

6<sup>th</sup> May 2025

# Metallurgical Review Highlights Strong Recovery Potential at Maverick Springs

Phase 1 metallurgical test work set to commence following Independent Metallurgical Operations (IMO) extensive review of historical metallurgical test work at Maverick Springs

## Highlights:

- **Phased Metallurgical Program Underway** – Sun Silver set to commence metallurgical test program to enhance recoveries and optimise processing strategies.
- **Strong Historical Recoveries** – Fine particle cyanide leach tests achieved silver recoveries up to 97.5% (2004 testwork), with gold recoveries reaching 96% (2006 testwork).<sup>1</sup>
- **Mineralogical Understanding to Improve Processing** – Limited past mineralogical studies mean new investigations aim to unlock further recovery gains.
- **Historical Test Work Deficiencies** – Historical test work lacked intermittent bottle roll and column leach testing, which will now be evaluated.

Sun Silver Limited (ASX Code: “**SS1**”) (“**Sun Silver**” or “**the Company**”) is pleased to announce Phase 1 Metallurgical test work program is set to commence for the Maverick Springs Silver-Gold Project in Nevada, USA, (“**Maverick Springs Project**” or “**the Project**”).

This program builds on an extensive review of historical metallurgical test work conducted by Independent Metallurgical Operations (IMO) (a fully owned subsidiary of SGS), which confirmed the Project's silver and gold recovery potential and identified key opportunities to enhance processing efficiency.

The Company is finalising plans for a targeted metallurgical test program designed to maximise metal recoveries and optimise processing methods, supporting the ongoing advancement of the Project.

Sun Silver Managing Director, Andrew Dornan, said:

*“The review of historical metallurgical work confirms the strong silver and gold recovery potential at Maverick Springs, and we now have a clear roadmap to further optimise processing. By addressing past test work gaps, we see significant opportunities to enhance and achieve consistent higher recoveries. This is an exciting step forward as we advance Maverick Springs toward development.”*

<sup>1</sup> Refer to the Company's Prospectus, dated 17 April 2024, as released on 13 May 2024, and the ASX announcement dated 28 August 2024.



## Historical Recovery Potential & Optimisation Improvements

A comprehensive review of metallurgical studies conducted by Newmont (2002), Vista Gold & Silver Standard Resources (2004, 2006), has reinforced the recovery potential at Maverick Springs. Key outcomes from the review include the following:

- 2004 and 2006 fine particle cyanide leach tests achieved silver recoveries up to 97.5% (2004) and 90.5% (2006), with gold recoveries up to 91.1% (2004) and 95.8% (2006)<sup>2</sup>.
- The review identified that higher cyanide dosages significantly improved silver extraction efficiency.
- Flotation testing varied considerably but yielded silver recoveries up to 83.7%<sup>2</sup>, with potential for further improvement through enhanced reagent selection and retention time adjustments.
- Coarse particle cyanide leach tests indicated that longer retention times and refined processing conditions can improve silver recoveries.
- Silver is considered not particularly refractory.
- The test work from Newmont in 2002 stated preg-robbing from carbon was not a factor.

The previous metallurgical testing is considered preliminary in nature and may be subject to change based on the further studies to be conducted by Sun Silver.

### Limiting Factors

The review also identified key gaps in historical metallurgical test work that require further investigation:

- Previous test work did not include intermittent bottle roll (IBR) or column leach testing.
- Flotation test work lacked sufficient retention time and reagent optimisation, impacting recovery efficiency.
- Limited mineralogical studies were conducted, leaving silver deportment characteristics underexplored.

### Forward Work Program to Improve Recoveries

Following these review outcomes, Sun Silver has initiated a targeted metallurgical program designed to optimise recoveries at Maverick Springs:

- Extended cyanide bottle roll tests to fine-tune the relationship between silver and gold recoveries and particle size.
- Higher cyanide dosages and optimised leaching parameters to improve silver recoveries.

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<sup>2</sup> Refer to Company's Prospectus, dated 17 April 2024, as released on ASX on 13 May 2024, and the ASX Announcement dated 28 August 2024.

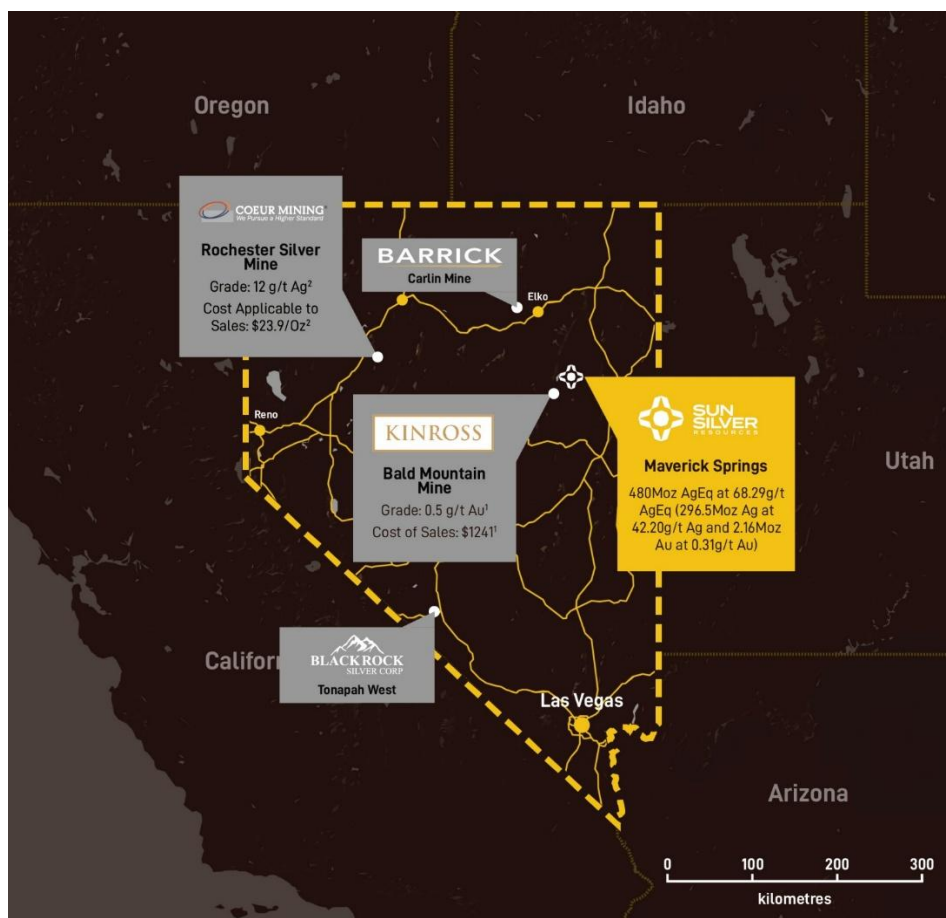
- Intermittent bottle roll (IBR) and column leach testing to evaluate heap leaching viability and enhance extraction efficiency.
- Flotation optimisation studies to improve both silver and gold concentrate grades and overall recoveries.
- Mineralogical and diagnostic leach studies to identify and mitigate refractory silver losses, further improving recovery rates.

Metallurgical test work will be executed in multiple phases with results to be reported in due course.

Refer to Sun Silver ASX announcement, dated 28 August 2024, for further details of historic metallurgical test results.

### ***Maverick Springs Project***

Sun Silver's cornerstone asset, the Maverick Springs Project, is located 85km from the fully serviced mining town of Elko in Nevada and is surrounded by several world-class gold and silver mining operations including Barrick's Carlin Mine.



*Figure 1 – Sun Silver's Maverick Springs asset location and surrounding operators.*

Nevada is a globally recognised mining jurisdiction which was rated as the Number 1 mining jurisdiction in the world by the Fraser Institute in 2022.

The Project, which is proximal to the prolific Carlin Trend, hosts a JORC Inferred Mineral Resource of 218Mt grading 42.2g/t Ag and 0.31g/t Au for 296.5Moz of contained silver and 2.2Moz of contained gold (480Moz of contained silver equivalent)<sup>3</sup>.

The deposit itself remains open along strike and at depth, with multiple mineralised intercepts located outside of the current Resource constrained model.

This announcement is authorised for release by the Board of Sun Silver Limited.

**ENDS**

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**Forward-looking statements**

*This announcement may contain certain forward-looking statements, guidance, forecasts, estimates or projections in relation to future matters (**Forward Statements**) that involve risks and uncertainties, and which are provided as a general guide only. Forward Statements can generally be identified by the use of forward-looking words such as “anticipate”, “estimate”, “will”, “should”, “could”, “may”, “expects”, “plans”, “forecast”, “target” or similar expressions and include, but are not limited to, indications of, or guidance or outlook on, future earnings or financial position or performance of the Company. The Company can give no assurance that these expectations will prove to be correct. You are cautioned not to place undue reliance on any forward-looking statements. None of the Company, its directors, employees, agents or advisers represent or warrant that such Forward Statements will be achieved or prove to be correct or gives any warranty, express or implied, as to the accuracy, completeness, likelihood of achievement or reasonableness of any Forward Statement contained in this announcement. Actual results may differ materially from those anticipated in these forward-looking statements due to many important factors, risks and uncertainties. The Company does not undertake any obligation to release publicly any revisions to any “forward- looking statement” to reflect events or circumstances after the date of this announcement, except as may be required under applicable laws.*

**Competent Person Statement**

*The information in this announcement that relates to exploration results or estimates of mineral resources at the Maverick Springs Project is extracted from the Company’s Prospectus, dated 17 April 2024 (**Prospectus**), as released on ASX on 13 May 2024, and the ASX announcements dated 28 August 2024 and 26 March 2025 (**Original Announcements**). The Company confirms that it is not aware of any new information or data that materially affects the information contained in the Prospectus and Original Announcements and, in the case of estimates of mineral resources, that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.*

<sup>3</sup> Refer to the Annexure A and the Company’s ASX Announcement dated 26 March 2025.

## ANNEXURE A – MAVERICK SPRINGS MINERAL RESOURCE

Classification	Cut-off (g/t AgEq)	Tonnes	AgEq (Moz)	AgEq (g/t)	Ag (Moz)	Ag (g/t)	Au (Moz)	Au (g/t)
Inferred	30	218,541,000	479.8	68.29	296.5	42.2	2.16	0.31

1. Maverick Springs Mineral Resource estimated in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).
2. Refer to the Company's ASX announcement dated 26 March 2025 for further details regarding the Maverick Springs Mineral Resource (**Original Announcement**). The Company confirms that it is not aware of any new information or data that materially affects the information contained in the Original Announcements and that all material assumptions and technical parameters underpinning the mineral resource estimate continue to apply and have not materially changed.
3. References to metal equivalents (AgEq) are based on an equivalency ratio of 85, which is derived from a gold price of USD\$2,412.50 and a silver price of USD\$28.40 per ounce, being derived from the average monthly metal pricing from Jan 2024 to Jan 2025, and average metallurgical recovery. This is calculated as follows:  $AgEq = Silver\ grade + (Gold\ Grade \times ((Gold\ Price \times Gold\ Recovery) / (Silver\ Price \times Silver\ Recovery)))$  i.e.  $AgEq\ (g/t) = Ag\ (g/t) + (Au\ (g/t) \times ((2412.50 \times 0.85) / (28.40 \times 0.85)))$ . Metallurgical recoveries of 85% have been assumed for both silver and gold. Preliminary metallurgical recoveries were disclosed in the Company's prospectus dated 17 April 2024, which included a review of metallurgical test work completed by the prior owners of Maverick Springs. Metallurgical recoveries for both gold and silver were recorded in similar ranges, with maximum metallurgical recoveries of up to 97.5% in preliminary historical metallurgical testing in respect of silver and up to 95.8% in respect of gold. Gold recoveries were commonly recorded in the range of 80% - 90%, and the midpoint of this range has been adopted at present in respect of both silver and gold. It is the Company's view that both elements referenced in the silver and gold equivalent calculations have a reasonable potential of being recovered and sold.