

14 July 2021

**ASX Limited** - [Company Announcements Platform](#)

## KALAHARI METALS LIMITED – KITLANYA WEST EXPLORATION UPDATE

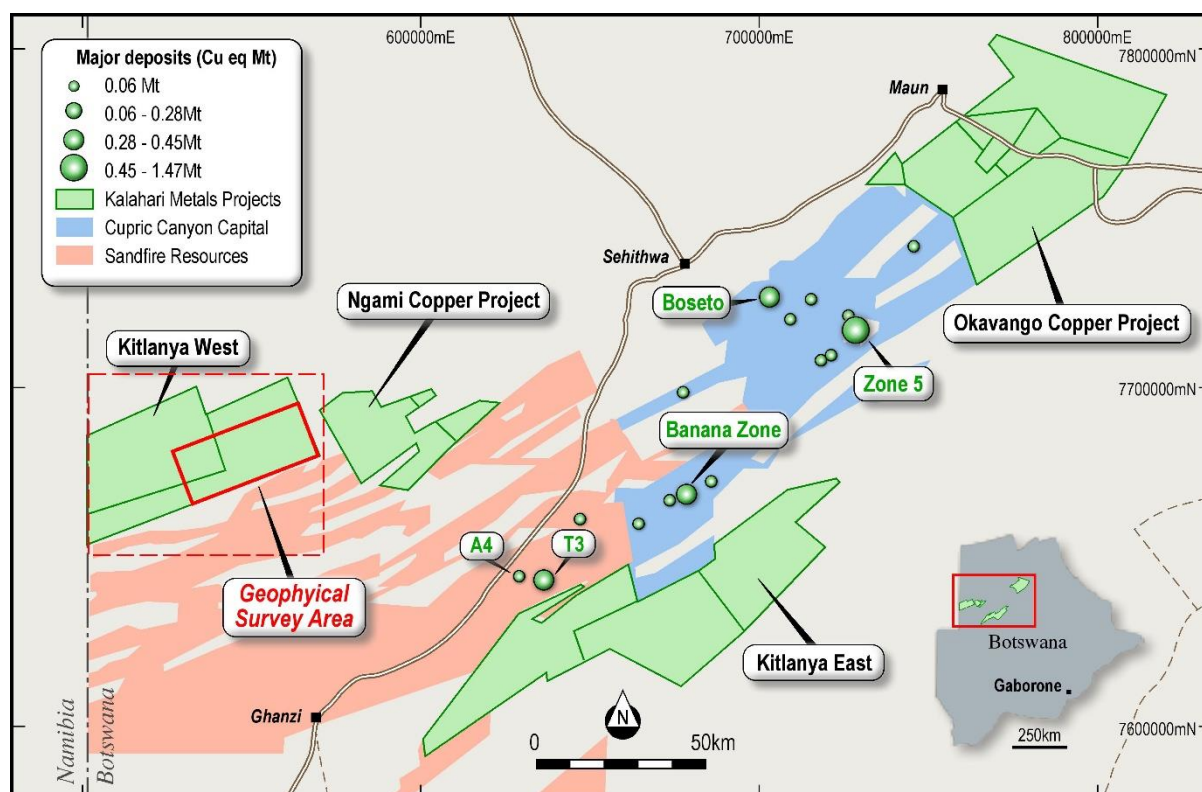
Cobre Limited (ASX: **CBE**, **Cobre** or **Company**) is pleased to announce the completion of airborne magnetic and gravity surveys on Kalahari Metal Limited's (**KML**) wholly owned Kitlanya West (**KIT-W**) project in Botswana. In addition, diamond drilling has now commenced on the first Airborne Electromagnetic (**AEM**) target with initial results corroborating the conceptual target model with mineralisation expected on or above the Ngwako Pan Formation (**NPF**) and D'Kar Formation (**DKF**) contact.

### Highlights:

- Airborne gravity has mapped out an ENE trending gravity low, likely related to the development of a deeper sub-basin in the lower Kalahari Copper Belt (**KCB**) basin, the margins of which would be considered prospective sites for Cu-Ag mineralisation;
- High-resolution magnetic data clearly map out fold targets in the DKF correlating with, and adding further support for, existing AEM targets;
- Interpretation of magnetic data further suggests that much of the previously interpreted NPF is covered with thin DKF – this would open the possibility for shallow, relatively flat lying mineralisation along the redox contact between these formations;
- The updated interpretation is further supported by regional soil sampling traverses with both Cu and Zn anomalies correlating with the position of the interpreted redox contact between the DKF and NPF; and
- Initial results from diamond drilling confirm the existence of DKF in the fold structures mapped in the AEM modelling.

Interpretation of new geophysical data along with existing soil sampling and ongoing diamond drilling, has further prioritised areas with a high potential for deposition of Cu-Ag mineralisation. The variety of deposition styles, trap sites, scale and distribution of mineralisation within the KIT-W license area, and existence of prospective sub-basins, enhances the potential for the project to deliver new Cu-Ag discoveries in the emerging KCB.

At Kitlanya East (**KIT-E**), a total of 1,742m of combined Reverse Circulation (**RC**) (839m) and diamond (903m) drilling has now been completed. An additional diamond rig is scheduled to mobilise onto this programme to help improve production rates this week. Provisional results from this programme will be reported in a forthcoming announcement.



**Figure 1.** Locality map illustrating the position of the area of interest and recently completed airborne geophysical survey boundary discussed in the current announcement, NW Botswana.

**Commenting on recent developments in Botswana, Martin Holland, Cobre's Executive Chairman and Managing Director, said:**

*"The board and I are extremely encouraged to see continued advancement of the Kitlanya West Project area. The application of this leading edge combined magnetic and gravity survey system has allowed the technical team to take a major step in unlocking the potential to discover significant copper-silver resources. We are excited to see our priority drill target, focused on an AEM signature that is very similar to that of ASX listed Sandfire Resources' T3 & A4 deposits, looks to be located on a basin margin, a prime target site for KCB deposits. We keenly await the results of our current drilling programme."*

### Airborne magnetic and gravity surveys

The presence of sub-basin architecture with basin margins and intra-basinal highs provide important controls in sedimentary copper models. Fault controls along these boundaries provide pathways for mineralising hydrothermal fluids both during basin formation and again during basin inversion. Importantly, sub-basins provide closed systems for focussed fluid flow, which can increase the metal tenor of any deposit.

Airborne gravity data provide a novel method for mapping the original basin architecture given that the main density contrast in the geological section relates to the interface between dense Okwa Group basement and lower density volcano-sedimentary units of the KCB. Thicker basins and sub-basins are thus expected to manifest as gravity low anomalies. The margins of these gravity lows are priority sites for deposit formation.

A total of 9,970 km of airborne magnetic and gravity data were collected by New Resolution Geophysics (**NRG**) using a fixed-wing platform flown at low-level (appr. 30m survey height) and 100m line spacing. Airborne gravity data was collected using NRG's NxT airborne gravimeter. The system employs a new laser ring gyro strapdown Inertial Measurement Unit which does not require the mechanical orientation platform used in traditional airborne gravimeter designs; allowing for operation in turbulent conditions typical in low-level tight drape magnetic surveys. As a result, sub mGal gravity data can be collected concurrently with high-resolution magnetic data. The combined gravity and magnetic data products provide an effective combination for mapping and target generation.

Results from the airborne survey and interpretation of data are summarised as follows (refer *Figures 2 and 3*):

- Airborne gravity data map out a prominent 4 mGal, 30 x 7 km, ENE trending gravity low which is likely related to a deeper sub-basin (see model results in *Figure 2*);
- The margins of the sub-basin would provide priority sites for deposit formation and can be further prioritised when cross referenced with magnetic, AEM and soil geochemical datasets;
- Compelling targets analogous to Sandfire Resources' T3 and A4 deposits are identified as several tight folds in the DKF, clearly mapped in the magnetic data, and correlated with historical AEM conductors ;
- The priority folded conductor, currently being drill tested, also coincides with the interpreted sub-basin margin; and
- Interestingly, in the central portion of the survey area, potential exists for thin DKF cover on NPF anticlines which is evidenced by slightly elevated susceptibility units with different textural character to the NPF.

The updated lithological interpretation appears to correlate well with regional soil sampling traverses collected in 2019. Both elevated Cu and Zn are often associated with the interpreted contact between DKF and NPF as would be expected. Results support the potential for traditional targets on the NPF-DKF contact on fold limbs as well as under thin DKF cover where flatter geometry may be possible. In addition, several tightly folded portions of DKF have been delineated with corresponding AEM anomalies like those identified at T3 and A4 with potential for mineralisation to occur higher in the DKF above the NPF contact in structurally controlled trap-sites. *Figure 4* illustrates these results.

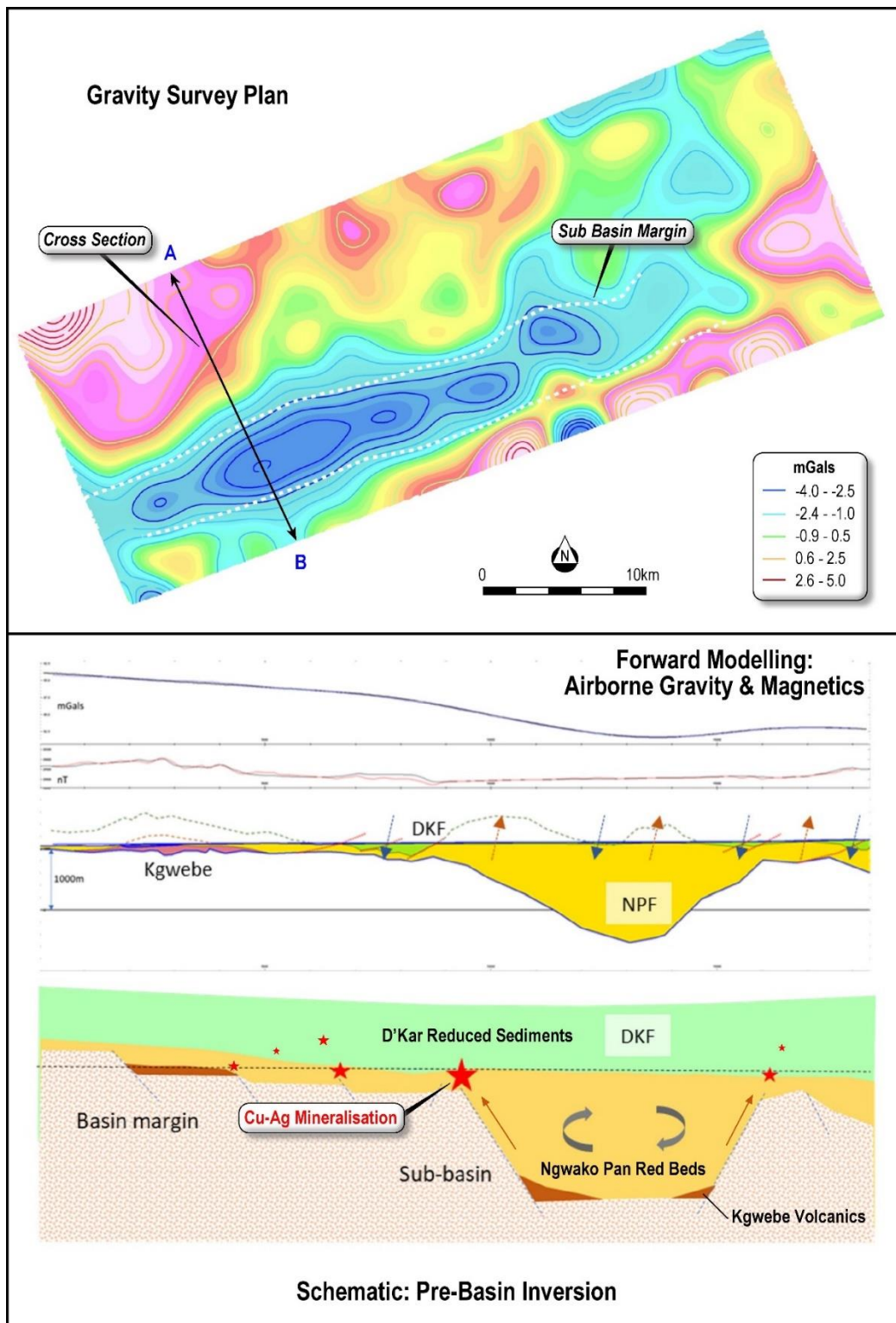
### KIT-W Drill Programme

Drill testing of the first of the AEM conductors has now commenced with access and water supplies in place. A total of 40m has been drilled into DKF sandstones and siltstones with less than 20m of Kalahari cover (including 9m of calcrete). Initial drilling results thus confirm the target AEM conductor is related to units in the DKF. In addition to the ongoing diamond drilling, a short percussion programme is planned to verify the updated interpretation presented in this announcement. The percussion drill programme will consist of a series of short vertical holes to confirm the underlying geology as well as providing estimates of Kalahari cover thickness and geochemical samples at the base of the Kalahari cover.

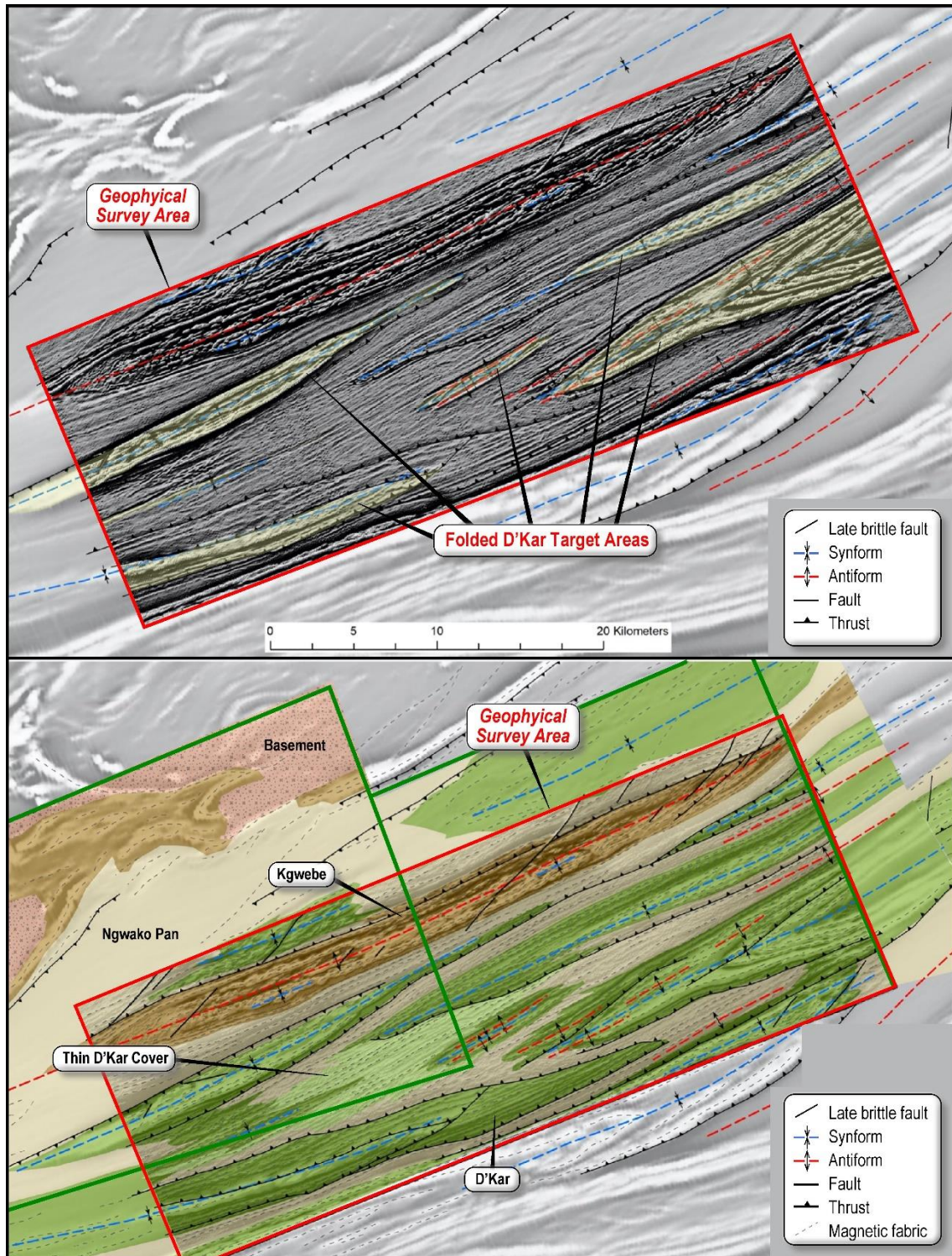
**Table 1: KML Planned Drill Programme**

Project /Target	Drilling Planned	Target Rationale
Kitlanya West	2 x DDH (900m)  Optional 3 x DDH follow-up  (~1,300m)	AEM conductive targets associated with soil anomalies and fold structures.  Potential for traditional fold limb, redox targets as well as fold hinge and structurally controlled targets above the traditional contact.  Interpreted Kgwebe Formation geology and position on the northern margin of the KCB considered encouraging vectors for deposits.  AEM conductor targets developed upon local anticlines within a broad synclinal structure supported by coincident Cu / Zn soil geochemical survey anomalies.  Anomalies have a similar geophysical response (in terms of geological setting, conductivity, geometry, and scale) to the Sandfire T3, A4 and A1 targets.  KML note the similarities between the structural setting of Kit-W and Sandfire's A4 deposit where high-grade drilling intercepts up to 33.0m @ 4.6% Cu & 74.3 g/t Ag from 109m down-hole were reported in December 2020 <sup>1</sup> .
Kitlanya West	10 percussion holes (~500m)  (Optional follow up percussion – 10 holes ~500m)	The percussion drill programme will consist of a series of short vertical holes to confirm the underlying geology as well as providing estimates of Kalahari cover thickness and geochemical samples at the base of the Kalahari cover.

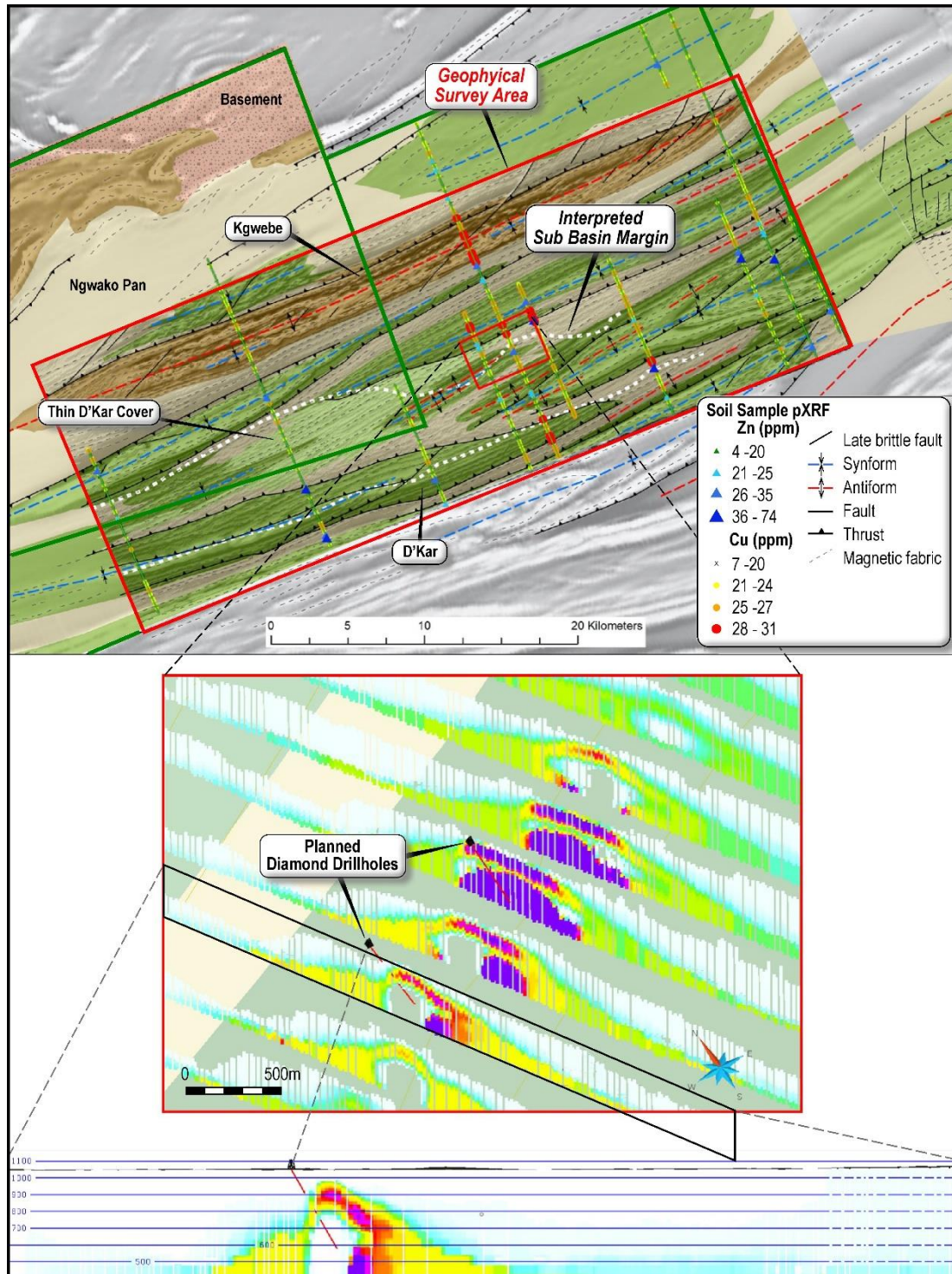
<sup>1</sup> Sandfire Resources ASX announcement 1 December 2020



**Figure 2.** Colour contour image of the residual Bouguer Anomaly with model section line illustrated. Model results, schematic section of the original sub-basin and priority sites for mineralisation illustrated.



**Figure 3.** (Above) Second vertical derivative magnetic image with structure and fold-axes highlighted. (Below) Updated lithostructural interpretation based on the detailed magnetic data.



**Figure 4.** (Above) Lithostructural interpretation with soil sample results overlain, note the correlation between Cu and Zn anomalies with the DKF-NPF interpreted contacts. (Below) Detailed 3D view and section through the AEM anomaly which is currently being drill tested. Note the correlation between this priority target and the interpreted sub-basin margin.

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, please contact:**

**Martin C Holland**

**Executive Chairman and Managing Director**

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### **About the Kalahari Copper Belt**

- The Kalahari Copper Belt extends for over 600km across north-western Botswana into Namibia. The belt is part of an extensive Mesoproterozoic rift system which formed along the margins of the Kalahari craton during the Namaqua-Grenville orogeny.
- Stratigraphy displays typical characteristics of a sedimentary copper system, including a basal sequence of bimodal volcanics of the Kgwebe Formation overlain by red-bed sediments of the Kuke and Ngwako Pan Formations (**NPF**), mixed reduced marine siliciclastic and carbonate rocks of the D'Kar Formation (**DKF**), and nearshore to fluvial siliciclastic and carbonate rocks of the Mamuno Formation.
- Cu (-Ag) mineralisation occurs throughout the belt along, and above, the main redox contact between the Ngwako Pan and D'Kar Formations. Mineralisation is largely epigenetic and primarily related to basin inversion during a prolonged mineralising event during the Damara (Pan-African) orogeny.
- Two production hubs are currently in development: Sandfire Resources' Motheo Production Hub (including the T3 deposit - 53Mt @ 0.9% Cu and 13g/t Ag); and Khoemacao's Expansion Project (168Mt @ 2.1%Cu & 27 g/t Ag). Significant investment into powerline infrastructure by the Botswana government further supports project development.
- Despite the belts emergence as a copper producing district, much of the area remains relatively unexplored due to the presence of extensive Kalahari Group cover masking the mineralised stratigraphy. Exploration thus relies on geophysical data with a notable increase in discoveries as technology improves along with improvements in understanding of the mineralisation models.
- Kalahari Metals Limited's extensive, strategically positioned, licenses place the company in an excellent position for making new discoveries.



Location of the Kalahari Copper Belt



Kalahari Copper Belt stratigraphy

	Age	Orogeny	Formation	Group	S.Group	Description
Kalahari Copper Belt Stratigraphy	579 Ma	Damara	Okwa Group			Syn-post tectonic metasedimentary
	~1100-715Ma		Mamuno	Ghanzi	Ghanzi-Chobe	Arkosic sandstone, siltstone, mudstone and limestone (nearshore)
		Cu-Ag	D'Kar			Reduced sandstone, arkose, siltstone and carbonate (marine)
			Ngwako Pan			Red bed sequence (alluvial fan - lacustrine)
			Kuke			Basal conglomerates, arenites, red sandstones (fluvial)
	1100 Ma	Grenvillian	Kgwebe			Bimodal volcanics
	2056Ma		Okwa basement complex			

## 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 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.

Table 2: JORC TABLE 1 - Code Reporting Criteria

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p><i>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</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used broad meaning of sampling. Aspects of the determination of mineralization that are Material to the Public Report.</i></p> <p><i>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 mineralization types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<ul style="list-style-type: none"> <li>• The information in this release relates to the technical details from the Company's exploration and drilling program at Kitlanya West which lies within the Ghanzi District on the Kalahari Copper Belt, Republic of Botswana.</li> <li>• The current Kalahari Metals soil sampling was carried out along traverses using 50m sample intervals along regional traverses.</li> <li>• Kalahari Metals Soil samples were taken at an average depth of 10cm from uncontaminated and undisturbed sites.</li> <li>• Kalahari Metals soil sampling was undertaken during the dry season to avoid drying.</li> <li>• Samples were sieved on site to 180µm and sealed in either clear plastic sample envelopes or paper geochemical collection packets.</li> <li>• Kalahari Metals Soil samples were screened using a pXRF.</li> <li>• Following industry best practice a series of standards, duplicates and blanks were included for QAQC while conducting the pXRF screening.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse	<ul style="list-style-type: none"> <li>• Current Kalahari Metals</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>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).</i>	<p>Diamond drilling is drilled at HQ/NQ size.</p> <ul style="list-style-type: none"> <li>All NQ drill core is oriented using Reflex ACT III tool.</li> </ul>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximize sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Not relevant at this early stage of reporting (i.e. just reporting that drilling has commenced)</li> </ul>
Logging	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> <li>All drill cores will be logged by a suitably qualified geologist on site</li> </ul>
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and</i></p>	<ul style="list-style-type: none"> <li>Not relevant at this early stage of reporting (i.e. just reporting that drilling has commenced)</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	
Quality of assay data and laboratory tests	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>Not relevant at this early stage of reporting (i.e. just reporting that drilling has commenced)</li> </ul>
Verification of sampling	<i>The verification of significant</i>	<ul style="list-style-type: none"> <li>Not relevant at this early stage</li> </ul>

Criteria	JORC Code explanation	Commentary
and assaying	<p><i>intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>of reporting (i.e. just reporting that drilling has commenced)</p>
Location of data points	<p><i>Accuracy &amp; quality of surveys used to locate survey data</i></p> <p><i>Specification of the grid system used.</i></p>	<ul style="list-style-type: none"> <li>• Kalahari Metals Drill collar coordinates are captured by GPS.</li> <li>• Elevation control on the geophysical survey relied on Novatel DL-V3L1L2 with post-processed differential correction in conjunction with a Freeflight radar altimeter.</li> <li>• Geophysical data location controlled by GGPS.</li> <li>• The grid system used is WGS84 Zone 34S. All reported coordinates are referenced to this grid.</li> </ul>
	<p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>• Topographic control was based on satellite survey data collected at 30m resolution. Quality is considered acceptable.</li> </ul>
Data spacing and distribution	<p><i>Data spacing for reporting of Exploration Results.</i></p>	<ul style="list-style-type: none"> <li>• Sampling is deemed appropriate for the type of survey and equipment used.</li> <li>• Magnetic and gravity survey lines were flown on bearing 157 degrees with line spacing 100m. Survey altitude was an average of 34.4m</li> <li>• Historical GeoTem AEM data was collected on a bearing of appr. 330 degrees at a line</li> </ul>

Criteria	JORC Code explanation	Commentary
		spacing of 400m
Orientation of data in relation to geological structure	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>• Magnetic and AEM surveys flown across the average regional strike direction (~070)</li> </ul>
Sample security	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> <li>• All readings/geophysical measurements collected and stored on computer. Data was transferred via cloud storage. All readings/geophysical measurements collected and stored on computer with separate backup data.</li> <li>• Sample bags are logged, tagged and stored at the field office.</li> <li>• Diamond core is stored in a secure facility at the field office.</li> </ul>
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>• None completed at this stage</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<i>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</i>	<ul style="list-style-type: none"> <li>• Cobre Ltd holds a 51% interest in Kalahari Metals, the Company that holds the tenements.</li> </ul>

	<i>national park and environmental settings.</i>	
	<i>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.</i>	<ul style="list-style-type: none"> <li>The tenements are in good standing.</li> </ul>
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> <li>There are no publicly available reports referring to any historical work in this area.</li> </ul>
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> <li>The geological setting is analogous, as are the interpreted deposit types and styles of mineralisation, to others within the Central Kalahari Copperbelt currently being explored by Khoemacau Copper Mining and Sandfire Resources.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not relevant at this early stage of reporting (i.e. just reporting that drilling has commenced)</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li><i>In reporting Exploration</i></li> </ul>	<ul style="list-style-type: none"> <li>Not relevant at this early stage</li> </ul>

	<p><i>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.</i></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<p>of reporting (i.e. just reporting that drilling has commenced)</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not relevant at this early stage of reporting (i.e. just reporting that drilling has commenced)</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Included within the report.</li> </ul>
Balanced reporting	<p><i>Where comprehensive reporting of all Exploration Results is not</i></p>	<ul style="list-style-type: none"> <li>• Reporting of the geophysical survey is based on internal</li> </ul>

	<i>practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	<p>interpretation and covers the full surveyed area.</p> <ul style="list-style-type: none"> <li>• All soil data is included on plans within the report.</li> <li>• No drill results are available for reporting at this early stage.</li> </ul>
Other substantive exploration data	<i>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.</i>	<ul style="list-style-type: none"> <li>• Nothing relevant at this early stage of reporting (i.e. just reporting that drilling has commenced)</li> </ul>
Further work	<i>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.</i>	<ul style="list-style-type: none"> <li>• Further work is discussed in the document.</li> </ul>