



EAGLE MOUNTAIN MINING

ASX ANNOUNCEMENT

21 NOVEMBER 2023

## Resource Increased to 28Mt at 1.35% Cu for 380kt Contained Copper

### Highlights

- Mineral Resource Estimate (MRE) for Oracle Ridge increases substantially 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
- Measured and Indicated Resources account for over half of the new MRE and better grades exist in higher confidence categories of the new MRE
- Expanded Mineral Resource will underpin technical studies including metallurgical, processing and mining evaluations
- The new MRE benefits from extensive new geological information gained from accessing underground workings. New information includes:
  - 50 additional drillholes from surface and underground
  - Almost 1 kilometre of high detail underground channel sampling providing 3D information on mineralisation and its localised controls
  - Updated geological modelling resulting from the underground mapping and sampling program
- 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
- More than 600,000 tonnes of contained copper at lower cut-off grades, which will be assessed as part of ongoing mining and processing technical evaluations
- Considerable growth potential remains with the following targets not included in the new MRE:
  - Up to 10% Cu from outcropping surface samples along 3.5 kilometres of prospective targets directly east of the new MRE
  - Up to 4% Cu from samples in prospective sediments 500 metres to the west, including the historical Hartman-Homestake mine
  - Potential mineralisation below the Leatherwood intrusion

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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

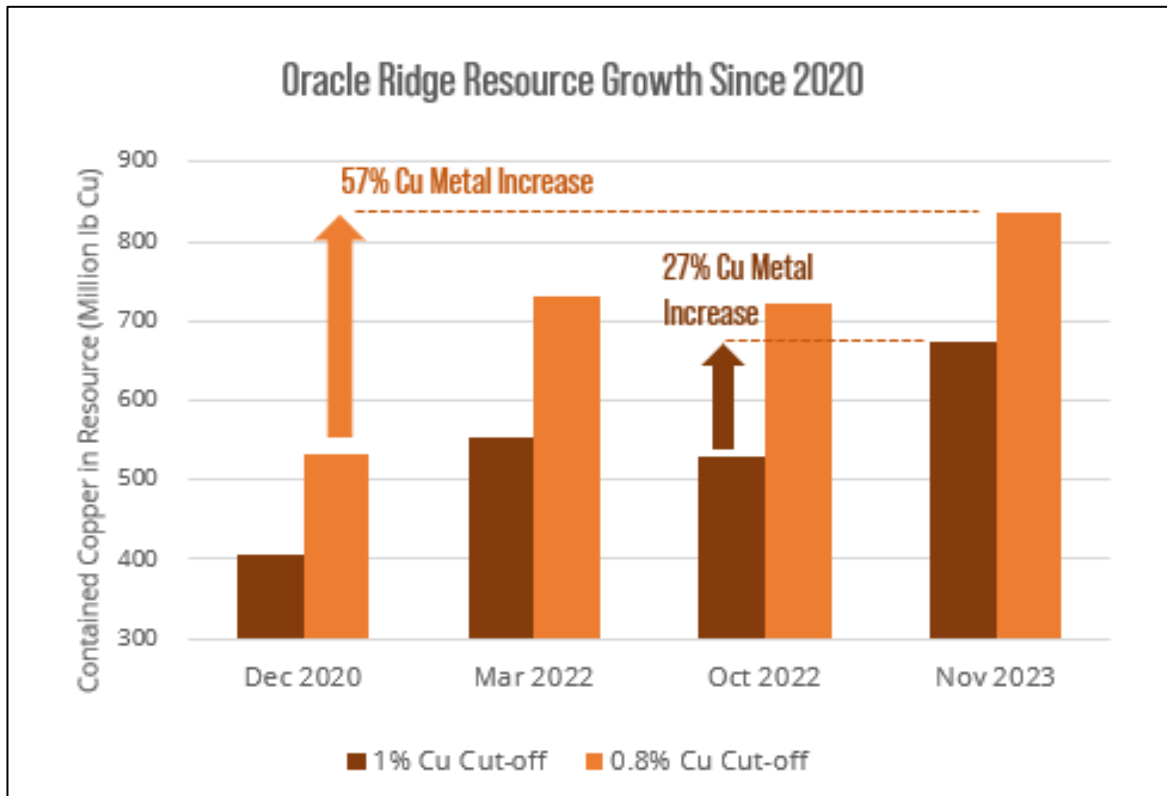


Figure 1 - Summary of Oracle Ridge resource growth.

Commenting on the new Mineral Resource Estimate, Eagle Mountain Mining's CEO, Tim Mason, said:

*"The new Mineral Resource Estimate reflects a 27% increase in contained copper on a like-for-like basis from the previous resource and is on track to surpass more than 400 thousand tonnes of contained copper. This update is a key milestone on our path to become a significant producer of copper, with a strong focus on low emission production.*

*Our recent refurbishment of the underground mine was instrumental to this latest update, as it provided us with previously unrecognised insight into the geology and mineralisation and has confirmed the mining and*



*processing optionality of the Project. In particular, we see a greater opportunity for a much larger mining operation at Oracle Ridge than previously contemplated, leveraging off recent advancements in processing and mining technologies to reduce both costs and our impact on the environment. Our activities are currently focusing on processing pathways for a lower grade, larger tonnage operation.*

*The resource remains open in multiple areas, and we are confident that further resources will be defined. We are currently assessing and prioritising resource extension targets, along with upgrades of existing Inferred resources to further de-risk production in the first five years of mine life.*

*Taking all this into consideration, I am optimistic that we have the foundations to become a mid-tier copper producer at Oracle Ridge.”*

## Overview

Eagle Mountain Mining Limited (ASX:EM2) (**Eagle Mountain**, or the **Company**) is pleased to provide an update on its 100% owned Oracle Ridge Copper Project (**Oracle Ridge**, or the **Project**) in Arizona, USA.

An updated geological model has been completed incorporating drilling and channel sampling data acquired since the October 2022 resource update. This revised geological model better reflects the style of mineralisation observed from the new data and in particular from the underground mapping.

The Company has completed a new Mineral Resource Estimate (**MRE**) using the revised geological model. The new MRE has been reviewed by SRK Consulting Pty Ltd (**SRK**).

Key differences between the previous and new Mineral Resource include:

- **Significant improvements in geological modelling and domaining methodologies.** The extensive knowledge gained from detailed underground geological mapping, sampling and high density 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 justifies lowering the Mineral Resource reporting cut-off from 1.0% Cu to 0.8% Cu, while carrying over the same reporting cut-off grade assumptions applied to the October 2022 MRE.



## Mineral Resource Estimate

The new MRE is reported in accordance with the JORC Code 2012 and was calculated using ordinary kriging (OK) constrained to unique geological units. Where applicable, categorical indicator kriging (CIK) was used to interpret higher resolution estimation sub-units, resulting in closer alignment to localised mineralisation observations and input sample data. A summary of the new MRE is presented above in Table 1 and displayed below in Figures 2 and 3. Comparison tonnes and grade are presented above in Figure 1 and below in Tables 2 and 3.

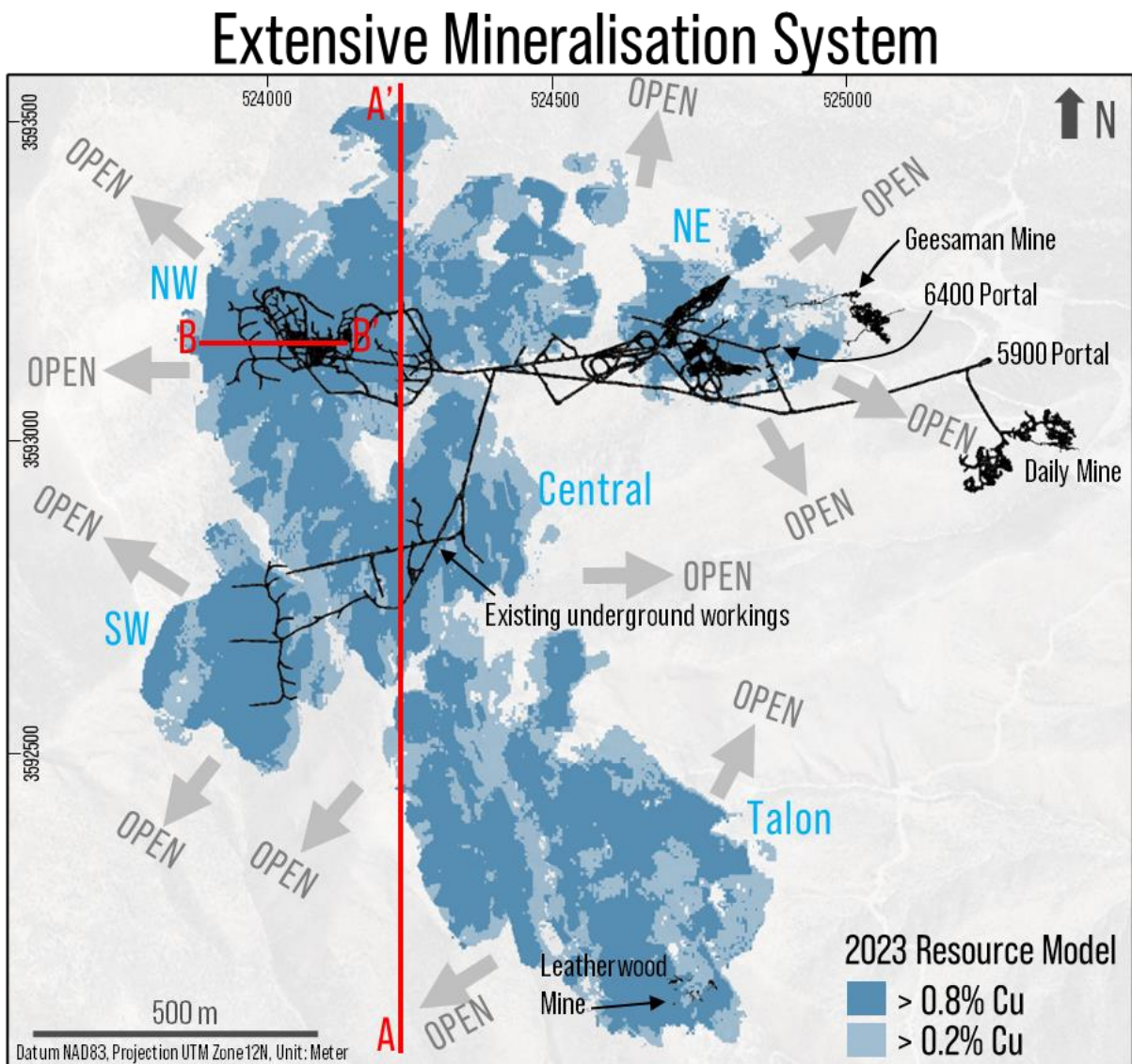


Figure 2 – Plan view of the new resource model at a 0.2% and 0.8% Cu cut-off grade, location of existing underground workings and main deposit areas.

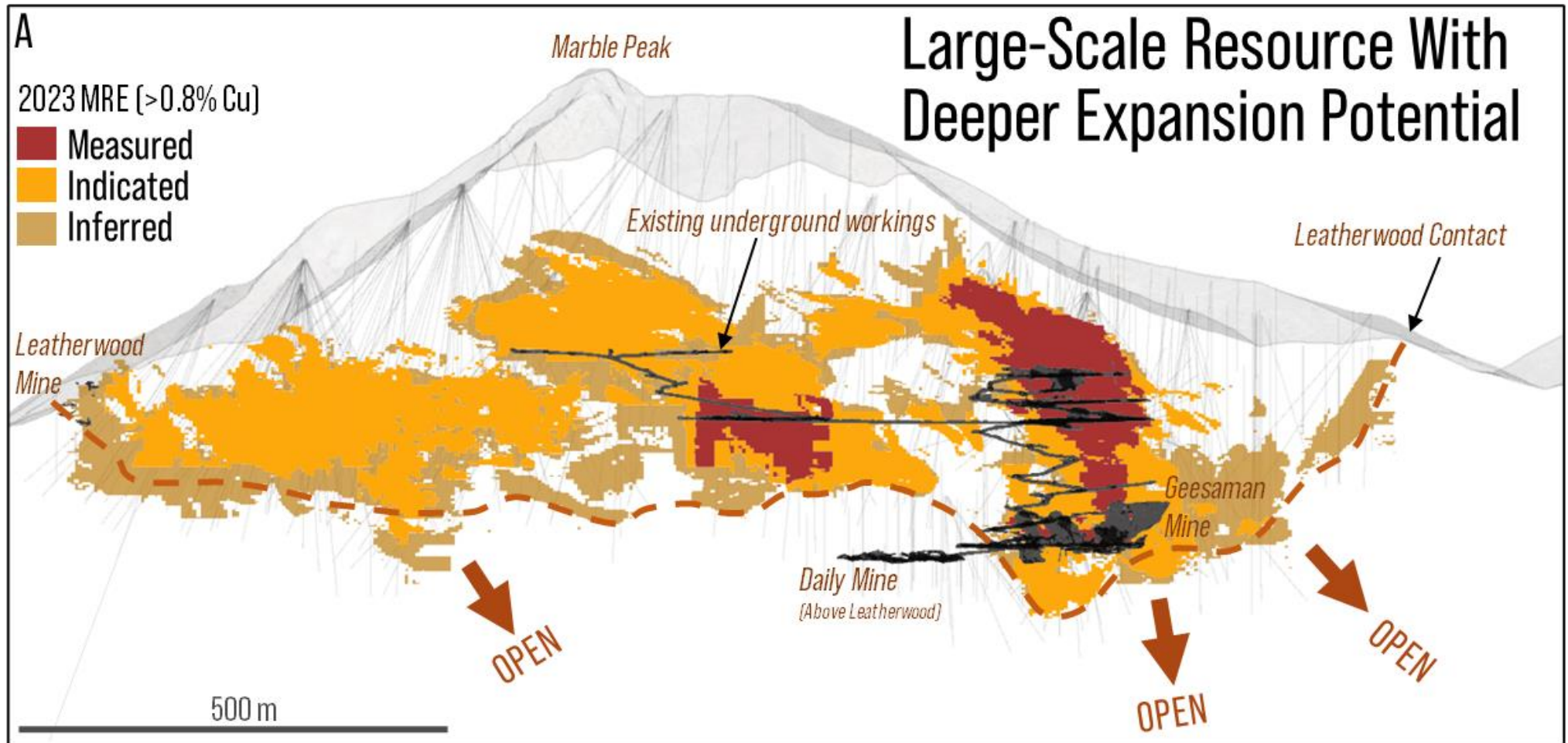


Figure 3 – Long section view of updated MRE looking west showing distribution of Resource Categories, location of existing underground workings and main deposit areas. Note only the topographic surface and Leatherwood contact have a view window applied (of 100m).



Table 2 – Comparison of new and previous resource quantities at a 1.0% Cu cut-off grade

	Resource Category	Tonnes [Mt]	Cu [%]	Ag [g/t]	Au [g/t]	Contained Cu	Contained Ag	Contained Au
Nov-23 >1% Cu	Measured	2.3	1.57	15.51	0.20	37,000 t 81,600,000 lb	1.2 Moz	15 kOz
	Indicated	8.7	1.55	13.34	0.20	134,000 t 295,400,000 lb	3.7 Moz	56 kOz
	Inferred	8.8	1.52	10.72	0.14	134,000 t 295,400,000 lb	3.0 Moz	40 kOz
	<b>Total M+I+I</b>	<b>19.8</b>	<b>1.54</b>	<b>12.43</b>	<b>0.17</b>	<b>305,000 t 672,400,000 lb</b>	<b>7.9 Moz</b>	<b>111 kOz</b>
Oct-22 >1% Cu	Measured	2.1	1.57	16.42	0.21	33,000 t 72,800,000 lb	1.1 Moz	14 kOz
	Indicated	8.7	1.49	14.94	0.21	129,000 t 284,400,000 lb	4.2 Moz	59 kOz
	Inferred	5.7	1.36	14.85	0.15	77,000 t 169,800,000 lb	2.7 Moz	28 kOz
	<b>Total M+I+I</b>	<b>16.5</b>	<b>1.45</b>	<b>15.10</b>	<b>0.19</b>	<b>240,000 t 529,100,000 lb</b>	<b>8.0 Moz</b>	<b>102 kOz</b>
Difference	Measured	0.2	0.01	-0.93	-0.02	4,000 t 8,800,000 lb	0.1 Moz	1 kOz
	Indicated	0	0.08	-1.7	-0.01	5,000 t 11,000,000 lb	-0.5 Moz	-3 kOz
	Inferred	3.1	0.17	-4.12	-0.01	57,000 t 125,600,000 lb	0.3 Moz	12 kOz
	<b>Total M+I+I</b>	<b>3.3</b> Up 20%	<b>0.09</b> Up 6%	<b>-2.67</b>	<b>-0.02</b>	<b>65,000 t 143,300,000 lb</b> Up 27%	<b>-0.1 Moz</b>	<b>9 kOz</b>

Differences may occur in totals due to rounding

Significantly greater tonnages occur at lower copper cut-off grades, providing optionality for future mining and processing studies (refer to Table 3 below).

Table 3 – 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

Contained metal is primarily within the various sedimentary units, namely the Escabrosa, Martin and Abrigo limestones, with a smaller proportion attributed to the Leatherwood granodiorite and various other intrusions (refer to Figures 4 and 5 below).

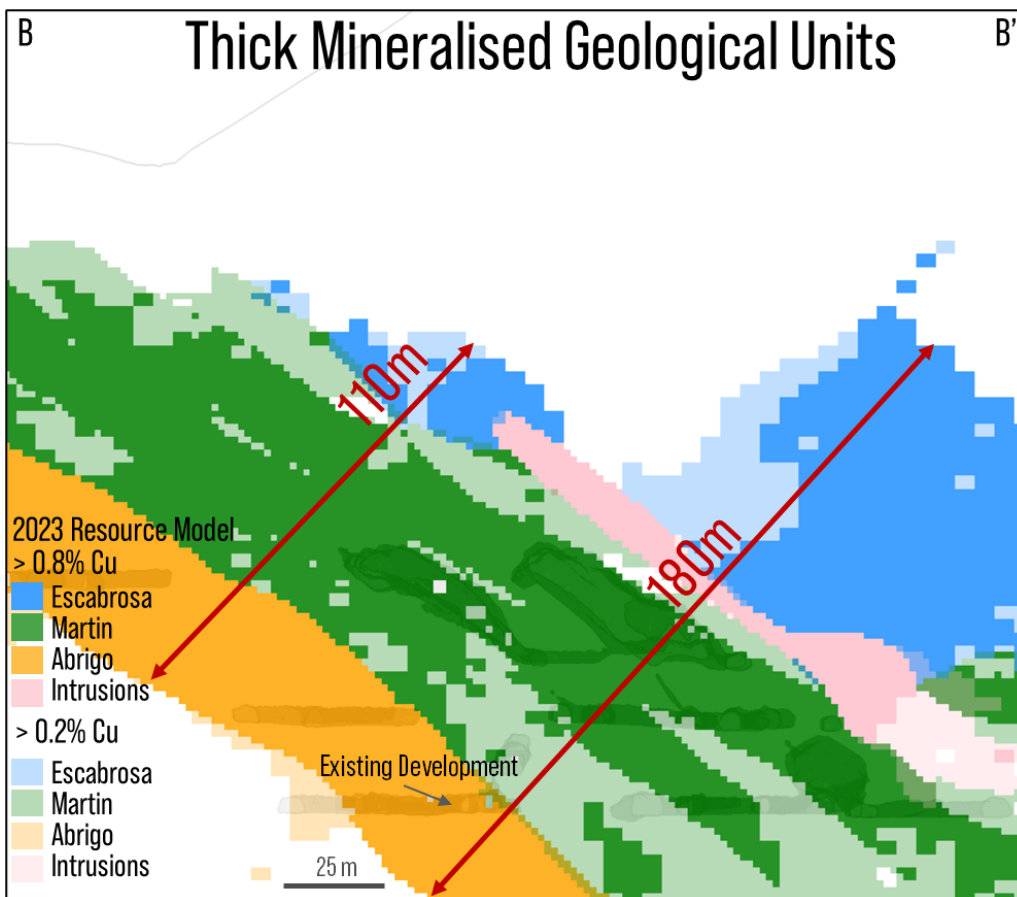


Figure 4 – North section in the North-West mine area showing the updated resource model displayed by geological unit (refer to Figure 2 for section location). View window of 50m applied.

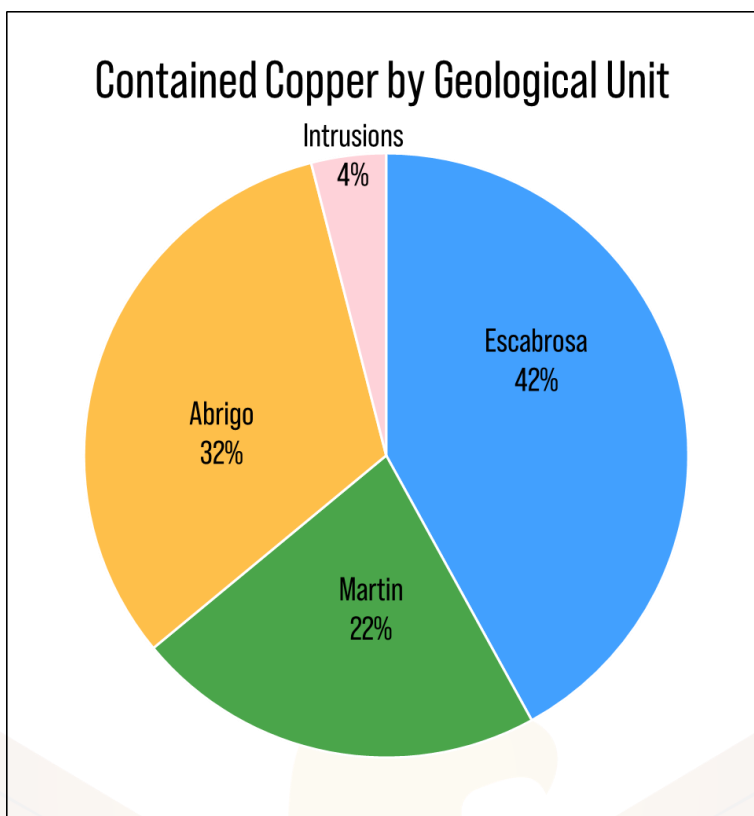


Figure 5 – Contained Cu proportions for the 2023 MRE at a 0.8% Cu cut-off by geological unit.



The main copper minerals present at Oracle Ridge are bornite, chalcocite and chalcopyrite. A bornite-dominant ore system continued to be supported by new drilling and underground channel sampling used in the updated MRE. An example of bornite mineralisation seen at Oracle Ridge is shown in Figure 6.



*Figure 6 – Example of bornite rich mineralisation in skarn-altered limestone shown in dashed outline. Hole WT-22-124 within a zone 5.9m wide grading 2.67% Cu, 44.58g/t Ag and 0.48g/t Au from 266.3m. Note core interval shown is for 268.32 to 268.89m (refer ASX announcement dated 11 July 2022).*

#### Mineral Resource Estimate - Discussion

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. This represents an increase of 8% in the total number of holes drilled at Oracle Ridge by current and previous owners.





Completed holes included:

- 23 resource expansion surface holes, designed to expand the Inferred footprint from the October 2022 MRE;
- 9 infill surface holes, designed to increase confidence in areas of the Inferred resource; and
- 18 upgrade surface and underground holes, designed to increase estimation confidence and upgrade the resource category (e.g. Indicated to Measured). Of the 18 upgrade holes, two were drilled at a larger diameter to collect material for ongoing metallurgical studies.

Results from 55 underground channels across 958 metres were included in the new MRE. The completed channel sampling occurred in the North-West mine area within the Measured portion of the existing resource. The aim of channel sampling and mapping was to gain high resolution information to inform and support geological and resource modelling in areas of highest metal content. The completed channel sampling included:

- 39 channels from the 6400 development level;
- 4 channels from the 6500 development level; and
- 12 channels from the 6550 development level.

The 32 expansion and infill holes resulted in increased tonnage, particularly for the Inferred category.

Consistently higher average copper grades from the 18 upgrade holes and 55 underground channels compared to previous drilling resulted in copper grade increases across all cut-off grades. A significant amount of knowledge was gained from the opportunity to map, sample and model geological features in three dimensions as part of the underground channel sampling programs. Local scale grade variability became evident from high density drilling and underground mapping and sampling data. This information supported sub-domaining in instances where strong evidence for discrete grade zones from sample populations and mapping observations existed.

### **Resource Expansion Potential**

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

Figure 7 below shows the prospective target areas.

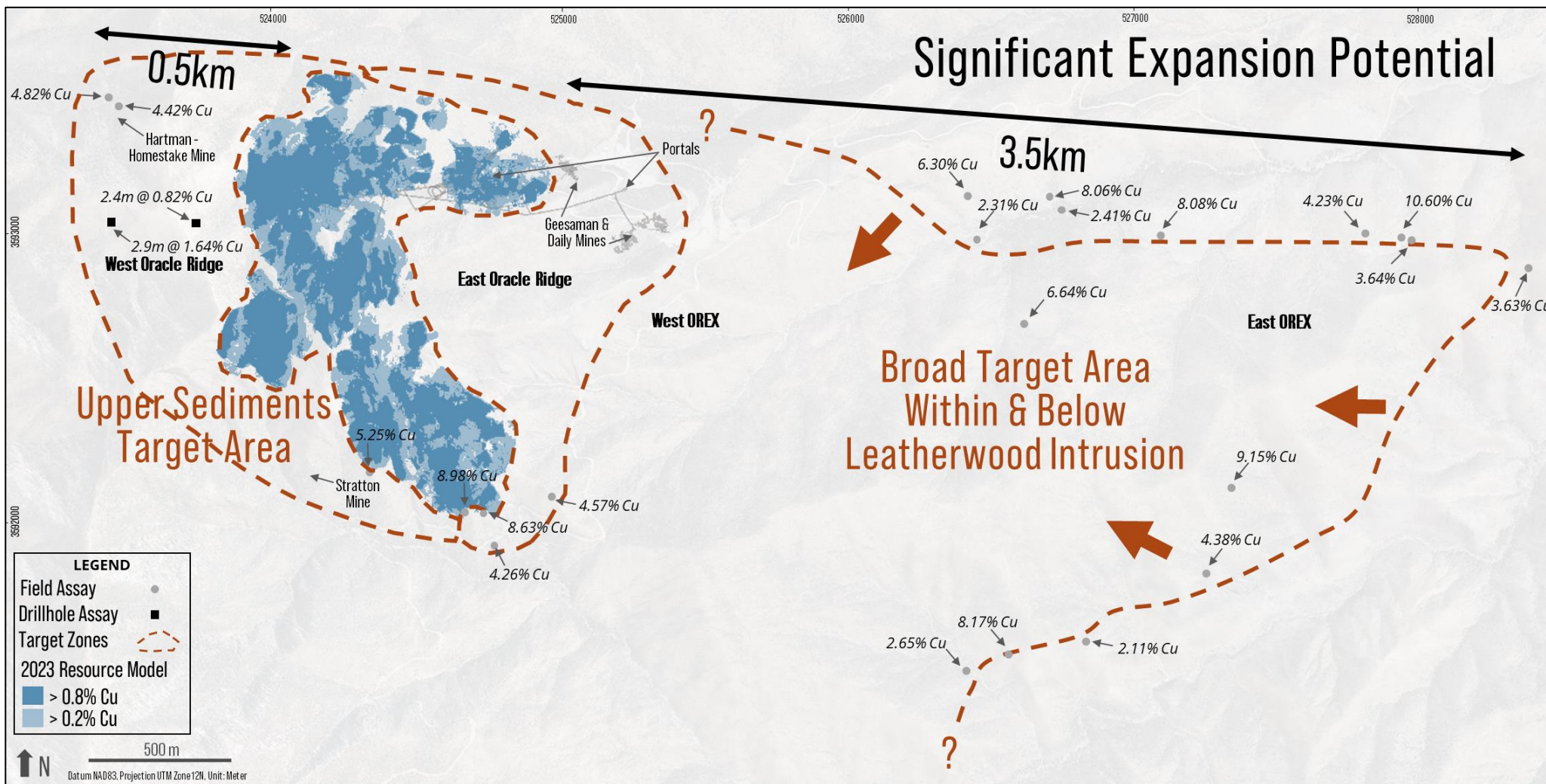


Figure 7 – Plan view showing the Oracle Ridge resource model and prospective target areas (refer ASX announcements dated 25 May 2020, 10 June 2020, 16 April 2021 and 14 November 2022).



## Upper Sediments Target Area

### West Oracle Ridge

Strong resource expansion results from the Talon area have helped identify a significant potential zone of resource expansion west of the Talon and possibly progressing north towards the main mine area. Although largely untested, a few historical holes pass through this region and show encouraging grades. Elevated copper, silver and lead rock chip sampling from the Hartman-Homestake mine is also proximal to these historical holes and present additional resource expansion targets. Furthermore, encouraging copper, silver and gold rock chip sampling around the Stratton mine provides an expansion target progressing north-west towards the historical drilling and Hartman-Homestake mine.

Although the grade intercepts from the historical holes were narrow, it does suggest that the skarn units continue to carry grade and may “blow out” in areas in a similar manner to the main mine mineralisation.

### East Oracle Ridge

It was previously assumed by others that there is direct correlation of copper mineralisation with magnetite altered skarn. Examination of uncut drill core showed good copper mineralisation in non-magnetic zones. With Eagle Mountain’s drilling and surface mapping, it has become apparent that copper mineralisation does occur in non-magnetic units.

There is now demonstrated potential for resource expansion to the east of the Talon and extending north towards the portals. This large volume of untested sediments is surprisingly coincident with a magnetic low. The magnetic low may also be impacted by the adjacent magnetic high at the Talon, potentially masking magnetite altered units in the magnetic low area. Additional targets in this region include magnetite altered skarn south-east of the Talon and around the Daily and Geesaman mines. Figure 7 above shows the prospective East Oracle Ridge area.

## Broad Target Area Within And Below Leatherwood Intrusion

Prospective resource expansion potential has been supported by continued drilling results showing strong mineralisation along the upper Leatherwood contact and in breccias and fault zones within the Leatherwood itself. In particular, structures internal to the Leatherwood may potentially be significant feeders to a metal source at depth. The Company is continuing to assess the best options to test for large scale feeder zones from all drilling, sampling and mapping data to date.

The continuation of prospective sediments and potential mineralisation under the Leatherwood contact in the Oracle Ridge mine area remains a promising target for the Company. The lower Leatherwood contact extends across the mine by approximately 1.2 kilometres by 1.2 kilometres and is essentially untested. Regional geological mapping data also indicates that the Leatherwood continues to trend for kilometres to the west and south of Oracle Ridge. Depth of drilling to the lower contact decreases towards the eastern OREX area. Drilling east from the mine portals could test what is expected to be prospective sediments in the western section of OREX, as shown in Figure 7.



## Next Steps

The new MRE will be incorporated into ongoing technical evaluations currently being carried out by the Company. The improved understanding of the Oracle Ridge geology and style of mineralisation will be used to guide further geological modelling and metallurgical work. Results from the various metallurgical test work programs will be incorporated into a future resource update, creating more of a mining model that will include metallurgical information.

The Company will be assessing the resource expansion targets generated from the updated sampling, mapping, geology model and resource estimate. Based on the success of the underground mapping and sampling program completed this year and given the potential of surrounding prospects and mines on the perimeter of Oracle Ridge, a deposit-wide surface mapping program is planned. This mapping program is expected to generate surface drill targets outside of the existing MRE.

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

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## COMPETENT PERSON STATEMENT

The information in this announcement that relates to Mineral Resources is based on information compiled by Mr Alex Lukomskyj, who is a member of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activities 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 Code, 2012). Mr Lukomskyj is the Chief Resource Geologist at Eagle Mountain Mining Limited and consents to the inclusion in this announcement of information relating to Mineral Resources in the form and context in which it appears. Mr Lukomskyj holds shares and options in Eagle Mountain Mining Limited.

Where Eagle Mountain Mining Limited (the Company) references previous ASX announcements, including historical exploration results, the Company confirms that other than the adjustments made and disclosed in this announcement, it is not aware of any new information or data that materially affects the information included in those announcements, and all material assumptions and technical parameters underpinning the results and resource estimates stated within those announcements continue to apply and have not materially changed. In addition, the form and context in which the Competent Person’s 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:



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## APPENDIX A

### Mineral Resource Estimate – Supporting Information

#### Introduction

Eagle Mountain Mining Limited (ASX:EM2) (**Eagle Mountain**, or the **Company**) has compiled and SRK Consulting (Australasia) Pty Ltd (SRK) has reviewed an update of the Mineral Resource Estimate (MRE) for the Oracle Ridge deposit (**Oracle Ridge**, or the **Project**). The Project is located in the Marble Peak area, approximately 30 kilometres by air, northeast of Tucson, Arizona, USA.

Copper was discovered in the local area in 1873, with numerous companies conducting exploration and small-scale mining operations. Oracle Ridge Mining Partners conducted mining activities between 1991 and 1996, with a recorded production of approximately 1.1 Mt of ore. Eagle Mountain acquired the project from the receiver of Oracle Ridge Mining Corp (ORM), a Canadian company which worked on the property between 2010 and 2015, in late November 2019. Eagle embarked on extensional, infill and upgrade drilling programs at the Oracle Ridge mine from September 2020 and underground mapping and channel sampling programs from January 2023.

Oracle Ridge is 100% owned by Eagle Mountain through its Arizona subsidiaries Wedgetail Operations LLC (100%) and Wedgetail Holdings LLC (100%). Oracle Ridge mine (including the historical Tailings Storage Facility and excluding Red Hawk, OREX and Golden Eagle) comprises 60 Patented Mining Claims and 50 Unpatented Mining Claims within the Coronado National Forest (United States Forest Service).

#### Geology overview

The deposit is classified as a copper-dominated skarn, with lenses of material with elevated sulphide concentrations occurring within Carboniferous to Cambrian carbonate-rich sediments that have been intruded by late Cretaceous granodiorite sills and dykes. Grade tenor appears to be largely controlled by the proximity to the granodiorite contact and the composition of the sediments. Copper mineralisation has also been identified within the granodiorite, but it is largely limited to the contact zones.

The main copper minerals are bornite, chalcocite, and chalcopyrite, with very little copper occurring in oxide or silicate form. The deposit also contains elevated concentrations of silver and gold, which generally show associations with copper and, in past operations, have reported to the concentrate. Mineralisation geometry is commonly stratiform within sedimentary units and contact controlled along intrusive boundaries, and less commonly structurally hosted within faults and shears that often intersect the granodiorite contact. Smaller scale mineralisation forms include fine disseminations, fracture fill, vein fill and coarse blebs. The main gangue minerals are magnetite, pyroxene, serpentine, grossularite, dolomite, calcite and quartz.

#### Data collection overview

Numerous drilling campaigns have been conducted at Oracle Ridge, with the database containing information sourced from diamond core and percussion drilling dating back to 1950. Only holes located within the defined model area have been used for resource modelling, all of which were drilled between 1969 and 2023. Holes drilled between 1969 and 1990 are hereafter referred to as *historical holes*. Holes drilled between 2011 and 2014, which were all drilled by ORM, are hereafter referred to as *ORM holes*. Holes drilled between 2020 and 2023, which were all drilled by Eagle Mountain, are hereafter referred to as *EM2 holes*. The portion of the EM2 holes, which comprise all new drill data incorporated into this resource update, are hereafter referred to as *recent holes*. Other data additions include underground channel sampling, which was completed in 2023 by the Company. Detailed information relating to the historical and ORM drill hole datasets is documented in the MRE report completed by SRK in 2020.



All geological information has been collected using imperial units, and these have been retained when preparing the MRE. In this Mineral Resource Statement, the various quantities have been converted and reported using metric units or industry conventions.

### **Drilling and channel sampling**

All of the recent drill data used for grade estimation was sourced from surface and underground diamond core holes drilled by Boart Longyear using triple-tubed PQ, HQ or NQ equipment. Channel sample intervals were adjusted to geological conditions and were cut in a “saw-tooth” pattern at a consistent angle approximately 1.5 metres from the floor. Core and channel samples were collected over 0.2 to 3.0 metre intervals, with a maximum sample length of 1.5 metres taken within suspected zones of mineralisation. Core recovery is reported as being very good, averaging 97% for EM2 holes. After geological logging and photographing, the cores were longitudinally split, with half-cores submitted for assaying and the other halves retained for reference. A small number of PQ holes were quarter-cored for assaying, with another quarter retained for reference and the remaining half-core retained for future metallurgical test work. Channel samples were cross-referenced to the associated mapping and sampling sheet and submitted for assaying.

### **Sample preparation and assaying**

Selective assaying procedures were used for the recent holes, with only samples interpreted to be within or adjacent to mineralised zones submitted for assaying. Core from the recent holes were sawn in half by Eagle Mountain staff in Tucson. Half of the core was bagged and sent for assaying while the other half was left in the core box for future reference. ALS Minerals conducted all preparation work. The samples were weighed, dried and crushed to better than 70% passing 2mm. They were then processed through a riffle splitter and a split of approximately 250g was pulverised to better than 85% passing 75µm.

Pulverised core samples were sent to ALS Minerals' Vancouver facility. The assay methods used included ME-MS61 (48 element four acid ICP-MS) and Au-AA23 (Au 30g charge Fire Assay with Atomic Absorption finish) for surface drilling and Cu-ICP61, Ag-ICP61 (four acid ICP-AES) and Au-AA23 for underground drilling and channel samples. These techniques are considered to be a near total digest of the minerals of interest. Above detection Au samples were re-assayed by 30g charge Fire Assay with a gravimetric finish (Au-GRA21). Above detection Ag, Cu, Pb and Zn samples were re-assayed using ore grade (OG) four acid ICP-MS overlimit (Ag-OG62, Cu-OG62, Pb-OG62, Zn-OG62). Ag samples above the Ag-OG62 upper detection limit (1,500g/t) were re-assayed by 30g charge Fire Assay with a gravimetric finish (Ag-GRA21).

QAQC protocols have been in place for all EM2 drilling and channel sampling. The Company routinely inserted standards or certified reference materials (CRMs) and blanks into their laboratory submission batches, which were supplemented by the laboratories' internal QAQC procedures. Duplicates were also collected from drill core to assess grade variability, where some of the half-core samples were quarter-cored and processed as two separate samples (primary and duplicate). CRMs and blanks (and duplicates for drill core) were inserted/collected at a ratio of 1:10 with a minimum of 1 CRM per assay batch. Several hundred high grade samples from the recent holes were sent for re-analysis at Skyline's Tucson facility to determine if any laboratory biases were present. The re-analysis results showed good correlation with the original results with no evidence of significant biases.

The 12.5% Cu reduction applied to a minority of historical data in previous estimates due to grade bias was retained for the updated estimate. Comparisons between recent and historical data justified the continued application of this correction factor.



## Bulk density testing

The bulk density dataset compiled from the recent drilling comprised a total of 1,451 results derived from water displacement tests performed on core samples acquired from 50 drill holes. The tests were conducted onsite by the Company. Bulk density was estimated using Archimedes' principle by measuring dry and submerged sample weights and then dividing the dry weight by the difference between dry and submerged weights. Sealing was not required given the competency of the samples. Bulk density results were compared to those reported from the earlier drilling programs and were considered to be equivalent. The two datasets were merged, with the combined dataset used for resource estimation containing 11,535 results.

## Geological model

The geological model used for estimation was prepared by Company geologists in Tucson and provided to the Competent Person as wireframe solids defining the following lithological units, which were used as estimation domains:

- Horquilla Formation
- Escabrosa Formation
- Martin Formation (six subunits)
- Abrigo Formation (four subunits)
- Leatherwood granodiorite and associated sills
- Late-stage dyke

The model was constructed in Leapfrog Geo using implicit modelling techniques. The main data sources included all available drill hole and underground channel sampling data as well as surface and underground mapping. The interpretations were largely based on lithological and structural drill hole, channel and mapping data.

## Estimation dataset

The drilling and underground channel data used for Mineral Resource estimation were sourced from database extracts in July 2023. This comprised a total of 704 drillholes and 55 underground channels, equating to 132,538 metres. Approximately 10% of the data (by metres) comprised the recent drilling of 50 diamond core holes and sampling of 55 underground channels, equating to 12,749 metres.

Compositing was carried out to an interval length of 5 feet (approximately 1.5 metres) and stopped at domain and sub-domain boundaries. This length closely aligns with the nominal sampling interval. Residual composite lengths were distributed equally to all preceding intervals within the domain.

Due to the selective nature of historical sampling, significant overestimation of the local grade is likely to occur if the unassayed samples are treated as 'missing values', whereas local estimates are likely to be underreported if the missing intervals are assigned a grade of zero. The historical geological logs contained visual estimates of copper sulphide content and the Company was able to correlate these with existing copper grades to develop realistic default grades for the unassayed intervals. These default grades were used for previous Mineral Resource estimates and were retained for the resource update.

For the previous resource estimate, silver and gold default grades were assigned to unassayed intervals, and the same approach was used for the updated resource estimate.

The copper, silver and gold grade distributions in each estimation domain were examined for anomalously high grades, which could unduly influence the local estimates. None of the grades were considered to be significantly anomalous however, as a precautionary measure, area of influence





(distance) restrictions were applied to grades above selected threshold values. The number of values constrained was very low, and the impact on the global resource estimates was minor.

Statistical and variographic studies were conducted on copper, silver and gold grades in each domain. Variogram definition was relatively good, with moderate to low nugget values (averaging less than 5%) and practical ranges from approximately 30 to 350 feet (approximately 10 to 100 metres).

## Estimation

Resource estimates were prepared using linear and non-linear block modelling techniques in Datamine Studio RM Pro. A single 3D model framework was created that covered the extent of all input data. Sample spacing and domain geometry were used to assist with the selection of a parent cell size of 15 feet east x 15 feet north x 10 feet elevation (approximately 4.6 x 4.6 x 3.1 metres). Sub-celling was applied where required down to 5 x 5 x 5 feet (approximately 1.5 x 1.5 x 1.5 metres) to ensure representative volume modelling.

Categorical indicator kriging (CIK) was used to assist with the interpretation of low and high grade sub-domains within each estimation domain where a normal grade distribution was not evident in the sample population. This methodology resulted in closer alignment to localised mineralisation observations and accounting for multi-modal sample grade populations. The extent of CIK sub-domains were controlled by selection of a probability threshold value which minimised sample misclassification by optimising the sub-domain volume to the input sample grades. Local grade estimates were prepared for copper, silver and gold. Ordinary kriging (OK) was used for parent cell grade interpolation. Mapping and logging data continued to support hard boundary constraints being applied to domain and sub-domain contacts.

Zones of elevated copper grade occur in broadly stratiform lenses. To enable these characteristics to be reproduced in the model, dynamic anisotropy was applied to allow the search ellipsoids to be aligned with the local orientations of the geological units. These adjustments enabled improved estimation control.

A multi-pass search strategy was implemented using discoid-shaped search ellipsoids, with the dimensions largely based on the results from variography study. Default grades, which were based on the 30<sup>th</sup> percentile of the estimation dataset grade for each domain, were assigned to any cells that did not receive estimated grades. Extrapolation was limited to approximately half of the drill spacing.

Density was estimated into each model cell using similar estimation parameters to those used for copper grade estimation. Default densities equivalent to the dataset average for each domain were assigned to model cells that did not receive an interpolated density value.

## Validation

Model validation included:

- Visual comparisons of the sample and model cell grades;
- Local and global statistical comparisons of the sample and model cell grades;
- Assessment of the estimation performance data; and
- Check estimates using nearest neighbour (NN) and inverse distance squared (IDS) interpolation.

No significant issues were identified and the model cell estimates were consistent with the input data. The swath plots showed very good agreement between the estimated block grades and the composite grades. The estimation performance data indicated that most of the model cell estimates were informed by an adequate number of relevant samples, and acceptable slope of regression and kriging efficiency values were achieved. The IDS and NN estimates were comparable to the OK estimates, including those within sub-domains estimated by CIK.



## Mineral Resource classification and reporting

The Mineral Resource estimates have been classified in accordance with the JORC Code (2012). The classifications have been applied to the Mineral Resource estimates based on consideration of the confidence in the geological interpretation, the quantity and quality of the input data, the confidence in the estimation technique and the likely economic viability of the material.

Classifications of Measured, Indicated and Inferred Resource have been assigned to the estimates by examining the data coverage and local estimation performance values for each domain. Resource category volumes were primarily based on copper grade estimates, given the similarities between copper, silver and gold estimation performance and the notably lower silver and gold contribution to the total contained resource metal compared to copper.

A classification of Measured has been assigned to regions with a regular drill coverage spaced at less than 50 feet (approximately 15 metres), where the majority of model cells were estimated in the first pass using at least 10 samples, and where the slope of regression was at least 0.7.

A classification of Indicated has been assigned to surrounding areas with a regular drill coverage spaced at up to 100 feet (approximately 30 metres), where most cells were estimated in the first or second search pass using at least 10 samples, and the slope of regression was at least 0.5.

A classification of Inferred was assigned to the surrounding areas where there was still reasonably uniform drill coverage and spacings of up to 200 feet (approximately 60 metres), with most cells estimated in the second or third search pass and a slope of regression greater than 0.3.

The above criteria were not applied in an overly prescriptive way, but instead used to identify broad and continuous regions meeting these guidelines.

The Mineral Resource estimates are presented in the body of the announcement.

## Mining and metallurgical methods and parameters

Although mining and metallurgical methods for Oracle Ridge are currently under review, it is expected that the mining method would be similar to that used prior to the suspension of operations in 1996, which was backfilled long-hole stoping, with longitudinal advance in narrow areas and transverse mining in wider areas. For the previous operation, level spacings of 12 metres and 15 metres were used.

The metallurgical configuration is also expected to be similar to that used prior to suspension of operations in 1996, which was a crush-grind-floatation flowsheet. Recoveries are expected to be in line with those achieved during this time – 90% for copper and 81% for silver and gold. Previous studies indicated the main copper minerals to be bornite, chalcocite, and chalcopyrite, and the main gangue minerals to be magnetite, pyroxene, serpentine, dolomite, and calcite. No deleterious elements were identified.

Eagle Mountain are currently completing metallurgical test programs as part of a series of technical evaluations for the Oracle Ridge deposit.



## COMPETENT PERSON'S STATEMENT

The information in this announcement that relates to Mineral Resources is based on information compiled by Mr Alex Lukomskyj, who is a member of The Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activities 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 Code, 2012). Mr Lukomskyj is the Chief Resource Geologist at Eagle Mountain Mining Limited and consents to the inclusion in this announcement of information relating to Mineral Resources in the form and context in which it appears. Mr Lukomskyj holds shares and options in Eagle Mountain Mining Limited.

Where Eagle Mountain Mining Limited (the Company) references previous ASX announcements, including historical exploration results, the Company confirms that other than the adjustments made and disclosed in this announcement, it is not aware of any new information or data that materially affects the information included in those announcements, and all material assumptions and technical parameters underpinning the results and resource estimates stated within those announcements continue to apply and have not materially changed. In addition, the form and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

Attachment 2

**JORC Code, 2012 Edition – Table 1**

**Section 1 Sampling Techniques and Data**



(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<p><b>Sampling techniques</b></p>	<ul style="list-style-type: none"> <li>• <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 broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘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 mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<p>The drill hole and underground channel data used for Mineral Resource estimation were sourced from database extracts in July 2023. The collar file contained 927 entries comprising a mix of surface and underground diamond drill holes, underground percussion holes, auger holes and underground channels. Only diamond drill holes and underground channels located in the defined model area were used for grade estimation. This comprised a total of 704 drill holes and 55 underground channels, equating to 131,580 metres, and containing assay data for 39,188 assayed intervals.</p> <p>The earliest data were collected over several programs that occurred between 1969 and 1990, which are hereafter referred to as <i>historical holes</i>. Oracle Ridge Mining (ORM) conducted several programs between 2010 and 2014, which are hereafter referred to as <i>ORM holes</i>. Holes drilled between 2020 and 2023, which were all completed by Boart Longyear for Eagle Mountain, are hereafter referred to as <i>EM2 holes</i>. The portion of EM2 holes that comprise all new drill data incorporated into this resource update are hereafter referred to as <i>recent holes</i>. Additional new data comprised underground channel sampling, which was completed by Eagle Mountain in 2023. The historical datasets were prepared from original and compiled records by ORM and Eagle Mountain, and little detail is available on the sample collection, preparation, testing, and validation procedures for the historical programs. For this reason, most of the commentary in Section 1 of this Table 1 pertains to ORM and EM2 holes, with the majority of commentary relating to recent holes and underground channels as they comprise all data additions since the previous MRE. ORM and Eagle Mountain have used the results from confirmatory drilling and a core re-logging and re-sampling program to demonstrate that the historical data are sufficiently reliable for resource estimation.</p> <p>A summary of the sample collection and preparation procedures for the three programs is presented below.</p> <p><b>EM2 programs (includes recent holes and underground channels)</b></p> <p>These programs were all completed by Eagle Mountain. Diamond drill cores were sampled as half-core from 0.2m to 3.0 metre increments and adjusted as required for local geological conditions, with a maximum sample length of 1.5 metres taken within suspected mineralisation. The sampling intervals were defined by Eagle Mountain geologists and marked on the core prior to being sent to the ALS Tucson lab. One half of cut samples were selected from a consistent position to the orientation line and sent for</p>

Criteria	JORC Code explanation	Commentary
		<p>preparation and assaying using conventional sample preparation procedures and analytical techniques (see below). The other half of the cut samples were retained for future reference and sent back to Eagle Mountain. Underground channels were sampled as rock-chips from 0.2m to 3.0 metre increments and adjusted as required for local geological conditions, with a maximum sample length of 1.5 metres taken within suspected mineralisation. The sampling intervals were defined by Eagle Mountain geologists. Channels were cut in a “saw-tooth” pattern at a consistent angle approximately 1.5 metres from the floor prior to being collected and sent to the ALS Tucson lab.</p> <p><b>ORM programs</b></p> <p>These programs were all completed by ORM. Diamond drill cores were sampled as half-core at nominal 1.52 metres (5 feet) increments beginning and ending at geological contacts. The sampling intervals were defined by ORM geologists and marked on the core prior to being split into two halves using a core-splitting hammer. Sample preparation and assaying were conducted by Skyline and SGS laboratories using conventional sample preparation procedures and analytical techniques (see below).</p> <p><b>Historical programs</b></p> <p>These programs were completed by several companies, including Continental Copper, Continental-Union Miniere and ORM from 1970 to early 1990. The samples were prepared and assayed by a number of independent commercial laboratories. Little information is available on the sample preparation or assaying procedures, although it is likely to have been acid digest followed by atomic absorption (AA) analysis. Gold and silver analyses are only available for some programs. The database records were collated from historical records that ORM was able to locate.</p> <p>ORM was able to obtain remnant cores from 67 holes, which were re-logged and re-assayed. Although the re-assayed results generally showed good correlation with the original results, the re-assayed copper results appeared to be biased low compared to the original results. For this reason, all original copper grades for the historical data where re-assays were not available have been reduced by 12.5% relative. Comparisons between recent and historical drilling supports the continued application of this reduction to historical copper grades.</p>
<p><b>Drilling techniques</b></p>	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i></li> </ul>	<p>All of the assay data used for resource estimation were acquired from diamond core drilling and underground rock-chip channels. The database also contained information acquired from percussion drilling, which was used to assist with the preparation of the geological model but was not used for grade estimation.</p> <p>For the EM2 programs, the drilling was conducted using rigs fitted with NQ, HQ and PQ triple-tubed equipment. An azimuth aligner was used when each hole was collared for rig alignment. Downhole deviation surveys were performed approximately every 30.5 metres (100 feet). The core was oriented with a Boart Longyear Truecore™ system to allow measurement of structural information.</p>

Criteria	JORC Code explanation	Commentary
		<p>For the ORM programs, drilling was conducted using rigs fitted with HQ and NQ double-tubed equipment.</p> <p>The historical data are reported to have been acquired from a range of different core sizes, with the most common sizes understood to be NQ and BQ.</p>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <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></li> </ul>	<p>The resource estimation drilling datasets were all derived from diamond drill samples.</p> <p>For recent drilling, core recoveries were recorded by the drillers at the rig and verified by Eagle Mountain personnel during core logging.</p> <p>To maximise sample recovery and core quality, drilling was performed with a triple-tube set up where two splits are inserted into the barrel. This minimises core displacement and core loss.</p> <p>No relationship has been determined between sample recoveries and grade.</p>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>For the recent programs, the entire length of each hole or channel was geologically logged at an appropriate level of detail to support resource estimation studies, with information on lithology, alteration, mineralisation, structure and veining recorded. Magnetic susceptibility was captured for drill core.</p> <p>All recent cores were photographed, and half-core samples were retained for reference and subsequent testing.</p> <p>All logging is considered to be qualitative in that it was based on visual assessments.</p>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <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></li> </ul>	<p>Core from recent holes were sawn in half by Eagle Mountain staff in the Tucson logging facility. Half of the core was bagged and sent for assaying while the other half was left in the core box for future reference.</p> <p>ALS Minerals conducted all of the sample preparation work. The samples were weighed, dried, and crushed to better than 70% passing 2mm. The crushed sample was processed through a riffle splitter, and a sub-sample with a nominal weight of 250g was pulverised to better than 85% passing 75µm.</p> <p>Duplicates were used to assess the grade heterogeneity. These were prepared by dividing the half-core sample into two quarter-cores, with one quarter used for the primary sample and the other quarter used for the duplicate. The remaining half of the core was left in the box for future reference.</p>

Criteria	JORC Code explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<p>Sample sizes were considered appropriate for the grain size and the grade characteristics of the material.</p> <p>The recent surface drilling samples were assayed by ALS Laboratories (Vancouver) using 48 multi-element four acid (4A) digestion and ICP-MS finish (ME-MS61) and Au 30g charge fire assay (FA) with atomic absorption (AA) finish (Au-AA23). The technique is considered a near total digest of the relevant minerals. Above detection Au samples were re-assayed by 30g charge FA with a gravimetric finish (Au-GRA21). Above detection Ag, Cu, Pb and Zn samples were re-assayed using ore grade (OG) 4A ICP-AES overlimit (Ag-OG62, Cu-OG62, Pb-OG62, Zn-OG62) and Ag-GRA21 was used for silver exceeding the Ag-OG62 upper detection limit.</p> <p>For recent underground drilling, the methods applied were as per surface drilling, or alternatively by 4A digestion and ICP-AES finish (Cu-ICP61 and Ag-ICP61) and Au-AA23 where multi-element data was not required.</p> <p>Underground channels were only analysed for Cu, Ag and Au and was completed by 4A digestion and ICP-AES finish (Cu-ICP61, Ag-ICP61) and Au-AA23.</p> <p>Certified Reference Material (CRM), blanks and duplicates were inserted/collected at a ratio of 1:10 for drill core and channel samples, with a minimum of 1 CRM per assay batch. CRMs were inserted at intervals never exceeding 20 samples. The sample batches were re-assayed if the CRM results fell outside of the control limits (<math>\pm 3SD</math>). Acceptable levels of accuracy and precision were observed.</p> <p>Several hundred high grade samples from the recent holes were sent for re-analysis at Skyline's Tucson facility for independent laboratory checking. The re-analysis results showed good correlation with the original Cu and Au results, with no evidence of significant bias. A small bias was evident for Ag, with the ALS results reporting approximately 10 to 15% (relative) higher than the Skyline results.</p> <p>Portable XRF analysis was used to assist with core logging and to check sub-samples returned from the laboratories, however the results were not used for grade estimation.</p>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<p>Eagle Mountain's Director of Exploration has reviewed the intervals submitted for laboratory testing and the results upon receipt of the assays.</p> <p>ORM re-assayed approximately 1,900 retained samples from the historical programs. A comparison of the results indicated that the historical copper results were biased high by approximately 12.5%. Given that the ORM dataset is supported by a full set of QAQC procedures (including independent laboratory checks and CRMs), it was concluded that the historical results over-reported the copper grade. To mitigate against this, all copper results for historical holes in the resource estimation dataset were reduced by 12.5% relative. Comparison of recent drilling to the Cu adjusted historical dataset confirmed that this reduction was still appropriate.</p>

Criteria	JORC Code explanation	Commentary
		<p>Selective assaying practices had been applied for both the historical, ORM and EM2 programs, with significantly more stringent selection criteria used for the ORM and EM2 programs. Significant overestimation is likely to occur if the unassayed intervals are treated as 'missing values', and underestimation is likely to occur if they are set to detection limits. An estimate of sulphide contents had been included in the historical geological logs. These were compared to existing copper values, and it was concluded that sufficiently reliable regression equations could be devised to assist with the assignment of suitable copper grades to the unassayed historical intervals. Most assigned grades are in low-grade areas and are therefore expected to have minimal impact on the resource grades above the reporting cut-off.</p> <p>Unassayed historical silver and gold intervals were assigned default grades.</p> <p>Detection limit values for Cu, Ag and Au were assigned to unassayed intervals from the ORM and EM2 drilling due to far less stringent sample selection criteria and high levels of confidence in locations of unsampled intervals, as determined by the logging geologists. The Cu, Ag and Au grade distributions in each estimation domain were examined, and top-cuts (by an area of influence or distance restriction methodology) were applied to grades that appeared to be outliers. None of the grades were considered to be significantly anomalous, the numbers cut were relatively small, and the application of the top-cuts made only minor differences to the resource estimates.</p> <p>All resource data are stored and validated within an electronic database, which is managed by an external database administrator. All assays were received from the laboratories by electronic file transfer and are automatically imported into the database. Historical assay data were transcribed from original signed assay certificates into the electronic database. Most original assay certificates from the 1970s onward are available.</p>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<p>The survey data were collected and reported using UTM Zone 12 Arizona Central State Plane; the map datum was NAD83 and the vertical values were reported in NAVD88. The centroid for scaling from grid to ground was N 538657.436 ft and E 1070796.672 ft and the scale factor was 1.00017864591.</p> <p>Surface drill collar surveying of EM2 holes were captured by Eagle Mountain geologists using a Differential Global Positioning System (DGPS) unit with an estimated accuracy of ±0.5 metres. Underground drill holes were located by a total station survey instrument. Downhole surveys were captured at regular intervals by Boart Longyear staff using a Trushot Digital Survey Tool and verified by Eagle Mountain geologists. Underground channel samples were located from survey stations using a laser distance measurer. The topographic surface survey was conducted on the 14 January 2011 by Cooper Aerial Surveys Co. Using the National Standard for Spatial Data Accuracy, the survey has a reported accuracy of ±0.3 metres (±1 foot) in all key project areas.</p> <p>Unmanned Aerial Services (UAS) surveyors carried out an updated underground survey of accessible workings in 2022 using LiDAR drone equipment.</p>



Criteria	JORC Code explanation	Commentary
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>The drill spacing in the model area is quite variable. In subregions of uniform coverage, the spacing generally ranges from 30 to 200 feet, which is considered adequate to define geological and grade continuity. The spacing has been taken into consideration when assigning resource classifications to the estimates.</p> <p>Samples were composited to 5 feet (approximately 1.5 metres) prior to being used for grade estimation. This length aligned closely to the global mean.</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<p>Most of the mineralised lenses are stratiform with the orientation largely mimicking that of the carbonate units, which usually exhibit shallow to moderate dips but can become increasingly steep, particularly when proximal to intrusive sills. In general, the drill holes were planned to intersect stratigraphy at perpendicular angles. However, both surface and underground access constraints have meant that some of the drilling intersects the formations at acute angles. This has been taken into consideration when planning the modelling approach.</p> <p>No orientation-based sampling biases have been identified.</p>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<p>Core boxes were collected at the drill rig by Eagle Mountain personnel and transported to the Tucson logging facility. After logging, the core was delivered by Eagle Mountain personnel to ALS Minerals' Tucson facilities for cutting, sampling, sample preparation. Underground channel samples were collected by Eagle Mountain personnel after cutting and delivered to ALS Minerals' Tucson facilities for sample preparation.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<p>An external laboratory check at Skyline was conducted for several hundred high grade samples from recent drilling. Results showed generally good correlations to ALS assays, with no significant biases identified.</p>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

***No new Exploration Results reported. Where applicable the information in this section is reproduced from the following:***

- ***For previously announced historical results - ASX announcement 25 May 2020***
- ***For previously announced results (EM2 programs, comprising WT-series holes and underground channels) - ASX announcements 19 October 2020 onwards***

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• <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 national park and environmental settings.</i></li> </ul>	<p>The Oracle Ridge Mine Project (Project) is located in the Marble Peak area, approximately 30 kilometres by air north-east of Tucson, Arizona, U.S.A. It is located in Sections 17, 18, 19 and 20 of Township 11 South, Range 16 East, Gila and Salt River Base and Meridian of the U.S. cadastral system. The geographical coordinates are approximately Latitude 32°28' North, Longitude 110°41' West.</p> <p>The Project is 100% owned by Eagle Mountain Mining Ltd through its Arizona</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<p>subsidiaries Wedgetail Operations LLC (100%) and Wedgetail Holdings LLC (100%).</p> <p>The Project consists of four main areas: Oracle Ridge, OREX, Golden Eagle and Red Hawk</p> <p><b>Oracle Ridge</b> (including historical Tailings Storage Facility)</p> <p>Oracle Ridge comprises 60 Patented Mining Claims and 50 Unpatented Mining Claims within the Coronado National Forest (United States Forest Service).</p> <p>100% of the mineral rights starting from 15.2 metres (50 feet) below surface are owned by Wedgetail Operations LLC.</p> <p>In 2009, the surface rights for the area necessary for potential mining access (e.g. portals), processing facilities and offices have been secured by an industrial property lease. Under the agreement, Wedgetail Operations LLC leases the surface rights to the project for the purpose of carrying out its exploration, potential development and mining. The lease has an initial term of three years and is renewable for nine additional extensions of three years each.</p> <p>The mineral rights of Patented Claims at Oracle Ridge are likely to have a reversionary interest to Marble Mountain Ventures, which occurs on 18 February 2025, unless the Company exercises its Extension Option upon which the Company's interests in the mineral rights are extended to 18 February 2040.</p> <p>There is a 3% net smelter returns royalty on the future sale of any metals and minerals derived from the Oracle Ridge mine.</p> <p><b>OREX</b></p> <p>The OREX area is covered by 93 Unpatented Mining Claims within the Coronado National Forest (United States Forest Service).</p> <p>100% of the mineral rights are owned by Wedgetail Operations LLC.</p> <p>The OREX area is also partly covered by Patented Mining Claims controlled by Pima County. The Company does not currently control the Mineral Rights over Pima County's claims.</p> <p><b>Golden Eagle</b></p> <p>The Golden Eagle area is covered by 27 Unpatented Mining Claims within the Coronado National Forest (United States Forest Service).</p> <p>100% of the mineral rights are owned by Wedgetail Operations LLC.</p> <p>The Golden Eagle area is also partly covered by Patented Mining Claims controlled by Pima County. The Company does not currently control the Mineral Rights over Pima</p>

Criteria	JORC Code explanation	Commentary
		<p>County's claims.</p> <p><b>Red Hawk</b></p> <p>The Red Hawk area is covered by 24 Unpatented Mining Claims within the Coronado National Forest (United States Forest Service).</p> <p>100% of the mineral rights are owned by Wedgetail Operations LLC.</p> <p>The land tenure is secure at the time of reporting and there are no known impediments to obtaining permits to operate in the area.</p>
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<p><b>Oracle Ridge</b></p> <p>The Oracle Ridge Mining District was discovered in 1873. In 1881, an 18 tonne per day copper smelter was erected at nearby Apache Camp. The ore for this smelter was supplied from the Hartman, Homestake, Leatherwood, Stratton, Geesman and other small mines in the area.</p> <p>Phelps Dodge Copper Company (Phelps Dodge) entered the District in 1910 and undertook considerable development and exploration work.</p> <p>Continental Copper, Inc began exploring in the District in the 1950s. Continental leased the property in 1968 with an option to purchase and undertook a large exploration and development program. This was the first time there was a large scale assessment of the mineralisation.</p> <p>Union Miniere began a new exploration program in April 1980. In 1984, a feasibility study for an 1,814 short ton per day operation was completed.</p> <p>In October 1988, South Atlantic Ventures acquired Union Miniere's interest and entered into a 70-30 partnership with Continental to develop the mine. Minproc Engineers Inc. was contracted to supervise the confirmatory metallurgical test work. A detailed design was started in November 1989 on a column flotation plant. Construction of the facility commenced in April 1990 and the first ore was processed through the plant on March 3, 1991. The capacity of the mill was initially set at 771 short ton per day. The mill capacity was later expanded to approximately 1,000 short ton per day.</p> <p>The mine closed in 1996. Production records show that approximately 1,200,000 short tons were milled since commencement of the operation.</p> <p>Between 2009 and 2015 the project was owned by Oracle Ridge Mining, a TSX-V listed company, which drilled approximately 130 surface and underground holes.</p> <p><b>Golden Eagle</b></p> <p>Small scale mining occurred in the Golden Eagle area in the first half of the 1900s focussed on gold. The largest operation was the Sanderson Mine. The mine is part of the Golden Eagle mineralised system but is located outside the Company's landholding.</p>

Criteria	JORC Code explanation	Commentary
		<p>It reported smelter returns between 1936 and 1941 averaging 0.4 Oz/short ton Au (13.7 g/t Au), 0.65 Oz/ton Ag (22.3 g/t Ag) and 0.46% Cu (small tonnage).</p> <p>Oracle Ridge mining conducted exploration at Golden Eagle in the mid-1990s. A geophysical magnetic survey was flown over the area. Few magnetic anomalies, postulated to be magnetite-rich skarn were tested by reconnaissance drilling. Results were not deemed sufficiently encouraging and no further drilling was conducted in the area.</p> <p><b>OREX</b></p> <p>Details of historical (pre-1980s) exploration and mining activities in the OREX area are not known. Few small-scale workings were found during mapping. In 1980 a Joint Venture between Gulf Minerals Corporation and W.R. Grace Company completed mapping of the area and drilled 7 holes. Results of the program were reviewed by Oracle Ridge Mining Partners and summarised in an internal communication in 1992.</p> <p><b>Red Hawk</b></p> <p>No historical exploration nor mining activities are known for the Red Hawk area.</p>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>The deposit is classified as copper dominated skarn. Minerals representative of both prograde and retrograde skarn development are present, the former being represented by diopside and garnets, the latter by epidote, magnetite and chlorite.</p> <p>Copper dominated mineralised zones generally contain bornite, chalcocite and chalcopyrite. The deposits are commonly associated with Andean-type plutons intruded in older continental-margin carbonate sequences. The associated intrusive rocks are commonly porphyritic stocks, dikes and breccia pipes of quartz diorite, granodiorite, monzogranite and tonalite composition, intruding carbonate rocks, calcareous-volcanic or tuffaceous rocks. The deposits shapes vary from stratiform and tabular to vertical pipes, narrow lenses, and irregular zones that are controlled by intrusive contacts.</p> <p>The copper rich skarn deposits at Oracle Ridge are found in conformable lenses along the contact with the Leatherwood granodiorite or associated with faults and shear zones which intersect the Leatherwood. These have acted as feeders into the reactive carbonate horizons, with mineralisation commonly forming in sub-vertical orientations.</p>
<b>Drill hole Information</b>	<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> </ul> </li> </ul>	<p>No new drilling results outlined in this announcement.</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>– dip and azimuth of the hole</li> <li>– down hole length and interception depth</li> <li>– hole length.</li> <li>• 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.</li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• In reporting Exploration 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>For historical results, a minimum cut-off grade of 1% copper was used and a weight-averaging applied based on sample length.</p> <p>For WT-series drilling and underground channel samples (EM2 programs), exploration results are reported as weighted averages of assays equal or above a 1% copper cut-off. Lower grade intersections are reported as weighted averages of assays equal or above 0.6% and 0.2% copper cut-offs. Intersections start and end at a sample at or exceeding the specified cut-off.</p> <p>For GE-series drilling (EM2 programs), exploration results are reported as weighted averages of assays equal or above a 0.5g/t gold cut-off or 1% copper cut-off. Intersections start and end at a sample at or exceeding the specified cut-off.</p> <p>No metal equivalents reported.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• 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').</li> </ul>	<p>The mineralised skarn beds are irregular in orientation but generally dip easterly. Drill hole orientation relative to skarn beds from surface drilling was challenged by severe topography which limited the ability to intercept skarn beds at right angles to dip.</p> <p>For historical results, underground drill holes were designed to take skarn bed orientation into consideration. Due to variable skarn bed orientation and limitations imposed on drill hole orientation, true versus drilled widths vary accordingly.</p> <p>For recent drilling results, all intervals reported are down hole length. True widths are not known at this stage. For underground channel sampling, all intervals reported are horizontal channel widths.</p>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<p>No new drilling results outlined in this announcement.</p>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of</li> </ul>	<p>All exploration results obtained so far have been reported in previous announcements.</p>

Criteria	JORC Code explanation	Commentary
	<i>Exploration Results.</i>	
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><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></li> </ul>	<p>Surface and underground mapping and sampling has been undertaken over the life of the property.</p> <p>An airborne magnetic and resistivity geophysical survey was conducted in 1995 by DIGHEM.</p> <p>In 2011, metallurgical testing was conducted on drill hole samples collected from the first 4 holes drilled under the Phase I surface drill program and bulk chip samples collected from underground workings. Samples were collected in July 2011 and shipped to Phillips Enterprises LLC in Golden, Colorado for testing under the supervision of Lyntek Inc. (Lyntek) of Lakewood, Colorado. Metallurgical testing began in August 2011 with the completion of comminution studies. The Bond Ball Mill work index determinations ranged from 9.09 to 11.63 kw-hr/st and an evaluation for SAG mill grinding was designated as average. Samples tested demonstrated an average hardness and resistance to grinding, typical of copper ores.</p> <p>Flotation testing was conducted on 8 composites made up of the assay pulps from early diamond drill holes 2011-016, 2011-039, 2011-051 and 2011-071. Grind/recovery tests were completed and indicated a p80 of 150 mesh (106 micron) was suitable for optimum rougher flotation recovery.</p> <p>In 2012, Resource Development Inc. (RD<i>i</i>) was awarded the contract to undertake metallurgical testwork for the Project with the primary objective of generating flowsheet and technical data to support ongoing engineering studies.</p> <p>The metallurgical test program objectives were to confirm/refine the process flowsheet developed in earlier studies in order to produce marketable-grade copper concentrate and evaluate the potential of increasing metal recoveries. The metallurgical test results are expected to be used to design a preliminary process flowsheet.</p> <p>No significant deleterious materials were identified in concentrates generated from locked cycle testing. Contaminants were talc which could be controlled by addition of depressant CMC.</p> <p>A methodical program of density determinations from core samples from the drill program has been carried out. Samples were measured in the core shack by weighing the sample and then submersing it to establish the volume. The overall average of 5,363 density measurements from skarn horizons 0.098 t/ft<sup>3</sup> or 3.14 g/cm<sup>3</sup>.</p> <p>Skyline initially determined the specific gravity (SG) on 440 samples. Their technique was much more elaborate than the ORM system but the results were similar. The 440 samples SG averaged 2.93 g/cm<sup>3</sup> using the Skyline method and 2.94 g/cm<sup>3</sup> using the ORM method. Since then an additional 152 samples were added to the Skyline total.</p>

Criteria	JORC Code explanation	Commentary
		<p>The SG average of all the Skyline determinations is 2.95 g/cm<sup>3</sup>.</p> <p>Groundwater flow at the mine property is in fractured bedrock, consisting of the Leatherwood Granodiorite (a Cretaceous sill), and overlying meta-sedimentary units: the Abrigo (Cambrian), Martin (Devonian), Escabrosa (Mississippian) formations. There is little to no primary porosity. Maps of the underground workings and observations at outcrops indicate that joints and faults are pervasive. The numerous fractures and joints noted in the underground workings and the high variability of the orientations increases the likelihood that the fractures intersect, resulting in a single potentiometric groundwater surface at the site. However, this does not preclude the possibility of perched groundwater in isolated fractures, a common occurrence in other fractured rock settings.</p> <p>Slug testing of two piezometers indicates that the hydraulic conductivity of the fractured rock aquifer is low, on the order of 1 x 10<sup>-6</sup> cm/sec. Elevations of water levels in the piezometers, at springs, and in the underground workings indicate a potentiometric surface that dips to the east, away from surface and groundwater hydraulic divide located in the vicinity of Oracle Ridge west of the property. The average horizontal hydraulic gradient is 0.13 ft/ft. The estimated groundwater velocity is less than one foot per day, based on an effective porosity of less than 2%.</p> <p>Analysis of groundwater samples from the piezometers and underground workings, and water discharging from springs indicates that water is generally a calcium-bicarbonate or calcium-magnesium-bicarbonate type water. Exceptions include Geesaman Spring and PZ-3, which are located downgradient of the mineralised zone. Geesaman Spring and PZ-3 have higher sulfate concentrations, and PZ-3 has a relatively elevated TDS. The elevated sulfate is interpreted to be the result of oxidized sulfide minerals in fractures upgradient of PZ-3 and Geesaman Spring. Because water collected from the underground workings did not generally contain elevated sulfate or have high TDS, the source of elevated sulfate is interpreted to be below the underground workings in the Leatherwood Granodiorite.</p> <p>JRT GeoEngineering (JRT) was retained to provide a Pre-Feasibility Study (PFS) rock mechanics assessment for the proposed Oracle Ridge underground mine project.</p> <p>Evaluation of rock mass classification data from recent investigations confirms that average values are similar to those from historical studies. However, historical values consist only of summaries in reports, and do not include a database where spatial and statistical variations can be fully evaluated.</p> <p>With the recently collected data, a complete database is now available to assess both the spatial variations and statistical ranges in geotechnical conditions. The data indicate: ~ 13% (say 15%) of the rock mass is of 'Fair' rock quality (RMR &lt; 60, average 50, Q' of</p>

Criteria	JORC Code explanation	Commentary
		<p>2);</p> <p>~ 30% is 'Fair-Good' quality (60 &lt; RMR &lt; 70, average 65, Q' of 10); and</p> <p>~ 57% (say 55%) is 'Good' quality (RMR &gt; 70, average 75, Q' of 30).</p> <p>From this data, two conditions are defined: a 'Conservative Case' and a 'Base Case', for use in subsequent analyses, to appropriately consider the range of rock mass conditions likely to be encountered during mining at Oracle Ridge. For general stope planning tasks 'base case' design criteria can be used by ORM mine planners. The 'conservative case' criteria are reserved for contingency planning purposes, and for designing and costing stopes in lower quality rock masses.</p> <p>Regarding work completed by Eagle Mountain, there is no other meaningful and material exploration data beyond what is presented in the current release and previous ASX announcements by the Company.</p>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>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></li> </ul>	<p>Further work will include the progression of various technical studies aimed at assessing future mining and processing options at Oracle Ridge.</p>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in Section 1 and where relevant in Section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>• <i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></li> <li>• <i>Data validation procedures used.</i></li> </ul>	<p>All resource data are stored and validated within an electronic database, which is managed by an external contractor (Maxgeo). All assays were received from the laboratories by electronic file transfer which are automatically imported into the database.</p> <p>Validation is completed on imported assays by Maxgeo. QAQC checks are completed by Eagle Mountain staff.</p> <p>Prior to importing into the database, validation is completed by Eagle Mountain geologists on collar, survey and geology datasets. These include checks for absent fields, overlapping intervals and negative values.</p>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> </ul>	<p>The project site and logging facility has been visited by the Competent Person. A review of mapping, logging, QAQC and sampling procedures was conducted, in addition to laboratory site visits.</p>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>The geological model was prepared by Eagle Mountain staff in Tucson, who have significant familiarity with the deposit geology. The geological setting and controls on mineralisation are well understood given the long mining history and similarities to other deposits in the region.</p> <p>The mineralised zones are predominantly stratiform, with the carbonate units and the proximity to the Leatherwood granodiorite and associated sills acting as the primary controls on mineralisation. Eagle Mountain used geological surface and underground mapping data and geological drill hole and channel logging data to prepare wireframe representations of the carbonates and intrusions.</p> <p>The Competent Person reviewed the geology models prepared by Eagle Mountain staff in Tucson and considers them to be consistent with drilling, channel sampling and mapping data. The interpreted geological setting is also consistent with the generally accepted understanding within the mining community for this style of mineralisation.</p> <p>Lithology definition was primarily based on geological logging, with the boundaries typically corresponding to changes in physical characteristics. However, the interpretation is also supported by the geochemical data, with distinct grades changes evident across some boundaries.</p> <p>Lithological and grade continuity is adversely affected by post-mineralisation faulting and the highly irregular nature of the contact between the intrusions and the sediments, which is a common characteristic of skarns. The estimation techniques have been tailored to moderate the impact of this, most notably with the recent implementation of categorical indicator kriging (CIK) for sub-domaining mineralisation zones within lithological units.</p> <p>Alternative geological modelling approaches were not trialled as part of the resource update. However, there were some differences in the estimation control procedures compared to the previous study completed in 2022, namely the use of CIK to produce low and high grade sub-domains. There were also significant differences between the modelling approaches used after 2019 compared to the procedures applied in 2014, with the latter comprising an explicit modelling approach with a greater reliance on grade data (as opposed to lithological logs).</p>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<p>The grade model has been prepared over an area that extends for approximately 1,680 metres in a north–south direction and approximately 1,400 metres in an east–west direction. Within this area, the defined resource has been limited to subregions with regular drill coverage, which are approximately 1,550 metres north–south by 1,050 metres east–west.</p>

Criteria	JORC Code explanation	Commentary
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>There is an elevation difference of approximately 790 metres between the lowest and highest part of the resource model.</p> <p>The Mineral Resource estimates were prepared using linear and non-linear block modelling techniques.</p> <p>A single model was prepared to represent the defined extents of the mineralisation. The resource modelling and estimation study was performed using Datamine Studio RM Pro. Variography and kriging neighbourhood analysis (KNA) were completed in Snowden Supervisor. The geological model was prepared using Seequent Leapfrog Geo.</p> <p>KNA studies were used to assess a range of parent cell dimensions, and a size of approximately 4.6 x 4.6 x 3.1 metres (15 x 15 x 10 feet) was considered appropriate given the drill spacing and grade continuity characteristics. Sub-celling was applied where required down to approximately 1.5 x 1.5 x 1.5 metres (5 x 5 x 5 feet) to ensure representative volume modelling. Sub-cells were estimated at the parent cell scale.</p> <p>The lithology wireframes were used as hard boundary estimation constraints, meaning that the model cell grades in each domain were estimated using only the samples located within the domain. CIK was used to produce low and high grade sub-domains within each of the estimation domains where a normal grade distribution was not evident in the sample population. This methodology resulted in closer alignment to localised mineralisation observations and accounting for multi-modal sample grade populations. Sub-domains were also used as hard boundary estimation constraints. The extent of CIK sub-domains was controlled by selection of a probability threshold value. A threshold value was selected which minimised sample misclassification by optimising the sub-domain volume to the input sample grades. Visual comparisons of various threshold values were also compared to sample and geological mapping data.</p> <p>Probability plots were used to check for outlier values, and the impact of these on the local estimates was limited by applying a distance restriction to limit the area of influence.</p> <p>The parent cell grades were estimated using ordinary kriging (OK) within each sub-domain, or domain, where applicable. Initial search orientations and weighting factors were derived from variographic studies. Dynamic anisotropy was applied to reproduce the grade trends more accurately in the profile and to enable the search ellipsoids to be more accurately aligned with the local orientations of the geological units. For the largest volume domains, dynamic anisotropy was applied along the lower contact to align with mineralisation observations from logging and mapping data.</p> <p>A multiple-pass estimation strategy was applied. KNA assisted with the selection of search distances and sample number constraints. Extrapolation was limited to approximately half the nominal drill spacing.</p>

Criteria	JORC Code explanation	Commentary
		<p>Local estimates were generated for copper, silver, gold, and density. Assumptions have been made regarding the recovery of silver and gold as copper by-products based on previous mining and metallurgical factors as outlined below.</p> <p>No assumptions have been made regarding selective mining units.</p> <p>Previous metallurgical results did not identify any deleterious elements. At this stage of the project, other non-grade variables of economic significance have not been identified.</p> <p>Model validation included:</p> <ul style="list-style-type: none"> <li>– visual comparisons between the input sample and estimated model grades</li> <li>– global and local statistical comparisons between the sample and model data</li> <li>– assessment of estimation performance measures including kriging efficiency, slope of regression and percentage of cells estimated in each search pass</li> <li>– check estimates using nearest neighbour and inverse distance squared interpolation</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<p>The Mineral Resource estimates are expressed on a dry tonnage basis and in-situ moisture content has not been estimated.</p>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<p>A copper cut-off grade of 0.8% has been used for reporting of the Mineral Resource. The copper cut-off grade was based on a copper price of \$US4 per pound and total site operating costs of \$US50/t, which are considered realistic for an underground mining operation. The copper cut-off grade is consistent with that used for similar projects located within the US and abroad. In the Competent Person's opinion, these factors, in addition to the mining and metallurgical assumptions made below, indicate that the Mineral Resource has reasonable prospects for eventual economic extraction (RPEEE).</p> <p>Grade and tonnage quantities were calculated using several cut-off grade values outside of the adopted cut-off grade to assess sensitivity and facilitate comparison with previous estimates.</p>

Criteria	JORC Code explanation	Commentary
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<p>It is expected that the mining method would be similar to that used prior to the suspension of operations in 1996, which was backfilled long-hole stoping, with longitudinal advance in narrow areas and transverse mining in wider areas. For the previous operation, level spacings of 12 metres and 15 metres were used.</p> <p>Pre-defined grade boundaries were not used as estimation constraints and therefore some internal dilution is included in the estimates. External dilution has not been intentionally added.</p>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<p>It is expected that the metallurgical configuration would be similar to that used prior to the suspension of operations in 1996, which was a crush-grind-flotation flowsheet. Recoveries are expected to be in line with those achieved during this time – 90% for copper and 81% for silver and gold.</p> <p>ORM conducted a number of metallurgical test programs between 2011 and 2013, with the objective of developing and confirming preliminary flowsheets and collecting data that could be used to support subsequent engineering studies. The test programs, which were conducted on diamond core and bulk samples collected from underground exposures, included sample preparation and characterisation, mineralogical studies, grinding studies, rougher and cleaner flotation tests, locked cycle flotation tests, and thickening and filtration tests. The studies indicated the main copper minerals to be bornite, chalcocite, and chalcopyrite, and the main gangue minerals to be magnetite, pyroxene, serpentine, dolomite, and calcite. No deleterious elements were identified.</p> <p>Eagle Mountain are currently completing metallurgical test programs of a similar scope to those completed by ORM as part of a series of technical evaluations for the Oracle Ridge deposit.</p>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status</li> </ul>	<p>Eagle Mountain is currently investigating a number of waste and residue disposal options. These include the return of waste rock as rockfill within the mined stopes, as well as adding to existing waste dumps that are proximal to the portals. Eagle Mountain considers that it may be possible to use the process residue as engineered fill. Eagle Mountain also assessed the existing storage facilities and concluded that there is sufficient capacity to support all anticipated residue from the current Mineral Resource.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></p>	
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li>• <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<p>The density dataset comprises a total of 11,535 results derived from water displacement tests performed on core samples. The tests were conducted onsite by Eagle Mountain staff. The test procedures entailed the measurement of dry and submerged sample weights. Sealing was not required given the competency of the samples.</p> <p>The density dataset was flagged according to estimation domain and used to interpolate a density value to each model cell using similar estimation parameters to those used for grade estimation. Default densities that were approximately equivalent to the dataset average for each domain were assigned to model cells that did not receive an interpolated density value.</p>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>The Mineral Resource classifications were applied to the resource estimates based on a consideration of the confidence in geological interpretation, quality and quantity of the input data, confidence in the estimation technique and the likely economic viability of the material.</p> <p>Data from EM2 drilling and channel sampling is considered of high quality, however the historical datasets used to prepare the Mineral Resource estimates were acquired over an extended period by numerous companies using different sample collection, preparation and analytical techniques. During 2021, Eagle Mountain drilled five diamond holes to aid in the verification of historical data by targeting mineralised volumes of the 2020 Mineral Resource that were primarily informed by historical drilling. The spatial agreement between lithological contacts, mineralisation and grade tenor of these five verification holes reconciled closely to the proximal historical drilling.</p> <p>Remaining significant sources of uncertainty were the reliability of the local estimates and the accuracy of lithological interpretation. These sources of uncertainty were primarily influenced by data density. A combination of confidence in geological interpretation, datal spacing and estimation performance measures were used to identify geologically sound and spatially continuous sub-regions of Measured, Indicated and Inferred Mineral Resources within the model. In terms of grade estimation performance measures, resource classification was primarily based upon the outputs from the copper estimates. This was justified given the similarity between copper, silver and gold estimate performance measures and the notably lower silver and gold contribution to the total contained resource metal.</p>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• A classification of Measured was assigned to regions with a regular drill coverage with an approximate spacing of less than 15 metres (50 feet), and where all cells were estimated in the first pass using at least 12 samples and the slope of regression was at least 0.7.</li> <li>• A classification of Indicated was assigned to surrounding areas with a regular drill coverage with an approximate spacing of up to 30 metres (100 feet), where the cells were estimated in the first or second pass using at least 10 samples and the slope of regression was at least 0.5.</li> <li>• A classification of Inferred was assigned to the surrounding areas where there was still reasonably uniform drill coverage with spacings of up to approximately 60 metres (200 feet), with cells estimated in the second or third search pass using at least 6 samples and a slope of regression exceeding approximately 0.3.</li> </ul> <p>The criteria used for classification and results produced appropriately reflect the Competent Person's view of the deposit.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	An independent review of the Mineral Resource estimates and associated documentation was completed by Mr Rodney Brown of SRK Consulting (Australasia) Pty Ltd.

Criteria	JORC Code explanation	Commentary
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<p>The Mineral Resource estimates have been prepared and classified in accordance with the guidelines that accompany the JORC Code (2012), and no attempts have been made to further quantify the uncertainty in the estimates.</p> <p>The validation checks indicate good consistency between the model grades and the input datasets. The largest sources of uncertainty were the accuracy of the geological interpretation and the grade estimates. These sources of uncertainty were primarily influenced by data density.</p> <p>The Mineral Resource estimate has been prepared on a global scale. The Mineral Resource estimate is considered suitable to support drilling programs and mine planning studies, however it is not considered suitable for detailed production planning or design studies that rely on the accuracy of individual model cell estimates.</p>