LION ONE COMMENCES DEVELOPMENT OF HIGH-GRADE ROSCOELITE ZONE AT TUVATU GOLD MINE IN FIJI

Initial Bulk Sample Returns 11.6 g/t Gold from 861 Tonnes

North Vancouver, B.C., November 12, 2024 - Lion One Metals Limited (TSX-V: LIO) (OTCQX: LOMLF) **("Lion One" or the "Company")** is pleased to report that the development of a new high-grade near-surface roscoelite zone has commenced at the company's 100% owned Tuvatu high-grade alkaline gold mine on the island of Viti Levu in Fiji.

Lion One CEO Walter Berukoff stated "Quartz-roscoelite veining is the most economically significant mineral assemblage at several world class alkaline gold deposits that are similar to Tuvatu. Roscoelite is a defining characteristic of these alkaline systems and it is directly associated with high-grade gold. An initial bulk sample of the near-surface roscoelite zone at Tuvatu has returned 11.6 g/t gold from 861 tonnes of material mined at full mining widths. We are now enhancing our mine plan with this gold-rich roscoelite material, which is already being processed through the pilot plant".

Roscoelite veining is directly related to high-grade mineralization at the nearby Vatukoula gold mine in Fiji where over 7 million ounces of gold have been produced over the last 85 years. Roscoelite is also observed in association with gold mineralization at the Porgera gold mine in PNG, which has been a top ten ranked gold mine globally and which has produced over 25 million ounces of gold.

At Porgera, the most economically significant veins are the Stage II quartz-roscoelite-pyrite veins with native gold, found in the Roamane fault zone.[1] At Tuvatu the high-grade Stage II veins also ubiquitously occur with roscoelite – a rare dark green to black vanadium rich mica mineral.[2] This same mineral assemblage is observed in the near-surface roscoelite zone at Tuvatu, which consists of a series of intersecting flat and sub-vertical banded veins composed primarily of low-temperature chalcedonic quartz intergrown with roscoelite, pyrite, lesser sphalerite and galena, and native gold. This same mineral assemblage is also observed at the high-grade Zone 500 at 500m depth in Tuvatu, at the West Zone near-mine expansion target 300 m to the West of Tuvatu, as well as in drill core throughout the Tuvatu deposit (Figure 1). See news releases: Lion One drills 20.86 g/t Au over 75.9 m from Zone 500, June 6, 2022, and Lion One drills 105.2 g/t Au over 2.1 m from near-mine exploration at the West Zone, October 1, 2024.

Tuvatu is optimally located on Fiji's Viti Levu lineament, with a tectonic history and structural setting that created ideal conditions for the vertical ascent of deep alkalic magmas and the formation of the Navilawa volcanic caldera. Within the caldera, the precipitation of metals from hydrothemal fluids occurred through episodic phases of boiling, mixing and cooling. The presence of roscoelite in direct association with high-grade gold mineralization reflects a rare combination of criteria, shared by other notable world-class alkaline gold deposits, thus underscoring the enormous potential for Tuvatu as part of a potentially much larger high-grade alkaline gold system within Fiji's Navilawa Caldera.

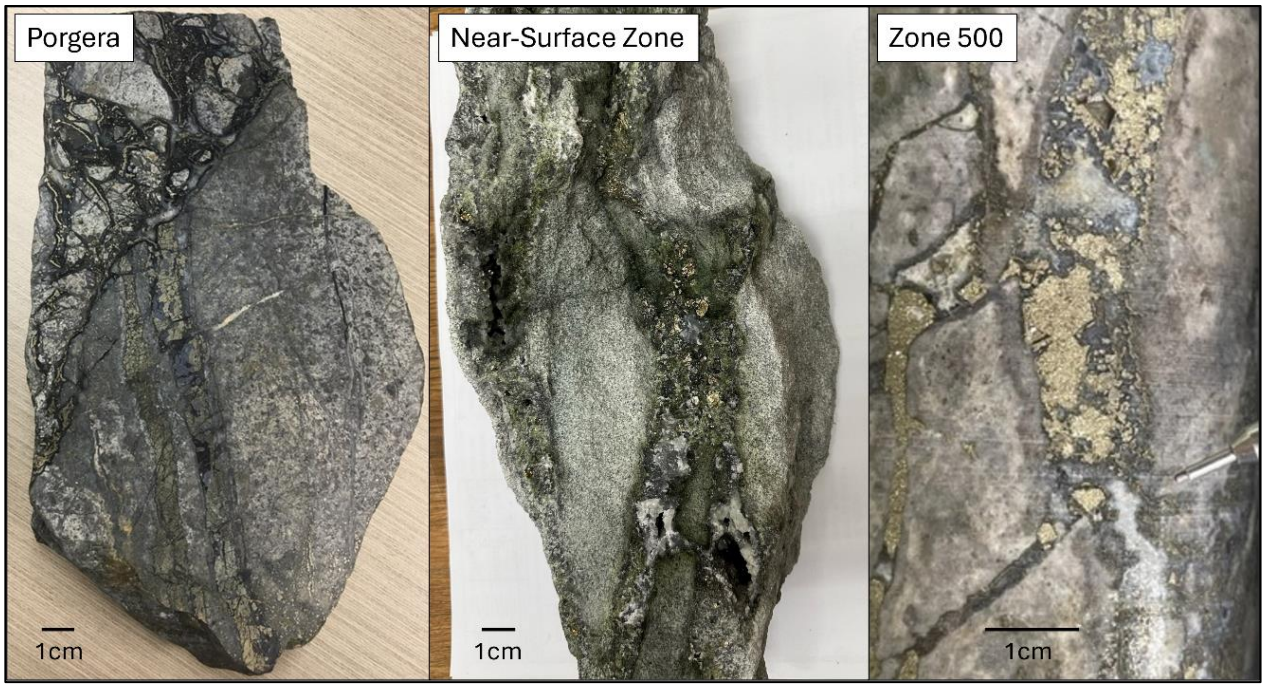

Figure 1. Example high-grade mineralization from Porgera[3] (left), the new near-surface roscoelite zone at Tuvatu (center), and Zone 500 at Tuvatu (right; TUG-141 drill core, 492.5 m depth, 25.23 g/t Au). High grade mineralization at Porgera, Zone 500, and the new near-surface roscoelite zone at Tuvatu all consist of veins composed of quartz-roscoelite-pyrite with native gold.

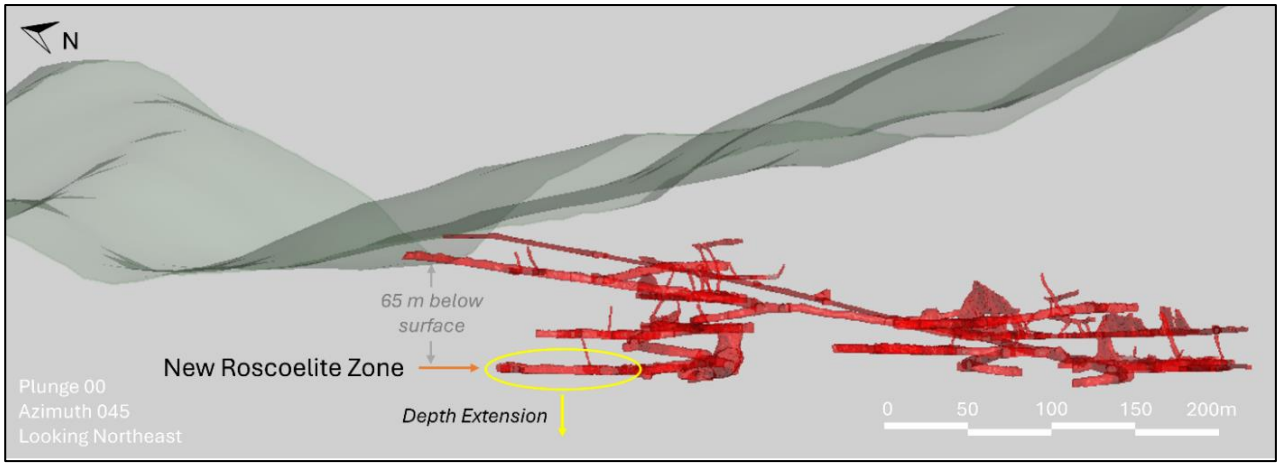

Figure 2. Location of the new roscoelite zone in relation to underground developments. The new roscoelite zone is in Zone 2 of Tuvatu, in the northwest part of the deposit, approximately 65 m below surface. Preliminary evidence indicates that the zone extends to additional levels below the current underground workings.

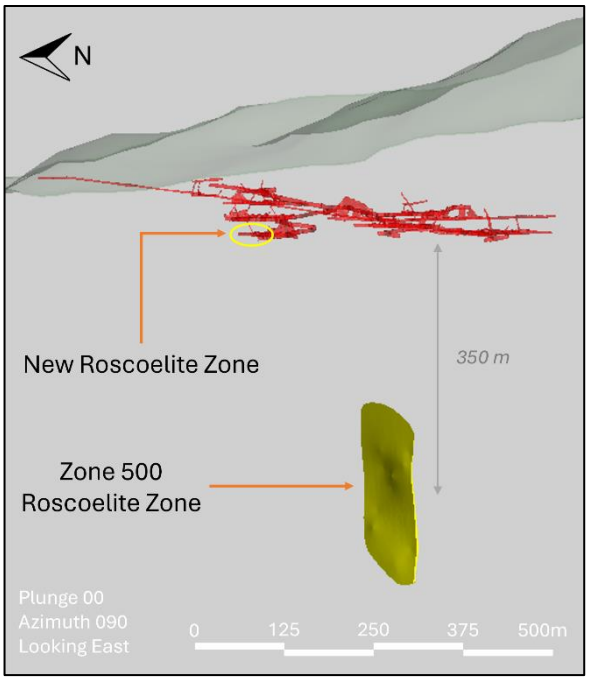

Figure 3. Location of the new roscoelite zone in relation to Zone 500. Mineralization observed in the new near-surface roscoelite zone is like that observed in the high-grade Zone 500, which is approximately 350 m below the current underground workings.

The near-surface roscoelite zone at Tuvatu is located 65 m below surface and consists of a series of flat-lying and vertical veins. The strongest gold mineralization occurs in blow-out zones at the intersection of these structures (Figure 4). The primary vertical structures in this zone consist of quartz vein arrays with roscoelite and minor base metal sulfides, while the primary flat-lying structures consist of low-temperature quartz-roscoelite-pyrite veins. Both sets of veins contain high-grade gold. This is a very similar scenario to that observed at the Porgera gold mine, wherein there are high-grade ore shoots formed at the intersection of early Stage I base metal veins with later Stage II quartz-roscoelite-pyrite veins, with both sets of veins containing gold.[1,4] In the near surface roscoelite zone at Tuvatu there is evidence of multiple stacked flat-lying quartz-roscoelite-pyrite veins, which would produce multiple stacked shoots of high-grade mineralization at the intersection of vertical structures below the current underground workings.

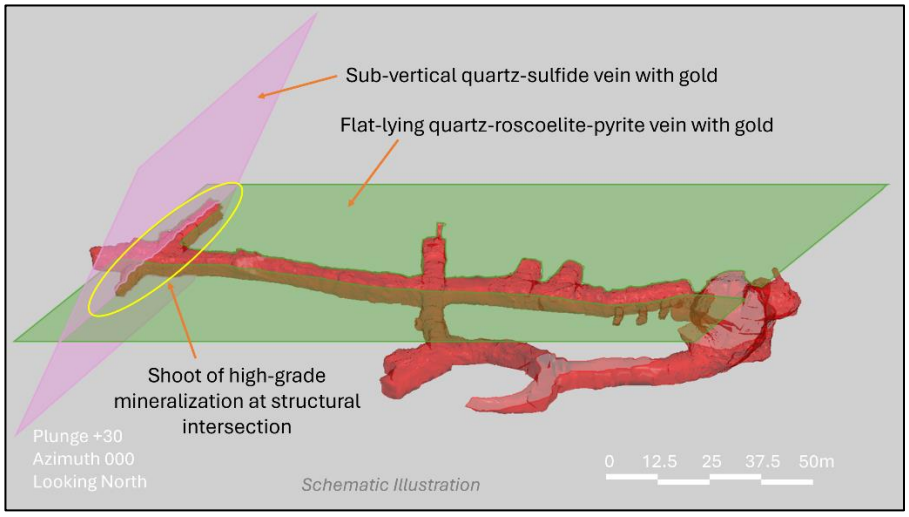

Figure 4. Simplified conceptual illustration of intersecting structures in the near-surface roscoelite zone. Multiple flat-lying quartz-roscoelite-pyrite veins have been observed underground.

Notes and References:
Vatukoula: Sandstorm Gold Royalties | Vatukoula | WHI-VGM-040112
Porgera: Strong Output Growth in 2023 - Zijin Mining | (Zijin Mining 2024)
Lihir: (Table 8.1): Technical Report on Lihir Operations as of 30 June 2020
Alkaline Gold Systems: Alkalic-Type Epithermal Gold Deposit Model | USGS

1. Ronacher, E. (2002). *The Porgera gold deposit: Fluid characteristics, ore deposition processes, and duration of the ore forming event*. [Doctoral Thesis, University of Alberta]. p 55. Link to report
2. Schmidt, D. (2023). *Petrographic Characterization and Evolution of the Alkalic-Type Epithermal Tuvatu Au-Te Deposit, Fiji*. [Masters Thesis, Colorado School of Mines]. P50. Link to report
3. Supplied image of Porgera rock sample.
4. Cameron, G. (1998). *The Hydrothermal Evolution and Genesis of the Porgera Gold Deposit, Papua New Guinea*. [Doctoral Thesis, Australian National University]. p 53. Link to report

Competent Persons Statement
The information in this report that relates to mineral exploration at the Tuvatu Gold Project is based on information compiled by the Lion One team and reviewed by Melvyn Levrel, who is the company's Senior Geologist. Mr Levrel is a Member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken, 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' (JORC code). Mr Levrel consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Lion One Laboratories / QAQC
Lion One adheres to rigorous QAQC procedures above and beyond basic regulatory guidelines in conducting its drilling, sampling, testing, and analyses. The Company operates its own geochemical assay laboratory and its own fleet of diamond drill rigs using PQ, HQ and NQ sized drill rods.

Diamond drill core samples are logged and split by Lion One personnel on site and delivered to the Lion One Laboratory for preparation and analysis. All samples are pulverized at the Lion One lab to 85% passing through 75 microns and gold analysis is carried out using fire assay with an AA finish. Samples that return grades greater than 10.00 g/t Au are re-analyzed by gravimetric method, which is considered more accurate for very high-grade samples.

Duplicates of 5% of samples with grades above 0.5 g/t Au are delivered to ALS Global Laboratories in Australia for check assay determinations using the same methods (Au-AA26 and Au-GRA22 where applicable). ALS also analyses 33 pathfinder elements by HF-HNO3-HClO4 acid digestion, HCl leach and ICP-AES (method ME-ICP61). The Lion One lab can test a range of up to 71 elements through Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), but currently focuses on a suite of 23 important pathfinder elements with an aqua regia digest and ICP-OES finish.

About Lion One Metals Limited
Lion One Metals is an emerging Canadian gold producer headquartered in North Vancouver BC, with new operations established in late 2023 at its 100% owned Tuvatu Alkaline Gold Project in Fiji. The Tuvatu project comprises the high-grade Tuvatu Alkaline Gold Deposit, the Underground Gold Mine, the Pilot Plant, and the Assay Lab. The Company also has an extensive exploration license covering

the entire Navilawa Caldera, which is host to multiple mineralized zones and highly prospective exploration targets.

On behalf of the Board of Directors,
Walter Berukoff, Chairman & CEO

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