

4km of Leatherwood Contact with High Grade Cu at OREX Prospect

- Field mapping at OREX prospect identifies extensive outcropping mineralisation along the lower Leatherwood intrusive contact, approximately three kilometres from the Oracle Ridge mine portals
- The contact shows very similar geology to that encountered at the Oracle Ridge mine which hosts the existing JORC Resource
- High-grade rock chip samples along the contact include:
 - o 10.6 % Cu, 29.5 g/t Ag
 - o 8.17 % Cu, 71.3 g/t Ag, 0.48 g/t Au
 - o 8.08 % Cu, 30.9 g/t Ag, 0.23 g/t Au
 - o 8.06 % Cu, 39.1 g/t Ag
 - o 6.64 % Cu
 - o 6.31 % Cu, 0.45 g/t Au
 - o 6.21 % Cu, 59.6 g/t Ag
- Prospectivity for additional skarn-hosted copper mineralisation at OREX significantly enhanced
- Detailed aeromagnetic geophysical survey of the OREX prospect in progress to determine drill targets and assess the mineralisation potential of the lower contact.

Eagle Mountain Mining CEO, Tim Mason, commented:

"These results illustrate the prospectivity of the OREX prospect which covers an area greater than at the Oracle Ridge mine. This is truly exciting."

Following an initial geological review in 2020, we staked a significant package of prospective land to the south-east of the Oracle Ridge mine now known as OREX. This latest field program on OREX concluded that the lower contact of the Leatherwood granitic intrusive has abundant outcropping copper skarn. Our interpretation is that the limestone units which host the mineralised skarn were intruded by the Leatherwood granite, therefore the bottom of the Leatherwood at OREX is highly prospective for further mineralisation. We have commenced a detailed drone aeromagnetic geophysical survey over OREX to assist us in defining priority drill targets."

Overview

Eagle Mountain Mining Limited (ASX:EM2) ("Eagle Mountain", the "Company") is pleased to report the results of a field mapping program at the OREX prospect ("OREX"), part of the Company's 80% owned Oracle Ridge Mine Project ("Oracle Ridge", "Project") in Arizona.

Based on encouraging results from an initial field mapping program at OREX in 2020 (see ASX Announcement 12 October 2020), a detailed mapping project has now been completed. The recently completed field program confirmed the extensive occurrences of outcropping skarn hosted copper-silver-gold mineralisation along the lower contact of the Leatherwood intrusive ("lower contact") and the skarn horizon. Over 100 grab samples were collected with many returning high-grade mineralisation (see Figure 1, Table 1 and Attachment 1). The limestone formations and resulting skarn are very similar to those encountered at the Oracle Ridge mine.

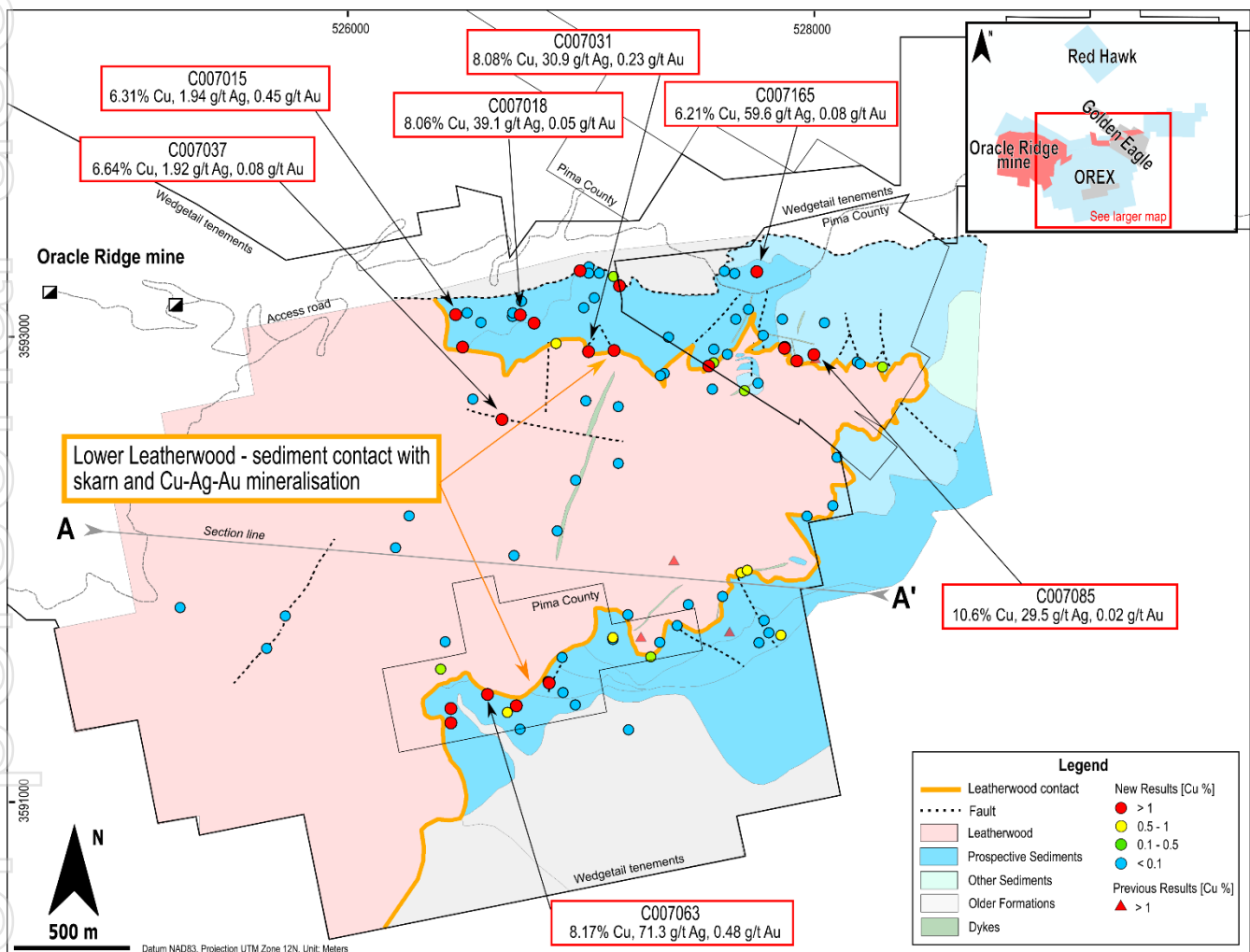


Figure 1 – New geological map of OREX prospect with high-grade samples highlighted (Note: Wedgetail tenements are owned by Wedgetail Operations in which Eagle Mountain owns an 80% interest. Pima County claims are owned by Pima County and Wedgetail Operations has an agreement for low disturbance exploration activities.)

Further highlights enhancing the potential of the lower contact to host additional mineralisation include:

- Dozens of historical workings were discovered at OREX, primarily at or near the lower contact. Some workings were also identified within the Leatherwood intrusive where mineralised structures cross-cut the intrusive. Dumps with mineralised material were often associated with historical prospects.
- Alteration and mineralisation occur in the same rocks as at the Oracle Ridge mine (Escabrosa, Martin and Abrigo Formations). The physical characteristics of the mineralisation and the assay results are broadly consistent with those encountered at the Oracle Ridge mine.
- Significant alteration and mineralisation were encountered along approximately 4 kilometres of the exposed lower contact suggesting this geological feature is an important locus for mineralisation.
- The intensity of skarn alteration increases upwards towards the lower Leatherwood contact.
- Several generations of dykes occur at OREX with mineralised dykes occurring at the lower contact. The importance of these dykes at Oracle Ridge and their links to copper mineralisation are becoming increasingly apparent. Additional work is being planned to better understand these features.

Table 1 Summary of Cu > 1% assay results from rock chip samples at OREX prospect

Sample ID	Easting	Northing	Cu [%]	Ag [g/t]	Au [g/t]	Sample type
C007085	528003	3592931	10.6	29.5	0.02	Dump
C007063	526596	3591465	8.17	71.3	0.48	Outcrop
C007031	527142	3592949	8.08	30.9	0.23	Dump
C007018	526737	3593102	8.06	39.1	0.05	Dump
C007037	526658	3592651	6.64	1.92	0.08	Dump
C007015	526459	3593103	6.31	1.94	0.45	Dump
C007165	527757	3593288	6.21	59.6	0.08	Dump
C007069	526995	3593292	5.03	42	0.36	Dump
C007088	527876	3592958	4.23	3.6	0.03	Dump
C007034	527165	3593227	2.90	28.5	0.26	Dump
C007094	526438	3591404	2.65	31.5	0.45	Outcrop
C007020	526797	3593067	2.41	1.41	BD	Dump
C007035	526488	3592963	2.31	2.61	0.05	Outcrop
C007089	526862	3591515	2.11	7.98	0.02	Outcrop
C007052	527549	3592882	1.93	2.12	0.05	Outcrop
C007057	526720	3591416	1.90	3.62	0.28	Outcrop
C007095	526438	3591342	1.80	22.7	0.18	Dump
C007032	527031	3592944	1.62	21.5	0.21	Outcrop
C007087	527878	3592962	1.43	1.74	0.01	Dump
C007086	527929	3592903	1.01	8.17	0.01	Outcrop

BD = below detection

Discussion

The results of this latest field work indicates that OREX is an outstanding target to define additional skarn-hosted copper mineralisation at Oracle Ridge. Alteration and mineralisation at OREX and at the Oracle Ridge mine display many similarities. At the mine, orebodies occur at or near the upper Leatherwood-sediments contact while mineralisation at OREX has been identified at the lower Leatherwood-sediments contact.

The lower contact at OREX can be traced at surface for over four kilometres and displays discontinuous skarn alteration and mineralisation over its entire length. Based on Eagle Mountain's recent mapping and review of historical drilling information (*ASX announcement 12 October 2020*), the Company believes that the prospective contact exists at depth below the Leatherwood for approximately three kilometres in an east-west direction (Figure 2).

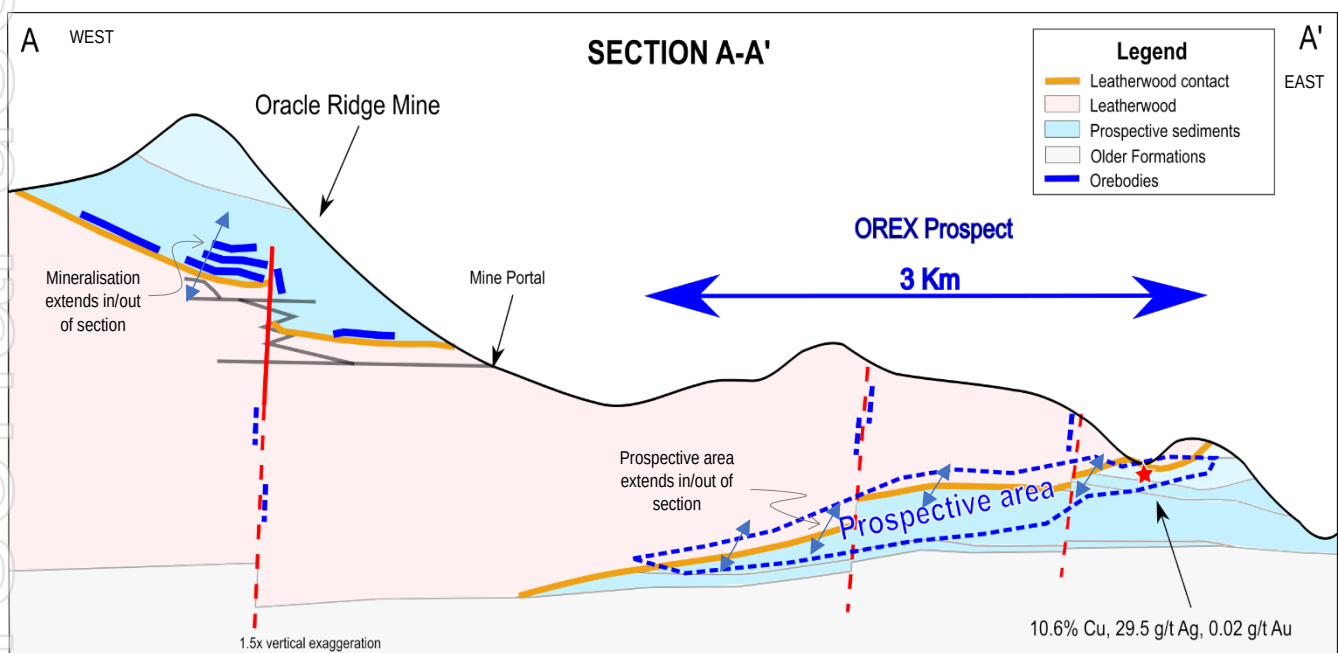


Figure 2 – Schematic cross section of the Oracle Ridge mine and OREX prospect. The orebodies at the Oracle Ridge mine are located at the upper contact of the Leatherwood intrusives. Recent results and re-interpretation of historical information have confirmed the prospectivity of the lower Leatherwood intrusive at the OREX prospect.



Figure 3 – Field mapping at OREX. Magnetite skarn with strong copper mineralisation (green) at the contact between Leatherwood and Escabrosa Formation (Sample C007032 527031E 3592944N)

Next Steps

A drone aeromagnetic geophysical survey is currently being completed over the OREX prospect. The survey will highlight areas with high magnetite content, a mineral often associated with mineralisation at Oracle Ridge. After the survey, further geophysical processing of the data will be completed to establish the depth of the anomalies. Drill holes will then be planned to test these anomalies in the coming months, and drilling will commence once necessary permits are received.

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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 greenfield 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 developments through our website and social media channels:



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



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Attachment 1 - List of samples from mapping project at OREX prospect

Sample ID	Easting	Northing	Sample ID	Easting	Northing
C007001	527461	3591853	C007036	526532	3592739
C007002	527609	3591887	C007037	526658	3592651
C007004	527689	3591990	C007038	526282	3597287
C007005	527715	3592001	C007039	526376	3597275
C007006	527201	3591809	C007040	526216	3597194
C007007	527299	3591627	C007041	527188	3596832
C007008	527339	3591689	C007042	526830	3596817
C007009	527413	3591762	C007043	526562	3596696
C007010	527788	3591784	C007044	526454	3596654
C007011	527808	3591731	C007045	526140	3596657
C007012	527860	3591720	C007046	527332	3596039
C007013	527766	3591689	C007047	527001	3595966
C007014	526508	3593111	C007048	526951	3595945
C007015	526459	3593103	C007049	526789	3595843
C007016	526568	3593069	C007050	526654	3595781
C007017	526703	3593095	C007051	527571	3592954
C007018	526737	3593102	C007052	527549	3592882
C007019	526705	3593111	C007053	527565	3592781
C007020	526797	3593067	C007054	527341	3592840
C007021	527011	3593132	C007055	526857	3591521
C007022	526710	3592064	C007056	526921	3591473
C007023	526896	3592170	C007057	526720	3591416
C007024	526976	3592389	C007058	526736	3591314
C007025	527020	3592731	C007059	526682	3591387
C007026	527160	3592707	C007060	527136	3591702
C007027	527159	3592462	C007061	527136	3591709
C007028	529275	3596317	C007062	526918	3591624
C007029	529300	3596302	C007063	526596	3591465
C007030	527358	3592849	C007064	525271	3591840
C007031	527142	3592949	C007065	525644	3591664
C007032	527031	3592944	C007066	525724	3591803
C007033	526892	3592979	C007067	526200	3592097
C007034	527165	3593227	C007068	526258	3592235
C007035	526488	3592963	C007069	526995	3593292

Sample ID	Easting	Northing
C007070	527033	3593309
C007071	527033	3593282
C007072	527078	3593282
C007073	527139	3593268
C007074	527056	3593176
C007075	526743	3593161
C007076	527570	3592896
C007077	527630	3592932
C007078	527704	3592775
C007079	527762	3592808
C007080	527666	3593083
C007081	527720	3593126
C007082	527784	3593014
C007083	527867	3593083
C007084	528049	3593068
C007085	528003	3592931
C007086	527929	3592903
C007087	527878	3592962
C007088	527876	3592958
C007089	526862	3591515
C007090	526974	3591420
C007091	527204	3591312
C007092	526413	3591692

Sample ID	Easting	Northing
C007093	526394	3591574
C007094	526438	3591404
C007095	526438	3591342
C007101	528190	3592899
C007102	528203	3592890
C007103	528298	3592877
C007104	528497	3592798
C007151	526443	3597479
C007152	526749	3596902
C007153	526394	3596851
C007154	526113	3596915
C007155	525802	3597131
C007156	526904	3596385
C007157	526523	3596227
C007158	526433	3595960
C007159	526748	3595970
C007160	527973	3592233
C007161	528085	3592279
C007162	528103	3592488
C007163	527617	3593291
C007164	527661	3593280
C007165	527757	3593288
C007166	527376	3593006



JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	- 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. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - 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.	<u>Rock chip sampling (Mapping)</u> Grab samples were collected during geological mapping to test altered and mineralized material in outcrop and waste dumps.
Drilling techniques	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).	Not applicable. No drilling results reported.
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure representative nature of the samples. - Whether a relationship exists between sample recovery and grade and whether sample bias may	Not applicable. No drilling results reported.

Criteria	JORC Code explanation	Commentary
	<i>have occurred due to preferential loss/gain of fine/coarse material.</i>	
Logging	- 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. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. - The total length and percentage of the relevant intersections logged.	<u>Rock chip sampling (Mapping)</u> - Samples were described by the field geologist. Photos were taken for each sample - Geological descriptions are qualitative in nature - All samples were geologically described
Sub-sampling techniques and sample preparation	- If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. - For all sample types, the nature, quality and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - 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. - Whether sample sizes are appropriate to the grain size of the material being sampled.	<u>Rock chip sampling (Mapping)</u> - 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. - No duplicates were taken - Sample sizes are appropriate to the grain size of the material being sampled
Quality of assay data and laboratory tests	- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. - 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. - 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.	<u>Rock chip sampling (Mapping)</u> - ALS Minerals assay methods: ME-MS61 (48 element four acid ICP-MS), Hg-MS42 (trace Hg by ICP-MS) and Au-AA23 (Au 30g charge Fire Assay with Atomic Absorption finish). The technique is considered a total digest of relevant minerals. Above detection samples were re-assayed with Au-GRA21, Ag-OG62, Cu-OG62, Pb-OG62, Zn-OG62 - Certified Reference Material (CRM), blanks and duplicates were inserted at a ratio of 1:20 with a minimum of 1 CRM per batch. Acceptable levels of accuracy and precision have been established.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	<u>Rock chip sampling (Mapping)</u> - Significant samples were reviewed by the Principal Geologist - Not applicable. No drilling results reported - Field data were collected on paper notebook and then digitized in spreadsheet and GIS files for visualization - No adjustment to assay data applied
Location of data points	- 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. - Specification of the grid system used. - Quality and adequacy of topographic control.	<u>Rock chip sampling (Mapping)</u> - Observation points and samples were located with a handheld GPS with an accuracy of $\pm 5\text{m}$ - Data were captured in NAD83 UTM Zone 12N - Topographic control was provided by 3D surfaces built from USGS' National Elevation Dataset points (Horizontal resolution: 10m, Vertical Accuracy: $\sim 3\text{m}$)
Data spacing and distribution	- Data spacing for reporting of Exploration Results. - 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. - Whether sample compositing has been applied.	<u>Rock chip sampling (Mapping)</u> - Samples were taken on an ad-hoc basis and have variable spacing - Not applicable. No Mineral Resource or Mineral Reserve reported - No sample compositing applied
Orientation of data in relation to geological structure	- Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. - 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.	<u>Rock chip sampling (Mapping)</u> Due to the nature of the mapping program and the limited understanding of mineralization controls, the potential for sampling bias cannot be assessed
Sample security	The measures taken to ensure sample security.	<u>Rock chip sampling (Mapping)</u> 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
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<u>Reconnaissance sampling</u> No audits or reviews of sampling techniques and data performed

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</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. - 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.	<u>OREX</u> - The OREX area is covered by 81 Unpatented Mining Claims (WTO 25 – 105) within the Coronado National Forest (United States Forest Service) - The patented claims are owned by Wedgetail Operations LLC, which is owned by Eagle Mountain Mining Limited (80%) and Vincere Resource Holdings LLC (20%) - Claims have been staked on the ground and filed with Pima County's Recorder's Office. - There are no known impediments to obtaining a licence to operate in the area
<i>Exploration done by other parties</i>	Acknowledgment and appraisal of exploration by other parties.	<u>OREX</u> - Details of historical (pre-1980s) exploration and mining activities in the OREX area are not known. Few small-scale workings were found during mapping. - In 1980 a Joint Venture between Gulf Minerals Corporation and W.R. Grace Company completed mapping of the area and drilled 7 holes. Results of the program were reviewed by Oracle Ridge Mining Partners and summarised in an internal communication in 1992.
<i>Geology</i>	Deposit type, geological setting and style of mineralisation.	<u>OREX</u> - Skarn-hosted Cu (Ag-Au) mineralization within sediments (Escabrosa, Martin and Abrigo Formations) below the Leatherwood intrusive sill - Structurally controlled Cu (Ag-Au) mineralization within Leatherwood intrusive
<i>Drill hole Information</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: - easting and northing of the drill hole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar - dip and azimuth of the hole - down hole length and interception depth - hole length. - 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	Not applicable. No drilling results reported

Criteria	JORC Code explanation	Commentary
	<i>the report, the Competent Person should clearly explain why this is the case.</i>	
<i>Data aggregation methods</i>	<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> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	- No weighting averaging techniques were applied to Exploration Results - Not applicable. No metal equivalents reported
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i>	Not applicable. No drilling results reported.
<i>Diagrams</i>	<i>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.</i>	See body of the announcement
<i>Balanced reporting</i>	<i>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.</i>	<u>OREX</u> Cu values for all grab samples collected over 1% are presented in the body of the announcement
<i>Other substantive exploration data</i>	<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</i>	All substantive exploration data reported in the current or previous company announcements.

Criteria	JORC Code explanation	Commentary
	<i>contaminating substances.</i>	
Further work	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <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>	Follow-up exploration at OREX includes: - Refinement of existing geological model based on the new data collected during mapping - A detailed, UAV-supported geophysical aeromagnetic survey is currently ongoing at OREX. Results will be used to identify highly magnetic areas potentially associated with skarn alteration and associated mineralization. Inversion of the magnetic data will be used to constrain the anomalies' depth - Drilling of targets displaying the most favourable geological, geochemical and geophysical characteristics will follow when all relevant permits have been obtained