

# Quarterly Activities Report for the Period Ended 31 December 2023

Eagle Mountain Mining Limited (ASX:EM2) (Eagle Mountain, or the Company) is pleased to provide shareholders and investors with an exploration and operations overview to accompany the Appendix 5B for the quarter ended 31 December 2023 ("Quarter"). Activities during the Quarter focused on advancing the Oracle Ridge Copper Project ("Oracle Ridge", "Project") towards a restart of mining.

## **Highlights**

- New Mineral Resource Estimate (MRE) for Oracle Ridge was completed with an increase to 28.2Mt at 1.35% copper, 11.06g/t silver and 0.16g/t gold using a 0.8% copper cut-off grade for 380,000 tonnes of contained copper. Key outcomes:
  - 27% increase in contained copper at a 1% cut-off compared to the previous MRE with a 20% increase in tonnes and 6% increase in copper grade
  - Measured and Indicated resources accounted for over half of the new MRE
- As part of technical studies, a simplified process flowsheet was identified where LME grade copper is produced on site offering the potential for lower capital and operating costs.
   Supporting test work commenced during the Quarter including:
  - Mine planning New MRE supports larger stopes with multiple mining fronts envisaged which will increase productivity. The elevated position of the mineralisation is considered conducive for a battery haulage fleet.
  - o **Ore sorting up to 30% increase** in copper head grade possible by removal of lower grade ore or waste material.
  - o **Crushing** Initial comminution testwork suggested that **high pressure grinding rolls** are amendable to Oracle Ridge rock, which has the benefit of **reduced power requirements** compared to traditional crushing equipment and a reduced operating footprint.
  - Flotation Excellent average rougher flotation recoveries were received of 93% Cu at 100µm grind size with a mass rejection of 92%.
  - Sulphide Leaching Preliminary glycine leaching of run-of-mine mineralisation resulted in bottle-roll copper recoveries up to 91%.
  - Locked Cycle testwork which is indicative of standard flotation circuits resulted in a copper concentrate grade of 25% Cu with 90% copper recoveries on average.
- Subsequent to the end of the Quarter
  - Scoping Study commenced incorporating the new MRE along with positive results from simplified process flowsheet.
  - Renounceable entitlement offer of 1 new share for every 4 shares held at 6 cents per share, plus a free attaching 3 year option per new share.

**AUS REGISTERED OFFICE** 

Ground Floor, 22 Stirling Highway Nedlands WA 6009 ACN: 621 541 204



E: info@eaglemountain.com.au





#### Commenting on the activities during the Quarter, Eagle Mountain Mining's CEO, Tim Mason, said:

"The Company made great progress during the December Quarter, with both a significant increase in Mineral Resources and a simplified processing pathway for the Project identified.

The new MRE reflects a 27% increase in contained copper on a like-for-like basis from the previous resource. This new resource estimate contains 380,000 tonnes of contained copper and will underpin mining studies for longer mine life and increased annual throughput compared to previous operations.

We also identified a far simpler processing method for mineralisation at Oracle Ridge with a raft of cost and environmental benefits. Excellent copper recovery from rougher flotation alone paves the way for direct tank-leaching of the concentrate which in turn feeds to an SX/EW plant on site that produces LME grade copper sheet. There is no need for filtering and shipping of concentrate to smelters and refiners. Additional feedstock to the SX/EW could come from a low grade heap leach process which is currently in the testing phase. If viable, this has potential to negate the need for a tailings storage facility, eliminating those capital and operating costs for the Project. Glycine leaching is currently being tested on a run of mine ore and low grade material. Results received to date are very encouraging and the next stage involves testing the rougher concentrate and the existing tailings.

I am very excited by developments during the Quarter which support our goal to become a mid-tier copper producer in the USA and would like to thank shareholders for their support to date."

#### **EXPLORATION ACTIVITIES**

# Oracle Ridge Copper Mine Project

Eagle Mountain aims to become a low emission producer of copper at the Oracle Ridge Copper Project in Arizona, USA. The Project has significant infrastructure already in place, including approximately 18 kilometres of underground development, access roads, tailings facility (since closed), underground electrical, ventilation and water services.

The following key activities were undertaken at Oracle Ridge during the Quarter:

- Resource modelling and progressing the new MRE work;
- Update Mineral Resource Estimate completed; and
- Various technical evaluations.

#### **Updated Mineral Resource Estimate**

During the Quarter, the company completed a new Mineral Resource Estimate (MRE) using a revised geological model incorporating new drilling and underground channel data. A total of 50 new diamond drill holes for 11,792 metres were included in the new MRE since the previous update in October 2022<sup>1</sup>. This represents an increase of 8% in the total number of holes drilled at Oracle Ridge by the Company and previous owners. A total of 55 underground channels across 958 metres were also included in the new MRE (refer ASX Announcement - 21 November 2023).

Key differences between the previous and new Mineral Resource included:

 Significant improvements in geological modelling and domaining methodologies. The extensive knowledge gained from detailed underground geological mapping, sampling and high density

<sup>&</sup>lt;sup>1</sup> ASX Announcement – Oracle Ridge Resource Estimate Update – 6 October 2022



underground drilling has provided invaluable insights into the style of mineralisation and its local scale geometry. Higher resolution geological modelling and domaining of these mineralised zones was supported and made possible by this information. This greatly assisted with grade estimation control and resulted in improved reconciliation between mapped and sampled mineralisation to resource block grades.

- Increased Measured and Indicated contained copper. This positive change was a result of surface and underground upgrade drilling which increased the footprint of higher confidence Resource Categories. An increase in metal also resulted from strong underground channel sampling grades.
- Increase in Inferred tonnes and grade. Almost two thirds of all new drilling comprised expansion of the Inferred resource and infill drilling within the Inferred footprint. Positive average grades and widths compared to surrounding drilling resulted in tonnage and grade increases.
- Cut-off grade set at 0.8% Cu. Internal mining and metallurgical studies that the Company is currently progressing justified lowering the Mineral Resource reporting cut-off grade from 1.0% Cu to 0.8% Cu, while carrying over the same reporting cut-off grade assumptions applied to the October 2022 MRE.

Table 1 – New Oracle Ridge Mineral Resource Estimate at a 0.8% copper cut-off

Resource Category	Tonnes [Mt]	Cu [%]	Ag [g/t]	Au [g/t]	Contained Cu	Contained Ag	Contained Au
Measured	3.1	1.40	13.93	0.18	43,000 t or 94,800,000 lb	1.4 MOz	18 kOz
Indicated	12.2	1.36	11.96	0.18	166,000 t or 366,000,000 lb	4.7 MOz	71 kOz
Subtotal M+I	15.3	1.37	12.35	0.18	209,000 t or 460,800,000 lb	6.1 MOz	89 kOz
Inferred	13.0	1.32	9.53	0.13	171,000 t or 377,000,000 lb	4.0 MOz	53 kOz
Total M+I+I	28.2	1.35	11.06	0.16	380,000 t or 837,800,000 lb	10.0 MOz	142 kOz

Differences may occur in totals due to rounding



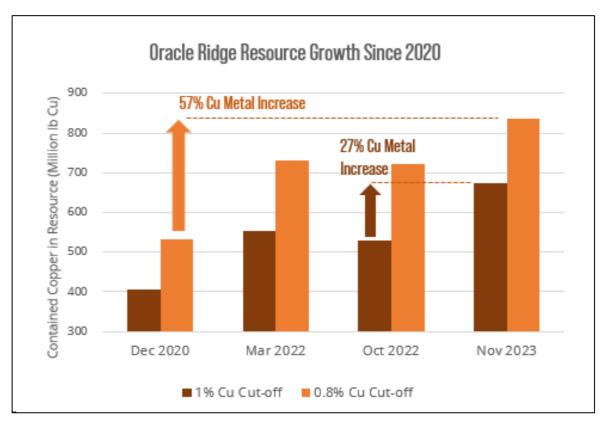


Figure 1 - Summary of Oracle Ridge resource growth.

Significantly greater tonnages occur at lower copper cut-off grades, providing optionality for future mining and processing studies (refer to Table 2 below).

Table 2 – 2023 resource model tonnage and grade quantities at various cut-off grades

Cut-Off [Cu %]	Tonnes [Mt]	Cu [%]	Ag [g/t]	Au [g/t]	Contained Cu	Contained Ag	Contained Au
0.2	91.0	0.71	6.13	0.09	648,000 t or 1,428,600,000 lb	17.9 MOz	257 kOz
0.4	58.7	0.95	8.02	0.11	555,000 t or 1,223,600,000 lb	15.1 MOz	216 kOz
0.6	40.4	1.15	9.59	0.14	465,000 t or 1,025,100,000 lb	12.5 MOz	178 kOz
0.8	28.2	1.35	11.06	0.16	380,000 t or 837,800,000 lb	10.0 MOz	142 kOz
1.0	19.8	1.54	12.43	0.17	305,000 t or 672,400,000 lb	7.9 MOz	111 kOz
1.2	13.8	1.74	13.84	0.19	239,000 t or 526,900,000 lb	6.1 MOz	84 kOz



**Extensive Mineralisation System** 

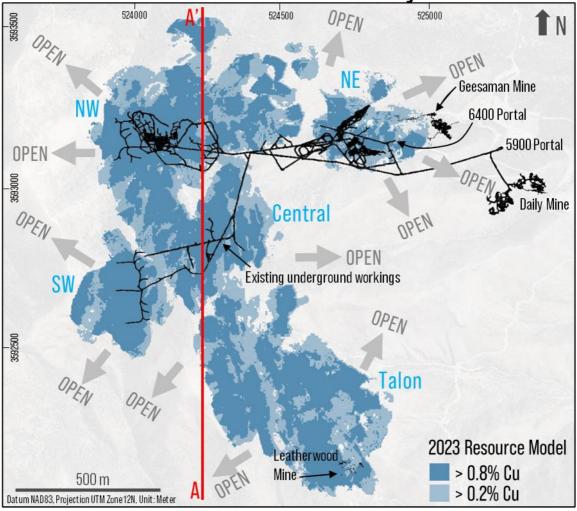


Figure 2 – Plan view of the new resource model at a 0.2% and 0.8% Cu cut-off grade, location of existing underground workings and main deposit areas.

# **Resource Expansion Potential**

Improved understanding of the geology and styles of mineralisation from new information used in the resource model highlighted multiple prospective areas surrounding Oracle Ridge for continued resource expansion.

Figure 4 below shows the prospective target areas.

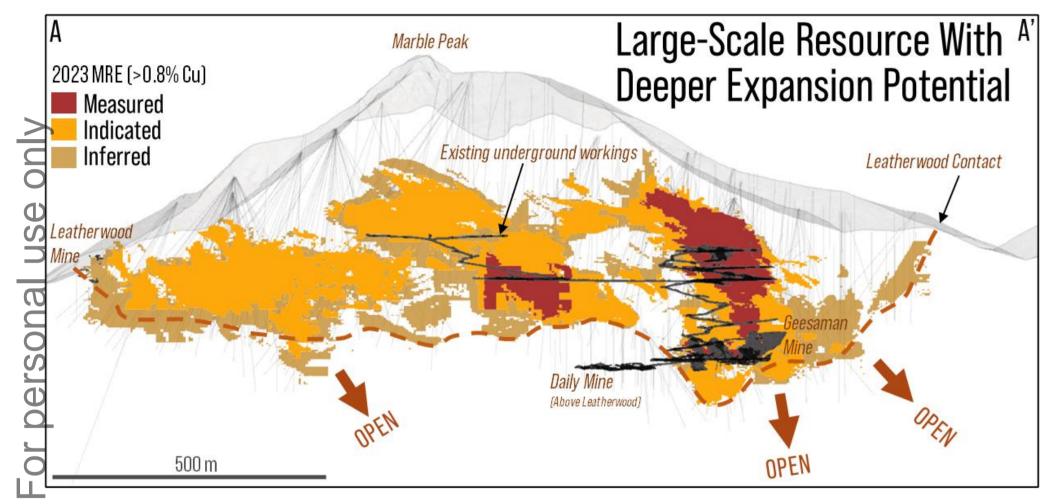


Figure 3 – Long section view of updated MRE looking west showing distribution of Resource Categories, location of existing underground workings and main deposit areas. Note only the topographic surface and Leatherwood contact have a view window applied (of 100m).



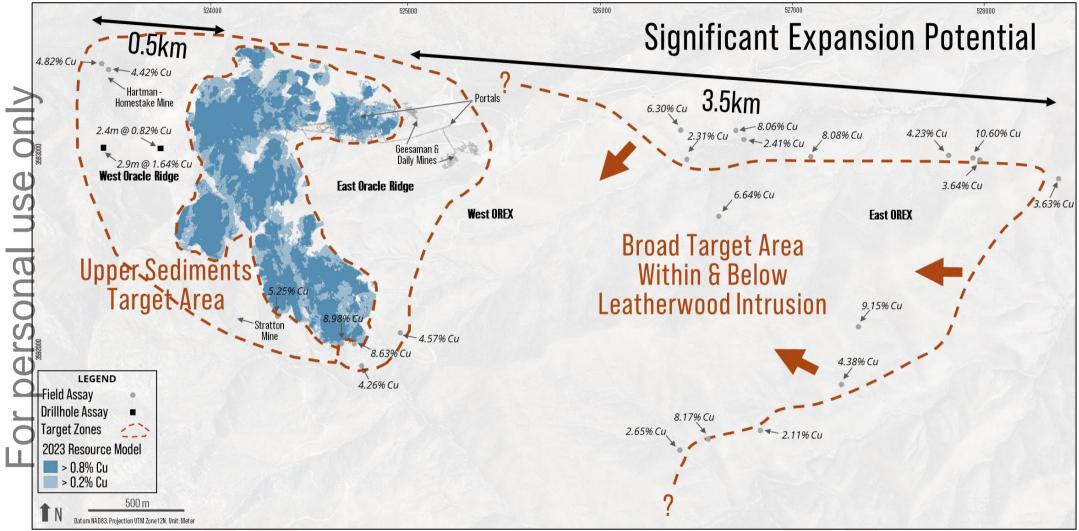


Figure 4 – Plan view showing the Oracle Ridge resource model and prospective target areas (refer ASX announcements dated 25 May 2020, 10 June 2020, 16 April 2021 and 14 November 2022).

## **Technical Evaluation Progress**

During the Quarter, a range of metallurgy and communication results were received which supported a simplified flow sheet to produce copper on site via leaching, solvent extraction and electrowinning.

During previous mining at Oracle Ridge in the 1990's a bulk copper, silver and gold concentrate was produced on site using a standard flotation circuit and sold to a nearby smelter. Recovery was not optimum as there was reportedly up to 50% scat recirculating load which impacted processing. This suggests that with improved plant infrastructure (such as appropriate crushers including a pebble crusher), strong metallurgical recoveries can be achieved while also producing high grade concentrates.

#### Mining

The work conducted on the new MRE identified that the mineralisation is significantly more continuous using lower cut-off grades supporting potential for larger stopes. It is anticipated that the most suitable mining method will be long hole open stoping with multiple mining fronts allowing higher production rates. Backfill will be incorporated which may include paste fill, waste rock or reclaimed heap leach material. As large portions of the mineralisation are above the current portal, this is well suited to the use of battery powered mobile fleet with the benefit of reduced emissions and reduction of ventilation costs within the mine.

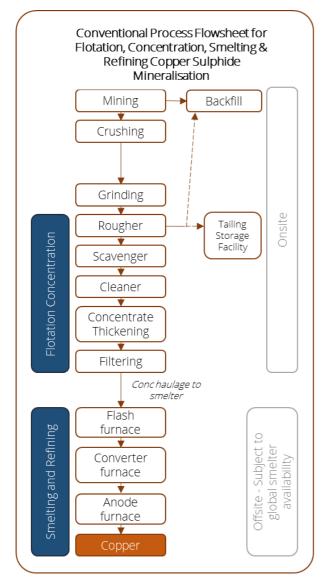
#### Simplified Processing Flowsheet

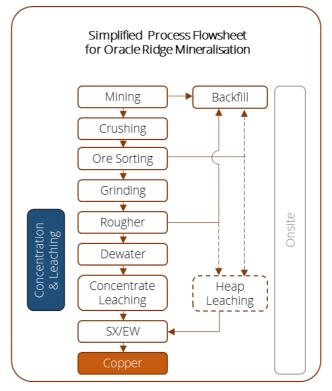
While the production of a bulk concentrate, as previously produced in the 1990's, remains an option for the Project via a conventional processing route, a simplified process has been identified that avoids smelting and refining beyond the mine gate. A comparison of a conventional bulk flotation process with the simplified process is shown in Figure 5. The benefits relative to the production of a bulk concentrate include:

- Potentially lower capital and operating costs;
- Avoids downstream transport and processing (smelting and refining) costs;
- Reduced environmental impact from avoiding smelting processes;
- Security of supply of copper, a critical material, for US domestic consumption;
- Supports local jobs and broader social benefits; and
- Increased credentials for securing various US Government funding tied to critical materials production.

Further details of the flotation, ore sorting and leaching optionality within this flowsheet are outlined later in this announcement and in sequence of the flowsheet.







Note – Both processes shown are both conceptual and simplified and will vary based on detailed design work. Dashed lines represent optionality

Figure 5 – Conceptual processing flowsheet for the production of LME grade copper at Oracle Ridge. Note, this is a conceptual flow sheet only which has not been economically or technically evaluated as part of any formal study.

#### Ore Sorting Testwork

The Company believes the mineralisation could be amenable to ore sorting. Two run-of-mine samples, consisting of 600 kg each, were provided for the testwork, which was conducted on a Steinert multisensor sorter in Kentucky, USA (Figure 6).

Sample 1 consisted of a coarse size fraction (-4+2") and Sample 2 consisted of a fines fraction (-2+1/2"). The objective of the testwork was to remove waste rock while upgrading the copper content. The evaluation of different sensors showed that the X-Ray transmission and induction sensor combination showed the best potential.

There are two potential scenarios in which ore sorting could be applied. Firstly, focus on high copper recoveries by rejection of non-copper bearing rock with rejects used for underground backfill (Scenario 1, refer below). Alternatively, a focus on increasing copper head grade for processing in a flotation or tank leaching circuit with rejects directed towards a heap leach (Scenario 2, refer below). Outcomes of the two scenarios were undertaken on both coarse and fine composites with results outlined below.



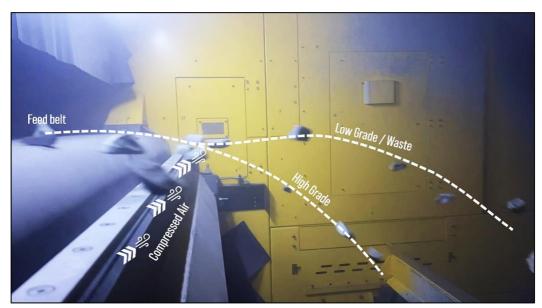


Figure 6 – Ore Sorting in progress of Oracle Ridge Mineralisation, with process shown how compressed air sorts rock samples off a conveyor belt.

#### Rougher Flotation Concentrate Testwork

Flotation testwork focused on determining the optimum flowsheet in terms of grind, pH and reagents for the two Master Composites. Once an agreed optimised grind size and reagent scheme were selected, testing continued with cleaner development followed by locked cycle tests. The established rougher/cleaner flowsheet was applied to each variability sample as a benchmark.

Rougher testwork indicated that high metal recoveries of 93% on average could be achieved, while rejecting an average of 92% of the mass. This result is encouraging as it may support reduction of capital cost by avoiding the need for cleaning and regrind circuits, concentrate thickeners and filtering, when combined with the leaching of concentrates straight from the rougher flotation. Table 3 below shows the results of baseline rougher testwork with natural pH and moderate grind conditions of  $P_{80}$  100µm.

Given that Eagle Mountain is considering SX/EW as the last component of the copper recovery process rather than exporting a copper concentrate to a smelter, maximising copper recovery in the rougher is the focus for future work.

Table 3 - Rougher recoveries at 100µm grind and no adjustment of pH

	Sample Head Grade		Mass Recovery to Rougher Concentrate	Recovery			Metal Grade			
	Cu %	Ag g/t	Au g/t	%	Cu %	Ag %	Au %	Cu %	Ag g/t	Au g/t
Master	1.78	14.6	0.27	11.0%	92.0	86.7	88.4	15.5	122	2.21
Composite 1										
Master	1.49	14.4	0.26	5.8 <mark>%</mark>	94.8	92.1	78.0	24.2	227	3.44
Composite 2										
Average	1.64	14.5	0.27	8.4%	93.4	89.4	83.2	19.85	174.5	2.83



## Glycine Leaching

To support the aim of producing copper on site, the Company has identified a sulphide leaching process that utilises glycine to leach copper, silver and gold from both ore and concentrates. The processes have been shown to be more applicable to leaching copper within bornite and chalcocite, compared to chalcopyrite. The process has the following significant potential benefits:

- Cost savings lower processing costs, no downstream smelting and haulage costs
- **USA copper production** the dissolved copper will be recovered through an SX/EW plant producing LME grade copper cathode supporting domestic decarbonisation goals
- Environmental the process uses glycine which is used in the food and pharmaceutical industries
- Recyclable the glycine is recovered and stays in circuit prior to the SX/EW process

All glycine testwork was performed by the Draslovka Mining Innovation Centre in Perth. Two samples were delivered to Draslovka that were derived from the ore sorting tests, being one higher grade and one lower grade sample, which were crushed and ground by Draslovka prior to leach tests.

The higher grade sampled assayed 1.75% Cu, 21.97 g/t Ag and 0.35 g/t Au. The lower grade sample assayed 0.61% Cu, 4.23 g/t Ag and 0.27 g/t Au.

Twenty-four diagnostic leach tests were completed for both the high and low grade samples to determine the criteria for subsequent bottle roll tests. For each of the high grade and low grade samples, three glycine tests were run, plus one high acid reactor leach test as a base case. The bottle roll tests included two glycine with NaOH at different concentrations, plus a glycine with NH<sub>3</sub> (28% solution) test. The tests were run over seven days at a pH of approximately 10.

GlyAmm<sup>™</sup> (glycine-ammonia) gave the highest bottle roll recoveries (Figure 7), as follows:

High grade: 91.4% Cu (Ag and Au results pending)

Low grade: 46.7% Cu (Ag and Au results pending)

Draslovka is in the process of running GlyCat<sup>TM</sup> (glycine-cyanide) on the residue which targets recovery of silver and gold. Given the bottle roll results on the low grade, they are in the process of conducting various mini-column tests on the low grade. Results planned to be received in the first quarter of 2024.

Eagle Mountain is encouraged by the results from the higher grade sample and will commence glycine leach tests on rougher concentrate as soon as enough concentrate has been produced at BaseMet's Tucson facility.



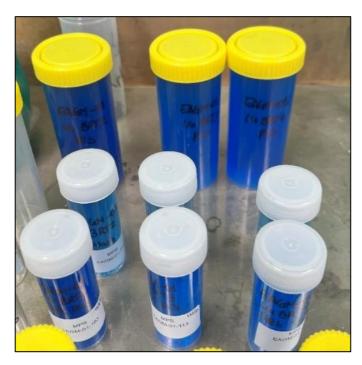


Figure 7 – Copper rich solution (copper clycinate) following bottle roll leach testwork

## **Scoping Study**

Subsequent to the end of the Quarter, the Company commenced a Scoping Study on the development of Oracle Ridge. The Study will incorporate the new MRE outlined during the Quarter and also plans to adopt the simplified processing pathway identified to produce copper in the USA. The Study is planned to be completed in Q3 2024.

#### **Permits**

The Company is currently seeking permits from the United States Forest Service required for drilling on parts of the OREX prospect. The work to obtain these permits progressed during the Quarter.

#### **CORPORATE**

#### Cash

The Company held cash on hand at 31 December 2023 of A\$0.5 million, held in both Australian and US denominations. Expenditure was actively and materially reduced during the Quarter following the transition to technical evaluations.

#### Capital Raised

Subsequent to the end of the Quarter, Eagle Mountain announced a partially underwritten 1 for 4 prorata renounceable entitlement issue of ordinary shares to existing shareholders, at the record date, at an issue price of 6 cents per share to raise up to A\$4.5 million (refer ASX announcement 29 January 2024). In addition, for each new share issued under the entitlement offer, the applicant will also receive one free attaching option exercisable at 20 cents and expiring 31 March 2027. The offer is partially underwritten to the value of A\$1.25 million by an entity associated with Managing Director, Charles Bass. Other Directors and the CEO intend to subscribe for their full entitlement.



Further details of the entitlement issue are contained in the Company's ASX announcement dated 29 January 2024.

In accordance with the reporting requirements of ASX Listing Rule 5.3, the Company incurred \$712,000 on exploration and evaluation activities during the Quarter. Expenditure predominantly related to:

- General fieldwork at Oracle Ridge and Silver Mountain projects;
- Completion of the New Mineral Resource Estimate; and
- Technical studies on Oracle Ridge, including various metallugical testwork.

There were no mining development or production activities conducted during the Quarter.

During the Quarter, the Company made payments to related parties of \$24,874 in rent paid to an entity associated with Mr Charles Bass.

#### This ASX announcement was authorised for release by the Board of Eagle Mountain Mining Limited.

For further information please contact:

Tim Mason
Chief Executive Officer
tim@eaglemountain.com.au

Mark Pitts
Company Secretary
mark@eaglemountain.com.au

Jane Morgan Investor and Media Relations jm@janemorganmanagement.com.au

#### COMPETENT PERSON STATEMENT

The information in this report that relates to the Processing and Metallurgy for the Oracle Ridge Project is based on and fairly represents information and supporting documentation compiled by Mr Charles Bass who is a Fellow of The Australasian Institute of Mining and Metallurgy and the Managing Director of Eagle Mountain Mining Limited. Charles Bass has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity 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'. Charles Bass consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this document that relates to Exploration Activities is based on information compiled by Mr Brian Paull, who is a member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience relevant 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 (JORC Code 2012). Mr Paull is the Director of Exploration at Eagle Mountain Mining Limited's wholly-owned subsidiary, Silver Mountain Mining Inc, and consents to the inclusion in this document of the information in the form and context in which it appears. Mr Paull holds shares and options in Eagle Mountain Mining Limited.

Where the Company references the Mineral Resource Estimate updated and released on 21 November 2023, it confirms that it is not aware of any new information or data that materially affects the information included in that announcement, and all material assumptions and technical parameters underpinning the Mineral Resource Estimate continue to apply and have not materially changed. In addition, the form and context in which the Competent Persons findings are presented have not been materially modified from the original reports.

#### ABOUT EAGLE MOUNTAIN MINING

Eagle Mountain is a copper-gold explorer focused on the strategic exploration and development of the Oracle Ridge Copper Mine and the highly prospective greenfields Silver Mountain Project, both located in Arizona, USA. Arizona is at the heart of America's mining industry and home to some of the world's largest copper discoveries such as Bagdad, Miami and Resolution, one of the largest undeveloped copper deposits in the world.

Follow the Company's developments through our website and social media channels:







<u>edln</u> <u>Twitter</u>

**EM2 Website** 

#### Attachment 1

#### Summary table of metallurgical testwork sample information

Testwork ID	Source Material	Easting	Northing	Elevation	Dip	Azimuth	Depth
		[m]	[m]	[m]	[0]	[0]	[m]
Var-1	WT-21-63	523959	3593091	2093	-52	31	344
Var-2	WT-21-63	523959	3593091	2093	-52	31	344
Var-3	WT-21-58	524024	3593225	2098	-61	259	208
Var-4	WT-21-58	524024	3593225	2098	-61	259	208
Var-5	WTU-23-05	524147	3593187	1920	-47	120	47
Var-6	WT-20-16	524437	3593062	2102	-55	248	339
Var-7	WT-20-16	524437	3593062	2102	-55	248	339
Var-8	UG Bulk Sample 1	524237	3592752	1922	0	45	51
Var-9	WT-22-160	524604	3592183	2059	-68	185	935
Master Comp 1	Var-1 to 5	Various	Various	Various	Various	Various	Various
Master Comp 2	Var-6 to 8	Various	Various	Various	Various	Various	Various

#### Summary table of intervals used for metallurgical testwork and previous assay results

Note - All reported intervals are downhole widths (horizontal channel width for Var-8).

Testwork ID	Source Material	From	То	Width	cu	Ag	Au
		[m]	[m]	[m]	[%]	[g/t]	[g/t]
Var-1	WT-21-63	69.0	95.6	26.6	2.39	21.58	0.44
Var-1	WT-21-63	112.5	129.0	16.5	2.89	29.15	0.35
Var-2	WT-21-63	199.6	226.9	27.3	1.52	20.43	0.19
Var-2	WT-21-63	237.7	261.5	23.8	2.18	19.09	0.23
Var-3	WT-21-58	109.0	140.0	31.0	1.19	11.73	0.14
Var-4	WT-21-58	140.0	159.4	19.4	1.45	20.84	0.23
Var-5	WTU-23-05	0.0	23.6	23.6	0.71	7.38	0.12
Var-6	WT-20-16	205.9	219.9	14.0	1.29	16.19	0.20
Var-7	WT-20-16	275.3	297.7	22.4	1.19	15.03	0.18
Var-8	UG Bulk Sample 1	0.0	51.0	51.0	N/A	N/A	N/A
Var-9	WT-22-160	160.8	227.1	66.3	1.60	11.97	0.46

# Attachment 2

#### Schedule of interests in mining tenements

a) Interests in mining tenements as at 31 December 2023

Eagle Mountain mineral licences are all located in the State of Arizona, United States of America (ASX Listing Rule 5.3.3)

## SILVER MOUNTAIN PROJECT

Prospect & Tenure type	Claim Reference (Tenement)	Percentage held
Pacific Horizon		
Patented Claims (26 individual claims)	Empire, Copper Ash, Palestine, Buffalo, Little Pittsburg, Austin, Wellington, Eagle, Number Ten, Number Eleven, Number Twelve, Number Thirteen, Noonday, South Noonday, Dudley, Comet, Alameda, Virginia, Mars, Ashland, Oakland, Sunnyside, Cuprite, Azurite, Yavapai and Jumbo	100%
Unpatented Claims (117 individual claims)	SMM#5-14, SMM#19-37, SMM#40-60, SMM#67-85, SMM#96-117, SMM#119, SMM#124-141, SMM#143 SMM#147, SMM#149, SMM#151, SMM#155, SMM#157, SMM#159	100%
Exploration Permit (1 individual permit)	008-012-0870	100%
Scarlett		
Unpatented Claims (76 individual claims)	SCA#1-15, SCA#57-80, SCA#83-87, SCA#90-94, SCA#97- 101, SCA#104-108, SCA#111-115, SCA#118-121, SCA#124-127, SCA#130-133	100%
Red Mule		
Unpatented Claims (93 individual claims)	SMM#146, SMM#148, SMM#150, SMM#152-154, SMM#158, SMM#160, SMM#162-207, SMM#210-212, SCA#16-51	100%
Exploration Permit (1 individual permit)	008-120872	100%
Rhyolite Target		
Unpatented Claims (65 individual claims)	SMMSO#001-015, SMMSO#023-048, SMMSO#054-056, SMMSO#058, SMMSO#060-061, SMMSO#063-068, SMMSO#071-079, SMMSO#081-082, SMMSO#084	100%
Exploration Permit (1 individual permit)	008-120101	100%



Prospect & Tenure type	Claim Reference (Tenement)	Percentage held
Oracle Ridge  Patented Claims  61 individual claims)	Parcel 1 (Roosevelt, Way-up, Homestake, Lone Pine, Imperial and Hidden Treasure) Parcel 2 (Eagle, York, Copper Peak and Golden Peak No 2) Parcel 3 (Grand Central Lode) Parcel 4 (Tunnel Site, Major McKinley, Marble Peak, Wedge, Giant, Copper Head, Centennial, General R E Lee and Blizzard) Parcel 5 (Oversight MS3461) Parcel 6 (Daily No3, Daily No5, Sphinx, Roskruge, Calumet, Edith, Daily Extension, Cave, Wedge No3, Wedge No2 and Katherine) Parcel 7 (Copper Princess, Apache Central and Daily Tunnel Site) Parcel 8 (Oversight MS3504) Parcel 9 (Apex, Alabama, Bornite, Contact, Cuprite, Epidote, Embersite, Garnet, Over the Top, Yellow Copper, Valley, Apex No2, Keeney and Wilson) Parcel 10 (Chalcopyrite and Peacock) Parcel 11 (Daily Extension No2, Daily Extension No3, Daily Extension No4) Parcel 12 (H T Fraction) Parcel 13 (Turkey) Parcel 24 (20506009B) Parcel 25 (20506014B) Parcel 27 (Holly Terror) Parcel 28 (Precious Metals)	100%
Unpatented Claims (50 individual claims)	Jody #1-20, Lorelei #1-7, Olesya #1-23	100%
Red Hawk Unpatented Claims (24 individual claims)	WTO 1-24 Lode Claims	100%
OREX Unpatented Claims (93 individual claims)	WTO 25-105, 115-124, 143-144 Lode Claims	100%
Golden Eagle Unpatented Claims (27 individual claims)	WTO 106-114, 125-142 Lode Claims	100%

b) Tenements acquired and disposed of during the Quarter

## No change

c) The beneficial percentage interests held in farm-in or farm-out agreements at the end of the Quarter

#### None

d) The beneficial percentage interests in farm-in or farm-out agreements acquired or disposed of during the Quarter

None

# **Appendix 5B**

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

#### Name of entity

Eagle Mountain Mining Limited	
ABN	Quarter ended ("current quarter")
34 621 541 204	31 DECEMBER 2023

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(712)	(1,741)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(164)	(331)
	(e) administration and corporate costs	(164)	(435)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	2	3
1.5	Interest and other costs of finance paid	(6)	(15)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other	-	-
1.9	Net cash from / (used in) operating activities	(1,044)	(2,519)

2.	Ca	sh flows from investing activities		
2.1	Pay	yments to acquire or for:		
	(a)	entities	-	
	(b)	tenements	-	
	(c)	property, plant and equipment	(1)	(143
	(d)	exploration & evaluation	-	
	(e)	investments	-	
	(f)	other non-current assets	-	

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	91
	(d) investments	-	-
	(e) other non-current assets		
	- Environmental Bonds/deposits	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(1)	(52)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	1,000
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (repayment of lease liabilities)	(71)	(141)
3.10	Net cash from / (used in) financing activities	(71)	859

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,663	2,237
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,044)	(2,519)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1)	(52)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(71)	859

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Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held *	(22)	-
4.6	Cash and cash equivalents at end of period	525	525

<sup>\*</sup> The Company's operations are in Arizona and it has expenditure and holds funds in USD.

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	525	1,663
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	525	1,663

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	17
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.		

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	3,000	3,000
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	3,000	3,000
7.5	Unused financing facilities available at qu	arter end	-

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

In May 2023, the Company entered into an unsecured loan facility with Metech Super Pty Ltd as trustee for the Metech No2 Super Fund (Metech), an entity associated with Director, Mr Charles Bass. The loan attracts interest at 10% per annum and matures on 31 December 2024. Metech may elect to convert all or part of the principal and interest into ordinary shares in the Company (subject to shareholder approval and compliance with the Corporations Act) at the greater of:

- i) a 15% discount to the 15 day VWAP for the Company's shares immediately prior to the election to convert, and
- ii) a floor price of \$0.14 per share.

If any portion of the loan has not been repaid or converted prior to the day which is 90 days prior to maturity, the Company may at its sole discretion either:

- repay the balance of the loan and interest in cash: or
- ii) require conversion at a 12% discount to the 15 day VWAP for the Company's shares immediately prior to the election to convert, subject to shareholder approval and compliance with the Corporations Act.

The Company initially drew down \$2 million in May 2023, with the remaining \$1 million being drawn down in September 2023.

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,044)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,044)
8.4	Cash and cash equivalents at quarter end (item 4.6)	525
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	525
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	0.5
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A".  Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.	

- 8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:
  - 8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?
  - Answer: Subsequent to the end of the quarter, the Company has taken steps to raise sufficient funding to enable it to evaluate the results achieved to date and undertake a series of development focused studies. Furthermore, future exploration and studies activity is largely discretionary and will be dependent on available cash.
  - 8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?
  - Answer: The Company has agreed to an unsecured loan in the amount of \$1.25 million from an entity associated with Managing Director Charles Bass and in addition has launched a Renounceable Entitlement Offer to raise up to \$4.5 million. Refer to ASX announcement dated 29 January 2024 for details of the Offer.
  - 8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: The Company expects that it will be able to continue its operations and to meet its business objectives. Refer to 8.8.2

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2024

Authorised by: .By Order of the Board

(Name of body or officer authorising release – see note 4)

#### Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.