

Copper in first assays from the Jessica Project (NT)

- Assays from the two drill holes completed at the Zeta target (“Zeta”), drilled 1.3km apart, at the Jessica Copper Project (“Jessica”) in the Northern Territory confirm the presence of copper sulphide bearing veins and alteration signatures associated with iron oxide copper gold (IOCG) style mineralisation.
- Zeta is a coincident gravity and magnetic anomaly associated with a discrete seismic reflector. Initial drilling has intersected a number of IOCG indicators including:
 - Chalcopyrite and bornite in thin quartz-carbonate veins
 - Intense and pervasive red rock hematite alteration
- These scout drill holes have identified IOCG signatures in a previously unexplored region.
- A deep seeking MIMDAS* geophysical survey is being evaluated for completion in June-July 2024 to identify potential mineralised zones at Zeta.
- Assay results from six further diamond drill holes (~5,700m) completed at the Jessica and Carrara projects are expected in the June 2024 quarter.
- Jessica and Carrara are being explored under farm-in agreements with a subsidiary of South32 Limited (“South32”).

Encounter Resources Ltd (“Encounter”) is pleased to announce that the first drilling at the Jessica project in the NT has intersected copper mineralisation in an IOCG setting at Zeta.

Commenting on the first assays from Zeta, Encounter Managing Director Will Robinson said:

“The NT has significant untapped copper potential which has been recognised by numerous major resources companies. Located in a previously unexplored region of the NT, the first holes drilled at Zeta targeted large magnetic and gravity anomalies. Both holes intersected red-rock hematite alteration and copper associated with quartz-carbonate veining which is interpreted as a distal alteration signature to a potential IOCG style mineral system.

“Geophysics is used extensively to define mineralisation in IOCG systems and a deep seeking MIMDAS geophysical survey could focus the next phase of targeted drilling at Zeta.”

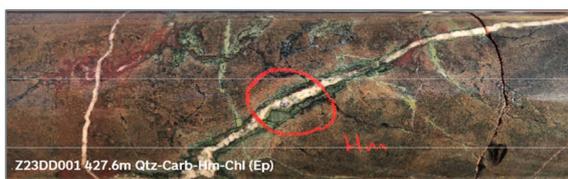


Photo 1 – Chalcopyrite and bornite in quartz-carbonate veins at the Zeta target within Jessica copper project

Background

Jessica covers ~10,300km² along key structural corridors east of Tennant Creek and is prospective for sediment-hosted copper and IOCG style deposits (Figure 1).

Reprocessing of seismic data that extends through Jessica was completed by HiSeis, to provide greater detail of the geology and structure in the upper 1,000m. A 2km spaced gravity survey was also completed with 1km spaced gravity infill data collected over a series of high priority magnetic targets.

The seismic reprocessing and gravity surveys have identified a series of targets for drilling including the Zeta IOCG target (“Zeta”). Zeta is a significant and discrete gravity feature coincident with a prominent magnetic feature on the margin of a large interpreted intrusive body (Figures 2 & 3). In addition, there is a discrete seismic reflector immediately underlying Zeta (ASX announcement 28 October 2022).

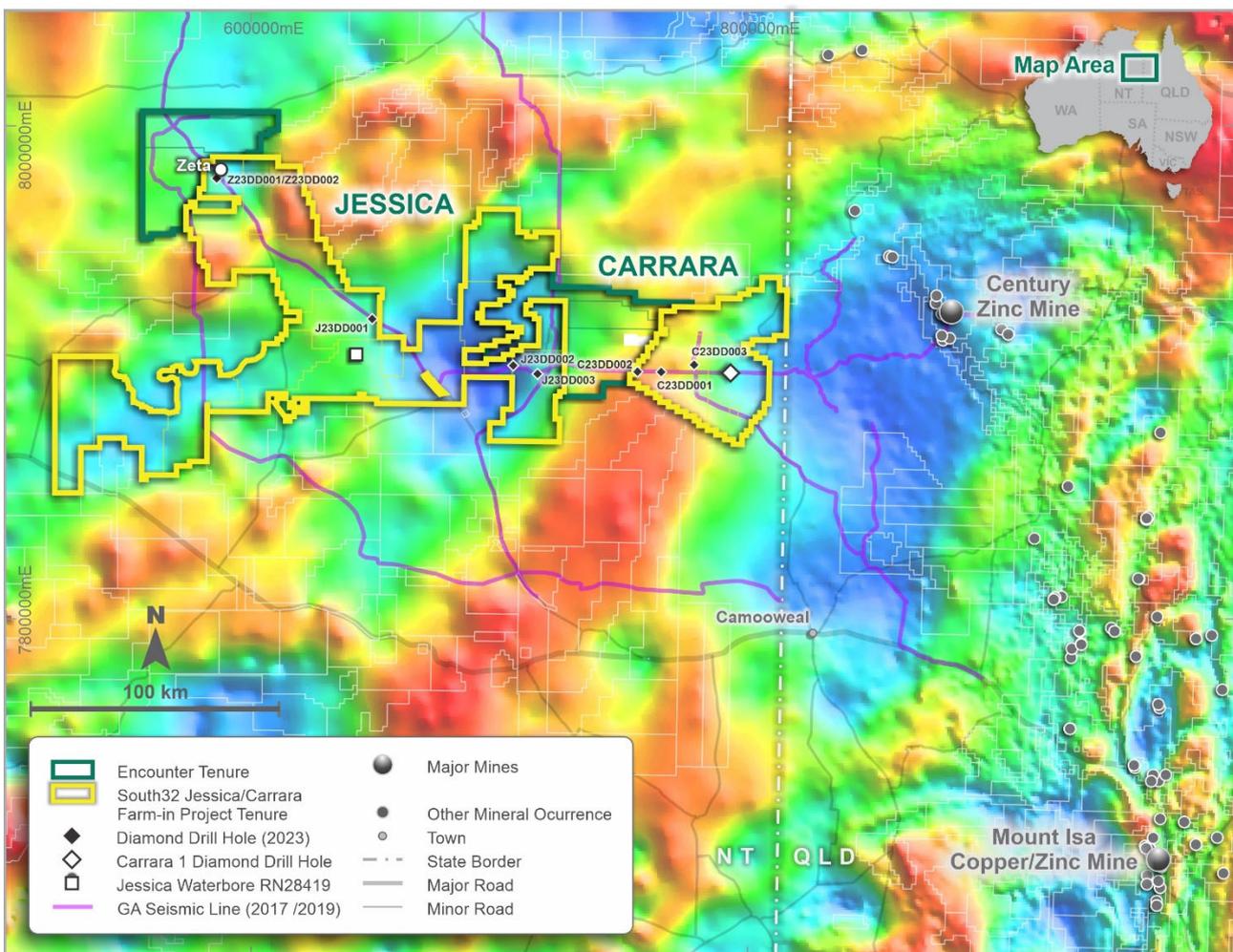


Figure 1 – Jessica and Carrara project location plan over Bouguer gravity

* MIMDAS- M.I.M. Distributed Acquisition System- is an advanced electrical geophysical acquisition technique capable of acquisition of DC resistivity and magnetotelluric (MT) resistivity and IP chargeability data

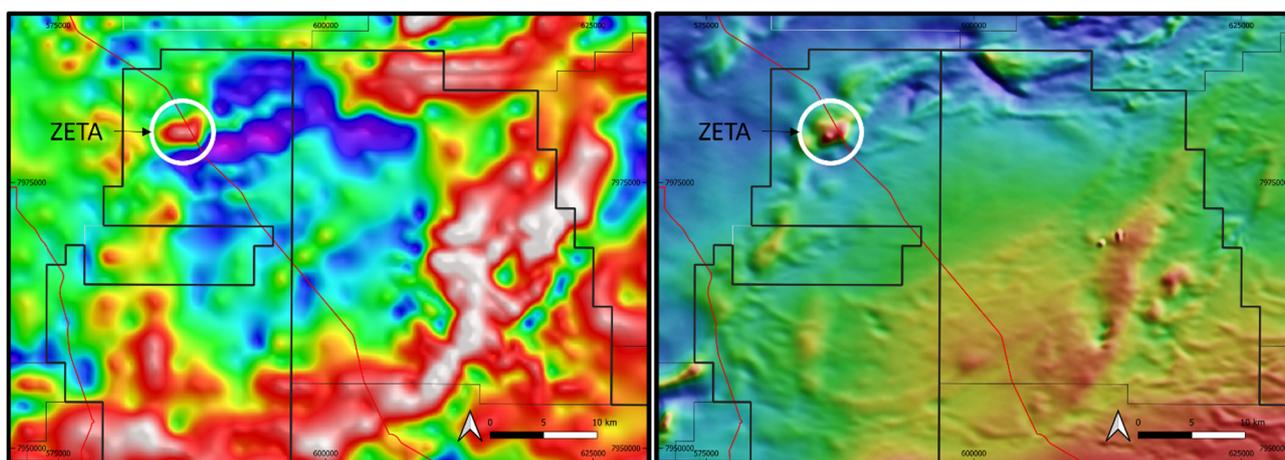
Diamond Drilling at the Zeta IOCG Target

Two diamond drill holes were completed at the Zeta target (Z23DD001 & Z23DD002).

Z23DD001 drilled through Georgina Basin sediments until basement was intersected at 413.7m depth. Basement rocks below this depth consisted of porphyritic felsic-intermediate volcanics with hematite alteration and late quartz carbonate veins. Minor chalcopyrite and bornite was observed in quartz – carbonate veins between 456.4m – 458m. Geology then transitioned into an altered intermediate-mafic volcanic rock until the hole was terminated at 700.1m depth.

Z23DD002 drilled through the Georgina Basin sediments before intersecting basement at 448.2m. Proterozoic rocks below this depth consisted of a strongly red rock (hematite dusted potassium feldspar) altered felsic – intermediate porphyritic volcanic rock before transitioning to a more mafic volcanic rock from 662.75m until the end of the hole at 796m.

Quartz carbonate veining containing chalcopyrite was intersected from 664.55m – ~667.75m depth. The chalcopyrite is fine to medium grained occurring as isolated grains within thin (2mm – 7mm) carbonate veins. Chalcopyrite in quartz carbonate veining present at 665m returned 1m at 0.37% Cu consistent with visual estimates. Trace chalcopyrite was observed in veins beyond this interval until ~750m.



Figures 2 & 3 – Jessica Project – Zeta IOCG target. Gravity (1VD) (left) and Magnetics (RTP) (right), location of GA seismic lines shown in red

Hole_ID	Hole_Type	MGA_Grid_ID	MGA_East	MGA_North	MGA_RL	Azimuth	Dip	EOH Depth
Z23DD001	DDH	GDA94 Z53	586970	7979746	238	180	-90	700.1m
Z23DD002	DDH	GDA94 Z53	586199	7978736	236	180	-90	796m

Table 1: Collar locations and drill hole information of completed diamond holes at Zeta

Hole ID	from (m)	to (m)	interval (m)	Cu (ppm)
Z23DD001	422	443	21	157
and	456.4	700.1	253.7	156
Z23DD002	527	530	3	101
and	557	560	3	161
and	576	578	2	163
and	623.6	624	0.4	134
and	664	796	138	173
including	665	666	1	3748

Table 2: Diamond drill hole intersections above 100ppm Cu cutoff.

Next Steps

A deep seeking MIMDAS geophysical survey is being evaluated and expected to be completed by July 2024 at Zeta.

Assays results from six further diamond drill holes (~5,700m) completed at the Jessica and Carrara projects are expected in the June 2024 quarter.

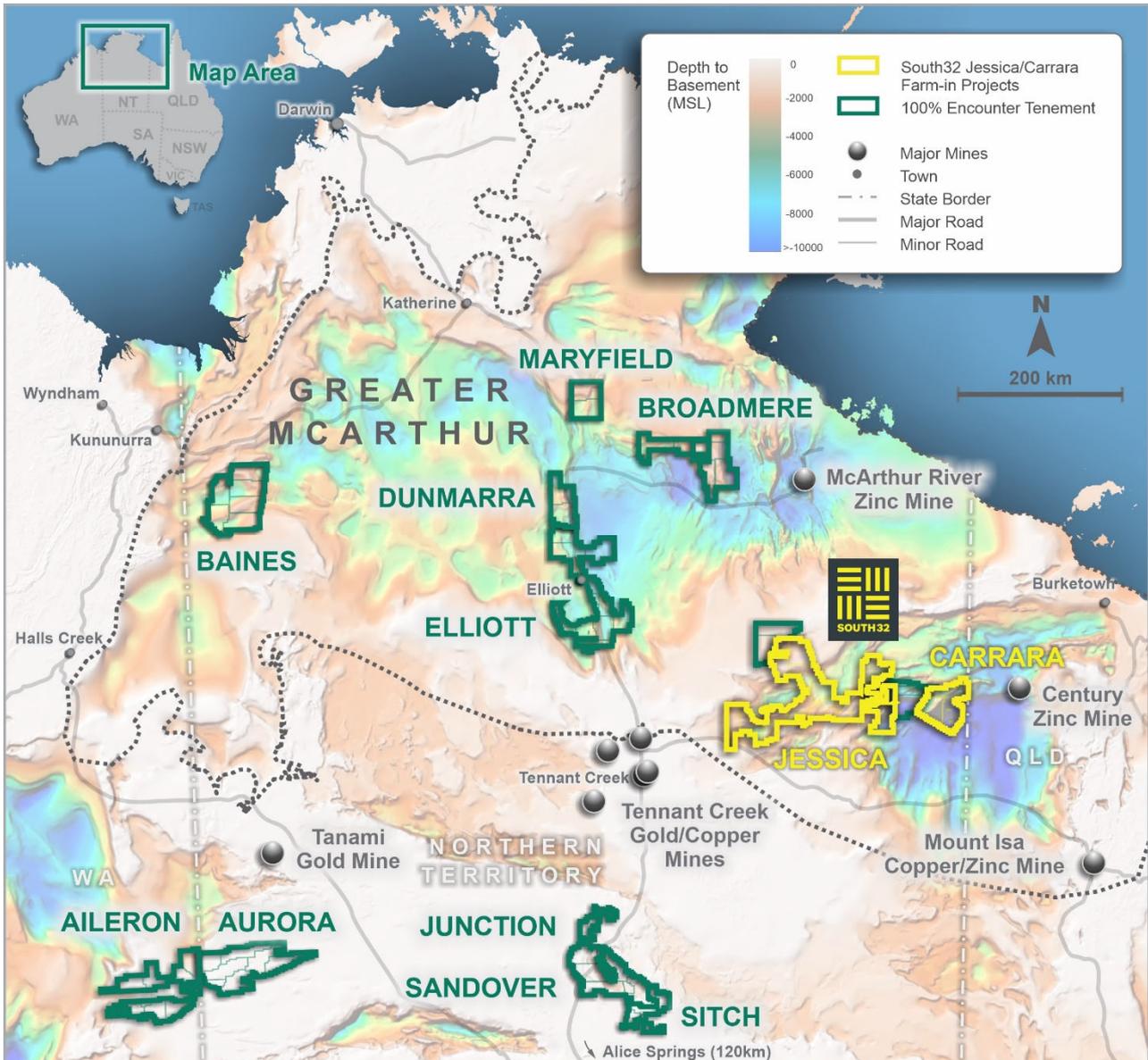


Figure 4 – Jessica and Carrara project location plan over Bouguer gravity

Farm-in and Joint Venture Agreement – Key Terms

The key terms for the farm-in and joint venture agreement include:

- South32 has the right to earn a 60% interest in Jessica (the “Initial Interest”) by sole funding \$15 million of exploration expenditure within 10 years.
- During the farm-in phase or joint venture period, South32 may earn an additional 15% interest in Jessica (the “Further Interest”) by completing a Scoping Study¹.
- Upon South32 earning the Initial Interest or Further Interest in Jessica, a 60:40 or 75:25 joint venture will be formed and in the case of South32 earning the Further Interest, the parties must contribute funds based on their pro-rata interest or dilute according to a standard dilution formula. Should a party’s interest dilute to below 10%, that party’s interest automatically converts to a net smelter return royalty.
- During the farm-in phase, South32 is the Manager of the project.

During the farm-in phase, a technical committee comprising representatives from each of Encounter and South32 review and approve annual exploration programs and budgets. All decisions of the technical committee are decided by majority vote, with South32 having the casting vote.

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 Persons findings are presented have not been materially modified from the original market announcements.

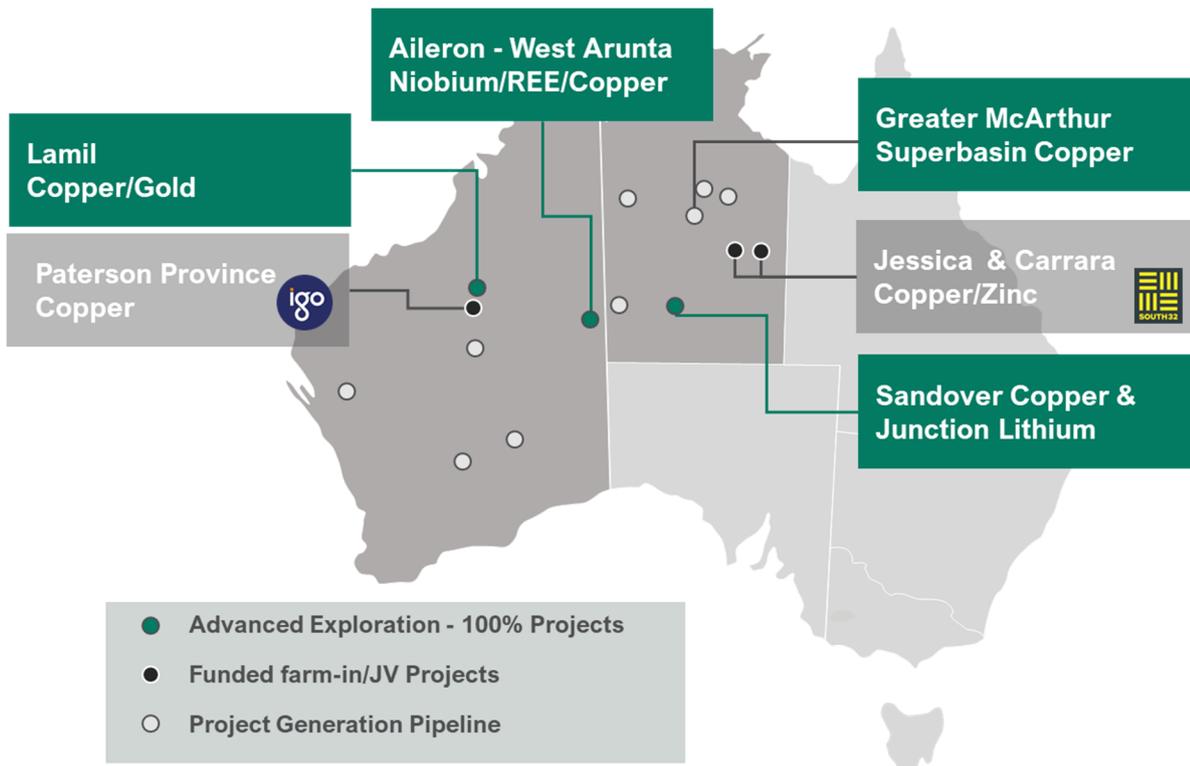
This announcement has been approved for release by the Board of Encounter Resources Limited.

¹ **Scoping Study** (JORC Code, 2012 edition) is an order of magnitude technical and economic study of the potential viability of Mineral Resources. It includes appropriate assessments of realistically assumed Modifying Factors with any other relevant operational factors that are necessary to demonstrate at the time of reporting that progress to a Pre-Feasibility study can be reasonably justified.

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 miners: South32 and IGO.



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SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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 sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	Diamond drilling was completed using diamond core from the Zeta target within the Jessica project. A two hole program was completed to test semi-coincident magnetic and gravity anomalies defined in regional aeromagnetics and gravity surveys. Diamond core was transferred to core trays for logging and sampling.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	Where distinct mineralisation boundaries, geological contacts, or core loss is logged, sample lengths are adjusted to ensure the sample is representative. Sampling for diamond drilling is carried out as specified within sampling and QAQC procedures as per industry and internal standards.
	<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>	Samples were nominated by geologists from HQ and NQ diamond core (yielding core diameters of 63.5mm and 47.6mm respectively), with a minimum sample width of 0.4m and a maximum width of 3m. Nominated samples were cut into 1/3rd core. All methods are used to produce representative samples of approximately 3kg for submission to an independent commercial laboratory. Samples are crushed at the receiving laboratory to minus 2mm and subject to 4-acid multi element analysis and fire assay (25g fire assay / ICP-OES).
Drilling techniques	<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>	Diamond drilling was used to a depth of 700.1m & 796m for Z23DD001 & Z23DD002 respectively. Overlying Cambrian sequences were drilled using HQ2 in case fractured or porous ground conditions were encountered, and the basement rocks were drilled NQ2.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	Sections of lost core were minimal and were noted by the diamond drillers. Core recoveries were measured and recorded with respect to each drill run.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	HQ/NQ diamond drilled with core recovery +95%. In areas of bad ground drilling muds and fluids were utilized by the drilling contractor to mitigate any recovery issues. Areas of core loss were identified and excluded from sampling to avoid any dilution.
	<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>	To date, no detailed analysis to determine the relationship between sample recovery and/ grade has been undertaken for this drill program.

Criteria	JORC Code explanation	Commentary
Logging	<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>	Z23DD001 and Z23DD002 have been logged for lithology, alteration, mineralisation, structure, veining, RQD, and density.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Geological logging (lithology, alteration & veining) is qualitative in nature, with quantitative assessments for recording of density, structure, RQD and visual estimations of minerals. All core was photographed on site and core retained.
	<i>The total length and percentage of the relevant intersections logged</i>	Z23DD001 and Z23DD002 have been logged for the complete length of drilling.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Selected samples submitted were cut and sampled third (1/3) core using an Almonte automated core saw.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	All drilling was diamond core drilling.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Sample preparation was completed at Intertek Laboratories in Townsville for analyses. The total weight of the sample, (weight of 1/3rd core), was crushed to 2mm and pulverised up to 3kg sample weight. Samples >3kg were crushed to 2mm, split and pulverised up to 3kg, with the coarser fraction retained.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Duplicate core samples were collected and inserted every 30 samples. Additional QC procedures involve the use of commercial certified reference materials (CRMs) and blanks. The insertion rate of these is at an average of 1:30.
	<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>	Sampling intervals do not overlap and was sampled in down hole order to avoid any cross contamination. Duplicate core samples were collected and inserted every 30 samples.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are considered appropriate to give an accurate indication of the mineralisation.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>All samples were submitted to Intertek Laboratories in Townsville for analysis.</p> <p>Samples were submitted for multiple laboratory analyses. Assays have been reported from Intertek method 4A/MS (Multi-acid digest including Hydrofluoric, Nitric, Perchloric and Hydrochloric acids in Teflon Tubes. Analysed by Inductively Coupled Plasma Mass Spectrometry), for elements Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr,) and method FA25/OE (25g Lead collection fire assay. Analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry) for elements (Au).</p> <p>Standard laboratory QAQC was undertaken and monitored by the laboratory. The analytical method is considered partial.</p>

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.

Diamond core underwent routine pXRF analysis at 1/2 metre intervals using a Olympus Vanta Handheld X-ray fluorescence analyser to aid in logging and identifying zones of interest. All pXRF readings were taken in Geochem mode with a 30 second 2 beam reading. The instrument is calibrated according to Evident Scientific Inc (manufacturer). calibration procedures and verified using CRMs produced by Analytical Reference Materials International (ARMI) and OREAS and confirms to the manufacturer quality assurance standards.

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.

Intertek laboratory utilise Certified Reference Materials and/or in-house controls, blanks and replicates are analyzed with each batch of samples. Results of the laboratory quality control analyses are reported along with the sample values in the final report In addition an independent suite of CRMs and blanks (see above) are submitted within each batch of samples. A formal review of this data is completed on a periodic basis.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Geological observations included in this report have been verified by the Competent Person.
	<i>The use of twinned holes.</i>	No twinned holes have been drilled.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary logging and sampling data collected from drillholes onto field laptop computers using Excel templates. Data collected is sent offsite to Cloud Database (Egnyte software), which is backed up daily.
	<i>Discuss any adjustment to assay data.</i>	No adjustments have been made to assay data.
Location of data points	<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>	Drill hole collar locations are determined using a handheld Garmin GPS ($\pm 5m$ accuracy). Down hole surveys were collected during this drilling program with a Reflex EZ-Trac survey tool at approx. 30-50m intervals downhole.
	<i>Specification of the grid system used.</i>	The grid system used is MGA_GDA94, zone 53.
	<i>Quality and adequacy of topographic control.</i>	RLs measurements were measured of the drill collar using a handheld Garmin GPS ($\pm 5m$ accuracy).
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Two diamond drill holes were completed spaced 1280m apart.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	Exploration results are only reported in this report. 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.
	<i>Whether sample compositing has been applied.</i>	Intervals have been composited using a length weighted methodology for up to 3m sample intervals.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	This is early-stage exploration drilling and the orientation of the hole with respect to key structures is not fully understood.

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.

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Sample security	<i>The measures taken to ensure sample security.</i>	The chain of custody is managed by geologists. Samples were transported by field personnel to the assay laboratory.
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Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	Drill core sampling techniques and procedures are regularly reviewed internally, as is data. To date, no external audits have been completed on Zeta data.
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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 Zeta target is located within the tenement EL32386 (814 km²) registered to Baudin Resources Pty Ltd (100% subsidiary company of Encounter Resources Ltd) and was granted on 30/07/2021 for a period of 6 years. EL32386 forms part of the Jessica Project (Jessica) farm-in agreement, South32 has the right to earn a 60% interest in Jessica (the "Initial Interest") by sole funding \$15 million of exploration expenditure within 10 years. During the farm-in phase or joint venture period, South32 may earn an additional 15% interest in Jessica (the "Further Interest") by completing a Scoping Study. Upon South32 earning the Initial Interest or Further Interest in Jessica, a 60:40 or 75:25 joint venture will be formed and in the case of South32 earning the Further Interest, the parties must contribute funds based on their pro-rata interest or dilute according to a standard dilution formula. Should a party's interest dilute to below 10%, that party's interest shall automatically convert to a net smelter return royalty. During the farm-in phase, South32 will be the Manager of the project.</p> <p>This tenement is contained within the Brunette Downs pastoral property.</p> <p>Native title rights are held by the Karrkarrkuwaja Group, the Mangurinja Group & Kujuluwa Group.</p> <p>No historical or environmentally sensitive sites have been identified in the area of work.</p>
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	No previous exploration conducted on the Zeta target other than publicly available government geophysical surveys (seismic, regional gravity and magnetics).
Geology	<i>Deposit type, geological setting and style of mineralisation</i>	Jessica covers key structural corridors east of Tennant Creek and is prospective for sediment-hosted copper and IOCG style deposits. The Zeta project area is covered by up to 400m of Cambrian aged sediments of the Georgina Basin and underlying Proterozoic lithologies interpreted to belong to the Tawallah or Murphy Groups.
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> 	Refer to tabulations in Table 1 of this announcement.

- Down hole length and interception depth
- Hole length

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>	All reported assays have been length weighted, with a nominal 100ppm Cu grade cut-off with a maximum of 3m of internal dilution included. No upper cuts-offs have been applied. No core loss was encountered within the reported mineralised interval.
	<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>	All results reported are downhole width. Intercepts are aggregated with minimum width of 0.4m and maximum width of 3m for internal dilution, however, some intervals with significantly elevated Cu grades may be reported individually.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents have been reported in this announcement.

Criteria	JORC Code explanation	Commentary
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>	The geometry of the mineralisation is not yet known due to insufficient drilling in the targeted area.
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>	Refer to body of 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>	The average grade outside the reported intervals is 41ppm Cu for Z23DD001 and 16ppm for Z23DD002.
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>	All meaningful and material information has been included in the body of the text.
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>	Geophysical techniques such as MIMDAS are being evaluated to potential mineralised zones at Zeta.