

LION ONE REPORTS 2020 HIGHLIGHTS FROM THE TUVATU GOLD PROJECT IN FIJI

North Vancouver, B.C., December 22, 2020 - Lion One Metals Limited (TSX-V: LIO) (OTCQX: LOMLF) (ASX: LLO) ("Lion One" or the "Company") is pleased to provide the following update highlighting its key accomplishments during the past year in the exploration and development of its 100% owned, fully permitted Tuvatu Alkaline Gold Project, located on the island of Viti Levu in Fiji.

Drilling, Discoveries, Development

Lion One emerged in 2020 as a fully equipped gold exploration company with four active surface drilling rigs and a fully operational, quick-response metallurgical and geochemical laboratory in nearby Nadi. The Company also added personnel to its growing and vastly experienced exploration and engineering team and was able to operate in Fiji with minimal disruption throughout 2020.

Lion One believes the Navilawa Caldera hosts a very large "alkaline gold system". This variety of gold system is not prolific in number globally but are among the largest producers of gold in the world, with notable examples in the South Pacific including the Porgera and Lihir gold mines in Papua New Guinea, and Vatukoula in Fiji, 40km from Tuvatu. A North American example is the Cripple Creek gold mine in Colorado.

The CSAMT survey (see news release dated Feb. 5, 2020) completed in late 2019 revealed the deep structural architecture underlying the Navilawa system, to depths below 1,200m, with many major structural intersections underlying areas displaying strong coincident gold anomalism at surface. Another strong indicator of a large gold system is evidenced through widespread gamma radiation emitted from high concentrations of the alkaline element potassium across the Navilawa system.

In securing the adjacent ground to Tuvatu in 2019, Lion One became the first company in modern times to consolidate and carry out systematic exploration over the entire 7km diameter Navilawa Caldera. The Project area now consists of four contiguous exploration licenses covering almost 200km². The 385 hectare Tuvatu mining lease is located near its epicentre and hosts the high grade, permitted for production, Tuvatu gold resource.

The Company has now also purchased two additional deep capacity underground diamond drill rigs with vertical ranges in excess of 1,000m. These two underground rigs will focus on testing for deep extensions of new high grade zones of mineralization discovered below Tuvatu in 2020, highlighted by TUDDH500 which returned a notable intercept of 55.43 g/t Au over 12.70m from 571m, (including 1,400 g/t Au over 0.3m) approximately 200m below one of the deeper points in the current Tuvatu resource (see August 17, 2020 news release). In addition to discovering deep extensions below Tuvatu, the Company also discovered very similar mineralization at Banana Creek 3km to the NE of Tuvatu, and has a large pipeline of drilling targets across the Navilawa Caldera.

During 2020 the Company completed civil works for the surface infrastructure and the new portal site for the main decline to access the recently discovered deep extents of the Tuvatu gold deposit. As of December 2020 the Company has selected a shortlist of contractors for managing the construction of



the process plant and surface infrastructure, and a second group to manage mining operations and procurement of equipment.

The Company concludes 2020 with a very strong working capital position of CAD \$63 million, secured through private placements in December 2019 (\$11m raised at \$0.92), August 2020 (\$39m raised at \$1.70 and \$2.05), with an additional \$17 million secured through the full exercise of the \$1.20 December 2020 warrants.

Lion One Chairman and CEO Walter Berukoff commented, "On behalf of management and the Board of Directors I'd like to recognize and thank our resilient Lion One Fiji team for their incredible efforts and performance over the last year. We're in a strong financial position to accelerate deep drilling at our discovery below Tuvatu and pursue new discoveries at Banana Creek, and confirm our thesis that the Navilawa Caldera hosts large alkaline gold systems of a scale rarely owned by a junior gold company".

Photo: Lion One Fiji Headquarters Compound outside Nadi with Laboratory, Workshop and Office





Photo: Surface rig #3 after its arrival in mid-2020



Photo: Underground drilling from previous campaign





Diagram: North looking cross section of Tuvatu block model highlighting depth extensions identified during 2020 diamond drilling

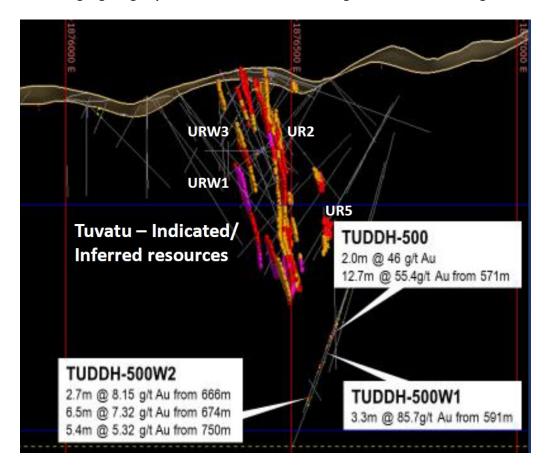
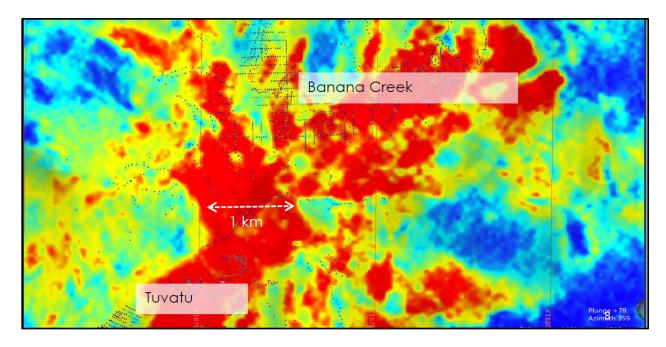


Photo: drill core from mineralized interval in diamond drill hole TUDDH-500

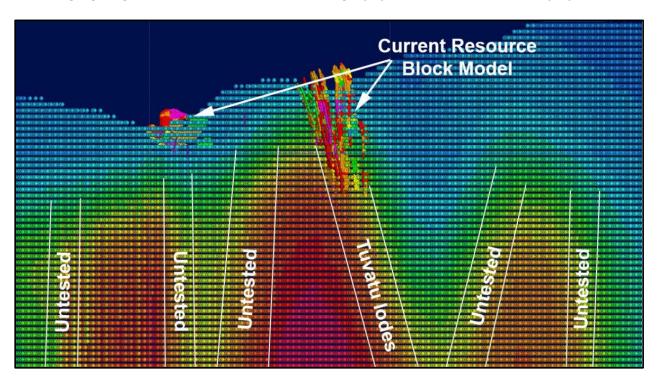




Diagram: Gamma radiation signature emitted from potassium-rich rocks of the Navilawa Caldera



CSAMT geophysical imagery showing resistivity gradients in N-facing cross section of Tuvatu resource area highlighting several of the numerous untested geophysical anomalies within the project area.





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 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 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 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.

Drilling and Assay QAQC Processes and Procedures

The Company is utilizing its own diamond drill rig, using PQ, HQ and ultimately NQ sized drill core rods. Drill core is logged by Company geologists and then is sawn in half and sampled by Lion One staff.

Samples are analyzed at the Company's own geochemical laboratory in Fiji, whilst pulp duplicates of samples with results >0.5g/t Au are sent to ALS Global Laboratories in Australia for check assay determinations. Intervals reported here have been sent to ALS Global Laboratories for screen metallic assay. All samples are pulverized to 80% passing through 75 microns. Original gold analysis was carried out using fire assay with an AA finish. A second round of assaying was completed utilizing fire assay with a gravimetric method. The fire assay-gravimetric method generates a physical bead of gold that is weighed. Lion One's laboratory can also assay for a range of 71 other elements through Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), but currently focuses on a suite of 9 important pathfinder elements. All duplicate anomalous samples sent to ALS Townsville, Queensland, Australia are analyzed by the same methods (Au-AA26, and also Au-GRA22 where applicable). ALS also analyze for 33 pathfinder elements are analyzed by HF-HNO3-HClO4 acid digestion, HCl leach and ICP-AES. (method ME-ICP61).

Qualified Person

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



On behalf of the Board of Directors of Lion One Metals Limited "Walter Berukoff" Chairman and CEO

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