



## LION ONE ACCELERATES MINE DEVELOPMENT AND CONSTRUCTION AT THE TUVATU ALKALINE GOLD PROJECT IN FIJI

**North Vancouver, B.C., February 16, 2023** - Lion One Metals Limited (TSX-V: LIO) (OTCQX: LOMLF) (ASX: LLO) (“Lion One” or the “Company”) announces the acceleration of mine development and plant construction following the completion of project financing, at the Company’s 100% owned Tuvatu Alkaline Gold Project in Fiji.

Lion One has advanced the number 2 development drive by over 250 meters and has completed the first cut of high-grade material from the URA1 lode. The samples taken from this first cut averaged 14 g/t gold and are designated for the high-grade ROM stockpile.

Lion One CEO Walter Berukoff commented “In conjunction with ongoing mine development, we are preparing to mobilize personnel for the installation and commissioning of the Tuvatu gold processing plant. All of the processing plant components have already been delivered to Fiji, with shipments of the remaining bulk materials in progress and expected to be delivered by the end of March to coincide with the completion of infrastructure for the mill area, electrowinning facility, and gold room.”

The Lion One processing plant will treat material using a two-stage crushing process, with a primary jaw crusher and secondary cone crusher feeding a two-stage grinding circuit. The ground material will feed an integrated two stage gravity concentration circuit with some concentrates treated by an intensive cyanide leaching reactor and the remainder of the concentrates leached using conventional cyanide Carbon in Leach (CIL) technology. Gold will be recovered from the gold laden carbon using conventional absorption desorption recovery (ADR) technology and smelted on site to produce gold doré bars. The leached tailings will be treated using the SO<sub>2</sub>/air process to remove any residual cyanide. Filtered tailings will be transported to Lion One’s tailings storage facility 3.5 km from the Tuvatu mine site.

Lion One plans to operate at an initial production capacity of 300 tonnes per day for the initial 18 months of operations before increasing the capacity to 500 tpd in mid-2025. The initial mining will focus on the near-surface resource while advancing underground development into high-grade mineralization in Zone 500.

The 2023 drilling program will be focused on three fronts: grade control drilling of the near-term production blocks; drill-testing regional targets with the aim of identifying additional separate mineralized systems within the greater Navilawa caldera; and completing the geophysical (CSAMT) surveys initiated in 2022 to delineate additional drill targets.

### **About Tuvatu**

The Tuvatu Alkaline Gold Project is located on the island of Viti Levu in Fiji. The January 2018 mineral resource for Tuvatu as disclosed in the technical report “Technical Report and Preliminary Economic Assessment for the Tuvatu Gold Project, Republic of Fiji”, dated September 25, 2020, and prepared by Mining Associates Pty Ltd of Brisbane Qld, comprises 1,007,000 tonnes indicated at 8.50 g/t Au (274,600 oz. Au) and 1,325,000 tonnes inferred at 9.0 g/t Au (384,000 oz. Au) at a cut-off grade of 3.0 g/t Au. The technical report is available on the Lion One website at U and on the SEDAR website at [www.sedar.com](http://www.sedar.com).

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Photo 1: Aerial view of the Tuvatu plant site and surrounding Navilawa caldera



Photo 2: Aerial view of the Tuvatu production decline portal and plant site



Photo 3: Aerial view of the Tuvatu plant site





Photo 4: mining fleet



Photo 5: ball mills



Photo 6: mobile crusher



Photo 7: Tuvatu production decline



Photo 8: Tuvatu production decline



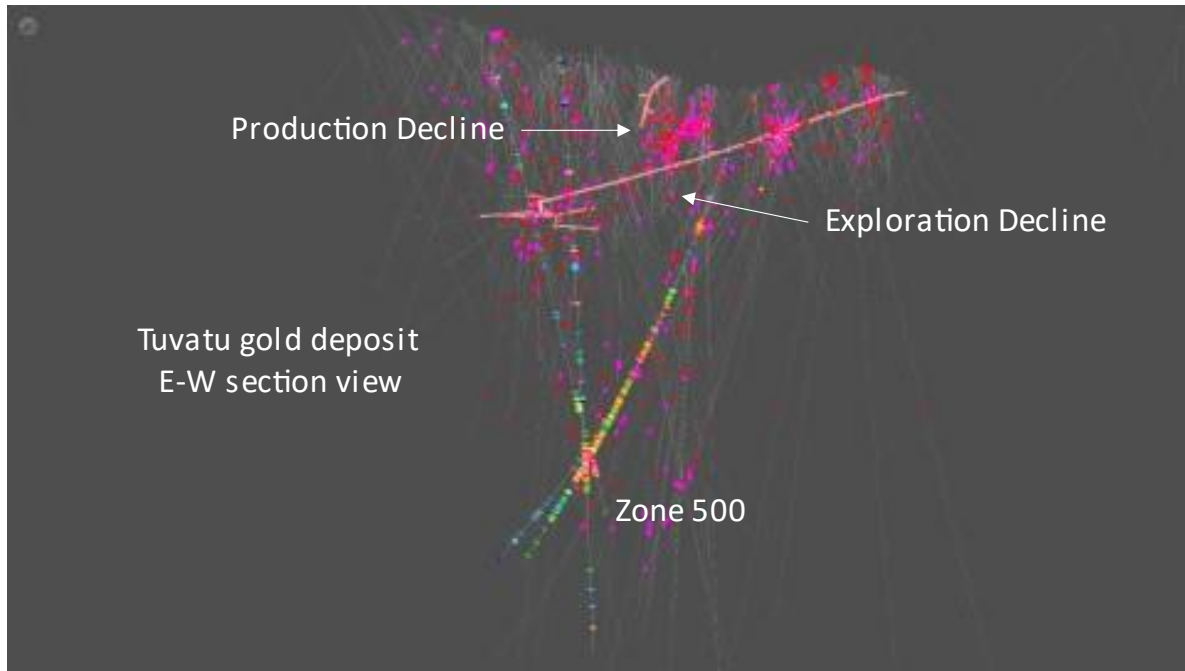


Figure1: section view of Tuvatu deposit



Figure 2 section view of Tuvatu deposit and planned development drives



Photo 9: First cut from URA1 Lode in Tuvatu production decline

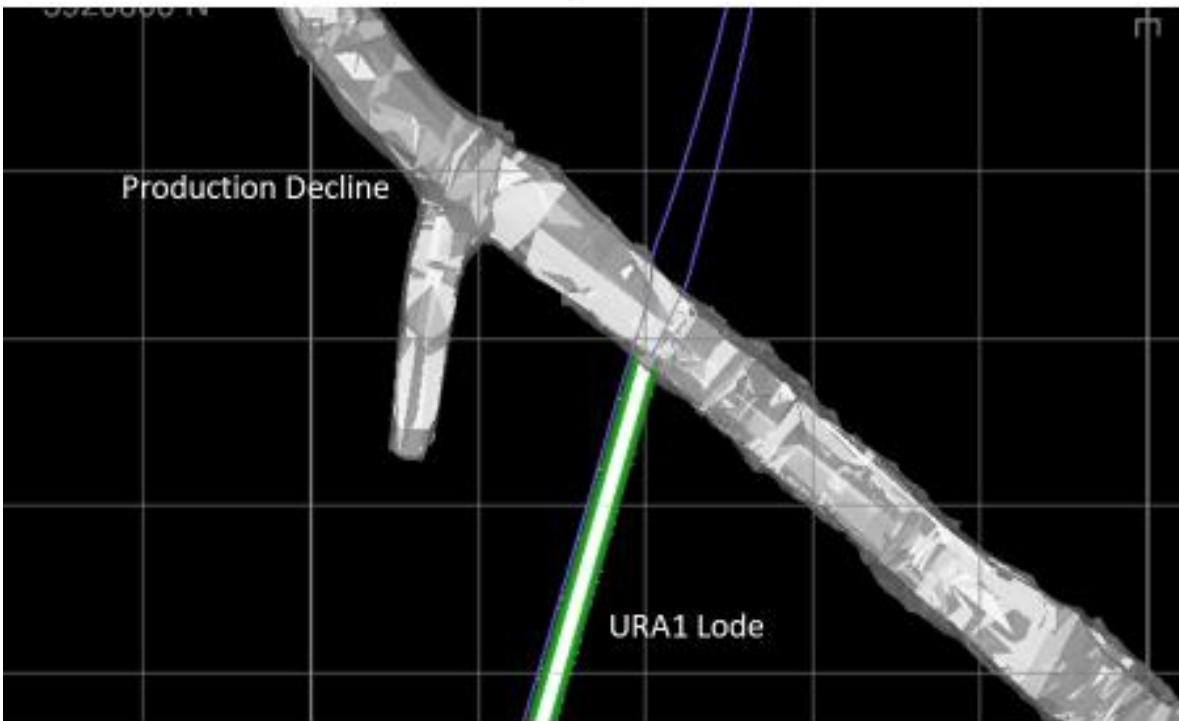


Figure 3: URA1 Lode accessed by Tuvatu production decline

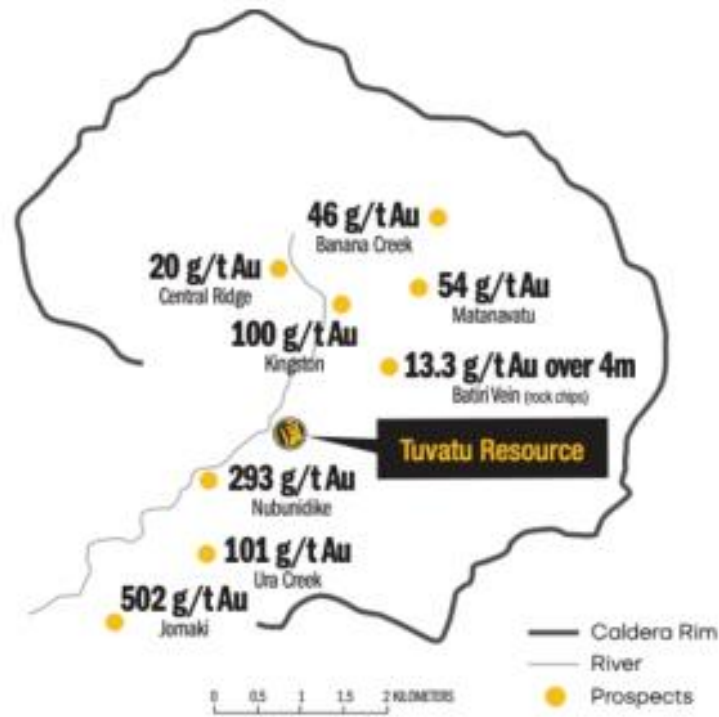


Figure 4: Tuvatu resource and regional targets in Navilawa caldera



Photo 10: Tuvatu tailings storage facility looking north into Navilawa caldera





Photo 11: aerial photo of Fiji head office compound and assay laboratory in Nadi



Photo 12: Lion One geochemical and metallurgical laboratory



Photo 13: Lion One geochemical and metallurgical laboratory





### **Qualified Person**

In accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”), Patrick Hickey, Chief Operating Officer, is the Qualified Person for the Company and has reviewed and is responsible for the technical and scientific content of this news release.

### **About Lion One Metals Limited**

Lion One’s flagship asset is 100% owned, fully permitted high grade Tuvatu Alkaline Gold Project, located on the island of Viti Levu in Fiji. Lion One envisions a low-cost high-grade underground gold mining operation at Tuvatu coupled with exciting exploration upside inside its tenements covering the entire Navilawa Caldera, an underexplored yet highly prospective 7km diameter alkaline gold system. Lion One’s CEO Walter Berukoff leads an experienced team of explorers and mine builders and has owned or operated over 20 mines in 7 countries. As the founder and former CEO of Miramar Mines, Northern Orion, and La Mancha Resources, Walter is credited with building over \$3 billion of value for shareholders.

### **On behalf of the Board of Directors of Lion One Metals Limited**

“Walter Berukoff”, Chairman and CEO

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