to test both the magnetic and gravity anomalies at this target.

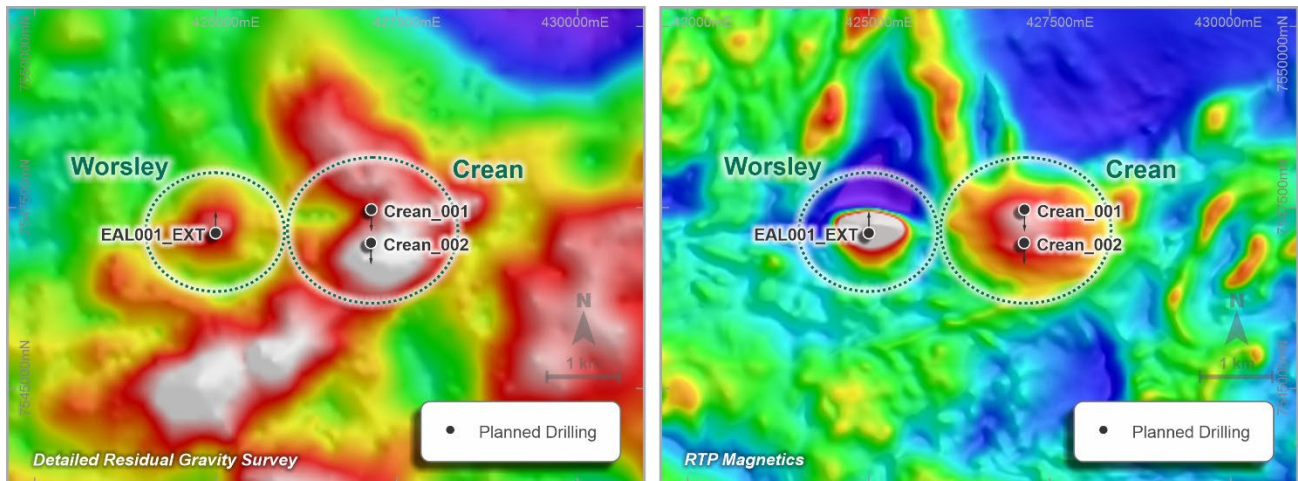


Figure 3 - Worsley (L) and Crean (R) diamond drill hole locations over residual gravity and RTP magnetics

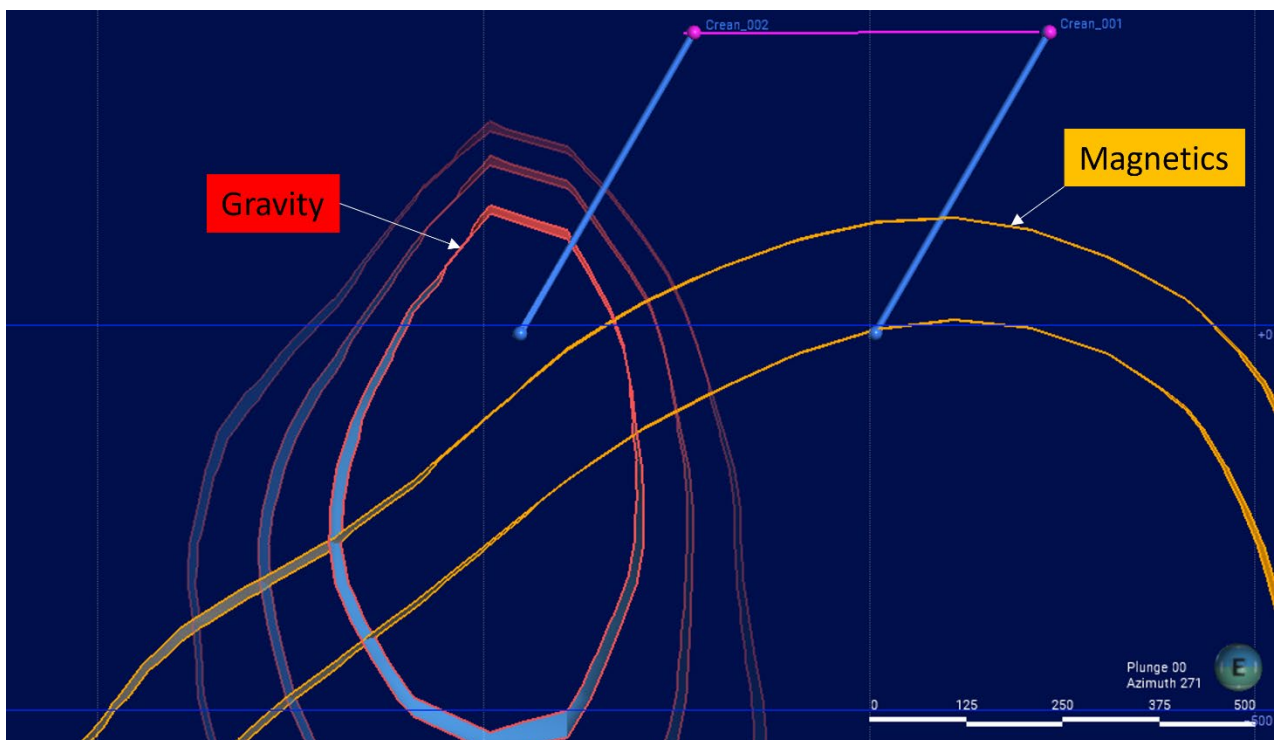


Figure 4 – Crean modelled gravity and magnetic shells with drill hole locations

Worsley

Worsley is the region's standout magnetic and coincident gravity anomaly. The upcoming diamond drill program will extend drill hole EAL0001 that was terminated at a depth of 158m without testing the magnetic-gravity anomalies. EAL0001 was ineffective and ended prior to designed depth due to a mechanical failure on the drill rig. Assay results later confirmed highly anomalous Cu, Au, Mo, Nb and REE (up to 0.8%) in the top of the hole.

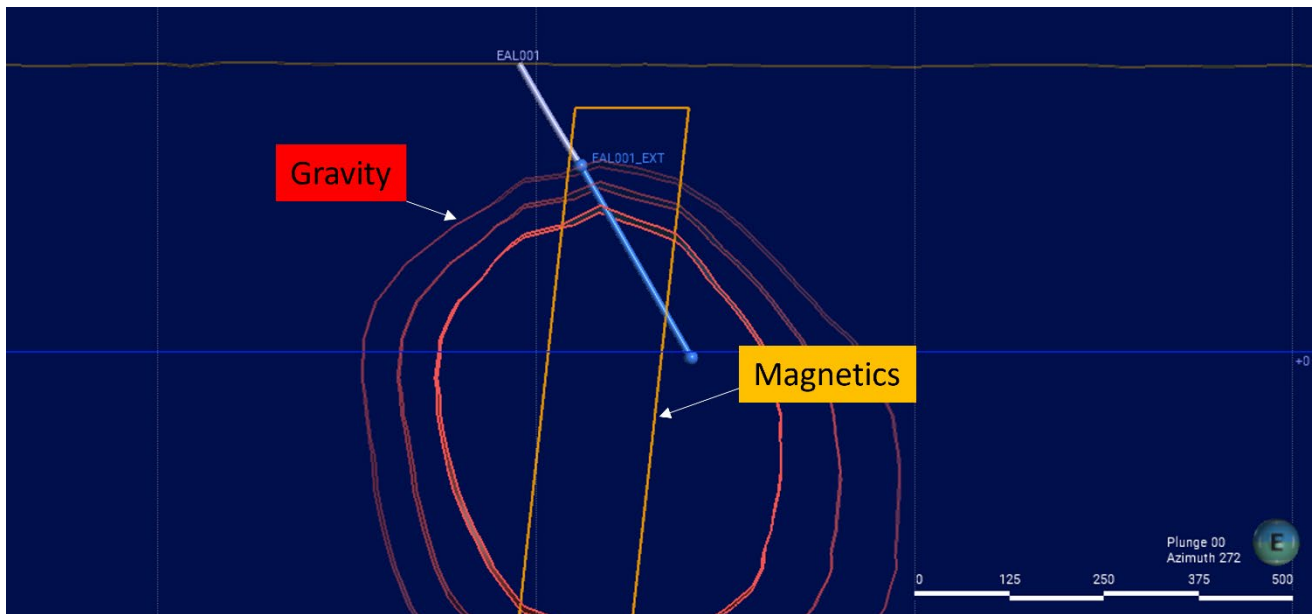


Figure 5 - Worsley cross section with coincident gravity anomaly (shown as isosurfaces) and modelled magnetic plate with incomplete diamond drill hole EAL001 which will be extended in April 2023

Upcoming Activity

Diamond drilling at Caird, Crean and Worsley will commence in April 2023.

In addition, a track will be established to the Shackleton target located ~12km west of Caird. Shackleton is a gravity anomaly over which no outcrop was identified during geological reconnaissance. In the northern part of Shackleton there is a low lying quartzite outcrop, containing iron alteration where a single reconnaissance rock chip sample of the iron rich material returned 0.5% REE. Geological mapping and systematic geochemical sampling are planned at Shackleton in April-June 2023.

A 3,300 line km airborne Falcon gravity survey will be completed in May 2023 to extend detailed gravity over the entire project. This 300m spaced survey will be a fundamental dataset for the targeting of IOCG and carbonatite-hosted REE deposits in the West Arunta.

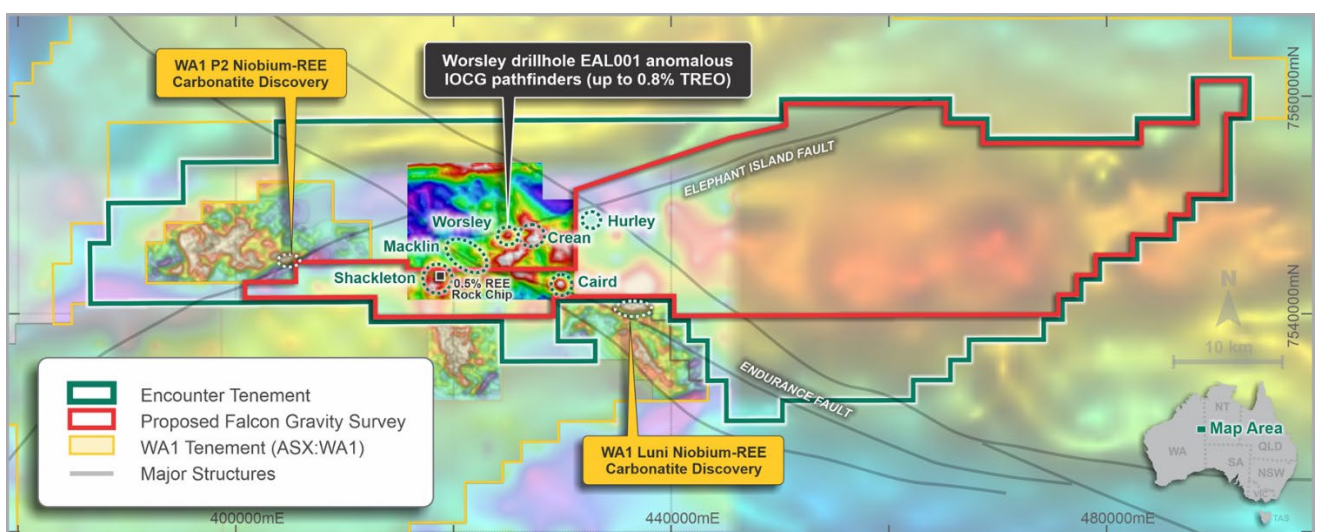
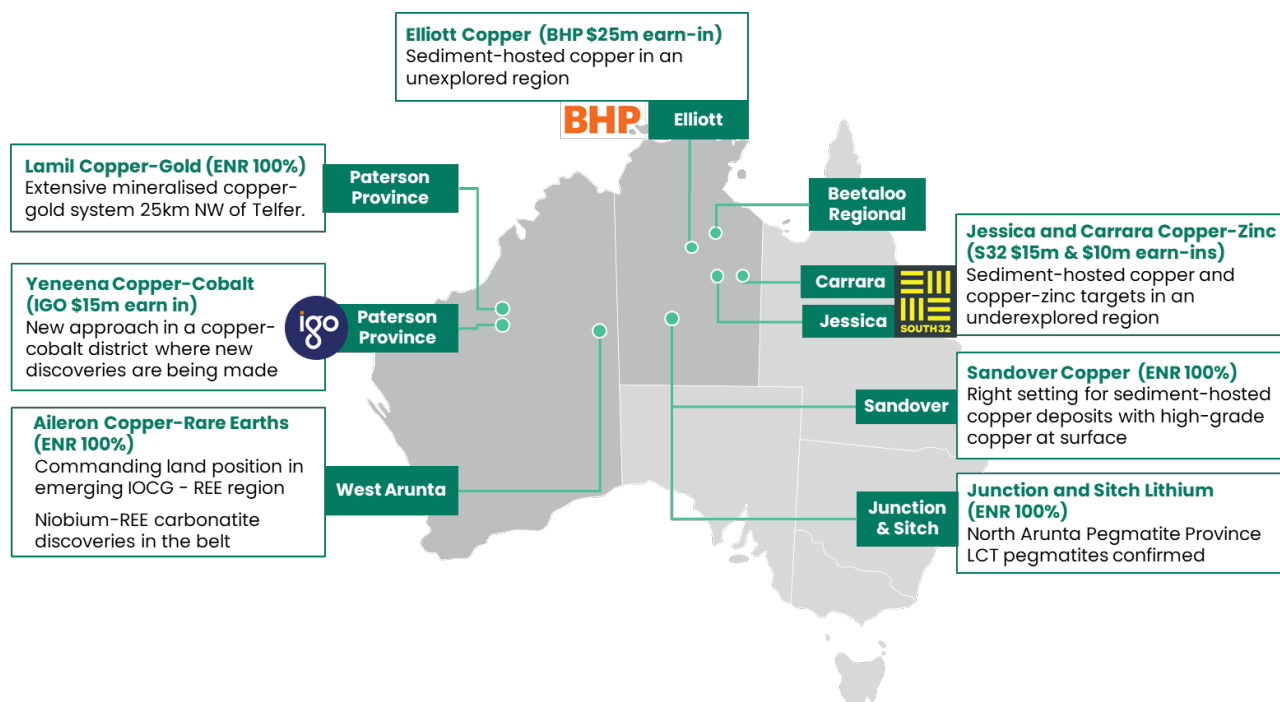


Figure 6 - Aileron project – Area of planned Falcon gravity survey overlaid on regional gravity data

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 controls a large portfolio of 100% owned projects in Australia's most exciting mineral provinces that are prospective for copper, rare earths and lithium. Complementing this, Encounter has numerous large scale copper projects being advanced in partnership and funded through farm-in agreements with leading miners: BHP, South32 and IGO. Encounter's assets include:

100% ENR Projects

Aileron Copper-Rare Earths Project - WA

- Targeting IOCG style copper and carbonatite-hosted REE mineralisation
- Falcon airborne gravity survey May 2023
- Diamond drilling commencing April-June 2023

Sandover Copper Project - NT

- Outcropping shale units that contain copper mapped for >20km
- Major gravity survey completed at Sandover, planning for 2023 drilling

Junction Lithium Project - NT

- Highly anomalous lithium & critical minerals
- Confirmed LCT pegmatites

Lamil Copper-Gold Project - Paterson Province WA

- High-grade copper-gold reefs, up to 6.5% copper and 21.5g/t gold, intersected in Sep 2022

Copper Farm-in Partners

\$7m invested by partners on ENR projects in 2022

Elliott Copper Project - NT

(up to \$25m farm-in funding)



- 2 diamond drill holes (1,655m) Nov 2022
- Awaiting geochemical and petrophysical results for both holes

Jessica and Carrara Projects - NT

(up to \$25m farm-in funding)



- Diamond drilling commencing May 2023
 - 4 holes (3,500m) at Jessica
 - 3 holes (3,000m) at Carrara

Yeneena Project - Paterson Province WA

(up to \$15m farm-in funding)



- 2022 diamond drill program included:
 - 6 diamond holes (3,988m)
 - Seismic survey and airborne geophysics

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¹ refer ASX release 28 January 2021

² refer ASX release 14 February 2022

³ refer ASX release by WA1 – 16 November 2022

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
Sampling techniques	<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 magnetic 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 & 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> <p>A helicopter supported 400m spaced gravity survey was completed at Aileron by Atlas Geophysics.</p> <p>In addition, 200m spaced gravity infill data was collected to cover a series of high priority magnetic targets including the Caird target at Aileron.</p> <p>At each station, the gravity operator took a minimum of two gravity readings of 15 or 20 second duration so that any seismic or wind noise could be detected. Control station readings were set to 60 second duration. Before taking the reading, the operator ensured that the instrument tilt-reading was restricted to less than 5 arc-seconds and after the reading, not higher than 20 arc-seconds. Tilt-testing prior to project commencement showed that the gravity meters performed well even at extreme tilts (better than 0.05 $\mu\text{m/s}^2$ at +150/-150 arc-seconds).</p> <p>A helicopter supported 400m spaced gravity survey was completed in 2021. In addition, 200m spaced gravity infill data was collected to cover a series of high priority magnetic targets at Aileron.</p>
Drilling techniques	<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>
Drill sample recovery	<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>
Logging	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level</i></p>	<p>No new drilling is being reported in this announcement</p>

of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.

Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.

The total length and percentage of the relevant intersections logged

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.

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.

No new drilling is being reported in this announcement

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.

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.

Gravity data were acquired concurrently with GNSS data using two Scintrex CG-5 gravity meters and two Scintrex CG-6 gravity meters. Data were acquired in single shifts of up to ten hours duration, with each shift consisting of a single loop controlled by observations at the gravity control station.

At each station, the gravity operator took a minimum of two gravity readings of 15 or 20 second duration so that any seismic or wind noise could be detected. Control station readings were set to 60 second duration. Before taking the reading, the operator ensured that the instrument tilt-reading was restricted to less than 5 arc-seconds and after the reading, not higher than 20 arc-seconds. Tilt-testing prior to project commencement showed that the gravity meters performed well even at extreme tilts (better than 0.05 $\mu\text{m/s}^2$ at +150/-150 arc-seconds).

Each loop contained a minimum of two repeated readings so that an interlocking network of closed loops was formed. A total of 10.09% repeats were acquired for quality control purposes. Repeat readings were evenly distributed on a time-basis throughout each of the gravity loops.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Data was reviewed by Geophysical field contractors and Terry Hoschke on completion of the survey.
	<i>The use of twinned holes.</i>	Terry Hoschke then processed the final data and returned a range of gravity and magnetic products to Encounter in the form of images and isoshells which are stored on Encounter's servers.
	<i>Documentation of primary data, data entry</i>	

procedures, data verification, data storage (physical and electronic) protocols.

Discuss any adjustment to assay data.

The field gravity observations have been processed using standard formulae and constants as documented in the completion report to produce a Bouguer Anomaly for each gravity station.

Location of data points

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.

Specification of the grid system used.

Quality and adequacy of topographic control.

Magnetic Survey: 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.

Gravity Survey: Dual-frequency Leica Geosystems GPS1200 GNSS receivers have been utilised on the project to allow for post-processed kinematic (PPK) centimetre level accuracy 3D positions

Final position coordinates were established for all control stations, and this allowed all position and height information obtained from the gravity survey to be tied to the Geocentric Datum of Australia (GDA94) and Australian Height Datum (AHD), calculated using AusGeoid09.

Dual-frequency Leica Geosystems GPS1200 GNSS receivers have been utilised on the project to allow for post-processed kinematic (PPK) centimetre level accuracy 3D positions

Data spacing and distribution

Data spacing for reporting of Exploration Results.

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.

Whether sample compositing has been applied.

Line spacing of the magnetic airborne survey is 100m which is considered appropriate for the level of geological and structural interpretation that was completed.

Gravity Stations were 400m spaced.

More detailed 200m spaced stations were collected covering a series of high priority magnetic targets at Aileron including the Caird target.

Mineralisation 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.

Orientation of data in relation to geological structure

Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.

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.

Line spacing of the magnetic airborne survey is 100m which is considered appropriate for the level of geological and structural interpretation that was completed.

The gravity data was collected 400m spaced and lines with infill to 200m covering a series of high priority magnetic targets at Aileron including the Caird target.

Sample security

The measures taken to ensure sample security.

No new drilling is being reported in this announcement

Audits or reviews

The results of any audits or reviews of sampling techniques and data.

No audits have been conducted however the data was reviewed by Geophysical contractors and Terry Hoshke on completion of the survey.

SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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 Ngurrpa.</p> <p>No historical or environmentally sensitive sites have been identified in the work area.</p>
Exploration done by other parties	<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.
Geology	<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 carbonate-hosted REE deposits.
Drill hole information	<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"> • <i>Easting and northing of the drill hole collar</i> • <i>Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</i> • <i>Dip and azimuth of the hole</i> • <i>Down hole length and interception depth</i> • <i>Hole length</i> 	No new drilling is being reported in this announcement
Criteria	JORC Code explanation	Commentary
Data aggregation methods	<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
Relationship between mineralisation widths and intercept lengths	<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
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any</i>	No new drilling is being reported in this announcement

	<i>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>	
Balanced Reporting	<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
Other substantive exploration data	<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
Further Work	<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 have been prioritised with diamond or RC drilling targeted to scheduled to commence in April 2023.