

14 OCTOBER 2025

# Bramaderos Gold-Copper Project, Southern Ecuador

# Sunstone targeting an updated Mineral Resource following successful completion of surface sampling program

Program is aimed at enhancing the already-substantial 2.7Moz AuEq<sup>1,2</sup> resource ahead of a scoping study

### **Key Points**

Planned Brama-Alba Mineral Resource upgrade and scoping study

- A major 1,543m surface sampling program has been successfully completed at Brama-Alba
- This is the first stage of a program to upgrade geology interpretations and expand the existing 2.7Moz AuEq<sup>1,2</sup> Mineral Resource estimate ahead of a planned Bramaderos scoping study
- The program targeted gold soil anomalies to expand the existing known mineralised area within the Brama-Alba porphyry resource and within the planned open pit area, as well as linking Alba to the adjacent Melonal gold copper porphyry
- Assays for the 773-sample program are expected this month

### **Copete Gold and Copper Porphyry**

 All remaining assays from the Copete gold-copper surface definition ravine sampling program have been received with interpretations suggesting that the Copete gold-copper porphyry mineralisation may be contiguous with the adjacent Porotillo gold-copper porphyry mineralisation.

Sunstone Metals Ltd (ASX: STM) is pleased to provide an update on its latest exploration activity at its Bramaderos Gold-Copper Project in southern Ecuador.

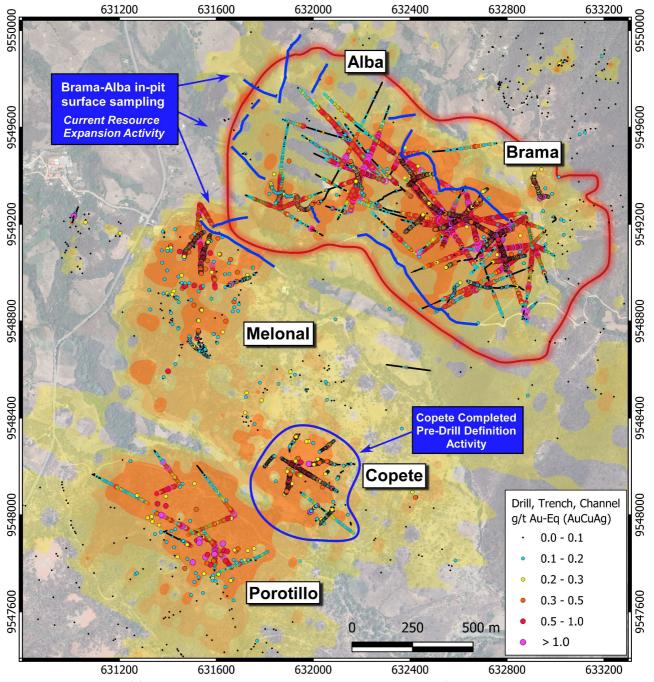
Sunstone Managing Director Patrick Duffy said: "Our technical team continues to do exceptional exploration work while Sunstone progresses its strategic corporate and asset discussions.



"The completion of a campaign-scale surface sampling and mapping program around the Brama and Alba gold and copper porphyry system is part of our strategy to upgrade the porphyry Mineral Resource and to prepare for a Scoping Study for the Bramaderos project.

"With multiple avenues for rapid resource growth and strengthening gold prices, we have very high confidence in the compelling economics of our resource at the Bramaderos Project which the proposed low-cost scoping study will deliver and also reevaluating the resource and conceptual open pit using recent gold prices.

"At Copete, additional channel sampling assays and compilation of data by our geology team are opening up the possibility that the Copete and Porotillo porphyry systems are contiguous. This is an exciting development that will focus our ongoing assessment of these adjacent porphyry systems".



**Figure 1:** The cluster of four porphyry gold-copper systems in the central area of the Bramaderos concessions (Brama-Alba, Melonal, Copete and Porotillo), showing the two areas of completed surface sampling and geological mapping activity at Copete (blue outline) and around the periphery of Brama-Alba (blue channel sampling lines).



### 1. Brama-Alba Surface Channel Sampling Campaign

A Mineral Resource estimate was undertaken at the Brama - Alba porphyry system in 2022 (see ASX announcement dated 13 December 2022), along with a modelled economic open-pit outline and definition of porphyry exploration targets within and under the modelled open-pit. This work clearly identified potential for the Brama-Alba resource to grow on several sides and at depth below the modelled pit.

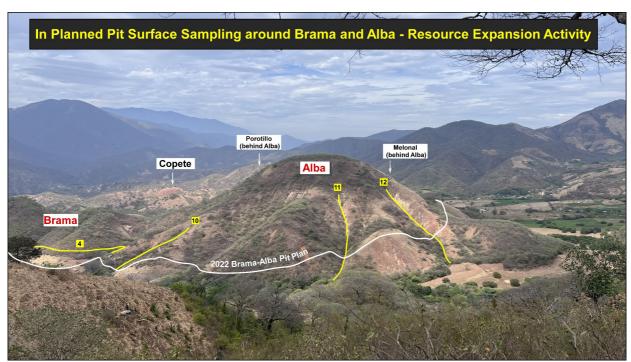
Gold and copper prices have significantly increased (over 100%) since the initial resource estimate in late 2022. Consequently, the company sees value in rapidly progressing studies on the Brama-Alba porphyry system, in parallel with its exploration initiatives at the outcropping, higher-grade Limon epithermal gold-silver system, as well as the other Bramaderos porphyry targets.

This has the potential to result in a larger Mineral Resource estimate at Brama Alba, which will underpin a Scoping Study for the eventual multi-decade, large-tonnage, low-cost gold-copper mining operations at Bramaderos.

As part of this strategy, a significant campaign of surface channel sampling was completed during September at Brama-Alba and on the northeast side of Melonal. This work involved sampling a series of vehicle access roads, drill rig access tracks and ravines over gold soil anomalies that lie within and adjacent to the 2022 modelled open-pit shell (see Figures 2 and 3). The aims of this work are to:

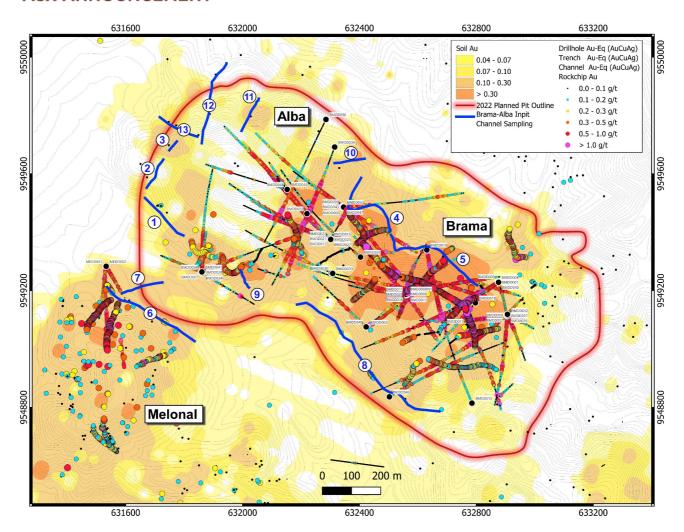
- identify additional zones of mineralisation that lie outside the current resource;
- identify if mineralisation is contiguous between Alba and Melonal;
- refine the surface geology map and the deposit sub-surface 3D lithology model;
- acquire additional samples from surface on the northeast side of Melonal so that a future Mineral Resource update can bring part of the area into the resource; and,
- provide further constraints for detailed vein and alteration modelling of the Brama Alba deposit.

Areas of stockwork veining were encountered along sampling line 5 north of Brama, along sampling lines 6 and 7 between Melonal and Alba, and along parts of sampling line 8 on the south side of Brama (see Figures 2 and 3). All assays for sampling lines 1-13 are due in October 2025.



**Figure 2:** Southward-looking view over Alba and Brama showing 4 of 13 surface rock-sampling lines surrounding the edges of the current resource.





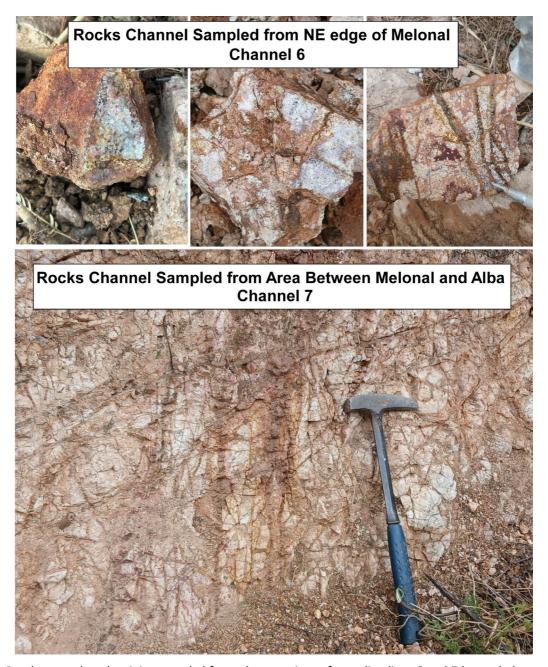
**Figure 3:** Location of 13 lines of surface rock channel sampling (blue lines) located over soil gold anomalies around the edges of the Brama-Alba resource and within or close to the margins of the planned pit shell as modelled in 2022 (red outline.





**Figure 4:** Areas of new channel sampling and mapping along access tracks and ravines off the southern and western edges of the Brama-Alba gold and copper orebody.





**Figure 5:** Porphyry stockwork veining sampled from along sections of sampling lines 6 and 7 located along and off the northeast edge of the Melona! porphyry system (see Figure 3). The rocks pictured above contain oxidised sheeted and stockwork veins at up to 15 veins per metre dominated by quartz and iron-oxide minerals such as goethite, limonite and hematite. The abundances of these iron-oxide minerals are around several percent, but do not necessarily translate to mineralisation. The maximum veins per metre estimates are based on field observations of the number of veins per metre of rock exposed in channel cuts. The photographs are not of specific mineralisation, and there are no visual-based estimates of grade due to the highly oxidised nature of these surface samples. Assay results for the sampling program discussed in this announcement are due and expected to be reported in late October 2025.



### 2. Discussion of Results - Copete

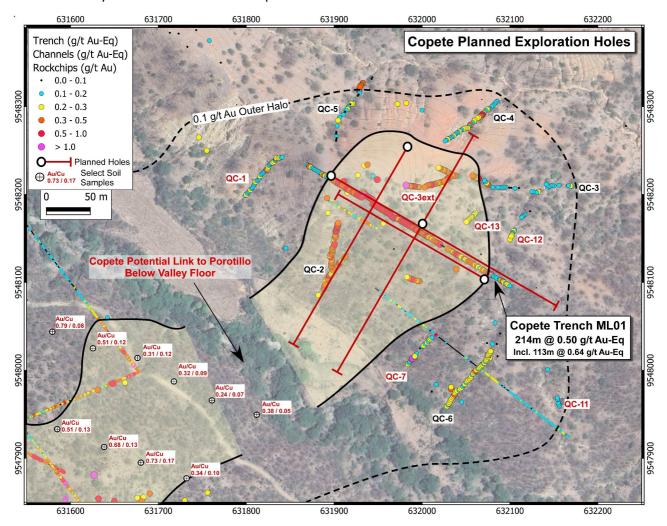
Final assays were received from the completed program of ravine rock channel sampling at Copete that covered an area of 400m by 350m (see Figures 6 and 7).

An earlier trench at Copete (Trench ML01) yielded 214m @ 0.5 g/t Au-Eq and included 113m @ 0.64 g/t Au-Eq (see ASX announcement dated 12 November 2024).

The ravine mapping and sampling at Copete identified two mineralised intrusions that cover an area of 300m by >250m and are strongly stockwork veined. Assays from the first set of ravines (ravines 2 - 6) were announced in an ASX release dated 4 September 2025. Assays from the second set of ravines, QC-1, QC-3Ext, QC-7, QC-11, QC-12 and QC-13, have been received, and significant intersections are listed in Table 1.

This work has identified a core zone of higher gold grade in QC-2 and QC-3ext associated with two syn-mineral intrusions, and show that the high-grade mineralisation in Trench ML01 extends downslope to the north and south. This core zone at Copete appears to extend southward towards the Porotillo system.

The mineralised quartz diorite porphyry intrusion at Copete is open to the south and extends under cover below the valley floor that lies between Copete and Porotillo.



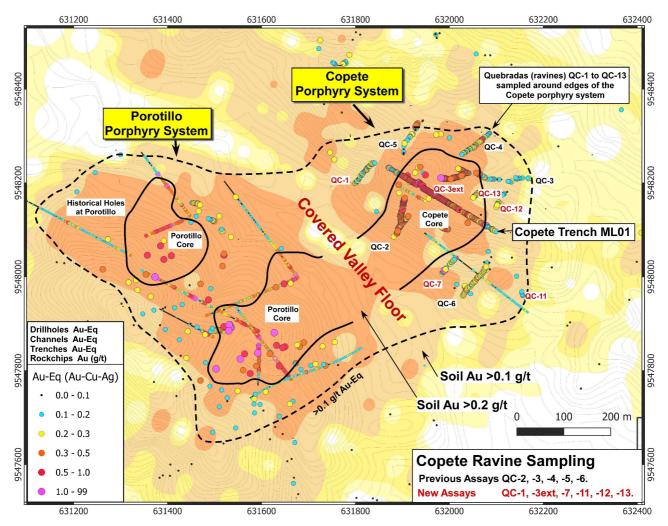
**Figure 6:** Compilation map showing all sampled ravines at Copete (QC-1 to QC-7 and QC-11 to QC-13) in relation to Trench ML01, which yielded 214m @ 0.50 g/t Au-Equivalent (see ASX announcement dated 12 November 2024). Five exploration holes have been planned as a first-pass drill test of the Copete porphyry system (indicated by red hole traces).



Copete		Intersection Length	Au-Eq	Au	Cu	Mo	Ag
Ravine		(Metres)	Au-Cu-Ag (g/t)	(g/t)	ppm	ppm	(g/t)
QC-1		78.7	0.19	0.16	159	25.4	0.22
QC-2a		63.7	0.44	0.41	194	10.3	0.45
QC-2b		48.3	0.35	0.31	191	5.5	0.36
QC-3		105.1	0.22	0.16	353	23.6	0.76
	Includes	40.8	0.33	0.26	410	27.8	1.02
QC-3ext		60.2	0.44	0.37	408	16.8	0.84
QC-4		88.1	0.19	0.16	146	20.9	0.34
	Includes	21.7	0.24	0.21	119	15.7	0.55
QC-5		48.9	0.19	0.16	162	4.7	0.70
	Includes	12.4	0.36	0.32	248	9.3	0.42
QC-6		90.8	0.24	0.15	549	11.4	0.47
QC-7		34.0	0.29	0.25	244	6.8	0.50
QC-11		11.9	0.15	0.06	557	1.8	0.36
QC-12		18.7	0.17	0.11	357	9.7	0.69
OC-13		19.4	0.23	0.16	386	10.3	1.31

**Table 1:** Rock channel assay results from the recently completed program at Copete. New assays from ravines QC-1, QC-3ext, QC-7, QC-11, QC-12 and QC-13.

There is increasing evidence that the strongest parts of the exposed Copete and Porotillo porphyry systems may be cojoined. They may be part of a 700m-long coherent and tabular mineralised zone that passes under the valley floor that separates Copete from Porotillo (Figure 6). Highly mineralised soil samples along this northeasterly porphyry trend strengthen this interpretation (Figure 7).



**Figure 7:** Overview of the developing geometry and linkage of the Copete and Porotillo porphyry systems. Strong cores of mineralisation at surface at both Copete and Porotillo may be part of a large system whose surface expression is a 700m-long tabular zone that passes under the intervening valley floor.



Geological work is ongoing to further test this hypothesis. If correct, this area could provide a third avenue for substantial porphyry resource growth on the Bramaderos property beyond the current 2.7 Moz Au-Eq<sup>1,2</sup> resource at Brama-Alba:

- 1. Phase 1 expansion: Grow the Brama-Alba resource laterally and at depth;
- 2. incorporate the Melonal Exploration Target into the Bramaderos Mineral Resource; and
- 3. incorporate Copete-Porotillo into an Exploration Target and, with further drilling, a maiden Mineral Resource.

### 3. Ongoing Work

Ongoing geological work is currently focused on updating geological models at the Brama-Alba system to support a planned updated Mineral Resource estimate and commencing the Bramaderos Scoping Study.

### **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:

 The Bramaderos Project, located in Southern Ecuador, has both at-surface and deeper porphyry goldcopper 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)	AuEq² (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
Total	156	0.35	0.11	1.3	0.53	2.7

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 $^{1,2}$ , and the Limon epithermal gold-silver Exploration Target of 0.9 - 1.7Moz AuEq $^4$  within 30Mt - 44Mt at a grade between 0.9 - 1.2g/t AuEq $^{3,4}$ .

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

<sup>&</sup>lt;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 x Au price x Au recov / 31.1035) + (Ag grade x Ag price x Ag recov / 31.1035) + (Cu grade x Cu price x Cu recov / 100)) / (Au price x 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>&</sup>lt;sup>3</sup> Refer ASX Announcement on 5 February 2024.

<sup>&</sup>lt;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



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>.

		Average Grade			Material Content					
JORC Classification	Tonnage Mt	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
TOTAL	64	0.60	0.41	0.66	1,301	0.13	1,200	800	1,300	80

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>.

### **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 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**

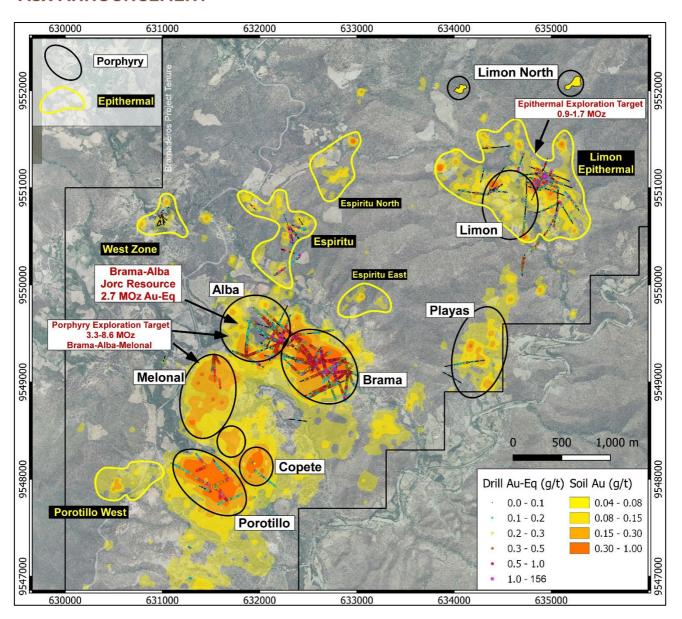
The Board and Management Team take their responsibilities to the host communities seriously and have endeavoured to implement the highest ESG standards throughout our business. Sunstone released its inaugural Sustainability Report in 2023, which details the level of support and engagement with local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

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

<sup>&</sup>lt;sup>6</sup> The gold equivalent calculation formula for porphyry gold-copper-silver mineralisation at El Palmar is AuEq (g/t) = ((Au grade x Au price x Au recov / 31.1035) + (Ag grade x Ag price x Ag recov / 31.1035) + (Cu grade x Cu price x Cu recov / 100)) / (Au price x 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

<sup>&</sup>lt;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.





**Figure 8:** 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 focused on the Limon gold-silver epithermal opportunity.





Figure 9: 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

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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 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.

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.



# TABLE 1 – Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• 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.	The results announced here are from rock chip and channel samples collected during geological mapping programs.
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Rock chip samples and channel samples were representative of the outcrop and alteration domains.
	• 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.	• Rock chip and channel 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).
Drilling techniques	• 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).	• 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.
Drill sample	Method of recording and assessing core and chip sample recoveries and results assessed.	This announcement does not report drilling results.
recovery	Measures taken to maximise sample recovery and ensure representative nature of the samples.	This announcement does not report drilling results.
	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.	This announcement does not report drilling results.
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.	Rock chip and channel samples 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.
	Whether logging is qualitative or quantitative in nature.  Core (or costean, channel, etc.) photography.	Rock chip and channel samples are logged for lithology, weathering, structure, mineralogy, mineralisation, colour, and other features.
	• The total length and percentage of the relevant intersections logged.	The areas of outcrop are logged in full, and each sampled outcrop is individually described.
Sub-sampling techniques	• If core, whether cut or sawn and whether quarter, half or all core taken.	• N/A – no drilling.
and sample	• If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	• N/A.
preparation	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• 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% <2mm and splitting the sample to a 250g portion by riffle or Boyd rotary splitter. The 250g sample is then pulverised to >85% passing 75 microns and then split into two 50g pulp samples. Then one of the pulp samples was sent to the MS Analytical Laboratory in Vancouver (Unit 1, 20120 102nd Avenue, Langley, BC



Criteria	JORC Code explanation	Commentary		
		<ul> <li>V1M 4B4, Canada) for gold and base metal analysis.</li> <li>The sample preparation is carried out according to industry standard practices using highly appropriate sample preparation techniques.</li> </ul>		
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<ul> <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 approximately 1 in 28 samples. Field duplicates were also taken at a rate of approximately 1 in 30 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> <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>	Once assay results are received the results from duplicate samples are compared with the corresponding routine sample to ascertain whether the sampling is representative.		
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered to be appropriate for the style of sampling undertaken and the grainsize of the material, and correctly represent the style and type of mineralisation at the exploration stage.		
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.	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 multielement analysis by ICP-AES/MS at ultra-trace levels.      This analysis technique is considered suitable for this style of mineralisation.		
	<ul> <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>	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.		
	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.	<ul> <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>		
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Procedure checks have been completed by the Competent Person for exploration results for this announcement.		
assaying	<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>Twin holes have not been drilled in these areas.</li> <li>Sunstone sampling data were imported and validated using Excel.</li> </ul>		
	Discuss any adjustment to assay data.	Assay data were not adjusted.		
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.	Sample co-ordinates are located by GPS.		
	Specification of the grid system used.	Ecuador projection parameters:     Parameter Value  Reference Ellipsoid International 1924		
		Semi Major Axis		



Criteria	JORC Code explanation	Commentary	
		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
	Quality and adequacy of topographic control.	The topographic control was published maps and satellit good quality.	
Data spacing and	Data spacing for reporting of Exploration Results.	The samples were collected areas during mapping. For samples were collected at a	the channel sampling most
distribution	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.	The data from these sample resource estimate nor impli	
	Whether sample compositing has been applied.	No sample compositing w	vas done.
Orientation of data in	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Rock chip locations were interpreted geology providence.	appropriate for the ding representative samples.
relation to geological structure	• 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.	No sampling bias is expect	eted at this stage.
Sample security	The measures taken to ensure sample security.	Sunstone sampling proceds samples were given due attered to Sample security was manage individual samples and seas samples for secure delivery permanent staff of the joint MS Analytical is an internal laboratory that has all its ir scrutinised in order to main Analytical is accredited to Accredited Methods.	tention. ged through sealed led bags of multiple y to the laboratory by t venture. ationally accredited nternal procedures heavily ntain their accreditation. MS
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sunstone's sampling techn audited multiple times by i	ndependent mining project assessments. These the sampling techniques o industry standards.

# <u>TABLE 1 – Section 2: Exploration Results</u>

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Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	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 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



Criteria	JORC Code explanation	Commentary
		area. There are no established native title interests.
	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.	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.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	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).
Geology	Deposit type, geological setting and style of mineralisation.	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.
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:     a. easting and northing of the drill hole collar b. elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar c. dip and azimuth of the hole d. down hole length and interception depth e. hole length.	<ul> <li>Details of the samples discussed in this announcement are in the body of the text.</li> <li>See Figures 1-7 for the location of rock chip and surface channel sampling.</li> </ul>
	• 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.	Information included in announcement.
Data aggregation methods	• 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.	Weighted averages were calculated over reported intervals according to sample length.      No grade cut-offs were applied.
	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.	No aggregating of intervals undertaken at this stage.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	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.
Relationship between	• If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.	Figures 6-7 show the interpreted strike orientation of the mineralised lodes based on mapping and interpretation of detailed alteration and structural data.



Criteria	JORC Code explanation	Commentary
mineralisation widths and intercept lengths	• 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').	True widths of mineralised lodes are not known at this stage.
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 Figures 1-2 and 6-7 for maps showing distribution of samples.
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.	• Figures 1-2 and 6-7 show the current interpretations of geology.
Other substantive exploration data	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.	Figures 1-2 and 6-7 above show various datasets that are being used to identify target areas and to guide current and future drilling.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The planned exploration program is outlined in the announcement.</li> <li>See Figures 1-2 and 6-7 which show areas for further exploration.</li> </ul>