

1 SEPTEMBER 2026

**Bramaderos Gold-Copper Project, Southern Ecuador**

# Metallurgical tests deliver increases in Bramaderos Project recoveries

**The higher recoveries will have a material positive impact on the Bramaderos Project NPV, production and AISC**

## Key Points

- Latest metallurgical tests return significantly higher recoveries than those used in the Scoping Study (refer ASX Announcements 21 April 2026 and 11 May 2026)
- The revised average recoveries of 80% for copper and 93% for gold are higher than the Scoping Study respective recoveries of 75% and 85%
- The recovery results are expected to have a material positive impact on all the key project metrics, including potential gold and copper production, unit costs and NPV
- The highly favourable outcomes reflect the successful demonstration that conventional flotation can be effectively applied to both principal ore types within the Bramaderos resource
- Locked-cycle flotation testing achieved copper recoveries of up to 83% into concentrates grading approximately 18% copper.
- Low arsenic content indicates production of clean copper concentrates with minimal smelter penalty risk
- Combined flotation and cyanidation test work have achieved overall gold recoveries of up to 94%
- Metallurgical characteristics support a conventional processing flowsheet comprising crushing, grinding, flotation and cyanidation of flotation tails to produce a copper-gold concentrate and gold dore
- Discussions with offtake providers confirmed Bramaderos concentrate would be in high demand and receive favourable pricing terms

Sunstone Managing Director Patrick Duffy said: *"These are important results with highly favourable consequences for Bramaderos across all the key project metrics.*

*"The increased recoveries are very positive for the forecast Bramaderos production and NPVs and lower unit costs significantly in the process. Essentially, the key to this breakthrough lies in the fact that the locked-cycle testwork has confirmed the technical viability of conventional flotation processing for Bramaderos.*

*"Both the copper and gold recoveries are materially higher than the assumptions used in the April 2026 Scoping Study and consistent with our strategy to progressively grow the value of the overall Bramaderos Gold-Copper Project. These outcomes provide a robust metallurgical foundation for the ongoing project studies and support the continued advancement of Bramaderos as a potential large-scale gold-copper development opportunity".*

## ASX ANNOUNCEMENT

Sunstone Metals Limited (ASX: STM) is pleased to announce highly favourable results from a comprehensive metallurgical test work program completed on the Brama-Alba-Melonai porphyry deposits at the Bramaderos Project in southern Ecuador.

The program assessed the metallurgical characteristics of the project mineralisation and provided key inputs to the ongoing study programs. Testwork was undertaken at Intertek Kamloops and overseen by Pitchblack Group.

The testwork evaluated the physical and metallurgical performance of the principal Brama-Alba lithologies, namely the Brama Diorite ("DI") and Brama Breccia ("IBX"), with the objective of defining ore hardness and competency, mineralogical characteristics, flotation response, concentrate quality and overall gold-copper recovery potential.

**Figure 1.** Location of the Bramaderos Project in Loja Province, Ecuador.



## ASX ANNOUNCEMENT

### 1. Representative Composite Samples

Composite samples were prepared from multiple drill holes. Diorite and breccia represent the dominant resource lithologies and approximate anticipated mining grades.

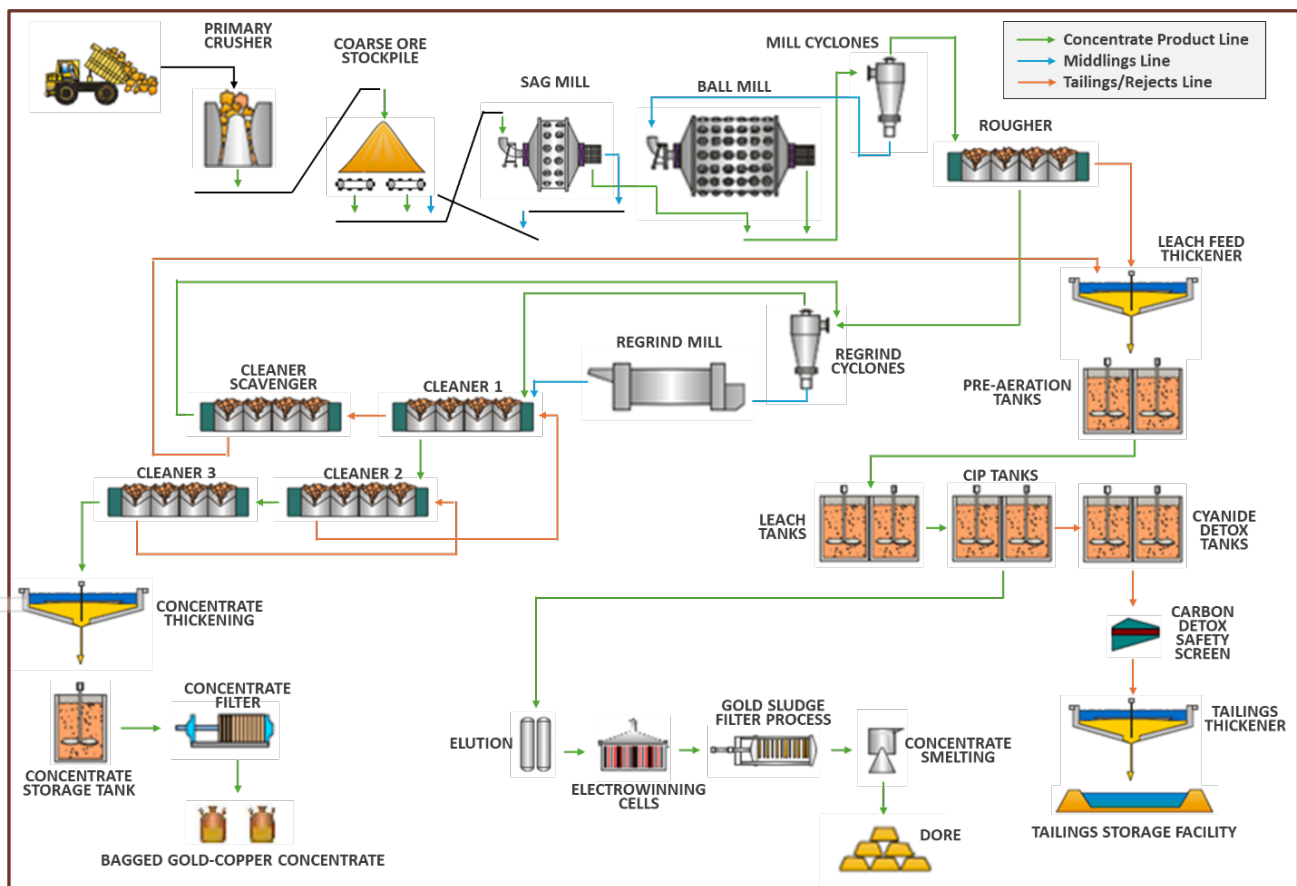
Head assay results demonstrated excellent agreement between composite samples and drill core grades, confirming the representativeness of the samples tested.

**Table 1: Composite Head Grades**

| Composite | Gold (g/t) | Copper (%) | Silver (g/t) |
|-----------|------------|------------|--------------|
| Diorite   | 0.34       | 0.10       | 1.1          |
| Breccia   | 0.40       | 0.12       | 1.2          |

Sulphur contents averaged 3.35% and 3.29% respectively, reflecting abundant pyrite mineralisation. Arsenic, antimony, mercury, lead and zinc concentrations were low and are not expected to impact concentrate quality.

**Figure 2. Bramaderos Project process route flowsheet.**



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### 2. Mineralogical Characteristics

Detailed QEMSCAN® analysis confirmed that both ore types are mineralogically similar and exhibit typical copper-gold porphyry characteristics. Chalcopyrite is the dominant copper-bearing mineral, with minor bornite and trace secondary copper sulphides present.

The Diorite composite contains approximately 4.4 wt.% pyrite and 0.35 wt.% chalcopyrite, while the Breccia composite contains approximately 3.0 wt.% pyrite and 0.46 wt.% chalcopyrite. The relatively high pyrite content confirms that selective pyrite depression will be an important requirement for producing marketable concentrates.

Gangue mineralogy is dominated by quartz and plagioclase feldspar, representing approximately 60-65 wt.% of both samples. Significant muscovite, chlorite and clay mineral contents were also identified. These minerals are expected to adversely influence flotation performance through slime generation, elevated pulp viscosity and gangue entrainment, highlighting the importance of dispersant and gangue-depressant strategies within the process design.

Liberation analysis showed chalcopyrite liberation improves significantly below 38 microns, indicating that relatively fine concentrate regrinding will be required to achieve optimal recoveries and concentrate grades.

### 3. Comminution Testing

Comminution testing demonstrated favourable processing characteristics for both ore types.

Crusher Work Index values of 5.96 kWh/t for Diorite and 5.11 kWh/t for Breccia indicate relatively soft crushing behaviour. Point Load Testing classified the Diorite as a low competency rock and the Breccia as moderately competent.

Bond Abrasion Index values of 0.248 and 0.284 indicate low abrasiveness and modest wear rates. Bond Ball Mill Work Index results of 17.8 kWh/t and 18.1 kWh/t classify both ore types as moderately hard.

SMC testing demonstrated that both lithologies are suitable for SAG milling, with results supporting the application of a conventional SAG-ball mill circuit. Additional trade-off studies comparing HPGR and SABC circuit options are recommended as part of future engineering studies.

### 4. Locked-Cycle Flotation Performance

Building on the positive outcomes from rougher and cleaner flotation optimisation programs, locked-cycle flotation testing was undertaken to simulate continuous plant operation and provide the most representative indication of expected commercial performance.

Locked-cycle flotation testing delivered highly encouraging results and confirmed the technical viability of conventional flotation processing for both the Brama Diorite and Brama Breccia mineralisation.

The best results from multiple reagent trials for the diorite were 83% copper recovery and 57% gold recovery to an 18% copper and 33g/t gold concentrate grade. For the breccia sample, the best result was 75% copper recovery and 54% gold recovery to a 17% copper and 48g/t gold concentrate.

These results confirm the technical viability of producing clean and marketable copper-gold concentrates from both mineralisation styles using conventional flotation technology. Importantly, optimisation test work demonstrated that selective pyrite depression through elevated pH control, coupled with finer regrinding and targeted reagent modification, can materially improve concentrate quality and flotation selectivity. Concentrate grades exceeding 24% copper were achieved during optimisation test work, demonstrating the potential to further enhance concentrate quality through ongoing process refinement.



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### 5. Cyanidation of Flotation Tails

Results from previous direct cyanidation of flotation tails significantly enhanced overall gold recovery.

For the Diorite lithology type, flotation plus regrind and cyanidation demonstrates approximately 94% gold recovery, while for the Breccia lithology type, 92% gold recovery is achieved.

These results demonstrate that a flowsheet incorporating copper flotation followed by regrinding and cyanidation of flotation tails offers the greatest opportunity to maximise overall project value.

### 6. Recovery Assumptions

The Bramaderos metallurgical test work program provides an updated basis for the application of metallurgical recovery factors in future gold equivalent ("AuEq") calculations. Based on the flotation, locked-cycle and cyanidation test work completed to date on the Brama Diorite and Brama Breccia mineralisation, Sunstone will apply average metallurgical recoveries of 80% for copper and 93% for gold for the purpose of future AuEq calculations (assuming an 18% copper concentrate is produced).

The revised assumed average recoveries of 80% for copper and 93% for gold are materially higher than the April 2026 Scoping Study recoveries of 75% and 85%, respectively.

These recovery assumptions are considered representative of the expected performance of a conventional processing flowsheet comprising copper flotation followed by regrinding and cyanidation of flotation tailings and reflect the anticipated overall recovery of payable metals.

#### Next Steps

The metallurgical results will provide important inputs into process plant design, operating cost estimation and project evaluation. Further variability testing is underway, and future work will focus on refining process optimisation parameters, validating metallurgical performance across additional ore domains and completing process circuit trade-off studies.

The results confirm that Bramaderos hosts copper-gold mineralisation amenable to conventional processing and demonstrate a viable development pathway capable of producing in-demand marketable copper-gold concentrates while delivering high overall gold recoveries.

## ASX ANNOUNCEMENT

## 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, contains the November 2025 Mineral Resource estimate of 220Mt at 0.50g/t AuEq for 3.6Moz AuEq<sup>1,2</sup>.

| JORC Classification | Tonnage (Mt) | Au (g/t)    | Cu (%)      | Ag (g/t)    | AuEq <sup>1</sup> (g/t) | AuEq <sup>1</sup> (Mozs) |
|---------------------|--------------|-------------|-------------|-------------|-------------------------|--------------------------|
| Indicated           | 40           | 0.38        | 0.10        | 1.26        | 0.56                    | 0.6                      |
| Inferred            | 190          | 0.32        | 0.10        | 1.14        | 0.49                    | 2.9                      |
| <b>Total</b>        | <b>220</b>   | <b>0.33</b> | <b>0.10</b> | <b>1.16</b> | <b>0.50</b>             | <b>3.6</b>               |

Additionally, the Bramaderos Project has a Porphyry Exploration Target of between 4.1Moz and 11.2Moz AuEq<sup>1,2</sup> within 315 to 505Mt at a grade between 0.41 and 0.68g/t, and the Limon epithermal gold-silver Exploration Target of between 0.9 and 1.7Moz AuEq<sup>3,4</sup> within 30 to 44Mt at a grade between 0.9 and 1.2g/t.

The potential quantity and grade of the Exploration Targets is conceptual in nature. There has been insufficient exploration to estimate a Resource for the reported exploration target areas. 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, which hosts several 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 for 1.2Moz AuEq<sup>5,6</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> |

Additionally, the El Palmar Project has a porphyry Exploration Target of between 15Moz and 45Moz AuEq<sup>5,6</sup> within 1.0 to 1.2Bt at a grade between 0.3 - 0.7g/t gold and 0.1 – 0.3% copper.

A flyover video of the two Projects can be viewed here: [CLICK LINK](#)

## Strategy

The porphyry projects at Bramaderos and El Palmar have the potential to evolve into multi-decade gold-copper mining centres. At Bramaderos, a Scoping Study has been completed which indicated project viability and large growth potential. Sunstone plans to further grow the Bramaderos resource while continuing to advance the project studies towards development. At El Palmar, Sunstone is testing the deep gold-copper targets, with drilling expected to recommence in September 2026.

Sunstone has an ongoing strategic process to determine a preferred long-term funding model to unlock the substantial value of its two world-class projects. The Company also continues to monitor and evaluate potential opportunities to continue to grow our business in Ecuador, where clear shareholder value can be demonstrated.

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### 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.

### Excellent infrastructure

All projects are supported by established infrastructure close to water, power, road and port infrastructure.

### Community support

The Board and Management Team take their responsibilities towards the host communities seriously and have endeavoured to uphold the highest ESG standards across our business. Sunstone published its inaugural Sustainability Report in 2023, outlining the level of support and engagement with local communities and project stakeholders.



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

**ASX ANNOUNCEMENT**

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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<sup>1</sup> Refer ASX Announcement on 24 November 2025.

<sup>2</sup> The gold equivalent (AuEq) calculation formula for porphyry gold-copper-silver mineralisation at Bramaderos is  $\text{AuEq (g/t)} = ((\text{Au grade} \times \text{Au price} \times \text{Au recov} / 31.1035) + (\text{Ag grade} \times \text{Ag price} \times \text{Ag recov} / 31.1035) + (\text{Cu grade} \times \text{Cu price} \times \text{Cu recov} / 100)) / (\text{Au price} \times \text{Au recov} / 31.1035)$ . The prices applied were US\$1,800/oz gold, US\$4.50/lb copper and US\$22/oz silver. Recoveries are estimated at 88% for gold, 85% for copper and 60% for silver based on metallurgical studies. 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  $\text{AuEq(g/t)} = \text{Au(ppm)} + (\text{Ag (ppm)}/82)$ . 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 AuEq calculation formula for porphyry gold-copper-silver mineralisation at El Palmar is  $\text{AuEq (g/t)} = ((\text{Au grade} \times \text{Au price} \times \text{Au recov} / 31.1035) + (\text{Ag grade} \times \text{Ag price} \times \text{Ag recov} / 31.1035) + (\text{Cu grade} \times \text{Cu price} \times \text{Cu recov} / 100)) / (\text{Au price} \times \text{Au recov} / 31.1035)$ . 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>7</sup> Refer ASX Announcements on 27 February 2026 and 11 March 2026.



## ASX ANNOUNCEMENT

### 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 24 November 2025. 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

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

#### Bramaderos

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

The Exploration Target does not include known porphyry mineralisation at Sandia, Playas or Yeso. It was decided to not include these areas because Sunstone has not yet completed any or sufficient drilling in these areas. 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 material that was drilled to sufficient density an economically modelled pit. Inadequate drilling exists in some areas both within and outside the modelled pit to show mineralisation continuity. Furthermore, the effect of the reasonable prospects of eventual economic extraction was to exclude 31% 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. This exploration target was reduced by the amount of material within it that was converted to resource by the latest MRE update.

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. This exploration target was reduced by the amount of material within it that was converted to resource by the latest MRE update.

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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.

### Copete and Porotillo

The Copete and Porotillo exploration targets are areas of outcropping porphyry stockwork veining that occur within an extensive gold and copper soil geochemical anomaly. These areas have seen substantial historical drilling (13 drill holes) with extensive mineralised intersections, plus widespread rockchip sampling of surface mineralisation, channel sampling in ravines and an extensive mineralised trench ML-01 at Copete that assayed 214m @ 0.50 g/t AuEq<sup>2</sup> (ASX announcement 12 November 2024).

At Porotillo, within the main body of the gold-in-soil geochemical anomaly, an extensive early-mineral quartz diorite intrusion hosts overprinting porphyry-related, disseminated and vein stockwork mineralisation over an area spanning up to approximately 530m by 310m. Very substantial historic drill intersections were encountered at Porotillo.

Two domains were modelled to generate the Copete-Porotillo exploration target to depths of 200m and 400m below surface.

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 an intermediate sulphidation epithermal system in numerous drill holes including LMDD017, 26, 30, 32, 38, 40, 43 and 46-51. Drill intersections include 185m @ 2.85 g/t AuEq<sup>4</sup> (include 31m @ 12.93 g/t AuEq<sup>4</sup>) in LMDD026, and 269m @ 1.05 g/t AuEq<sup>4</sup> (include 11m @ 14.15 g/t Au) in LMDD040.

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 on drilling, mineralised rock types, grade distribution, potential for extrapolating mineralisation continuity, and interpreted geological risk.

The volume ranges for the other components were estimated from geological interpretation and guided by the 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 year, subject to the Company's funding ability.

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### 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 not to 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 domains 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 intersections 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 further 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.