

10 October 2024

## Government funded gravity survey highlights new prospective areas at Mt Isa East Cu-Au Project

*The Company is pleased to announce the completion of a government funded detailed gravity survey at the Mt Isa East Cu-Au Project.*

### Highlights

- The detailed gravity survey was completed over approximately 150 sq kms at a nominal 500m station spacing, with infill to a 100m station spacing at the King Solomon and Brumby Ridge Cu-Au Prospects
- At King Solomon, the detailed gravity survey highlights the strongest mineralisation (King Solomon 1), is coincident with a gravity gradient between a gravity high in the east and lower gravity to the west. The gravity gradient continues to the north of King Solomon 1 and may indicate a continuation of sheared lithological boundary under shallow cover, which could have potential to host further Cu-Au mineralisation
- At Brumby Ridge, the detailed gravity data highlights a prominent NE trending structure intersecting the Argylla and Leichardt Formation boundaries, and where the highest-grade mineralisation was intersected in previous drilling. Two other NE trending structures identified in the data are worthy of follow-up exploration
- The new regional gravity data is thought to be highlighting the juxtaposition of brittle and more ductile units, which are favourable sites for the formation of faults and shear zones that could host significant Cu-Au mineralisation. Several targets have been selected as potential trap sites for Cu-Au mineralisation

**Cooper Metals Managing Director, Ian Warland commented:**

*“Importantly, this new detailed gravity survey improves the station spacing by four times compared to the historical data. At Brumby Ridge and King Solomon, 100m infill data has highlighted key lithological contacts and structures important in focussing Cu-Au mineralisation at these Prospects, potentially opening up a new area of focus at both Prospects. A review of the regional data has identified new targets of interest where the favourable structures may have formed at the contact between brittle and ductile lithological units highlighted in the gravity data. Cooper continues to build its pipeline of targets at Mt Isa East and is also assessing potential acquisitions to grow shareholder value.”*

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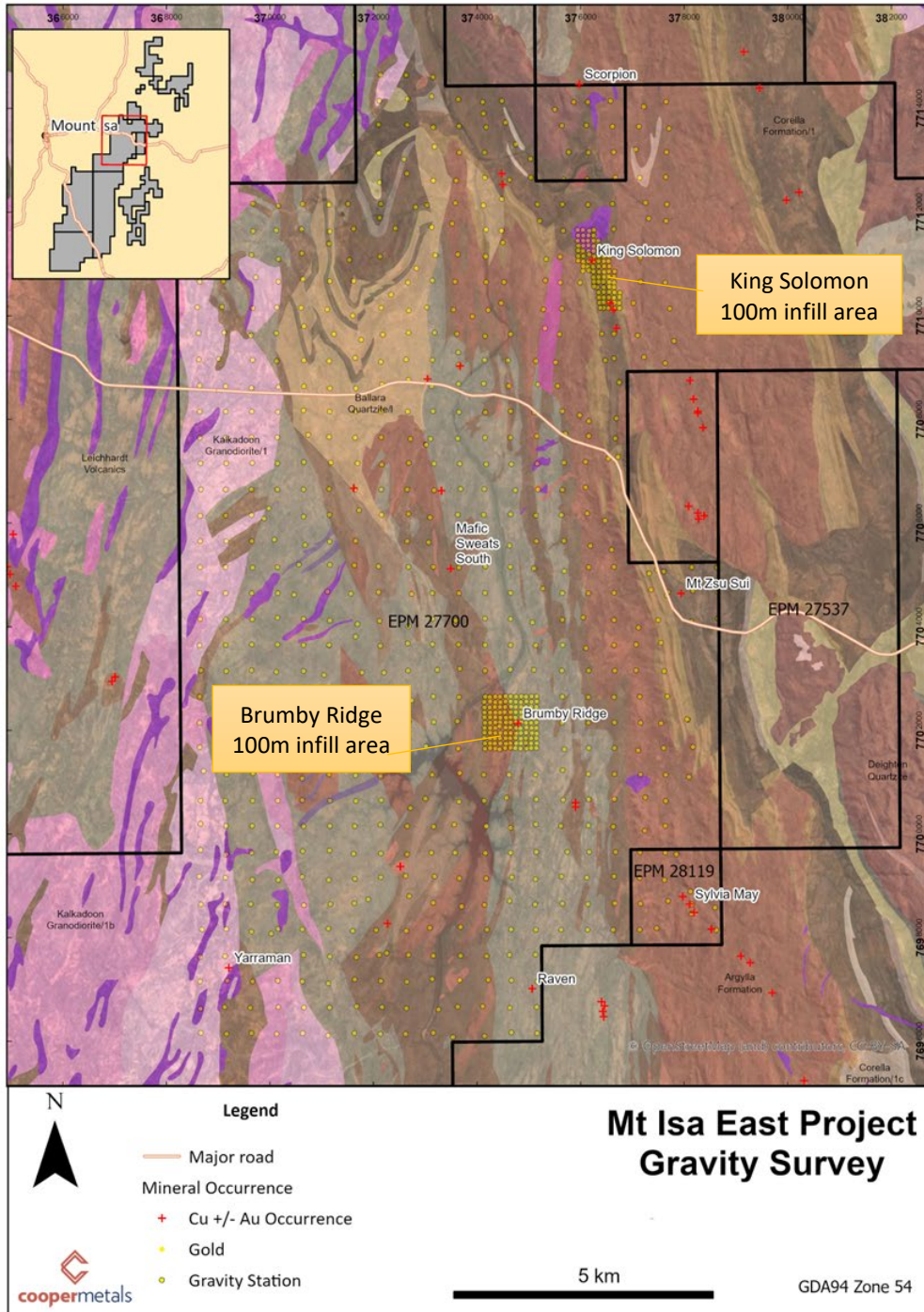


**Background**

Under the 2024 Collaborative Exploration Initiative (CEI), the Queensland Government awarded Cooper Metals \$116,523 to complete a regional gravity survey. The survey covered around 150 sq kms of prospective tenure at 500m station spacing, from King Solomon in the north, to the Raven Cu-Au Prospect in the south (**Figure 1**).

The new gravity survey is four times more detailed than the historic gravity coverage. Gravity surveys have long been demonstrated as key data in the direct and indirect targeting strategy for Cu-Au deposits, particularly IOCG and ISCG deposits. Used in conjunction with aeromagnetic data, gravity can help define the location of favourable structural locations and lithological contacts important for accumulation of Cu-Au mineralisation.

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**Figure 1: Simplified Geology map with Gravity Station Locations**

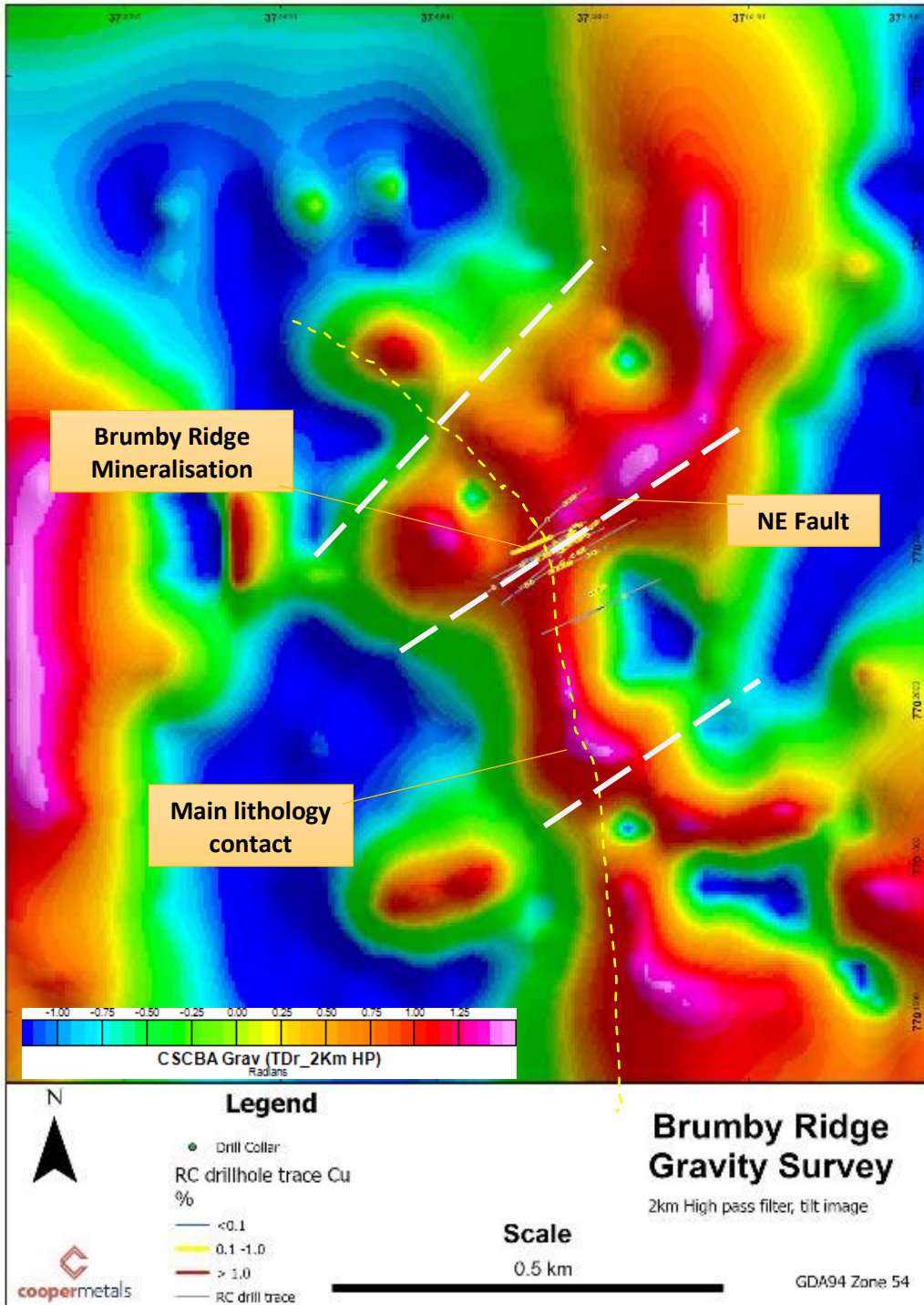


**Brumby Ridge 100m gravity Grid**

At Brumby Ridge Cu-Au Prospect, a 100m gravity grid was completed over the Cu-Au mineralisation to gain insight to the orientation of lithological boundaries and structure that may affect the controls on mineralisation. Drilling has shown Cu-Au mineralisation is located near the main contact between the Leichardt Volcanics in the east and Argylia Formation in the west.

A prominent NE trending structure in the new gravity data is highlighted, coincident with a narrow-mineralised fault intercepted in previous drilling, which assayed up to 71m @ 2.8% Cu in drillhole 23MERC028<sup>1</sup>. This intersection at an inflection point in the lithological boundary and NE trending gravity structure may have been important in focussing Cu-Au mineralisation at Brumby Ridge. There are at least two similar NE trending faults observed in the gravity image that may also be prospective for Cu-Au mineralisation (**Figure 2**).

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**Figure 2: Brumby Ridge - shaded Tilt image of 2Km high-pass filtered (TDRr-2kmHP) CSCBA Gravity with interpreted lithological boundary and faults**

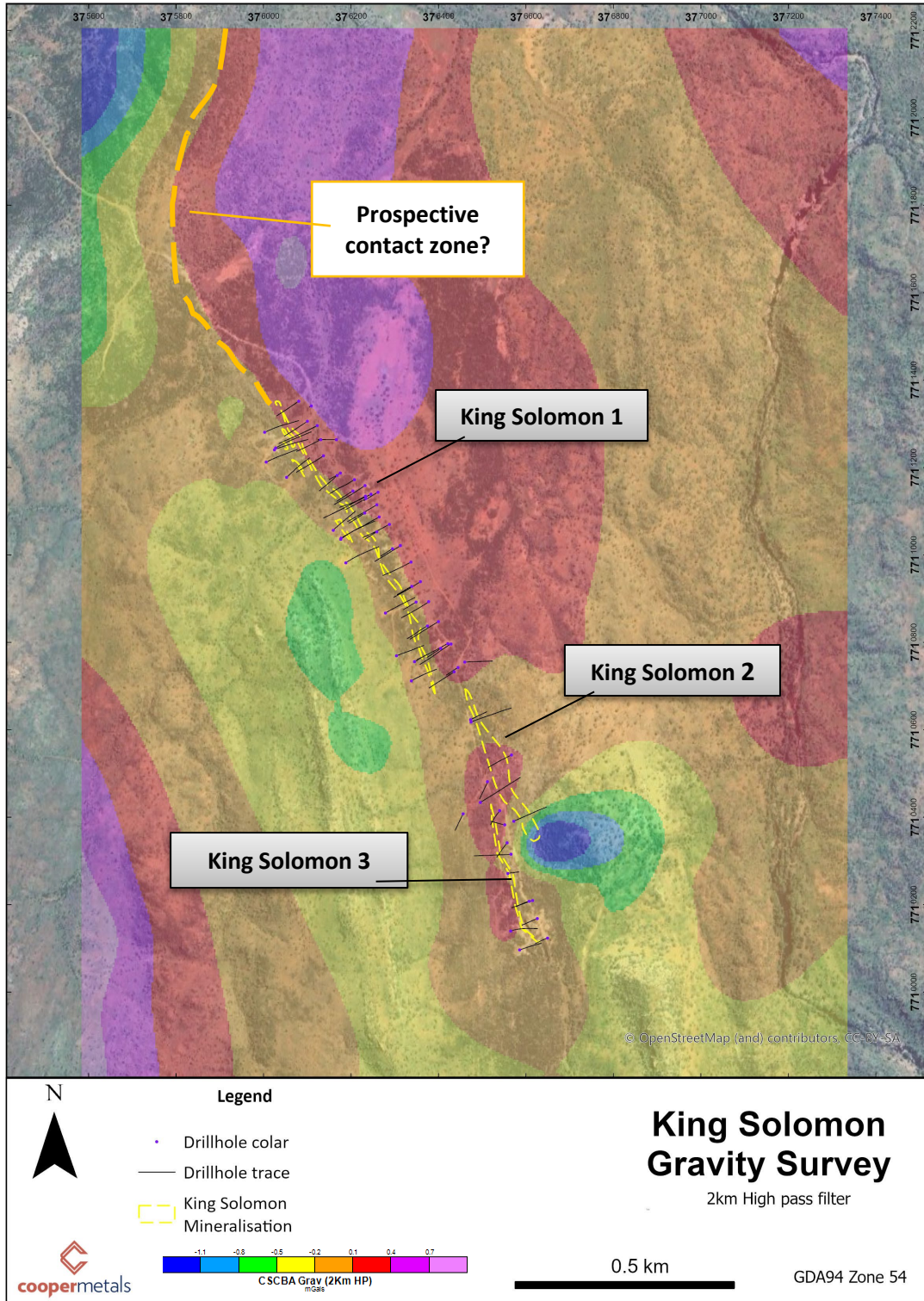




**King Solomon Cu-Au Prospect**

King Solomon Cu-Au Prospect consists of Cu-Au mineralisation within the sheared contact between the Corella and Argylia Formations. The 100m spaced infill gravity survey highlights the strongest mineralisation (King Solomon 1), is coincident with a pronounced gravity gradient between a gravity high in the east and lower gravity to the west. This gravity gradient coincident with King Solomon 1 mineralisation, also extends north of King Solomon 1 and indicates that the key lithological contact continues under shallow cover. This could have potential for the continuation of a mineralised sheared contact (**Figure 3**).

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**Figure 3: King Solomon Round 8 CEI, 100m spaced HP filtered gravity image**

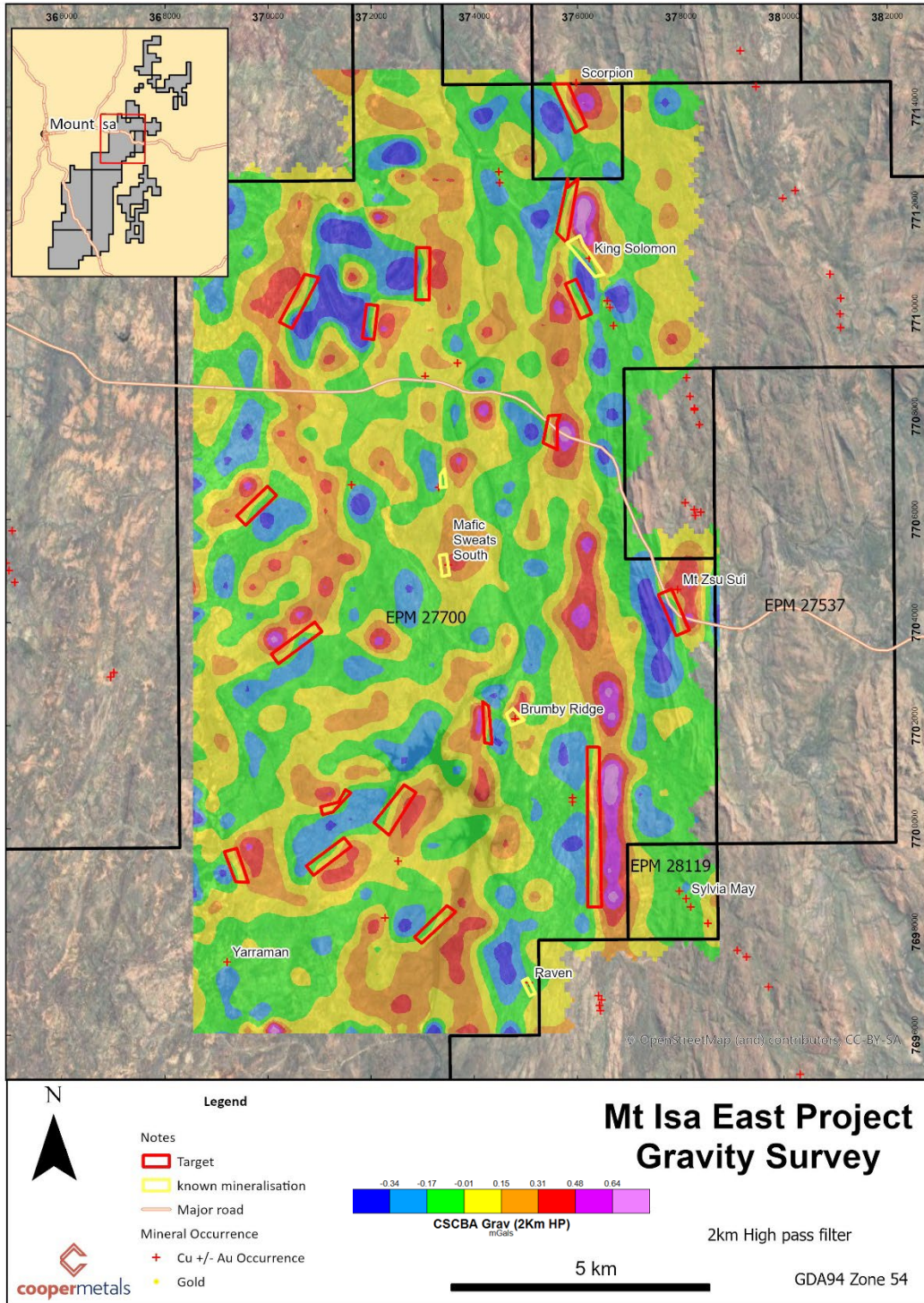




**Regional Targets**

Some of the Cu-Au Prospects including King Solomon, Brumby Ridge and Mafic Sweats South are located at or near the contact between pronounced gravity highs and lows. The gravity data is thought to be highlighting the juxtaposition of brittle and more ductile units which are favourable sites for the formation of faults and shear zones that host Cu-Au mineralisation. A number of these zones have been highlighted in the 2 km high pass filtered gravity data for further investigation (Figure 4). Of note is the Scorpion Prospect in the north and Mt Zsu Sui Prospect near the Barkley Hwy are located near contacts between strong gravity highs and lows.

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**Figure 4: 2 Km high-pass filtered gravity image of the 500m spaced data with preliminary targets and known Cu-Au Prospects**



## Next Steps

Continued review of the new gravity data along with other geochemical and geophysical datasets is in progress. Cooper continues to build the pipeline of targets at Mt Isa East while assessing new potential acquisitions to build shareholder value.

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

## For further information:

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## 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 Australian Institute of Geoscientists. 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. ASX: CPM 30 November 2023: Brumby Ridge Copper Discovery confirmed with 71m @ 2.8% Copper including 24m @ 5.4% Copper

## 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 two 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.

### 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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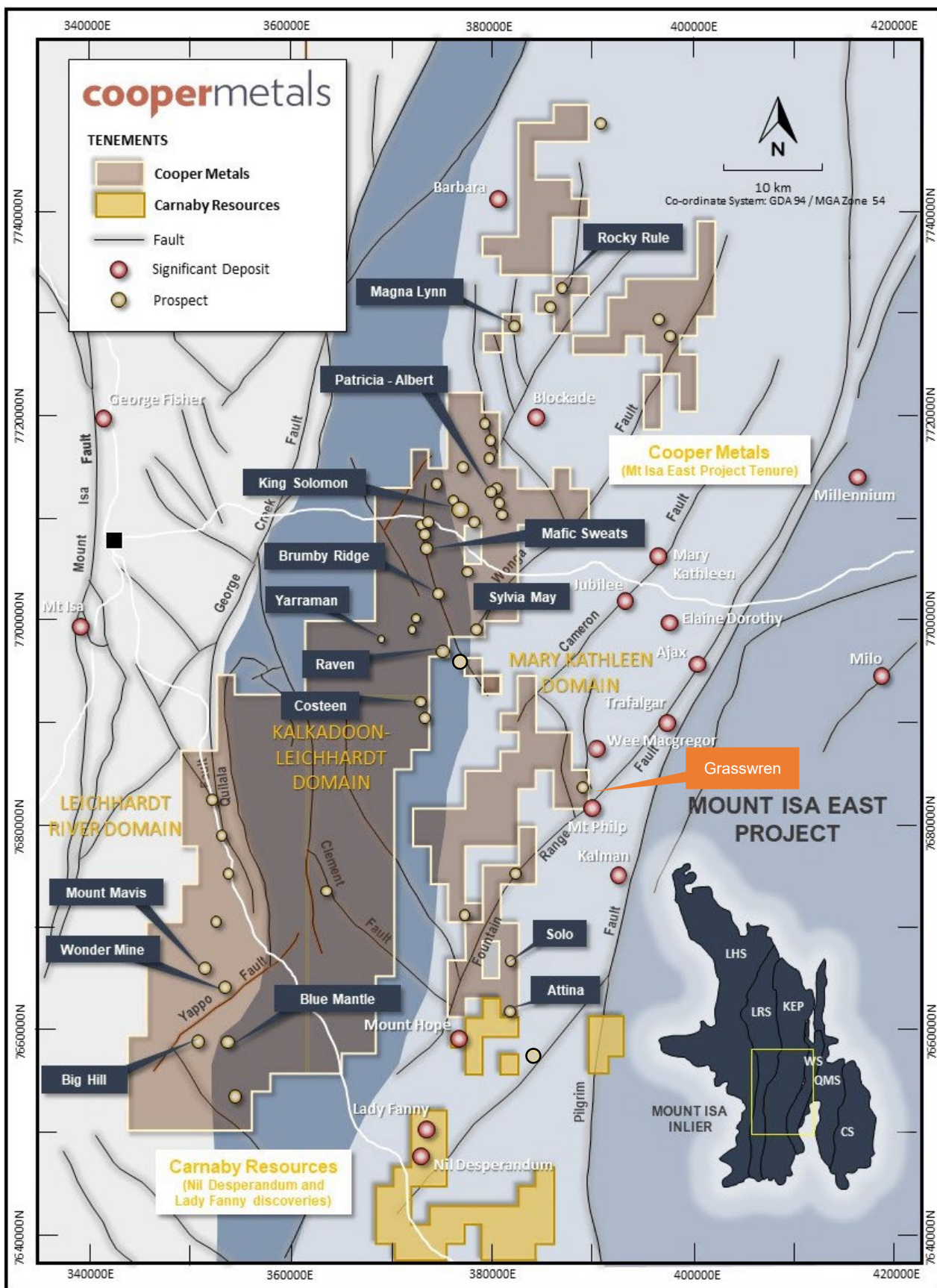


Figure 5: Mt Isa East Project Location over regional geology and main prospects



**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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Cooper Metals Ltd (ASX: CPM) is reporting a new gravity survey completed at the Company's Mt Isa East Project.</li> <li>The survey was completed in August and September by Daishsat Geodetic Surveyors.</li> <li>A nominal 500m eqi-spaced grid was completed over approximately 150sqkm. 100m stn spaced infill was completed at King Solomon and Brumby Ridge Prospects.</li> <li>Scintrex CG-5 Autograv gravity meters were used for gravity data acquisition and base station control. Leica GX1230 GNSS receivers were used for gravity station positional acquisition. All gravity and GNSS data were acquired using Daishsat UTV methods, with up to 3 crews operating concurrently onsite.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling is reported in this release</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling is reported in this release</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No new geochemistry or drilling reported in this release</li> </ul>
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>All field descriptions are qualitative in nature.</li> </ul>
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling reported in this release</li> </ul>

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Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• No new geochemistry or drilling reported in this release</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Surveying equipment utilised on this survey included:               <ul style="list-style-type: none"> <li>• Scintrex CG-5 Gravity meters</li> <li>• Leica GX1230 GNSS receivers</li> <li>• Garmin vehicle-mounted GNSS receivers for navigation</li> <li>• Notebooks for data processing and backup</li> </ul> </li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul style="list-style-type: none"> <li>• Due to the early stage of exploration no verification of significant results has been completed at this time.</li> </ul>
	<ul style="list-style-type: none"> <li>• The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>• No twinned holes encountered.</li> </ul>
	<ul style="list-style-type: none"> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>• All data is digitally recorded in exploration report to Qld government.</li> </ul>
	<ul style="list-style-type: none"> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• No adjustments to the data.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• One new GNSS base station, numbered 1710, was established and utilised as primary GNSS control for the survey.</li> <li>• Raw kinematic GNSS data was logged by a GX1230 GNSS receiver, set up on the GNSS base appropriate for the survey area. Raw static GNSS data was logged at 5 second intervals during acquisition at GNSS bases. An additional GX1230 GNSS receiver is placed nearby using the same static logging rate as redundancy in case of primary GNSS receiver failure.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• Regional stn spacing was completed at a 500m spacing with infill to 100m stn spacing at Brumby Ridge and King Solomon Prospects</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No mineral resources or reserves have been estimated, the competent person considers the results of further exploration, drilling, sampling and laboratory analysis, trenching for bulk samples, etc., would be required to establish the geological, grade continuity and an understanding of the metallurgical properties for each of the project areas.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>No sample compositing applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Data was collected on a nominal 500m stn spacing , which is considered appropriate for gravity survey data</li> <li>No new drilling reported</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No new geochemistry or drilling is reported in this release</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews undertaken.</li> </ul>

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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
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The tenements (specifically EPM 27700, 28119 referred to in this release) are held by Cooper Metals Ltd.</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The tenements are secure under Qld legislation.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>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".</li> <li>Cooper has completed RC drilling at several prospects including Brumby Ridge, King Solomon, Yarraman, Raven, Long Slot, Mafic Sweats South and North.</li> <li>Cooper has also completed portable XRF soil sampling and rock chip sampling on several prospects in the tenement</li> <li>Copper completed IP surveys and EM surveys on various prospects in the area</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling reported in this release</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>No new geochemical sampling or drilling in this release</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No metal equivalents used.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>No new drilling reported in this release,</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>See main body of this release.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Gridded gravity data for the whole survey is presented in this release</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Considerable historical work was completed with mapping sampling and geophysics and drilling in the area. This work needs further review.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Cooper is planning follow up geophysical, geochemical and drilling programs in on selected targets in the area.</li> </ul>
	<ul style="list-style-type: none"> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to figures in this report.</li> </ul>