AEM Survey Defines Priority Targets at Aileron

Encounter Resources (ASX: ENR) ('Encounter' or **'the Company')** is pleased to announce that a high-resolution regional airborne electromagnetic (AEM) survey has delivered new priority drill targets at the Aileron Project in the West Arunta region.

Key Highlights:

- **3,953 line km helicopter-borne electromagnetic (AEM) survey completed**
- **AEM survey has successfully mapped the Green carbonatite complex with major regional targeting implications**
- **Shallow conductors along regional faults identified as priority targets for new niobium-REE mineralised carbonatites**
- **Coincident AEM/magnetic anomaly at the Scott prospect, defined as a priority copper-gold target, scheduled for diamond drilling in October 2025**

Executive Chairman, Will Robinson, comments:

"The AEM survey has delivered a step-change in our targeting at Aileron. It has mapped the Green carbonatite complex in detail and clearly outlines the Green Niobium-REE deposit and the recent 1.5km extension of the carbonatite complex.

Green provides a powerful template that can be applied systematically across the project to accelerate the discovery of new resources. Several similar EM features, along key regional structures, are prime targets for new zones of high-grade, near-surface niobium-REE mineralisation.

The survey has also defined an EM anomaly at the Scott Prospect, coincident with a major magnetic anomaly on a key regional structure. This is considered a high-priority copper-gold target, with diamond drilling at Scott scheduled for October 2025."

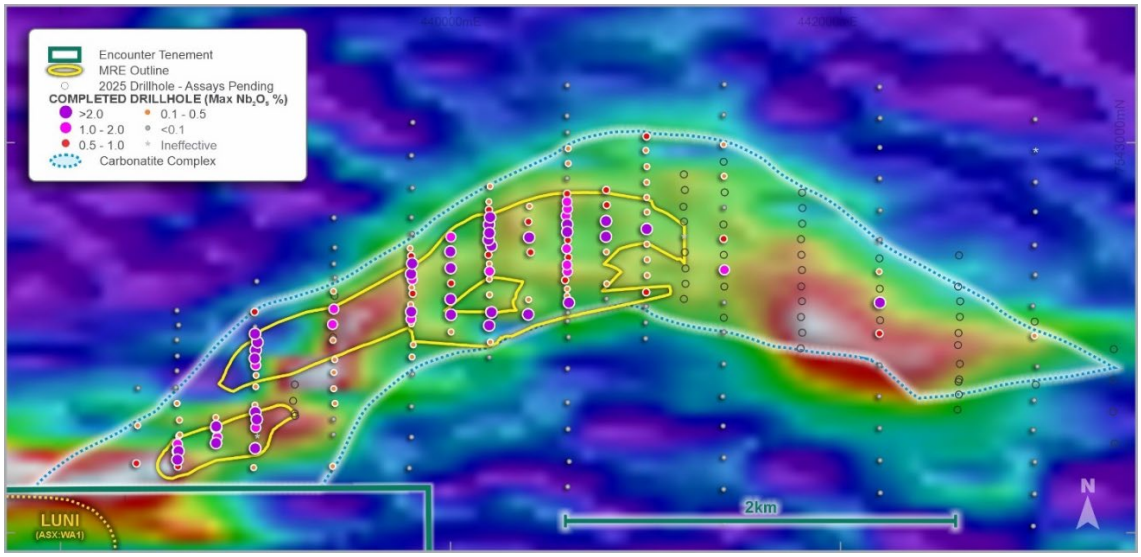

Figure 1 – Green Prospect - AEM - Layered Earth Inversion (LEI) DS55 showing arcuate conductive feature coincident with the outline of the weathered carbonatite complex (from geological logging) and MRE [2,3]

High-Resolution Airborne EM Survey Completed at Aileron

Encounter has completed a 3,953km² helicopter-borne electromagnetic (EM) survey at Aileron, flown with the Xcite™ time-domain EM system on 300m line spacing. The survey was co-funded by the WA Government Exploration Incentive Scheme (EIS) ($250,000). The program followed earlier interpretation of Geoscience Australia's *Exploring for the Future* dataset (20km line spacing) and delivers a step-change in data resolution across the project.

This high-quality regional dataset will be used to:

- Identify basement conductors that may host copper-sulphide mineralisation;
- Map zones of deeper weathering, highlighting preferentially weathered carbonatites prospective for high-grade niobium and REE mineralisation; and
- Delineate groundwater resources to support future development activities.

Niobium-REE carbonatite targeting

Carbonatite discoveries to date confirm that the major fault systems within Encounter's tenure act as mantle-tapping conduits for mineralised carbonatite magmas. High-grade zones typically form at structural intersections and flexures, which are the key focus of regional exploration.

The major regional structures, including the Elephant Island and Weddell Fault, have been further refined by the AEM survey. Importantly, the AEM has successfully mapped the Green carbonatite complex enrichment zone (Figure 1). This has significant regional targeting implications with near-surface conductors along the major regional structures, high-priority targets for future drilling (see Figure 2).

A number of these priority AEM features have been added to the ongoing regional aircore program for drill testing in the coming months.

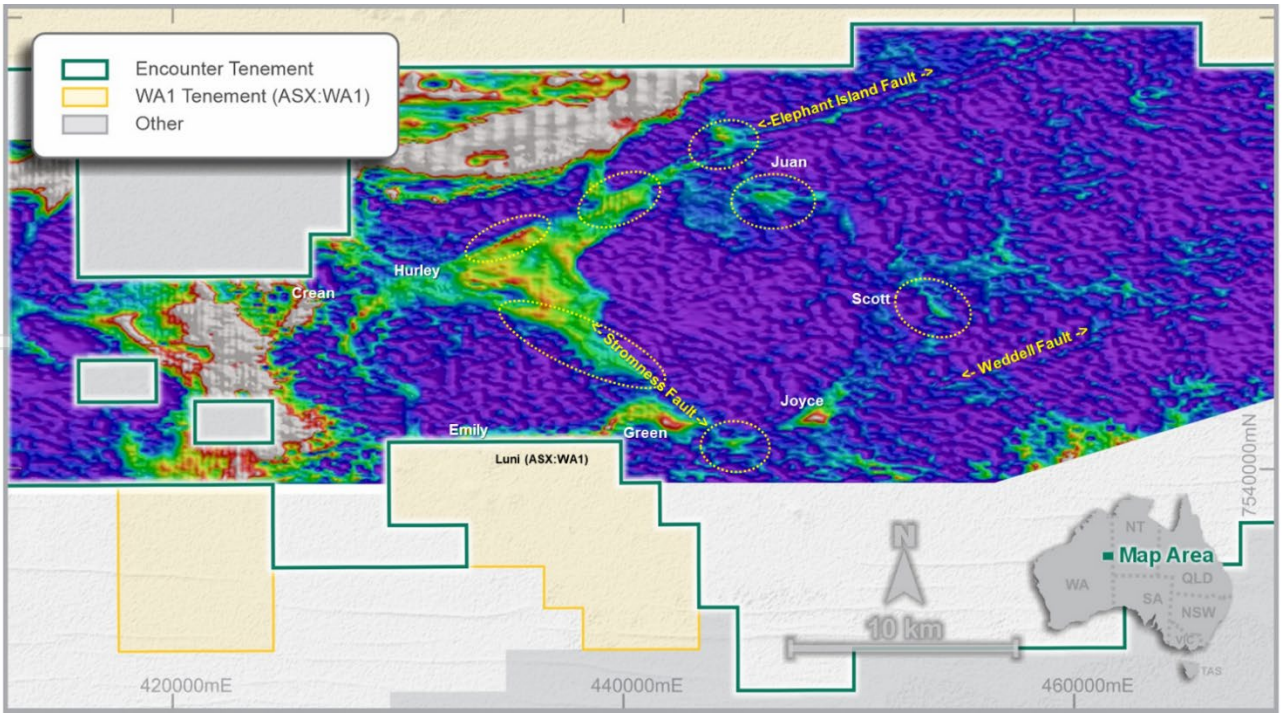

Figure 2 – Aileron AEM - Layered Earth Inversion (Depth Slice 55 metres below surface) – showing new EM targets on the regional faults

Conductive features for potential copper sulphide mineralisation

Structural intersections and flexures are also prospective for other intrusive-related mineralisation such as IOCG-style copper-gold systems.

In 2022, geochronology from drillhole EAL001 at Aileron confirmed magmatic rocks of a similar age to those in the Gawler Craton, South Australia, which hosts Olympic Dam and other large-scale IOCG deposits[1].

A regional magnetic feature within these magmatic rocks that extends from Juan to Scott has been identified as a priority regional anomaly for copper exploration.

The AEM survey has highlighted a compelling shallow conductive feature, coincident with the significant magnetic anomaly, at the Scott Prospect (Figures 2 & 3). This is an outstanding copper-gold target scheduled for EIS-supported diamond drilling in October 2025.

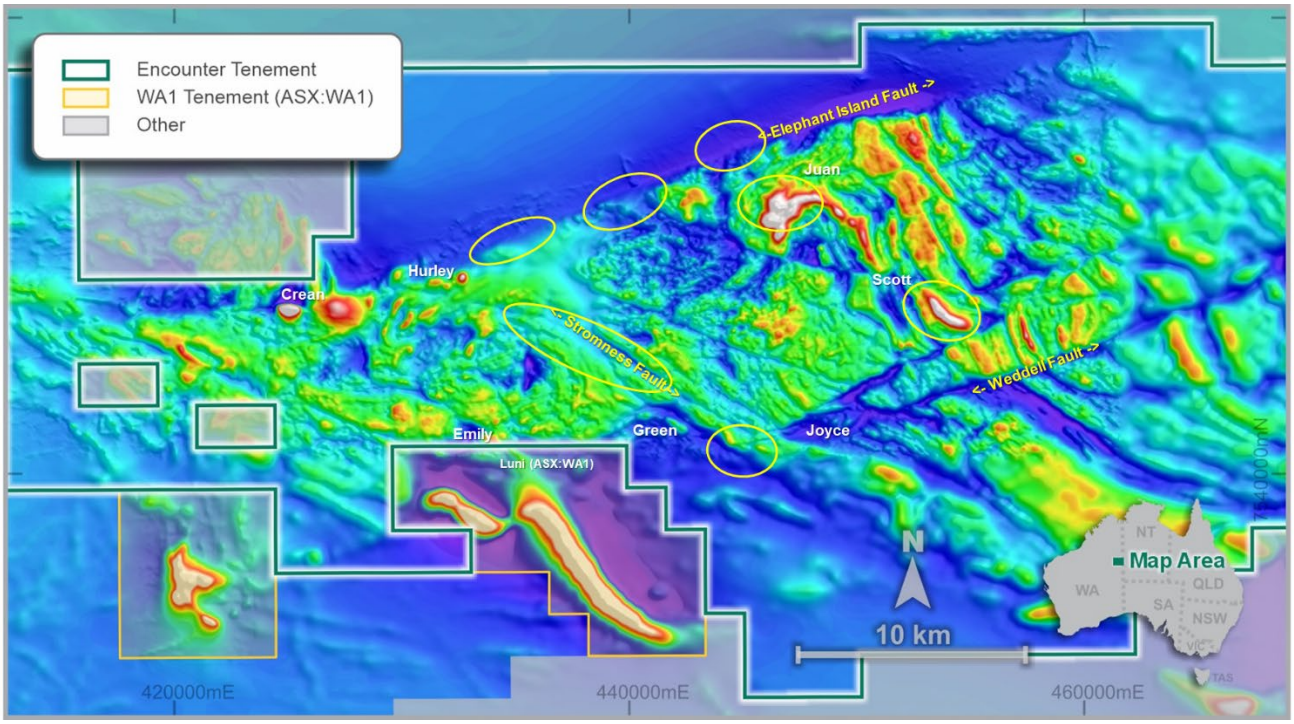

Figure 3 – Magnetics - showing coincident magnetic/AEM anomalies at Scott and Juan copper prospects [4]

Next Steps

The new AEM dataset is being integrated with existing geophysical information, with regional targets to be re-ranked and prioritised. Several of the AEM targets interpreted as potential weathered carbonatites will be drill tested with aircore drilling in the coming months, providing an initial test of this new dataset.

At the Scott Prospect, the coincident magnetic/AEM target is scheduled for diamond drilling in October 2025.

[1] ENR ASX announcement 25 August 2022
[2] ENR ASX announcement 24 March 2025
[3] ENR ASX announcement 1 September 2025
[4] ENR ASX announcement 27 October 2022

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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.

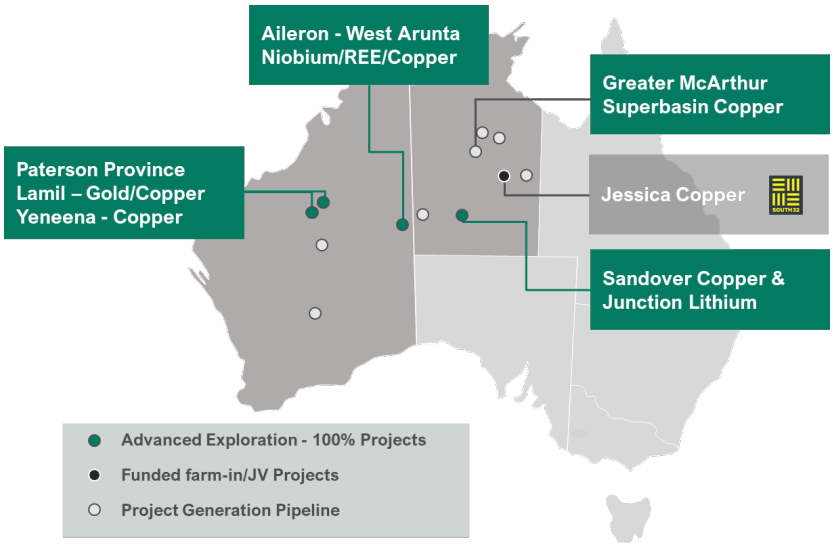
About Encounter

Encounter Resources (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, which is emerging as a significant frontier for critical mineral exploration.

The Aileron Project includes a JORC 2012-compliant Inferred Mineral Resource of 19.2 million tonnes at 1.74% Nb_2O_5, highlighting its potential as a world-class critical minerals province.

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



Deposit	0.25% Nb_2O_5 cut-off						
	Tonnage (Mt)	Nb_2O_5 (%)	Nb_2O_5 (kt)	TREO (%)	TREO (kt)	P_2O_5 (%)	P_2O_5 (kt)
Green	48.0	0.81	387	0.36	172	6.04	2,899
Emily	13.9	0.93	130	0.32	45	7.44	1,035
Crean	5.7	1.38	78	0.84	48	7.42	423
Total	**67.6**	**0.88**	**595**	**0.39**	**265**	**6.44**	**4,357**
Deposit	**1.0% Nb_2O_5 cut-off (subset of 0.25% Nb_2O_5 cut-off)**						
	Tonnage (Mt)	Nb_2O_5 (%)	Nb_2O_5 (kt)	TREO (%)	TREO (kt)	P_2O_5 (%)	P_2O_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

Notes:

- *The resource is constrained within optimised pit shells based on a price of US$45 per kilogram Nb (US$30/kg FeNb) and is reported above a 0.25% Nb_2O_5 cut-off grade. Refer ENR announcement 14 May 2025.*
- *The resource reported above a 1% Nb_2O_5 cut-off grade is a subset of the 0.25% Nb_2O_5 cut-off grade.*
- *All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.*

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 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.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used* *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*	New Resolution Geophysics "NRG" carried out a high resolution Xcite™ time domain electromagnetic and magnetic survey at the Aileron project during July 2025. A total of 3953line KMs was flown. Layered Earth Approximation (GALEI) Conductivity Depth Images were produced by NRG for all lines. Survey specifications below Survey type: Xcite HDTEM and Magnetic Platform: Airbus AS350B3 Equipment specs: Magnectic configuration: Towed Bird Data acquisition type: NRG DAS II Sensor type: Single Geometrics G822A Electromagnetic system: Xcite Concentric Tx-Rx GPS: Novatel DL-V3L1L2 Differential correction: Post Processed Radar altimeter: Free Flight Sample rates: Magnetic: 20 Hz GPS: 20 Hz Radar altimeter: 20 Hz Electromagnetic: Streamed Survey Parameters: Traverse line spacing: 300 m Traverse line orientation: 0 Degrees Flight Height: EM Sensor: 30 - 40 Metres Magnetic Sensor: 30 - 40 Metres **Xcite™ Waveform** Base Frequency [Hz]: 25.0 Peak Current: 280 A Peak Dipole Moment: 300, 000 NIA Zero time: 5.4336 m Equipment and data sampling specifications as per below.

Electromagnetic System	
Type	Xcite™
Sensor Configuration	Coincident Tx-Rx
Weight	~450 kg
Structure	Fully inflatable frame
Aircraft Type	AS350B Series
Engine Type	Turbine
Fuel Type	JetA1
Transmitter	
Diameter	18.4 m
Number of turns	4
Current	280 A
Dipole Moment	300,000 NIA
Base Frequency	25Hz
Waveform	Nominal square wave – typically 5.4 mS ontime
Receiver	
Diameter	0.613 m (effective) (X), 1.0 m (Z)
Number of turns	200 (X), 100 (Z)
Orientation	X & Z axis
Configuration	Concentric to Tx
Recording	Digitally at 625 kbps
Time gates	Extracted from streamed data – Typically 24 gates
Time gate windows	0.04 ms to >11 ms
Measurements	dB/dT & integrated B-field
Acquisition System	
Type	NRG RDAS II
CPU	Dual Core ARM 1.5 Ghz
Operation Temperature	-10 to 65 Degrees C
Standard Sampling Rate	20 Hz (capable of >1 kHz)
GPS Positioning	
Type	Novatel DL-V3L1L2
Differential Correction	Post Processed
Code Tracked	C/A
Number of Satellites	12

		Magnetometer Counter
		Type: NRG RDAC II
		Internal System Noise: <0.0001 nT
		Adc Inputs: 24
		Magnetometer Inputs: 4
		Recording Rate: 20 Hz (capable of >1 kHz)
		Magnetometer Sensor
		Type: Single Geometrics G822A
		Measurement Range: 15 000 – 105 000 nT
		Gradient Tolerance: 40 000 nT/m
		Operating Temperature: -40 to +50 Degrees C
		Recording Rate: 20 Hz (capable of >1 kHz)
		Radar Altimeter
		Type: Free Flight
		Operating range: 0 - 762 m
		Accuracy 0 - 10 m: +-0.3m
		Accuracy 10 - 762 m: +-0.5m
		Recording rate: 20 Hz (capable of >1kHz)
		Base Station Magnetometer
		Type: NRG VER 2
		Manufacturer: NRG Engineering
		Range: 15 000 to 105 000 nT
		Sensitivity Recording Rate: 0.0006 nT √Hz RMS 1 Hz
		Laser Altimeter
		Type: SF11/C (Loop) and SF00(Heli)
		Range: 0 – 60 m and 0 – 250m
		Resolution: 1cm
		Recording rate: 20 Hz (capable of >1kHz)
		Field Data Verification System
		Processing Software Platforms: Geosoft Oasis Montaj and Proprietary Software

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, 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).*	No new drilling is being reported in this announcement.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed* *Measures taken to maximise sample recovery and ensure representative nature of the samples* *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*	No new drilling is being reported in this announcement
Logging	*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.*	No new drilling is being reported in this announcement

	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.*	All reported data passed QAQC checks

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	Data was reviewed by NRG contractors and Terry Hoschke (contract geophysicist) on completion of the survey. Terry Hoschke then returned image products to Encounter in the form of registered images which are stored on Encounter's servers.

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.*	X, Y, elevation and altitude channels are derived from a combination of GPS sensors on the helicopter and EM transmitter loop as well as a laser altimeter mounted on the transmitter loop.
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 survey is 300m which is considered appropriate for the level of geological and structural interpretation that was completed. Flight line direction of the survey was north-south
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 survey is 300m which is considered appropriate for the level of geological and structural interpretation that was completed. Flight line direction of the survey was north-south
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 NRG contractors and Terry Hoschke (contract geophysicist) on completion of the survey and passed all QAQC checks.

SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*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.*	The Aileron project is located within the tenements E80/5169, E80/5469, E80/5470 and E80/5522 which are held 100% by Encounter Resources The tenements are contained within Aboriginal Reserve land where native title rights are held by the Parna Ngururrpa and the Tjamu Tjamu. No historical or environmentally sensitive sites have been identified in the work 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	*Deposit type, geological setting and style of mineralisation*	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 carbonatite-hosted critical mineral deposits.

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*	No new drilling is being reported in this announcement
Criteria	***JORC Code explanation***	**Commentary**
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.*	No new drilling is being reported in this announcement
	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.	No new drilling is being reported in this announcement
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No new drilling is being reported in this announcement
Relationship between mineralisation widths and intercept lengths	*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').*	No new drilling is being reported in this announcement
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.*	No new drilling is being reported in 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.*	No new drilling is being reported in this announcement
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 characteristics; potential deleterious or contaminating substances.*	No other meaningful and material results to report
Further Work	*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.*	Interpretation and further modelling of the data will be completed. Planned exploration to include aircore and diamond drilling.