

## Diamond drill program expanded at Aileron - West Arunta

- Final data from the Falcon airborne gravity survey has been received. This has enhanced and clarified targets identified within the +100km wide Aileron copper-gold-critical minerals project in the West Arunta.
- The gravity survey has refined a suite of structurally complex anomalies immediately north of the Luni discovery by WA1 Resources Ltd (ASX: WA1). A series of RC drill traverses are planned to test these targets between August and October 2023 along with additional RC drilling at Caird, Crean and Worsley.
- In addition, three significant gravity anomalies in the eastern part of Aileron ("Eastern Gravity Anomalies") have been prioritised:
  - Mawson and Perce are discrete, high amplitude (~6 mGal) anomalies that potentially outline alkaline/carbonatite intrusions or hematite alteration prospective for IOCG mineralisation
  - Wordie is a circular density feature, with significant internal complexity located on a major regional structure, interpreted as a potential alkaline/carbonatite intrusive body
- The planned four hole diamond drill program is progressing and has been expanded to five holes with a third diamond hole added to the program at Crean. Assay results from six RC pre-collar holes from Caird and Crean are expected later in June 2023.

Encounter Resources Ltd ("Encounter") is pleased to announce that the final project-wide Falcon airborne gravity survey has refined and enhanced the large scale targets at the Aileron copper-gold-critical minerals project (100% ENR) in the West Arunta region of WA.

**Commenting on the final survey results, Encounter Managing Director Will Robinson said:**

*"The project wide Falcon gravity survey provides a fundamental dataset to target IOCG and carbonatite-hosted critical mineral deposits in the West Arunta region.*

*The survey area north of the Luni discovery by WA1 Resources, has resolved into a suite of structurally complex density anomalies interpreted as potential alkaline intrusions. These features will be tested in an RC drill program planned for August-October 2023 along with additional drilling at Caird, Crean and Worsley.*

*Further east, three standout density features have been prioritised as highly prospective for carbonatite-hosted critical minerals and base metals with surface geochemistry, and possibly RC drilling, planned for later in 2023"*

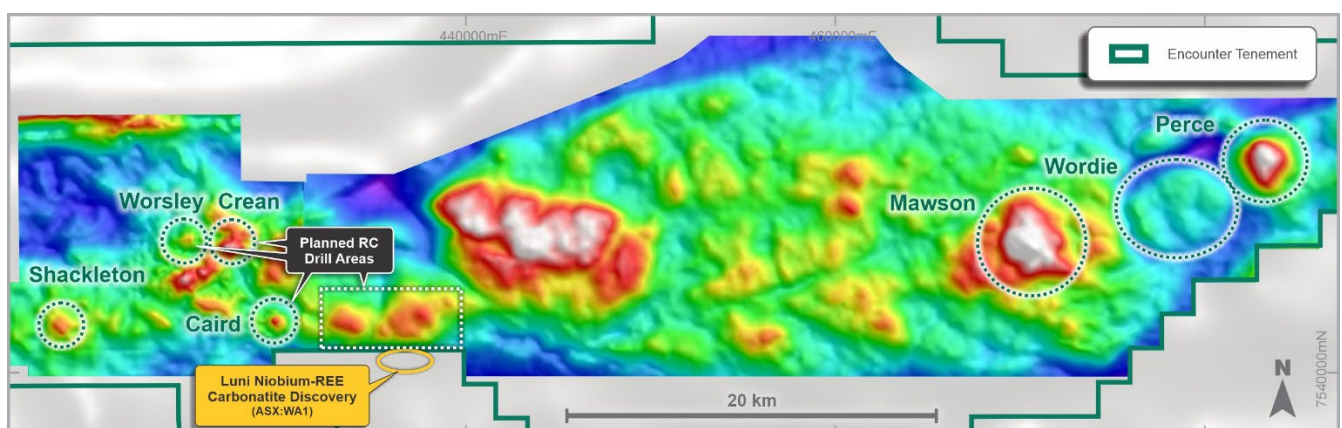


Figure 1 – Aileron Falcon gravity survey has highlighted a number of high priority targets

### Planned RC Drill Program

The final Falcon gravity survey has refined and enhanced a suite of structurally complex density anomalies immediately north of the Luni discovery by WA1. Following completion of a heritage survey, an RC drill program is planned between August and October 2023 to include:

- testing of the density targets identified north of Luni;
- additional pattern RC drilling at the Caird, Crean and Worsley targets; and
- initial RC drilling at the Eastern Gravity Anomalies.

### Eastern Gravity Anomalies

The Eastern Gravity Anomalies are significant and have been prioritised for exploration:

- Mawson and Perce are discrete, high amplitude (~6 mGal) anomalies that could outline alkaline/carbonatite intrusions or hematite alteration prospective for IOCG mineralisation
- Wordie is a circular density feature about 6km in diameter with significant internal complexity. It is interpreted as a potential alkaline/carbonatite intrusive body

A heritage survey, that will include these high priority targets is scheduled for July 2023, with surface sampling and RC drilling planned.

### Diamond Drill Program Update

Diamond drilling is progressing at the exciting Caird, Crean and Worsley geophysical targets. The planned four diamond hole program is expected to be completed in June 2023 with a fifth diamond hole added to the program.

- Six RC pre-collar holes were completed at Caird and Crean to a depth of 80-90m. Diamond drill tails have been completed on three of the holes (one at Caird and two at Crean).
- Based on observations from drilling, a fifth diamond hole has now been added to the program to test a major fault corridor at Crean.
- The planned Worsley hole, started in a prior program but terminated at a depth of 158m due to a mechanical issue, has been re-entered and is being extended by diamond drilling to test the defined magnetic anomaly.

The first assays from the six RC pre-collar holes from are expected to be received in June 2023. Assays from the diamond holes are expected to be received in the September quarter 2023.

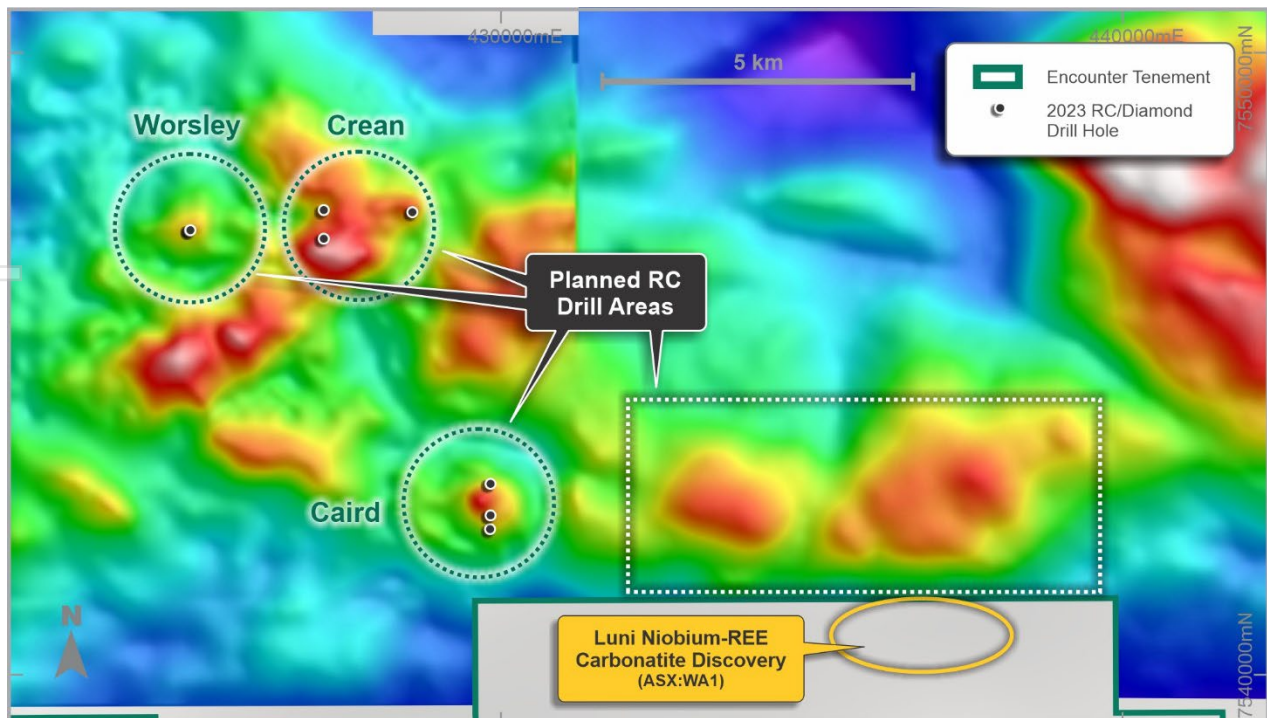
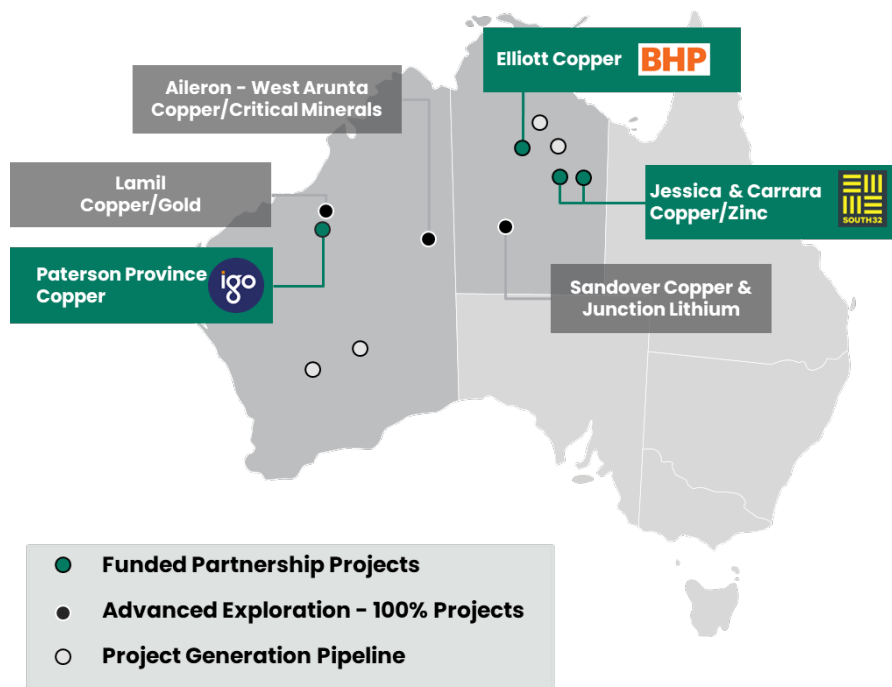


Figure 2 – Aileron drill locations over residual gravity. Caird, Crean and Worsley are currently being drilled. The area north of Luni is planned to be drilled between August and October 2023 along with additional RC drilling at Caird, Crean and Worsley.

## 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 copper-gold and carbonatite hosted critical minerals
- Falcon airborne gravity survey May 2023
- Diamond drilling May - June 2023

#### Sandover Copper Project - NT

- Outcropping shale units that contain copper mapped for >20km
- Gravity survey completed, diamond drilling program planned

#### Junction Lithium Project - NT

- Highly anomalous lithium & critical minerals
- Confirmed LCT pegmatites

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

- High-grade copper-gold reefs intersected

### Copper Farm-in Partners

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

#### Elliott Copper Project - NT

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



- Diamond drilling intersected a potential "first reductant" horizon in 2022
- Key target for sediment-hosted copper deposits

#### Jessica and Carrara Projects - NT

(ENR carried to Scoping Study)



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

#### Yeneena Project - Paterson Province WA

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



- Diamond drilling commencing June 2023
- 3 holes (2,000m) targeting high-value sediment-hosted copper

### 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 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.*

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## 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>Falcon Airborne Gravity Gradiometer System, including Lockheed Martin Airborne Gravity Gradiometer (AGG) with single near-vertical spin-axis, dual complement Gravity Gradiometer Instrument (GGI).</p> <p>A single-sensor magnetometer mounted on a stinger that will provide high precision magnetic data collection. In addition to the airborne magnetometer, a continuously-recording base station magnetometer will be located near the survey area in an area of low magnetic gradient, away from man-made influences.</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>

<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>No new drilling is being reported in this announcement</p>
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>	<p>Data processors complete daily Quality Control of each of the re-flight specifications (along with other quality indicators) and produce a range of QC products for quality control monitoring.</p> <p>A bi-weekly QC Processing Report is provided to the Company, and presents a wide range of data quality measures, along with progressive images of flight path (planned and realized), DTM, GDD, GD in a spreadsheet format.</p> <p>The data is analyzed to verify turbulence, speed, position and noise for each data stream and any lines found to exceed specified tolerances are noted for possible reflight.</p> <p>All reported data passed QAQC checks, and no lines required re-flights.</p>
Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Data was reviewed by Xcalibur Multiphysics field contractors and Terry Hoschke (contract geophysicist) on completion of the survey.</p> <p>Terry Hoschke then processed the data and returned a range of gravity and magnetic products to Encounter in the form of registered images which are stored on Encounter's servers.</p>
<b>Location of data points</b>	<p><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></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Dual frequency phase measurement GPS system suitable for real-time position accuracy of 5m and post-processed accuracy of 1m and a GPS ground station for phase-smoothed pseudo-range differential correction of flight position data.</p>
<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</i></p>	<p>Line spacing of the Falcon airborne gravity survey is 300m which is considered appropriate for the level of</p>

*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.*

geological and structural interpretation that was completed. Flight line direction of the survey was east-west.

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 Airborne Falcon gravity survey is 300m which is considered appropriate for the level of geological and structural interpretation that was completed.

#### **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 the Xcalibur Multiphysics contractors and Terry Hoschke (contract geophysicist) on completion of the survey and passed all QAQC checks.

## **SECTION 2 REPORTING OF EXPLORATION RESULTS**

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<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 IOCG style and carbonate-hosted critical mineral 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> </ul>	No new drilling is being reported in this announcement

- Down hole length and interception depth
- Hole length

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 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
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>	Interpretation and further modelling of the data will be completed. Planned exploration to include surface geochemistry and drilling.