

Cobre Limited A.C.N. 626 241 067 (ASX: CBE)

Level 10, Kyle House, 27 Macquarie Place

SYDNEY NSW 2000

Tel: + 61 407 123 143

www.cobre.com.au

9 October 2023

**ASX Limited -** <u>Company Announcements Platform</u>

## NGAMI COPPER PROJECT – METALLURGICAL TEST WORK HIGHLIGHTS ENCOURAGING RECOVERY POTENTIAL

Cobre Limited (ASX: **CBE**, **Cobre** or **Company**) is pleased to announce the results from a second stage of metallurgical test work at the Ngami Copper Project (**NCP**) in the Kalahari Copper Belt (**KCB**), Botswana. Bottle roll test results carried out on high-grade and low-grade composite samples to assess leach potential of copper mineralisation have demonstrated:

- Adding a combination of ferric sulphate and chloride to the leach system resulted in a significant improvement in copper recoveries (77.4% and 71.9% for high and low-grade samples respectively);
- In addition to improving copper recoveries, a relatively low chloride concentration allows for recovery of the associated silver mineralisation which may provide a valuable additional metal stream;
- Results demonstrate an improvement of more than 20% in copper recoveries compared with initial reported metallurgical leach tests (see ASX announcement 8 August 2023).
- The encouraging metallurgical results provide further support for the potential to beneficiate the copper-silver mineralisation at NCP using an in-situ copper recovery process (ISCR). The next milestone to proving the process includes a series of pump tests which will commence in the current quarter. If proven successful, ISCR provides an effective mining method at the bottom of the global cost curve with low environmental footprint.

#### Commenting on the metallurgical results, Adam Wooldridge, Cobre's Chief Executive Officer, said:

"The metallurgical test results are highly encouraging, demonstrating that the extensive chalcocite dominant mineralisation intersected at NCP can be effectively beneficiated with a leaching solution with high copper recoveries expected. The recovery of the associated silver credit is an unexpected bonus."

Drill tested mineralisation at the NCP extends over 40kms of strike with modelling results estimating a scale of between 103 and 166Mt @ 0.38 to 0.46% Cu<sup>1</sup> with significant additional untested blue-sky potential (see ASX announcement 30 August 2023). In addition to copper mineralisation, silver credits associated with the exploration target model are estimated at ~32 Moz at an average grade of 7.3 g/t Ag. Based on high-level hydrogeological studies and a first stage of metallurgical test work (see ASX announcement 8 August 2023), the mineralisation at NCP represents strong candidate for ISCR.

ISCR utilises a series of injection wells to pump a weak acid (similar pH to lemon juice) solution under low pressure to dissolve the copper within the ore body. The method relies on naturally developed fractures to focus the solution into the orebody where the copper is leached after which the copper-rich solution is pumped to surface through recovery wells for processing into copper cathode sheets using an electro-chemical process that separates the copper from the solution. As there is no need for excavation, mine development, waste piles, milling or smelting, the technique provides a cost-effective technology with an extremely small environmental footprint.

As part of the ongoing programme to test the viability of an ISCR process, a second round of metallurgical test work was undertaken to investigate the addition of ferric sulphate, chloride and potassium permanganate on the leach recovery. Overall results indicate copper recoveries above 70% can be achieved with an oxidation-reduction potential (**ORP**) maintained at 450 mV (via ferric sulphate addition) and a low chloride concentration. In addition, silver recoveries of up to 43.5% and 80.5% for high- and low-grade samples respectively were achievable with the addition of chloride.

These encouraging results provide a significant improvement on the first round of test work and demonstrate that copper and silver mineralisation at NCP can be effectively beneficiated with a leaching solution.

#### **Metallurgical Results**

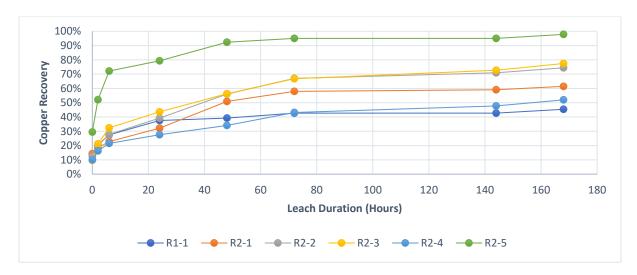
A total of five leach tests were conducted on a high-grade (**HG**) and low-grade (**LG**) composite sample by Independent Metallurgical Operations Pty Ltd to assess the following:

- Impact of increased ferric sulphate addition to maintain a higher oxidising reduction potential (ORP of ≥450 mv);
- 2. Impact of low chloride addition to the system, with a chloride concentration of 20 g/L;
- 3. Impact of high chloride addition to the system, with a chloride concentration of 100 g/L;
- 4. Impact of potassium permanganate as an oxidant to maintain ORP (as opposed to ferric sulphate); and
- 5. Impact of an increased temperature of 70°C.

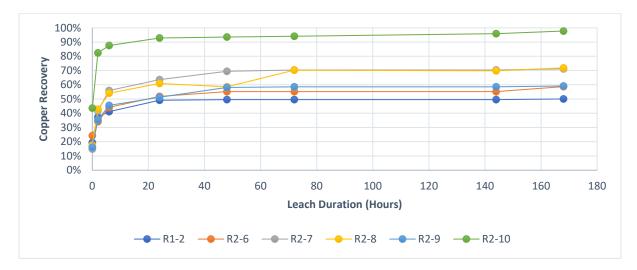
<sup>&</sup>lt;sup>1</sup> At this stage the results are in an exploration target category. The estimates of tonnage and grade are conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Tests were benchmarked against results from the first round of testing which achieved a total copper recovery of 45.4% and 50.0% for the same HG and LG composite samples respectively. Results are summarised as follows:

- Increasing ferric sulphate addition to maintain an ORP at 450 mV (increased from ~400 mV in the first round of testing) resulted in:
  - A 16.1% increase in HG Composite Cu recovery, from 45.4% to 61.4%;
  - An 8.7% increase in LG Composite Cu recovery, from 50.0% to 58.7%;
- Addition of 20 g/L chloride to the leach system resulted in:
  - A 13% increase in HG Composite Cu recovery from 61.4% to 74.4%;
  - A 12.5% increase in LG Composite Cu recovery from 58.7% to 71.2%;
  - Increased HG Composite Ag recovery from 0.0 to 10.0%;
  - Increased LG Composite Ag recovery from 0.0% to 45.3%.
- Increased chloride concentration to 100 g/L resulted in minor increases in Cu recovery with marked increase in silver recovery (compared to 20 g/L chloride):
  - Increased HG Composite Cu recovery from 74.4% to 77.4%;
  - Increased LG Composite Cu recovery from 71.2% to 71.9%;
  - Increased HG Composite Ag recovery from 10.0% to 43.5%;
  - Increased LG Composite Ag recovery from 45.3% to 80.5%.
- The use of potassium permanganate to maintain ORP in place of ferric sulphate resulted in:
  - Reduced HG Composite Cu recovery by 9.5% (from 61.4% to 52.0%);
  - No significant change in LG Composite Cu recovery, increasing from 58.7% to 59.2%;
- Increased temperature from ambient to 70°C significantly increased Cu extraction with both composites reporting a final copper recovery of 97.8%.



**Figure 1.** Recovery curves for HG composite sample. R1-1 = benchmark results from previous metallurgical test; R2-1 = increase of ferric sulphate (EH from 400 to 450mV), R2-2 = addition of 20 g/L chloride, R2-3 = addition of 100 g/L chloride, R2-4 = addition of potassium permanganate instead of ferric sulphate, R2-5 = increased ambient temperature to  $70^{\circ}C$ .



**Figure 2.** Recovery curves for LG composite sample. R1-2 = benchmark results from previous metallurgical test; R2-6 = increase of ferric sulphate (EH from 400 to 450mV), R2-7 = addition of 20 g/L chloride, R2-8 = addition of 100 g/L chloride, R2-9 = addition of potassium permanganate instead of ferric sulphate, R2-10 = increased ambient temperature to  $70^{\circ}$ C.

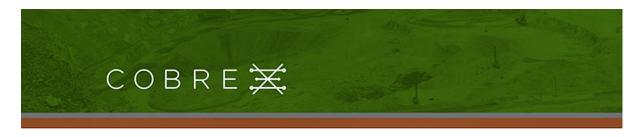
#### **Geology and Mineralisation**

The drill program at NCP has been designed to intersect sedimentary-hosted, structurally controlled, Cu-Ag mineralisation associated with the redox contact between oxidised Ngwako Pan Formation red beds and overlying reduced marine sedimentary rocks of the D'Kar Formation on the limbs of anticlinal structures. Drilling has focussed on the southern anticlinal structure which extends for over 40km across the NCP with evidence for anomalous copper-silver mineralisation on both northern and southern limbs. Results have highlighted the lateral continuity of this mineralisation which occurs over several 10s of kms of strike on both northern and southern limbs of the anticline with an apparent increase in grade on the eastern side of the anticline.

Drilling results to date have returned consistent, wide intersections of anomalous to moderate-grade copper-silver values over extensive strike lengths with structurally controlled higher-grade zones. This style of mineralisation is dominated by fine-grained chalcocite which occurs along cleavage planes ( $S_1$ ) and in fractures rather than the vein hosted bornite with chalcopyrite more typical of the Kalahari Copper Belt style. Importantly the chalcocite mineralisation is amenable to acid leaching, occurs below the water table and is associated with well-developed fracture zones bounded by more competent hanging and footwall units satisfying key considerations for ISCR.

#### Follow-up Work

The next stage of work on the NCP will include a hydrogeological pilot study comprising well drilling, aquifer pumping and injection tests. Results from this phase of work will provide a comprehensive understanding of the hydraulic properties and connectivity within fracture networks key to evaluating the hydraulic aspects of the ISCR process. The pilot study is scheduled to start within Q4 2023. Further



metallurgical test work including column testing will commence following successful completion of the pilot study.

#### **Target Model**

The NCP area is located near the northern margin of the Kalahari Copper Belt (**KCB**) and includes significant strike of sub-cropping Ngwako Pan / D'Kar Formation contact on which the majority of the known deposits in the KCB occur.

Cobre is aiming to prove up a similar ISCR process to Taseko Mines Ltd's (TSX:TKO, NYSE:TGB) Florence Copper Deposit (320Mt @ 0.36% Cu) in Arizona which shares a similar scale to NCP<sup>2</sup>.

This ASX release was authorised on behalf of the Cobre Board by: Adam Wooldridge, Chief Executive Officer.

For more information about this announcement, please contact:

**Adam Wooldridge** 

**Chief Executive Officer** 

wooldridge@cobre.com.au

#### **COMPETENT PERSONS STATEMENT**

The information in this announcement that relates to exploration results is based on information compiled by Mr David Catterall, a Competent Person and a member of a Recognised Professional Organisations (ROPO). David Catterall 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 (JORC 2012). David is the principal geologist at Tulia Blueclay Limited and a consultant to Kalahari Metals Limited. David Catterall is a member of the South African Council for Natural Scientific Professions, a recognised professional organisation.

David Catterall consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

<sup>&</sup>lt;sup>2</sup> Florence Copper | Taseko Mines Limited



#### **APPENDIX 1**

#### JORC Table 1 - Section 1 Sampling Techniques and Data for the NCP

(Criteria in this section apply to all succeeding sections)

### JORC Code, 2012 Edition – Table 1 report template

#### **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. 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.	<ul> <li>The information in this release relates to the technical details from the Company's exploration and drilling program at the Ngami Copper Project (NCP) located within the Ngamiland District on the Kalahari Copper Belt, Republic of Botswana.</li> <li>Representative diamond half core samples are taken from zones of interest. Samples were taken consistently from the same side of the core cutting line. Core cutting line is positioned to result in two splits as mirror images with regards to the mineralisation, and to preserve the orientation line.</li> </ul>
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	<ul> <li>bisecting structures of interest, and by the sample preparation technique in the laboratory.</li> <li>The diamond drill core samples were selected based on geological logging and pXRF results, with the ideal sampling interval being 1m, whilst ensuring that sample interval does not cross any logged significant</li> </ul>
	Aspects of the determination of mineralisation that are Material to the Public Report.	<ul> <li>feature of interest.</li> <li>Individual core samples were crushed entirely to 90% less than 2mm, riffle split off 1kg, pulverise split to better than 85% passing 75 microns (ALS PREP-31D).</li> </ul>

	In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	<ul> <li>Sample representivity and calibration for ICP AES analysis is ensured by the insertion of suitable QAQC samples.</li> <li>Samples are digested using 4-acid near total digest and analysed for 34 elements by ICP-AES (ALS ME-ICP61, and ME-ICP61a).</li> <li>Over range for Cu and Ag are digested and analysed with the same method but higher detection limits (ALS ME-OG62).</li> <li>pXRF measurements are carried out with appropriate blanks and reference material analysed routinely to verify instrument accuracy and repeatability.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole 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).	COBRE's Diamond drilling is being conducted with Tricone (Kalahari Sands), followed by PQ/HQ/NQ core sizes (standard tube) with HQ and NQ core oriented using AXIS Champ ORI tool.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Core recovery is measured and recorded for all drilling. Once bedrock has been intersected, sample recovery has been very good >98%.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Samples were taken consistently from the same side of the core cutting line to avoid bias.</li> <li>Geologists frequently check the core cutting procedures to ensure the core cutter splits the core correctly in half.</li> <li>Core samples are selected within logged geological, structural, mineralisation and alteration constraints.</li> </ul>
		Samples are collected from distinct geological

			domains with sufficient width to avoid overbias.				
	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.	•	Sample recovery was generally very good and as such it is not expected that any such bias exists.				
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate	•	COBRE Diamond drill core is logged by a team of qualified geologists using predefined lithological, mineralogical, physical characteristic (colour, weathering etc) and logging codes.				
	Mineral Resource estimation, mining studies and metallurgical studies.		The geologists on site followed industry best practice and standard operating procedure for Diamond core drilling processes.				
			Diamond drill core was marked up on site and logged back at camp where it is securely stored.				
			Data is recorded digitally using Ocris geological logging software.				
		•	The QA/QC'd compilation of all logging results are stored and backed up on the cloud.				
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	•	All logging used standard published logging charts and classification for grain size, abundance, colour and lithologies to maintain a qualitative and semi-quantitative standard based on visual estimation.				
			Magnetic susceptibility readings are also taken every meter and/or half meter using a ZH Instruments SM-20/SM-30 reader.				
	The total length and percentage of the relevant intersections logged.	•	100% of all recovered intervals are geologically logged.				
Sub- sampling techniques and sample	If core, whether cut or sawn and whether quarter, half or all core taken.	•	Selected intervals are currently being cut (in half) with a commercial core cutter, using a 2mm thick blade, for one half to be sampled for analysis while the other half is kept for reference.				
preparation		•	For selected samples core is quartered and both quarters being sampled as an original and field replicate sample.				

If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry	• N/A
For all sample types, the nature, quality and appropriateness of the sample preparation techniques	<ul> <li>Soil samples are sieved to -180µm in the field and then further sieved to -90µm by the laboratory.</li> <li>Field sample preparation is suitable for the core samples.</li> <li>The laboratory sample preparation technique (ALS PREP-31D) is considered appropriate and suitable for the core samples and expected grades.</li> <li>For metallurgical work, composite samples were collected from both high-grade and low-grade intersections totalling approximately 5 – 6m each.</li> <li>Metallurgical intermittent bottle roll test work was carried out on a relatively fine reserve sample crush with plans to carry out future work on a coarse crush along with column testing which is deemed to be more representative of the in-situ environment.</li> </ul>
Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<ul> <li>COBRE's standard field QAQC procedures for core drilling and soil samples include the field insertion of blanks, selection of standards, field duplicates (quarter core), and selection of requested laboratory pulp and coarse crush duplicates. These are being inserted at a rate of 2.5-5% each to ensure an appropriate rate of QAQC.</li> <li>Metallurgical samples were composited, homogenised and split into test charges.</li> </ul>
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.	<ul> <li>Sampling is deemed appropriate for the type of survey and equipment used.</li> <li>The duplicate sample data (field duplicate and lab duplicates) indicates that the results are representative and repeatable.</li> <li>Metallurgical samples were taken from two drill intersections located 1km apart.</li> </ul>
Whether sample sizes are appropriate to the grain size of the material being sampled.	Initial metallurgical results quoted have been carried out on a fine crush sample. Future studies will utilise a coarser crush.

#### 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.

- COBRE's core samples are being sent for 4-acid digest for "near total" digest and ICP-AES analysis (34 elements) at ALS laboratories in Johannesburg, South Africa.
- The analytical techniques (ALS ME-ICP61 and ME-OG62) are considered appropriate for assaying.
- Intermittent Bottle Roll Leach test work has been carried out on 6m composite samples from a high and low grade intersection in different portions of the Comet Target. Results provide an indication of the copper leach performance.
- Comprehensive head assay was carried out on metallurgical samples to determine Cu speciation (acid soluble Cu, cyanide soluble Cu, residual Cu).

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.

- COBRE use ZH Instruments SM20 and SM30 magnetic susceptibility meters for measuring magnetic susceptibilities and readings are randomly repeated to ensure reproducibility and consistency of the data.
- A Niton FXL950 pXRF instrument is used with reading times on Soil Mode of 120seconds in total.
- For the pXRF analyses, well established in-house SOPs were strictly followed and data QAQC'd before accepted in the database.
- A test study of 5 times repeat analyses on selected soil samples is conducted to establish the reliability and repeatability of the pXRF at low Cu-Pb-Zn values.
- For the pXRF Results, no user factor was applied, and as per SOP the units calibrated daily with their respective calibration disks.
- All QAQC samples were reviewed for consistency and accuracy. Results were deemed repeatable and representative:

	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	<ul> <li>Appropriate certified reference material was inserted on a ratio of 1:20 samples.</li> <li>Laboratory coarse crush and pulp duplicate samples were alternated requested for every 20 samples.</li> <li>Blanks were inserted on a ratio of 1:20.</li> <li>ALS Laboratories insert their own standards, duplicates and blanks and follow their own SOP for quality control.</li> <li>Both internal and laboratory QAQC samples are reviewed for consistency.</li> <li>The inserted CRM's have highlighted acceptable laboratory accuracy and precision for Cu. The inserted CRM (OREAS96), highlighted acceptable accuracy and precision for results above 10ppm Ag. There is a rather poor precision for Ag at concentration levels of less than 10x the analytical method's detection limit (e.g. &lt; 10ppm Ag.</li> <li>The coarse Blank and lab internal pulp Blank results suggest a low risk of contamination during the sample preparation and analytical stages respectively.</li> <li>The duplicate sample data indicates that the results are representative and repeatable for Cu and Ag.</li> <li>External laboratory checks were carried out by Scientific Services Laboratories showing an excellent correlation and a high degree of repeatability of the results. The laboratory comparative sample data indicates that the analytical results from ALS Laboratories for Cu and Ag are representative and repeatable</li> </ul>
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	All drill core intersections were verified by peer review.
	The use of twinned holes.	No twinned holes have been drilled to date.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<ul> <li>All data is electronically stored with peer review of data processing and modelling.</li> <li>Data entry procedures standardized in SOP, data checking and verification routine.</li> <li>Data storage on partitioned drives and backed up on server and on the cloud.</li> </ul>

	Discuss any adjustment to assay data.	No adjustments were made to assay 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.	<ul> <li>COBRE's Drill collar coordinates are captured by using handheld Garmin GPS and verified by a second handheld Garmin GPS.</li> <li>Drill holes are re-surveyed with differential DGPS at regular intervals to ensure sub-meter accuracy.</li> <li>Downhole surveys of drill holes is being undertaken using an AXIS ChampMag tool.</li> </ul>
	Specification of the grid system used.	The grid system used is WGS84 UTM Zone 34S. All reported coordinates are referenced to this grid.
	Quality and adequacy of topographic control.	Topographic control is based on satellite survey data collected at 30m resolution. Quality is considered acceptable.
Data spacing and distribution	Data spacing for reporting of Exploration Results.  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>Data spacing and distribution of all survey types is deemed appropriate for the type of survey and equipment used.</li> <li>Drill hole spacing is broad varying between 125 m to greater than 1 600 m, as might be expected for this stage of exploration.</li> </ul>
	Whether sample compositing has been applied.	• N/A
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.	Drill spacing is currently broad and hole orientation is aimed at intersecting the bedding of the host stratigraphy as perpendicular as practically possible (e.g. within the constraint of the cover thickness). This is considered appropriate for the geological setting and for the known mineralisation styles in the Copperbelt.

	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>Existence, and orientation, of preferentially mineralised structures is not yet fully understood but current available data indicates mineralisation occurs within steep, sub-vertical structures, sub-parallel to foliation.</li> <li>No significant sampling bias is therefore expected.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Sample bags are logged, tagged, double bagged and sealed in plastic bags, stored at the field office.</li> <li>Diamond core is stored in a secure facility at the field office and then moved to a secure warehouse.</li> <li>Sample security includes a chain-of-custody procedure that consists of filling out sample submittal forms that are sent to the laboratory with sample shipments to make certain that all samples are received by the laboratory. Prepared samples were transported to the analytical laboratory in sealed gravel bags that are accompanied by appropriate paperwork, including the original sample preparation request numbers and chain-of-custody forms</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>COBRE's drill hole sampling procedure is done according to industry best practice.</li> <li>Hydrogeological results are reviewed by WSP Australia</li> <li>Metallurgical test work was conducted by and reviewed by Independent Metallurgical Operations Pty Ltd.</li> <li>Geological modelling was carried out and reviewed by Caracle Creek International Consulting.</li> </ul>



#### JORC 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 reporting along with any known impediments to obtaining a licence to operate in the area.	<ul> <li>Cobre Ltd holds 100% of Kalahari Metals Ltd.</li> <li>Kalahari Metals in turn owns 100% of Triprop Holdings Ltd and Kitlanya (Pty) Ltd both of which are locally registered companies.</li> <li>Triprop Holdings holds the NCP licenses PL035/2017 (306.76km²) and PL036/2017 (49.8km²), which, following a recent renewal, are due their next extension on 30/09/2024</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous exploration on portions of the NCP and KITW projects was conducted by BHP.</li> <li>BHP collected approximately 125 and 113 soil samples over the KITW and NCP projects respectively in 1998.</li> <li>BHP collected Geotem airborne electromagnetic data over a small portion of PL036/2012 and PL342/2016, with a significant coverage over PL343/2016.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The regional geological setting underlying all the Licences is interpreted as Neoproterozoic meta sediments, deformed during the Pan African Damara Orogen into a series of ENE trending structural domes cut by local structures.</li> <li>The style of mineralisation expected comprises strata-bound and structurally controlled disseminated and vein hosted Cu/Ag mineralisation.</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:

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.

- Summary table of all completed core drill holes on the NCP licenses is presented below. All coordinates are presented in UTM Zone 34S, WGS84 datum. HGPS indicates that the holes were surveyed using a handheld GPS; DGPS indicates that the holes have been re-surveyed with differentially corrected GPS. Drill holes designated TRDH are original holes drilled by Triprop in 2014.
- Summary results of intersections are provided using a cut-off of 0.2% Cu to provide a comparable Cueq m% estimate (Cueq% = Cu% + Ag(g/t)\* 0.0087) using metal prices from March 2023.
- Summary results for of > 1% Cu over 1m are provided in the next table.

Sit	teID	Easting	Northing	RL	Grid	Method	Date	Company	
NO	CP01	594786.0	7694068.0	1052.0	UTM34S	HGPS	2019/07/06	Orezone	
NO	CP01A	594786.0	7694070.0	1052.0	UTM34S	HGPS	2019/06/13	Orezone	
NO	CP02	617226.0	7692104.0	999.0	UTM34S	HGPS	2019/06/20	Orezone	
NO	CP03	594746.0	7693874.0	1034.0	UTM34S	HGPS	2019/05/07	Orezone	
NO	CP04	590768.0	7691124.0	1054.0	UTM34S	HGPS	2019/06/30	Orezone	
NO	CP05	590566.0	7691488.0	1053.0	UTM34S	HGPS	2019/05/08	Orezone	
NO	CP06	590610.0	7691398.0	1050.0	UTM34S	HGPS	2019/12/08	Orezone	
NO	CP07	599889.5	7685403.0	1099.2	UTM34s	DGPS	2022/11/07	Mitchell Drilling	
NO	CP08	598985.5	7684909.0	1101.9	UTM34s	DGPS	2022/07/23	Mitchell Drilling	
NO	CP09	598092.8	7684452.0	1102.5	UTM34s	DGPS	2022/07/28	Mitchell Drilling	
NO	CP10	601620.3	7686327.4	1092.4	UTM34s	DGPS	2022/04/08	Mitchell Drilling	
NO	CP11	598960.0	7684952.0	1068.0	UTM34s	HGPS	2022/11/08	Mitchell Drilling	
NO	CP11-A	598963.0	7684949.0	1083.0	UTM34s	HGPS	2022/08/13	Mitchell Drilling	
NO	CP11-B	598958.5	7684956.8	1101.9	UTM34s	DGPS	2022/08/13	Mitchell Drilling	
NO	CP12	599431.6	7685158.1	1100.5	UTM34s	DGPS	2022/08/31	Mitchell Drilling	
NO	CP13	598533.8	7684688.8	1102.8	UTM34s	DGPS	2022/05/09	Mitchell Drilling	
NO	CP14	600311.2	7685611.5	1097.5	UTM34s	DGPS	2022/12/09	Mitchell Drilling	
NO	CP15	601192.3	7686073.9	1095.5	UTM34s	DGPS	2022/09/20	Mitchell Drilling	
NO	CP16	602078.3	7686537.5	1092.0	UTM34s	DGPS	2022/09/27	Mitchell Drilling	
NO	CP17	599185.6	7685059.8	1100.6	UTM34s	DGPS	2022/03/10	Mitchell Drilling	
NO	CP18	598730.0	7684840.0	1098.0	UTM34s	HGPS	2023/03/10	Mitchell Drilling	
NO	CP18A	598727.0	7684848.1	1102.1	UTM34s	DGPS	2022/07/10	Mitchell Drilling	
NO	CP19	599212.0	7685019.7	1100.3	UTM34s	DGPS	2022/11/10	Mitchell Drilling	
NO	CP20	598762.0	7684798.0	1115.0	UTM34s	HGPS	2022/10/15	Mitchell Drilling	
NO	CP20A	598758.7	7684796.7	1102.2	UTM34s	DGPS	2022/10/22	Mitchell Drilling	
NO	CP21	589691.0	7679008.0	1104.0	UTM34s	HGPS	2022/10/17	Mitchell Drilling	
NO	CP22	587387.0	7677006.0	1103.0	UTM34s	HGPS	2022/10/25	Mitchell Drilling	
NO	CP23	599161.4	7685097.5	1100.9	UTM34s	DGPS	2022/10/28	Mitchell Drilling	
NO	CP24	605254.0	7688076.0	1075.0	UTM34s	HGPS	2022/07/11	Mitchell Drilling	
NO	CP25	598876.3	7684850.8	1101.4	UTM34s	DGPS	2022/12/21	Mitchell Drilling	
NO	CP26	598643.5	7684747.6	1102.8	UTM34s	DGPS	2022/11/19	Mitchell Drilling	
NO	CP27	605504.0	7683642.0	1066.0	UTM34s	HGPS	2022/12/11	Mitchell Drilling	

NCP	28	598622.2	7684786.0	1102.7	UTM34s	DGPS	2022/11/24	Mitchell Drilling	
NCP	29	600751.0	7679853.0	1097.0	UTM34s	HGPS	2022/11/20	Mitchell Drilling	
NCP	30	598851.9	7684887.0	1101.7	UTM34s	DGPS	2022/11/24	Mitchell Drilling	
NCP	31	599441.0	7678120.0	1104.0	UTM34s	HGPS	2022/11/26	Mitchell Drilling	
NCP	31A	599444.0	7678119.0	1099.0	UTM34s	HGPS	2022/11/24	Mitchell Drilling	
NCP	32	610528.0	7686927.0	1046.0	UTM34s	HGPS	2022/11/30	Mitchell Drilling	
NCP	33	610575.0	7686839.0	1053.0	UTM34s	HGPS	2022/03/12	Mitchell Drilling	
NCP	34	590274.0	7679998.0	1103.0	UTM34s	HGPS	2022/12/05	Mitchell Drilling	
NCP	35	610144.0	7686583.0	1049.0	UTM34s	HGPS	2023/01/20	Mitchell Drilling	
NCP	36	601039.0	7679350.0	1096.0	UTM34s	HGPS	2023/01/22	Mitchell Drilling	
NCP	37	612295.0	7687857.0	1060.0	UTM34s	HGPS	2023/01/27	Mitchell Drilling	
NCP	38	612746.0	7688085.0	1060.0	UTM34s	HGPS	2023/02/04	Mitchell Drilling	
NCP	39	600936.0	7679534.0	1090.0	UTM34s	HGPS	2023/02/03	Mitchell Drilling	
NCP	40	611022.0	7687064.0	1039.0	UTM34s	HGPS	2023/02/08	Mitchell Drilling	
NCP	41	592796.0	7681630.0	1097.0	UTM34s	HGPS	2023/02/14	Mitchell Drilling	
NCP	42	607051.0	7688937.0	1052.0	UTM34s	HGPS	2023/02/19	Mitchell Drilling	
NCP	43	599098.0	7684964.0	1085.0	UTM34s	HGPS	2023/02/23	Mitchell Drilling	
NCP	44	586591.5	7676382.2	1123.7	UTM34s	HGPS	2023/03/07	Mitchell Drilling	
NCP	45	600106.8	7685494.0	1099.4	UTM34s	HGPS	2023/03/04	Mitchell Drilling	
NCP	46	600529.7	7685715.5	1096.7	UTM34s	HGPS	2023/03/10	Mitchell Drilling	
NCP	47	595337.9	7670959.5	1133.1	UTM34s	HGPS	2023/03/21	Mitchell Drilling	
NCP	48	601417.1	7686190.8	1093.7	UTM34s	HGPS	2023/03/16	Mitchell Drilling	
NCP	49	600005.8	7685434.3	1100.4	UTM34s	HGPS	2023/03/21	Mitchell Drilling	
NCP	50	599790.2	7685325.2	1097.3	UTM34s	HGPS	2023/03/25	Mitchell Drilling	
NCP	51	597630.8	7684254.0	1101.2	UTM34s	HGPS	2023/03/31	Mitchell Drilling	
NCP	52	598764.0	7684788.0	1101.0	UTM34s	HGPS	2023/04/03	Mitchell Drilling	
TRD	H14-01	612238.0	7687953.0	1042.0	UTM34s	HGPS	2014/11/07	RDS	
TRD	H14-02	612339.0	7687802.0	1047.0	UTM34s	HGPS	2014/07/14	RDS	
TRD	H14-02A	612338.0	7687804.0	1047.0	UTM34s	HGPS	2014/07/16	RDS	
TRD	H14-03	612281.0	7687887.0	1042.0	UTM34s	HGPS	2014/07/18	RDS	
TRD	H14-04	609703.0	7686345.0	1040.0	UTM34s	HGPS	2014/07/21	RDS	
TRD	H14-05	609596.0	7686512.0	1040.0	UTM34s	HGPS	2014/07/21	RDS	
TRD	H14-06	609653.0	7686433.0	1038.0	UTM34s	HGPS	2014/07/24	RDS	
		1	l	1			1		

								_	
TRDH14-07	609663.0	7686414.0	1042.0	UTM34s	HGPS	2014/07/25	RDS		
TRDH14-08	607204.0	7684683.0	1056.0	UTM34s	HGPS	2014/01/08	RDS		
TRDH14-09	607133.0	7684805.0	1055.0	UTM34s	HGPS	2014/05/08	RDS		
TRDH14-10	607061.0	7684936.0	1024.0	UTM34s	HGPS	2014/06/08	RDS		
TRDH14-11	607150.0	7684776.0	1014.0	UTM34s	HGPS	2014/08/08	RDS		
TRDH14-12	600845.0	7685696.0	1080.0	UTM34s	HGPS	2014/08/18	RDS		
TRDH14-13	600924.0	7685567.0	1073.0	UTM34s	HGPS	2014/08/20	RDS		
TRDH14-14	600816.0	7685737.0	1070.0	UTM34s	HGPS	2014/08/22	RDS		
TRDH14-15	600721.0	7685893.0	1042.0	UTM34s	HGPS	2014/03/09	RDS		
TRDH14-16	600758.0	7685834.0	1081.0	UTM34s	HGPS	2014/09/15	RDS		
TRDH14-16A	600764.0	7685829.0	1083.0	UTM34s	HGPS	2014/09/17	RDS		
TRDH14-17	608880.0	7685776.0	1027.0	UTM34s	HGPS	2014/09/30	RDS		
TRDH14-17A	608862.0	7685805.0	1028.0	UTM34s	HGPS	2014/03/10	RDS		

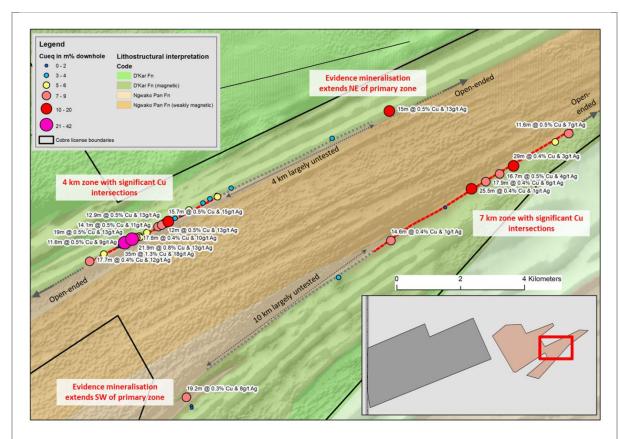
Down hole intersections using low grade cut-off (0.2% Cu) to establish  $Cu_{eq}$  m% for each hole. Resulted sorted by  $Cu_{eq}$  m%

Hole Id	FROM	ТО	Length	Cu <sub>eq</sub> m%	Intersection
NCP20A	124.0	159.0	35.0	41.6	35m @ 1.3% Cu & 18g/t Ag
NCP08	125.0	146.9	21.9	20.1	21.9m @ 0.8% Cu & 13g/t Ag
NCP25	122.0	141.0	19.0	11.8	19m @ 0.5% Cu & 13g/t Ag
NCP40	269.0	298.0	29.0	11.3	29m @ 0.4% Cu & 3g/t Ag
NCP45	188.9	204.6	15.7	10.4	15.7m @ 0.5% Cu & 15g/t Ag
TRDH14-07	62.0	87.5	25.5	9.5	25.5m @ 0.4% Cu & 1g/t Ag
NCP42	142.5	157.5	15.0	9.4	15m @ 0.5% Cu & 13g/t Ag
NCP43	157.0	174.8	17.8	8.8	17.8m @ 0.4% Cu & 10g/t Ag
NCP33	228.0	244.7	16.7	8.8	16.7m @ 0.5% Cu & 4g/t Ag
NCP51	221.2	238.9	17.7	8.6	17.7m @ 0.4% Cu & 12g/t Ag
NCP29	187.0	206.2	19.2	7.8	19.2m @ 0.3% Cu & 8g/t Ag
NCP50	177.9	192.0	14.1	7.6	14.1m @ 0.5% Cu & 11g/t Ag
NCP35	238.0	255.9	17.9	7.5	17.9m @ 0.4% Cu & 6g/t Ag
NCP49	177.8	190.8	12.9	7.2	12.9m @ 0.5% Cu & 13g/t Ag

NCP07	249.0	261.0	12.0	7.0	12m @ 0.5% Cu & 13g/t Ag
NCP38	261.0	272.6	11.6	6.2	11.6m @ 0.5% Cu & 7g/t Ag
TRDH14-11	125.9	140.5	14.6	6.2	14.6m @ 0.4% Cu & 1g/t Ag
NCP18A	280.5	292.2	11.6	6.1	11.6m @ 0.5% Cu & 9g/t Ag
NCP09	108.2	121.3	13.1	5.9	13.1m @ 0.4% Cu & 7g/t Ag
NCP37	186.0	203.0	17.0	5.5	17m @ 0.3% Cu & 3g/t Ag
NCP19	147.3	157.0	9.7	4.8	9.7m @ 0.4% Cu & 10g/t Ag
NCP11-B	345.0	353.6	8.6	4.7	8.6m @ 0.5% Cu & 12g/t Ag
TRDH14-16A	169.2	173.7	4.5	4.4	4.5m @ 0.8% Cu & 4g/t Ag
NCP12	215.5	223.4	7.9	4.4	7.9m @ 0.5% Cu & 12g/t Ag
NCP10	311.3	319.2	7.9	4.4	7.9m @ 0.5% Cu & 12g/t Ag
NCP30	237.0	246.2	9.2	4.2	9.2m @ 0.4% Cu & 9g/t Ag
NCP23	424.0	431.7	7.7	4.2	7.7m @ 0.5% Cu & 9g/t Ag
NCP26	199.7	208.7	9.0	4.1	8.9m @ 0.4% Cu & 8g/t Ag
NCP48	171.2	182.0	10.8	4.0	10.8m @ 0.3% Cu & 6g/t Ag
NCP34	398.9	409.5	10.7	3.5	10.7m @ 0.2% Cu & 16g/t Ag
NCP17	236.8	243.5	6.6	3.2	6.6m @ 0.4% Cu & 11g/t Ag
NCP15	192.0	198.9	6.8	3.0	6.8m @ 0.4% Cu & 9g/t Ag
NCP24	178.0	191.3	13.3	2.9	13.3m @ 0.2% Cu & 3g/t Ag
NCP21	118.0	129.0	11.0	2.9	11m @ 0.2% Cu & 4g/t Ag
NCP14	232.0	238.6	6.6	2.6	6.6m @ 0.3% Cu & 10g/t Ag
NCP22	144.0	149.6	5.6	2.4	5.6m @ 0.3% Cu & 15g/t Ag
NCP46	170.0	175.4	5.4	2.4	5.4m @ 0.4% Cu & 3g/t Ag
NCP44	283.0	288.4	5.4	2.3	5.4m @ 0.2% Cu & 26g/t Ag
NCP27	152.4	156.2	3.8	2.2	3.8m @ 0.5% Cu & 6g/t Ag
NCP16	188.0	196.2	8.3	2.1	8.3m @ 0.2% Cu & 6g/t Ag
NCP28	274.0	279.9	5.9	1.9	5.9m @ 0.3% Cu & 6g/t Ag
NCP13	171.4	176.8	5.4	1.4	5.4m @ 0.2% Cu & 2g/t Ag
NCP39	333.0	338.5	5.5	1.3	5.5m @ 0.2% Cu & 1g/t Ag
NCP43	123.6	126.0	2.4	1.3	2.4m @ 0.5% Cu & 9g/t Ag

				T	
NCP35	169.0	175.0	6.0	1.3	6m @ 0.2% Cu & 1g/t Ag
NCP36	509.5	514.2	4.7	1.2	4.7m @ 0.2% Cu & 2g/t Ag
NCP10	211.0	213.0	2.0	1.0	2m @ 0.4% Cu & 12g/t Ag
NCP26	135.0	136.0	1.0	0.8	1m @ 0.7% Cu & 4g/t Ag
NCP31A	310.1	311.8	1.7	0.8	1.7m @ 0.3% Cu & 17g/t Ag
NCP43	152.0	155.0	3.0	0.8	3m @ 0.2% Cu & 5g/t Ag
NCP10	149.0	151.0	2.0	0.8	2m @ 0.4% Cu & 4g/t Ag
NCP11-B	338.0	340.1	2.1	0.7	2.1m @ 0.3% Cu & 8g/t Ag
NCP52	106.5	108.7	2.2	0.6	2.2m @ 0.2% Cu & 5g/t Ag
NCP52	96.0	98.3	2.3	0.6	2.3m @ 0.2% Cu & 4g/t Ag
	1	436.5	1.4	0.5	1.4m @ 0.2% Cu & 12g/t Ag
NCP41	435.1	430.3			<u> </u>
					Results sorted by Hole id.
				-off 1% Cu.	
Down hole inter	sections calcu	lated using a	grade cut	-off 1% Cu.	Results sorted by Hole id.
Down hole inter	sections calcu	lated using a	grade cut	-off 1% Cu.	Results sorted by Hole id.  Intersection
Down hole inter Hole id NCP08	sections calcu FROM 136.2	TO 146.9	Length (	-off 1% Cu.	Results sorted by Hole id.  Intersection  10.7m @ 1.3% & 18g/t Ag
Down hole inter Hole id NCP08 NCP10	FROM 136.2 318.0	TO 146.9 319.2	Length (	-off 1% Cu.	Results sorted by Hole id.  Intersection  10.7m @ 1.3% & 18g/t Ag  1.2m @ 1.1% & 26g/t Ag
Down hole interded Hole id NCP08 NCP10 NCP20A	FROM 136.2 318.0 148.7	TO 146.9 319.2 158.0	grade cut   Length (	-off 1% Cu.	Results sorted by Hole id.  Intersection  10.7m @ 1.3% & 18g/t Ag  1.2m @ 1.1% & 26g/t Ag  9.3m @ 3.4% & 30g/t Ag
Down hole interded Hole id NCP08 NCP10 NCP20A NCP25	FROM  136.2  318.0  148.7  133.0	TO 146.9 319.2 158.0 136.0	grade cut  Length (  10.7  1.2  9.3  3.0	-off 1% Cu.	Results sorted by Hole id.  Intersection  10.7m @ 1.3% & 18g/t Ag  1.2m @ 1.1% & 26g/t Ag  9.3m @ 3.4% & 30g/t Ag  3m @ 1% & 15g/t Ag
Down hole inter- Hole id NCP08 NCP10 NCP20A NCP25 NCP26	FROM  136.2  318.0  148.7  133.0  207.7	TO  146.9  319.2  158.0  136.0  208.7	grade cut  Length (  10.7  1.2  9.3  3.0  1.0	-off 1% Cu.	Results sorted by Hole id.  Intersection  10.7m @ 1.3% & 18g/t Ag  1.2m @ 1.1% & 26g/t Ag  9.3m @ 3.4% & 30g/t Ag  3m @ 1% & 15g/t Ag  1m @ 1.3% & 16g/t Ag
Down hole inter- Hole id NCP08 NCP10 NCP20A NCP25 NCP26 NCP29	FROM  136.2  318.0  148.7  133.0  207.7  198.7	TO 146.9 319.2 158.0 136.0 208.7 201.0	grade cut  Length (  10.7  1.2  9.3  3.0  1.0  2.3	-off 1% Cu.	Results sorted by Hole id.  Intersection  10.7m @ 1.3% & 18g/t Ag  1.2m @ 1.1% & 26g/t Ag  9.3m @ 3.4% & 30g/t Ag  3m @ 1% & 15g/t Ag  1m @ 1.3% & 16g/t Ag  2.3m @ 1.1% & 14g/t Ag
Down hole inter- Hole id  NCP08  NCP10  NCP20A  NCP25  NCP26  NCP29  NCP33	sections calcu FROM 136.2 318.0 148.7 133.0 207.7 198.7 240.2	TO 146.9 319.2 158.0 136.0 208.7 201.0 242.0	grade cut  Length (  10.7  1.2  9.3  3.0  1.0  2.3  1.8	-off 1% Cu.	Results sorted by Hole id.  Intersection  10.7m @ 1.3% & 18g/t Ag  1.2m @ 1.1% & 26g/t Ag  9.3m @ 3.4% & 30g/t Ag  3m @ 1% & 15g/t Ag  1m @ 1.3% & 16g/t Ag  2.3m @ 1.1% & 14g/t Ag  1.8m @ 1% & 12g/t Ag
Down hole inter- Hole id NCP08 NCP10 NCP20A NCP25 NCP26 NCP29 NCP33 NCP38	FROM  136.2  318.0  148.7  133.0  207.7  198.7  240.2  270.7	TO 146.9 319.2 158.0 136.0 208.7 201.0 242.0 272.6	grade cut  Length (  10.7  1.2  9.3  3.0  1.0  2.3  1.8  1.9	-off 1% Cu.	Results sorted by Hole id.  Intersection  10.7m @ 1.3% & 18g/t Ag  1.2m @ 1.1% & 26g/t Ag  9.3m @ 3.4% & 30g/t Ag  3m @ 1% & 15g/t Ag  1m @ 1.3% & 16g/t Ag  2.3m @ 1.1% & 14g/t Ag  1.8m @ 1% & 12g/t Ag  1.9m @ 1.1% & 21g/t Ag

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>Results &gt; 0.2% Cu have been averaged weighted by downhole lengths, and exclusive of internal waste to determine a Cu metre percent average for the holes.</li> <li>A second result with cutoff &gt; 1% Cu has been included to highlight higher grade portions of the drill hole intersections.</li> <li>No aggregation of intercepts has been reported.</li> <li>Where copper equivalent has been calculated it is at current metal</li> </ul>
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 (eg 'down hole length, true width not known').	<ul> <li>Prices: 1g/t Ag = 0.0081% Cu.</li> <li>Down hole intersection widths are used throughout.</li> <li>Most of the drill intersections are into steep to vertically dipping units. True thickness is anticipated to be in the order of 50% of the downhole thickness although step-out drilling will be required to accurately model this particularly for the new targets.</li> <li>All measurements state that downhole lengths have been used, as the true width has not been suitably established by the current drilling.</li> </ul>
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.	



Plan map illustrating the position of drill holes coloured by Cu<sub>eq</sub>m%.

### 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 to avoid misleading reporting of Exploration Results.

- Results from the previous exploration programmes are summarised in the target priorities which are based on an interpretation of these results.
- The accompanying document is considered to be a balanced and representative report.