

LION ONE ANNOUNCES PURCHASE OF 2 ADDITIONAL DRILL RIGS AND DOUBLES THE SAMPLING CAPACITY OF ITS ASSAY LAB AT TUVATU, FIJI

North Vancouver, B.C., March 1, 2022 - Lion One Metals Limited (TSX-V: LIO) (OTCQX: LOMLF) (ASX: LLO) ("Lion One" or the "Company") is pleased to announce plans to expand its drilling and sampling capacity through the purchase of two additional drill rigs and expansion of its laboratory serving the Company's fully permitted high grade Tuvatu Alkaline Gold Project in Fiji.

TWO NEW DEEP CAPACITY RIGS PURCHASED FOR TOTAL OF 8 DRILL RIGS IN TUVATU FLEET CAPACITY OF LION ONE LABORATORY TO EXCEED 12,000 SAMPLES PER MONTH

Lion One's Senior Vice-President Exploration Sergio Cattalani commented "Our best performing rigs have been two Canadian-made rigs, readily convertible from electric to diesel powerpacks, delivering an enviable average combined, drilling production rate of approx. ~CAD\$43 per meter, exclusive of analytical cost."

Phase 2 of the infill drilling program now underway will keep 3 rigs busy for the remainder of the 2022 exploration season. Ongoing deep target testing at Tuvatu will continue to rely on at least one surface and one underground rig, and with the dry season around the corner, some rig capacity will be required for testing of regional targets. Access to two additional rigs will provide the project with complete flexibility to deploy these high-performance rigs both underground and on surface, either at Tuvatu or on regional targets, or both, as required by our aggressive exploration and infill drill programs. Delivery is expected to take approximately 12 weeks.

The Company is also pleased to announce that the on-site analytical laboratory will be expanded to better meet its combined exploration drilling and underground development needs moving forward. The lab expansion will consist of new furnaces, including one additional 50 X 7A electrical cupellation furnace, an LPG-fuelled fusion furnace, a new 50-pot pouring system, and a new sample drying oven. Modifications to the lab itself include the addition of an LPG tank, construction of a concrete plinth and installation of underground gas lines, as well as various electrical upgrades, galvanized ducting, range hood and final installation and testing of all new equipment.

Prior to the projected expansion, the lab was operating on two 8-hour shifts, on a 5-days per week basis. An incremental expansion beginning with the sample preparation sector of the laboratory has been ongoing for the last several weeks, adding staff as required to move to 24-hour/day operation. The proposed full expansion will affect both the sample preparation and the analytical phases, aiming to ultimately operate both sectors of the laboratory on a 3-shift, 24/7 basis.

The projected increase in sample throughput of this expansion is 8400 samples/month in sample preparation, which represents a >260% increase from the 3200 samples/month throughput prior to expansion. In the analytical sector, the increase in sample throughput following the deployment of new 60 pot furnaces and a 24/7 operational basis is expected to yield an estimated 12,600 samples/month, representing a 315% increase over the 4000 samples/month throughput prior to expansion. Installation



and commissioning of all new equipment and a full expansion of the laboratory to full-time 24/7 operation is expected to be completed by late March 2022.

Qualified Person

The scientific and technical content of this news release has been reviewed, prepared, and approved by Mr. Sergio Cattalani, P. Geo, who is a qualified person pursuant to National Instrument 43-101 – Standards of disclosure for Mineral Projects ("NI-43-101).

About Tuvatu

The Tuvatu gold deposit is located on the island of Viti Levu in the South Pacific island nation of Fiji. The mineral resource for Tuvatu as disclosed in the technical report "Tuvatu Gold Project PEA", dated June 1, 2015, and prepared by Mining Associates Pty Ltd of Brisbane Qld, and subsequently updated in January 2018 as disclosed in the technical report and PEA by Tetra Tech "Technical Report and Preliminary Economic Assessment Update for the Tuvatu Gold Project, The Republic of Fiji" dated September 2020, comprises 1,007,000 tonnes Indicated at 8.48 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 www.liononemetals.com and on the SEDAR website at www.sedar.com.

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 volcanic edifice of alkaline affinity. 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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