



## EAGLE MOUNTAIN MINING

ASX Announcement | 28 OCTOBER 2021

### Large Mineralised System Potential Additional to Copper Skarn

- Drilling at Golden Eagle confirms two separate mineralised zones enhancing the prospectivity for large mineralised systems to occur. The two systems are:
  - Vein-hosted polymetallic system with alteration extending over 500 metres of strike with localised veining increasing intensity and prospectivity to the west and at depth
  - Separate mineralised gold rich system exceeding 650 metres of strike with extensive hematite (iron oxide) alteration with large zones of brecciation open to the west and at depth. Assays include:
    - 21.2m at 1.88g/t Au (GE-21-03), including
    - 8.0m at 3.80g/t Au, and
    - 7.2m at 1.26g/t Au
- Structural interpretation from drilling at Golden Eagle conceptually linked to a separate deeper system which provided the heat source for mineralisation in the area, including the copper skarn mineralisation which hosts the JORC resources at Oracle Ridge
- Multiple geological similarities with other large deposits in the southwest United States and into Mexico, further enhancing prospectivity for additional mineralisation
- 13 holes drilled at Golden Eagle with holes up to 650 metres in length. Assays pending for 11 holes at Golden Eagle. Assays pending for a further 13 holes across Oracle Ridge.

Eagle Mountain Mining CEO, Tim Mason, commented:

*“Our maiden drill program at Golden Eagle has uncovered extensive alteration with vein-hosted polymetallic mineralisation. This is exciting because it could represent a distal mineralisation of a larger and deeper porphyry system. The same system could also be driving the copper mineralisation at the Oracle Ridge mine.*

*While most of our core is still at the laboratory, it is pleasing to see initial visual results confirming vein-hosted polymetallic mineralisation within an extensively altered package. Based on the size and abundance of the veins, we are optimistic about how the mineralisation could evolve laterally with multiple observations suggesting an increase in intensity to the west and at depth. These geological observations share many similarities with other mineralised systems in the southwest United States and into Mexico.*

*Adding to the polymetallic system, the strong gold assays are a positive indicator of the existence of either separate or associated gold mineralisation.*

*We have just completed our thirteenth hole at Golden Eagle and have moved that rig back to the mine area to continue resource upgrade drilling. It is prudent that we wait until further assay results are received to enable improved drill planning for the next set of holes. As soon as the new targets are defined, we will be back at Golden Eagle. These results are a major leap forward in our ongoing search for the major system feeding the copper skarn mineralisation at Oracle Ridge.”*

Eagle Mountain Mining Limited (ASX:EM2) (“Eagle Mountain”, the “Company”) is pleased to provide an exploration update at its 100% owned Oracle Ridge Mine Project (“Oracle Ridge”, “Project”) in Arizona, USA.

Highly encouraging results have been received from the Company’s maiden diamond drill program at the Golden Eagle Prospect (Golden Eagle). Golden Eagle is located two kilometres to the east of the Oracle Ridge mine portals (Figure 1) and is prospective for different styles of mineralisation other than the skarn-hosted copper-silver-gold deposit at the mine. Thirteen holes have been completed at Golden Eagle targeting the large alteration systems previously identified in the area by surface geological mapping and rock chip sampling (refer ASX announcement 23 August 2021). Based on available historical information, very limited drilling has occurred at Golden Eagle prior to the work completed by Company.

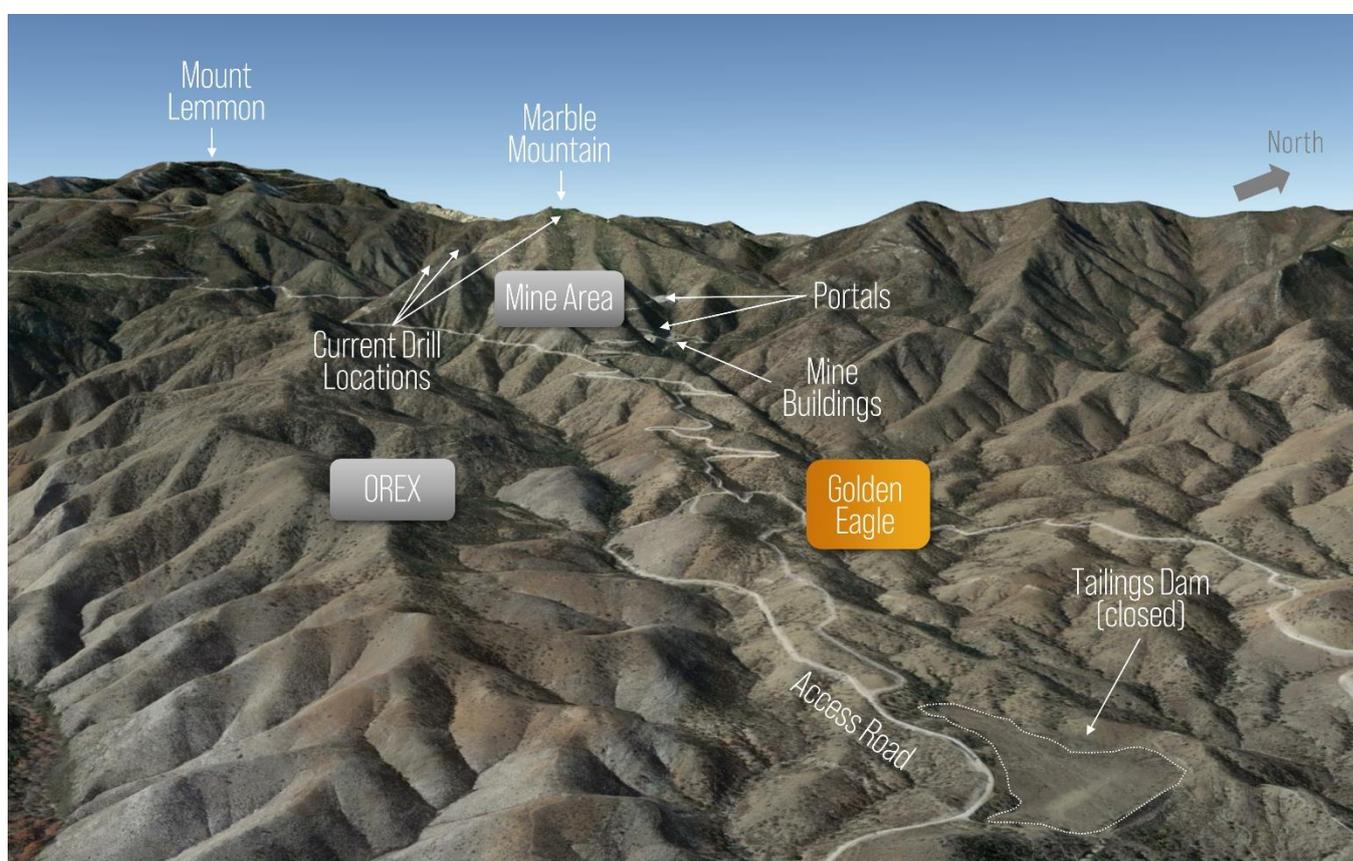


Figure 1 – 3D view looking west showing the location of the Golden Eagle area at Oracle Ridge Project

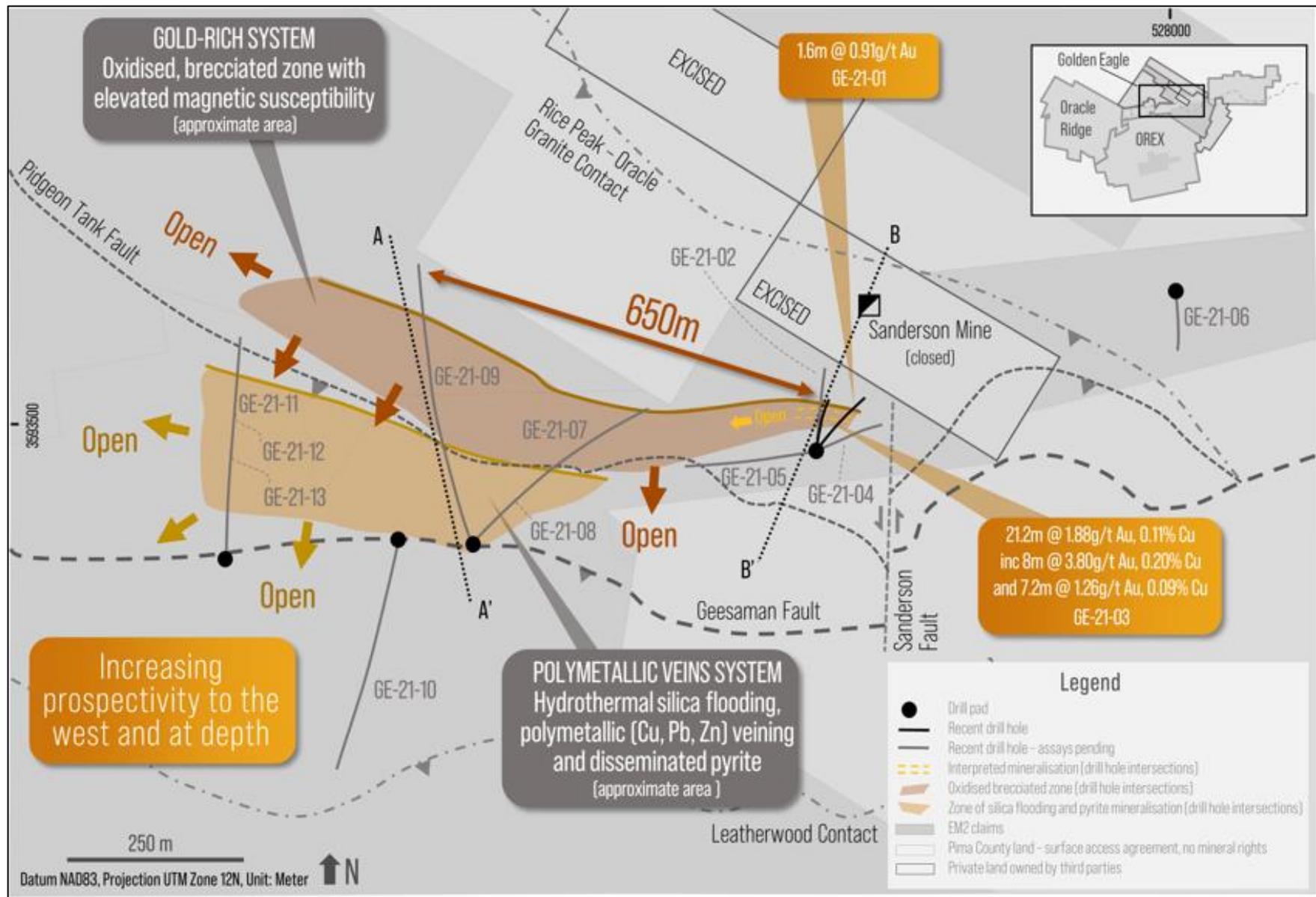


Figure 2 – Plan view of Golden Eagle showing reported results, recent drill hole locations, geological structures and prospective alteration zones.

Visual observations showed that most drill holes intersected large widths of altered rocks associated with two separate hydrothermal systems:

- A vein-hosted polymetallic system, characterised by pyrite and silica alteration with localised veins containing lead, zinc and copper sulphides. Intensity of alteration and veining appears to increase to the west and at depth.
- A gold-rich system, confirmed by assay results, displaying abundant hematite (iron oxide) alteration associated with geological structures (e.g. breccias).

Both systems have a strike extent exceeding 500 metres and remain open at depth and to the west (Figure 2). Assays are awaited for eleven of the thirteen holes drilled. It is expected that assay results will assist in defining exploration vectors towards the most endowed parts of these alteration systems. Importantly, the polymetallic vein alteration could be interpreted as the distal expression of a potential porphyry also linked to the skarn-hosted copper-silver-gold mineralisation at the mine.

### Polymetallic vein system

The polymetallic vein system extends from drill hole GE-21-05 to GE-21-12 for a total strike length exceeding 500 metres (Figure 2). From east to west, the system shows a progressive increase in intensity of pyrite dissemination and silica flooding (Figure 3, Figure 6) with abundance of associated polymetallic (Cu-Pb-Zn) veinlets which also increase westwards. Alteration in places appears spatially associated with the Rice Peak Porphyry intrusive, a Laramide-aged rock. The broader alteration zone straddles a local structure named Pidgeon Tank Fault (Figure 2, Figure 10), which is interpreted to be a splay of the regionally significant Geesaman Fault. The westernmost drillholes (GE-21-11, GE-21-12) also showed an increase in alteration and veining with depth prompting the completion of an additional hole to test this below GE-21-12. This drill hole (GE-21-13) is currently being logged.

Another alteration feature, which could indicate a higher heat flow and increasing proximity to potentially mineralising fluids and a heat source downhole, is the presence of secondary biotite in vein selvages. Progressing downward, the biotite veins begin to carry pyrite. Below approximately 315 metres downhole, the biotite-pyrite veinlets contained secondary potassium feldspar selvages.



*Figure 3 – Example of polymetallic veining seen in silica flooded, pyrite-rich alteration zone at Golden Eagle. GE-21-09 at 295m downhole depth.*

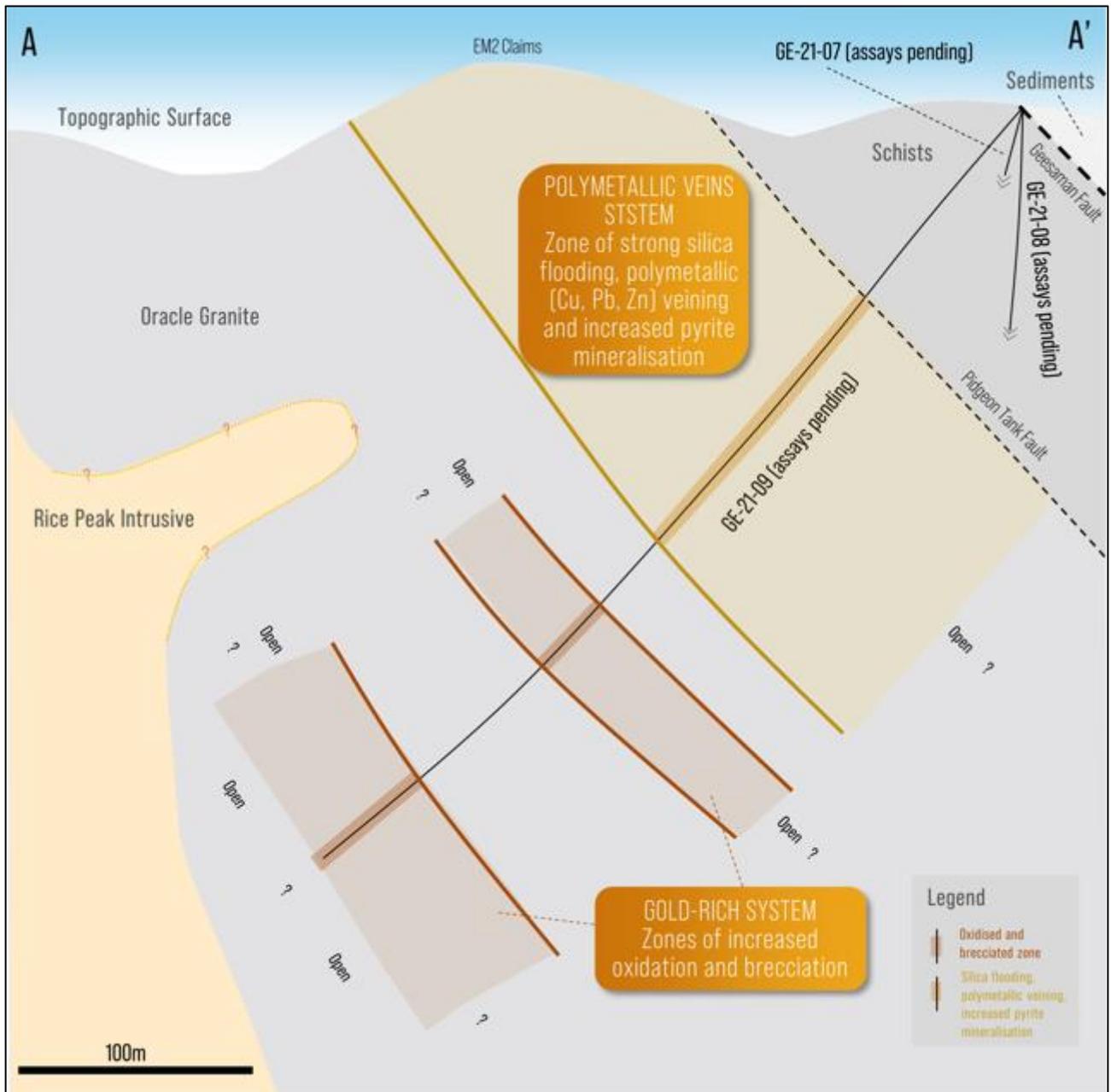


Figure 4 – Section BB' North-south section looking east showing the spatial correlation between the polymetallic vein system (yellow) and the gold system (red). See Figure 2 for section location.

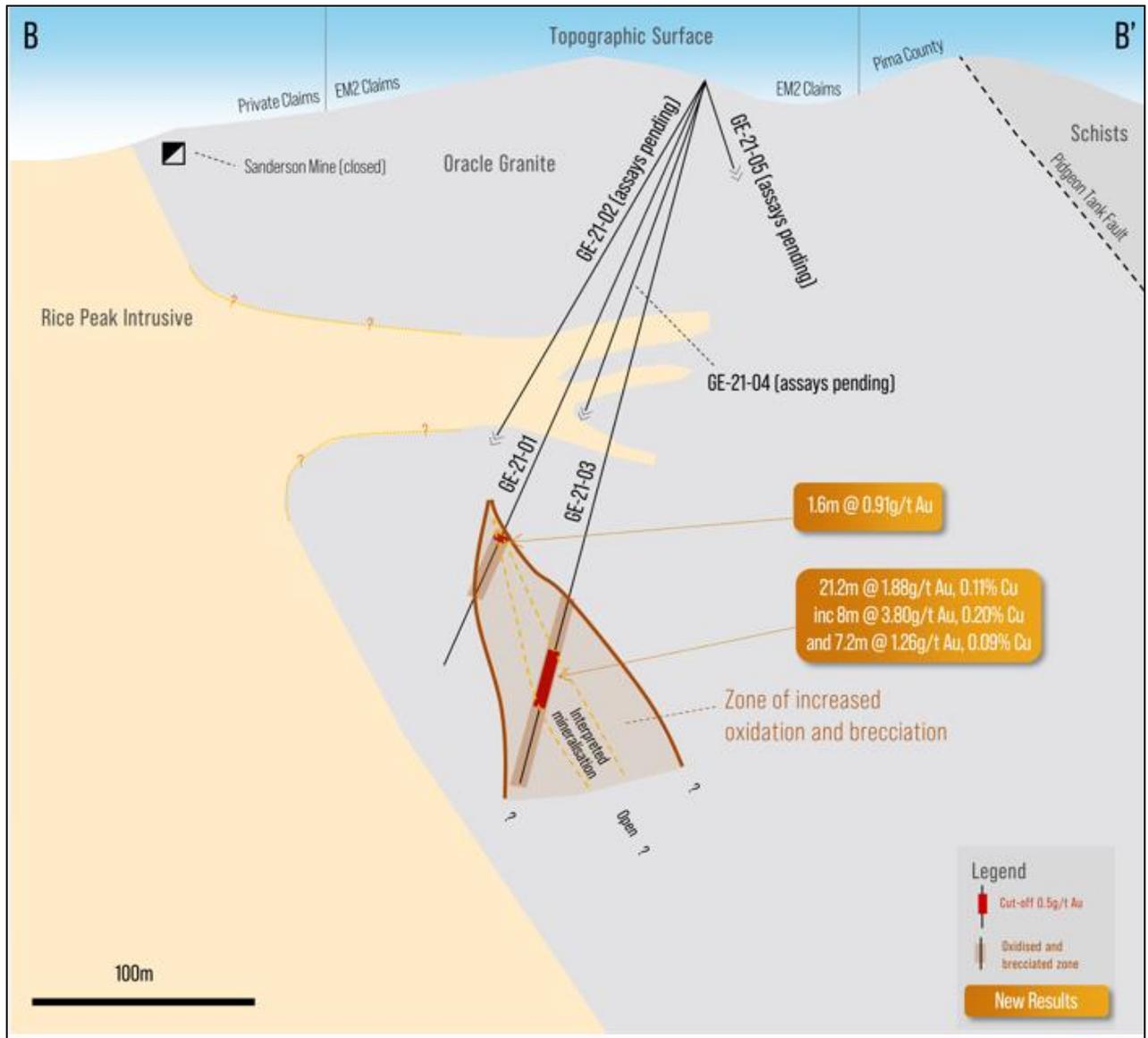


Figure 5 – Northeast-southwest looking southeast section showing mineralised intercepts and prospective alteration in GE-21-01 and GE-21-03.



Figure 6 – Disseminated pyrite in quartz flooded Oracle Granite, located in the upper hydrothermal silica altered polymetallic zone. GE-21-07 at 170m downhole depth.

## Gold system

Previous exploration completed by the Company highlighted a prominent feature crossing the entire Golden Eagle area in a NW-SE orientation, clearly defined by a geophysical magnetic anomaly. This feature was tentatively linked to structural zones or a geological contact and deemed prospective for gold-copper mineralisation based on favourable results from several surface samples (see ASX announcement 23 August 2021).

Several of the drill holes completed to date have intersected a strongly oxidised structural zone associated with brecciated intervals (Figure 5, Figure 8) over a 650 metre strike length as shown in Figure 2. Four holes clustered near the intersection of the Geesaman and Pidgeon Tank Faults (GE-21-01 to GE-21-04) showed the most intense oxidation and brecciation. Additional holes broadly spaced to the west intersected thicker zones of moderate oxidation with only minor brecciation. Interestingly the oxidised zones showed an increase in the magnetic response, consistent with the interpretation that this alteration could be generating the magnetic anomaly seen in the geophysical data.

Full assay results have been received for two drill holes (GE-21-01 and GE-21-03) as well as the lower part of GE-21-07 with significant gold values, reported using a 0.5g/t gold cut-off, including:

- 1.6m at 0.91g/t Au and 0.02% Cu from 200.4m (GE-21-01)
- 21.2m at 1.88g/t Au and 0.11% Cu from 236.8m (GE-21-03), including
- 8.0m at 3.80g/t Au and 0.20% Cu, and
- 7.2m at 1.26g/t Au and 0.09% Cu

The assay results received to date for GE-21-07 have returned no significant intersections but the results confirm the correlation between oxidised structures and anomalous gold values.

The presence of a thick zone of gold mineralisation including an eight metre higher grade interval in hole GE-21-03 confirms the gold endowment of this system and indicates the strong potential to host significant gold-copper mineralisation. The mineralised structure remains open at depth (as shown in Figures 4, 5 and 10) and to the north-west with the magnetic anomaly suggesting potential continuity of this feature for over two kilometres of strike length.



Figure 7 – Oxidised and brecciated mineralised zone in GE-21-03. Outlined interval averages 8.0m at 3.80g/t Au and 0.20% Cu (250.0 to 258.0m).



Figure 8 – Oxidised breccia in Oracle Granite. Drill hole GE-21-07, 639m depth.

### Implications for Porphyry Prospectivity

Porphyry copper deposits are common in Arizona and throughout the southwestern United States including, Twin Buttes, Sierrita-Esperanza, Rosemont, Silver Bell, Mission-Pima, Ajo, Ray, Miami, Pinto Valley, Morenci, Safford<sup>1</sup>, and Resolution. All of these deposits were formed during the Laramide period, a time between 75 and 40 million years ago when the geology was conducive to the emplacement of

<sup>1</sup> Details of the geological setting of several copper porphyries in the Southwestern North America can be found in: S.R. Titley; C.L.Hicks - *Geology of the Porphyry Copper Deposits – Southwestern North America*. The University of Arizona Press; 1966  
S.R. Titley - *Advances in Geology of the Porphyry Copper Deposits – Southwestern North America*. The University of Arizona Press; 1982

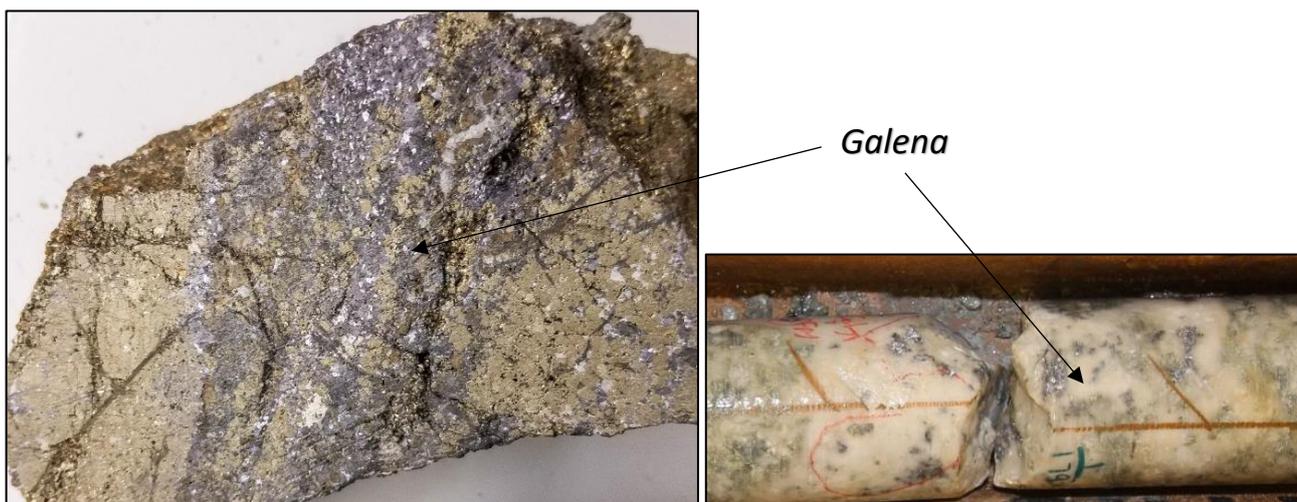
porphyry copper mineralisation. Besides the time of formation, many of these deposits share a similar structural setting, with fractures and dykes dominated by east-west and northeast-southwest orientations, as well as common host rocks. Moreover, the main porphyry copper is often spatially and genetically associated with other types of mineralisation such as:

- Skarns (including copper, iron, gold, zinc types)
- Polymetallic replacement (silver, lead, zinc, copper, gold)
- Polymetallic veins (gold, silver, copper, lead, zinc, manganese, arsenic)
- Distal disseminated gold-silver (gold, silver)
- Epithermal vein (intermediate/low sulfidation gold-silver)

The Oracle Ridge Project shares many of these geological features common in porphyry copper mines in the southwest United States. These include the presence of intrusive rocks of Laramide Age (e.g. Leatherwood and Rice Peak intrusives), structures with east-west to northeast-southwest orientation (e.g. Geesaman Fault) and favourable host rocks (e.g. Escabrosa, Martin and Abrigo Formations). The Project also contains copper skarns at the Oracle Ridge mine and a recently discovered polymetallic vein system at Golden Eagle. The copper skarns in the mine area also contain varying concentrations of minor molybdenite, which is also common in porphyry systems in the southwest United States.

The current geological model for Oracle Ridge sees the skarn and the polymetallic vein systems as potentially linked to a porphyry system at depth with structures such as the Geesaman Fault and the Pidgeon Tank Fault acting as pathways for the mineralising fluids between the porphyry and sites of metal deposition (Figure 10).

The Company and its consultants will continue to refine this conceptual model with additional information gathered from surface mapping, geophysics and drilling in combination with other advanced exploration techniques (e.g. Portable Infrared Mineral Analyser).



*Figure 9 – Example of polymetallic vein at Bingham Canyon mine, Utah. Pyrite-galena-sphalerite-chalcopyrite vein surrounded by pyrite mineralisation.<sup>2</sup>*

*Galena-pyrite-quartz vein at Golden Eagle (GE-21-12, 179 metres downhole depth).*

<sup>2</sup> Source: <http://geology.byu.edu/Home/news/thesis-defense-spotlight-david-tomlinson>.

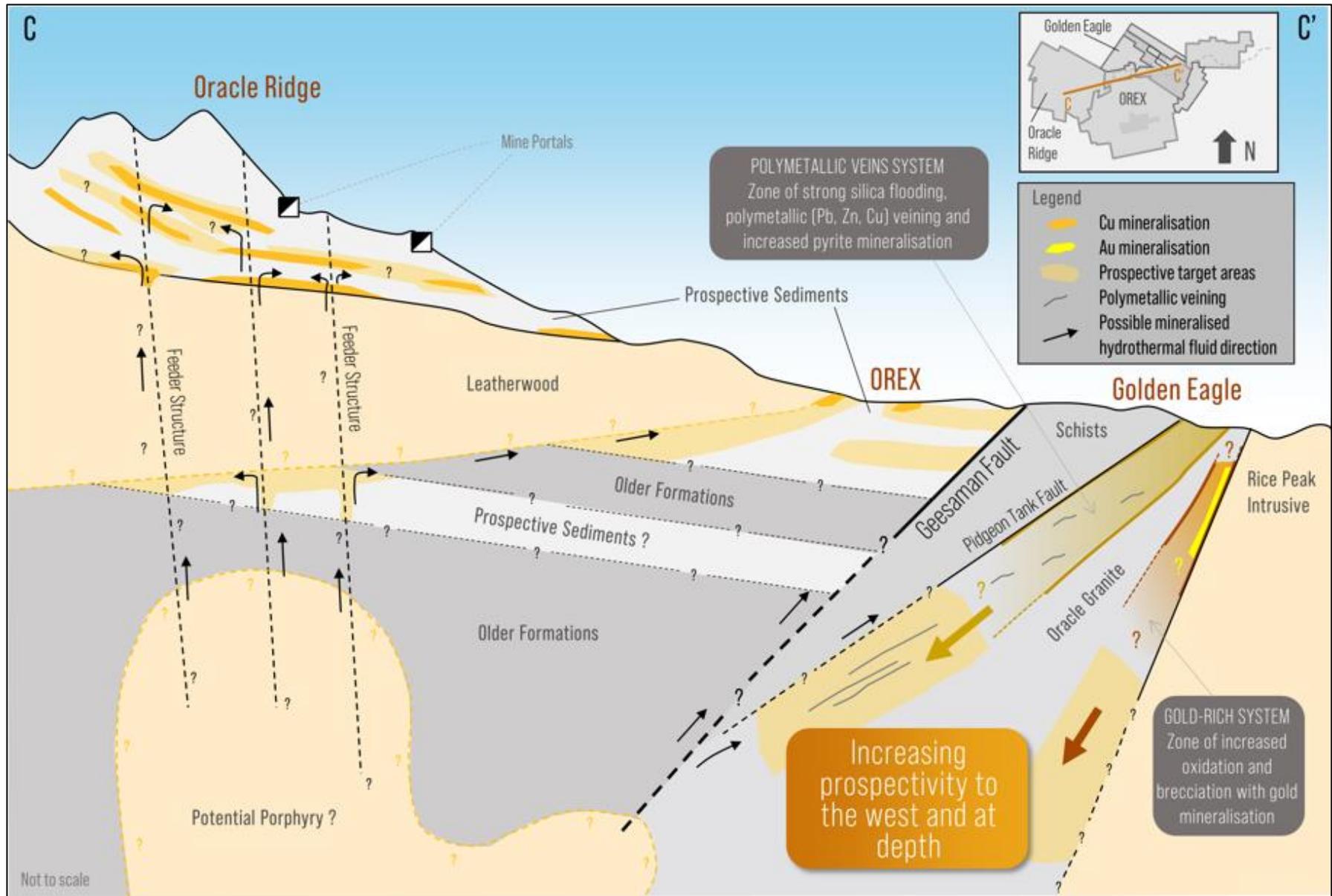


Figure 10 – Conceptual cross section looking northwest across Oracle Ridge, OREX and Golden Eagle showing the different styles of mineralisation and increasing prospectivity along strike and at depth at Golden Eagle

## Next steps

Thirteen drill holes have been completed at Golden Eagle with assay results pending for eleven. The Golden Eagle drill rig has recently returned to the Oracle Ridge mine to complete the remaining holes of the Resource Upgrade program.

Assay results, together with additional geological interpretation and possibly a new geophysical survey, will assist vectoring toward more prospective zones at Golden Eagle. New drill holes will be planned once drilling data has been compiled and interpreted.



*Figure 11 - Drilling at Golden Eagle. Note the gentle terrain and the easy road access.*

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

## 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 a 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 Principal Geologist of Eagle Mountain Mining Limited and 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.

## EAGLE MOUNTAIN MINING LIMITED

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:



Website <https://eaglemountain.com.au/>



Twitter [https://twitter.com/eagle\\_mining](https://twitter.com/eagle_mining)



LinkedIn <https://www.linkedin.com/company/eagle-mountain-mining-ltd/>

## Attachment 1

*Summary table of recent drill holes at Oracle Ridge*

Hole ID	Easting	Northing	Elevation	Dip	Azimuth	Depth
	[m]	[m]	[m]	[°]	[°]	[m]
WT-21-22	524436	3592408	2151	79	099	487.7
WT-21-23	524437	3592407	2150	77	123	336.7
WT-21-24	523958	3593086	2094	63	029	138.4
WT-21-25	524436	3592408	2151	67	228	370.6
WT-21-26	524024	3593218	2094	62	279	242.3
WT-21-27	524560	3592300	2108	75	003	345.9
WT-21-28	524024	3593218	2094	70	279	176.2
WT-21-29	524372	3592479	2189	73	235	373.4
WT-21-30	524560	3592300	2108	85	000	312.42
WT-21-31	524560	3592300	2108	50	166	391.4
WT-21-32	524372	3592479	2189	67	239	366.1
WT-21-33	524560	3592300	2108	53	153	367.3
WT-21-34	524371	3592480	2189	64	290	359.1
WT-21-35	524559	3592298	2108	48	179	380.4
WT-21-36	524372	3592479	2189	61	247	333.8
WT-21-37	524559	3592298	2108	54	188	390.8
WT-21-38	524372	3592479	2189	81	223	375.7
WT-21-39	524434	3592417	2153	54	222	395.6
WT-21-40	524369	3592480	2194	61	205	374
WT-21-41	524436	3592408	2151	47	232	Abandoned
WT-21-42	524368	3592479	2195	56	215	371.2
WT-21-43	524433	3592415	2152	46	230	376.7
WT-21-44	524372	3592479	2193	67	207	376.1
WT-21-45	524437	3592417	2151	53	199	401.4
WT-21-46	524372	3592479	2193	61	225	377.0
WT-21-47	524436	3592408	2151	49	211	Abandoned
WT-21-48	524372	3592479	2193	76	188	Abandoned
WT-21-49	524436	3592408	2157	47	197	In progress
WT-21-50	524365	3592477	2194	72	339	In progress
WT-21-51	524024	3593225	2098	63	237	In progress
GE-21-01	527468	3593409	1497	65	035	261.5
GE-21-02	527468	3593409	1497	60	002	249.9
GE-21-03	527468	3593409	1497	76	002	295.7
GE-21-04	527468	3593409	1497	64	065	253.3
GE-21-05	527468	3593408	1497	50	260	309.4
GE-21-06	528007	3593650	1485	80	180	487.7
GE-21-07	526940	3593290	1559	60	45	639.2
GE-21-08	526940	3593290	1559	83	45	526.1
GE-21-09	526939	3593291	1559	50	340	624.8
GE-21-10	526822	3593288	1562	45	190	449.6
GE-21-11	526566	3593264	1592	47	0	478.8
GE-21-12	526577	3593249	1592	60	0	548.6
GE-21-13	526564	3593262	1594	85	355	276.5

Summary table of significant diamond drill hole intersections at Oracle Ridge during 2021

Note - All reported intervals are downhole widths.

Hole ID	From	To	Width	Cu	Ag	Au
	[m]	[m]	[m]	[%]	[g/t]	[g/t]
<b>WT-21-22</b>	208.4	222.8	14.4	1.15	10.56	0.19
<i>including</i>	208.4	211.8	3.4	3.14	29.05	0.28
<i>including</i>	208.4	209.0	0.6	12.25	118.00	0.04
	240.0	242.0	2.0	2.50	14.80	0.16
	294.9	297.0	2.1	4.30	38.20	0.29
	307.1	309.0	1.9	1.12	9.33	0.27
<i>within</i>	294.9	309.0	14.1	1.14	9.69	0.23
<i>within</i>	294.9	320.4	25.5	0.89	7.91	0.18
<b>WT-21-23</b>	193.4	202.0	8.6	1.02	8.09	0.15
<i>including</i>	193.4	194.2	0.8	2.35	20.30	0.31
	209.5	211.4	1.9	2.36	12.30	0.05
	257.3	257.6	0.3	1.09	11.25	0.14
	289.5	290.1	0.6	2.32	21.40	0.51
	303.6	316.6	13.0	1.68	13.84	0.35
<b>WT-21-24</b>	28.3	138.4	110.1	1.06	9.64	0.16
<i>including</i>	28.3	32.1	3.8	1.60	16.11	0.23
<i>and</i>	44.8	45.8	1.0	2.81	41.90	0.39
<i>and</i>	53.0	71.4	18.4	3.12	27.83	0.51
<i>and</i>	74.7	78.8	4.1	1.44	11.98	0.12
<i>and</i>	86.5	103.5	17.0	1.17	7.70	0.16
<i>within</i>	53.0	103.5	50.5	1.73	16.63	0.29
<i>and including</i>	118.0	121.4	3.4	1.86	18.38	0.30
<i>and</i>	129.8	130.8	1.0	1.00	18.40	0.17
<i>and</i>	137.5	138.4	0.9	3.63	65.70	0.53
<b>WT-21-25</b>	174.1	187.9	13.8	1.54	13.22	0.28
	219.5	221.0	1.5	1.32	9.19	0.46
	225.0	228.7	3.7	3.13	25.38	0.75
	239.5	246.9	7.4	1.92	19.18	0.44
	266.4	275.5	9.1	2.39	22.47	0.22
<i>including</i>	266.4	268.0	1.6	6.80	67.30	0.40
<b>WT-21-26</b>	47.3	158.8	111.5	1.00	13.25	0.13
<i>including</i>	90.9	91.4	0.5	2.23	15.55	0.16
<i>and</i>	111.5	115.5	4.0	2.23	21.01	0.28
<i>and</i>	127.0	131.3	4.3	1.13	8.65	0.07
<i>and</i>	133.3	133.6	0.3	3.82	72.90	0.60
<i>and</i>	144.2	148.5	4.3	2.22	42.06	0.38
<i>and</i>	151.5	158.8	7.3	2.13	31.84	0.35
<b>WT-21-27</b>	179.5	183.0	3.5	2.24	14.23	0.36
<i>within</i>	179.5	187.0	7.5	1.40	8.89	0.20
	197.7	198.0	0.3	2.52	27.90	0.09
	235.3	236.8	1.5	1.84	13.08	0.29
	239.0	240.2	1.2	3.40	28.91	0.45
	243.1	247.7	4.6	2.00	18.17	0.56
<i>within</i>	239	247.7	8.7	1.68	15	0.38

Hole ID	From	To	Width	Cu	Ag	Au
<i>and within</i>	235.3	247.7	12.4	1.44	12.41	0.45
	254.9	255.6	0.7	2.36	34.80	0.61
<b>WT-21-28</b>	111.0	161.8	50.8	0.64	7.49	0.06
<i>including</i>	112.3	114.1	1.8	1.66	15.76	0.19
<i>and</i>	117.0	118.0	1.0	1.85	16.05	0.19
<i>and</i>	121.2	121.7	0.5	1.12	8.32	0.12
<i>and</i>	132.4	133.5	1.1	1.21	12.05	0.08
<i>and</i>	147.1	150.6	3.5	2.69	39.76	0.22
<i>and</i>	157.7	161.8	4.1	1.02	10.20	0.06
<b>WT-21-29</b>	211.4	213.4	2.0	1.49	11.50	0.39
<b>WT-21-29</b>	225.5	227.2	1.7	1.15	9.76	0.19
	244.5	247.5	3.0	1.12	9.43	0.45
	252.0	253.9	1.9	1.09	6.43	0.16
	267.0	268.1	1.1	1.92	21.30	0.20
	292.5	303.0	10.5	1.20	13.16	0.23
<i>including</i>	300.5	303.0	2.5	2.40	28.12	0.52
<b>WT-21-30</b>	167.7	170.8	3.1	1.25	10.80	0.25
	222.7	224.2	1.5	1.67	14.40	0.61
<b>WT-21-31</b>	253.5	261.5	8.0	1.90	13.92	0.85
	271.2	286.0	14.8	1.62	11.93	0.53
	294.5	306.2	11.7	1.90	15.22	0.52
	313.0	321.7	8.7	2.00	15.20	0.40
	335.3	345.0	9.7	3.39	29.65	0.67
<i>within</i>	253.5	345.0	91.5	1.37	10.64	0.38
<b>WT-21-32*</b>	270.6	299.5	28.9	2.34	21.95	0.37
<i>including</i>	270.6	283.8	13.2	3.53	33.89	0.54
<i>including</i>	292.3	299.5	7.2	2.04	15.71	0.29
<b>WT-21-33</b>	Assays pending					
<b>WT-21-34</b>	Assays pending					
<b>WT-21-35</b>	Assays pending					
<b>WT-21-36</b>	Assays pending					
<b>WT-21-37</b>	Assays pending					
<b>WT-21-38</b>	Assays pending					
<b>WT-21-39</b>	Assays pending					
<b>WT-21-40</b>	Assays pending					
<b>WT-21-41</b>	Hole Abandoned					
<b>WT-21-42</b>	Assays pending					
<b>WT-21-43</b>	Assays pending					
<b>WT-21-44</b>	Assays pending					
<b>WT-21-45</b>	Assays pending					
<b>WT-21-46</b>	Assays pending					
<b>WT-21-47</b>	Hole Abandoned					
<b>WT-21-48</b>	Hole Abandoned					
<b>WT-21-49</b>	Hole in progress					
<b>WT-21-50</b>	Hole in progress					
<b>WT-21-51</b>	Hole in progress					
<b>GE-21-01</b>	200.4	202.0	1.6	0.02	0.50	0.91
<b>GE-21-02</b>	Assays pending					

Hole ID	From	To	Width	Cu	Ag	Au
GE-21-03	236.8	258.0	21.2	0.11	1.86	1.88
<i>including</i>	250.0	258.0	8.0	0.20	3.79	3.80
<i>and</i>	236.8	244.0	7.2	0.09	0.83	1.26
GE-21-04	Assays pending					
GE-21-05	Assays pending					
GE-21-06	Assays pending					
GE-21-07*	NSI (lower part of the hole); Assays pending					
GE-21-08	Assays pending					
GE-21-09	Assays pending					
GE-21-10	Assays pending					
GE-21-11	Assays pending					
GE-21-12	Assays pending					
GE-21-13	Assays pending					

\*Assays for part of the hole are still outstanding

NSI = No significant Intercepts

## Attachment 2

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data



Criteria	JORC Code explanation	Commentary
Sampling techniques	<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 down hole 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>	<ul style="list-style-type: none"> <li>Diamond drilling. Nominal sampling interval of 3m adjusted as required for local geological conditions. Core was sawn and half-core was crushed, pulverised and split to produce a representative sample for assaying.</li> <li>For WT-series drilling, samples returning weighted average Cu <math>\geq</math> 1% are reported in the announcement. Wider intercepts are reported using a 0.6% Cu cut-off.</li> <li>For GE-series drilling, samples returning weighted average Au <math>\geq</math> 0.5g/t are reported in the announcement.</li> <li>Visual results presented are based on geological observations, and for WT-series drilling consider the copper content of different sulphide species at a 0.6% Cu nominal cut-off</li> </ul>
Drilling techniques	<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 drilling completed by Boart Longyear using an LF-90 drill rig.</li> <li>Core is HQ3</li> <li>Downhole deviation surveys are performed approximately every 30.5m (100 feet)</li> <li>The core is oriented with a Boart Longyear Truecore™ system to allow measurement of structural information.</li> </ul>
Drill sample recovery	<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>Core recoveries are recorded by the drillers at the rig and verified by Company's personnel during core logging</li> <li>To maximise sample recovery and core quality drilling is performed with a "triple tube" set up where two splits are inserted in the barrel to minimize core displacement and core loss.</li> <li>No relationship has been determined between sample recoveries and grade.</li> </ul>
Logging	<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</li> </ul>	<ul style="list-style-type: none"> <li>A quick log is completed on site and detailed logging is performed at the Company's facility in Tucson.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <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>• Logging is both qualitative and quantitative in nature. Portable XRF and magnetic susceptibility measurements are taken at regular intervals on the core.</li> <li>• Core is photographed after mark-up, before sampling, wet and dry</li> <li>• 100% of the relevant intersections is logged.</li> </ul>
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <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>• The core is sawn in half by ALS Minerals or Skyline Assayers and Laboratories at their Tucson facilities. Half of the core is bagged and sent for assaying while the other half is left in the core box for future reference.</li> <li>• ALS Minerals or Skyline Assayers and Laboratories conducted all preparation work: samples were weighed, dried, crushed and crushed to better than 70% passing 2mm; sample was split with a riffle splitter and a split of up to 250g pulverised to better than 85% passing 75µm.</li> <li>• Duplicates are used to assess the sampling representativeness. When duplicates are collected the core is quartered: one quarter is sent to the laboratory as the primary sample, the other quarter is sent to the laboratory as the duplicate and the remaining half of the core is left in the box for future reference</li> <li>• Sample sizes are considered appropriate to the grain size of the material being sampled</li> </ul>
<p><i>Quality of assay data and laboratory tests</i></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>• 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>• Skyline Assayers and Laboratories methods: TE-5 (47 element multi acid digestion with ICP-MS) and FA-01 (Au Fire Assay with Atomic Absorption finish). The technique is considered a near total digest of relevant minerals.</li> <li>• Certified Reference Material (CRM), blanks and duplicates were inserted/collected at a ratio of 1:10 with a minimum of 1 CRM per assays batch. CRMs are inserted at intervals never exceeding 20 samples. Acceptable levels of accuracy and precision have been established.</li> <li>• Before releasing results from geological observations (e.g. visual mineralisation), the Company adopts the following QA/QC procedures: <ul style="list-style-type: none"> <li>○ Core is dispatched to the laboratory and cut. Samples are bagged, crushed and pulverised (sample preparation)</li> <li>○ After sample preparation is finalised, a sub-sample is returned to</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>○ the Company while assays are being completed at the laboratory</li> <li>○ Returned sub-samples are analysed with the Company's portable XRF instrument</li> <li>○ Portable XRF readings are compared with the visual logs</li> <li>○ Visual results are approved for release to the market</li> </ul>
Verification of sampling and assaying	<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>● Significant intersections have been verified by Company's Principal Geologist</li> <li>● No twinned holes reported</li> <li>● Logging and sampling data are collected using tablet computers and Logchief software to ensure data integrity. The data is transferred weekly to the Datashed database after further data validation by the database manager</li> <li>● No assay adjustment performed</li> </ul>
Location of data points	<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>● NAD83 Arizona State Plane Central (International feet). Data is presented in NAD83 UTM Zone 12N (meters)</li> <li>● National Elevation Dataset. Horizontal resolution of approximately 10m and vertical resolution of 1m</li> <li>● Drill holes are located with a hand-held GPS with an estimated horizontal accuracy of ±5m. Collar location is subsequently recaptured using a DGPS system with an estimated accuracy of ±0.5m</li> </ul>
Data spacing and distribution	<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>● The data spacing of the new drilling results reported is insufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource estimation</li> </ul>
Orientation of data in relation to geological structure	<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>● The relationship between drilling orientation and orientation of key mineralised structures is yet to be determined</li> </ul>
Sample security	<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>● Core boxes are collected at the drill rig by Company personnel and transported to the Tucson logging facility. After logging the core is delivered by Company personnel to either ALS Minerals' or Skyline Tucson facilities for cutting, sampling, sample preparation and assaying.</li> </ul>

Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews of 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
Mineral tenement and land tenure status	<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 Ltd 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 Oracle Ridge (including historical Tailings Storage Facility)</li> <li>Oracle Ridge comprises 57 Patented Mining Claims and 45 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>There is a 3% net smelter returns royalty on the future sale of any metals and minerals derived from the Oracle Ridge mine.</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> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <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 3 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>
<p>Exploration done by other parties</p>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>completed.</p> <ul style="list-style-type: none"> <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 ton were milled since commencement of 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 scall mining occurred in the Golden Eagle area in the first half of the 1900s focussed on gold. The largest operation was the Sanderson Mine. The mine is part of the Golden Eagle mineralised system but is located outside the Company's landholding. 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).</li> <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>

Criteria	JORC Code explanation	Commentary
		<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>
Geology	<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 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> <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>
Drill hole Information	<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>See body of announcement including Attachment 1.</li> </ul>
Data aggregation methods	<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>For WT-series drilling, exploration results are reported as weighted averages of assays equal or above a 1% copper cut-off. Lower grade intersections are reported as weighted averages of assays equal or above a 0.6% copper cut-off. Intersections start and end at a</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>	<ul style="list-style-type: none"> <li>sample at or exceeding the specified cut-off.</li> <li>For GE-series drilling, exploration results are reported as weighted averages of assays equal or above a 0.5g/t gold cut-off. Intersections start and end at a sample at or exceeding the specified cut-off.</li> <li>No metal equivalents reported</li> </ul>
Relationship between mineralisation widths and intercept lengths	<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>All intervals reported are down hole length. True widths are not known at this stage.</li> </ul>
Diagrams	<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>
Balanced reporting	<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>
Other substantive exploration data	<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>
Further work	<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>	<ul style="list-style-type: none"> <li>Further work will include interpretation of logging and assay results when they become available. Additional drill holes will be completed at Oracle Ridge in the coming weeks.</li> </ul>