

## **Nearby Historic Mine Samples and South Talon Surface Samples Return Strong Assay Results - Enhancing Scale Potential at Oracle Ridge**

### **Highlights**

- Assays from the nearby historic Hartman-Homestake underground mine deliver multiple high-grade base and precious metal results. Rock-chip assays include:
  - 4.42% Cu, 60.80g/t Ag, 0.29% Zn and 0.87% Pb (HH14)
  - 3.93% Cu, 344g/t Ag, 0.76% Zn and 3.22% Pb (HH19)
  - 3.09% Cu, 73.20 g/t Ag, 0.06% Zn and 0.03% Pb (HH16)
  - 2.98% Cu, 139g/t Ag, 0.05% Zn and 0.01% Pb (HH12)
  - 2.42% Cu, 79.10g/t Ag, 1.99% Zn and 0.94% Pb (HH3)
- Situated within the Oracle Ridge Project, the Hartman-Homestake mine is:
  - Located on patented mining claims where drilling can be expedited
  - 500 metres from the existing JORC mineral resource and 2 kilometres from the mine portals by road
  - Last mined in the mid-1930s
- Significant zinc and lead assays as well as apparent structural control makes this area quite different to anything seen in the main mine area and any drilling to-date
- Two kilometres southwest from the Hartman-Homestake mine, an additional 38 surface rock-chip samples from the southern Talon and near the historic Stratton workings indicate that the current modelled resource extends to the surface in this area. Selected results include:
  - 8.96% Cu, 79.40 g/t Ag and 0.75g/t Au (E209411)
  - 8.63% Cu, 61.90g/t Ag and 0.94g/t Au (E209420)
  - 5.25% Cu, 131g/t Ag and 1.21g/t Au (E209403)
  - 4.57% Cu, 196g/t Ag and 3.69g/t Au (E209429)

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

*"These excellent assay results at the Hartman-Homestake mine demonstrate the broader endowment potential of the Oracle Ridge project. Extensive skarn alteration and strong copper, silver, zinc and lead occur within two kilometres of the existing mine portals. We are planning additional work to better understand the local geology and develop drill ready targets. Importantly, the Hartman-Homestake area is located on patented claims and, after geological targets have been refined, earthworks and drilling can be expedited.*

*These results strongly enhance our view that there is much more mineralisation to be discovered at Oracle Ridge, bolstering our plans for a future mine with growth potential.*

*This new information supports our hypothesis that similar to many other copper skarn deposits in the world, there is quite a broad area of separate mineralised zones."*





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

The Company's technical team has recently completed further mapping and sampling across the Oracle Ridge mine area. Key goals of this program included:

- Reconnaissance mapping near historic mines along both the western and southern flank of Marble Peak, the main topographic feature at Oracle Ridge;
- Improve the understanding of the surface expression of the mineralisation intersected in the drilling at the Talon; and
- Constrain the geological model by detailed mapping of the Leatherwood-Sediments contact at surface in the Talon area.

The key outcomes of the program are described below.

### **Reconnaissance Mapping and Sampling of Historical Mines**

The Marble Peak area contains several historical workings in the vicinity of the Oracle Ridge mine portals. Two groups of workings which were never previously mapped and sampled in detail include:

- The Hartman-Homestake mine, situated two kilometres to the west of the portals by road and 500 metres northwest of the current Mineral Resource Estimate (MRE); and
- The Stratton area, located approximately 600 metres to the west of the southern Talon area.

#### ***Hartman-Homestake Mine***

Limited information is available regarding historical production from the Hartman-Homestake mine which is believed to have been operational in the early decades of last century. A recent review of historical reports by the Company's technical team highlighted the existence of underground workings covering an area of approximately 100 by 100 metres. Also, historical samples reported on the underground maps showed encouraging base metals values. Preliminary observations from a reconnaissance visit highlighted the following encouraging results (refer to Figures 1 and 2):

- The local geology includes skarn-altered Abrigo Formation, a geological unit hosting significant Cu-Ag-Au mineralisation at Oracle Ridge;
- Underground exposures show abundant skarn alteration and copper mineralisation which appears to be structurally controlled. The key feature of the area is a northeast-southwest trending fault which seems to focus the mineralisation. This structure is interpreted to be a southwestern splay of the regionally significant Geesaman Fault to the north.
- 20 rock-chip samples collected across the underground workings returned several high-grade assays, with significant results highlighted in Table 1 and full results in Attachment A.





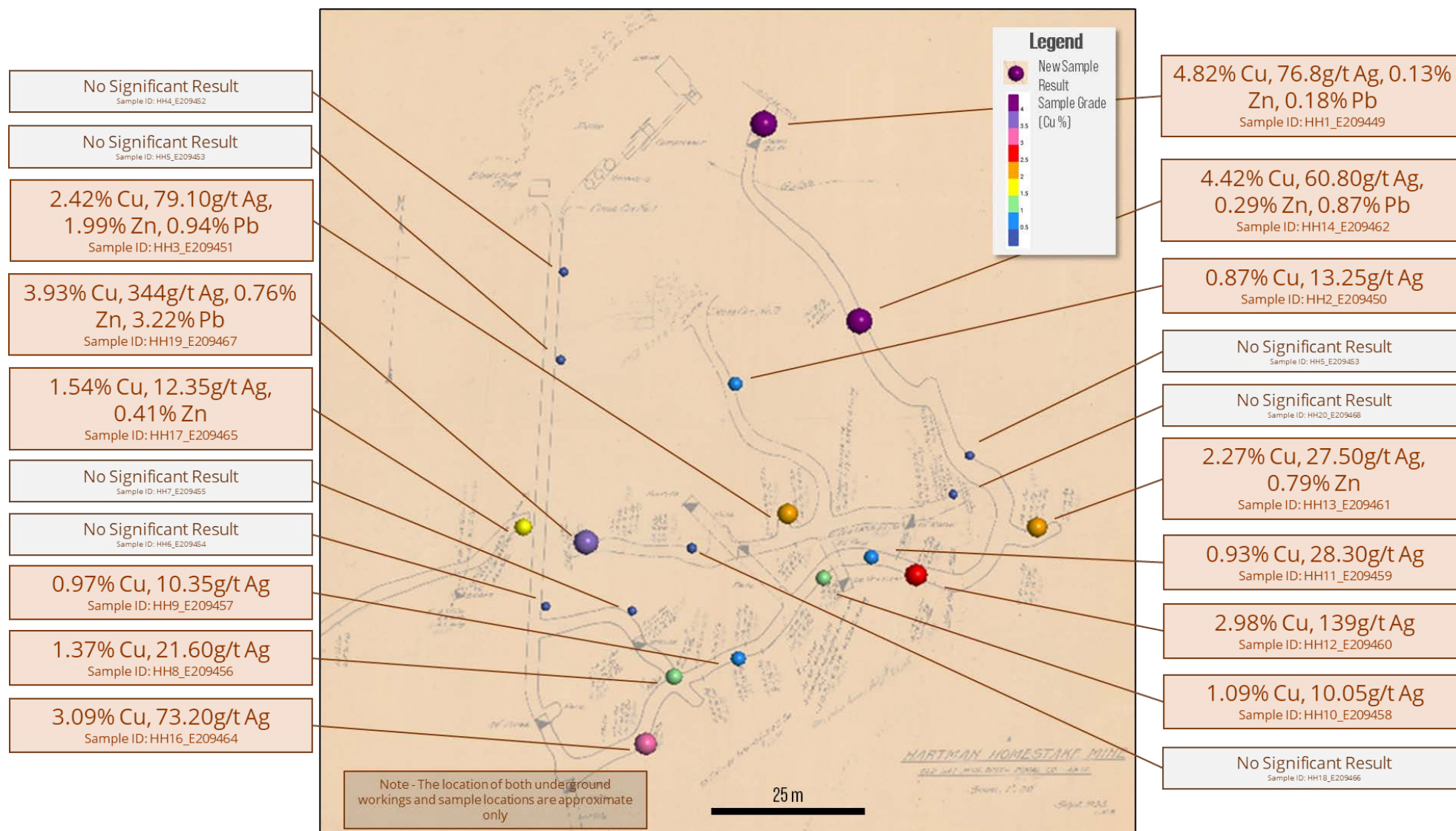


Figure 2 – Historic map (circa 1930s) of the Hartman-Homestake mine, showing new assays of rock-chip samples received



Table 1 – Summary of Significant Rock-Chip samples from the Hartman-Homestake mine

Sample ID	Easting [m]	Northing [m]	Cu [%]	Ag [g/t]	Zn [%]	Pb [%]
HH1_E209449	523397	3593538	4.82	76.80	0.13	0.18
HH3_E209451	523401	3593469	2.42	79.10	1.99	0.94
HH8_E209456	523380	3593441	1.37	21.60	0.02	0.01
HH9_E209457	523392	3593444	0.97	10.35	0.04	0.01
HH10_E209458	523407	3593458	1.09	10.05	0.06	0.00
HH11_E209459	523415	3593461	0.93	28.30	0.05	0.14
HH12_E209460	523423	3593458	2.98	139	0.05	0.01
HH13_E209461	523445	3593467	2.27	27.50	0.79	0.05
HH14_E209462	523414	3593503	4.42	60.80	0.29	0.87
HH16_E209464	523375	3593429	3.09	73.20	0.06	0.03
HH17_E209465	523354	3593467	1.54	12.35	0.41	0.05
HH19_E209467	523365	3593465	3.93	344	0.76	3.22

Unlike the main Oracle Ridge mine area, the copper-silver mineralisation shows a strong association with lead and zinc and low gold values. This observation suggests that the mineralising system at the Hartman-Homestake is somewhat different from the Oracle Ridge mine and is likely a result of having been emplaced in a lower temperature hydrothermal environment.

Results from the reconnaissance mapping are considered highly encouraging and follow-up work is being planned, including:

- Review and compilation of historical data, such as available reports, geological maps and historical rock-chip and channel samples;
- Detailed mapping and sampling, including channel samples across key mineralised areas;
- Geological interpretation and 3D modelling to define viable drill targets;
- Underground survey of the workings; and
- Eventual drilling from surface.

Should the results of the above programs be favourable, a drilling campaign will be designed to test the area. The Hartman-Homestake mine is subject to seasonal flooding and therefore the planned work will be carried out when water levels are sufficiently low to ensure good exposure and the safety of the Company's personnel.



### *Stratton Mine Area*

The Stratton area is situated approximately 600 metres to the west of the Leatherwood mine at the Southern Talon (Figure 1). The current reconnaissance mapping covered the eastern-most adits in this group of workings as well as outcropping mineralisation in the vicinity.

All rock-chips in the area returned copper values exceeding 1% (refer to Table 2 and Figure 1). Assay results show a chemistry similar to Oracle Ridge, with copper and silver associated with gold rather than lead and zinc, as observed at the Hartman-Homestake mine. This is consistent with the mineralisation defined in the current MRE model.

**Table 2 – Summary of Rock-Chip samples from the Stratton area**

Sample ID	Easting [m]	Northing [m]	Cu [%]	Ag [g/t]	Au [g/t]
E209401	524367	3592154.03	3.12	6.19	0.04
E209402	524353	3592158.65	3.29	2.66	0.02
E209403	524329	3592170.79	5.25	131	1.21
E209404	524322	3592336.83	1.20	11.45	0.13
E209405	524352	3592290.57	1.69	16.55	0.47
E209406	524430	3592172.59	2.67	30.50	0.65

### **Southern Talon Surface Mapping and Sampling**

The Talon mapping successfully defined the location of the Leatherwood-Sediments contact, with this additional constraint applied to the geological model underpinning the recently announced MRE (refer to ASX announcement dated 6 October 2022). During mapping, several samples were collected (refer to Figure 1 and Attachment A) which confirmed the extent and tenor of mineralisation at the Talon. These results further support the geological interpretation that the mineralisation intersected in drilling at the Talon daylights to the south, southeast and east. Significant results are highlighted in Table 3.



Table 3 – Summary of Significant Rock-Chip samples from the Talon area

Sample ID	Easting [m]	Northing [m]	Cu [%]	Ag [g/t]	Au [g/t]
E209407	524667	3592000	2.98	27.50	0.48
E209408	524653	3592017	1.69	16.15	0.41
E209410	524637	3592037	3.29	32.90	1.30
E209411	524632	3592048	8.96	79.40	0.75
E209415	524705	3591913	2.11	24.00	0.55
E209416	524741	3591876	4.26	36.70	0.64
E209417	524780	3592002	3.50	39.40	0.67
E209418	524748	3591989	1.07	5.43	0.19
E209420	524736	3592005	8.63	61.90	0.94
E209421	524721	3592038	1.22	9.96	0.21
E209422	524710	3592017	2.24	13.65	0.15
E209425	524804	3592068	3.51	60.00	0.29
E209426	524826	3592057	3.60	99.40	0.29
E209428	524848	3592092	3.12	11.15	0.57
E209429	524954	3592050	4.57	196	3.69
E209430	524864	3592109	1.62	17.35	0.17
E209431	524867	3592135	3.68	75.60	0.89
E209432	524839	3592134	3.18	41.00	0.63
E209434	524890	3592323	3.72	38.10	0.53
E209436	524848	3592332	1.63	18.30	0.30
E209438	524879	3592303	1.28	12.25	0.68

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

For further information please contact:

Tim Mason  
Chief Executive Officer  
[tim@eaglemountain.com.au](mailto:tim@eaglemountain.com.au)

Mark Pitts  
Company Secretary  
[mark@eaglemountain.com.au](mailto:mark@eaglemountain.com.au)

Jane Morgan  
Investor and Media Relations  
[jm@janemorganmanagement.com.au](mailto:jm@janemorganmanagement.com.au)

#### COMPETENT PERSON STATEMENT

The information in this document that relates to new Exploration Activities is based on information compiled by Mr Fabio Vergara and Mr Brian Paull who are both Members of The Australasian Institute of Mining and Metallurgy (MAusIMM) and have sufficient experience relevant to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Mr Vergara is the Chief Geologist and Mr Paull is the Director of Exploration of Eagle Mountain Mining Limited and both consent to the inclusion in this document of the information in the form and context in which it appears. Mr Vergara and Mr Paull hold shares and options in Eagle Mountain Mining Limited.



Where the Company references historic exploration results including technical information from previous ASX announcements including 25 May 2020, JORC Table 1 disclosures are included within them. The Company confirms that 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 within 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.

The information in this report that relates to historic production results was prepared and first disclosed under a pre-2012 edition of the JORC Code. The data has been compiled but NOT validated by Eagle Mountain geologists. At this stage, Eagle Mountain is unable to conclude that the production data is reliable. However, nothing has come to the attention of Eagle Mountain that causes it to question the accuracy or reliability of the historic production results and the various source 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:



LinkedIn



Twitter



EM2 Website





## Attachment A

### Summary of Assayed Rock-Chip Sample Results

Sample ID	Easting [m]	Northing [m]	Cu [%]	Ag [g/t]	Zn [%]	Pb [%]	Au [g/t]	Area
HH1_E209449	523397	3593538	4.82	76.80	0.13	0.18	0.09	Hartman
HH2_E209450	523392	3593492	0.87	13.25	0.04	0.01	0.01	Hartman
HH3_E209451	523401	3593469	2.42	79.10	1.99	0.94	0.04	Hartman
HH4_E209452	523361	3593512	0.03	0.53	0.02	0.01	BD	Hartman
HH5_E209453	523361	3593497	0.07	1.06	0.05	0.01	BD	Hartman
HH6_E209454	523358	3593453	0.02	0.18	0.01	0.00	BD	Hartman
HH7_E209455	523373	3593452	0.02	0.35	0.02	0.01	BD	Hartman
HH8_E209456	523380	3593441	1.37	21.60	0.02	0.01	0.04	Hartman
HH9_E209457	523392	3593444	0.97	10.35	0.04	0.01	0.01	Hartman
HH10_E209458	523407	3593458	1.09	10.05	0.06	0.00	0.01	Hartman
HH11_E209459	523415	3593461	0.93	28.30	0.05	0.14	0.01	Hartman
HH12_E209460	523423	3593458	2.98	139	0.05	0.01	0.18	Hartman
HH13_E209461	523445	3593467	2.27	27.50	0.79	0.05	0.02	Hartman
HH14_E209462	523414	3593503	4.42	60.80	0.29	0.87	0.05	Hartman
HH15_E209463	523433	3593479	0.07	0.64	0.03	0.01	BD	Hartman
HH16_E209464	523375	3593429	3.09	73.20	0.06	0.03	0.19	Hartman
HH17_E209465	523354	3593467	1.54	12.35	0.41	0.05	0.01	Hartman
HH18_E209466	523384	3593463	0.18	14.10	0.13	0.09	0.01	Hartman
HH19_E209467	523365	3593465	3.93	344	0.76	3.22	0.04	Hartman
HH20_E209468	523430	3593472	0.01	1.01	0.03	0.01	BD	Hartman
E209401	524367	3592154	3.12	6.19	0.00	0.01	0.04	Stratton
E209402	524353	3592159	3.29	2.66	0.00	0.01	0.02	Stratton
E209403	524329	3592171	5.25	131	0.01	0.00	1.21	Stratton
E209404	524322	3592337	1.20	11.45	0.01	0.03	0.13	Stratton
E209405	524352	3592291	1.69	16.55	0.00	0.02	0.47	Stratton
E209406	524430	3592173	2.67	30.50	0.00	0.02	0.65	Stratton
E209407	524667	3592000	2.98	27.50	0.00	0.06	0.48	Talon
E209408	524653	3592017	1.69	16.15	0.00	0.05	0.41	Talon
E209409	524635	3592028	0.03	0.37	0.00	0.01	BD	Talon
E209410	524637	3592037	3.29	32.90	0.00	0.03	1.30	Talon
E209411	524632	3592048	8.96	79.40	0.00	0.02	0.75	Talon
E209412	524701	3591973	0.72	6.45	0.00	0.03	0.06	Talon
E209413	524720	3591982	0.88	5.94	0.00	0.03	0.15	Talon
E209414	524671	3591949	0.44	4.56	0.00	0.01	0.05	Talon
E209415	524705	3591913	2.11	24.00	0.00	0.03	0.55	Talon
E209416	524741	3591876	4.26	36.70	0.00	0.07	0.64	Talon
E209417	524780	3592002	3.50	39.40	0.00	0.01	0.67	Talon
E209418	524748	3591989	1.07	5.43	0.00	0.02	0.19	Talon
E209419	524749	3592007	0.22	2.99	0.00	0.01	0.03	Talon
E209420	524736	3592005	8.63	61.90	0.01	0.02	0.94	Talon
E209421	524721	3592038	1.22	9.96	0.00	0.08	0.21	Talon
E209422	524710	3592017	2.24	13.65	0.00	0.03	0.15	Talon
E209423	524788	3592081	0.45	3.69	0.00	0.01	0.09	Talon



E209424	524788	3592076	0.28	2.10	0.00	0.03	0.07	Talon
E209425	524804	3592068	3.51	60.00	0.00	0.01	0.29	Talon
E209426	524826	3592057	3.60	99.40	0.00	0.02	0.29	Talon
E209427	524836	3592087	0.87	11.70	0.00	0.03	0.08	Talon
E209428	524848	3592092	3.12	11.15	0.00	0.02	0.57	Talon
E209429	524954	3592050	4.57	196	0.01	0.02	3.69	Talon
E209430	524864	3592109	1.62	17.35	0.00	0.02	0.17	Talon
E209431	524867	3592135	3.68	75.60	0.01	0.03	0.89	Talon
E209432	524839	3592134	3.18	41.00	0.01	0.02	0.63	Talon
E209433	524890	3592320	0.03	0.39	0.00	0.01	0.01	Talon
E209434	524890	3592323	3.72	38.10	0.00	0.01	0.53	Talon
E209435	524869	3592326	0.02	0.17	0.00	0.01	BD	Talon
E209436	524848	3592332	1.63	18.30	0.00	0.02	0.30	Talon
E209437	524867	3592349	0.33	2.47	0.00	0.01	0.03	Talon
E209438	524879	3592303	1.28	12.25	0.00	0.04	0.68	Talon

\*BD Below Detection

## JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data



Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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 downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>Grab samples were collected during geological mapping to test altered and mineralised material in surface outcrop and underground workings.</li> </ul>
<b>Drilling techniques</b>	<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>Not applicable. No drilling results reported.</li> </ul>
<b>Drill sample recovery</b>	<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 representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable. No drilling results reported.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>Samples were described by the field geologist.</li> <li>Geological descriptions are qualitative in nature.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were geologically described.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>ALS Minerals conducted the preparation work: samples were weighed, dried and finely crushed to better than 70% passing 2mm; sample was split using a riffle splitting and a split of up to 250g pulverised to better than 85% passing 75µm.</li> <li>No duplicates were taken.</li> <li>Sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>ALS Minerals assay methods: ME-MS61 (48 element four acid ICP-MS) and Au-AA23 (Au 30g charge Fire Assay with Atomic Absorption finish). The technique is considered a near total digest of relevant minerals. Above detection samples are re-assayed with Au-GRA21, Ag-OG62, Cu-OG62, Pb-OG62, Zn-OG62.</li> <li>Certified Reference Material (CRM), blanks and duplicates were inserted/collected at a ratio of 1:20 with a minimum of 1 CRM per assays batch. Acceptable levels of accuracy and precision have been established.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>Significant samples were reviewed by the Principal Geologist.</li> <li>Not applicable. No drilling results reported.</li> <li>Field data were collected on paper notebook and then digitised in spreadsheet and GIS files for visualisation.</li> <li>No adjustment to assay data applied.</li> </ul>





Criteria	JORC Code explanation	Commentary
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>For surface sampling, observation points and samples were located with a handheld GPS with an accuracy of <math>\pm 5\text{m}</math>.</li> <li>For underground sampling, observation points and samples were located based on visual approximation compared to the geometry of the underground workings in historical, hand-drawn underground maps. The sample location is estimated to be <math>\pm 50\text{m}</math>. An underground survey is planned to improve sample location accuracy.</li> <li>Data were captured in NAD83 UTM Zone 12N.</li> <li>Topographic control was provided by 3D surfaces built from USGS' National Elevation Dataset points (Horizontal resolution: 10m, Vertical Accuracy: <math>\sim 3\text{m}</math>).</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>Samples were taken on an ad-hoc basis and have variable spacing.</li> <li>Not applicable. No Mineral Resource or Mineral Reserve reported.</li> <li>No sample compositing applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>Due to the nature of the mapping program and the limited understanding of mineralisation controls, the potential for sampling bias cannot be assessed.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>All samples were collected by Company's consultants, securely stored at the Company office prior to drop off at the assaying laboratories by Company personnel.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>No audits or reviews of rock-chip sampling techniques have been completed.</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>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Oracle Ridge Mine Project (Project) is located in the Marble Peak area, approximately 30 kilometres by air northeast 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.</li> <li>The Project is 100% owned by Eagle Mountain Mining Limited through its Arizona subsidiaries Wedgetail Operations LLC (100%) and Wedgetail Holdings LLC (100%).</li> <li>The Project consists of four main areas: Oracle Ridge, OREX, Golden Eagle and Red Hawk.</li> </ul> <p>Oracle Ridge (including historical Tailings Storage Facility)</p> <ul style="list-style-type: none"> <li>Oracle Ridge comprises 60 Patented Mining Claims and 50 Unpatented Mining Claims within the Coronado National Forest (United States Forest Service).</li> <li>100% of the mineral rights starting from 15.2m (50 feet) below surface are owned by Wedgetail Operations LLC.</li> <li>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.</li> <li>A separate surface access agreement is in place to allow access to drill sites and drill pads construction.</li> <li>The mineral rights of Patented Claims at Oracle Ridge 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</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>the mineral rights are extended to 18 February 2040.</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 Oracle Ridge Project.</li> </ul> <p>OREX</p> <ul style="list-style-type: none"> <li>The OREX area is covered by 93 Unpatented Mining Claims within the Coronado National Forest (United States Forest Service).</li> <li>100% of the mineral rights are owned by Wedgetail Operations LLC.</li> <li>The OREX area is also partly covered by Patented Mining Claims controlled by Pima County. The Company has an agreement in place for non-ground disturbing exploration work to occur on Pima County's Patented Mining Claims. The Company does not currently control the Mineral Rights over Pima County's claims.</li> </ul> <p>Golden Eagle</p> <ul style="list-style-type: none"> <li>The Golden Eagle area is covered by 27 Patented Mining Claims and 32 Unpatented Mining Claims within the Coronado National Forest (United States Forest Service).</li> <li>100% of the mineral rights are owned by Wedgetail Operations LLC.</li> <li>The Golden Eagle area is also partly covered by Patented Mining Claims controlled by Pima County. The Company has an agreement in place for non-ground disturbing exploration work to occur on Pima County's Patented Mining Claims. The Company does not currently control the Mineral Rights over Pima County's claims.</li> </ul> <p>Red Hawk</p> <ul style="list-style-type: none"> <li>The Red Hawk area is covered by 24 Unpatented Mining Claims within the Coronado National Forest (United States Forest Service).</li> <li>100% of the mineral rights are owned by Wedgetail Operations LLC.</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>



Criteria	JORC Code explanation	Commentary
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>Oracle Ridge</p> <ul style="list-style-type: none"> <li>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.</li> <li>Phelps Dodge Copper Company (Phelps Dodge) 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 assessment of the mineralisation.</li> <li>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.</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 short ton per day. The mill capacity was later expanded to approximately 1,000 short ton per day.</li> <li>The mine closed in 1996. Production records show that approximately 1,200,000 short tons were milled since commencement of the operation.</li> <li>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.</li> </ul> <p>Golden Eagle</p> <ul style="list-style-type: none"> <li>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</li> </ul>





Criteria	JORC Code explanation	Commentary
		<p>Company's landholding. 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> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>OREX</p> <ul style="list-style-type: none"> <li>• Details of historical (pre-1980s) exploration and mining activities in the OREX area are not known. Few small-scale workings were found during mapping.</li> <li>• 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.</li> </ul> <p>Red Hawk</p> <ul style="list-style-type: none"> <li>• No historical exploration nor mining activities are known for the Red Hawk area.</li> </ul>
<p><b>Geology</b></p>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>Oracle Ridge</p> <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 latter 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 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.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<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 latter can form a “Christmas Tree” type shape.</li> </ul> <p>Hartman-Homestake</p> <ul style="list-style-type: none"> <li>Based on historic reports and early-stage underground rock-chip samples, the Hartman-Homestake deposit is interpreted to be a separate, lower temperature skarn system compared to Oracle Ridge due to the stronger association of copper-silver mineralisation with lead and zinc and minimal gold values. The deposit is hosted within the same lower carbonate sequences observed at Oracle Ridge.</li> <li>The carbonates show strong skarn alteration with elevated copper, silver, lead and zinc. Mineralisation is structurally controlled within a northeast-southwest striking fault, interpreted to be a splay of the Geesaman Fault.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </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>	<ul style="list-style-type: none"> <li>Not applicable. No drilling results reported.</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</li> </ul>	<ul style="list-style-type: none"> <li>No weighting averaging techniques were applied to Exploration Results.</li> <li>Not applicable. No metal equivalents reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p>of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
<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>Not applicable. No drilling results reported.</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>See body of 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>All exploration results obtained so far have been reported.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No other meaningful and material exploration data beyond this and previous ASX announcements by the Company.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<p><u>Rock-chip sampling (Mapping)</u></p> <ul style="list-style-type: none"> <li>Review and compilation of historical data, including available reports, geological maps and historical rock-chip and channel samples.</li> <li>Underground survey of the Hartman-Homestake workings to aid mapping and sampling.</li> <li>Detailed mapping and sampling, including channel samples across key mineralised areas.</li> <li>Geological interpretation and 3D modelling to define viable drill targets.</li> </ul>