

8 MAY 2025

Bramaderos Project, Southern Ecuador

# Strong assays outline scope of new areas of high-grade gold at Bramaderos

The latest results highlight the project's potential upside

## Key Points

- Surface sampling and geological mapping have identified additional areas of epithermal gold-silver mineralisation, with up to 14.4g/t gold in surface rock chip samples
- The results confirm that multiple higher-grade epithermal mineralised corridors extend from the defined porphyry gold-copper deposits at Brama-Alba within Bramaderos
- The discovery of more high-grade gold areas would have major ramifications for the economics at Bramaderos

Sunstone Metals Ltd (ASX: STM) is pleased to announce strong assays from recent geological mapping and rock chip sampling at its Bramaderos Project in southern Ecuador.

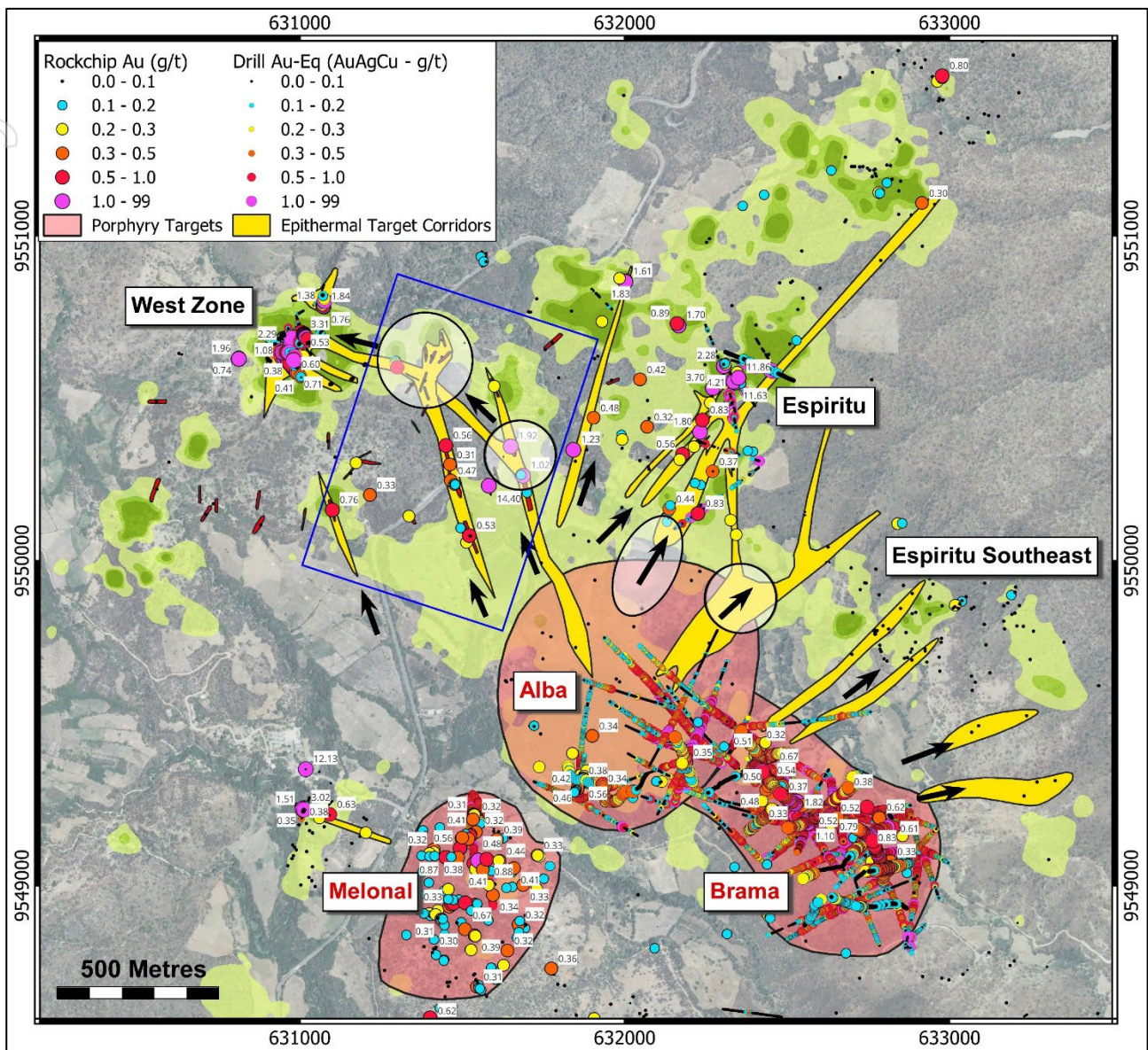
Sunstone Managing Director Patrick Duffy said the latest results continue to expand the higher-grade gold opportunity at Bramaderos and point to the potential for more of the high-grades encountered at the Limon gold-silver deposit.

*"These results are significant because they demonstrate very clearly that with additional mapping and surface sampling, the higher-grade gold opportunity will expand in scale at Bramaderos," Mr Duffy said.*

*"This is entirely consistent with our geological model and gives us great confidence that we can grow the areas of higher-grade gold and deliver multiple drill targets. These results form the basis for an expanding exploration program – one that continues to define additional at surface gold-silver systems, and defines other gold-copper porphyry systems like that recently identified at Copete.*

*"At Bramaderos, we have a cluster of gold-silver epithermal systems at surface that are adjacent to several very large gold-copper porphyry deposits. This is an ideal scenario for considering future developments at what we expect will become a major gold-copper mining centre in southern Ecuador."*

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**Figure 1:** Brama-Alba gold-copper porphyry deposit surrounded by alteration corridors related to epithermal gold mineralisation at West Zone, Espiritu, Espiritu Southeast, and newly defined areas within the blue rectangle. The green background contours show the epithermal pathfinder element arsenic in soil samples. New key epithermal exploration targets are developing in the four white shaded areas.

**Discussion of Results**

Geological mapping programs have been undertaken in the areas to the north and west of the large Brama-Alba porphyry gold-copper deposit as follow-up work to previous exploration at the outcropping Espiritu and West Zone epithermal gold-silver-lead-zinc occurrences.

The follow-up is based on the evolving geological model of structural corridors – based largely on the Limon epithermal gold-silver deposit and related Limon porphyry gold-copper target – and defined at surface throughout the Bramaderos Project area by domains of altered rock and their geochemical signature.

Table 1 shows the results of the recent rock chip program. High-grade gold is associated with the epithermal pathfinder elements silver (“Ag”) and lead (“Pb”).

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Associated alteration includes silicic, silicic argillic and advanced argillic alteration (Table 1), which overprint hydrothermal breccias, fault breccias and other volcanic host rocks

**Table 1:** Rock chip assay results from the most recent program in areas north and west of Brama-Alba

SAMPLE_ID	LITHOLOGY	LATE_ALTERATION	Au_ppm	Ag_ppm	Pb_ppm	AuEq_AuAg
R123065	BRECCIA (HYDROTHERMAL)	ADVANCED ARGILLIC	14.4	1.41	134.7	14.417
R123073	ANDESITE	SILICIC ARGILLIC	1.924	3.09	797.2	1.962
R123030	VEIN (QUARTZ)	SILICIC ARGILLIC	1.022	11.21	3267.2	1.159
R123052	VEIN (QUARTZ)	SILICIC ARGILLIC	0.756	9.58	71.7	0.873
R123051	VEIN (QUARTZ)	SILICIC	0.561	1.72	22.3	0.582
R123027	VEIN (QUARTZ)	SILICIC ARGILLIC	0.529	15	4168.4	0.712
R123056	DIORITE	ARGILLIC	0.333	0.96	53.6	0.345
R123061	BRECCIA (VOLCANIC)	SILICIC ARGILLIC	0.3	6.25	252.4	0.376
R123072	ANDESITE	SILICIC ARGILLIC	0.282	0.83	130.2	0.292
R123047	DIORITE	ARGILLIC	0.254	0.84	45.9	0.264
R123062	VEIN (QUARTZ)	SILICIC ARGILLIC	0.223	1.59	25	0.242
R123074	BRECCIA (HYDROTHERMAL)	SILICIC ARGILLIC	0.159	16.57	174.3	0.361
R123032	VEIN (QUARTZ)	SILICIC ARGILLIC	0.153	4.61	555.1	0.209
R123064	BRECCIA (VOLCANIC)	ARGILLIC	0.141	0.69	16.3	0.149
R123076	BRECCIA (HYDROTHERMAL)	SILICIC ARGILLIC	0.123	6.24	47.1	0.199
R123026	VEIN (QUARTZ)	SILICIC ARGILLIC	0.121	2.76	294.4	0.155
R123045	DIORITE	ARGILLIC	0.082	0.21	16	0.085
R123066	VEIN (QUARTZ)	SILICIC ARGILLIC	0.081	3.15	1003.7	0.119
R123037	QUARTZ VEIN	ARGILLIC	0.074	0.64	8.3	0.082
R123068	ANDESITE	ARGILLIC	0.06	0.35	13.5	0.064
R123071	BRECCIA (VOLCANIC)	SILICIC ARGILLIC	0.059	1.85	15.7	0.082
R123028	VEIN (QUARTZ)	SILICIC ARGILLIC	0.047	0.81	71.4	0.057
R123031	VEIN (QUARTZ)	SILICIC ARGILLIC	0.035	1.23	59.4	0.050
R123059	ANDESITE	SILICIC ARGILLIC	0.027	0.1	15.4	0.028
R123029	VEIN (QUARTZ)	SILICIC ARGILLIC	0.023	0.72	109.3	0.032
R123038	QUARTZ VEIN		0.017	0.44	8.2	0.022
R123054	BRECCIA (ANDESITIC)	ARGILLIC	0.015	0.06	14.5	0.016
R123055	ANDESITE	SILICIC ARGILLIC	0.015	0.39	31.5	0.020
R123053	DIORITE	SILICIC ARGILLIC	0.012	0.41	15.4	0.017
R123041	QUARTZ VEIN	ARGILLIC	0.01	0.15	7.9	0.012
R123058	BRECCIA (ANDESITIC)	ARGILLIC	0.01	0.07	19.9	0.011
R123077	VEIN (QUARTZ)	SILICIC	0.01	0.15	8.4	0.012
R123040	QUARTZ VEIN		0.008	0.18	10.4	0.010
R123067	BRECCIA (VOLCANIC)	SILICIC ARGILLIC	0.006	0.16	33.5	0.008
R123036	QUARTZ VEIN	ARGILLIC	0.005	0.48	9.7	0.011
R123044	VEIN (QUARTZ)	ARGILLIC	0.005	0.16	12.7	0.007
R123048	DIORITE		0.005	0.11	10	0.006
R123039	QUARTZ VEIN		0.0025	0.11	11.5	<0.005
R123042	VEIN (QUARTZ)	ARGILLIC	0.0025	0.26	10.3	<0.005
R123043	VEIN (QUARTZ)	ARGILLIC	0.0025	0.04	9.9	<0.005
R123046	QUARTZ VEIN	ARGILLIC	0.0025	0.03	2.5	<0.005
R123057	TUFF (ANDESITIC)	SILICIC ARGILLIC	0.0025	0.21	5.1	<0.005
R123060	ANDESITE	SILICIC ARGILLIC	0.0025	0.09	10.6	<0.005
R123069	BRECCIA (VOLCANIC)	ARGILLIC	0.0025	0.14	6.7	<0.005

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### About Sunstone Metals

Sunstone Metals Limited (“Sunstone” or “Company”) is an ASX-listed mineral exploration company with two world-class gold and copper projects in Ecuador:

1. The **Bramaderos Project**, located in Southern Ecuador, has both at-surface and deeper porphyry gold-copper systems and contains an initial Mineral Resource estimate of 156Mt at 0.53g/t AuEq for 2.7Moz AuEq<sup>1,2</sup>.

JORC Classification	Tonnage (Mt)	Au (g/t)	Cu (%)	Ag (g/t)	AuEq <sup>2</sup> (g/t)	AuEq <sup>2</sup> (Mozs)
Indicated	9	0.38	0.09	1.1	0.53	0.2
Inferred	147	0.35	0.11	1.3	0.53	2.5
<b>Total</b>	<b>156</b>	<b>0.35</b>	<b>0.11</b>	<b>1.3</b>	<b>0.53</b>	<b>2.7</b>

Additionally, the Bramaderos Project has a porphyry Exploration Target of between 3.3Moz and 8.6Moz AuEq within 255Mt to 360Mt at a grade between 0.40 and 0.74g/t AuEq<sup>1,2</sup>, and the Limon epithermal gold-silver Exploration Target of 0.9 - 1.7Moz AuEq<sup>4</sup> within 30Mt - 44Mt at a grade between 0.9 - 1.2g/t AuEq<sup>3,4</sup>.

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Resource for the exploration target area reported. It is uncertain if further exploration will result in the estimation of a Resource.

2. The **El Palmar Project** is located in northern Ecuador, 60km north-west of Ecuador’s capital Quito. The property sits on the regionally significant Toachi Fault Zone that hosts a number of world-class copper porphyry systems. The Project has both at-surface and deeper porphyry gold-copper systems and an initial Mineral Resource estimate of 64Mt at 0.60g/t AuEq<sup>5,6</sup> for 1.2Moz AuEq<sup>6</sup>.

JORC Classification	Tonnage Mt	Average Grade					Material Content			
		AuEq <sup>6</sup> (g/t)	Au (g/t)	Ag (g/t)	Cu (ppm)	Cu (%)	AuEq <sup>6</sup> (Koz)	Au (Koz)	Ag (Koz)	Cu (Kt)
Indicated	5	0.63	0.42	0.81	1,456	0.15	100	100	100	7
Inferred	59	0.59	0.40	0.65	1,290	0.13	1,100	700	1,200	70
<b>TOTAL</b>	<b>64</b>	<b>0.60</b>	<b>0.41</b>	<b>0.66</b>	<b>1,301</b>	<b>0.13</b>	<b>1,200</b>	<b>800</b>	<b>1,300</b>	<b>80</b>

<sup>1</sup> Refer ASX Announcement on 13 December 2022.

<sup>2</sup> The gold equivalent calculation formula for porphyry gold-copper-silver mineralisation at Bramaderos is  $AuEq(g/t) = (Au\ grade \times Au\ price \times Au\ recov / 31.1035) + (Ag\ grade \times Ag\ price \times Ag\ recov / 31.1035) + (Cu\ grade \times Cu\ price \times Cu\ recov / 100) / (Au\ price \times Au\ recov / 31.1035)$ . The prices used were US\$1,800/oz gold and US\$9,500/t copper and US\$22/oz silver. Recoveries are estimated at 89% for gold, 85% for copper, and 60% for silver based on metallurgical studies. Grades for the Exploration Target are 0.24g/t Au and 0.10% Cu. In Sunstone’s opinion all the elements included in the metal equivalents calculation have reasonable potential to be recovered and sold

<sup>3</sup> Refer ASX Announcement on 5 February 2024.

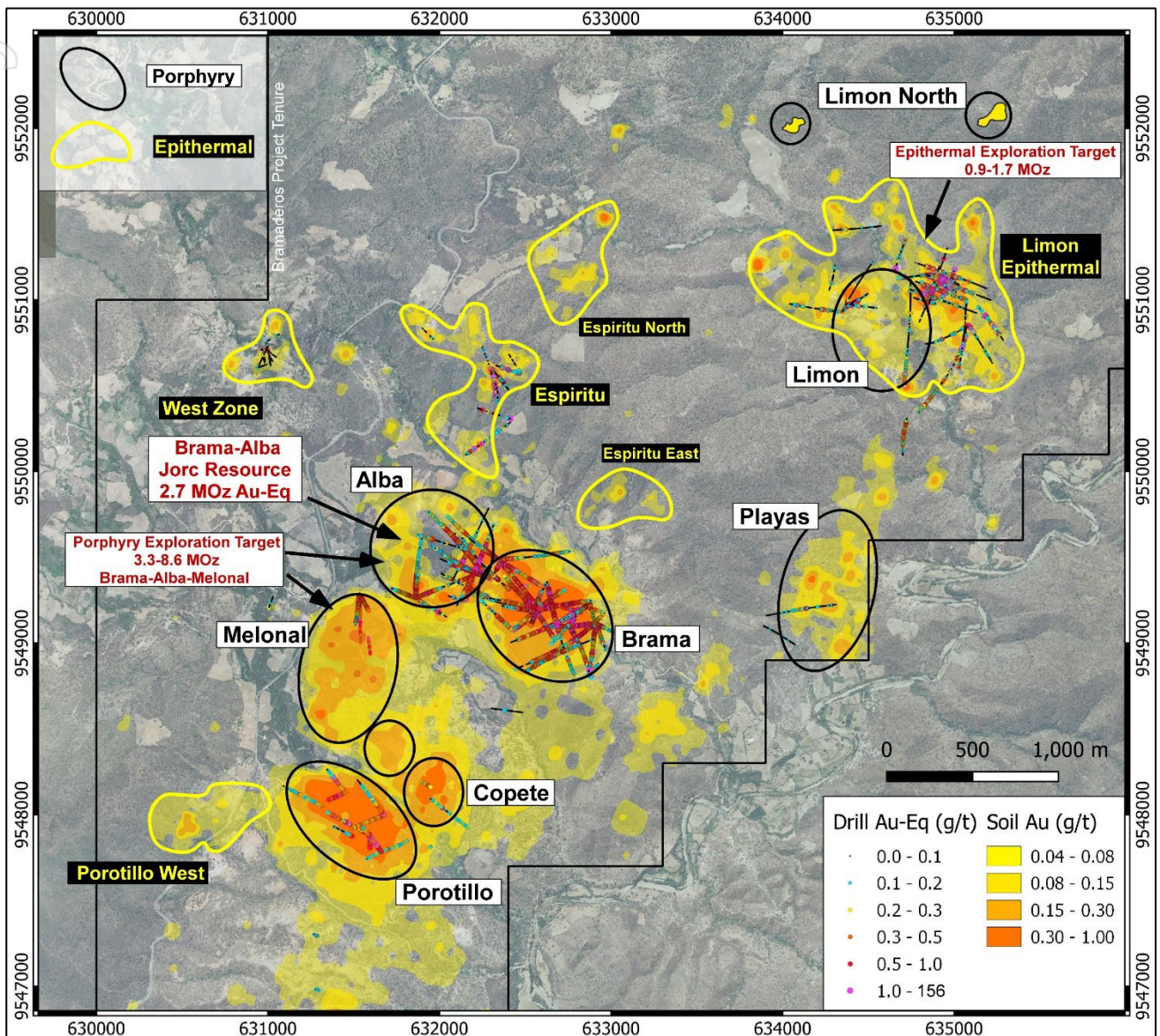
<sup>4</sup> The gold equivalent calculation formula for the Limon epithermal gold-silver mineralisation is  $AuEq(g/t) = Au(ppm) + (Ag(ppm)/82)$ . The prices used were US\$1,800/oz gold and US\$22/oz silver. Recoveries are estimated at over 90% for gold and 90% for silver from metallurgical studies. In Sunstone’s opinion all the elements included in the metal equivalents calculation have reasonable potential to be recovered and sold

<sup>5</sup> Refer ASX Announcement on 22 October 2024.

<sup>6</sup> The gold equivalent calculation formula for porphyry gold-copper-silver mineralisation at El Palmar is  $AuEq(g/t) = ((Au\ grade \times Au\ price \times Au\ recov / 31.1035) + (Ag\ grade \times Ag\ price \times Ag\ recov / 31.1035) + (Cu\ grade \times Cu\ price \times Cu\ recov / 100)) / (Au\ price \times Au\ recov / 31.1035)$ . The prices applied were US\$1,800/oz gold, US\$4.50/lb copper and US\$22/oz silver. Recoveries are estimated at 90% for gold, 78% for copper (excluded for oxide material), and 60% for silver based on metallurgical studies. Grades for the Exploration Target are 0.30g/t Au and 0.10% Cu. In Sunstone’s opinion all the elements included in the metal equivalents calculation have reasonable potential to be recovered and sold

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Additionally, the El Palmar Project has a porphyry Exploration Target<sup>7</sup> of between 15Moz and 45Moz AuEq within 1.0 to 1.2Bt at a grade between 0.3 - 0.7g/t gold and 0.1 – 0.3% copper<sup>5</sup>.



**Figure 2:** The Bramaderos concession showing the location of Limon and other gold-copper porphyry (black outlines) and gold-silver epithermal targets (yellow outlines). The background image is gold-in-soil, highlighting the potential scale increase to be delivered with more drilling at Bramaderos across multiple targets. Drilling activity during 2024 focussed on the Limon gold-silver epithermal opportunity.

**Strategy**

The porphyry projects at Bramaderos and El Palmar have the potential to evolve into multi-decade gold-copper mining centres. At Bramaderos, the Limon epithermal deposit has been prioritised as a potential near-surface high-grade gold-silver development opportunity. This strategy allows for a scalable operation

<sup>7</sup> The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Resource for the exploration target area reported. It is uncertain if further exploration will result in the estimation of a Resource.

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to be established first before developing the much larger porphyry gold-copper-silver opportunities at Bramaderos.

The Company continues to evaluate potential new opportunities to continue to grow our business in Ecuador, where clear shareholder value can be demonstrated. It is also evaluating potential partnerships for its projects where this may maximise the value of the portfolio.

**Track Record**

The team at Sunstone has been involved in significant discoveries of porphyry and epithermal copper-gold mineralisation at Tujuh Bukit in Indonesia and Cascabel in Ecuador, and the successful development of the King of the Hills Gold Mine in Western Australia and Koniambo Nickel Mine and Smelter in New Caledonia. The Company continues to attract specialist resources executives and is well-placed to repeat that success at Bramaderos and El Palmar.

**Excellent infrastructure**

All projects are supported by established infrastructure close to power, road and rail infrastructure and ports.

**Community support**

The Board and Management Team take their responsibilities to the host communities seriously and have endeavoured to implement the highest ESG standards throughout our business. Sunstone released its inaugural Sustainability Report in 2023, which details the level of support and engagement with local communities and project stakeholders.

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Figure 3: Location of Sunstone’s Bramaderos and El Palmar projects, Ecuador.

Mr Patrick Duffy, Managing Director of Sunstone Metals Ltd., has authorised this announcement to be lodged with the ASX.

For further information, please visit [www.sunstonemetals.com.au](http://www.sunstonemetals.com.au)

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### Competent Persons Statement

The information in this report that relates to exploration results and Exploration Targets is based upon information reviewed by Dr Bruce Rohrlach who is a Member of the Australasian Institute of Mining and Metallurgy. Dr Rohrlach is a full-time employee of Sunstone Metals Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Dr Rohrlach consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information relating to the Bramaderos Mineral Resource is extracted from the ASX announcement on 13 December 2022. The information relating to the El Palmar Mineral Resource is extracted from the ASX announcement on 22 October 2024. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person’s findings are presented for their respective Mineral Resource estimates have not been materially modified from the original market announcements.

### Information on Exploration Targets

#### Bramaderos

The Bramaderos porphyry Exploration Target within the Bramaderos concession is estimated from 3 areas – the extensions to the Brama-Alba system that are not captured in the Mineral Resource estimate (MRE), and mineralisation drilled at the targets of Melonal and Limon porphyry mineralisation.

The Exploration Target does not include known porphyry mineralisation at Sandia, Porotillo, Playas, Copete or Yeso. It was decided to not include these areas because Sunstone has not yet completed any or sufficient drilling in these areas. Some historical drilling has been completed at Porotillo. Further work in these areas will be undertaken and they are expected to contribute to an expanded Exploration Target in future.

Several areas of mineralisation have been identified outside of the area of the MRE. The MRE captured all material within a ‘Mineralisation Wireframe’, and within an economically modelled pit. Some drill holes that intersected mineralisation are outside the mineralisation wireframe, and either within or outside the pit. Inadequate drilling exists in these areas to show continuity. Furthermore, the effect of the reasonable prospects of economic extraction was to exclude 14% of material. This material has been captured in the Exploration Target.

Six domains were identified as having clear potential for additional mineralisation and these were reviewed either on a depth slice basis, or a block basis. Volumes were calculated and grade was assigned based on nearby data and on comparison with the overall Brama-Alba grade.

The Melonal target is a continuation of the Brama-Alba system. It is geologically grouped with Brama-Alba. Recent drilling by Sunstone, and historical drilling from 2007, has confirmed that the Melonal target is mineralised, and that mineralisation is hosted in rocks the same as those drilled at the nearby Brama-Alba deposit. The mineralised rocks are coincident with a discrete sub-vertical magnetic anomaly measuring up to 400m in diameter, and with a vertical extent of over 1,000m. The Exploration Target for Melonal was considered to a depth of 500m. The Melonal target straddles the approved Bramaderos-01 and Bramaderos-02 concessions.

Sunstone has drilled 8 effective diamond holes at the Limon porphyry target. Mineralisation has been intersected in a number of holes. A trench (LM\_TR\_01) was completed at Limon prior to drilling in an area of outcropping stockwork veining and minor secondary copper mineralisation. It returned 97m at 0.73g/t gold

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and 0.23% copper. A recent hole drilled under the trench has intersected similar stockwork veined intrusive and contains chalcopyrite.

This area around Trench TR\_LM\_01 has been included in the porphyry Exploration Target where more drilling is required to allow inclusion in a Mineral Resource estimate.

This target area will be further explored with drilling programs to be executed over the next two years, subject to the Company's funding ability.

### **Limon epithermal**

The Limon epithermal Exploration Target was estimated on target prospects where there was a combination of diamond drilling (by Sunstone), geological mapping, trenching, geochemistry (soils) and to a lesser extent geophysical data (magnetics) which could support the geological and mineralisation concept model.

The Limon alteration area has been covered with soil sampling on a 50m x 50m grid. This survey is an important exploration method which identified several gold-in soil anomalies that are primary targets for drilling. The soil geochemical data is further interpreted using related element associations typical of epithermal systems, such as areas of somewhat coincident gold, silver, zinc, lead, copper, tellurium and arsenic. Target areas have also been strengthened using alteration mineralogy from a hand-held Terraspec instrument. These data assist in mapping the alteration zones most likely to be associated with epithermal mineralisation.

Drilling at Limon has also intersected a high sulphidation system in holes LMDD004 and 006, which included intersections of 13.3m at 0.43% copper and 0.11g/t gold, within 59.6m at 0.16% copper.

Standard geological mapping and rock chip sampling has also been undertaken across the Limon target area.

The volume ranges for the initial Exploration Target in the Central Shoot were estimated using cross sections and 3-D modelling in Leapfrog software, based upon an analysis of drilling, mineralised rock types, grade distribution, potential for extrapolation of mineralisation continuity and interpreted geological risk.

The volume ranges for the other components were estimated from geological interpretation and guided by extent of surface geochemical anomalism, supplemented by preliminary drilling. A conservative approach was taken to the potential distribution of gold and silver bearing veins.

This target area will be further explored with drilling programs to be executed over the next two years, subject to the Company's funding ability.

### **El Palmar**

The Exploration Target within the El Palmar concession is estimated from within the T1, T2 and T3 areas.

The Exploration Target does not include interpreted or known porphyry mineralisation at the T4 and T5 target areas. It was decided to not include these areas because Sunstone has not yet completed any drilling at T4 and has conducted only minor drilling at T5. Further work in these areas will be undertaken and they are expected to contribute to an expanded Exploration Target in future.

The components of the exploration target are based on a combination of diamond drilling conducted by Codelco (during 2012) and by Sunstone (during 2022 and 2023), ground magnetics, multi-element soil sampling, multi-element rock chip and channel sampling, multi-element trench sampling and deep magnetic inversion anomalies modelled from ground magnetic data.

Wireframes of the areas within the Exploration Target areas were created in Leapfrog software using data interpreted from the Mineral Resource block model, iso-surface contours of modelled magnetic intensities, and grade ranges in available diamond drill holes. The volumes were multiplied by a specific gravity of 2.72g/cc (the average density of the T1 resource) to determine the tonnage range of the target. Grade ranges were determined with reference to drill intersection and surface rock chip assays.

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The next step in testing these targets is primarily diamond drill testing. The targets have been adequately defined, but drill programs still require detailed planning regarding the number of drill holes, their azimuths, dips, and final depths. Drilling of these targets will be undertaken over the next two years, subject to the company's funding availability.

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**TABLE 1 – Section 1: Sampling Techniques and Data**

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. 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> </ul>	<ul style="list-style-type: none"> <li>The results announced here are from rock chip samples collected during geological mapping programs.</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip samples were representative of the outcrop and alteration domains.</li> </ul>
	<ul style="list-style-type: none"> <li>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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip sampling points have been guided by geological mapping. The samples were dried, crushed to 70% passing 2mm, Split 1000g and pulverised to 85% passing 75microns. A 20g portion of this sample was used for multi-element analysis (IMS-230) and a 30g sample for Fire Assay Au (FAS-111).</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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>Previous drilling by Sunstone is diamond core drilling and has drilled to various depths. The diamond core was drilled delivering either HTW (70.9mm) or NTW (56mm) core. Drill core is oriented using a Reflex ACT II tool for bottom of hole.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul style="list-style-type: none"> <li>This announcement does not report drilling results.</li> </ul>
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>This announcement does not report drilling results.</li> </ul>
	<ul style="list-style-type: none"> <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>This announcement does not report drilling results.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chips were logged for lithology, weathering, structure, mineralogy, mineralisation, colour, and other features. Sampling was carried out according to Sunstone's internal protocols and QAQC procedures which comply with industry standards.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip samples are logged for lithology, weathering, structure, mineralogy, mineralisation, colour, and other features.</li> </ul>
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>The areas of outcrop are logged in full, and each sampled outcrop is individually described.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul style="list-style-type: none"> <li>N/A – no drilling.</li> </ul>
	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>N/A.</li> </ul>
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>Surface samples were sent to the LAC y Asociados Cia. Ltda. Sample Preparation Facility in Cuenca, Ecuador for sample preparation. The standard sample preparation for drill core samples (Code PRP-910) is: Drying the sample, crushing to size fraction 70% &lt;2mm and splitting the sample to a 250g portion by riffle or Boyd rotary splitter. The 250g sample is then pulverised to &gt;85% passing 75 microns and then split into two 50g pulp samples. Then one of the pulp</li> </ul>

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Criteria	JORC Code explanation	Commentary
		<p>samples was sent to the MS Analytical Laboratory in Vancouver (Unit 1, 20120 102nd Avenue, Langley, BC V1M 4B4, Canada) for gold and base metal analysis.</p> <ul style="list-style-type: none"> <li>The sample preparation is carried out according to industry standard practices using highly appropriate sample preparation techniques.</li> </ul>
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul style="list-style-type: none"> <li>Sunstone used an industry standard QAQC programme involving Certified Reference Materials “standards” and blank samples, which were introduced in the assay batches.</li> <li>Standards (Certified Reference Materials) or analytical blanks were submitted at a rate of 1 in 28 samples. Field duplicates were also taken at a rate of approximately 1 in 28 samples.</li> <li>The check or duplicate assay results are reported along with the sample assay values in the final analysis report.</li> </ul>
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Once assay results are received the results from duplicate samples are compared with the corresponding routine sample to ascertain whether the sampling is representative.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Sample sizes are considered to be appropriate for the style of sampling undertaken and the grain size of the material, and correctly represent the style and type of mineralisation at the exploration stage.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul style="list-style-type: none"> <li>Sunstone uses a fire assay gold technique for Au assays (FAS-111) and a four acid multi element technique (IMS-230) for a suite of 48 elements. FAS-111 involves Au by Fire Assay on a 30-gram aliquot, fusion and atomic absorption spectroscopy (AAS) at trace levels. IMS-20 is considered a near total 4 acid technique using a 20g aliquot followed by multi-element analysis by ICP-AES/MS at ultra-trace levels.</li> <li>This analysis technique is considered suitable for this style of mineralisation.</li> </ul>
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Handheld XRF data, together with detailed geological mapping, are used as a guide to areas of potential mineralisation and samples from these areas are sent for laboratory analysis as described above.</li> </ul>
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Standards, blanks and duplicates are inserted ~1/28 samples. The values of the standards range from low to high grade and are considered appropriate to monitor performance of values near cut-off and near the mean grade of the deposit.</li> <li>The check sampling results are monitored, and performance issues are communicated to the laboratory if necessary.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul style="list-style-type: none"> <li>Procedure checks have been completed by the Competent Person for exploration results for this announcement.</li> </ul>
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>Twin holes have not been drilled in these areas.</li> </ul>
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>Sunstone sampling data were imported and validated using Excel.</li> </ul>
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Assay data were not adjusted.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>Sample co-ordinates are located by GPS.</li> </ul>
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> </ul>	<ul style="list-style-type: none"> <li>Ecuador projection parameters:</li> </ul>

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Criteria	JORC Code explanation	Commentary	
		Parameter	Value
		Reference Ellipsoid	International 1924
		Semi Major Axis	
		Inverse Flattening (1/f)	
		Type of Projection	UTM Zone -17S (Datum PSAD56)
		Central Meridian:	-81.0000
		Latitude of Origin	0.0000
		Scale on Central Meridian	0.9996
		False Northing	10000000
		False Easting	500000
	<ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The topographic control was compared against published maps and satellite imagery and found to be good quality.</li> </ul>	
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>The samples were collected from various outcropping areas during mapping. No systematic sampling distances were applied.</li> </ul>	
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>The data from these samples does not contribute to any resource estimate nor implies any grade continuity.</li> </ul>	
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>No sample compositing was done.</li> </ul>	
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip locations were appropriate for the interpreted geology providing representative samples.</li> </ul>	
	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No sampling bias is expected at this stage.</li> </ul>	
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Sunstone sampling procedures indicate individual samples were given due attention.</li> <li>Sample security was managed through sealed individual samples and sealed bags of multiple samples for secure delivery to the laboratory by permanent staff of the joint venture.</li> <li>MS Analytical is an internationally accredited laboratory that has all its internal procedures heavily scrutinised in order to maintain their accreditation. MS Analytical is accredited to ISO/IEC 17025 2005 Accredited Methods.</li> </ul>	
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Sunstone's sampling techniques and data have been audited multiple times by independent mining consultants during various project assessments. These audits have concluded that the sampling techniques and data management are to industry standards.</li> <li>All historical data has been validated to the best degree possible and migrated into a database.</li> </ul>	

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**TABLE 1 – Section 2: Exploration Results**

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>	<ul style="list-style-type: none"> <li>The Bramaderos Exploration Concession is located in the Loja Province of southern Ecuador. The concession was granted to La Plata Minerales S.A. ("PLAMIN") in January 2017. PLAMIN is a subsidiary of Sunstone Metals Ltd. The concession is subject to a Joint Venture between SolGold Canada Inc. (12.5%) and Sunstone Metals Ltd. (87.5%). There are no declared wilderness areas or national parks within or adjoining the concession area. There are no established native title interests.</li> </ul>
	<ul style="list-style-type: none"> <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 Bramaderos Exploration Concession was granted to La Plata Minerales S.A. ("PLAMIN") in January 2017. PLAMIN is now a subsidiary of Sunstone Metals Ltd. The Bramaderos Concession is subject to a Joint Venture between Sunstone Metals and SolGold. Sunstone has an 87.5% interest in the JV. SolGold's 12.5% interest is loan carried.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The historic exploration at Bramaderos was completed by various groups over the period 1970-1984, 2001-2002 and 2004-2007. Most of the readily available historic data has been acquired and compiled into databases and a GIS project. Exploration by other parties has included stream sediment surveys, geological mapping, rock chip sampling (888 samples) and grid-based soil sampling (1324 samples), trenching and channel sampling (17 trenches), ground magnetic surveys (31 line kilometres), electrical IP surveys and diamond drilling (10426m).</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The deposit style being explored for includes intrusion-related and stockwork hosted porphyry Au-Cu systems plus epithermal gold-silver-polymetallic veins. The setting at Limon is a volcanic arc setting of Cretaceous age intrusions.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:               <ol style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Details of the samples discussed in this announcement are in the body of the text.</li> <li>See Figure 1 for the location of rock chip sampling.</li> </ul>
	<ul style="list-style-type: none"> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Information included in announcement.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	<ul style="list-style-type: none"> <li>Weighted averages were calculated over reported intervals according to sample length.</li> <li>No grade cut-offs were applied.</li> </ul>
	<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</li> </ul>	<ul style="list-style-type: none"> <li>No aggregating of intervals undertaken at this stage.</li> </ul>

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Criteria	JORC Code explanation	Commentary
	<p><i>aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Preliminary metallurgical studies are indicating a standard grind with a flotation circuit. Stage one will recover copper and the majority of gold as a saleable concentrate. Stage two is a finer grind with a cyanide leach for gold on site. Current, overall estimated recoveries for the combined process are 86% for copper and 89% for gold.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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 (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>Figures 1 &amp; 2 show the interpreted strike orientation of the mineralised lodes based on mapping and interpretation of detailed magnetic data.</li> <li>True widths of mineralised lodes are not known at this stage.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>See Figures 1-2 for maps showing distribution of samples.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Figures 1-2 show the current interpretations of geology.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported) including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>Figures 1-2 above show various datasets that are being used to identify target areas and to guide current and future drilling.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>The planned exploration program is outlined in the announcement.</li> <li>See Figures 1-2 which show areas for further exploration.</li> </ul>