



LION ONE REPORTS 19.60m AT 21.16 g/t Au INCLUDING 16.20m AT 25.28 g/t Au IN DRILLHOLE TUDDH-608, EXPANDING THE TUG-141 HIGH-GRADE ZONE AT TUVATU, FIJI

North Vancouver, B.C., September 15, 2022 - Lion One Metals Limited (TSX-V: LIO) (OTCQX: LOMLF) (ASX: LLO) ("Lion One" or the "Company") is pleased to announce the results from drillhole TUDDH-608 a direct follow-up to the TUG-141/TUDDH-601 high-grade zone discovery at its fully permitted Tuvatu Alkaline Gold Project in Fiji.

TUDDH-608 intersected:

19.60m at 21.16 g/t Au from 594.5-614.1m, which includes a zone of **16.20m at 25.28 g/t Au** from 596.7-612.9m.

The dip of this hole at this depth was approximately 60° equating to a **true horizontal width of 11.85m**.

TUDDH-608 was drilled from surface at an azimuth of approximately N090°E, aimed at intersecting the TUG-141/TUDDH-601 high-grade zone at a high angle to determine the true width of the high-grade zone at this location.

Figure 1 show the trace of TUDDH-608 and its location relative to the current interpretation of the TUG-141/TUDDH-601 high-grade dilation zone, and indicates that TUDDH-608 intersected high-grade Au mineralization approximately 20m north of subvertical hole TUDDH-601, and 15m below the discovery hole TUG-141. The trace of the currently drilling TUG-147 drillhole, designed to intersect the high-grade mineralized zone an additional 90 to the north of TUDDH-608 is also shown on Figure 1. TUG-147 is expected to cross the target rocks in the next 7-10 days.

Figure 2 includes some photos of the mineralization intersected by hole TUDDH-608. All results >0.5 g/t Au are summarized below in Table 1.

Lion One Sr. Vice-President of Exploration Sergio Cattalani, stated "This is yet another exceptional set of results from the ongoing drilling of the high-grade zone defined by the previous drill holes TUG-141 and TUDDH-601. Our current interpretation of this portion of the 500 Zone feeder is that of a wide zone of dilation associated with the interplay of major structural corridors (UR1 and UR4) and the main lithological contact between monzonite and andesite that has the potential to extend for tens to hundreds of meters both vertically and along the NS direction. True widths exceeding 10m at the narrower apex of this dilational zone suggest a significant increase in gold ounces once this zone has been adequately drilled off, and this, independent of the rest of the extensive vertical 500 zone feeder that is known to exceed 1100m in vertical extent. We will continue to expand this critical zone of high-grade mineralization with ongoing drilling both from surface as well as from the underground decline."

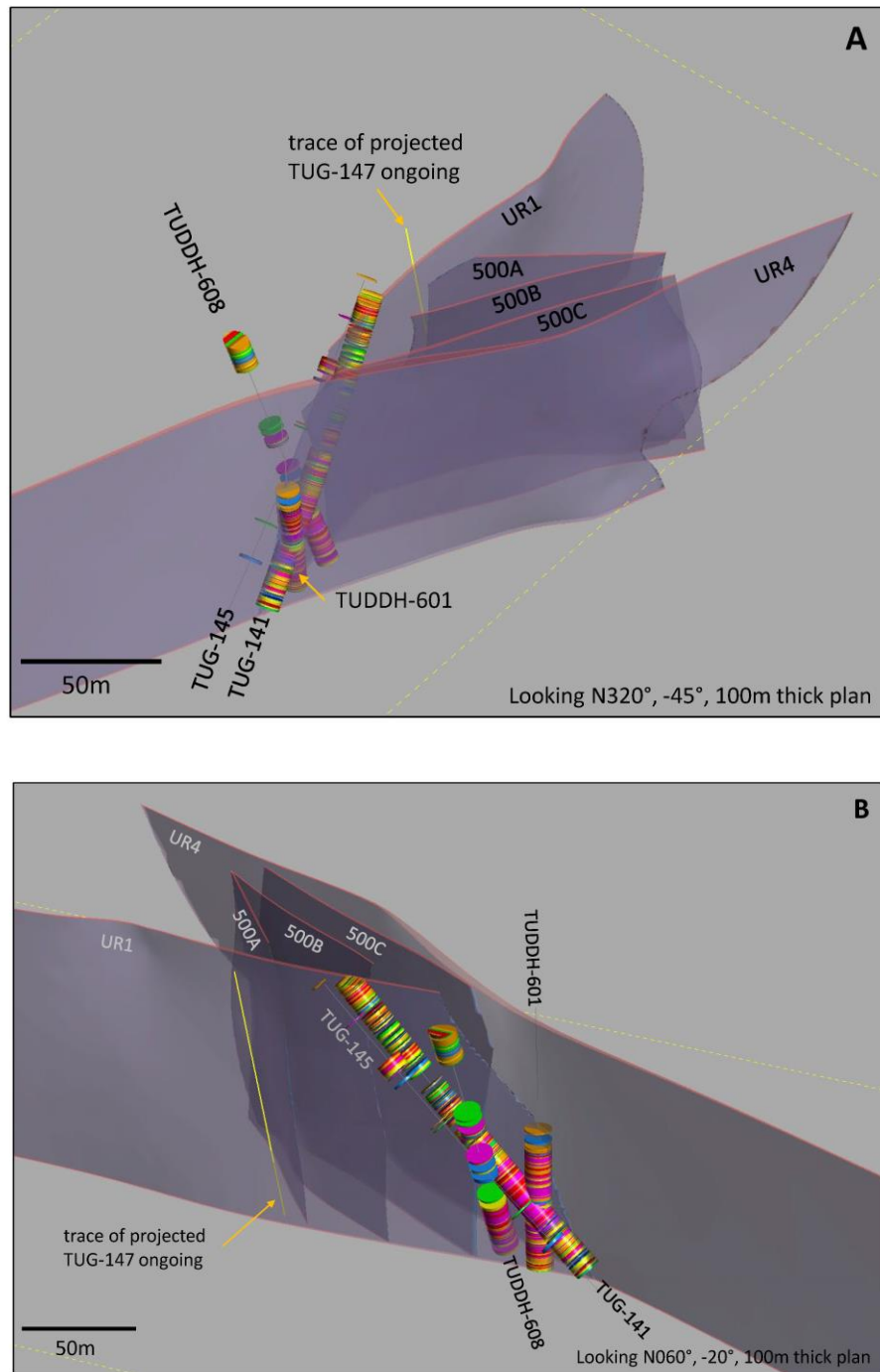


Figure 1: Oblique views looking N320° and down 45° (**A**) and looking N060° and down 20° (**B**) of a 100m thick horizontal slice of the UR1-UR4 high-grade mineralized zone. Yellow trace is the projected trace of TUG-147 (in progress).



Figures 2: Photos from TUDDH-608 drill core, as follows: **A)** 571.5m, 17.03 g/t Au; **B)** 601.9m, 23.21 g/t Au; **C)** 599.5m, 108.31 g/t Au; **D)** 606.5m, 54.54 g/t Au; **E)** 611.8m, 45.02 g/t Au; **F)** close-up of cut core from photo E showing VG.



Table 1: Drilling intervals for diamond drill hole TUDDH-608 returning >0.5 g/t Au (intervals > 3.0 g/t Au cutoff are shown in red, and intervals >9.0 g/t Au or longer than 1.2m are bolded).

<i>Hole ID</i>	<i>From (m)</i>	<i>To (m)</i>	<i>Interval (m)</i>	<i>Grade (g/t Au)</i>
TUDDH-608	38.0	38.6	0.6	1.03
	263.8	264.4	0.6	0.71
	285.1	285.7	0.6	0.69
	493.6	493.9	0.3	3.07
	503.2	510.0	6.8	2.45
Incl.	506.7	507.3	0.6	10.49
	511.2	515.7	4.5	1.45
	517.8	518.1	0.3	1.08
	519.3	523.2	3.9	1.49
	557.1	557.7	0.6	9.08
Incl.	557.1	557.4	0.3	11.64
Incl.	557.4	557.7	0.3	6.51
	559.2	559.8	0.6	3.02
	571.4	572.6	1.2	9.41
Incl.	571.4	572.6	0.6	17.02
	576.5	577.4	0.9	0.51
	594.5	618.2	19.6	21.16
Incl.	596.7	597.9	1.2	85.09
Incl.	597.9	598.6	0.7	9.42
Incl.	598.6	598.9	0.3	8.38
Incl.	598.9	599.2	0.3	11.44
Incl.	599.2	599.5	0.3	6.98
Incl.	599.5	599.8	0.3	36.39
Incl.	599.8	600.4	0.6	108.31
Incl.	600.4	600.7	0.3	21.69
Incl.	600.7	601.7	1.0	13.54
Incl.	601.7	602.2	0.5	23.39
Incl.	602.2	602.5	0.3	0.72
Incl.	602.5	603.1	0.6	80.01
Incl.	603.1	603.7	0.6	7.05
Incl.	603.7	604.0	0.3	11.97
Incl.	604.0	604.6	0.6	3.09
Incl.	604.6	605.2	0.6	2.93
Incl.	605.2	606.0	0.8	1.41



Incl.	606.0	606.6	0.6	54.53
Incl.	606.6	607.2	0.6	11.99
Incl.	607.2	607.8	0.6	8.30
Incl.	607.8	608.4	0.6	29.56
Incl.	608.4	609.3	0.9	1.34
Incl.	609.3	609.6	0.3	24.31
	609.6	610.2	0.6	2.61
Incl.	610.2	610.8	0.6	10.85
Incl.	610.8	611.1	0.3	7.54
	611.1	611.4	0.3	2.90
Incl.	611.4	612.1	0.7	45.02
Incl.	612.1	612.9	0.8	13.31
	612.9	613.8	0.9	0.54
	613.8	614.1	0.3	1.87
	616.1	618.2	2.1	4.25
Incl.	616.1	616.7	0.6	11.72
	670.2	670.5	0.3	0.97

Table 2: Survey details of diamond drill holes referenced in this release. Previously released drill holes are not included here.

Hole No	Coordinates (Fiji map grid)		RL	final depth	dip	azimuth
	N	E				
TUDDH-608	1876280	3920472	286.51	678.1	-64	089
TUG-147	1876435	3920584	116	in progress	-75	099



Qualified Person

In accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”), Sergio Cattalani, P.Geol, Senior Vice President Exploration, is the Qualified Person for the Company and has reviewed and is responsible for the technical and scientific content of this news release.

QAQC Procedures

Lion One adheres to rigorous QAQC procedures above and beyond basic regulatory guidelines in conducting its sampling, drilling, testing, and analyses. The Company utilizes its own fleet of diamond drill rigs, using PQ, HQ and NQ sized drill core rods. Drill core is logged and split by Lion One personnel on site. Samples are delivered to and analysed at the Company’s geochemical and metallurgical laboratory in Fiji. Duplicates of all samples with grades above 0.5 g/t Au are both re-assayed at Lion One’s lab and delivered to ALS Global Laboratories in Australia (ALS) for check assay determinations. All samples for all high-grade intercepts are sent to ALS for check assays. All samples are pulverized to 80% passing through 75 microns. Gold analysis is carried out using fire assay with an AA finish. Samples that have returned grades greater than 10.00 g/t Au are then re-analysed by gravimetric method. For samples that return greater than 0.50 g/t Au, repeat fire assay runs are carried out and repeated until a result is obtained that is within 10% of the original fire assay run. For samples with multiple fire assay runs, the average of duplicate runs is presented. 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 are sent to ALS labs in Townsville QLD and are analysed by the same methods (Au-AA26, and Au-GRA22 where applicable). ALS also analyses for 33 pathfinder elements by HF-HNO₃-HClO₄ acid digestion, HCl leach and ICP-AES (method ME-ICP61).

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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