



## Significant Exploration Target defined at Oracle Ridge

- **Significant Exploration Target defined**
- **Several additional prospective exploration targets identified beyond the defined Exploration Target**
- **Drill targets being prioritised**

Eagle Mountain Mining Limited (ASX:EM2) ("Eagle Mountain" or "the Company") is pleased to announce an Exploration Target at its 80% owned Oracle Ridge mine in Arizona, USA.

The Exploration Target shown in Table 1 is in addition to the existing NI43-101 Mineral Resource Estimate (MRE)<sup>1</sup> of 11.7 Mt at 1.57% Cu, 17.47g/t Ag and 0.18g/t Au, at a 1% Cu cutoff (refer Appendix 1 for further details) as shown in Table 2 below and is constrained solely within a magnetic high anomaly within the existing mine tenements. In addition Eagle Mountain has identified other prospective areas which have potential to further increase the overall mineralisation at Oracle Ridge.

**Table 1 – Oracle Ridge Exploration Target (Excludes Existing MRE & Mined Out Areas)**

Exploration Target	Copper	Gold	Silver
Tonnes	14 – 29 Mt		
Grade	1.1-1.9 %	0.03-0.26 g/t	7.1-19.3 g/t

*The potential quantity and grade of the exploration target is conceptual in nature and that there has been insufficient additional exploration to estimate an expanded Mineral Resource as at the date of this announcement and whilst additional exploration is planned it is uncertain if this will result in the estimation of an expanded Mineral Resource.*

**Table 2 – Oracle Ridge Mineral Resource Estimate<sup>1</sup>**

Existing NI43-101 Mineral Resource	Copper	Gold	Silver
Tonnes	11.7 Mt		
Grade	1.57 %	0.18 g/t	17.47 g/t
Contained Metal	184 kt Cu	68 kOz Au	6.6 MOz Ag

1. Cautionary Statement: (refer ASX Announcement 29 October 2019) references in this announcement to the publicly quoted resource tonnes and grade of the Project are foreign in nature and not reported in accordance with the JORC Code 2012, or the categories of mineralisation as defined in the JORC Code 2012. A competent person has not done sufficient work to classify the resource estimate as mineral resources or ore reserves in accordance with the JORC Code 2012. It is uncertain that following evaluation and/or further exploration work that the foreign/historic resource estimates of mineralisation will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code 2012. Resource estimates and other information used in this announcement are based on the March 2014 NI43-101 compliant Independent Technical Report prepared by Dr Giles Arseneau of Arseneau Consulting Services Inc for Oracle Mining Corp. This report can be found on the Company's website "[www.eaglemountain.com.au](http://www.eaglemountain.com.au)".

Eagle Mountain's CEO, Tim Mason, commented:

*"The recently defined Exploration Target is exciting because if drilling can prove even a portion of the Exploration Target, then we will have a sizable resource base for future mining studies. In addition to this Exploration Target we have identified several prospective zones for follow-up exploration including depth potential and geophysical anomalies. I look forward to commencing drilling at Oracle Ridge as we advance towards our goal of a sustainable mining operation."*

## Exploration Target

### Methodology

Following completion of the aeromagnetic survey, along with a review of select drill core and existing data and internal geological analysis, the Company has delineated an Exploration Target as extensions to existing mineralisation that is constrained by a magnetic 'high' anomaly.

The Exploration Target has been estimated following a review of an extensive database from previous drilling including, 618 drill holes for 76,000 metres of drilling and 11,600 assays, 100% of which is diamond drill core. (refer ASX Announcement 25 May 2020). In addition, the Company has recently completed an aeromagnetic survey (refer ASX announcement 27 February 2020) which identified a zone of increased magnetism extending beyond the drill defined mineralisation (refer Figure 1). As a portion of the skarn which hosts the existing resource has increased magnetism, this provides support for the Exploration Target.

Significantly, the Exploration Target **excludes** the existing NI43-101 MRE and the target falls entirely within the magnetic high interpreted to be within the Company's patented and unpatented mining claims.

The Exploration Target is based on a geological model of the mine stratigraphy and major intrusions built from the existing drilling database. Approximately 50 holes have been previously drilled within the Exploration Target with many of these holes intersecting skarn horizons which is evidence of an active hydrothermal system. The spacing of previous drilling is quite irregular, varying from 50 to 150 metres, thus leaving large areas untested. Several of these holes which intersected the skarn horizons also intersected copper mineralisation of varying grade.

The model was constrained outside the footprint of the historical MRE and excluded mined out areas. Geological zones highly likely to contain skarn-hosted mineralisation were interpreted to be within an area showing a high magnetic anomaly. The resulting volumes were converted to tonnes using a specific gravity of 3t/m<sup>3</sup>, which is appropriate for mineralisation at Oracle Ridge. A reduction factor of 65% (average) was then applied to the tonnage based on the ratio between known mineralised domains and potentially mineralised volumes within the historical MRE footprint. Final ranges were estimated by applying a lower side discount of 40% and upper side addition of 20%. Where no constraints were available, the average thickness of the potentially mineralised units was used.

### Timeline to test the Exploration Target

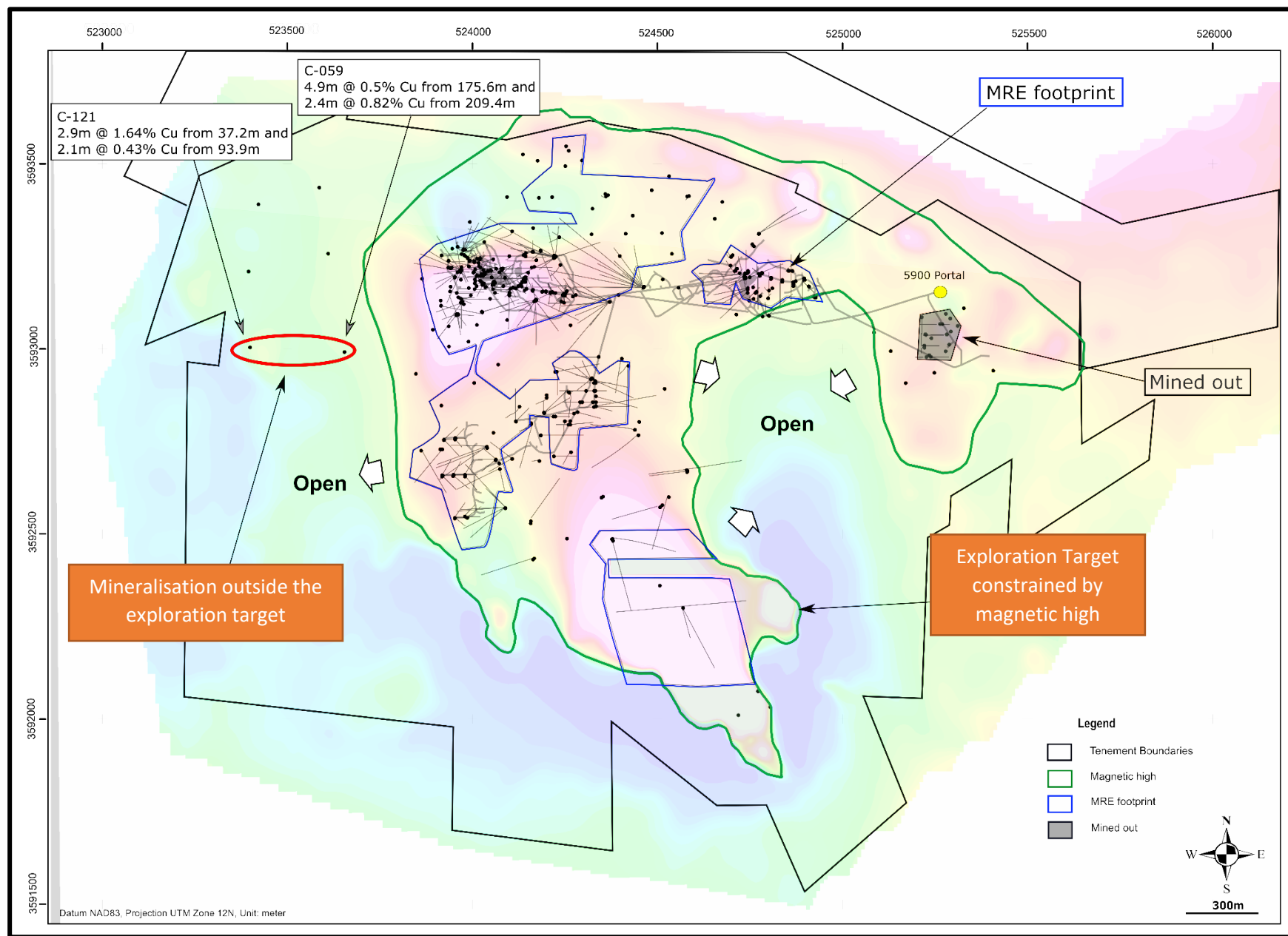
Eagle Mountain has adopted a stepped approach to its proposed exploration program. It is currently digitising the database from previous drilling which, together with recent geophysical analysis, field work and proposed ground truthing will assist in defining priority drill targets within the Exploration Target.

The Company is planning on completing these tasks over the coming months to enable a drilling program to commence which is planned to be undertaken in the second half of 2020.

### **Additional Exploration Prospects**

In addition to the Exploration Target, other prospective zones have been defined as outlined below.

- Historical drilling has intersected mineralisation up to 500m to the west of the existing MRE (Figure 1) in an area with no obvious magnetic anomaly. This shows potential for mineralisation to continue into skarn horizons with no magnetic anomaly.
- In between the Oracle mine portal and the tailings dam (approximately 4km from the mine), recent field work by the Company identified historical waste dumps from previous working along with outcropping sulphides. The Company is currently undertaking field investigations in these areas.
- Skarn mineralisation at Oracle Ridge is hosted within limestone stratigraphy, below which is an intrusive granitoid unit, locally known as the 'Leatherwood'. Previous drilling at Oracle Ridge has not penetrated through the Leatherwood Intrusive. This represents an exciting potential opportunity for either additional copper mineralisation within and below the Leatherwood or the location of a deeper copper porphyry system (Figure 3).



*Figure 1 – Exploration Target constrained by the magnetic high. Total Magnetics Intensity as the Background*

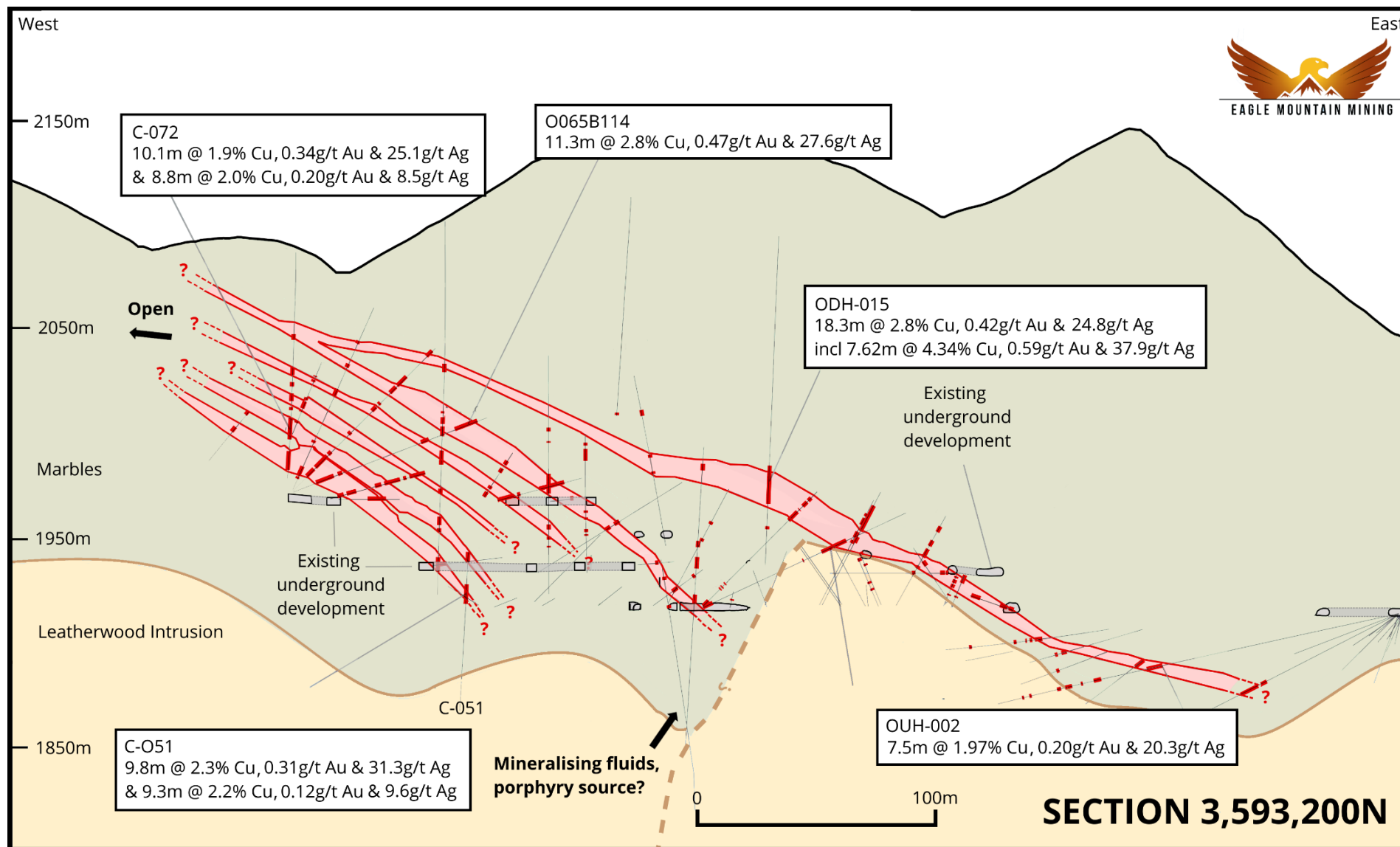
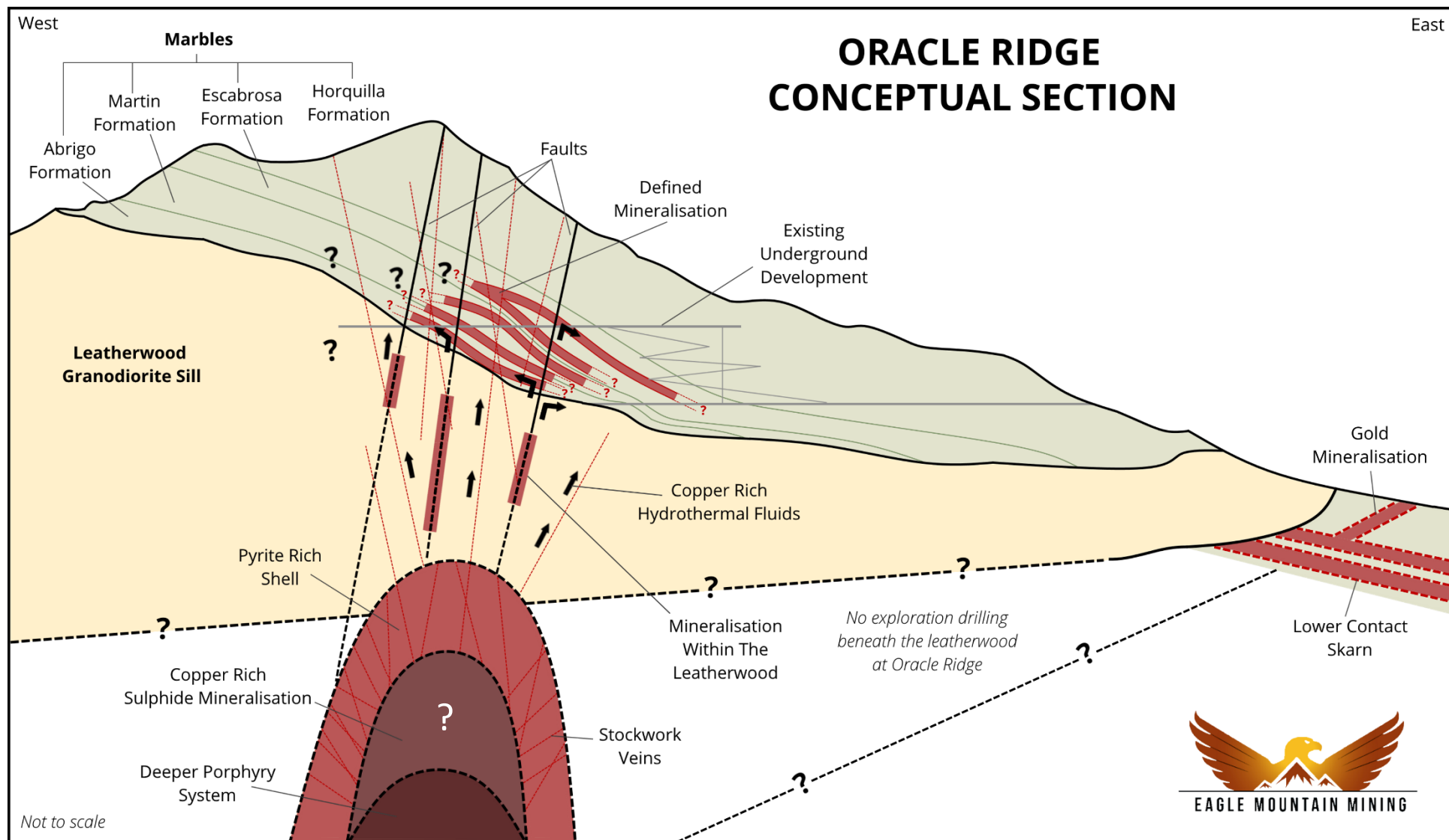


Figure 2 – Section through Oracle Ridge Copper Mine showing location of existing mineralisation and location of potential extensions



**Figure 3 – Conceptual Geological Section through Oracle Ridge showing potential source of mineralisation**

*Note - The Section shown in Figure 3 is both conceptual and speculative. There has been no exploration drilling beneath the 'Leatherwood' and it is therefore uncertain if any future exploration will define the source of mineralisation as conceptualised.*

## Next Steps at Oracle Ridge

The Company is methodically stepping through a geologic program and has recently commenced field mapping including ground truthing of various targets. In addition, the following tasks are either underway or planned to commence in the second half of 2020:

- Interpret the results from the recently completed airborne VTEM geophysics;
- Confirm existing mapping and create a 3D structural and geological model;
- Define drill targets which initially focus on extensions to existing mineralisation;
- Commence a drilling program focussing on priority high grade zones; and
- Develop an initial JORC 2012 Mineral Resource Estimate.

When priority drill targets within the Exploration Target have been identified, Eagle Mountain will plan a drilling program estimated to commence during the second half of 2020.

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*This Announcement has been approved for release by the Board of Eagle Mountain Mining Limited*

## **EAGLE MOUNTAIN MINING LIMITED**

Eagle Mountain is a copper-gold explorer focused on the strategic exploration and development of highly-prospective greenfields and brownfields projects 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.

## **COMPETENT PERSON STATEMENT**

The information in this document that relates to the Exploration Target and technical information about the Oracle Ridge Copper Mine is based on, and fairly represents information and supporting documentation compiled and reviewed by Mr Kevin Francis who is an independent consultant to the company. Mr Francis is a Registered Member of the Society of Mining, Metallurgy & Exploration. Mr Francis holds no interest in the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Francis consents to the inclusion in this announcement of the matters based upon the information in the form and context in which it appears.

Where the Company references results and technical information from previous ASX announcements including the Oracle Ridge Copper Mine and the announcement made on 29 October 2019, JORC Table 1 disclosures are included within them. The Company confirms that it is not aware of any new information or data that materially effects the information included in those announcements, and all material assumptions and technical parameters underpinning the results and resource estimates with those announcements continue to apply and have not materially changed. In addition the form and context in which the Competent Persons findings are presented have not been materially modified from the original reports.

## **FORWARD LOOKING STATEMENTS**

This announcement may include forward looking statements. Forward looking statements inherently involve subjective judgement, and analysis and are subject to significant uncertainties, risks and contingencies, many of which are outside the control of, and may be unknown to, the Company.

Statements regarding the Company's plans with respect to its mineral properties and programmes are forward-looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that the Company will be able to confirm the presence of additional Mineral Resources/Ore Reserves, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties. The performance of the Company may be influenced by a number of factors which are outside the control of the Company and its Directors, staff and contractors. Given these uncertainties, readers are cautioned not to place undue reliance on forward looking statements.



## Appendix A

### Mineral Resource Estimation

The resource estimates provided in this announcement have been taken from the 31 March 2014 Independent Technical Report for the Oracle Ridge Project prepared by Dr Gilles Arseneau, P.Geo, principal of Arseneau Consulting Services Inc. (refer ASX announcement 29 October 2019)

These resource estimates are Canadian NI43-101 compliant. As such, the Canadian Institute of Mining applies a standard that there are “reasonable prospects for economic extraction” in its definition of Mineral Resources.

Arseneau considers that “major portions of the Oracle Ridge Project are amenable to underground extraction”.

The table below presents the Mineral Resource Estimate calculated by Arseneau at a 1.0% CuEq (copper equivalent) cut-off grade. The Mineral Resource Estimate is not JORC compliant.

Resource Class	Tonnes (Millions)	Cu %	Ag g/t	Au g/t	Contained Cu, lbs (Millions)	Contained Ag, oz (Millions)	Contained Au, oz ('000)
Measured	1.06	1.59	18.86	0.24	37	0.6	8
Indicated	5.58	1.61	17.83	0.21	199	3.2	38
Inferred	5.12	1.53	16.80	0.14	173	3	22
<b>Total</b>	<b>11.76</b>	<b>1.57</b>	<b>17.47</b>	<b>0.18</b>	<b>409</b>	<b>6.8</b>	<b>68</b>

*Table 2 Summary of latest Mineral Resource Estimate – NI43-101 Compliant.*

#### *Note in respect to Copper Equivalency:*

The cut-off grade of 1% CuEq was used to ensure reasonable prospects of economic extraction assuming underground mining. Silver and gold grade estimates were based on a less comprehensive data set than the copper grade estimates. Where copper grade estimates exist without accompanying silver and gold grade estimates, the drill hole was not used to estimate silver or gold grade. Copper equivalency has been estimated using metal pricing of US\$2.80 per pound of copper, US\$20 per ounce of silver and US\$1,300 per ounce of gold. Metallurgical recovery was derived from preliminary locked cycle test results and assumed to be 81% for gold and silver. The prices used were a reflection of market at the time of the Mineral Resource Estimate and reasonable forecasts. The formula used is as follows:

$$\text{CuEq} = \text{Cu\%} + \{(\text{Ag oz/ton} * \text{US\$20} * 0.81) + (\text{Au oz/ton} * \text{US\$1,300} * 0.81)\} / \$2.80 / 2,000 * 100$$

**Cautionary Statement:** (refer to ASX announcement 29 October 2019) references in this announcement to the publicly quoted resource tonnes and grade of the Project are historical and foreign in nature and not reported in accordance with the JORC Code 2012, or the categories of mineralisation as defined in the JORC Code 2012. A competent person has not done sufficient work to classify the resource estimate as mineral resources or ore reserves in accordance with the JORC Code 2012. It is uncertain that following evaluation and/or further exploration work that the foreign/historic resource estimates of mineralisation will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code 2012. Resource estimates and other information used in this announcement are based on the March 2014 NI43-101 compliant Independent Technical Report prepared by Dr Giles Arseneau of Arseneau Consulting Services Inc for Oracle Mining Corp. This report can be found on the Company's website "[www.eaglemountain.com.au](http://www.eaglemountain.com.au)".

## Appendix B – JORC Code, 2012 Edition – Table 1

This Table 1 report pertains specifically to the technical information relating to the Oracle Ridge Mine as set out in the attached Announcement.

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (eg 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. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<p><u>Oracle Ridge Mining LLC (ORM, 2010 onwards):</u></p> <ul style="list-style-type: none"> <li>Diamond drill core was sampled as half core at nominal 1.52 metre (5 ft) increments beginning and ending at geologic contacts.</li> <li>100% of the drilling is derived from diamond drill core. There is a total of 618 diamond drill holes totalling 76,773.6 metres.</li> <li>Contacts and sampling increments were defined by geologists and marked on the core prior to splitting into two halves by a core splitting hammer.</li> <li>Skyline Laboratories of Tucson Arizona has been the primary assay lab utilizing the following assay methods: <ul style="list-style-type: none"> <li>FA-3 fire assay with gravimetric finish of a 30g charge.</li> <li>SEA-Cu total copper analysis with complete acid digestion.</li> </ul> </li> <li>During initial surface (19 holes) and underground core drilling (9 holes), SGS labs was used for sample assays utilizing the following criteria: <ul style="list-style-type: none"> <li>Wt. sample submission weight captured in kilograms</li> <li>FAA303 SGS Laboratories, 30 g fire assay with AAS finish for gold</li> <li>ICP90Q Sodium Peroxide Fusion ICP-AES analysis for Cu, Fe and Mo</li> <li>AAS42E 2g 4 acid digestion with AAS finish</li> <li>SQL01D sequential copper leach H2SO4 soluble Cu</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p><u>Historical</u></p> <ul style="list-style-type: none"> <li>485 of the core holes were drilled by several companies prior to ORM's involvement. Drilling campaigns were completed by Continental Copper, Continental-Union Miniere and Oracle Ridge Mining Partners from 1970 to early 1990. Core samples from these campaigns were assayed at independent commercial labs. From 2010 onward successful efforts were made to relocate historical drill hole collars, obtain original assay certificates and in the case of 67 holes with existing core, were relogged, photographed and submitted for a current assay with QA/QC samples inserted. In general, current assays compared favourably to historical results; however, a copper grade reduction factor of 12.5% was applied to all historical samples without a current assay. The source of the bias has not been identified and appears to be consistent across all copper grade ranges. Current assays replaced the historical assays. Eleven historical underground percussion drill holes were twinned by core and showed generally little correlation, as a result all percussion drill samples were removed from the assay database.</li> </ul>
<p><b>Drilling techniques</b></p>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core drilling was used exclusively from 2010 to present at core diameter HQ reducing to NX as drill conditions dictated. The core was not oriented but the initial azimuth and dip was selected in order to pierce the skarn mineralisation perpendicular to bedding. The drill hole collars and downhole survey were completed by contractors. Downhole surveys used gyroscopic survey tools with backsight due to presence of magnetite.</li> <li>Historical diamond drill core is primarily BQ sized.</li> </ul>
<p><b>Drill sample recovery</b></p>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure</li> </ul>	<ul style="list-style-type: none"> <li>Cores were measured, recorded and compared to the drilled interval to estimate recovery.</li> <li>The driller controlled rig speed and down pressure in order to</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>representative nature of the samples.</i></p> <ul style="list-style-type: none"> <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>maximize recovery. Diamond drill core is the preferred sampling method to ensure representative nature of samples.</p> <ul style="list-style-type: none"> <li>• No relationship between sample recovery and grade has been identified. Mineralisation is primarily controlled by veins along narrow structures and sample bias is not believed to be material.</li> </ul>
<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>	<ul style="list-style-type: none"> <li>• Since 2010, diamond drill core has been geologically and geotechnically logged to a level of detail to support Mineral Resource estimation, mining studies and metallurgical studies. Drill core was logged in detail for lithology, alteration, mineralisation, structure and veining. In addition, rock quality designation (RQD) was kept for geotechnical purposes. Core photos and the remaining half core have been retained for further geologic or geotechnical samplings as may become necessary.</li> <li>• Historical core has been geologically logged and infilled by contemporary drilling.</li> <li>• Geologic rock types, alteration and structure are recorded based on visual determination.</li> <li>• Diamond core was photographed prior to splitting.</li> <li>• Post 2010 drill holes were logged in full. Historical core boxes that appeared to be complete and unmixed were logged in full.</li> </ul>
<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</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond drill core collected after 2010 was mechanically split into two halves, one submitted for assay and the other kept. The resampling program of historical core used the entire remaining half core.</li> <li>• Samples were 100% core.</li> <li>• Industry standard diamond drilling techniques were used and are considered appropriate for use in Mineral Resource estimation.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <ul style="list-style-type: none"> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>For diamond drill core, sample quality was maintained by a geologist responsible for defining each sample interval based on geologic contact or sample length.</li> <li>No second half core sampling has been completed to date. The Oracle Ridge project is a copper skarn not typically associated with half core scale variability. A core library exists in the event that duplicate sampling is necessary. Core recovery is generally excellent.</li> <li>Sample sizes are considered appropriate to the copper mineralisation based on the style of mineralisation, the thickness of the intersections, the sampling methodology and the assay value ranges for copper.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>The copper analysis undertaken is a total copper assay using 4 acid total digestion. Total copper analysis is appropriate given that the primary copper minerals are sulphides and oxide and silicate minerals of copper are absent or in minor amounts. Fire assay with gravimetric finish of gold and silver samples is a total method and provides precise and accurate results.</li> <li>Handheld Niton XRF instruments are used qualitatively to identify the margins of mineralisation and not for Mineral Resource estimation and utilize the built-in calibration test and are sent to an authorized repair facility for servicing.</li> <li>Since 2011, the project has assayed 6,771 core samples, 5,672 were assayed at Skyline and 1,099 were assayed at SGS laboratories. In addition to the core samples, ORM submitted 255 blank samples and 206 standard reference material ("SRM"). Blanks and SRMs were only submitted starting with the 2012 drilling program. No SRM or</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>blanks were submitted with the 2011 drill samples. ORM geologists insert blanks after each high-grade sample to check for contamination at the lab's sample preparation facility. SRM are inserted with each mineralised interval. ORM used three commercially prepared SRM samples. During the 2010 drilling program, 69 samples from holes 2011-016, 2011-051, 2011-071, ODH 002, ODH 006, ODH 007 and ODH 008 were assayed at both of Skyline and ALS Chemex. The ALS results agree well with the Skyline assays with ALS reporting slightly lower copper grade than Skyline. The correlation is very good between ALS and Skyline with the Skyline assays being slightly lower than ALS between the ranges of 2.5 and 4% copper. The quality control processes used for the historical drilling are unknown. Remaining historical core was submitted to Skyline Labs for a new assay which included blanks and SRM's. The paired data were analysed and an unexplained high copper assay bias of 12.5% was corrected in the remaining historical assays not reassayed. The programs adopted by the project have assured acceptable levels of accuracy and precision.</p>
<p><b>Verification of sampling and assaying</b></p>	<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>	<ul style="list-style-type: none"> <li>• The intersections were reviewed by the project's Chief Geologist during sample selection and after receipt of assay results.</li> <li>• Two twin programs were drilled during deposit development. The first program consisted of 8 diamond drill holes drilled from the surface intended to replicate significant intervals in historical drilling. The comparison of the twins is generally good regarding the location and width of mineralised zones. However, significant grade differences were identified in part related to the variability of the copper mineralisation. The second twin program tested underground percussion drill holes with diamond drill holes. The</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>analysis of the twin samples prompted the removal of all percussion drilling from the Mineral Resource estimate.</p> <ul style="list-style-type: none"> <li>• All data are stored and validated within an electronic database. Drill collars and downhole surveys were recorded by company staff, recorded in the drill hole record and loaded into the database. Since 2010, all assays were received electronically and entered into the database via positive matching of holeid, from and to depths using Excel vlookup function. Historical assay data has been transcribed from original signed assay certificates into the electronic database. The majority of original assay certificates from the 1980's onward are available.</li> <li>• In 2012, Oracle carried out a limited re-sampling program of the historical drill core stored at the mine site. In total 186 samples were collected from the existing drill core. Not all of the re-sample intervals matched the original intervals complicating the comparison of the re-assay results with the original data. However, preliminary results indicated that the historical copper assay data was possibly biased on the high side. Prompted by these results, the project re-sampled all known existing drill core in order to quantify any bias and determine if an appropriate correction factor could be applied to the historical copper assays. In total, 1,557 samples were collected from historical drill core stored at the mine site, these included 753 new samples of previously un-sampled core leaving a total of 990 paired samples used for the comparison to quantify the bias associated with the historical data. Review of the paired data confirmed that the historical assay data did appear to be biased on the high side when compared with the re-assayed core. Re-assayed copper values reviewed on a scatter plot against the original copper assays don't follow the one to one correlation line. The linear trend indicates that the historical assay data are higher than the re-</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>assayed data and most of the points plot above the one to one correlation line indicating that the historical assay data are higher than the re-assayed core. To correct the bias associated with the historical data, the historical assay data were adjusted until the QQ plot of the historical assay data matched the re-assayed data. Several adjustment factors were evaluated from 5% to 20%. Based on an analysis of several grade adjustments, the best fit appeared to be a reduction of historical copper assays of 12.5%. The original and adjusted copper values are both recorded in the drilling database.</p>
<p><b>Location of data points</b></p>	<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>	<ul style="list-style-type: none"> <li>• Collar surveys are conducted by Darling Survey and Environmental of Tucson, Arizona, using a total station. Downhole surveys were completed by IDS Surveys, an independent contractor using a back-sighted gyroscopic survey instrument. In 2013, the project rented a Reflex gyroscopic downhole survey instrument and the driller completed the downhole survey. The collar and downhole surveys are analysed for discrepancies in azimuth and dip. Anomalous values are removed from the drilling database.</li> <li>• The ground coordinates are based on UTM Zone 12 Arizona Central State Plane, the map datum is NAD83 and the vertical values are in NAVD88. The centroid for scaling from grid to ground is N 538657.436 ft and E 1070796.672 ft and the scale factor is 1.00017864591</li> <li>• The topographic surface is based on a January 14, 2011 survey by Cooper Aerial Surveys Co. Using the National Standard for Spatial Data Accuracy, the survey has an accuracy of <math>\pm 0.3</math> metres (<math>\pm 1</math> foot) in all key project areas. A surface and underground survey of locatable historic drill collars was carried out by Darling Survey and Environmental. A survey of the accessible underground workings was</li> </ul>



Criteria	JORC Code explanation	Commentary
		carried out by 3D Digital Scan, also by Darling.
<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>	<ul style="list-style-type: none"> <li>Data spacing within the mineralised skarn beds ranges from 10 metres to 31 metres.</li> <li>Data spacing is adequate to define the geological and grade continuity for Mineral Resource estimation. Classification has taken into account drill spacing.</li> <li>Sample lengths within the database are not composited. Sample compositing was applied to data extracts for statistical analysis and Mineral Resource modelling.</li> </ul>
<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>	<ul style="list-style-type: none"> <li>To the extent limited by surface access and existing underground openings, surface and underground geological mapping were used to guide the location of drill holes to minimize the impact of structures. In the area of the reported Mineral Resource estimate, drilling density has minimized the possibility of structural bias.</li> <li>No orientation-based sampling bias has been identified to date in the data.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody was managed by the project team under the supervision of the Chief Geologist.</li> <li>Core samples were bagged and sealed by duct tape.</li> <li>Samples were stored in a fenced and gated facility until driven by company personnel to Skyline Labs in Tucson. In the event of using Chemex or SGS labs, samples were sealed in 5 gallon buckets and taken to a UPS facility for transport to the lab.</li> </ul>
<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>	<ul style="list-style-type: none"> <li>During the development of the project, several NI43-101 technical reports were prepared and each Qualified Person reviewed the sampling techniques and data.</li> <li>The drilling database was compared to existing assay certificates and</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>with the exception of a few minor errors which were corrected, the database was deemed sufficient for Mineral Resource estimation.</p> <ul style="list-style-type: none"> <li>• Percussion drilling information was found to be unsuitable for Mineral Resource estimation and was removed from the database.</li> <li>• Remaining core from historical diamond drill holes were re-assayed and the remaining historical assays were adjusted downward by 12.5%.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b><i>Mineral tenement and land tenure status</i></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> <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>	<ul style="list-style-type: none"> <li>• The Oracle Ridge mine is located on Oracle Ridge and Marble Peak approximately 24 kilometres by air northeast of Tucson, Arizona, U.S.A. and is located in Sections 17, 18, 19 and 20 of Township 11 South, Range 16 East, Gila and Salt River Base and Meridian. The geographical coordinates are approximately Latitude 32°28' North, Longitude 110°41' West.</li> <li>• The Oracle Ridge mine is 80% owned by Wedgetail Operations LLC (WTO), an Arizona limited liability corporation and wholly owned subsidiary of Eagle Mountain Mining Limited.</li> <li>• The project consists of 57 Patented Mining Claims covering approximately 364 hectares, 143 hectares of private land and 405 hectares of Unpatented Mining Claims.</li> <li>• In 2009, the surface rights for the area necessary for potential mining access, processing facilities and offices have been secured by an industrial property lease. Under the Lease, Wedgetail Operations LLC leases from Marble Mountain the surface rights to the project for the purpose of carrying out its exploration, and potential development and mining. The lease has an initial term of three years and is renewable for nine additional extensions of three years each.</li> <li>• 100% of the mineral rights below 50ft from surface will be owned by Wedgetail</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Operations LLC.</p> <ul style="list-style-type: none"> <li>• There is a 3% net smelter returns royalty on the future sale of any metals and minerals derived from the project.</li> <li>• The land tenure is secure at the time of reporting and there are no known impediments to obtaining permits to operate in the area.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Oracle Ridge Mining District was discovered in 1873. In 1881, a 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 and Geesaman mines and other small mines in the area.</li> <li>• Phelps Dodge Copper Company entered the District in 1910 and undertook considerable development and exploration work.</li> <li>• 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 look at the mineralisation.</li> <li>• Union Miniere began a new exploration program in April 1980. In 1984, a feasibility study for a 1,814 tonne per day operation was completed.</li> <li>• 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 tons per day.</li> <li>• The mine closed in 1996 having produced an estimated 816,000 tonnes.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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 later by epidote, magnetite and chlorite.</li> <li>• Copper dominated mineralisation generally contain chalcopyrite and bornite. The deposits are most commonly associated with Andean-type plutons intruded in older continental-margin carbonate sequences. The associated intrusive rocks are commonly</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>porphyritic stocks, dikes and breccia pipes of quartz diorite, granodiorite, monzo-granite 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> <ul style="list-style-type: none"> <li>The copper rich skarn deposits at Oracle Ridge are found in conformable lens 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. The later can form a "Christmas Tree" type shape.</li> </ul>
<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> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>For information relating to previous drilling, the reader is referred to EM2 ASX Announcement on 25 May 2020.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>A minimum cut off grade of 1% copper was used and a weight-averaging applied based on sample length.</li> <li>Past reporting of metal equivalency used the following formula: Copper equivalency has been estimated using metal pricing of US\$2.80 per pound of</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>copper, US\$20 per ounce of silver and US\$1,300 per ounce of gold. Metallurgical recovery was derived from preliminary lock cycle test results and assumed to be 81% for gold and silver. The formula used is as follows: <math>CuEQ = Cu\% + \{(Ag\text{ oz/ton} * \\$20 * 0.81) + (Au\text{ oz/ton} * \\$1,300 * 0.81)\} / \\$2.80 / 2,000 * 100</math>.</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>	<ul style="list-style-type: none"> <li>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. Underground drill holes were designed to take skarn bed orientation into consideration.</li> <li>Due to variable skarn bed orientation and limitations imposed on drill hole orientation, true versus drilled widths vary accordingly.</li> <li>Assays results for drill hole OUH-063 are reported as down hole length only as true width is not known</li> </ul>
<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>	<ul style="list-style-type: none"> <li>No significant discoveries being reported. Maps and images of the 3D model are presented in the body of the announcement.</li> </ul>
<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 Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not disclosed in this announcement.</li> </ul>

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<i>Other substantive exploration data</i>	<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>	<ul style="list-style-type: none"> <li>Surface and underground mapping and sampling has been undertaken over the life of the property.</li> <li>An airborne magnetic and resistivity geophysical survey was conducted in 1995 by DIGHEM.</li> <li>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. 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. In 2012, Resource Development Inc. 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. 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.</li> <li>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.</li> <li>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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>density measurements from skarn horizons 0.098 t/ft<sup>3</sup> or 3.14 g/cm<sup>3</sup>. 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. The SG average of all the Skyline determinations is 2.95 g/cm<sup>3</sup>.</p> <ul style="list-style-type: none"> <li>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. Slug testing of two piezometers indicates that the hydraulic conductivity of the fractured rock aquifer is low, on the order of <math>1 \times 10^{-6}</math> 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%. 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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>is interpreted to be below the underground workings in the Leatherwood Granodiorite.</p> <ul style="list-style-type: none"> <li>JRT GeoEngineering was retained to provide a Pre-Feasibility Study (PFS) rock mechanics assessment for the proposed Oracle Ridge underground mine project. Evaluation of rock mass classification data from recent investigations confirms that average values are similar to those from historic studies. However, historic values consist only of summaries in reports, and do not include a database where spatial and statistical variations can be fully evaluated. 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: <ul style="list-style-type: none"> <li>~ 13% (say 15%) of the rock mass is of 'Fair' rock quality (RMR &lt; 60, average 50, Q' of 2);</li> <li>~ 30% is 'Fair-Good' quality (60 &lt; RMR &lt; 70, average 65, Q' of 10); and</li> <li>~ 57% (say 55%) is 'Good' quality (RMR &gt; 70, average 75, Q' of 30).</li> </ul> </li> </ul> <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>
<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>	<ul style="list-style-type: none"> <li>The project has seen various periods of exploration, development and mining activity and compilation of the various works is necessary to guide the next phase of exploration activity. The expectation is the compilation will generate exploration targets for subsequent drilling and Mineral Resource estimation update.</li> <li>Areas of possible extensions have been generated through the data compilation program, further work, ground truthing and ultimately drilling is planned to be carried out.</li> </ul>