

# Significant Uranium-Thorium and Rare Earth Results at Silver Mountain

# Highlights

- Results received following recent fieldwork include:
  - $_{\odot}$  2,170ppm U\_{3}O\_{8} and 23,114ppm ThO\_{2} spot pXRF values on unique minerals within silica veining of pegmatites
  - $\circ~$  Assays up to 387ppm  $U_3O_8$  and 493ppm ThO\_2 from outcropping pegmatites at Silver Dollar
- Highest uranium and thorium values related to hydrothermal alteration and quartz veining
- While elevated U<sub>3</sub>O<sub>8</sub> and ThO<sub>2</sub> were within pegmatites, geological interpretation indicates the pegmatites are not the source of mineralisation, providing potential for deeper high-grade mineralisation supported by local and regional scale structural controls
- Mineralisation model progressing via detailed full elemental analysis and mineral identification
- Anomalous rare earth assays averaging 205ppm total rare earth elements, with 48% of that coming from heavy rare earth oxides
- Rare earth elements are spatially associated with the uranium and thorium, typical of many uranium-rare earth element deposits in the world
- Strong indications of a wide spread heat engine, such as a buried porphyritic intrusion, from surface samples and mapping

Commenting on the new mapping, assays and next steps, Eagle Mountain Mining's CEO, Tim Mason, said:

"It is exciting to see our first Silver Mountain assays in over four years, particularly given they support our recent field work that indicates a new geological system supported by elevated uranium, thorium and rare earth elements. With observed similarities between field samples and new mapping across the Silver Dollar and Scarlett areas, we are eagerly following up with additional work to help establish what could be a significant exploration target for Eagle Mountain Mining."

The Company's consulting geologist, Dr Linus Keating, commented:

*"The possibility that a "heat engine" – perhaps a porphyritic intrusion – may lie beneath Silver Mountain. Evidence to support this possibility includes:* 

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1) the peripheral precious metal - sericite veins at Scarlett;

2) the increasing chloritic alteration encountered in drill holes 014, 015, and 016; and the lack of strong overprinted chlorite to the south;

*3) an appearance that drilling deeper into the Pacific Horizon ... encounters more breccias and alteration may be suggesting up-dip fluid flow from a porphyritic source ..."* 

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

# Recent Field Sampling

Several field samples were collected from mapped pegmatite dykes near the historical Silver Dollar mine (refer to Figure 1 and Attachment 1) in the Scarlett area at Silver Mountain.

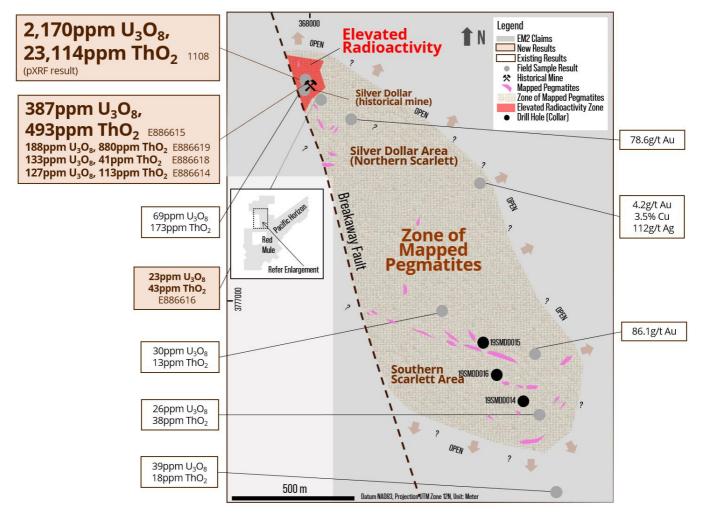


Figure 1 – Field sample results and geology mapping in the Scarlett area (Refer to ASX announcement dated 29 February 2024). Existing uranium and thorium results converted to oxide values.

Assays returned uranium values over five times greater, on average, than results from a handheld gammaray spectrometer (RS-230) as shown in Table 1 below.



## Table 1 – Summary of recent field sample assays and spectrometer results at Silver Mountain

Sample ID	Easting	Northing	Sample	RS230 Gamma-Ray	RS230 Gamma-Ray Spectrometer			Assays				
	[m]	[m]	Туре	Counts Per Second [approximate value]	U₃O8 [ppm]	ThO <sub>2</sub> [ppm]	U₃O8 [ppm]	ThO <sub>2</sub> [ppm]	HREEO* [ppm]	LREEO** [ppm]		
E886614	367959	3777786	Grab	NR	14	43	127	113	56	34		
E886615	367959	3777786	Grab	800	25	24	387	493	125	57		
E886616	368013	3777719	Grab	550	12	26	23	43	41	68		
E886617	367959	3777786	Grab	225	11	4	9	44	22	26		
E886618	367959	3777786	Grab	400	10	16	133	41	61	125		
E886619	367959	3777786	Grab	1,250	110	24	188	880	254	360		

NR = Not Recorded

\*HREEO = Heavy Rare Earth Element Oxides,  $Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$ \*\*LREEO = Light Rare Earth Element Oxides,  $La_2O_3 + Ce_2O_3 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3$ 

Several individual mineral occurrences were also assessed on other samples using a portable x-ray fluorescence analyser (pXRF). A black opaque mineral hosted in one silica flooded pegmatite sample showed very elevated uranium and thorium of 2,170ppm U3O8, 23,114ppm ThO2 (refer to Photo 1, Table 2 and Attachment 1). This black mineral is interpreted to have been precipitated from a siliceous hydrothermal fluid, providing potential for deeper high-grade mineralisation.

## Table 2 – Summary of recent pXRF results at Silver Mountain

pXRF	Easting	Northing	Sample	Thermo	Fischer X	L5 pXRF
Reading	[m]	[m]	Туре	Cu	U3O8	ThO <sub>2</sub>
ID				[%]	[ppm]	[ppm]
1108	367959	3777786	Grab	1.06	2,170	23,114

*Cautionary Statement on pXRF Results: pXRF values are from centimetre-scale spot analyses, are preliminary in nature, may not be representative of the whole rock concentration and could vary by orders of magnitude to assay results.* 

Petrographic work is planned to help understand this unique mineral occurrence, which could potentially be an indicator of a higher-grade mineralised system at depth. Overall, the highest values from field sampling appeared to be associated with structurally controlled hydrothermal alteration with quartz veining in pegmatites and granodiorites. Importantly, the source of higher-grade minerals are interpreted to not have originated from the pegmatites, rather from an alternative source which has remobilised these minerals. This provides opportunity for higher grade mineralisation separate to the pegmatites.



Photo 1 – Field sample of brecciated pegmatite collected from the Silver Dollar mine. Note the quartz veins and unknown opaque black mineral grain (circled white). This localised 1cm x 1cm area returned a pXRF reading of 2,170ppm U<sub>3</sub>O<sub>8</sub> and 23,114 ppm ThO<sub>2</sub> (spot pXRF reading ID 1108).

Radioactivity in the Silver Dollar area correlates with:

- increasing potassic and hematite alteration
- quartz ± magnetite veining
- brecciation in pegmatites

This style of alteration appears to increase towards the regional Breakaway Fault, as shown in Figure 1, which suggests that alteration and mineralisation are structurally controlled and may be derived from a source sitting below the upper plate of the fault.

Field work in the Silver Dollar area showed that pegmatites had a similar west-northwest trend as seen in pegmatite dykes mapped to the south at the Scarlett area (see Figure 1). This indicates the presence of a structural corridor favourable for the formation and emplacement of pegmatite dykes and associated mineralisation.

The Silver Dollar pegmatite samples were also elevated in rare earth element oxides as shown in Table 1. On average, almost 50% of the total rare earth element oxides comprised the heavy rare earth minerals. Rare earth elements are known to be associated with world class granitic and pegmatite hosted uranium deposits, such as Bokan Mountain in Alaska<sup>1</sup>. Detailed deposit comparisons are planned, however initial findings are that this potentially bodes well for the Silver Dollar area given their apparent geological and geochemical similarities.

<sup>&</sup>lt;sup>1</sup> Dostal et al, 2014. The early Jurassic Bokan Mountain peralkaline granitic complex (southeastern Alaska): geochemistry, petrogenesis and rare-metal mineralization. Lithos, 202-203, pp.395-412



## Next Steps

Further detailed review is planned to identify possible analogue world class uranium-rare earth deposits, such as Bokan Mountain<sup>2</sup>, which will guide future exploration targeting towards a potentially larger mineralisation system beyond the known radioactive rare earth occurrences.

Additional field work, petrography and interpretation has been planned to help establish the spatial extents and geological characteristics of the radioactive rare earth occurrences identified at the Silver Dollar area, with a particular focus on features believed to be critical in controlling mineralisation intensity such as the Breakaway Fault.

Assessment of geological data from the surrounding areas, including the Pacific Horizon, is also planned given the potential for a large mineralising system to be associated with the various Silver Mountain prospects.

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

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#### COMPETENT PERSON STATEMENT

The information in this document that relates to Exploration Activities is based on information compiled by Mr Brian Paull, who is a member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience relevant to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Mr Paull is the Director of Exploration at Eagle Mountain Mining Limited's wholly-owned subsidiary, Silver Mountain Mining Inc, and consents to the inclusion in this document of the information in the form and context in which it appears. Mr Paull holds shares and options in Eagle Mountain Mining Limited.

## 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.

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<sup>&</sup>lt;sup>2</sup> The Bokan Mountain granitic complex is located in southern Alaska. It is host to significant rare metal (REEs, Y, U, Th, Zr and Nb) deposits, such as the Bokan Mountain rare earth and Ross-Adams uranium projects.



# Attachment 1

## Summary table of recent field sample assays at Silver Mountain

Sample ID	Easting	Northing	Sample	RS230 Gamma-Ray S	Spectrome	ter	Assays			
	[m]	[m]	Туре	Counts Per Second [approximate value]	U <sub>3</sub> O <sub>8</sub> [ppm]	ThO <sub>2</sub> [ppm]	U₃O <sub>8</sub> [ppm]	ThO₂ [ppm]	HREEO* [ppm]	LREEO** [ppm]
E886614	367959	3777786	Grab	NR	14	43	127	113	56	34
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NR = Not Recorded

\*HREEO = Heavy Rare Earth Element Oxides,  $Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3 + XLREEO = Light Rare Earth Element Oxides, <math>La_2O_3 + Ce_2O_3 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3$ 

## Summary table of recent field sample assays at Silver Mountain – full rare earth element oxides

Sample ID								Assays	5						
	Ce <sub>2</sub> O <sub>3</sub> [ppm]	Dy <sub>2</sub> O <sub>3</sub> [ppm]	Er <sub>2</sub> O <sub>3</sub> [ppm]	Eu <sub>2</sub> O <sub>3</sub> [ppm]	Gd <sub>2</sub> O <sub>3</sub> [ppm]	Ho <sub>2</sub> O <sub>3</sub> [ppm]	La <sub>2</sub> O <sub>3</sub> [ppm]	Lu <sub>2</sub> O <sub>3</sub> [ppm]	Nd <sub>2</sub> O <sub>3</sub> [ppm]	Pr <sub>6</sub> O <sub>11</sub> [ppm]	Sm₂O₃ [ppm]	Tb <sub>7</sub> O <sub>4</sub> [ppm]	Tm <sub>2</sub> O <sub>3</sub> [ppm]	Y <sub>2</sub> O <sub>3</sub> [ppm]	Yb <sub>2</sub> O <sub>3</sub> [ppm]
E886614	14.2	6.1	4.2	0.3	3.3	1.3	7.4	0.7	7.6	2.1	2.7	0.8	0.6	34.5	4.3
E886615	25.1	11.7	8.6	0.4	6.1	2.5	10.3	2.4	12.9	3.3	4.9	1.4	1.6	78	12.8
E886616	30.9	4.4	2.6	0.5	3.4	0.8	13.4	0.4	15.9	3.7	4.0	0.6	0.4	25	2.5
E886617	10.7	2.3	1.6	0.3	1.9	0.4	5.4	0.3	6.4	1.6	1.7	0.3	0.2	12.6	1.6
E886618	57.2	6.6	4	0.5	5.7	1.3	25.6	0.7	28.3	7.4	6.3	1.0	0.6	36.1	4.2
E886619	172.8	33.7	18.9	1.1	26.3	6.2	65.7	2.6	77.7	19.9	24.1	4.9	2.8	138.4	19.1

## Summary table of recent pXRF results at Silver Mountain

pXRF	Easting	Northing	Sample	Thermo	Fischer X	L5 pXRF
Reading	[m]	[m]	Туре	Cu	U3O8	ThO <sub>2</sub>
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# Attachment 2

# JORC Code, 2012 Edition – Table 1

# Section 1 Sampling Techniques and Data



Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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>	<ul> <li>Reconnaissance-style sampling at Silver Mountain during geological mapping to test mineralised material found on historical mining dumps, significant outcrops, unknown or altered lithologies. The key objectives were to verify the metal content of historically mine material, confirm historical sampling programs and test new areas/significant outcrops.</li> <li>Sample types have included dump material collected near historical mine developments, rock chip samples from outcrops and some channel samples. Rock chips are collected and placed in sample bags with a location captured by hand-held GPS.</li> </ul>



Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul> <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 the core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>N/A – no new drilling results reported.</li> </ul>
<i>Drill sample recovery</i>	<ul> <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> <li>N/A – no new drilling results reported.</li> </ul>
Logging	<ul> <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> <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> <li>Mapping and associated geological logging information captured where samples have been acquired.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul> <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</li> </ul>	<ul> <li>ALS Minerals conducted all preparation work: surface samples were weighed, dried 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>Sample sizes are considered appropriate to the grain size of the material being sampled.</li> </ul>



Critorio	IODC Code overlagetion	
Criteria	JORC Code explanation	Commentary
	<ul> <li>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>	
<i>Quality of assay data and laboratory tests</i>	<ul> <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>	<ul> <li>A combination of assaying procedures were applied at ALS labs to ensure total elemental coverage for the field samples:</li> <li>ME-ICP06 (fused bead acid digestion and ICP-AES)</li> <li>ME-MS81(fused bead acid digestion and ICP-MS)</li> <li>ME-MS42 (aqua region digestion and ICP-MS)</li> <li>ME-4ACD81(four acid digestion and ICP-AES)</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 assay batch. CRMs are inserted at intervals never exceeding 20 samples. Acceptable levels of accuracy and precision have been established.</li> <li>A handheld gamma-ray spectrometer was used to determine (1) the level of radiation from decay of radioactive elements, and (2) component wavelengths to discern between uranium, thorium and potassium based on their spectral signature. The results guided sample selection for assaying. The instrument used was a Radiation Solutions RS-230 BGO Super-SPEC unit with a reading time of 60 seconds. The spectrometer had not been calibrated.</li> <li>Several unassayed grab samples were assessed using a ThermoFischer XL5 portable x-ray</li> </ul>

Criteria	JORC Code explanation	Commentary
		fluorescence analyser (pXRF). The results were preliminary and qualitative centimetre-scale spot sample analyses, used to guide further petrographic work on localised individual mineral occurrences. The pXRF results may not be representative of the whole rock element concentrations and could vary by orders of magnitude to assay results. The analysis time was 60 seconds and the pXRF was calibrated by ThermoFischer in June 2022.
<i>Verification of sampling and assaying</i>	<ul> <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 adjustments to assay data.</li> </ul>	<ul> <li>Significant intersections have been verified by the Company's Director of Exploration.</li> <li>No twinned holes reported.</li> <li>Logging and sampling data are collected using tablet computers to ensure data integrity.</li> <li>No assay adjustment was performed.</li> </ul>
<i>Location of data points</i>	<ul> <li>Discuss any adjustments to assay data.</li> <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>	<ul> <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 and surface samples are located with a hand-held GPS with an estimated horizontal accuracy of ±5m.</li> </ul>
Data spacing and distribution	<ul> <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>	Data spacing is insufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource estimation.



Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul> <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>	<ul> <li>The relationship between drilling and surface sampling orientation and orientation of key mineralised structures is yet to be determined.</li> <li>Drill holes are designed to intersect targets at a perpendicular angle.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>All field samples were collected by Company personnel or consultants and securely stored at the Company office prior to drop off at the assaying laboratories.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No audits or reviews of sampling techniques have been completed.

# **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>	<ul> <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> <li>The Silver Mountain Project (Project) is located approximately 100 kilometres by air northwest of Phoenix, Arizona, U.S.A. The geographical coordinates are approximately Latitude 34°8' North, Longitude 112°23' West.</li> <li>The Project is 100% owned by Eagle Mountain Mining Limited through its subsidiaries Silver Mountain Mining LLC.</li> <li>Silver Mountain comprises 26 Patented Mining Claims, 351 Unpatented Mining Claims and 3 State Exploration Permits.</li> <li>100% of the surface rights for the 26 Patented Mining Claims are owned by Silver Mountain Mining LLC (private property).</li> </ul>



Criteria	JORC Code explanation	Commentary	
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>It is believed that the first mining claims at the Pacific Horizon prospect were stake 1898.</li> <li>Between 1906 and 1912 the Pacific Copper Mining Company sunk a 150m (500ft) sinto the gossan at the Pacific Mine.</li> <li>Drilling was carried out in 1966, however it is unclear who completed the program (possibly Heinrichs GeoExploration)</li> <li>In 1968 Heinrichs GeoExploration conducted some dual frequency IP, resistivity ar magnetic geophysical surveys. This was followed by further geophysical surveys in using Very Low Frequency (VLF) Electro Magnetics (EM).</li> <li>KOOZ contracted Applied Geophysics in 1978 to run EM surveys (VLF, MaxMin II ar Horizontal Shootback) over selected areas.</li> <li>Detailed geological mapping was carried out by Kennecott in 1991 and 1992, focus the eastern and central areas of the Pacific Horizon prospect. Kennecott's mapping based on previous work done by Winegar et al, (1978)</li> <li>Ferguson &amp; Johnson (2013, Arizona Geological Survey) completed a mapping prograwhich covered the Pacific Horizon area.</li> </ul>	
Geology	• <i>Deposit type, geological setting and style of mineralisation.</i>	<ul> <li>Several types of deposit styles have been identified for the various prospects at Silver Mountain:</li> <li>Proterozoic volcanogenic massive sulphides (VMS) in Precambrian greenstone (Pacific Horizon prospect)</li> <li>Quartz-carbonate breccia with associated copper-gold-silver mineralisation (Pacific Horizon prospect)</li> <li>Younger (Laramide arc) copper-gold porphyry and associated gold veins (Scarlett prospect)</li> <li>Pegmatite dykes elevated in uranium and thorium (Scarlett prospect)</li> <li>Overprinting and remobilisation of fluids by Cenozoic trans-tension resulting in detachment style mineralisation (Red Mule prospect)</li> </ul>	
Drill hole information	• 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> <li>New field sample results have been reported in the body of the announcement.</li> <li>No new drilling results reported.</li> </ul>	

Criteria	JORC Code explanation	Commentary
Data aggregatio methods	<ul> <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> <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> <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, 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> <li>All field samples have been reported without a cut-off grade applied.</li> <li>The field samples are considered to be anomalous in uranium given the Arizona Geological Survey considers values above 4.5ppm uranium to be anomalous, as documented in their report on Naturally Occurring Radioactive Materials (NORM) in Arizona. Citation: Spencer, J.E., 2002, Naturally Occurring Radioactive Materials (NORM) in Arizona. Citation: Spencer, J.E., 2002, Naturally Occurring Radioactive Materials (NORM) in Arizona. Arizona Geological Survey Open File Report, OFR-02-13</li> <li>Uranium, thorium and rare earth element assays are reported as oxide species: uranium: U<sub>3</sub>O<sub>6</sub>; thorium: ThO<sub>2</sub>; heavy rare earth elements: Eu<sub>2</sub>O<sub>3</sub>, Gd2O3, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Fr<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>; light rare earth elements: La<sub>2</sub>O<sub>3</sub>, Ce<sub>2</sub>O<sub>3</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub></li> <li>No metal equivalents reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
		Commentary
<i>mineralisation widths and intercept lengths</i>	<ul> <li><i>Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><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></li> </ul>	
Diagrams	• 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.	See body of announcement.
Balanced reporting	• 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.	All exploration results obtained so far have been reported.
<i>Other substantive exploration data</i>	<ul> <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         <ul> <li>size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul> </li> </ul>	No other meaningful and material exploration data beyond this and previous ASX announcements by the Company.
Further work	The nature and scale of planned further	• Further work will involve additional data review, field mapping, sampling and petrography.



Criteria	JORC Code explanation	Commentary	
	<ul> <li>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>		