

22 April 2020

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## GEOPHYSICAL SURVEY UPDATE FOR THE PERRINVALE VHMS PROJECT

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### Highlights

- Down hole electromagnetic surveys have been undertaken on the recently completed diamond core drill holes at the Schwabe, Zinco Lago and Monti Prospects, plus two of the reverse circulation holes drilled in 2019.
  - A number of promising electromagnetic conductors have been identified within the Perrinvale Project including: the existing Schwabe drill area; below recent drilling at Zinco Lago; off hole along the Zinco Lago - Lago Rame gossan trend; and adjacent to the recent Monti drilling.
  - Ground electromagnetic surveys now underway to further refine targets for the next phase of drilling at the Perrinvale Project.
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### Update on Geophysical Survey Program at the Perrinvale VHMS Project

Cobre Limited (ASX: **CBE**, **Cobre** or **Company**) is pleased to provide an update of the results from the Down Hole Electromagnetic surveys (**DHEM**) undertaken following the recent diamond drilling program within the Perrinvale Volcanic-Hosted Massive Sulphide (**VHMS**) Project located in Western Australia (refer **Figure 4**).

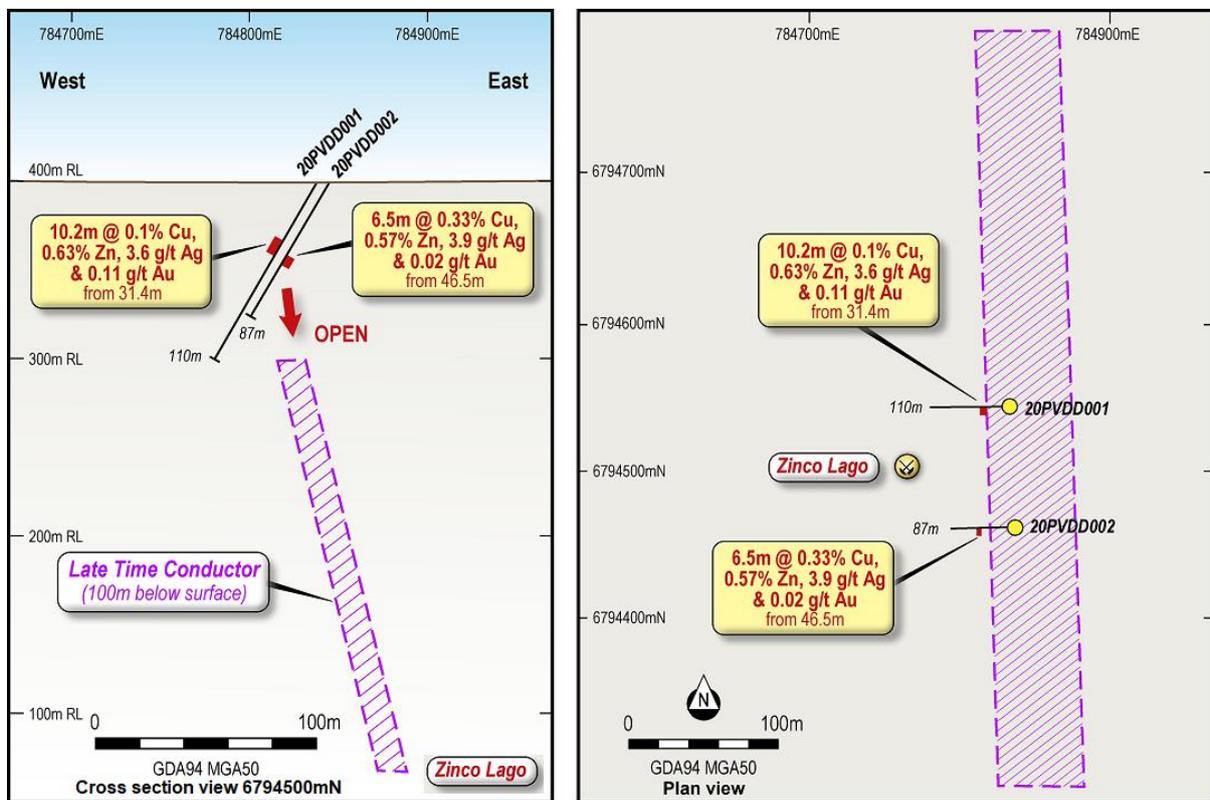
DHEM surveys were undertaken on the diamond core drill holes recently completed at the Schwabe, Zinco Lago and Monti Prospects, plus two of the reverse circulation (**RC**) holes drilled in 2019 (located southwest of Schwabe and along the gossan trend south of Zinco Lago). This data has been reviewed in conjunction with the broad spaced Moving Loop Electromagnetic (**MLEM**) and Airborne Electromagnetic (**AEM**) surveys completed in 2019.

### Schwabe Prospect

The DHEM survey at the Schwabe Prospect aligns well with the model of the 2019 AEM survey, indicating a robust and highly conductive core area within the existing exploration area, and some potential for a lower conductivity zone extending to the north or north-northwest of existing drilling. A MLEM survey is currently underway at Schwabe to further refine the next phase of drilling of the VHMS mineralisation previously identified at this location (refer to [ASX announcement 16/04/2020: Significant High-Grade Copper Gold Results at Perrinvale](#)).

**Zinco Lago Prospect**

The DHEM surveys of the Zinco Lago diamond drill holes indicate a strong (6,000 to 7,000 Siemens) late time conductor below the drill holes which is not obvious in the AEM data. The spatial position of the modelled conductor is aligned with the down dip projection of the mineralised horizon identified in the Zinco Lago drill core (refer **Figure 1**). The Maxwell model of this conductor strikes roughly north-south and is open to the limits of the data. The nature of the conductor response is indicative of a massive sulphide or highly graphitic lithology. While further exploration drilling is required to confirm the cause of conductance at the Zinco Largo Prospect, the Company is very encouraged by the primary sulphides including pyrite, pyrrotite and chalcopyrite as veinlet and narrow (10-30cm) massive zones identified in the recent diamond core holes above this conductor.



**Figure 1: Zinco Lago DHEM conductor model and recent drill results<sup>1</sup>**

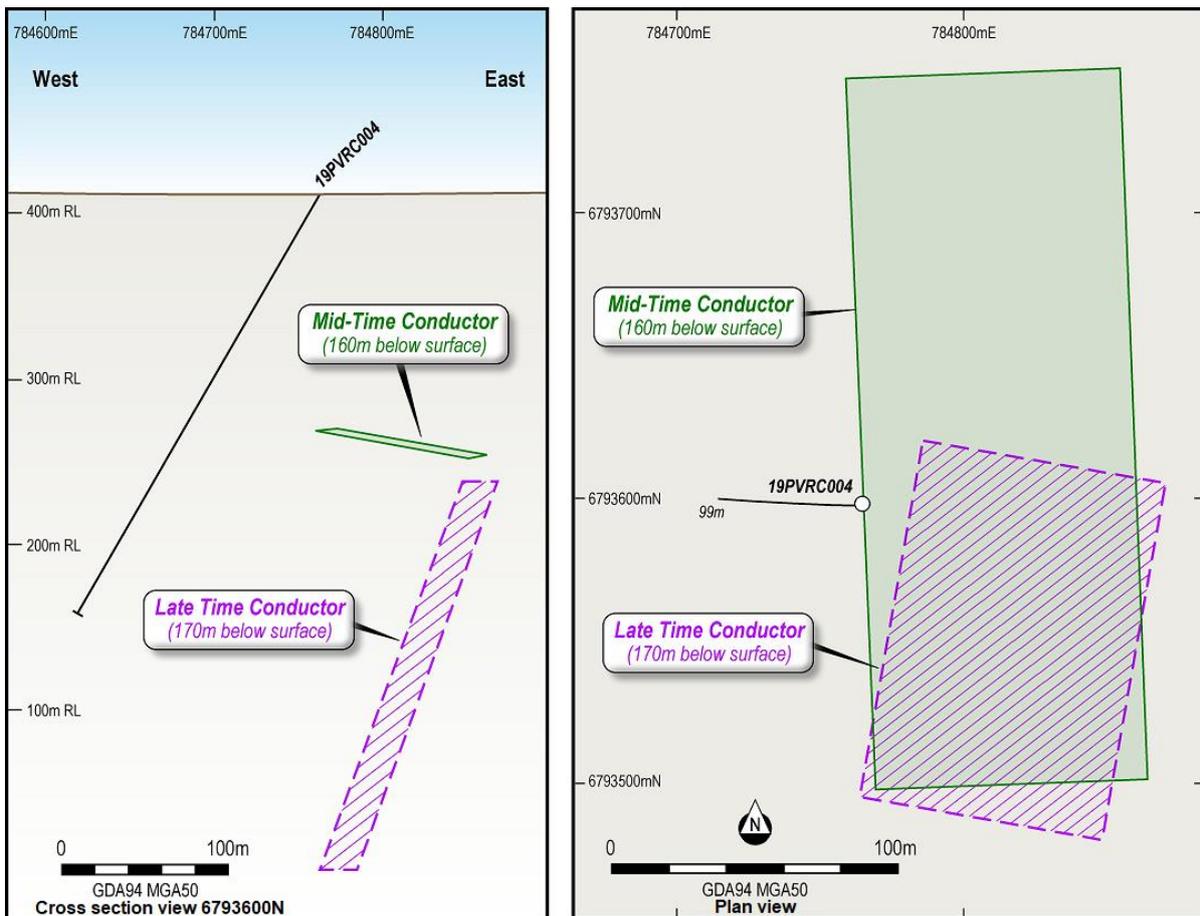
**Zinco Lago - Lago Rame Gossan trend**

RC hole 19PVR004 drilled in 2019, located along the Zinco Lago - Lago Rame gossan trend, 900 metres south of the Zinco Lago diamond drilling, was included in the DHEM surveys. The survey results generated off hole conductance, along with a very small on hole conductor associated with a narrow graphitic shale.

<sup>1</sup> refer to [ASX announcement 16/04/2020: Significant High-Grade Copper Gold Results at Perrinvale](#) for reporting under JORC 2012 guidelines

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Two conductor plates have been modelled as shown in **Figure 2**, including the RC drill trace. The best model fit generates a relatively flat mid time conductor and a deeper west dipping strong (6,000 to 7,000 Siemens) late time conductor. As for Zinco Lago, the strong late time conductor is considered indicative of a massive sulphide or highly graphitic lithology. The area has been revisited on the ground, with small scale folding noted in sub-crop within the sedimentary sequence. Folding on a larger scale may explain the orientations of the conductor models.



**Figure 2: Zinco Lago – Lago Rame Gossan DHEM conductor models and 2019 RC drill trace**

### Monti Prospect

At the Monti Prospect, DHEM was completed in the north and south, with small conductive features identified in the north. In the south, a much stronger (6,000 to 7,000 Siemens) off hole conductor has been identified north east of diamond hole 20MTDD003, as shown along with recent drill results<sup>1</sup> on **Figure 3**.

<sup>1</sup> refer to [ASX announcement 16/04/2020: Significant High-Grade Copper Gold Results at Perrinvale](#) for reporting under JORC 2012 guidelines

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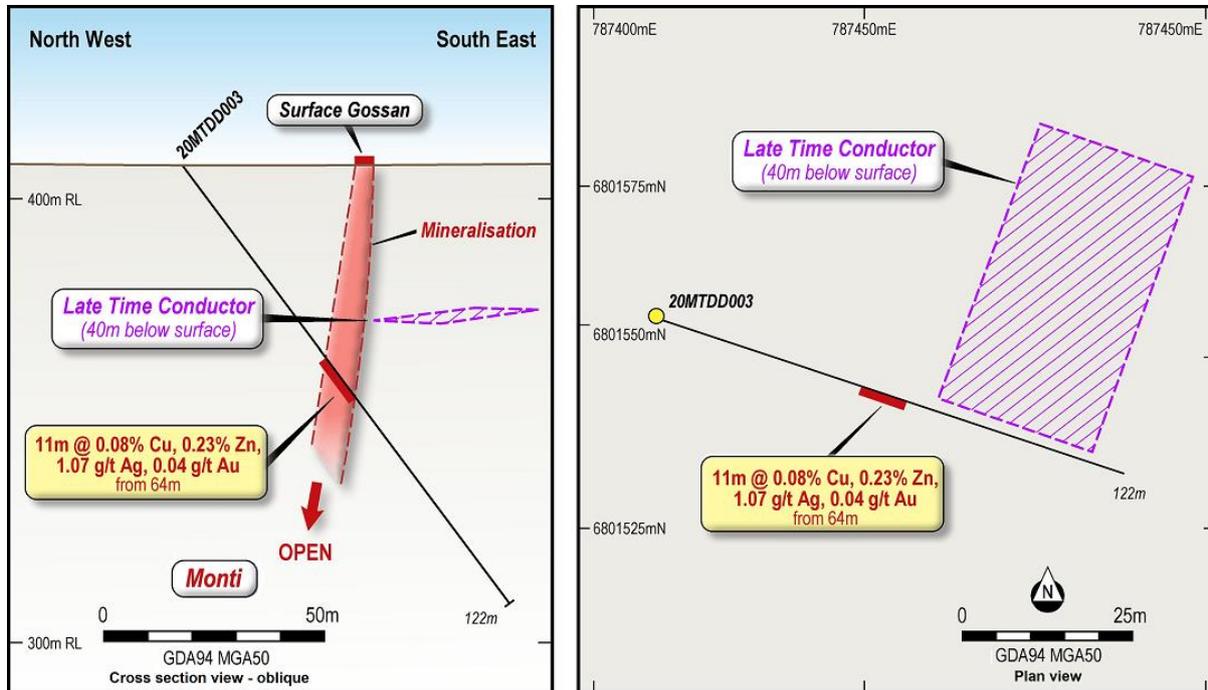


Figure 3: Monti DHEM conductor model and recent drill results (20MTDD003)<sup>1</sup>

### Moving Loop EM Survey Underway

The Company has now commenced a program of ground electromagnetic (MLEM) surveys across the Perrinvale Project area. The MLEM surveys will encompass both recently drilled prospects and priority conductive features identified during the 2019 interpretation of the AEM data. Field truthing of these priority conductive features has recently been completed, prior to the MLEM survey design.

The broad objectives of the MLEM program include:

- to assess the potential for deeper conductors associated with the Schwabe VHMS system;
- further assessment of areas where DHEM conductors may be open or are yet to generate clear models; and
- improve resolution of other priority conductors noted in the 2019 AEM survey.

A review of all data, including geophysics (magnetics & EM), geological mapping and drill hole logging, has led to the design of MLEM surveys across eight areas (refer **Figure 4**). The MLEM surveys, which typically have much greater depth penetration, have been designed to better assess potential deeper conductors, as well as to improve confidence in conductor models generated from AEM and DHEM data. At the completion of the MLEM surveys, the next phase of exploration drilling will be refined. This phase of drilling will include a mix of both RC (for shallower targets) and diamond core drilling (for deeper targets).

<sup>1</sup> refer to [ASX announcement 16/04/2020: Significant High-Grade Copper Gold Results at Perrinvale](#) for reporting under JORC 2012 guidelines

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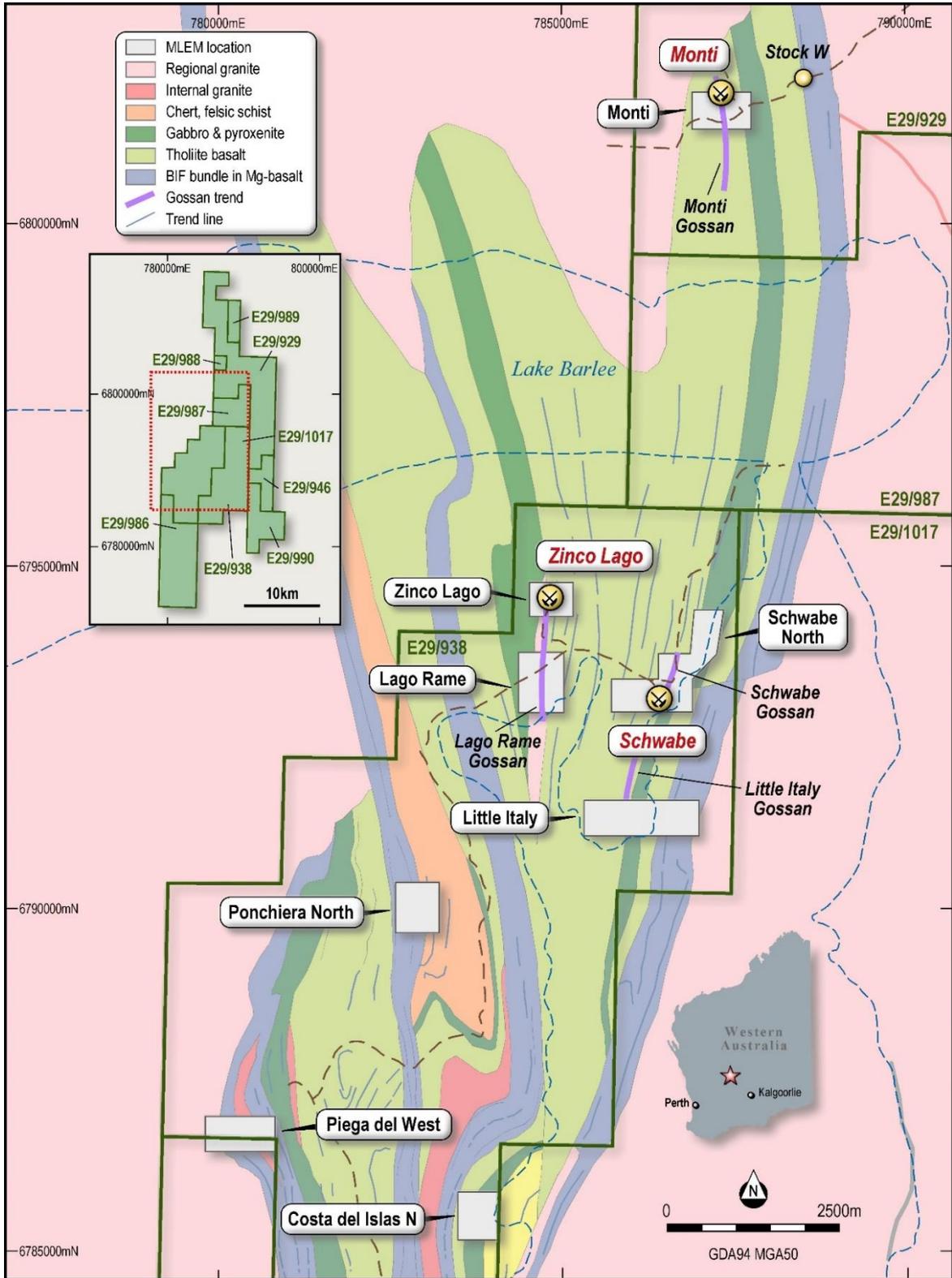


Figure 4: MLEM survey area locations

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### Exploration Program Moving Forward

The MLEM data is expected to be received progressively over the next 3 weeks of the survey period, allowing refinement of targets and finalisation of drill hole design. For most of the conductors being investigated, the existing Program of Works approvals will allow for immediate drilling.

Cobre's Executive Chairman and Managing Director, Martin Holland, said in relation to the recent EM results at the Perrinvale Project:

*"The recent down hole EM results follows the positive diamond drill results reported recently<sup>1</sup> at the Perrinvale Project. In particular, the off hole conductor along the Zinco Lago – Lago Rame gossan is an exciting new prospect identified by our exploration team. All together, these EM results provide encouragement to continue Cobre's systematic plan of utilising geophysics to refine drill targets in favourable geological positions across the Perrinvale Project area. I am encouraged in knowing our work to date has focused on a small part of the total project area. The 2019 AEM survey covered about 30% of our tenure and this current program is focused on a fraction of that survey area. I look forward to updating the market on the MLEM results as they become available and to leveraging the knowledge we gain to unlock potential across the entire project.*

This ASX release was authorised on behalf of the Cobre Board by: Martin C Holland, Executive Chairman and Managing Director.

#### For more information about this announcement:

**Martin C Holland**

**Executive Chairman and Managing Director**

**[holland@cobre.com.au](mailto:holland@cobre.com.au)**

<sup>2</sup> Reported under JORC 2012 in section 5 of the Cobre Prospectus: <http://www.cobre.com.au/prospectus>

### Competent Persons Statement

The information in this report that relates to mineral exploration results and exploration potential is based on work compiled under the supervision of Mr Todd Axford, a Competent Person and member of the AusIMM. Mr Axford is the Principal Geologist for GEKO-Co Pty Ltd and contracted to the Company as Exploration Manager and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking 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 Axford consents to the inclusion in this report of the information in the form and context in which it appears.

### Appendix 1: DHEM Logging Specifications

Downhole electromagnetic (DHEM) surveys were completed at nine drill holes across the Perrinvale Project, Western Australia (see below). Vortex Geophysics acquired data using a DigiAtlantis probe measuring the B-field. Downhole station intervals were varied according to geological intervals of interest. Specifications of transmitter loop sizes, locations and recording intervals are detailed below.

Prospect	Hole_ID	E_MGA94_Z50	N_MGA94_Z50	Dip	Azi_Mag	Depth_m	Survey Order	TX LOOP
Schwabe	20PVDD004	786464	6793075	-60	105	78.3	1	SCH1
Schwabe	20PVDD005	786418	6793061	-60	105	180.4	1	SCH1
Schwabe	19PVRC003-20PVDD006	786395	6793159	-62	90	264.2	1	SCH1
Schwabe SW	19PVRC006	786083	6793011	-60	90	153	2	SSW1
Zinco Lago	20PVDD001	784835	6794545	-60	270	109.8	3	ZL1
Zinco Lago	20PVDD002	784845	6794463	-60	270	87.4	3	ZL1
Zinco Lago Line	19PVRC004	784764	6793597	-60	270	99	4	ZLL1
Monti	20MTDD002	787313	6802241	-55	250	138.2	5	MON1
Monti	20MTDD003	787419	6801556	-54	110	121.8	5	MON2

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Loop	Easting	Northing
<b>SCH1</b> (~300 x ~300m)	786471 mE 786181 mE 786259 mE 786549 mE	6792945 mN 6793023 mN 6793313 mN 6793235 mN
<b>SSW1</b> (~200 x ~200m)	786118 mE 785923 mE 785966 mE 786161 mE	6792907 mN 6792950 mN 6793145 mN 6793102 mN
<b>ZL1</b> (~200 x ~200m)	784800 mE 785000 mE 785000 mE 784800 mE	6794600 mN 6794600 mN 6794400 mN 6794400 mN
<b>ZLL1</b> (~150 x ~150m)	784730 mE 784880 mE 784880 mE 784730 mE	6793675 mN 6793675 mN 6793525 mN 6793525 mN
<b>MON1</b> (~200 x ~200m)	787025 mE 787275 mE 787275 mE 787025 mE	6802350 mN 6802350 mN 6802100 mN 6802100 mN
<b>MON2</b> (~200 x ~200m)	787215 mE 787465 mE 787465 mE 787215 mE	6801675 mN 6801675 mN 6801425 mN 6801425 mN

Hole_ID	Downhole Logging Intervals
20PVDD004	5m stns 10-30m, 2.5m stns 32.5-65, 5m stns 70- EOH (~78.3m)
20PVDD005	10m stns 10-60m, 5m stns 65-75m, 2.5m stns 77.5-82.5, 5m stns 85-95m, 10m stns 100-EOH (~180.4m)
19PVRC003- 20PVDD006	10m stns 10-160m, 5m stns 165-185, 2.5m stns 187.5-190m, 5m stns 195-EOH (~264.2m)
19PVRC006	10m stns 10-EOH (~153m)
20PVDD001	5m stns 10-EOH (~109.8m)
20PVDD002	5m stns 10-EOH (~87.5m)
19PVRC004	5m stns 10- EOH (~99m)
20MTDD002	5m stns 10-EOH (~138.2m)
20MTDD003	10m stns 10-50m, 5m stns 55-EOH (~121.8m)

1Hz base frequency

X, Y and Z components measured

All coordinates are GDA94, MGA Zone 50

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Table 1: JORC Code Reporting Criteria

Section 1 Sampling Techniques and Data – Diamond Core & Reverse Circulation Drilling

Criteria	JORC Code explanation	Commentary
Sampling techniques		Not relevant for reporting DHEM geophysical survey
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 orientated and if so, by what method, etc).	HQ2 core drilling was completed by contractor Westralian Diamond Drillers using a McCulloch drill rig. Where ground conditions allowed core was orientated using a Reflex ACT Orientation tool. RC drilling was completed by contractor Challenge Drilling using KWL 350 drill rig with face-sampling hammer, onboard 1100cfm /350psi compressor, and a 1000/850 booster compressor on separate truck. 50mm diameter PVC casing was inserted in to holes post drilling for later DHEM surveys
Drill sample recovery		Not relevant for reporting DHEM geophysical survey
Logging		Not relevant for reporting DHEM geophysical survey
Sub-sampling techniques and sample preparation		Not relevant for reporting DHEM geophysical survey
Verification of sampling and assaying		Not relevant for reporting DHEM geophysical survey
Location of data points	Accuracy & quality of surveys used to locate drill holes (collar & downhole).	All collars survey with DGPS and downhole surveys either Gyro or single shot camera. These methods are suitable for using data in future resource estimation. DHEM surface loop positions (detailed in Appendix 1) located with handheld GPS expected accuracy 5m, which is suitable for the purpose.
	Specification of the grid system used.	GDA94 zone 50.
	Quality and adequacy of topographic control.	GPS survey, which is suitable for the stage of exploration.
Data spacing and	Data spacing for reporting of	Three component DHEM data were

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Criteria	JORC Code explanation	Commentary
distribution	Exploration Results.	collected on station intervals from 2.5m to 10m (specific detail in Appendix 1)
Orientation of data in relation to geological structure		Orientation of DHEM surface loops was based on lithological logging of the drilled holes and modelling of AEM survey.
Sample security		Not relevant for reporting DHEM geophysical survey
Audits or reviews		Contractors DHEM data and report reviewed by consultant from Core Geophysics Pty Ltd

## Section 2 Reporting of Exploration Results

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.	Reported results all from 100% Toucan Gold Pty Ltd tenements at Perrinvale WA, which may include E29/929, E29/938, E29/946, E29/986, E29/987, E29/988, E29/989, E29/990 & E29/1017. Toucan Gold Pty Ltd is a subsidiary (80% owned) of Cobre Ltd. FMG Resources Pty Ltd retains a 2% net smelter royalty on any future metal production from three tenements E29/929, 938 and 946. All samples were taken on Crown Land covered by a Pastoral Lease. No native title exists. The land is used primarily for cattle grazing.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The tenements are in good standing, and all work has been conducted under specific approvals from Department of Mining Industry Resources & Safety.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No results are relied on from other parties in this report.
Geology	Deposit type, geological setting and style of mineralisation.	The Perrinvale Project area includes parts of the Illaara and Panhandle Greenstone Belts (GB) located in the northern Southern Cross Domain of the Younami Terrane, in the Central part of Western Australia's Yilgarn Craton.

Criteria	JORC Code explanation	Commentary
		<p>The prospects drilled are located within the Panhandle GB in areas dominated by mafic volcanics and intrusives. Locally interflow sedimentary zones are present and consist variably of mudstones, shales and cherty exhalites. VHMS mineralisation in these mafic dominated rocks, associated with the intercalated sediments, is present. Disseminated, stringer and massive sulphides have been identified.</p>
<b>Drill hole Information</b>	<p>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:</p> <ul style="list-style-type: none"> <li>- easting and northing of the drill hole collar</li> <li>- elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>- dip and azimuth of the hole down hole length and interception depth</li> </ul>	<p>Included in appendix 1</p>
<b>Data aggregation methods</b>		<p>Not relevant for reporting DHEM geophysical survey</p>
<b>Relationship between mineralisation widths and intercept lengths</b>		<p>Not relevant for reporting DHEM geophysical survey</p>
<b>Diagrams</b>	<p>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.</p>	<p>Included within the report (or as appendices) are plans, sections, showing modelled conductor plates and related drill holes used in Down Hole Electro-Magnetic surveying.</p>
<b>Balanced reporting</b>	<p>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should</p>	<p>All significant results are included on the plans and/or cross-sections. Full survey details, including all holes surveyed are included in appendix 1.</p>

Criteria	JORC Code explanation	Commentary
	be practiced to avoid misleading reporting of Exploration Results.	
<b>Other substantive exploration data</b>	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.	Exploration of significance completed prior to December 2019 is detailed in the Cobre Ltd Prospectus that can be accessed via the Company website along with results of 2020 diamond drilling at: <a href="http://www.cobre.com.au/">http://www.cobre.com.au/</a>
<b>Further work</b>	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Further work is discussed in the document.