# METAL BANK LIMITED QUARTERLY ACTIVITIES REPORT For the Quarter ended 31 December 2023

# COPPER: COBALT: GOLD

Highligh	ts	
Jordan Copper	-	Encouraging results at the Company's Malaqa copper oxide project continue
	-	At Um el Amad, mineralisation was extended to over 800m in strike, with up
		to several % CuO per metre, and multiple mineralised horizons observed $^1$
	-	At Malaqa North roadside continuous channel sampling returned results of
		26m @ 0.79% Cu, additional channel results to 6m @ 0.97% Cu, and further
		positive outcrop results in the area <sup>1</sup>
	-	At Malaqa NW, high grade rock chips returned up to 8.70% Cu <sup>2</sup>
	-	Reconnaissance scouting in Wada Araba identified basement-hosted Cu
		mineralisation and greisen alteration, and a new priority bulk tonnage
		copper target is currently under application <sup>1</sup>
Livingstone Gold WA	-	Field program including soil sampling and regional prospect assessment
		completed, and reviews and ranking of new and existing targets continue
Millennium Cobalt Copper Gold Qld	-	Refining of metallurgical and resource drill programs plus test work toward
		scoping and pre-feasibility studies is ongoing with drilling contractors ready
Corporate	-	Annual General Meeting held on 23 November 2023

<sup>1</sup> MBK ASX Release 16 January 2024 "Growing Copper Mineralisation at Malaqa, Jordan"
<sup>2</sup> MBK ASX Release 14 November 2023 "High grade copper results continue at Malaqa, Jordan"

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# **Business Overview**

MBK holds a significant portfolio of advanced copper, cobalt and gold exploration projects, with substantial growth upside, including:

- Mineral exploration and reconnaissance rights in southern Jordan, focusing on identifying copper deposits near historic mining centres and the broader Wadi Araba area<sup>3</sup>;
- a 51% interest and the right to earn up to 80% of the Millennium Cobalt-Copper-Gold project which holds a 2012 JORC Inferred Resource of 8.4Mt<sup>4</sup> @ 1.23% CuEq across 5 granted Mining Leases with significant potential for expansion;
- a 75% interest in the advanced Livingstone Gold Project in WA which holds a JORC 2012 Inferred Resource of 40,300oz Au<sup>5</sup> at the Homestead prospect, a JORC 2012 Inferred Resource of 30,500oz<sup>6</sup> Au at Kingsley, and an Exploration Target<sup>6</sup> of 290 – 400Kt at 1.8 – 2.0 g/t Au for 16,800 – 25,700oz Au at Kingsley; and
- the 8 Mile, Wild Irishman and Eidsvold Gold projects in South East Queensland where considerable work by MBK to date has drill-proven both high grade vein-style and bulk tonnage intrusion-related gold mineralisation.

Metal Bank's 2024 exploration programs at these projects will continue to focus on:

- short term resource growth advancing existing projects to substantially increase JORC Resources;
- identifying additional mineralisation at each of its projects; and
- assessing development potential, including fast tracking projects through feasibility and development to production, particularly at the Millennium Project in Queensland, where the cobalt and copper project is contained within granted mining licenses.



Figure 1: Metal Bank Australian project locations

<sup>&</sup>lt;sup>3</sup> MBK ASX release 19 July 2023 "MBK secures exclusive rights to explore for Copper in Jordan"

<sup>&</sup>lt;sup>4</sup> MBK ASX Release 21 March 2023 "Millennium delivers substantial Resource increase"

<sup>&</sup>lt;sup>5</sup> MBK ASX Release 21 February 2023 "Livingstone delivers updated shallow Mineral Resources at Homestead"

<sup>&</sup>lt;sup>6</sup> MBK ASX Release 18 January 2022 "Kingsley Deposit Maiden Mineral Resource Estimate and updated Exploration Target"



**Metal Bank Limited** ('MBK' or 'the Company') is pleased to outline below the activities for the Quarter ended 31 December 2023 ('Quarter').

# Jordan - Copper

Field work in Jordan during the quarter at the Malaqa and Wadi Araba copper projects continued to build on initial groundwork, confirming encouraging assay results from September 2023<sup>8</sup> and identifying new target areas in November/December<sup>7</sup> (with results received subsequent to quarter end). This included: extending the size of outcropping stratiform copper oxide (CuO) mineralisation at Um el Amad to over 800m in strike<sup>7</sup> with results to 2.51% Cu<sup>8</sup> and remaining open to the east and south; identifying broad zones of mineralisation at Malaqa North with results to 26m @ 0.79% Cu<sup>8</sup> from continuous channel sampling plus encouraging samples over larger than interpreted area; and high grade rock chips at Malaqa NW to 8.70% Cu<sup>8</sup> (Figure 2).



Figure 2: Malaqa exploration agreement area and local geology showing location of recent sampling (green = November 2023 results, red = January 2024 results received post quarter end)

<sup>7</sup> Refer to footnote 1 on page 1

<sup>&</sup>lt;sup>8</sup> Refer to footnote 2 on page 1



Sample ID	Conner %	Fasting	Northing	Description		
Um el Amad						
3842	4.21	738883	3385011	Composite grab of CuO in weathered sandstone.		
3737	1 56	739290	3384761	MnO and malachite in coarse-grained cross-bedded sandstone		
3738	2.51	739293	3384765	MnO and malachite in flat lying coarse-grained cross-bedded sandstone		
3739	0.42	739316	3384735	MnO and malachite in loose friable material at base of coarse grained sandstone		
3740	0.36	739348	3384737	Coarse grained sandstone below mine with malachite as highs along hedding		
3740	0.25	739340	3384735	Coarse grained sandstone below mine with malachite as blobs along blobs along bedding		
3741	1.02	739307	3384753	Coarse grained sandstone from mine wall with malachite as hields and streaks		
3742	0.28	739307	338/753	Coarse grained sandstone from unfinished mine wall with malachite as blebs and streaks		
3842	4 21	738883	3385011	Composite graph of CuO in weathered sandstone		
38/15	3.09	738907	338/038	Composite grab of CuO in weathered sandstone.		
3846	2 31	738807	338/077	Composite grab of CuO in sh		
38/18	2.31	738815	3385080	Composite grab of CuO in shi		
38/10	4 35	730076	338/060	Composite grab of CuO in sn in the lenses and nactures		
2850	1.29	720254	2204520	Composite grab of CdO in sin		
3852	1.28	739334	3385063	Composite grab of CuO in sn		
Jojz Malaga Norti	1.04	730034	3383003			
3801-381/	26m@079	738533	3387137	Continuous channel sample to 200d magnetic. Disceminated CuQ in sandstone/siltstone between shales		
3801-3814	2011@0.73	730333	2207116	Continuous channel sample to 2500 magnetic. Disseminated CdO in sandstone, sitistone between shares		
2017	4m @ 0.27	730473	2207245	2x2m interval channel samples in creek. Start point, cremaing to zoomag. Soit Silysi. 1-2% CuO		
3817	2111 @ 0.03	730754	2207245	2m channel samples, N Malaga, CuO in sandstones		
3010	2111 @ 0.61	730752	3307343	2111 champles, N Malaga. CuO III sanustones		
2020 2022	1.51 (m@0.07	730/33	3307300	Composite grad sample of CuO mineralisation		
3620-3622	3m @ 0.37	730473	3387120	Comparing the sample to 2800 magnetic in incised guily. Disseminated CuO in sandstone/sitistone		
3023	2111 @ 0.73	730442	3367003	Composite channel/trench sample of outcropping CuO in sn/si over 2m trending to 270mag		
3824	2m @ 0.67	738440	3387063	Composite channel/trench sample of outcropping CuO in sh/si over 2m		
3825	211 @ 1.37	730434	3387060			
3826	2m@1.9	738429	3387068	Composite channel/trench sample of outcropping CuO in sn/si over 2m		
3827	2m@1.76	738429	338/0//			
3828	4.67	/3833/	3386952	I nick Fe-rich mudstone base of sequence with CuO as mal/azu/crc in swales and clusters in coarse qtz sh		
3843	6.58	737980	3386635			
3844	0.11	738900	3386473	He-Min-CuU stained sandstone		
3847	2.10	738384	3386530			
3851	1.57	738135	3386650			
3853	1.23	738910	3386402			
	4.24	726002	2205247			
3728	1.31	736882	3386317	Coarse grained sandstone with malachite, chrysocolla and iron oxides		
3729	5.49	736870	3386303	Coarse grained sandstone grit with malachite, chrysocolla and iron oxides		
3730	7.30	/36858	3386291	coarse grained sandstone grit with malachite, chrysocolla and iron oxides		
3/31	6.06	/36/45	3386344	Distinct medium grained sandstone with disseminated and blebby malachite, azurite and chrysocolla		
3/32	6.25	/36/41	3386341	Distinct medium grained sandstone with disseminated and blebby malachite, azurite and chrysocolla		
3733	4.03	/36742	3386343	Coarse grained sandstone with malachite in thin veinlets and small blebs		
3/34	8.70	/36/41	3386343	Fine-grained subvertical feature and fault with strong malachite below the copper bed		
3735	4.72	736750	3386457	Coarse grained sandstone grit with malachite, chrysocolla and iron oxides		
WGS84 Zone 36N co-ordinate system						

Table 1: Malaqa Project results from September and November/December 2023 work

The Malaqa project now demonstrates several broad areas of stratiform copper CuO mineralisation within extensively distributed sedimentary host rocks. The original approach to drill areas near the ancient Um el Amad mine (Malaqa project region) is currently delayed due to difficulty in sourcing specialist drilling equipment suitable for the terrain. A team is presently in-country to develop suitable access and drilling locations elsewhere at Malaqa in conjunction with a local drilling company and a rig suitable for flat terrain only.

Across the broader Wadi Araba project area, basement-hosted copper and sulphide-bearing granitoids and volcanics were noted in scouting of several areas with copper minerals malachite, bornite and chalcopyrite observed. Prospective greisen alteration was also identified in initial scouting of a combined radiometric/structural target area. Work is ongoing regarding the potential for these systems to host economic mineralisation and the requisite work programs to test. MBK has also identified a priority drilling target for bulk tonnage stratiform CuO mineralisation that sits below a flat wadi bed, and the company is working with the Ministry of Energy and Mineral Resources to secure exploration rights over this area.



# Um el Amad

At Um el Amad, positive rock chip results up to 4.35% Cu were returned from sampling along strike of the historic Um el Amad mine<sup>9,10</sup>. Importantly, over 800m of outcropping stratiform copper oxide mineralisation continuity (Figure 2) has now been demonstrated within several horizons up to several metres in true thickness. Copper mineralisation is present as malachite, chrysocolla and minor azurite in disseminated, clot, replacement and interstitial fill form and hosted within several horizons of flat to gently dipping fine clays, siltstones to dolomitic siltstone to granular quartz-rich sandstone sediments overlying Precambrian basement (Figures 3 and 4). Correlating host rocks in the east and south are also present, with historic work indicating continuity of copper mineralisation in these areas however no modern work has yet been undertaken.



Figure 3: Disseminated CuO (malachite) blebs in fine hard sandstone/dolomitic sandstone, Um el Amad area.



Figure 4: CuO (malachite) disseminated in soft clay-rich sandstone, Um el Amad area. 4.35% Cu.

#### Malaqa NW

At Malaqa NW, results up to 8.70% Cu<sup>10</sup> were returned from outcropping CuO mineralisation in similar host rocks as Um el Amad. The Malaqa NW area currently forms a small elevated hill surrounded by alluvial/wadi cover, and overlying sequence stratigraphy has been mapped further west but as yet remains unexplored. It is presently interpreted block faulting has down-dropped mineralisation below the level of erosion and cover sediments.

# Malaqa North

At Malaqa North approximately 2.5km northwest of Um el Amad, exposed copper oxide mineralisation has now been identified and sampled over ~1100m of strike (Figure 2). Results

<sup>&</sup>lt;sup>9</sup> Refer to footnote 1 on page 1

<sup>&</sup>lt;sup>10</sup> Refer to footnote 2 on page 1



include up to 6m @ 0.97% Cu and 26m @ 0.79% Cu in continuous channel sampling of outcropping mineralisation, and additional rock chip samples in the area have returned up to 6.58% Cu<sup>1</sup>. Copper mineralisation is similar to Um el Amad however appears more clearly constrained between two red shale marker beds (Figure 5) of the Burj-Dolomite Shale unit.

In addition, erosion has resulted in exposure of the host unit and copper mineralisation in a number of gullies (Figure 6). This host rock is observed to dip gently to moderately west and is interpreted to continue below overlying massive sandstone cover further west. Importantly, this mineralised stratigraphy is identified as the correlative with the Um el Amad, Feinan (7.5km northwest) and Khirbet (13-15km northwest) historic mining regions, providing excellent scope for regional scale stratiform copper oxide exploration and development.



Figure 5: Malaqa North cutting showing 26m @ 0.79% Cu channel sampling interval. Note bounding red clay/shale units at either end



Figure 6: Malaqa North (southern valley) showing gently-dipping stratiform CuO-mineralised exposures at A-B-C (pale areas – majority hidden under scree slopes). Results of 1.57-2.10% Cu from rock chip sampling



# Wadi Araba Exploration

MBK is currently assessing the potential for large-scale stratiform copper oxide and intrusionrelated copper deposits within the southern and central areas of Wadi Araba on the western side of Jordan. Initial scouting of preliminary targets has identified several zones of copper oxide mineralisation within both overlying sediments and basement volcanics/intrusives. While geochemical results of samples on company tenure were limited, initial observations include that copper and minor silver mineralisation occur within the upper portions of siliceous and oxidised rhyolites and aplites – coincident with other indicator elements this is indicative of a basement source. In addition, several sulphidic (including bornite) and veined samples were also identified within intermediate to felsic granitoids and aplitic to porphyritic rhyolite units. Greisen (sericite/white muscovite-silica alteration) and siliceous alteration to veining with trace boxworks after sulphides was also observed in several areas.

# Jordan Exploration - Next steps

MBK is currently working with a local drilling company to prepare for some scout drilling in the easier terrain in the Malaqa area. The recent drone attack on the US Base in Northern Jordan is not impacting field work at MBK's projects in Southern Jordan but a watching brief is in place, as is excellent communication with the security authorities and the Australian Embassy in Jordan.

The company is also continuing to develop targets within the Malaqa and Wadi Araba project areas and is in the process of applying for exploration rights over additional priority ground focussed on large scale bulk tonnage copper oxide targets.

# Livingstone Project – MBK 75%

The Livingstone gold project approximately 140km northwest of Meekatharra in Western Australia hosts a number of gold targets that have had limited drill testing or are untested including: Dampier and Drake, west along strike of Livingstone North; Hilltop and VHF, located in the eastern part of the project; and other unnamed greenfield gold-in-soil anomalies/targets (Figure 7). It is also noted that a significant amount of previous drilling failed to effectively test a number of gold geochemical anomalies, in part due to the shallow nature of the drilling and/or drill spacing not being able to effectively cover and sample the target areas.

During the quarter, several field programs including soil sampling, mapping, and rock chipping were completed across the Livingstone tenements to both test and develop advanced targets and conduct regional generative work to build potential drill targets. Full results from these programs are yet to be returned, and upon receipt will be analysed along with undertaking a project review to identify and prioritise drill and resource targets for the upcoming field season.





Figure 7: Livingstone Project – Resources and Targets

MBK's upcoming work program for the Livingstone Project is aimed to build existing Resources and identify new deposits including:

- Resource infill and extension drilling at the Kingsley deposit;
- Maiden Resource Estimation at the Livingstone North prospect; and
- Developing and test additional advanced and regional targets to identify a clear path to defining additional Resources within the tenement package.

The Company's forward drilling campaign is currently delayed pending Heritage clearance.

# Millennium Project – MBK 51% (earning up to 80%)

# Mineral Resource Estimate update

The Millennium Co-Cu-Au deposit (Millennium) approximately 35km WNW of Cloncurry in northwest Queensland currently has a JORC 2012 Mineral Resource Estimate (MRE) of 8.4Mt @ 0.09% Co, 0.29% Cu and 0.12g/t Au (1.23% CuEq<sup>11</sup>) (Figures 8-9). Plans for additional metallurgical and resource drilling plus test work leading to scoping and subsequent pre-feasibility studies are continuing, with the next phase of drilling to focus on the revised Exploration Target for Millennium of 12-14Mt @ 1.0-1.3% CuEq<sup>10</sup> (inclusive of current MRE). This is supported by an updated mineralisation model, high grade Co-Cu intersections at depth which remain open, and a number of infill and extensional gaps in the existing MRE. There is also

<sup>&</sup>lt;sup>11</sup> Refer to footnote 4 on page 2



additional scope for improving geology, metallurgy, geotechnical and economic parameters for inclusion in an updated MRE with associated confidence increase.

The potential quantity and grade of the Exploration Targets is conceptual in nature. There has been insufficient exploration to estimate an additional Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target takes no account of geological complexity that may be encountered, possible mining methods or metallurgical recovery factors. It is acknowledged that the currently available data is insufficient spatially in terms of the density of drill holes, and in quality, in terms of MBK's final audit procedures for down hole data, data acquisition and processing, for the results of this analysis to be classified as Mineral Resources in accordance with the JORC Code.

The Millennium Project is a key asset for MBK with the forward work program for the next 12-24 months including:

- Scoping and pre-feasibility studies to assess development potential and ESG aspects;
- Further metallurgical drilling to obtain sufficient bulk samples for advanced metallurgical work and flowsheet design in conjunction with geotechnical studies, geometallurgical domaining and infill work to increase confidence in the Mineral Resource;
- Infill and extension drilling to test the Exploration Target with scope to incorporate into the global Resource; and
- Collaboration with other critical minerals projects and research in the region to optimise project value.



Figure 8: Millennium Co-Cu-Au Project isoview showing 2023 MRE, resource drilling and optimised pit shell





Figure 9: N-S longsection view of the Millennium Co-Cu resource, optimised pit shell and resource drilling. Note Exploration Target figures are conceptual in nature and are poorly tested/untested to date.

# South East Queensland Gold Projects

There was no exploration carried out on the Company's South East Queensland Gold Projects during the Quarter.

# Corporate

The Company paid related parties, comprising executive director and company secretary fees, \$97,000 for the Quarter.

The Company spent \$522,000 on exploration activities in the Quarter, comprising geological, geophysical and assay costs.

The Company's Annual General Meeting for 2023 was held on 23 November 2023.



# Authorised by the Board

For further information contact: Inés Scotland, Executive Chair Email: <u>ines@metalbank.com.au</u> or Sue-Ann Higgins, Executive Director and Company Secretary Email:<u>sue-ann@metalbank.com.au</u>

# Competent Persons Statement

The information in this report that relates to Mineral Resource Estimations and Ore Reserves was prepared and reported in accordance with the ASX Announcements and News Releases referenced in this report.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant ASX announcements and News Releases. In the case of Mineral Resource estimates and Ore Reserve estimates, all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original ASX announcements or News Releases.

The information in this announcement, that relates to MBK Exploration Results, Mineral Resources and Exploration Target statements is based on information compiled or reviewed by Mr Rhys Davies. Mr Davies is a contractor to the Company and eligible to participate in the Company's equity incentive plan. Mr Davies is a Member of The Australasian Institute of Geoscientists has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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 Davies consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

It should be noted that the MBK Exploration Targets described in this report are conceptual in nature and there is insufficient information to establish whether further exploration will result in the determination of Mineral Resources.



# Metal Bank Limited Tenement Schedule

Roar Resources Pty Ltd (Wholly Owned Subsidiary) Eidsvold Project – 100% EPM18431 – Queensland EPM18753 – Queensland 8 Mile Project – 100% EPM26945 – Queensland Wild Irishman Project – 100% EPM27693 – Queensland

Westernx Pty Ltd (Wholly Owned Subsidiary)

Livingstone Project – Western Australia – 75%

E52/3667 E52/3403 E52/3903 E52/4213\* E52/4215\* E52/4216\*

# MBK Millennium Pty Ltd (Wholly Owned Subsidiary)

Millennium Project – Queensland – 51%, earning up to 80%

ML 2512 ML 2761 ML 2762 ML 7506 ML 7507

\*transfer of these tenements is in progress