

ASX Announcement | ASX: CPM

27 October 2022

Exploration Update - Drilling preparation underway at Python and King Solomon, while continuing to build a pipeline of Cu-Au targets

Cooper Metals Limited (ASX: CPM) is pleased to provide an exploration update for the Mount Isa East Cu-Au Project

Highlights

- Earthworks are completed for the drilling access to Python, Python electromagnetic conductor and follow-up drilling at King Solomon 1 Cu-Au prospects
- RC drilling to test Python fixed loop electromagnetic conductor¹ modelled as a south-easterly
 plunging conductor starting just below surface and extending for ~300m down plunge.
 Regulatory approval for two RC holes has been received and will be part of a drill program
 also testing under a historical shaft and open pit in the area
- The three plunging shoots of higher grade Cu-Au mineralisation identified at King Solomon 1² during the August drilling campaign will be tested at depth with RC drilling
- Reconnaissance rock chip sampling identifies anomalous copper grades up to 11.2% Cu over
 VTEM anomalies identified earlier in the year in large regional airborne VTEM survey³
- Cooper continues to build the pipeline of targets with reconnaissance sampling identifying copper potential at several historical mines including Sylvia May and Scorpion prospects

Managing Director Ian Warland, commented:

"The team is in the field undergoing preparation for RC drilling at Python and King Solomon coppergold prospects, to commence within the next week. Reconnaissance sampling has also started at the new Ardmore tenement just to the north of Carnaby's Mt Hope prospect and recent geochemical sampling over some of the VTEM anomalies identified in July and historical mineral occurrences is developing some exciting targets to follow-up. We have a lot of exciting work to complete prior to the end of the year and look forward to updating the market with developments as they eventuate."



Sampling at Sylvia May Workings





Cooper Metals Limited (ASX: CPM) ("CPM" or "the Company") is pleased to provide an exploration update for the Mt Isa East Copper Gold Project in northwestern Queensland (Figure 1).

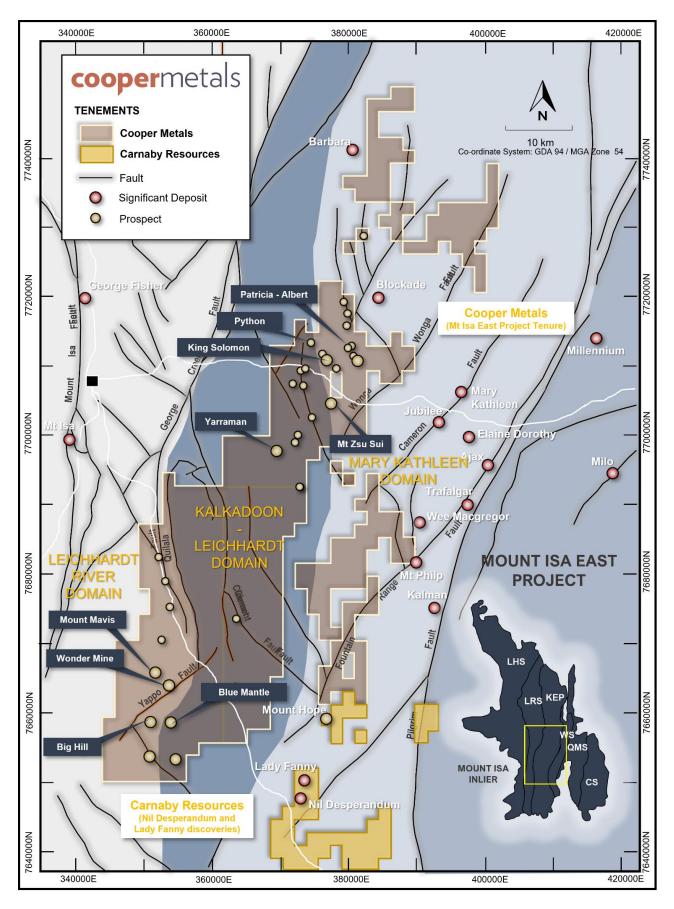


Figure 1: Mt Isa East Project Location Plan



Python Cu-Au Prospect is Drill Ready

Back in March, Cooper announced that a single fixed loop electromagnetic (FLEM) survey completed over Python prospect identified a robust conductor¹ at the northeastern end of the prospect approximately 500m from known copper mineralisation and historical workings (**Figure 2**). The conductor was modelled as a shallow southeasterly plunging body approximately 320m long and 100m down dip, projecting back to within 10m of the surface. The conductor is coincident with a significant northwesterly trending fault that may have been important in hosting copper mineralisation.

Ground checking of the modelled conductor in March and June by Cooper geologists identified iron oxide rich gossanous rock in metasediments of the Corella Formation and importantly rock sample MER078 returned anomalous metals including 0.2% Cu and 0.24% sulphur (MER078) above the modelled conductor.

The FLEM response indicates the conductor commences approximately 10m below surface, so any copper anomalism at surface is very encouraging. Two drill holes are planned for the conductor and two holes near the historical workings at Python.

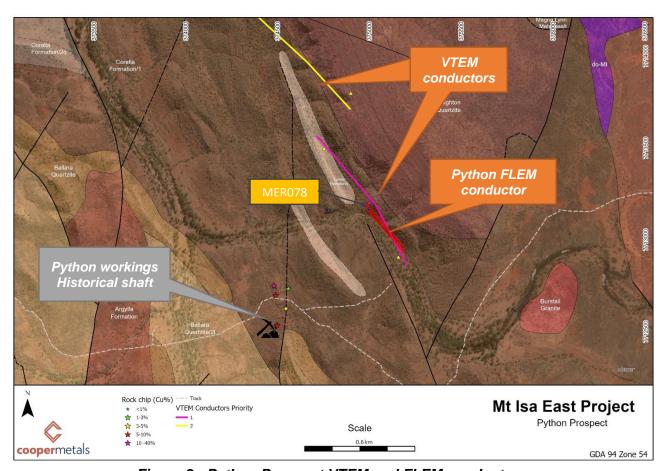


Figure 2: Python Prospect VTEM and FLEM conductors

King Solomon 1 RC Follow up drilling

In September, the Company announced the identification of three plunging shoots of higher-grade Cu-Au mineralisation at King Solomon 1².

The key outcomes of the August RC drilling at King Solomon 1 are summarised below:

Cu-Au mineralisation was successfully extended along strike in both directions and down dip with Cu-Au mineralisation intersected 70m SSE in hole 22MERC032, intersecting 19m @ 1.6% Cu and 0.21g/t Au from 123m, including 5m @ 4.5% Cu and 0.57g/t Au and drillhole 22MERC023 intersecting 14m @ 1.0% Cu & 0.09g/t Au from 76m including 4m @ 2.1% Cu & 0.23g/t Au (22MERC023) some 170m NNW of previously reported intercept in 22MERC015.



 Cu-Au mineralisation has been intersected over 650m of strike length with three higher grade south-easterly plunging shoots identified and remain open at depth (Figure 3).

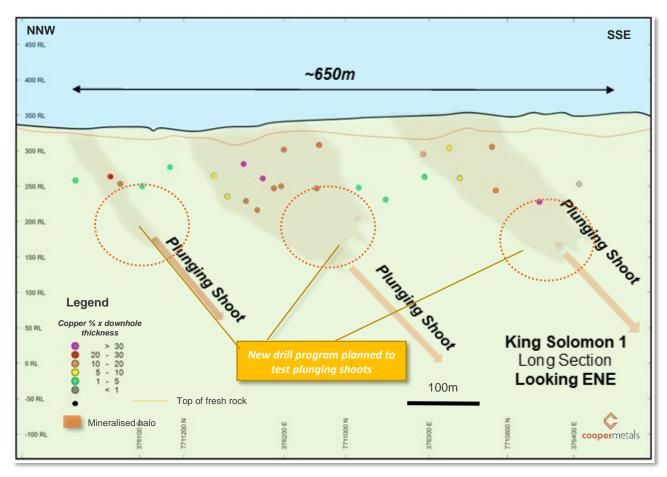


Figure 3: King Solomon 1 Long Section looking ENE

The new drilling program is designed to test down plunge of the known mineralisation. Once the geological model is confirmed by RC drilling an induced polarisation (IP) survey is planned to survey deeper down, further checking the depth potential of the mineralisation prior to any diamond drilling.

Building the Pipeline of Cu-Au Targets

In parallel to the prospect drilling, the Company is continuing to build a pipeline of Cu-Au targets by expanding tenure in the prospective Mt Isa Inlier and conducting regional geophysical and geochemical surveys over historical mineral occurrences and new targets identified by Cooper geologists.

Reconnaissance sampling of Versatile Time Domain Electromagnetic (VTEM) survey anomalies identified in June³ has already highlighted some areas of interest.

The VTEM anomalies may indicate a conductive response due to a variety of sources, including sulphide minerals. Many of the VTEM anomalies are located in areas inaccessible by vehicle, hence helicopter reconnaissance allows for a more rapid assessment of the potential source of the anomaly.

VTEM reconnaissance is continuing, with less than half of the anomalies visited to date.



Plate 1: Helicopter reconnaissance over VTEM anomalies



Encouraging rock chip samples have been returned from some of the anomalies including a narrow copper vein with 11.2% Cu and 1.4g/t Au from mafic rocks proximal to VTEM anomaly 1550b. VTEM 1550b is coincident with a significant north-westerly trending Janice fault that has known small copper mineral occurrences located along it (**Figure 4**). See Appendix 1 for a full list of new rock chip results.

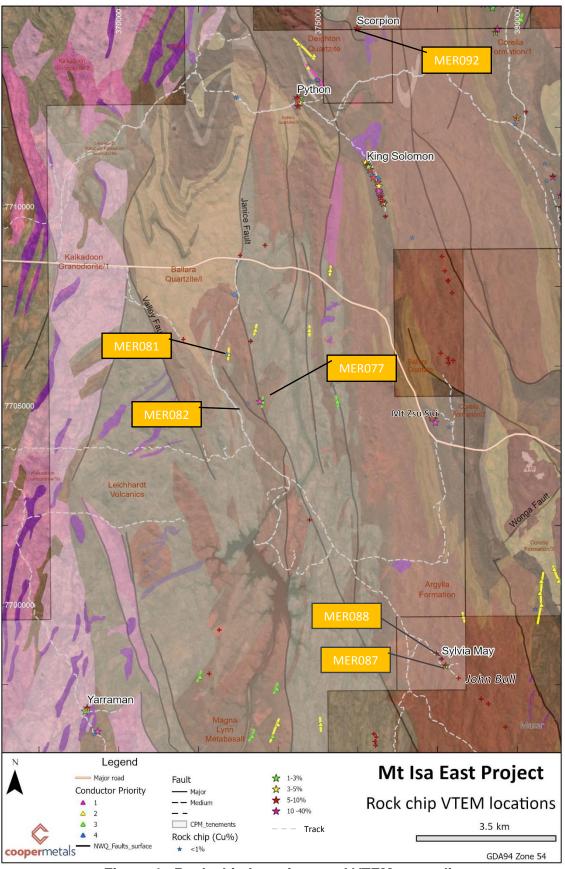


Figure 4: Rock chip Locations and VTEM anomalies

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Scorpion Historical Mine (375985E, 7714487N)

The Scorpion historical mine located approximately 1.5km to the northeast of the Python FLEM conductor is an open pit that is recorded as 45m long, 4m wide, and 8-10m deep in GeoResGlobe government database. Cooper rock chip sample MER092 returned 5.69% Cu and 0.422 g/t Au from a narrow vein within mafic rocks with red rock alteration (Figure 4).

Encouragingly, this historic working is located along the King Solomon, Python trend and will be followed up with further geochemical and possibly geophysical surveys.



Plate 2: Scorpion Mine (sample MER092)

Sylvia May Workings (378204 E, 7698477N)

Sylvia May is located approximately 12km south of King Solomon prospect (Figure 4). There are two historical open pits at Sylvia May which were mined for copper sometime last century. The

southern pit (Little Sylvia) is approximately 20m deep, 20m long and 4m wide, with quartz veining, and minor malachite staining. The rocks are mapped as Argylla formation and rock chip sample MER087 returned 1.45% Cu and 0.05ppm Au from mineralisation in the pit wall.

The main Sylvia May pit is ~ 190m to the north northwest of Little Sylvia. The pit is in poor condition with steep walls, and an adit in the eastern side. Rock chip sample MER088 taken from a small digging just north of the pit assayed 0.95% Cu and 0.036 ppm Au.



Plate 3:Little Sylvia Pit from the air



Plate 4: Little Sylvia Pit

Interestingly the John Bull copper prospect lies ~450m to the southeast along the Sylvia May trend. John Bull is described as 60m long, 40m wide and 5m deep (GeoResGlobe) and is yet to be visited by Cooper geologists. The trend is potentially 800m long including from Sylvia May to John Bull in the south-east (**Figure 4**).



Next steps and ongoing Geochemical Reconnaissance

- RC drilling to commence shortly at Python and King Solomon
- Reconnaissance sampling continues and included a recent field trip to the new Ardmore tenement EPM19125⁴ which is located just to the north of Carnaby's Mt Hope prospect. Rock chip samples taken from Ardmore have been submitted to the laboratory for analysis and expected in November.
- Reconnaissance sampling is also planned to continue following-up VTEM anomalies and other targets identified by Cooper's team

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

Jane Morgan
Investor & Media Relations
im@janemorganmanagement.com.au

M: 0405 555 618

COMPETENT PERSON'S STATEMENT:

The information in this report that relates to **Geological Interpretation and Exploration Results** is based on information compiled by lan 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. ASX CPM: 26 April 2022: Mt Isa East Cu-Au Project Exploration Update
- 2. ASX CPM: 28 September 2022: King Solomon assays define three plunging shoots of Cu-Au mineralisation
- 3. ASX CPM: 30 June 2022: Multiple VTEM conductors identified at Mt Isa East Cu-Au Project
- 4. ASX:CPM: 18 October: Cooper continues to grow the Mt Isa East Project
- 5. ASX CPM: 12 July 2022: IP identifies new targets at King Solomon Cu-Au prospect

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 (QId)

Cooper Metal's flag ship Mt Isa East Cu-Au Project covers ~1300 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 Mozz 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 Rock chip samples summary for this ASX release

Sample_id	Prospect	Cu_%	Au_ppm	Easting	Northing	Comments
MER077	VTEM1550b	11.20	1.40	373542	7705116	Gossan, malachite in dolerite near 1550b
MER078	Python conductor	0.20	0.03	374982	7713194	Iron and quartz rich gossan
MER079	King Solomon	0.29	0.00	376503	7710743	Calcsilicate rock, red rock alteration, minor Cu
MER080	King Solomon	6.27	0.18	346535	7710542	Quartz veining with Malachite
MER081	VTEM1510a	0.05	0.01	372707	7706304	Iron and quartz rich gossan
MER082		0.13	0.02	373227	7705062	Iron and quartz rich gossan
MER083	VTEM1320c	0.09	0.01	383666	7711997	Iron and quartz rich gossan
MER084	VTEM 1110a	0.19	0.00	379241	7718308	Iron and quartz rich gossan
MER085	Beautiful Sandra	4.37	0.02	379066	7716988	historical working , malachite in sericite schist
MER086	VTEM1720a	0.01	0.00	380449	7699892	within 200m of VTEM1720a, Manganese rich breccia
MER087	Sylvia May South	1.45	0.05	378204	7698477	Quartz veining with Malachite
MER088	Sylvia May North	0.95	0.04	378076	7698661	Quartz veining with Malachite , chalcocite
MER089	VTEM2280a	0.01	0.00	383119	7685517	actinolite, limonite, silica alt
MER090	VTEM2340b	0.20	0.06	388882	7683842	Quartz gossan with chalcocite and malachite, weakly ferruginous
MER091	VTEM2350c	0.00	0.01	388862.7	7683534.3	Quartz vein wall rock stockwork with malachite on selvedge
MER092	Scorpion Mine	5. <mark>6</mark> 9	0.42	375985	7714487	Quartz veining with Malachite
MER093	unnamed	2.26	0.01	379453	7714390	Quartz veining with Malachite
MER094	Ardmore			379332	7663789	assays pending
MER095	Ardmore			379789	7663701	assays pending
MER096	Ardmore			379951	7663516	assays pending
MER097	Ardmore			379949	7664022	assays pending
MER098	Ardmore			383367	7675643	assays pending
MER099	Ardmore			383500	7675790	assays pending
MER100	Regional			376792	7699681	assays pending
MER102	Sylvia May			377857	7698919	assays pending



APPENDIX 2: 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. 	 Cooper Metals Ltd (ASX: CPM) is reporting a new geochemistry survey completed at the Company's Mt Isa East Project. CPM Rock chip samples were collected predominantly on selective outcrop where there were signs of mineralisation or alteration of interest. All samples were submitted to ALS Laboratory in Mount Isa for sample preparation and then forwarded to ALS Laboratory in Brisbane for analysis. Rock samples preparation completed by ALS using method CRU-21 crush of 70% passing 6mm, then PUL-23 pulverise to nominal 85% passing 75 microns. Samples were analysed using method ME-ICP61 for 33 element four acid ICP-AES. Au was analysed by 50g charge ICP-AES finish code a-Au-ICP22. Ore Grade Elements were assayed using four acid digest and MEOG62. Ore Grade Cu was assayed using Cu-OG62
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. Whether logging is qualifative or quantitative in	CPM rocks have been described in detail and photographed. All field descriptions are qualitative in
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant	All field descriptions are qualitative in nature. No drilling reported in this release
	intersections logged.	• No animing 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 subsampling 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. 	 CPM rocks - sample preparation was appropriate for the level of reporting. No duplicates were submitted. CPM rock chips were taken by geologist to be representative of the subcrop or outcrop sampled. CPM rock samples of ~1kg are appropriate for style of mineralisation and regional exploration.
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. 	CPM Rock chips - No duplicates, standards or blanks were submitted with rock chip samples. The laboratory has its own QAQC system for standards, repeats and duplicates.
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. Accuracy and quality of surveys used to locate 	 Due to the early stage of exploration no verification of significant results has been completed at this time. No twinned holes encountered. All data is digitally recorded in exploration report to Qld government. No adjustments to the data. CPM rock chips - Location of samples by
data points	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.	handheld Garmin GPS to +/- 5m accuracy, GDA94 Zone 50.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	 The competent person considers the level of accuracy associated with the borehole collar survey methods and the historical borehole spacing to be appropriate for the reporting of exploration results and as an indication of mineralization prospectivity for the mineral tenements. CPM rock chips - Rock Chips samples were collected based on variable rock distribution.
	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.	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.



Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	Whether sample compositing has been applied. 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 sample compositing applied. CPM - Rock chips were taken from selected outcrops, and may not be representative of the whole outcrop. The sample selection was based on outcrop distributions, and the link with geological structures has not been defined at this time. No pow drilling reported.
Sample security	this should be assessed and reported if material. The measures taken to ensure sample security.	No new drilling reported Sample security, due care and chain of custody are expected to have followed leading practice at the time of each drilling campaign, in the review of the available historical open-source information the competent person has encountered no reason to have questioned this assumption. CPM rock chips are collected in individually numbered calico bags and loaded into polyweave bags and cable tied. Samples were collected and stored at a secure location and transported to the Mt Isa laboratory by CPM personnel along with appropriate identification and paperwork
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews undertaken.



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 27700) 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". Nine RC holes were completed at the Mt Zsu Sui prospect and details of this drilling can be found within the CPM Prospectus September 2021.
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 new 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 The assumptions used for any reporting of 	Unless stated otherwise in the announcement all grades were reported as certified by the laboratory for the sample length as taken in the field. No metal equivalents used.
	metal equivalent values should be clearly stated.	. 13 motal oquivalonio about



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 new drilling reported in this release,
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 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.	Rock chip samples are reconnaissance in nature from selected sites to demonstrate the prospectivity of the area. The reporting is considered balanced
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 figures in this report.