encounter RESOURCES LIMITED

Diamond drilling underway at Sandover Copper (NT)

- **Diamond drilling has commenced at the Sandover copper project in the NT**
- **The first diamond drill hole at Sandover (ESA001), completed by Encounter in late 2023, intersected unexpected high-grade copper mineralisation at the contact between the basin sediments and the basement rocks (0.3m at 2.1% Cu from 634.3m) [1]**
- **The source of this copper mineralisation, on the basal unconformity, is interpreted to be leakage from steep basin structures bounding the large Neoproterozoic basin**
- **A detailed (100m spaced) magnetic survey was completed at Sandover in June 2024 and resolved a magnetic feature 2.5km from ESA001, proximal to basin margin structure**
- **A diamond drill hole is planned to test the magnetic feature and basal unconformity closer to the interpreted feeder fault**

Encounter Resources Ltd ("Encounter") is pleased to announce diamond drilling has commenced at the Sandover project (100% ENR), located 170km north of Alice Springs.

Commenting on the drilling at Sandover, Executive Chairman Will Robinson said:
"Only three holes have intersected the basement unconformity in this part of the Neoproterozoic Sandover basin. Two holes were drilled by CRA in 1994, 50km apart, along the north-eastern margin of the basin. These holes intersected minor copper anomalism on the unconformity. The third drill hole (ESA001), completed by Encounter in late 2023, intersected narrow, high-grade copper mineralisation on the same basement unconformity on the western margin of the basin. This copper mineralisation is interpreted to have been emplaced along the flat lying unconformity from a steep feeder structure. A diamond drill hole will test a position 2.5km west of ESA001 closer to the interpreted feeder structure bounding the basin that is marked by a broad magnetic anomaly."

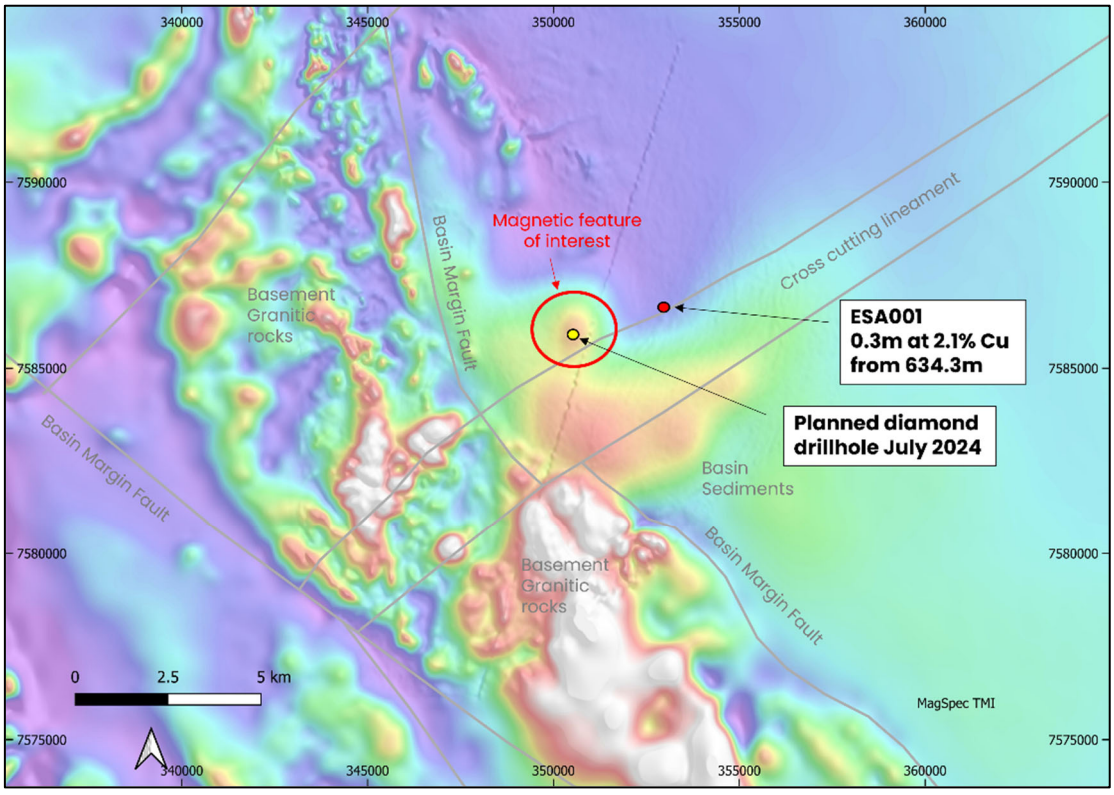

Figure 1 Sandover - Ginger Prospect drillhole location plan over Magnetic TMI 1VD image

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Background

Sandover is located 170km north of Alice Springs and covers a major structural corridor and Neoproterozoic depocenter on the southern margin of the Georgina Basin.

Field mapping and surface sampling in the south-east of Sandover confirmed the presence of an outcropping red-bed sandstone sequence with multiple narrow but strike extensive grey shale units containing copper oxide mineralisation [2].

Inspection of historical drill holes (drilled in 1968 and 1971) confirmed key geological units and processes to enable the formation of sediment-hosted copper deposits. Significantly, narrow zones of copper sulphide minerals, including bornite, have been identified in historical drill core [3]. This provides encouraging evidence that processes capable of forming high-grade copper mineralisation are present in the basin.

Furthermore, shale units containing the outcropping copper mineralisation at Sandover are considered to be only moderate reductants yet have precipitated considerable copper. This suggests that a highly copper charged fluid has been active at Sandover.

The remainder of the Sandover basin is essentially unexplored. Diamond drilling was conducted by CRA in 1994, when two diamond drill holes (DD94MG001 & 002) were completed, 50km apart, along the northern margin of the basin (Figure 2 & 3).

An NTGS co-funded gravity survey was completed by Encounter at Sandover. The integration of this gravity data with magnetic data defined a key structural location on the western margin of the basin, named the Ginger prospect ("Ginger").

Diamond drill program

A targeted stratigraphic diamond drill hole was completed at Ginger in late 2023 to test the faulted western margin of the Sandover basin where an interpreted NE-SW orientated cross cutting lineament intersects the major NW-SE trending basin margin structure.

ESA001 was drilled to a depth of 668.7m and intersected a stacked sequence of Phanerozoic sediments to 320.7m. Drilling continued through the Neoproterozoic Mopunga Group consisting of feldspar-rich sandstones, siltstones and shales. The targeted reductant Elyuah Fm was not present in ESA001.

A sharp lower contact of the Sandover Basin sedimentary sequence was intersected at 634.3m. High grade copper (2.1% Cu) was returned between 634.3-634.6m where hydrothermal sulphide (chalcopyrite) alteration was present in altered granite gneiss. Copper anomalism was also present in Neoproterozoic sediments above the unconformity where 665ppm Cu was returned over 0.5m between 633.8-634.3m.[1]

The unconformity where copper mineralisation was intersected in ESA001 is interpreted to be flat, suggesting copper charged mineralised fluids moved horizontally to this position. This basement unconformity is laterally extensive and opens up potential for a large scale sediment-hosted copper system at Sandover.

A detailed (100m spaced) magnetic survey was completed at Sandover in June 2024 and resolved a broad area of magnetic anomalism 2.5km west of ESA001, proximal to basin margin structures. Geophysical depth inversion modelling has been completed and the anomaly is consistent with a gently dipping magnetic body at or near the expected unconformity position.

Next Steps

A diamond drill hole will test the basal unconformity and magnetic anomaly 2.5km from ESA001, closer to an interpreted feeder fault on the western margin of the basin.

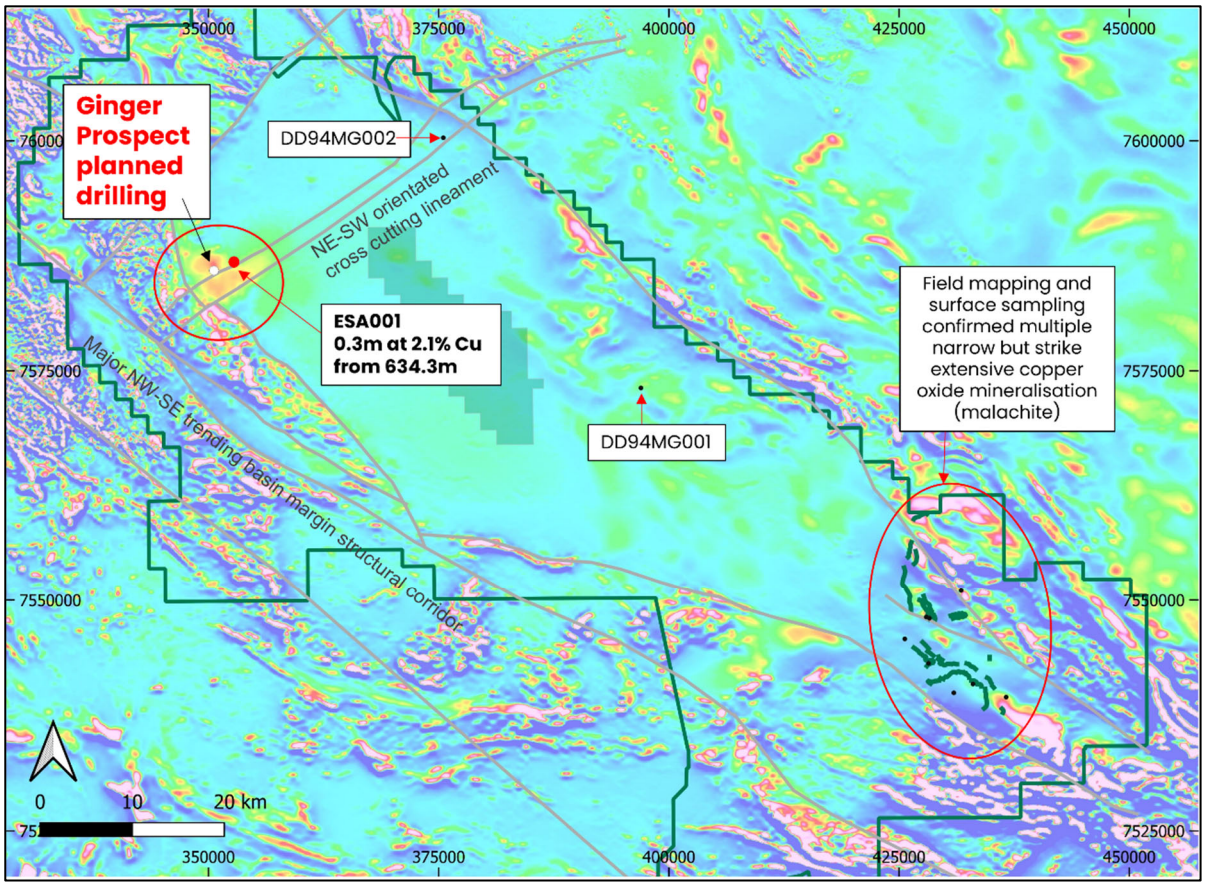


Figure 2 Sandover - Magnetics (TMI 1VD image) with location ESA001, diamond drillholes and mapped outcropping copper horizon [1]

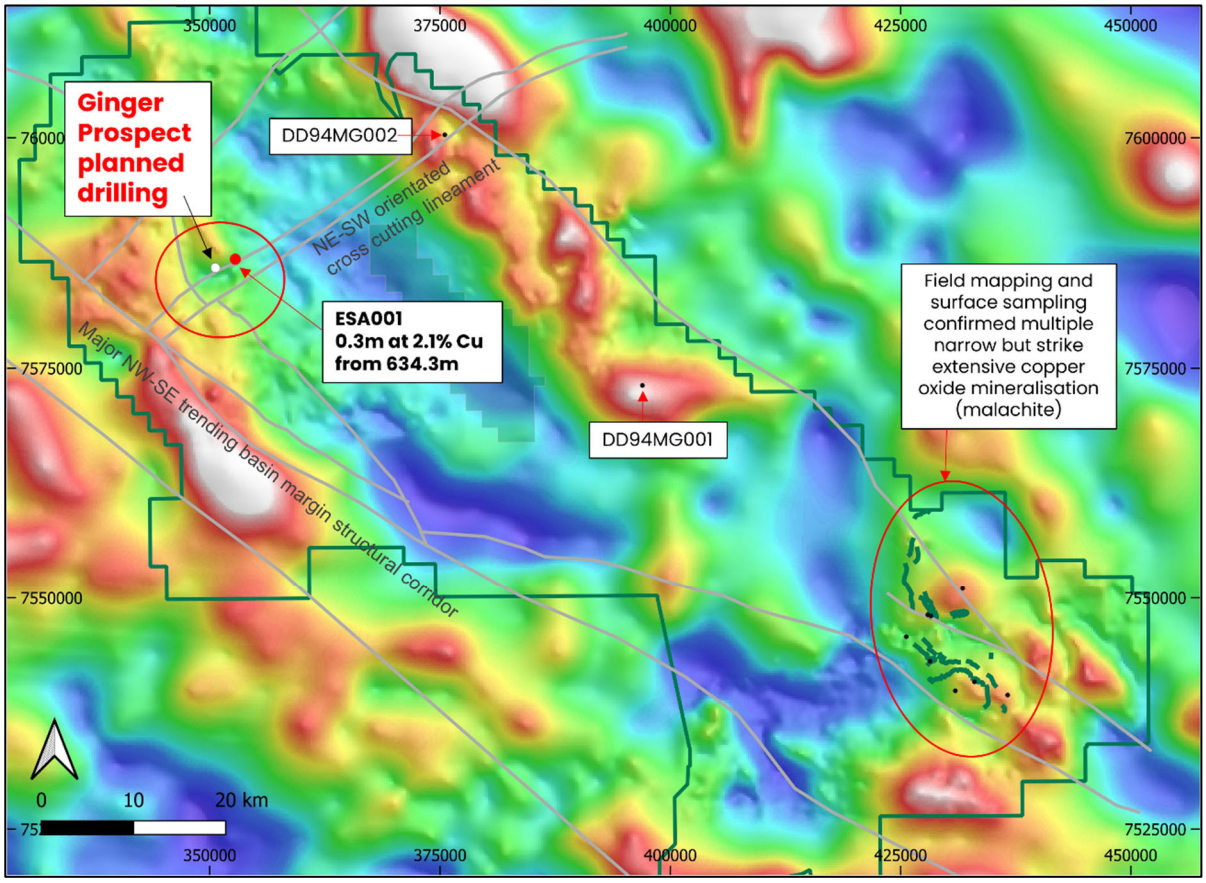


Figure 3 Sandover - Gravity with location ESA001, diamond drillholes and mapped outcropping copper horizon [1]

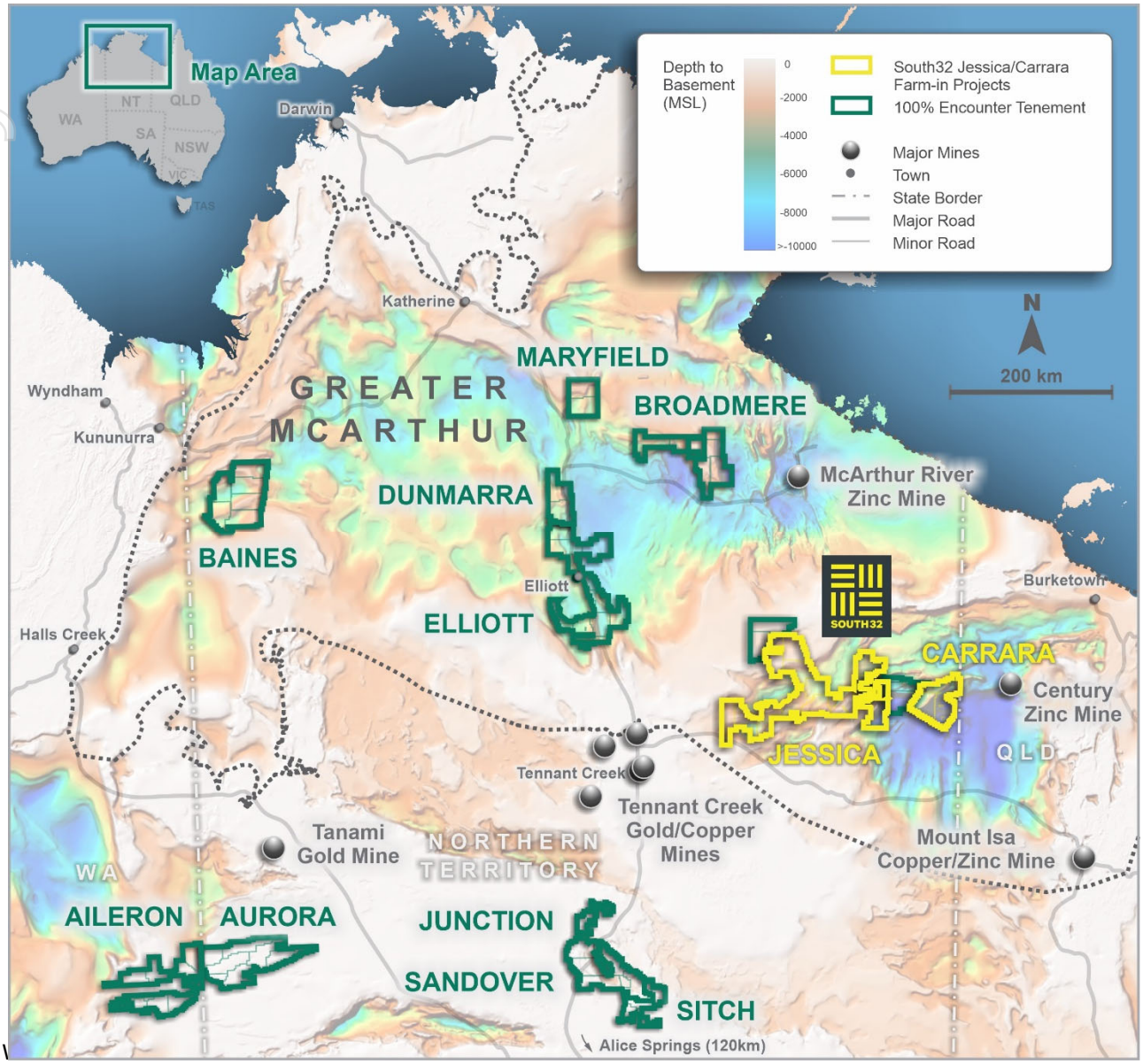


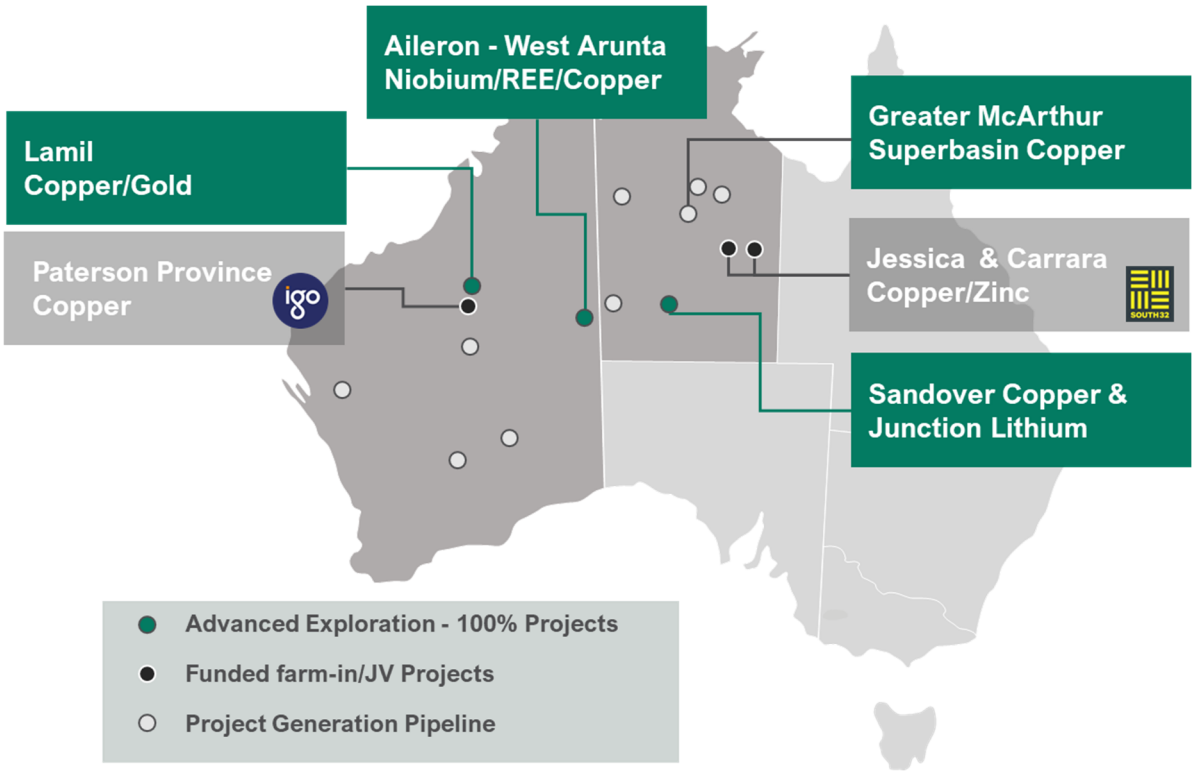
Figure 4 – Sandover project location – NT projects

[1] **ASX announcement 17 May 2024**
[2] **ASX announcement 25 November 2021**
[3] **ASX announcement 9 June 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 and niobium/REE deposits in Australia.

Encounter controls a large portfolio of 100% owned projects in Australia's most exciting mineral provinces that are prospective for copper and critical minerals including the Aileron project in the West Arunta region of WA. Complementing this, Encounter has numerous large scale copper projects being advanced in partnership and funded through farm-in agreements with leading miners: South32 and IGO.



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The information in this report that relates to Exploration Results is based on information compiled by Ms Sarah James who is a Member of the Australian Institute of Mining and Metallurgy. Ms James holds shares and options in and is a full time employee of Encounter Resources Ltd and would not receive any incentive payment dependent on the results of the information being reported based on her work 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'. Ms James consents to the inclusion in the report of the matters based on the information compiled by her, 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 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.

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*	The Magnetic survey was completed in June 2024 by MAGSPEC Airborne Surveys Pty Ltd who specialise in high resolution, ultra-detailed and regional airborne geophysical surveys. 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. 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. For the concurrent radiometric survey an RSI RS-500 gamma-ray spectrometer incorporating 2x RSX-4 detector packs, 32 litre crystal, sampling interval of 2 Hz was used.
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.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged*	No new drilling is being reported in this announcement

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.*	No new drilling is being reported in this announcement

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.*	No new drilling is being reported in this announcement
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.*	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.

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 airborne survey is 100m which is considered appropriate for the level of geological and structural interpretation that was completed.
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.*	No new drilling is being reported in this announcement
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 new drilling is being reported in this announcement

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 Ginger prospect project is located within the tenement EL32695 which together with EL32694, EL32695, EL32421, EL32374, EL33065, EL33060 and ELA33048 are part of the Sandover Project 100% held by Encounter. The mag survey was flown in an area contained within the Stirling Pastoral Lease. No heritage or environmentally sensitive sites have been identified in the area of work.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Historical drilling exploration activity at the southern end of the Sandover Project tenure was completed during the late 1960s and early 1970s. In 1966 Kennecott completed a three hole percussion drilling program (BH1-3) for a total of 610m together with regional costean sampling. In 1968, a program of 4 diamond holes for 662m (Mt Skinner 1-4) was drilled by the Mines and Water Resource Branch, NT. In 1970 Centamin N.L. drilled 4 diamond holes (CMS1-4) in the wider Sandover area for 1781m. Limited historical drilling exploration was completed at the northern and central end of the Sandover project during the mid 1990s. CRA drilled two diamond holes into the Sandover basin in 1994 (DD94MG01 -416.95m and DD94MG02 -175m) A line of 5 shallow RC holes was drilled by WMC in 1995 (TTRC61-65) within 10km of ESA001 for a total 354m. Previous Magnetic data was government precompetitive airborne data flown in 1981 at 500m line spacing.
Geology	*Deposit type, geological setting and style of mineralisation*	

		Sedimentary rocks at Sandover form the south-western margin of the Georgina Basin. Neoproterozoic Mopunga Group sediments lie unconformably on the basement metamorphics of the Arunta block. Sandover is interpreted to represent a locally preserved Neoproterozoic depocentre, overlain by more extensive Cambrian Georgina Basin sediments. A number of the major elements of the sediment-hosted copper system are present at Sandover.
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*	No other meaningful and material results to report

	characteristics; potential deleterious or contaminating substances.	
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.*	A diamond drill hole is planned to test a magnetic feature and basal unconformity closer to an interpreted feeder fault on the western margin of the basin.