20 February 2023

Kavango Resources PLC

("Kavango" or "the Company")

KCB - Karakubis Project Update

Botswana focussed metals exploration company Kavango Resources plc (LSE:KAV) ("Kavango") is pleased to announce an exploration update concerning its Karakubis Copper Project ("Karakubis") in the Kalahari Copper Belt ("KCB"), near the Namibian border.

Formerly referred to as the Mamuno Project, Karakubis is adjacent to large landholdings held by Sandfire Resources (ASX:SFR) to the north and Rio Tinto (LSE:RIO) to the west. Karakubis is immediately along strike of the Ghanzi West project where ENRG Elements (ASX:EEL) has identified similar geological signatures to Sandfire's (ASX:SFR) Motheo Copper Mine.

HIGHLIGHTS

Kavango engages local KCB consultant David Catterall of Tulia Blueclay Limited (TBL)

- Site visit to Karakubis completed in January by Dave Catterall, a local consultant with extensive experience of KCB exploration.
- Dave has been working closely with Kavango's senior team since October 2022 and has significantly enhanced the Company's understanding of KCB exploration
- Focus of TBL's work has been to improve Kavango's drill target selection and to mentor the Company's team on the ground
- TBL has provided Kavango with a detailed internal report (the "Report") on the prospectivity of its KCB prospecting licences ("PLs")
- One of the Report's key recommendations is that Kavango immediately focus its exploration efforts on the Karakubis Copper Project

Upgrade of Karakubis Prospecting Licences

- TBL's report has upgraded Kavango's prioritisation of the Karakubis PLs
- TBLI has reviewed Kavango's use of Controlled Source Audio Magnetotelluric ("CSAMT") technology in the KCB
- Kavango's CSAMT data taken over Karakubis appears to corroborate TBL's pre-existing interpretation of the area's geology
 - CSAMT data and TBL's geological interpretation suggest D'Kar/Ngwako Pan horizon contact is present at moderate depths at Karakubis
 - This appears to be comparable to the setting for Sandfire's A4 and T3 Deposits, where alteration/mineralisation lies at shallow depths above the D'Kar/Ngwako Pan Formation contact
- Karakubis Airborne Electromagnetic ("AEM") data provides further encouraging exploration leads
 - Kavango flew a limited AEM survey over Karakubis in September 2022
 - AEM is the most common surveying technique used in KCB exploration
 - AEM inversions indicate abundant parasitic folding of the D'Kar and Ngwako Pan sediments, with possible anticlinal hinge zones that could provide potential structural traps for mineralisation
- Analysis of regional satellite gravity data suggests a possible "basin margin" running from Karakubis into ENRG Elements' neighbouring licences
 - This large-scale structure could have provided conduits for metal-bearing hydrothermal fluids to pass through

Next Steps

- Final interpretation and integration of existing Karakubis geophysical and geochemical data underway
- Results expected in late February to support drill targeting

Ben Turney, Chief Executive Officer of Kavango Resources, commented:

"Dave Catterall's influence over our Kalahari Copper Belt exploration programme has been instant and meaningful.

Successful exploration in the Belt is challenging. Kavango has a large land package and Dave's successful introduction has encouraged us to refocus our efforts on our prospective Karakubis project area.

It is particularly promising that CSAMT and AEM data we have gathered independently appears to align with Dave's regional geological interpretation. Historically, Kavango has dedicated more energy to other of its prospecting licences. While we will continue to advance work on these (PLs 082 and 036 in particular), Karakubis is now our main centre of attention.

We now recognise that the Karakubis licences represent our greatest opportunity for the near-term detection of a metal bearing alteration system."

Report Summary

In October 2022, Kavango engaged David Catterall to review the Company's KCB strategy and provide any recommendations for improvement. Mr Catterall is one of the leading experts on the KCB's geology and its exploration.

In his review, Mr. Catterall amalgamated open source and public exploration and water borehole data for the KCB, along with regional AEM and electromagnetic survey data. During his time working in the KCB, Mr Catterall has developed alternative interpretation of the region's underlying geology compared to historic mapping. Specifically, he has mapped sandstones and siltstones consistent with D'Kar Formation lithologies, which typically overly the Ngwako Pan Formation.

The zones where the two formations meet are recognised as a primary regional control of copper/silver mineralisation in the KCB and are Kavango's primary exploration focus.



Figure 1 - Logged historic exploration and water boreholes in the KCB

Mr. Catterall subsequently used his extensive knowledge to create a new stratigraphic interpretation of the distribution of the D'Kar Formation across the KCB.

Among the key findings was the previously unrecognised presence of nearer surface D'Kar under Kavango's Karakubis licences near the Namibia border. Kavango has previously completed mapping, aeromagnetic surveying, and soil sampling on these licences and identified a large copper drill target (announced >>> 31 August 2022).

Kavango has now reclassified Karakubis as its top priority in the KCB.

Karakubis Project Upgrade

Kavango's preliminary interpretation of its Controlled Source Audio Magnetotelluric ("CSAMT") survey data from the Karakubis project area suggests the potential for the presence of the D'Kar/Ngwako Pan Formation contact at moderate depths. This potential was first highlighted by Mr Catterall during a historical data review last year.

The D'Kar/Ngwako Pan stratigraphic contact is the primary control on economic copper/silver mineralisation in the KCB. The Company believes that by confirming this contact at the projected depth at Karakubis would strengthen these PLs' prospectivity.

Inversion sections from Airborne Electromagnetic ("AEM") surveys completed over Karakubis also indicate the abundant presence of tightly folded rocks. These could provide the might structural setting for potential mineralisation.

In his Report, Mr Catterall concluded that this could have helped to bring the D'Kar/Ngwako Pan horizon contact closer to surface. It could have also created suitable structural traps for mineralisation.

 Similar structures are also understood from public domain information to be abundant on ENRG Elements' Ghanzi West Project immediately to the east of Karakubis.

ENRG Elements recently identified three domal features at Ghanzi West similar to those discovered along strike by Sandfire Resources at its Motheo Copper Mine. It also identified the potential for near-surface D'Kar/Ngwako Pan horizon contact-associated mineralisation, which is interpreted by Kavango's team and Mr Catterall to extend into the Karakubis PLs.

In parallel to Mr Catterall's work, Jeremy S. Brett who is a director of the Company and consults to the Company through Jeremy S. Brett International Consulting Ltd. has recently completed a review of satellite gravity data over Karakubis. Mr Brett's interpretation of the data suggests a possible "basin margin" runs through the project into ENRG Elements' neighbouring licences. Basin margins are located on the edges of sedimentary basins such as the KCB and could have provided favourable conduits for hydrothermal fluids to pass through that contained metallic elements.

Next steps

Kavango is finalising interpretation of its AEM and CSAMT survey data for Karakubis, with results expected in late February. The Company is completing an in-depth analysis combining the two geophysical data sets with recent reconnaissance geological field mapping (<u>announced >>> 31 August 2022</u>). This will be integrated with existing Karakubis geochemical data.

Kavango will use the data sets to improve its understanding of Karakubis' underlying geological structure and metal potential. The most favourable areas exhibiting similar geological controls to economic copper/silver deposits elsewhere on the KCB will be selected for targeting. Further updates will be provided in due course.

About David Catterall

David Catterall is a geologist with 36 years of experience in mineral exploration throughout Africa and Europe in a wide range of commodities, specialising in structurally controlled precious and base metals deposits.

Over the last 15 years, Mr. Catterall has focused extensively on exploring Africa's copper belts, including the central KCB. He is currently the Competent Person for Cobre Limited (ASX:CBE) and ENERG Elements (ASX:EEL), which are both active companies in the KCB.

Among other roles, Mr Catterall has also worked as a Consultant to Cupric Africa for its EISEB and Khoemacau project areas in the KCB and has also been a Contract Geologist and Consultant, for Cobre advising on work on KCB tenements owned by its subsidiary Kalahari Metals, covering 8,100km².

Mr Catterall's experience ranges from field mapping of complex structural terrains, through drill planning and execution to exploration management for large public mining companies and junior explorers.

He is well experienced in remote area exploration operations, mentoring junior technical staff, and developing a safe workplace.

Further information in respect of Kavango and its business interests is provided on the Company's website at <u>www.kavangoresources.com</u> and on Twitter at #KAV.

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Kavango Competent Person Statement

The technical information contained in this announcement pertaining to geology and exploration have been read and approved by Brett Grist BSc(Hons) FAusIMM (CP). Mr Grist is a Fellow of the Australasian Institute of Mining and Metallurgy with Chartered Professional status. Mr Grist has sufficient experience that is relevant to the exploration programmes and geology of the main styles of mineralisation and deposit types under consideration to act as a Qualified Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The technical information contained in this announcement pertaining to geophysics have been read and approved by Mr. Jeremy S. Brett, M.Sc., P.Geo., Senior Geophysical Consultant, Jeremy S. Brett International Consulting Ltd. in Toronto,

Canada. Mr. Brett is a member of the Professional Geoscientists of Ontario, the Prospectors and Developers Association of Canada, the Canadian Exploration Geophysical Society, and the Society of Economic Geologists. Mr. Brett has sufficient experience that is relevant to geophysics applied the styles of mineralization and types of deposits under consideration to act as a Qualified Person as defined under the Canadian National Instrument 43-101, Standards of Disclosure for Mineral Projects.

NOTES TO EDITORS

KAVANGO'S INTERESTS IN THE KALAHARI COPPER BELT

Kavango's exploration licences in the KCB include:

Kanye Resources

100% working interest (in 10 prospecting licences, which cover 4,256 km².

The LVR Project / Shongwe Resources

A 90% interest in prospecting licences PL082/2018 & PL 083/2018, held in a Joint Venture, Shongwe Resources, with LVR GeoExplorers (Pty) Ltd ("LVR"), which cover 809km²

THE KCB PROJECT GEOLOGICAL SETTING

Kavango's KCB Project areas include lengthy redox boundaries, close to surface, that represent excellent exploration targets.

The redox boundaries were formed several hundred million years ago in active sedimentary basins flooded by shallow seas. Organic matter accumulating on the sea floor created anoxic conditions, which formed a chemical barrier to metal ions rising upwards through the sediments as the basin subsided. The change in chemistry caused the precipitation of metal species (carbonates, sulphides etc.) including copper and silver on or just below the redox boundary.

Subsequent tectonic activity folded the sedimentary layers, which was often accompanied by the concentration of metals into the fold hinges and shear zones. Fold hinges pointing upwards are known as anticlines, while the downward pointing hinges are called synclines.

Several large copper/silver ore deposits have been discovered on the KCB in association with anticlines in areas now held under licence by Sandfire Resources (ASX:SFR) and Cupric Canyon (a privately owned mining development company). These deposits are relatively close to surface and many are amenable to open pit mining operations.

Accumulations of metals can be traced along the strike of geochemical reduction-oxidation ("redox") boundaries (sometimes for many kilometres) because they often contain iron and have a higher magnetic signature than the surrounding rock. These have recently been successfully mapped by Kavango's exploration teams.

GLOSSARY

AEM: Airborne Electromagnetic Survey. This uses an energised loop to induce currents in underlying lithological units, which resultant magnetic field can then be measured.

CSAMT: Abbreviated from Controlled Source Audio frequency Magneto Telluric. An AMT survey is an electromagnetic survey technique that uses naturally occurring passive energy sources, and which can electrically map geologic structures to depths of 500 metres or more.

Inversion: Geophysical inversion refers to mathematical and statistical techniques for recovering information on subsurface physical properties, from observed geophysical data

KCB: Kalahari Copper Belt. An area of southern Africa, running ENE-WSW from Botswana into Namibia, within which multiple economic copper-silver sedimentary rock hosted deposits have been discovered.

RC: Reverse Circulation drilling. This is a cost-effective method of drilling that uses compressed air to drive a downhole hammer, which breaks rock into chips that are forced up an internal tube in the drill rod, minimising risk of contamination by wall-rock.

Redox boundary: Reduction and oxidation boundary, at which the chemical oxidative state of chemical species changes, typically resulting in precipitation of metal salts.

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