ASX Announcement | **ASX: CPM**

27 February 2023

Large tenement granted at Mt Isa East Cu-Au Project contains priority Cu-Au target areas

Highlights

- **Granting of large exploration tenement EPM28087 (Barbara East) totalling around 192 square kilometres takes Cooper's granted tenure to just over 1,600 square kilometres at the Mt Isa East Copper Gold Project**
- **EPM28087 is within the Mary Kathleen Domain, highly prospective for Cu-Au mineralisation such as the Barbara Deposit which contained a resource of 4.7mt @ 1.6% Cu & 0.15 g/t Au[1] and also recently highlighted by Carnaby Resources Ltd (ASX: CNB) Cu-Au discoveries at Nil Desperandum, Lady Fanny and Mt Hope Prospects further to the south**
- **An external prospectivity review of EPM28087 highlights three priority areas for copper-gold exploration, including two historical Versatile Time-Domain Electromagnetic (VTEM) anomalies that may indicate bedrock conductors with copper-gold potential**
- **Fieldwork to follow up priority areas on the new tenement is slated for later in 2023, while the geology team is currently in the field exploring the Ardmore tenement (EPM19125) just to the north of Mt Hope**

Cooper Metals Managing Director Ian Warland commented:

"Cooper has already identified several historical workings and conceptual targets for follow-up, most of which have no prior drilling, leaving the discovery potential wide open. The identification of two regional VTEM anomalies in prospective Corella Formation rocks, that elsewhere in the region host several copper-gold deposits is an exciting development and worthy of ground truthing. The Barbara deposit is thought to have a VTEM signature demonstrating the usefulness of the method in identifying sulphide rich copper mineralisation. I look forward to updating the market with our exploration progress over the coming weeks".

Cooper Metals Limited (ASX: CPM) ("CPM" or "the Company") is pleased to announce the grant of tenement EPM28087 (Barbara East) which CPM acquired 85% ownership of from Revolution Mining Pty Ltd (Revolution)[2] (**Figure 1**).

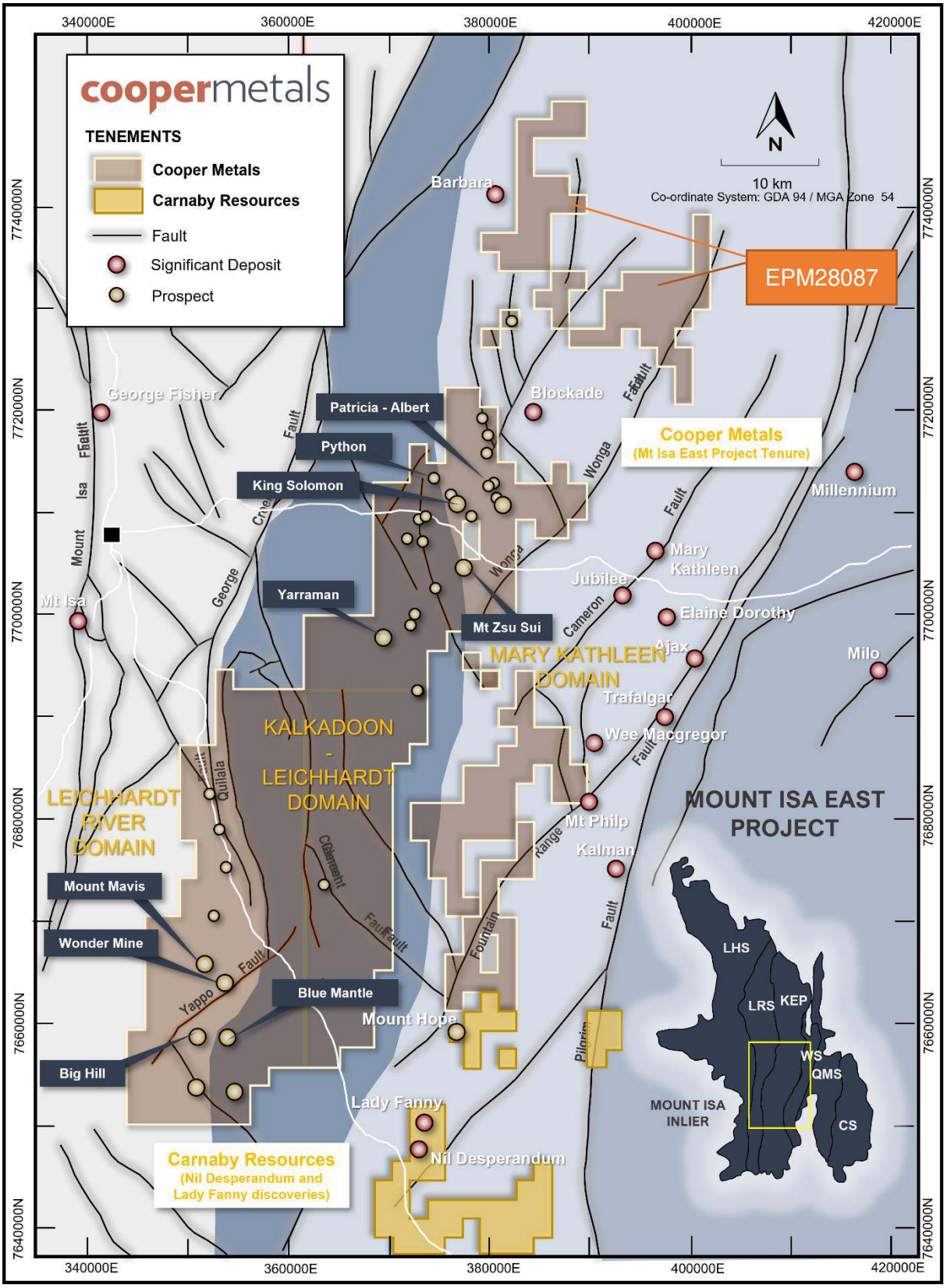

Figure 1: Mt Isa East Project Location, including new acquisition tenement over regional geology and main prospects

About EPM28087

EPM28087 is located just two kilometers to the northeast of CPM's existing tenure. Significantly, EPM28087 covers part of the Mary Kathleen Domain, a highly prospective structural Domain for Cu-Au deposits. For example, the Barbara Cu-Au deposit is located just 1.8km west of EPM28087 which contained a Resource of 4.7Mt @ 1.65% Cu and 0.2g/t Au. Carnaby Resources (ASX: CNB) recent discoveries at Nil Desperandum, Lady Fanny and Mt Hope are also located in the Mary Kathleen Domain (MKD) just to the south of Cooper's Ardmore tenement.

Rocks of the Corella and Argylla Formations dominate the tenure, which elsewhere in the MKD are host to several copper-gold deposits and occurrences, often formed in faults developed near the contact with the Ballara Quartzite and in other significant fault structures.

Previous exploration is limited to regional geophysics and surface geochemical sampling, including stream sediment sampling and minor rock chip sampling recorded within the government database (GeoResGlobe). An external review of previous exploration and the geology in the area has highlighted three priority target areas for copper-gold exploration. The priority areas A, B, and C are summarised below (**Figure 2**).

Area A: A structural target consisting of a coincident magnetic and gravity anomaly near Ballara Quartzite and Corella Formation contact, supported by historic copper anomalism in stream sediment samples just outside of EPM28087.

Area B: Two airborne Versatile Time-Domain Electromagnetic anomalies (VTEM) in the Corella Formation. The VTEM anomalies are identified from the reprocessing of a government 2016 regional survey which was flown on east west lines ~2km apart (see Table 1 for details). VTEM anomalies may be the result of bedrock conductors prospective for copper-sulphide mineralisation. Area B also includes the Rocky Rule historical copper-gold workings described in GeoResGlobe as 30m long, by 4m wide and 3m deep.

The Barbara deposit just to the west of Area B is located on a NW trending structure. Importantly, there are several pronounced NW trending structures in area B within favourable lithologies of the Argylla and Corella Formations that warrant follow-up.

Area C: This area has NNW trending structures along rock formation contacts splaying off the regionally significant NE trending Wonga Fault. The historical Dugald River Tributaries gold prospect along with a nearby anomalous copper trend defined in historic rock chips aligns with a NNW trending structure worthy of further investigation.

Next Steps

- Cooper has a team in the field at the moment conducting geochemical sampling on Ardmore tenement EPM19125[3].

The Board of Cooper Metals Limited has approved this announcement and authorised its release on the ASX.

For further information:

Ian Warland
Managing Director
ian@coopermetals.com.au
M: 0410 502 272

COMPETENT PERSON'S STATEMENT:

The information in this report that relates to Geological Interpretation and Exploration Results is based on information compiled by Ian Warland, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Warland is employed by Cooper Metals Limited. Mr Warland has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Warland consents to the inclusion in the report of the matters based on his information and the form and context in which it appears.

Reference

1. Cooper Minerals Ltd Prospectus September 20, 2021
2. ASX CPM: 20 January 2022: Cooper Metals expands the Mt Isa East Cu-Au Project
3. ASC CPM: 14 February 2023: Exploration restarts on the Ardmore Tenement at the Mt Isa East Cu-Au Project

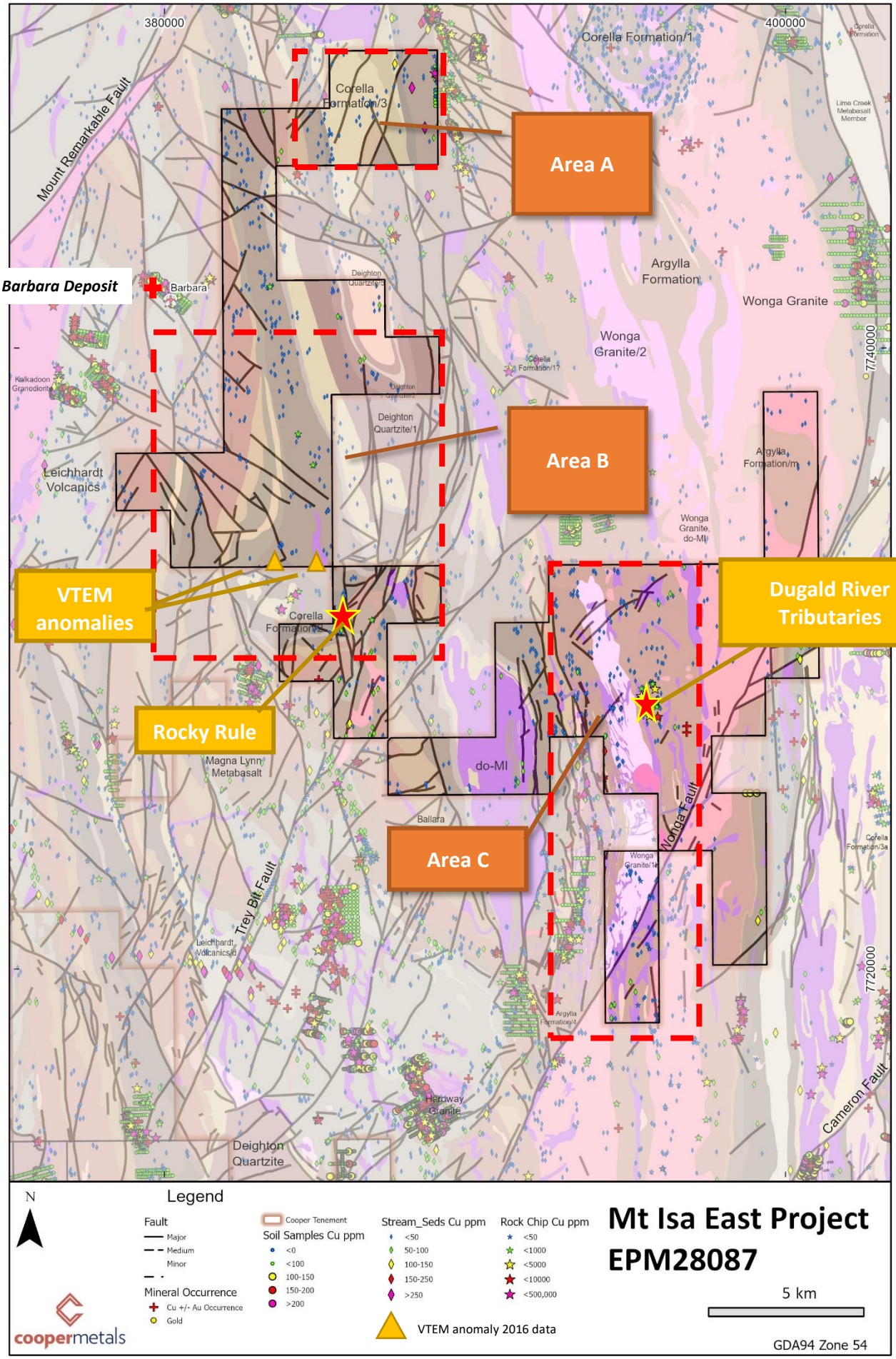

Figure 2: EPM 27087 Priority Areas and Prospects

About Cooper Metals Limited

Cooper Metals Ltd (ASX: CPM) is an ASX-listed explorer with a focus on copper and gold exploration. CPM aims to build shareholder wealth through discovery of mineral deposits. The Company has three projects all in proven mineralised terrains with access to infrastructure. The Projects are detailed briefly below:

Mt Isa East Project (Qld)
Cooper Metal's flag ship Mt Isa East Cu-Au Project covers ~1600 sq.km of tenure with numerous historical Cu-Au workings and prospects already identified for immediate follow up exploration. The Mt Isa Inlier is highly prospective for iron oxide copper gold (IOCG), iron sulphide copper gold (ISCG) and shear hosted Cu +/- Au deposits.

Yamarna Gold Project (WA)
The Yamarna Gold Project located along strike from Gold Roads 6.16 Moz world class Gruyere Gold Deposit (ASX: GOR) has an extensive length of untested Dorothy Hills Shear Zone that was important in the formation of Gruyere gold deposit located ~10 km to the southeast of Cooper's tenements.

Gooroo Project (WA)
Lastly the Gooroo Cu and or Au Project covers newly identified greenstone belt ~20 km from Silver Lakes (ASX: SLR) Deflector mine. The 26 km expanse of covered greenstone belt has had almost no exploration and was only added to government geology maps in 2020 after reinterpretation of geophysical data.

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APPENDIX 1: The following tables are provided to ensure compliance with JORC Code (2012) requirements for exploration results for the Mt Isa East Project in Qld.

1.1. **Section 1 Sampling Techniques and Data to update**

1.2. (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg 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. • 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.	• No new drilling or surface sampling in this release. • Historical Geochem samples from Qld government GeoRes Globe database. • Historical 2016 VTEM survey commissioned by Queensland Government in 2016 and flown by Geotech Ltd. The geophysical survey consisted of helicopter borne EM using the versatile time-domain electromagnetic (VTEM™plus) full receiver-waveform streamed data recording system with Z and X component measurements and a caesium magnetometer. A full report o the survey can be found Geoscience Australia's website. • Survey specifications ○ East-west flight lines ○ Spaced 2km apart ○ Flight height average 76m, with senor height 38m
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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 reported in this release
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 reported in this release
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 logging reported in this release
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	• No logging reported in this release
	• The total length and percentage of the relevant intersections logged.	• No drilling reported in this release

Criteria	JORC Code explanation	Commentary
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 logging reported in this release
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	VTEM system specifications Transmitter • Transmitter loop diameter: 26 m Receiver • X Coil diameter: 0.32 m • Number of turns: 4 • Effective Transmitter loop area: 2123.7 m2 • Transmitter base frequency: 25 Hz • Peak current: 192 A • Pulse width: 7.47 ms • waveform shape: Bi-polar trapezoid • Peak dipole moment: 407,753 nIA • Number of turns: 245 • Effective coil area: 19.69 m2 • Z-Coil diameter: 1.2 m • Number of turns: 100 • Effective coil area: 113.04 m2 • Average transmitter-receiver loop terrain clearance: 38 metres above the ground Receiver • Number of turns: 245 • Effective coil area: 19.69 m2 • Z-Coil diameter: 1.2 m • Number of turns: 100 • Effective coil area: 113.04 m2
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• VTEM data provided Geoscience Australia – data reviewed by Geo Discovery Group and VTEM anomalies selected as high , medium and low priority based on strength of conductor and reviewed against possible cultural affects.
	• The use of twinned holes.	• No drilling reported in this release
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• All data is digitally recorded
	• Discuss any adjustment to assay data.	• No adjustments to the data.
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.	• No drilling reported in this release • VTEM - The navigation system used was a Geotech PC104 based navigation system utilizing a NovAtel's WAAS (Wide Area Augmentation System) enabled GPS receiver. • GDA94 Zone 54. • Geochenistry data shown in Figure 2

Criteria	JORC Code explanation	Commentary
		from GeoResGlobe database
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• VTEM – lines spaced 2km apart and orientated east-west • Historical geochemistry results on diagram from GeoResGlobe database
	• 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.	• VTEM – line spacing for regional data only
	• Whether sample compositing has been applied.	• No sample compositing 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.	• VTEM lines are orientated east-west roughly perpendicular to the main strike of rock units in the Mt Isa Inlier
Sample security	• The measures taken to ensure sample security.	• No new sampling reported
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits or reviews undertaken.

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Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section.)

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 such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	• The tenements (specifically EPM 28087) referred to in this release are held by Revolution Minerals Pty Ltd, Cooper Minerals Ltd acquired 85% of the tenements and the tenements are in the process of being transferred to Cooper Minerals Ltd name.
	• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The tenements are secure under Qld legislation.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• The historical tenure reports indicated that several companies have explored the project area over the last 50 years. Exploration has mainly consisted of geochemical sampling of rock and soil. Geological mapping and acquisition of airborne magnetics. Limited historical drilling is recorded within the Qld Government database "GeoResGlobe".
Geology	• Deposit type, geological setting and style of mineralisation.	• The Mt Isa East Project is in the Mount Isa Inlier, which is prospective for IOCG, ISCG and shear hosted Cu-Au deposits. See body of this release for more information.
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a 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 metres) of the drill hole collar ➢ dip and azimuth of the hole ➢ down hole length and interception depth ➢ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• No Drilling reported in this release
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate 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 drill results reported
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No drill results reported

Criteria	JORC Code explanation	Commentary
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 drill results reported
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 plan view of drill hole collar locations and appropriate sectional views.	• See the main body of this release.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	• This is early-stage exploration and reporting is considered for the stage of exploration.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; 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.	• Considerable historical work was completed with mapping, sampling and geophysics This work needs further review.
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).	• Early-stage exploration and follow-up of identified Cu and Au anomalies including additional interpretation of geophysical data, reviews and assessments of regional targets, and infill geochemical sampling of ranked anomalies in preparation for future drill testing.
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Refer to the figures in this report.