

## **ASX Announcement** | **ASX: CPM**

31 May 2024

# Shallow Cu-Au mineralisation continues to grow at Mafic Sweats South

# **Highlights**

Cooper Metals Limited (ASX: CPM) ("CPM" or "the Company") is pleased to announce the assay results from recent regional RC drilling on four Cu-Au prospects at the Mt Isa East Cu-Au Project in Queensland.

- New drilling has significantly extended Cu-Au mineralisation at Mafic Sweats South to approximately 285m along strike and up to 200m deep, intersecting disseminated copper sulphides under an extensive copper oxide zone. New assay results include:
  - 89m @ 0.30% Cu & 0.01 g/t Au from 4m, including 4m @ 1.04% Cu & 0.01 g/t Au from 80m (24MERC011)
  - 118m @ 0.17% Cu & 0.01 g/t Au from 124m, including 8m @ 0.25% Cu & 0.01 g/t Au from 199m & 11m @ 0.33% Cu & 0.01 g/t Au from 222m (24MERC012)
- Encouragingly, all three drill holes at Mafic Sweats South ended in anomalous copper, indicating a large shallow Cu-Au system open along strike and downdip, centred around a regional faulted contact between the Argylla and Magna Lynn Formations
- A combined downhole length of approximately 79m of low-grade Cu-Au mineralisation was intersected in drillhole 24MERC017 over several zones at Yarraman Prospect, with grades up to 1m @ 1.0% Cu and 0.37 g/t Au confirming a fertile faulted contact zone between two key lithologies requiring further exploration

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

"RC drilling over the four Cu-Au prospects has intersected copper sulphides at all locations with highly encouraging results especially at Mafic Sweats South. Here we have delineated an extensive shallow copper oxide zone underlain by disseminated copper sulphides, which confirms a fertile system over the Janice Fault, located at the contact between differing lithologies. At Yarraman, another fertile system is confirmed with around 79m of low-grade Cu-Au mineralisation intersected on a coincident IP and geochemistry anomaly. Further mapping and sampling are underway to help delineate targets for follow-up drilling."





#### **Background**

Assay results have now been received for 12 drill holes drilled in April at the Mafic Sweats South, Mafic Sweats North, Raven and Yarraman Cu-Au Prospects (**Figure 1**).

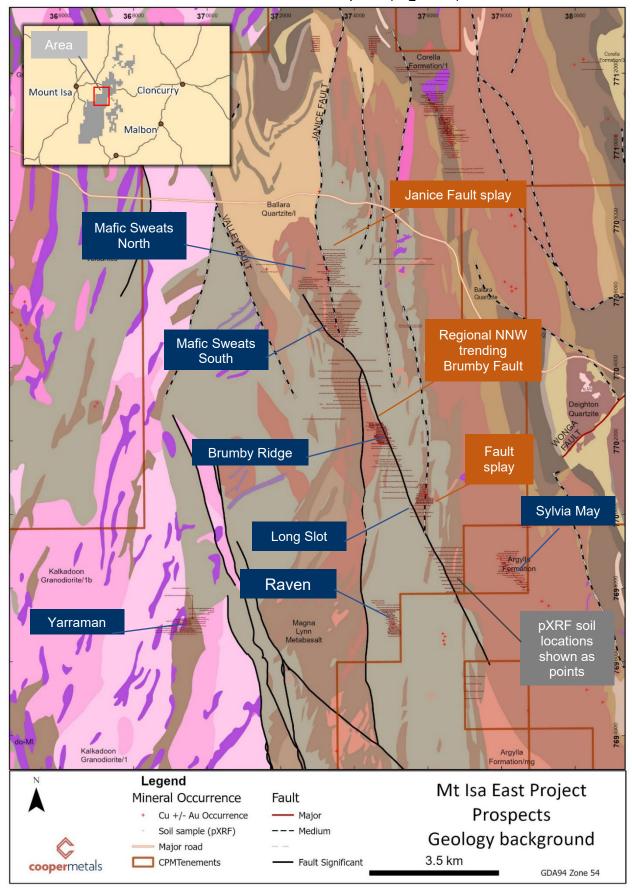


Figure 1: Prospect Location Map Mt Isa East Project



#### **Mafic Sweats South Cu-Au Prospect**

Three follow-up RC drill holes for 519m were drilled to test along strike and down dip from the 2023<sup>5</sup> drilling which had intersected significant downhole thickness of copper oxide mineralisation including;

- 65m @ 0.34% Cu from surface (23MERC014)
- 66m @ 0.25% Cu from 6m (23MERC015), and
- 39m @ 0.12% Cu from surface (23MERC016)

The new drilling has extended the low-grade Cu-Au mineralisation to a total strike length of approximately 285m long and down to 200m below surface. Drillhole 24MERC010 drilled at the northern end of the prospect intersected 74m @ 0.15% Cu and 0.012 g/t Au, including 17m @ 0.24% Cu & 0.02 g/t Au from 47m and 6m @ 0.29% Cu & 0.01 g/t Au from 73m.

Two drill holes drilled near the center of the prospect intersected Cu-Au mineralisation down to 246m down hole including:

- 89m @ 0.30% Cu & 0.01 g/t Au from 4m including;
  - o 4m @ 1.04% Cu & 0.01 g/t Au from 80m (24MERC011)
- 118m @ 0.17% Cu & 0.01 g/t Au from 124m including;
  - o 8m @ 0.25% Cu & 0.01 g/t Au from 199m &
  - o 11m @ 0.33% Cu & 0.01 g/t Au from 222m (24MERC012)

Importantly, drillhole 24MERC011 ended in mineralisation when the drill hole became bogged in clay rich weathered rocks. Drillhole 24MERC012 intersected disseminated chalcopyrite in fresh mafic rocks at around 124m downhole and ended in anomalous copper mineralisation at 246m deep.

Drilling to date indicates an extensive low-grade Cu-Au system approximately 280m long, with an oxide zone to around 75m deep and a sulphide zone drilled down to 200m below surface and open at depth (**Figure 3**).

The mineralisation is centred around a complex structural zone along the Janice Fault, a NNW trending fault that splays off a larger north-westerly trending regional fault (**Figure 1**). The low-grade copper intercepts fit well with the modelled 2022 Versatile Time domain Electomagnetic (VTEM) conductor<sup>9</sup> and the copper anomalism found in the pXRF soil survey (**Figure 2**).

Next steps include assessing the potential for higher grade Cu-Au mineralisation at Mafic Sweats South at depth or along strike for further drill testing.

#### **Mafic Sweats North Cu-Au Prospect**

Four holes for approximately 444m were completed to test a coincident soil copper anomaly and a VTEM conductive response<sup>9</sup>. Drilling intersected minor copper anomalism including 1m @ 0.28% Cu & 0.04 g/t Au from 97m (24MERC008), 6m @ 0.23% Cu & 0.02 g/t Au from 108m (24MERC009) and 5m @ 0.15% Cu & 0.01 g/t Au from 131m (24MERC009).

The mineralisation intersected so far in the drilling does not adequately explain the sizeable copper in soil anomaly which is approximately 900m long at >250ppm copper delineated by pXRF.

See Table 1 below for significant intercepts at Mafic Sweats South and North.



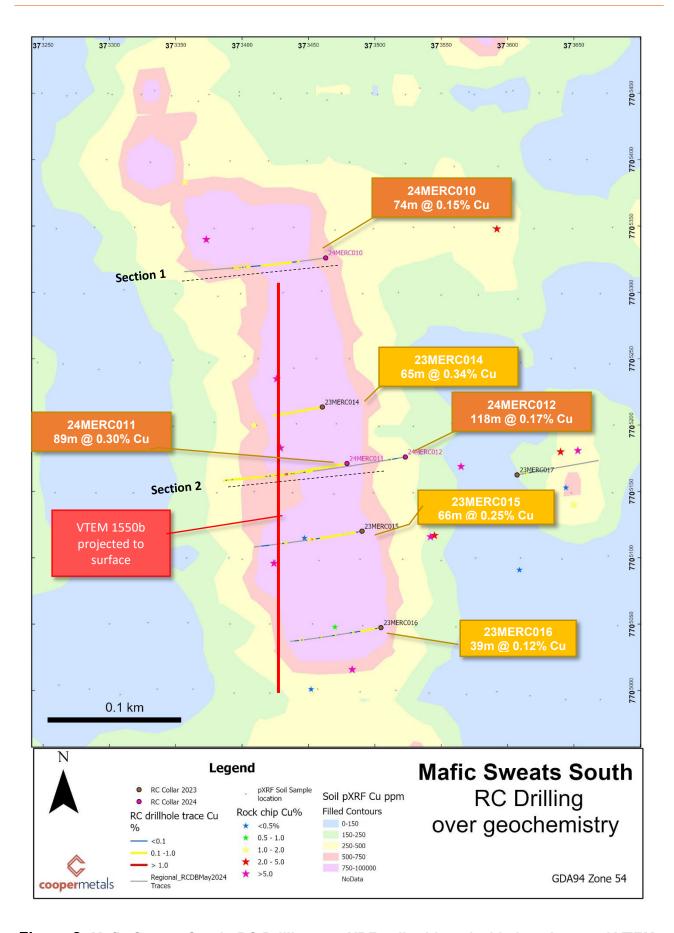


Figure 2: Mafic Sweats South, RC Drilling on pXRF soil grid, rock chip locations and VTEM anomaly



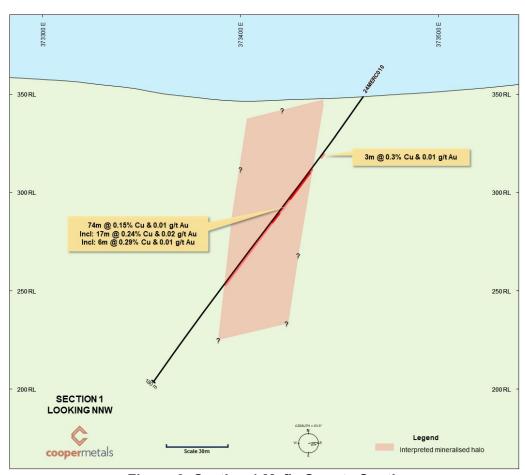


Figure 3: Section 1 Mafic Sweats South

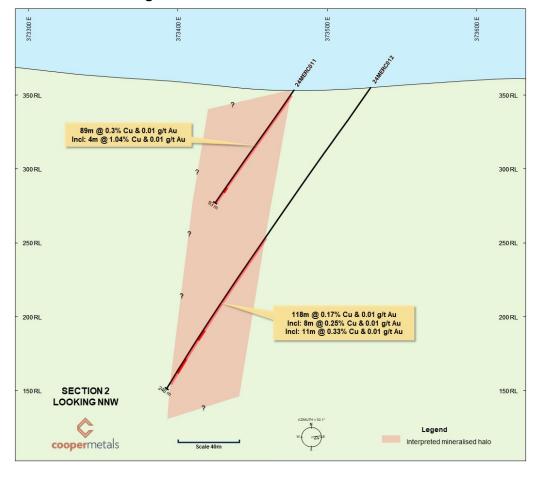


Figure 4: Section 2 Mafic Sweats South



# Table 1: Mafic Sweats South and North Prospects significant results

Holeid	Depth From (m)	Interval (m)	Cu%	Au (g/t)	Prospect	Comment	
24MERC006	7	2	0.14	0.02	Mafic Sweats North		
Z-IVIERCOOO	59	1	0.23	0.03	Mane Sweats North		
24MERC007					Mafic Sweats North	NSI	
24MERC008	97	1	0.28	0.04	Mafic Sweats North		
24MERC009	108	6	0.23	0.02	Mafic Sweats North		
24IVIERC009	131	5	0.15	0.01	Manc Sweats North		
23MERC014	0	65	0.34	0.003	Mafic Sweats South	Cu grades range from 0.16 to 0.66% and ended in 0.49%	
23MERC015	6	66	0.25	0.005	Mafic Sweats South		
25IVIERC015	97	8 0.1 0.005	Maric Sweats South				
23MERC016	0	39	0.12	0.006	Mafic Sweats South		
23MERC017	0	8	0.1	0.013	Mafic Sweats South		
24MERC010	35	3	0.3	0.01			
24IVIERCO10	45	74	0.15	0.012	Mafic Sweats South	test northern portion of	
incl:	47	17	0.24	0.02	Maric Sweats South	geochem anomaly	
incl:	73	6	0.29	0.01			
24MERC011	4	89	0.3	0.012	Mafic Sweats South	test oxide Cu	
incl:	80	4	1.04	0.01	ivianic sweats south	test oxide cu	
24MERC012	124	118	0.17	0.01		took doomon for C	
incl:	199	8	0.25	0.01	Mafic Sweats South	test deeper for Cu sulphides	
incl:	222	11	0.33	0.01		Jaipillacs	

#### Note:

- Significant intervals are selected based on Cu above 0.1% Cu and may contain internal dilution up to 4m
- 2024 RC hole collars are shown in bold and have 24MERC prefix
- 2023 drill holes shown for context



### Yarraman Cu-Au Prospect

The Yarraman Cu-Au Prospect is located approximately 5.5km west of the Raven Prospect. RC drill hole 23MERC026 completed in late 2023 intersected 10m @ 0.55% Cu from 94m including 1m @ 2.05% Cu from 102m<sup>5</sup> (**Figure 5**). This drill hole tested a copper geochemical anomaly in the soil pXRF survey. Cooper completed a 2D induced polarisation (IP) traverse survey¹ early this year, completing three lines over the stronger portion of the copper soil geochemical anomaly. Importantly, the IP chargeability response and copper anomaly are coincident with the NE trending lithology contact between dolerite in the west and Magna Lyn Metabasalt in the east.

One hole for 216m was completed in April. Encouragingly, new drillhole 24MERC017 intersected over 79m of Cu-Au mineralisation with strong red rock alteration in multiple separate zones including:

- 5m @ 0.12% Cu & 0.01 g/t Au from 14m
- 6m @ 0.27% Cu & 0.01 g/t Au from 28m
- 21m @ 0.32% Cu & 0.01 g/t Au from 43m
- 18m @ 0.24% Cu & 0.01 g/t Au from 74m including 1m @ 1.0% Cu & 0.01 g/t Au from 78m
- 7m @ 0.39% Cu & 0.06 g/t Au from 105m including 1m @ 1.01% Cu & 0.37 g/t Au from 108m
- 2m @ 0.19% Cu & 0.01 g/t Au from 127m
- 8m @ 0.30% Cu & 0.01 g/t Au from 141m
- 1m @ 0.25% Cu & 0.01 g/t Au from 187m
- 9m @ 0.10% Cu & 0.01 g/t Au from 193m

The long drill hole intersection of Cu-Au mineralisation with higher grades up to 1m @ 1.01% Cu and 0.37 g/t Au is encouraging for the area indicating a very fertile contact for Cu-Au mineralisation. Cu-Au mineralisation remains open to the NNE and SSW (Figure 6). Further exploration of the lithological contact between dolerite and Magna Lynn Formation in the area is ongoing to delineate new drill targets and potential for higher grade Cu-Au mineralisation. See Table 2 below for a list of significant intercepts.



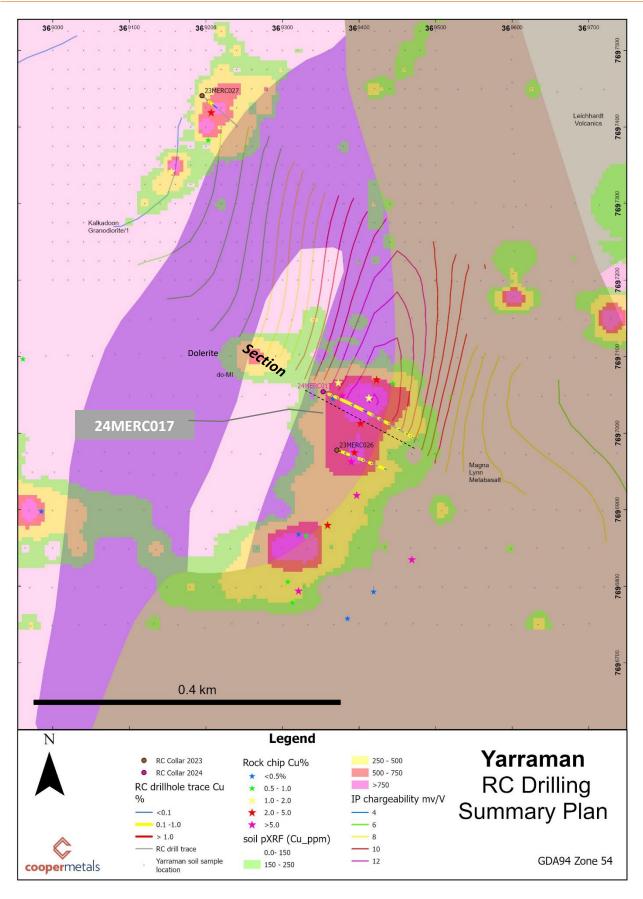


Figure 5: Yarraman Prospect RC drilling Summary Plan showing geology background and IP contours and Cu soil geochemistry



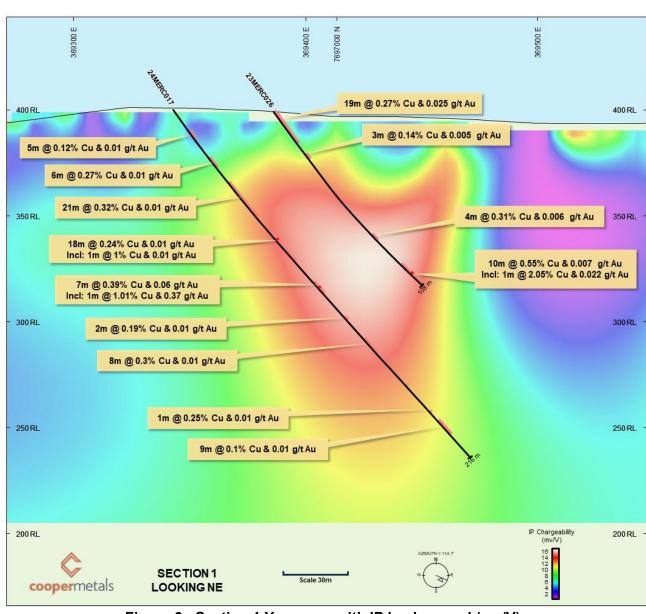


Figure 6: Section 1 Yarraman with IP background (mv/V)



#### Raven Cu-Au Prospect

Raven Cu-Au Prospect was first drilled in 2023 testing a VTEM conductor and coincident geochemistry anomaly<sup>9</sup>. The 2023 drilling delineated an approximately 100m long NNW trending shoot of Cu-Au mineralisation, which remains open and plunging to the SSE. A downhole electromagnetic survey (DHEM) in late 2023<sup>2</sup> identified a conductive response to the SSE of the 2023 drilling.

In April, three holes for 396m were drilled to test the DHEM anomaly C (**Figure 7**). One hole was abandoned (24MERC015), while new RC holes 24MERC013 and 014 both intersected two parallel anomalous zones of Cu-Au mineralisation including:

- 4m @ 0.38% Cu & 0.03 g/t Au from 103m and 1m @ 0.13% Cu & 0.01 g/t Au from 128m (24MERC013)
- 8m @ 0.14% Cu & 0.01 g/t Au from 134m and 11m @ 0.23% Cu & 0.04 g/t Au from 159m (24MERC014)

The Cu-Au mineralisation in 24MERC013 and 014 appears to explain the DHEM anomaly C modelled conductor. There is an increased proportion of pyrite and pyrrhotite that along with the chalcopyrite accounts for DHEM C response.

RC drillhole 24MERC016 was drilled in the center of the prospect, testing for a downdip extension to the plunging shoot and intersected a broad zone of Cu-Au mineralisation comprising 23m @ 0.23% Cu & 0.02 g/t Au from 145m, including 2m @ 0.81% Cu & 0.06 g/t Au from 150m (24MERC016) (Figure 8).

The Cu-Au mineralisation at Raven strikes for at least 200m in a NNW direction along a fault structure hosted within the Leichardt Volcanics. Initial interpretation of the drilling indicates a moderately SSE plunging twin parallel shoots from surface, dipping steeply towards the west. The Cu-Au grade is strongest in the northern half of the drilled prospect area as indicated by the 2023 RC drilling<sup>3,5</sup>, which included significant results summarised below.

- 15m @ 1.0% Cu & 0.10 g/t Au from 35m, including 3m @ 2.7%Cu & 0.29g/t Au from 35m and 3m @ 2.1% Cu & 0.18g/t Au from 47m all within a wider intercept of 28m @ 0.63% Cu & 0.06 g/t Au from 34m (23MERC019)
- 10m @ 1.27% Cu and 0.17 g/t Au from 77m and 3m @ 1.46% Cu and 0.15g/t Au from 100m both within a wider intercept of 44m @ 0.48% Cu and 0.06 g/t Au from 59m (23MERC018).
- 10m @ 1.35% Cu & 0.10 g/t Au from 62m including 3m @ 3.37% Cu and 0.26 g/t Au from 69m (23MERC032)
- 8m @ 1.0% Cu & 0.08g/t Au from 85m including 1m @ 1.79% & 0.25g/t Au from 85m and 2m @ 2.96% & 0.16g/t Au from 91m (23MER033)
- 12m @ 0.81% Cu & 0.09g/t Au from 113m, including 8m @ 1.0% Cu & 0.11g/t Au from 113m, and 3m @ 1.68% & 0.21g/t Au from 118m (23MERC033)
- 19m @ 0.22% Cu from 82m including 1m @ 1.05% Cu& 0.07 g/t Au from 82m (23MERC031)

#### **Next Steps**

The Raven Cu-Au mineralisation lines up with a magnetic anomaly that continues along strike to the NNW and SSE, indicating that the mineralised fault target zone is more extensive than the area drilled to date. Geochemical sampling and mapping are being extended to test the magnetic anomaly for the potential for higher grade Cu-Au mineralisation to the SSE and further drill testing. See Table 2 for a list of significant intercepts at Raven.



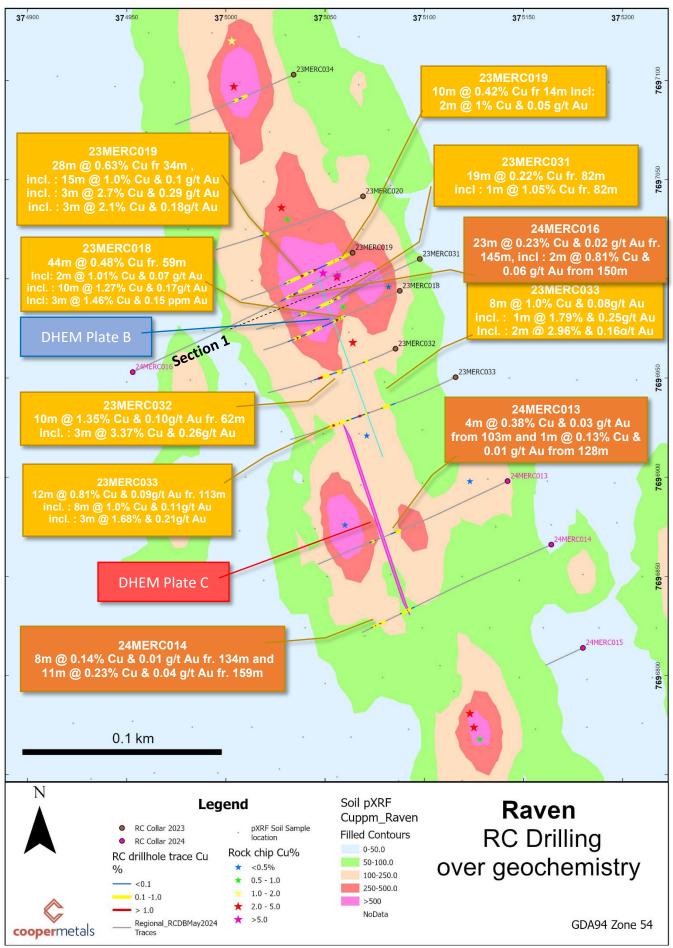


Figure 7: Raven Prospect RC drilling on pXRF soil grid (Cu ppm), rock chip locations



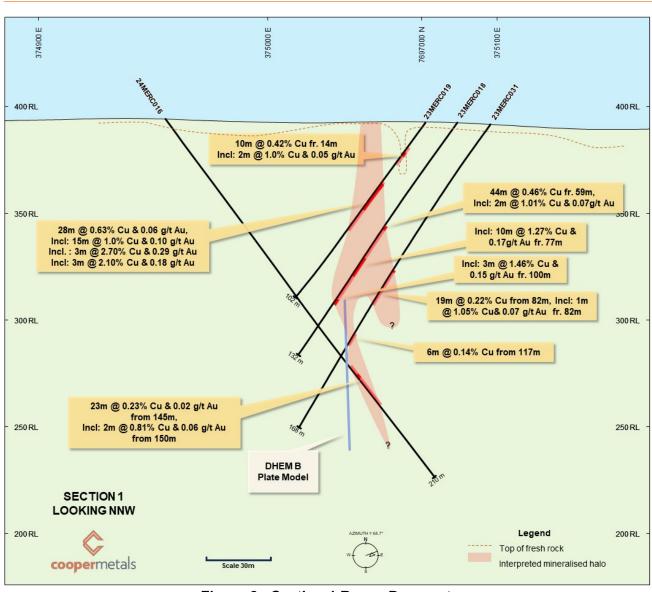


Figure 8: Section 1 Raven Prospect



# Table 2: Significant Assay Results from Raven and Yarraman Prospects

Holeid	Depth From (m)	Interval (m)	Cu%	Au (g/t)	Prospect	Comment
23MERC018	59	44	0.48	0.055		
incl:	59	2	1.01	0.07		
incl:	77	10	1.27	0.17	Raven	
incl:	100	3	1.46	0.15		
23MERC019	14	10	0.42	0.011		
incl:	17	2	1	0.05		
23MERC019	34	28	0.63	0.061	_	
incl:	35	15	1	0.1	Raven	
incl:	35	3	2.7	0.29		
incl:	47	3	2.1	0.18		
23MERC020	90	4	0.51	0.057	Raven	
	82	19	0.22	0.02		
23MERC031	incl:	1	1.05	0.07	Raven	
	117	6	0.14	0.02		
23MERC032	51	4	0.14	0.01		
	62	10	1.35	0.10	Raven	
incl:	69	3	3.37	0.26		
23MERC033	85	8	1.00	0.08		
incl:	85	1	1.79	0.25		
incl:	91	2	2.96	0.16	Raven	
	113	12	0.81	0.09		
	113	8	1.00	0.11		
incl:	118	3	1.68	0.21		
23MERC034	46	4	0.15	0.01	Raven	
	55	3	0.28	0.02		
24MERC013	103	4	0.38	0.03	Raven	test DHEM C
	128	1	0.13	0.01		
24MERC014	134	8	0.14	0.01	Raven	test DHEM C
3484506015	159	11	0.23	0.04	Raven	abaondoned
24MERC015 24MERC016	145	23	0.23	0.02	na ven	abaonuoneu
incl:	150	2	0.23	0.06	Raven	test down dip of shoot
mei.	0	19	0.27	0.025		
	25	3	0.14	0.005		
23MERC026	74	4	0.31	0.006	Yarraman	test geochem anomaly
	94	10	0.55	0.007		
incl:	102	1	2.05	0.06		
23MERC027	21	7	0.77	0.021		
incl:	24	2	1.78	0.06	Yarraman	test below shaft
24MERC017	14	5	0.12	0.01		
<b></b>	28	6	0.27	0.01		
	43	21	0.32	0.01		
	74	18	0.24	0.01		
incl:	78	1	1	0.01		
***************************************	105	7	0.39	0.06	Yarraman test geochem and anomaly	_
incl:	108	1	1.01	0.37		
	127	2	0.19	0.01		
	141	8	0.3	0.01		
	187	1	0.25	0.01		
	193	9	0.1	0.01		

#### Note:

- Significant intervals are selected based on Cu above 0.1% Cu and may contain internal dilution up to 4m
- 2024 RC hole collars are shown in bold and have 24MERC prefix
- 2023 drill holes shown for context



#### Appendix 1: Drill hole Location Summary Table for new drill holes

Holeid	Easting	Northing	Total Depth (m)	AZI (true)	DIP	Prospect	Comment
24MERC006	373383	7706867	84.00	270	-60	Mafic Sw eats North	assays received
24MERC007	373430	7706854	78.00	270	-60	Mafic Sw eats North	assays received
24MERC008	373396	7706791	144.00	255	-55	Mafic Sw eats North	assays received
24MERC009	373404	7706363	138.00	225	-55	Mafic Sw eats North	assays received
24MERC010	373463	7705326	180.00	260	-55	Mafic Sw eats South	assays received
24MERC012	373523	7705176	246.00	260	-55	Mafic Sw eats South	assays received
24MERC011	373479	7705171	93.00	260	-55	Mafic Sw eats South	assays received
24MERC013	375142	7696898	180.00	245	-55	Raven	assays received
24MERC014	375164	7696866	180.00	245	-55	Raven	assays received
24MERC015	375180	7696814	36.00	245	-55	Raven	assays received
24MERC016	374953	7696953	210.00	65	-55	Raven	assays received
24MERC017	369353	7697054	216.00	110	-55	Yarraman	assays received

Note: Coordinates in GDA94 Zone 54, handheld GPS

#### **Next Steps**

- Geochemical sampling and mapping are continuing on regional targets, in preparation for further drill testing later this year. The focus remains on the Brumby Fault area and the northern tenements
- Assessment of Mafic Sweats area for low grade oxide potential

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: 12 April 2024: Follow up RC Drilling commences on multiple Cu-Au prospects at Mt Isa East
- 2. ASX CPM: 23 January 2024: Raven Cu-Au Prospect potential improved by recent geochemistry and geophysics surveys
- 3. ASX: CPM: 12 December 2023: Raven Cu-Au prospect extended by recent RC drilling
- ASX CPM: 14 November 2023: 50m @ 1.32% Cu intercept at Brumby Ridge Cu-Au Prospect, Mt Isa East Cu-Au Project
- ASX: CPM: 2 November 2023: First holes into two previously untested prospects hit significant Cu-Au mineralisation
- ASX: CPM: 24 August 2023: Geochemical sampling extends Cu-Au footprint on five prospects at the Mt Isa East Project
- ASX: CPM: 12 July 2023: Reconnaissance sampling over VTEM/geochem anomalies identifies new coppergold targets
- 8. ASX: CPM: 7 February 2022: Follow-up rock chip sampling continues to demonstrate wide-spread Cu and Au mineralisation at Mount Isa East
- 9. ASX: CPM: 30 June 2022: Multiple VTEM conductors identified at Mt Isa East Cu-Au Project



#### **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.

#### **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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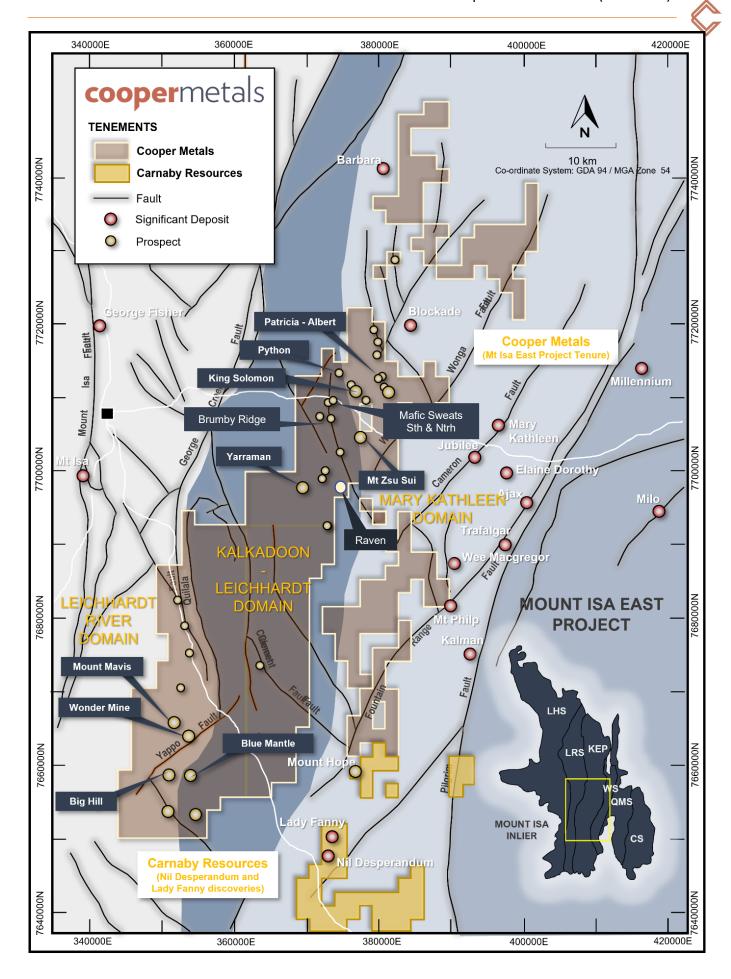


Figure 9: Mt Isa East Project Location over regional geology and main prospects



# 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	<ul> <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>	No new geochemical or geophysical reporting in this release. Refer to references for more information.  CPM Drill program  This release covers remaining assay results for RC drilling conducted at Raven Prospect. The drilling was completed by bullion Drilling Pty Ltd during April 2024 at Mafic Sweats south, Mafic Sweats North, Yarraman, and Raven  Sample Representativity  Initial shallow drilling was undertaken to identify near surface mineralisation indicated by geophysical and geochemical anomalies. Most holes are oriented appropriately to give optimal sample representivity, drilled mostly perpendicular to the interpreted strike of the mineralised body and oriented towards the dip the target mineralised horizon/structure. Nonethe-less, downhole widths will in most instances not represent true widths.  RC drilling techniques returned samples through a fully enclosed cyclone setup with sample return routinely collected in 1m intervals approximating 20kg of sample. 1m interval RC samples were homogenized and collected by a static riffle splitter to produce a representative 2-3kg sub-sample (~12.5% of sample weight);  RC samples were submitted to ALS, submitted in Mount Isa, Qld.
Drilling techniques	Drill type (e.g., core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>The RC drilling was completed using a Schramm 450WS rotary drill rig, with maximum air 350psi/900cfm was used to drill holes reported herein. An auxiliary IR air compressor 350psi/1070cfm was also utilised.</li> <li>Drilling diameter is 5.75-inch RC hammer.</li> <li>Face sampling bits are used.</li> </ul>
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.	<ul> <li>Sample recovery, moisture content and contamination are noted in a Toughbook computer by CPM field personnel.</li> <li>Drill contractors and CPM personnel monitor sample recovery, size and moisture, making appropriate adjustments as required to maintain sample quality, such as using compressed air to keep samples dry.</li> <li>A cone splitter is mounted beneath the cyclone to ensure representative samples are collected.</li> <li>The cyclone and cone splitter are cleaned as necessary to minimise contamination.</li> <li>No significant sample loss, contamination</li> </ul>



Criteria	JORC Code explanation	Commentary
		or bias has been noted in the current drilling. Several samples at Brumby Ridge were drilled wet below the water table, sample, sample recovery remained satisfactory.
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.	<ul> <li>Geological logging has been routinely undertaken by suitably qualified geologists on all RC holes along the entire length of the hole recording lithology, mineralogy, veining, alteration, weathering, structure, and other sample features as appropriate to the style of deposit. Observations were recorded in a Toughbook computer appropriate to the drilling and sample return method and is quantitative, based on visual field estimates.</li> <li>Observations were recorded appropriate to the sample type based on visual field estimates of sulphide content and sulphide mineral species.</li> </ul>
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	During the logging process Copper Metals Ltd routinely retained representative samples (stored in chip trays) for future reference. The RC chip trays are photographed and electronically stored.
	The total length and percentage of the relevant intersections logged.	<ul> <li>Every metre sample of RC drilling is logged by the geologist on site. For each metre RC chips are sieved and washed before logging by a geologist.</li> <li>Observations were recorded appropriate to the sample type based on visual field estimates.</li> <li>An estimate of visual sulphide content is included in this release, see main body of report Appendix 2 for details.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <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 subsampling 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> <li>RC samples are collected at 1m intervals in prenumbered calico bags (downhole metre value) via the cone splitter underneath the cyclone on the drill rig.</li> <li>RC samples are selected for analysis by CPM geologist based on the observed geology such as the presence of sulphides and or alteration minerals including quartz, actinolite, albite, and carbonate veining and guided by portable XRF machine where analysis of each 1m sample has &gt;1000ppm copper. Nominally 2, 1m samples are taken above and below the mineralised zone. Sample intervals may contain zones of internal dilution less than 1000ppm Cu.</li> <li>1m samples selected for laboratory analysis are placed inside prenumbered calico bags, then placed in labelled polyweave bags for transport to ALS Mount Isa by CPM personnel.</li> <li>Sample preparation is undertaken at the laboratory.</li> <li>RC samples are prepared at ALS in Mount Isa, use method PUL23 samples to 3kg are pulverised to 85% passing 75 microns.</li> <li>CPM field QC procedure include the use of certified reference standards ~(1:100), duplicates (1:50), blanks (1:100) at appropriate interval considered for early exploration stage. High, low and medium gold and base metal standards are used.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Both laboratories introduce QAQC samples and complete duplicate check assays on a routine basis</li> <li>Duplicates are collected by CPM personnel with the use of a sample spear.</li> <li>Field QC is checked after analysis.</li> <li>Sample size is considered appropriate to the material sampled.</li> </ul>
		The remaining 'reject' drill sample (weighing ~20 - 30kg) is left on the ground in 1m piles laid out in sequence from the top of the hole to the end of the hole until assay results have been received A sample is sieved from the reject material and retained in chip trays for geological logging and future reference and stored at the company's offices in Mount Isa.
Quality of assay data and laboratory tests	<ul> <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> <li>A Niton XL5 portable XRF is available at the drill rig to aid geological interpretation.</li> <li>RC samples were analysed by ALS, submitted in Mount Isa, Qld. A ~3kg sample was pulverised to produce a 50g charge for fire assay and ICP-AES (ICP22) finish. A four-acid digest was used for digestion with a ICP finish (ME-ICP61) to assay for Ag, AL, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mb, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn</li> <li>Au is analysed in Perth via method Au ICP22 or Au AA26 in Townsville</li> <li>The Lab utilises standard internal quality control measures including the use of internal Standards, Control Blanks and duplicates/repeats at a rate of 1 in 30 samples.</li> </ul>
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	<ul> <li>Mineralisation intercepts were observed and verified by Cooper Metals personnel.</li> <li>A complete record of logging, sampling and assays were stored within an Access Database including digital assay sheets obtained from ALS.</li> </ul>
	The use of twinned holes.	No specific twinning program has been conducted, given the early-stage of the project.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The assay data has been validated against the logging for all RC holes and were directly input onto electronic spread sheets and validated by the database manager. All data is digitally recorded
Location of	Discuss any adjustment to assay data.     Accuracy and quality of surveys used to locate	No adjustments to the data.  A hand hald CRS has been used to
data points	<ul> <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> <li>A hand-held GPS has been used to determine all collar locations at this stage.</li> <li>The grid system is MGA_GDA94, zone 54 for easting, northing and RL.</li> <li>Down hole surveying is routinely employed through the drilling campaign. All RC holes were downhole surveyed by Reflex EZ-TRAC xtf tool operated by the drillers.</li> </ul>
		At this stage the RL of the collar is taken from the handheld GPS, this will be corrected with the local topographic surface (SRTM 1m topographic data) will be used to generate the RL of most of the collars, given the large errors obtained by



Criteria	JORC Code explanation	Commentary
		GPS (±10m). Zone 54.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	<ul> <li>Drill spacing is determined by the stage of exploration of the prospect. The prospect has been drilled with a wide drill hole spacing required at this stage to determine the merit of the prospect and produce a reliable interval.</li> <li>No sample compositing has been applied to the data.</li> </ul>
	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.	<ul> <li>The drillhole spacing is appropriate for early-stage exploration only, and not considered sufficient for Resource or Reserve estimation.</li> <li>The true thickness, grade continuity along strike and down dip is unknown at this time and will require more detailed drilling.</li> </ul>
	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.	<ul> <li>The drilling is oriented as best as possible to perpendicular to the structure/geology containing or controlling the observed mineralisation based on projections from surface outcrops and guided by IP response.</li> <li>Generally, the orientation is considered appropriate. No sampling bias is considered to have been introduced, however the geological model is still evolving, and localised orientation of mineralisation may vary along strike.</li> </ul>
Sample security	The measures taken to ensure sample security.	Sample security adopted by Cooper Metals Ltd was based on responsibility and documentation of site personal with the appropriate experience and knowledge to maintain sample chain of custody protocols from site to lab.
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 security of the tenure held at the time of	<ul> <li>The Mt Isa East project is centred around 50 km south-east of Mount Isa. The drilling reported here took place on five prospects in EPM27700, see details in this release.</li> <li>The tenements (specifically EPM 27700) referred to in this release are Cooper Metals Ltd (85%) and Revolution Mining Pty Ltd (15%).</li> <li>The tenements are secure under Qld</li> </ul>
	reporting along with any known impediments to obtaining a licence to operate in the area.	legislation.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <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>Geochemical sampling (rock chip) and portable XRF soil sampling was conducted by Cooper Metals under the current tenure in 2022 and 2023.</li> <li>Cooper conducted a VTEM survey was in 2022</li> <li>The work resulted in the identification of preliminary drill targets.</li> <li>IP was completed at Yarraman and Mafic Sweats South</li> <li>DHEM was completed at Raven in 2023</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Mt Isa East Project is located within the Mt Isa Inlier. EPM27700 is within he Mary Kathleen Domain part of the Mt Isa Inlier</li> <li>The adopted exploration model for the Mt Isa East tenements targets the IOCG model and low-tonnage, high grade, shearhosted deposits.</li> </ul>
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:	See Table 1 and Appendix 1 of this release.     See this release for details.



Criteria	JORC Code explanation	Commentary
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 metal equivalent values should be clearly	<ul> <li>For Assy and pXRF results - aggregate intercepts were calculated using a 0.1% copper cut off with internal dilution up to 4m.</li> <li>Aggregate intercept grades are &gt; 0.1% copper.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>stated.</li> <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>	The azimuth and dip data for all holes is presented in Appendix 1. Most holes have been drilled at angles approximating -55 to -60° dip on the interpretation of steeply dipping mineralised horizon and approximately perpendicular to the strike of the mapped mineralised zone.  The nature and dip of the mineralisation are still being evaluated.  True widths and downhole widths are not 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.	A collar plan of all collar locations are provided in the main body of this announcement
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.	All exploration results have been reported.
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, see references in this release for more details.
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.      Cooper Metals Ltd plans to continue RC drilling on several Prospects testing deeper and laterally distal extensions of the copper mineralisation successfully intersected in the current program. Refer main body of the report.
	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.