

ASX Announcement | ASX: CPM

02 March 2022

High powered ground geophysics identifies robust conductors at Mt Isa East Cu-Au Project**Highlights**

- A high powered fixed loop ground electromagnetic survey (FLEM) has identified a robust conductor at the Python prospect, modelled as a shallow south-easterly plunging anomaly, extending approximately 420m long and 100m down-dip
- Significantly, the Python conductor is coincident with a north-westerly trending regional fault, possibly important in focusing copper mineralisation
- A separate FLEM survey has identified a conductive zone at King Solomon coincident with the known mineralised trend, striking over 1.2km with Cooper's rock chip samples previously returning up to 16.65% Cu and 2.58g/t Au^{1,2}
- The FLEM conductors at Python and King Solomon are coincident with airborne Versatile Time Electromagnetic (VTEM) conductors, interpreted by Cooper's consultant geophysicist from a 2016 regional VTEM survey
- The FLEM surveys have helped to define a robust drill target at Python, and a developing model at King Solomon, whilst other regional VTEM conductors identified on Cooper's ground will now be subjected to further investigation

Cooper Metals Managing Director Ian Warland, commented:

"I am highly encouraged that our first high-powered fixed loop electromagnetic survey at Mt Isa East has identified conductors at both the Python and King Solomon Cu-Au prospects. The Python conductor is especially exciting with the modelled conductor extending for over 400m and coincident with a significant regional fault. The use of publicly available VTEM data led Cooper to the Python conductor, confirming our strategy to use VTEM as an effective way of screening our tenure for sulphide rich deposits. To this end, Cooper has already signed a contract to complete a detailed VTEM in the June Quarter. Importantly, Cooper now has initial targets for drill testing and our highest priority is to organise a drill program, while continuing to generate a pipeline of high-quality Cu-Au targets."





Cooper Metals Limited (ASX: CPM) ("CPM" or "the Company") is pleased to announce the preliminary results of the fixed loop electromagnetic survey (FLEM) at the Python and King Solomon Cu-Au Prospects located at our Mt Isa East Project in northwestern Queensland (**Figure 1**).

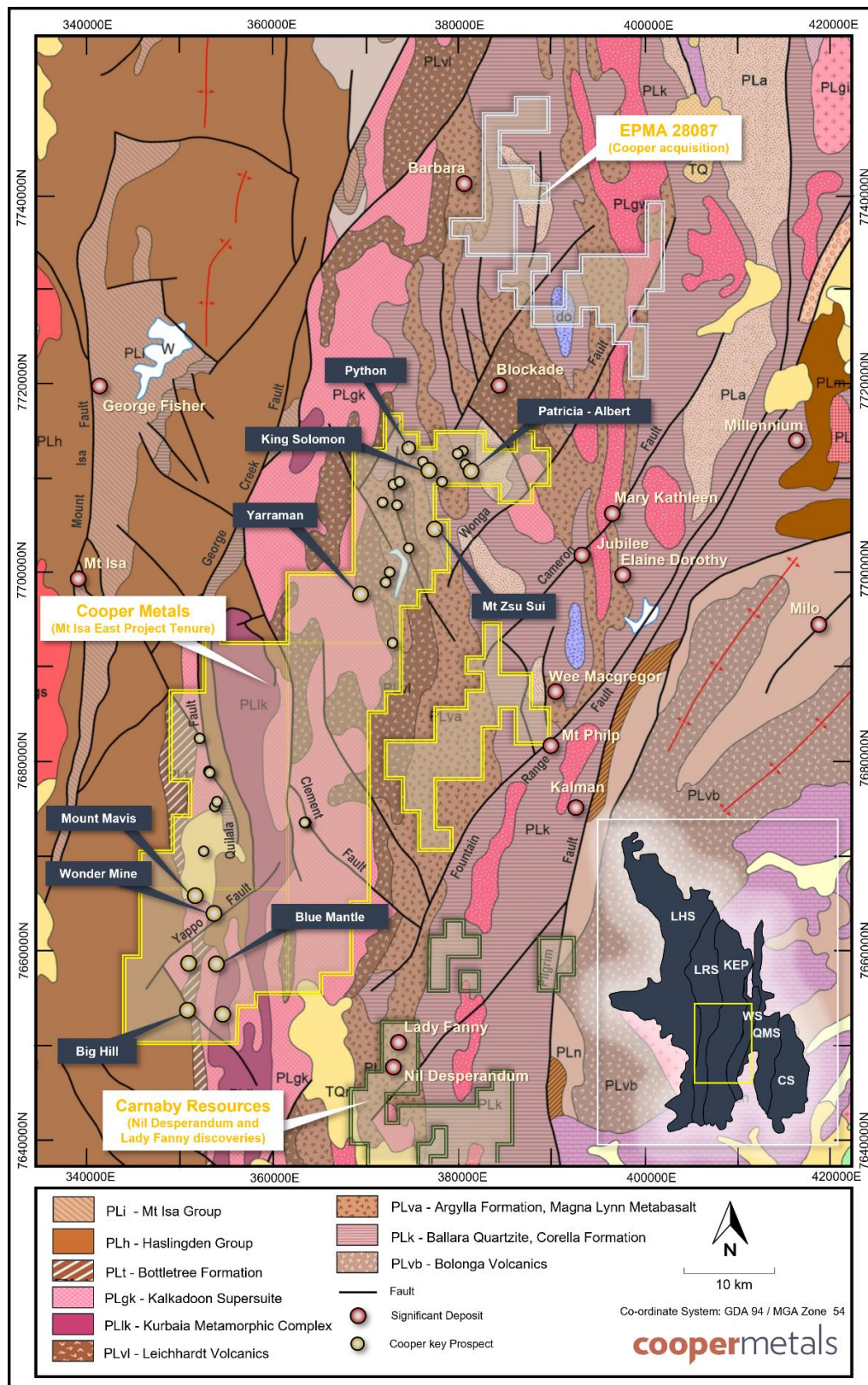


Figure 1: Mt Isa East Project over regional geology and main prospects



The FLEM program just finished on the 26th of February and initial results are now available.

Geophysical Program Rationale and Details

Copper-gold (Cu-Au) mineralisation at the Python and King Solomon Prospects is hosted in mixed siltstones, sandstones, and limestone of the Corella Formation. Both prospects have extensive historical workings in the form of shafts and small open pits, significantly without any recorded drill testing. The geophysical program comprised two separate survey blocks over each prospect with each block consisting of several traverses of three-component FLEM. The high-powered FLEM survey is the first of this type conducted on these historical prospects and was designed to identify the presence of conductive anomalies under the old workings that may indicate the presence of copper sulphide mineralisation at depth (Figure 2).

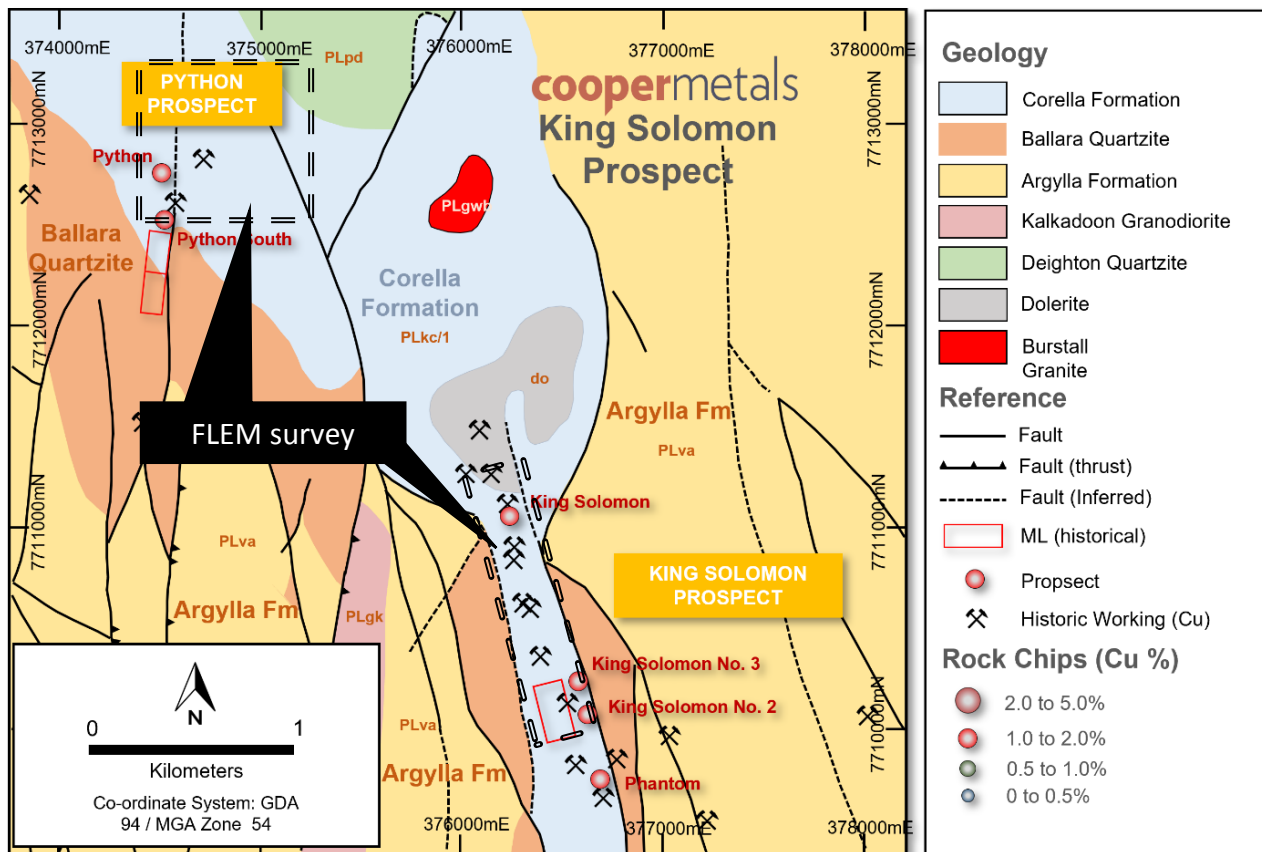


Figure 2: Location of King Solomon and Python Prospect FLEM survey over geology (source: After CPM Prospectus)

Python Cu Prospect

A single FLEM survey loop completed over Python prospect has identified a robust conductor at the northeastern end of the prospect approximately 500m from known copper mineralisation and historical workings (Figure 4). **The conductor was modelled as a shallow southeasterly plunging body approximately 420m long and 100m down dip, projecting back to the surface (Figure 3).** The conductor is coincident with a significant northwesterly trending fault that may have been important in hosting copper mineralisation.

Encouragingly, the FLEM conductor is coincident with an airborne Versatile Time Domain Electromagnetic (VTEM) anomaly identified by Cooper's consultant geophysicist from a publicly available regional VTEM survey commissioned by the Queensland Government in 2016. This proof of concept bodes well for other VTEM anomalies that have already been identified in Cooper's tenure. There are no known workings or surface geochemistry in the vicinity of the Python FLEM conductor.

The modelled conductor identified in the FLEM survey provides Copper with a robust drill target that will be drill tested as soon as the necessary approvals and arrangements have been made. The historical workings at Python (which are offset 500m from the new FLEM anomaly) did not resolve



any conductor responses, which suggests a disseminated style of mineralisation or lack of conductive sulphides. The historical workings will be further tested as part of the broader drill program planned at Python.

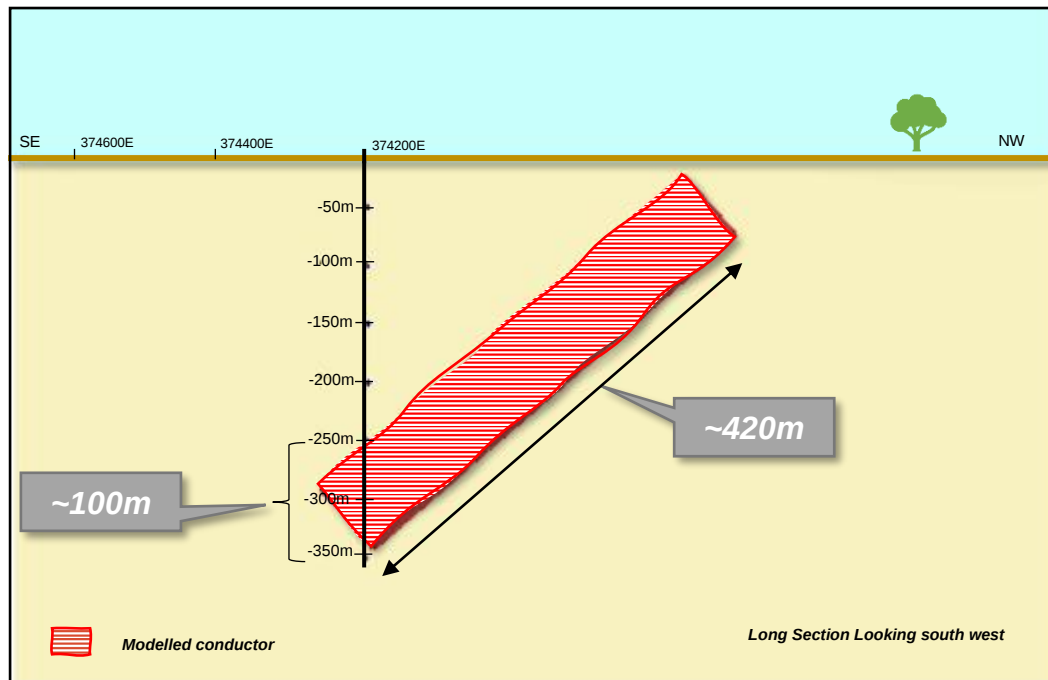


Figure 3: Long section of modelled FLEM conductor at Python Prospect

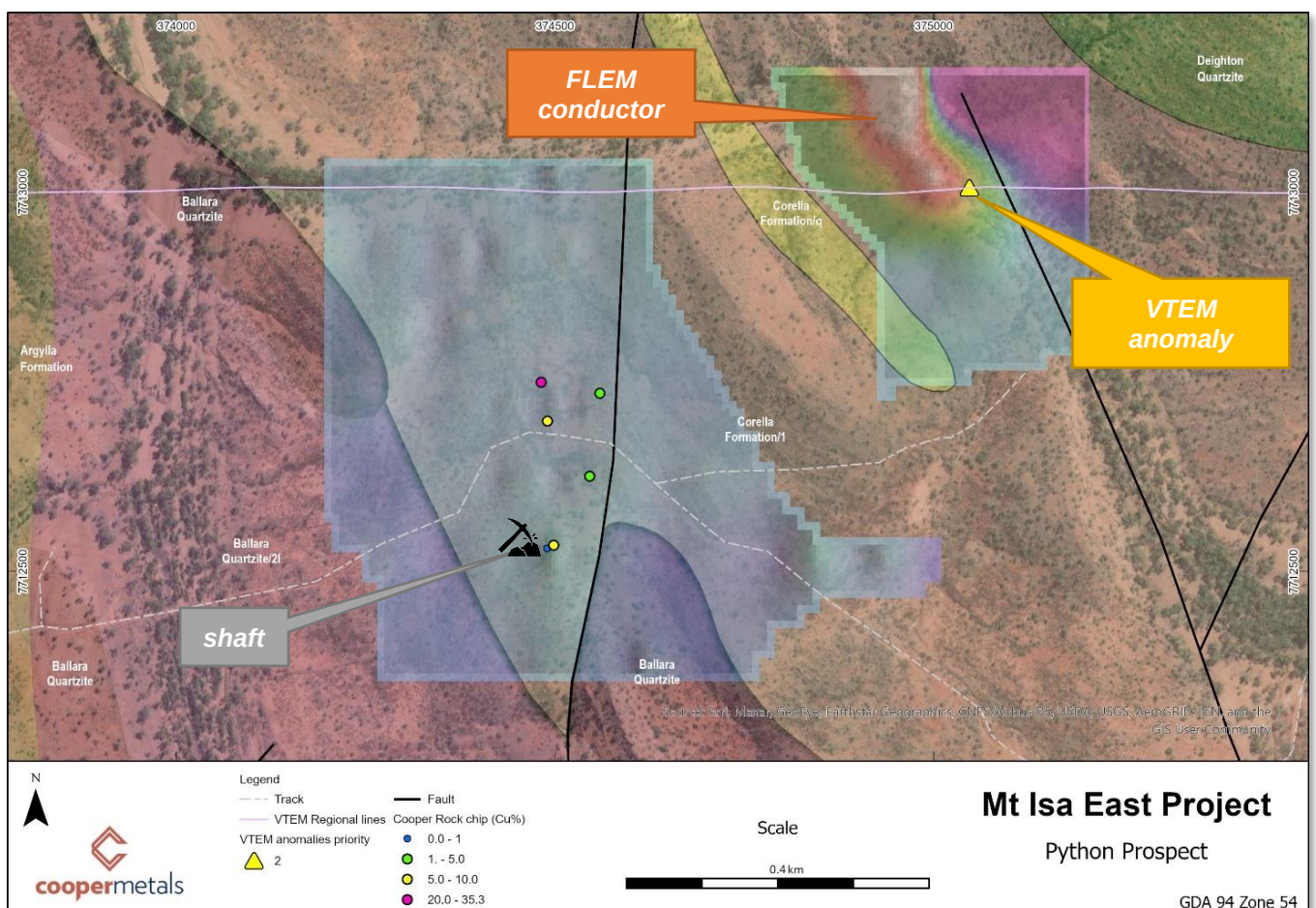


Figure 4: Python Prospect FLEM results channel 20 amplitude image



King Solomon Cu-Au Prospect

Two FLEM loops were used to cover ~1.2km length of mineralised trend, as defined from historical workings and surface geochemistry. Encouragingly the FLEM has mapped a conductive response coincident with the Cu-Au mineralised trend. The higher conductive response is in the northern part of the prospect area around King Solomon 1 and is potentially mapping out copper sulphide mineralisation at depth. Modeling of the FLEM response at King Solomon is in progress to define the best targets for drill testing.

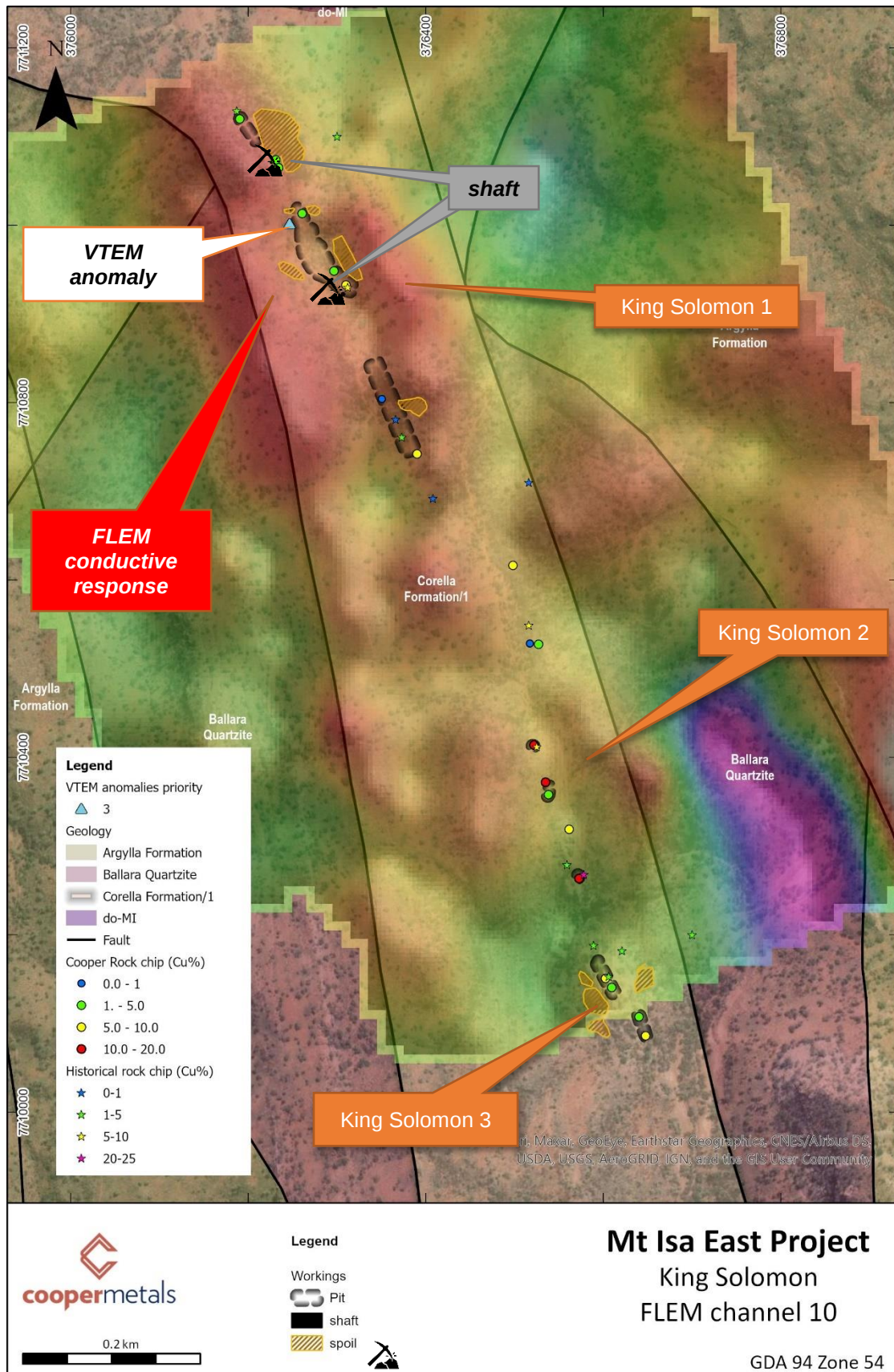


Figure 5: King Solomon FLEM channel 10 amplitude image, and rock chips assays



Significantly, as with the Python prospect, the King Solomon prospect also has a VTEM anomaly coincident with the FLEM anomaly, adding confidence to the applicability of the Queensland Government's 2016 regional VTEM survey for identifying potential Cu-Au anomalies (**Figure 5**). In addition to the VTEM anomalies associated with the Python and King Solomon, Cooper's consultant geophysicist has identified several other regional VTEM anomalies on Cooper's tenure which will be followed up with a detailed VTEM survey in the June Quarter.

Mt Zsu Sui Prospect was tested with two FLEM loops as a trial, while the access to Python and King Solomon prospects was temporarily closed by swollen river crossings. No significant conductive responses were found at Mt Zsu Sui. An induced polarisation (IP) trial is being considered at a later date.

Next Steps

- Complete FLEM modelling of King Solomon prospect
- Ground truth new conductors at Python and King Solomon prospects
- Finalise drill planning and approvals ahead of drill testing
- Finalise detailed VTEM survey planning

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

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COMPETENT PERSON'S STATEMENT:

*The information in this report that relates to **Geophysical Exploration Results** is based on information compiled by Kelvin Blundell, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Blundell, who is employed as a Consultant to the Company through geophysical consultancy. Mr Blundell 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 Blundell consents to the inclusion in the report of the matters based on his information and the form and context in which it appears.*

*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. ASX CPM: 1 December 2021: Early Fieldwork programs at Mt Isa East return rock chip assays up to 35.3% Cu and 7.96 g/t Au
2. ASX CPM: 7 February 2022: Follow-up rock chip sampling continues to demonstrate wide-spread Cu and Au mineralisation at Mount Isa East



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 ~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 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. - CPM is reporting the results of a ground electromagnetic survey conducted by Australian Geophysics Services (AGS) which commenced on the 24th of January 2022 and finished on the 25th of February 2022 - The electromagnetic data was acquired using a Emit SmartTEM 24, 16 channel receiver with 3 component smart fluxgate. 1 GeoRESULTS DRTX TX 4 transmitter and associated generator - The FLEM system specifications are as follows: - Senor configuration: 3 component smart fluxgate magnetometer. - Receiver=SmartTEM-24 - Transmitter=GeoResults DRTX 4 - Tx Current = is 50-60A for 400x 600m loops. 80A for the 300x200m loop - Base Frequency = 2.5 Hz - Off time = 100 msec - GPS control = handheld GPS - 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



Criteria	JORC Code explanation	Commentary
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
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.	- Australian Geophysics Services (AGS) conducted the FLEM survey. - The electromagnetic data was acquired using a Emit SmartTEM 24, 16 channel receiver with 3 component smart fluxgate. 1 GeoRESULTS DRTX TX 4 transmitter and associated generator - The FLEM system specifications are as follows: - Sensor configuration: 3 component smart fluxgate magnetometer. - Receiver=SmartTEM-24 - Transmitter=GeoResults DRTX 4 - Tx Current = is 50-60A for 400x 600m loops. 80A for the 300x200m loop - Base Frequency = 2.5 Hz - Off time = 100 msec - GPS control = handheld GPS 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



Criteria	JORC Code explanation	Commentary
		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.	• FLEM - Data received is preliminary in nature and has been reviewed by Kelvin Blundell Geophysical consultant. FLEM conductors have been selected by Kelvin Blundell Geophysical Consulting. • VTEM data provided Geoscience Australia – data reviewed by Kelvin Blundell 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 • FLEM - Data using a handheld GPS • 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.
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• Configuration = in-loop Python Prospect ◦ Loop size 400m by 600m orientated N-S ◦ Station spacing 100m E-W lines and 25 to 50m stations spacing along the line • Configuration = in-loop King Solomon Prospect ◦ Loop size 400m by 600m * 2 orientated 068 degrees ◦ Station spacing 100m SW-NE orientated lines and 50 to 100m stations spacing along the line • Configuration = in-loop Mt Zsu Sui Prospect ◦ Loop 1 size 400m by 600m orientated 070 degrees ◦ Station spacing 100m SW-NE orientated lines and 25m stations spacing along the line ◦ Loop 2 size 300m by 200m orientated N-S ◦ Station spacing 50m orientated E-W • VTEM – lines spaced 2km apart and orientated east-west
	• 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.	• FLEM line spacing is appropriate for exploration purposes • VTEM – line spacing for regional data only
	• Whether sample compositing has been applied.	• No sample compositing applied.



Criteria	JORC Code explanation	Commentary
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.	- FLEM lines were orientated perpendicular to the expected strike of the mineralisation. - 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 sampling reported
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. - Chinalco historical rock chip samples were collected from Chinalco historical tenement EPM14019. - Syndicated Metals historical rock chips in this ASX are from historical tenement EPM15816.
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



Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No drill results reported
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.	FLEM data is presented for Python and King Solomon, no significant anomalies at Mt Zsu Sui
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 modelling of the FLEM data is in progress over King Solomon to define drill targets
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.