

NEVADA SUNRISE METALS CORPORATION

Nevada Sunrise Achieves 90.2% Lithium Recovery in Metallurgical Testing, Gemini Lithium Project, Nevada

Vancouver, British Columbia, June 5, 2023: Nevada Sunrise Metals Corp. ("Nevada Sunrise", or the "Company") (TSXV: NEV, OTC: NVSGF) is pleased to announce the results of metallurgical testing carried out on lithium mineralization from its 100%-owned Gemini Lithium Project ("Gemini") located in the Lida Valley basin in Esmeralda County, Nevada. A novel method of small-scale column testing achieved a 90.2% lithium extraction rate under the direction of Willem Duyvesteyn, of Extractive Metallurgy Consultancy LLC, based in Reno, Nevada. Mr. Duyvesteyn utilized the facilities of McClelland Laboratories Inc. ("McClelland") in Sparks, Nevada for the metallurgical tests.

Highlights of Gemini Metallurgical Testing

- Preliminary leaching test work was designed to focus on obtaining a lithium leach extraction
 of more than 80%. Early tests included a standard sulfuric acid leach, the re-leach of
 residues, a hot acid beaker leach of low and high-grade mineralization, and a gypsum/lime
 roast water leach;
- Following the use of various extraction methods an "acid-bake" step was implemented using
 concentrated sulfuric acid on moist lithium-in-sediment mineralization with average lithium
 values of approximately 1,100 parts per million ("ppm") lithium;
- A one-meter-tall column was loaded with Gemini clay mineralization and an open-circuit system employed a two-step leaching system, which achieved a 90.2% lithium extraction over a 25-day period.

The 90.2% lithium extraction rate achieved from the Gemini mineralization compares favourably with the average lithium extraction of 84% reported by Lithium Americas at its Thacker Pass lithium project (Source: Feasibility Study, National Instrument 43-101 Technical Report for the Thacker Pass Project, Humboldt County, Nevada, USA, by Roth, D., et al, dated November 2, 2022.) As follow-up to the successful outcome of this small-scale column testing, Mr. Duyvesteyn has designed a larger-scale test involving 50 kilograms of Gemini clay mineralization, which began in late May 2023. The larger test will employ selected higher-grade mineralization averaging approximately **2,000 ppm lithium**.

Mr. Duyvesteyn and McClelland are carrying out further studies to assess the production of highpurity lithium carbonate from the column leach solutions. Both conventional precipitation methods and a modified direct lithium extraction ("DLE") technique, utilizing proprietary lithium absorbents are under consideration.

Testing carried out by McClelland on lithium-in-water samples collected from the 2022-2023 drilling at Gemini has revealed that the presence of suspended, sub-micron-sized clay particles carrying lithium are not amenable to a DLE extraction process. Nevada Sunrise will continue to collect and analyze water samples from future drilling programs to evaluate potential for a DLE process on the groundwater encountered at Gemini.

About the 2022-2023 Gemini Drilling Program

In March and April 2022, Nevada Sunrise drilled two RC boreholes for a total of 2,020 feet (615.85 metres) in its maiden drilling program at Gemini. The drill sites were located within a defined gravity low that hosts conductive layers detected by historical ground electromagnetic surveys. The results from the first two holes at Gemini represented a new discovery of lithium mineralization in the western Lida Valley, which was not historically drill tested for lithium (see Nevada Sunrise news release dated <u>May 18, 2022</u>). In July 2022, Nevada Sunrise received a permit for an expanded drilling area from the Bureau of Land Management good until July 2024 and began Phase 2 drilling at Gemini in October 2022. Three additional boreholes were completed from October 2022 to April 2023, with each intersecting lithium mineralization (see Nevada Sunrise news release dated <u>May 24, 2023</u>).

Nevada Sunrise believes that the southern and western parts of the Gemini basin are highly prospective for additional lithium mineralization and that further drilling could eventually define a large lithium resource. The Company is in discussions with a Vancouver, BC-based engineering firm to commission a National Instrument 43-101-compliant resource estimate and a Preliminary Economic Assessment of the lithium-bearing zones at Gemini.

For further information on Gemini, including maps and photos **click here**

About Gemini

Gemini consists of 582 unpatented placer and lode claims located in the western Lida Valley, Esmeralda County, approximately 6 miles (10 kilometres) east of the town of Lida, Nevada. The Lida Valley is a flat, arid basin with a similar geological setting to the better-known Clayton Valley basin where Albemarle Corporation operates the Silver Peak lithium brine mine, which has operated continuously since 1966.

Gemini is situated adjacent to the Gold Point Solar Energy Zone, a BLM land reserve set aside for solar and wind power generation projects until 2033. Exploration at Gemini is complemented by the Company's 80.09 acre/feet/year water right, a pre-requisite for the exploration and development of lithium brine projects in Nevada.

Sampling and Analytical QA/QC and Statement of Qualified Person

Sediment Sample Collection and Analysis

Sediment samples described in this new release are a composite of material collected from the rotary splitter in the RC drilling rig, which produces a continuous, representative 3 to 5 kilogram sample for each sample interval. Samples were submitted to American Assay and ALS Global USA in Reno, NV and were analyzed utilizing a multi-element ICP-AES method. Specifically, the analytical method involves aqua regia digestion of the sample followed by the inductively coupled plasma (ICP) technique to ionize the sample, and atomic emission spectrometry (AES) to determine elemental concentrations. Duplicates, field blanks, and certified reference standards were inserted at regular intervals in the sample stream to ensure accuracy of the analytical method.

The scientific and technical information contained in this news release has been reviewed and approved by Willem Duyvesteyn, M.Sc., who is a Qualified Person for Nevada Sunrise as defined in National Instrument 43-101 – *Standards of Disclosure for Mineral Projects*.

About Nevada Sunrise

Nevada Sunrise is a junior mineral exploration company with a strong technical team based in Vancouver, BC, Canada, that holds interests in lithium, gold, and copper exploration projects located in the State of Nevada, USA.

Nevada Sunrise owns 100% interests in the Gemini, Jackson Wash and Badlands lithium projects, with no applicable royalties, all of which are located in the Lida Valley in Esmeralda County, NV. The Company owns Nevada water right Permit 86863, also located in the Lida Valley basin, near Lida, NV.

The Company's key gold asset is a 20.01% interest in a joint venture at the Kinsley Mountain Gold Project near Wendover, NV with CopAur Minerals Inc. Kinsley Mountain is a Carlin-style gold project hosting a National Instrument 43-101 compliant gold resource consisting of **418,000 indicated** ounces of gold grading 2.63 g/t Au (4.95 million tonnes), and 117,000 inferred ounces of gold averaging 1.51 g/t Au (2.44 million tonnes), at cut-off grades ranging from 0.2 to 2.0 g/t Au ¹.

¹ Technical Report on the Kinsley Project, Elko County, Nevada, U.S.A., dated June 21, 2021 with an effective date of May 5, 2021 and prepared by Michael M. Gustin, Ph.D., and Gary L. Simmons, MMSA and filed under New Placer Dome Gold Corp.'s Issuer Profile on SEDAR (www.sedar.com).

Nevada Sunrise has the right to earn a 100% interest in the Coronado VMS Project, located approximately 48 kilometers (30 miles) southeast of Winnemucca, NV. The Company owns a 15% interest in the historic Lovelock Cobalt Mine and the Treasure Box copper properties, each located approximately 150 kilometers (100 miles) east of Reno, NV with Global Energy Metals Corp. ("GEMC") holding an 85% participating interest. A transaction is in progress for GEMC to own a 100% interest, scheduled to close on or before June 30, 2023.

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FORWARD LOOKING STATEMENTS

This release may contain forward-looking statements. Forward looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "plans", "anticipates", "believes", "intends", "estimates", "projects", "potential" and similar expressions, or that events or conditions "will", "would" or "should" occur and include disclosure of anticipated exploration activities. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results may differ materially from those in forward looking statements. Forward-looking statements are based on the beliefs, estimates and opinions of the Company's management on the date such statements were made. The Company expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

Such factors include, among others, risks related to the results and outcomes of the Company's 2022-2023 exploration activities and future plans at the Gemini Lithium Project; reliance on technical information provided by third parties on any of our exploration properties; changes in project parameters as plans continue to be refined; current economic conditions; future prices of commodities; possible variations in grade or recovery rates; failure of equipment or processes to operate as anticipated; the failure of contracted parties to perform; labor disputes and other risks of the mining industry, delays due to pandemic; delays in obtaining governmental approvals, financing or in the completion of exploration, as well as those factors discussed in the section entitled "Risk Factors" in the Company's Management Discussion and Analysis for the Six Months ending March 31, 2023, which is available under Company's SEDAR profile at www.sedar.com.

Although Nevada Sunrise has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate as actual results and future events could differ materially from those anticipated in such statements. Nevada Sunrise disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise. Accordingly, readers should not place undue reliance on forward-looking information.