



LION ONE ADDS NUMEROUS HIGH-GRADE INTERCEPTS NEAR SURFACE AND EXPANDS DEEP FEEDER ZONE 500, TUVATU, FIJI

North Vancouver, B.C., September 7, 2021 - Lion One Metals Limited (TSX-V: LIO) (OTCQX: LOMLF) (ASX: LLO) ("Lion One" or the "Company") is pleased to announce further high grade intercepts from ongoing deep extensional step-out drilling and near-surface infill drilling from the Company's 100% owned Tuvatu gold project in Fiji.

Highlights include:

10.24 g/t Au over 8.48m from downhole depth of 111.20m from TUDDH539 (near surface infill)
-incl. **33.26 g/t Au over 2.44m** from 111.20m, and **13.49 g/t Au over 3.30m** from 115.40m

24.92 g/t Au over 3.70m from downhole depth of 415.70m from TUG135 (Deep Feeder Zone 500)
-incl. **83.63 g/t Au over 0.30m** from 415.70m, and **159.30 g/t Au over 0.30m** from 417.20m

Sergio Cattalani, Lion One's Senior Vice President Exploration, commented "High grade mineralization in Deep Feeder Zone 500 has now been demonstrated to extend over an area approximately 150m along strike and 250m vertically, completely outside the existing resource model. We have planned additional drilling to test the lateral extent of this zone and infill the shallowest part of this zone with the base of the existing resource."

Deep Feeder Zone 500

These most recent intercepts are believed to be the continuation of the interpreted deep feeder structure that encountered **55.43 g/t Au over 12.70m** in TUDDH500 (*see July 24, 2020 News Release*) and **55.44 g/t Au over 2.30m** in TUDDH533. Multiple new high-grade gold intercepts have been encountered in underground hole **TUG135** drilled from the Tuvatu decline, as well as in hole **TUDDH533W1**, a wedge hole to TUDDH533 reported previously (*see July 26, 2021 News Release*). These include **24.92 g/t Au over 3.70m** (including **159.30 g/t over 0.30m**) from a downhole depth of 415.70m, **2.89 g/t Au over 2.50m** from a downhole depth of 508.10m in hole TUG135, and **3.34 g/t Au over 1.80m** from a downhole depth of 613.90m in hole TUDDH533W1. This same gold-bearing structure has now been intersected by multiple holes, including TUDDH500, 500W1, 500W2, TUDDH533, 533W1, TUDDH528, TUDDH517, 517W1, TUDDH514, 514W1, and TUG135 (*see Figure 1*). These additional deep intercepts significantly increase our degree of confidence that the Tuvatu orebody extends to considerable depth, and that it remains fully open, laterally and at depth. It is clear that the current Tuvatu resource represents but a fraction of a much larger and considerably more extensive, high-grade Au deposit for which additional drilling is warranted to further define its true extent.

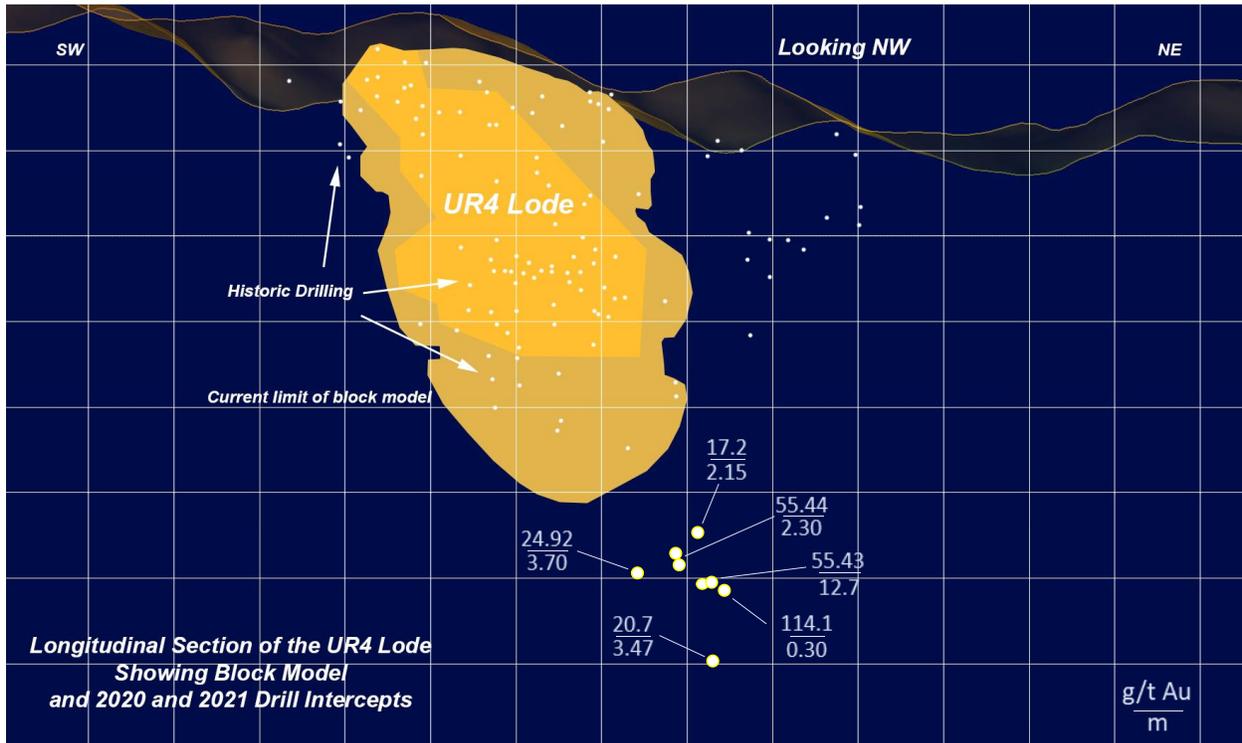


Figure 1: Longitudinal Section of the UR4 Lode Showing Block Model and 2020 and selected 2021 Drill Intercepts. The grid is 100m, the bright yellow is indicated and the darker yellow is inferred. Intercepts are expressed as g/t Au over downhole width in meters.

Resource Infill/Definition Drilling

In addition to expanding the high-grade feeder zone underlying the UR4 lode, several bonanza-grade intercepts have also been returned from the ongoing near-surface infill/definition drill program which will add significantly to the resource earmarked for early production. The aim of this drill program was to infill areas of low data density within parts of the resource currently categorized as Inferred. A complete set of results for all previously unreported drill holes is included as Appendix 1.

The Company is currently undertaking three tiers of drilling: 1) shallow resource infill drilling from surface and underground, 2) deep exploration drilling looking for lode extensions under the Tuvatu resource and 3) other target areas within the Navilawa caldera such as Banana Creek, 3.5 km NE of Tuvatu where drilling is underway.



Highlights from shallow infill/definition drilling include:

- TUG 135:** 7.53 g/t Au over 5.80m from 28.60m, incl. 13.64 g/t Au over 2.60m
TUDDH 540: 97.40 g/t Au over 1.30m from 103.90m, incl. 210.29 g/t Au over 0.60m
TUDDH 539: 10.24 g/t Au over 8.48m from 111.20m,
incl. 33.26 g/t Au over 2.44m, and 13.49 g/t Au over 3.30m
TUDDH 534: 5.52 g/t Au over 3.71m from 123.23m,
incl. 15.59g/t Au over 0.34m and 18.4 g/t Au over 0.47m
TUDDH 537: 12.23 g/t Au over 1.33m from 134.15m,
incl. 30.50 g/t Au over 0.35m, and 16.07 g/t Au over 0.35m
TUDDH 537: 6.52 g/t Au over 3.51m from 138.93m, incl. 19.46 g/t Au over 0.38m
TUDDH 538: 103.5g/t Au over 0.28m from 177.78m in TUDDH538

Note: true width of intersections have yet to be accurately determined for these numerous lodes reported in this release.

Table 1: Drilling Intervals Reported (intervals greater than 3.0 g/t Au cutoff are bolded)

Drill Hole	From (m)	To (m)	Interval (m)	Au (g/t)
TUDDH533	12.45	13.65	1.20	10.45
incl	13.00	13.30	0.30	36.69
	15.35	15.65	0.30	2.18
	17.50	17.80	0.30	2.91
	20.30	23.80	3.50	2.72
incl	20.60	20.90	0.30	9.23
	25.85	26.15	0.30	0.89
	27.40	28.00	0.60	1.04
	28.57	28.95	0.38	0.54
	30.00	31.80	1.80	1.41
	36.00	39.00	3.00	3.47
incl	37.60	38.20	0.60	10.06
	162.20	162.50	0.30	1.19
	266.80	267.40	0.60	437.13
	306.35	307.35	1.00	1.20
	309.35	310.80	1.45	16.14
incl	310.15	310.80	0.65	31.93
	335.24	335.64	0.40	12.84
	370.89	371.23	0.34	0.56
	385.60	386.00	0.40	1.10
	390.79	391.09	0.30	1.47



	437.84	438.26	0.42	0.95
	439.30	439.60	0.30	0.58
	453.15	453.60	0.45	0.67
	459.25	459.80	0.55	3.73
	464.10	464.91	0.81	1.82
	487.40	488.33	0.93	0.92
	539.45	540.30	0.85	1.33
	550.06	550.43	0.37	0.76
	551.20	551.50	0.30	0.61
	575.70	578.00	2.30	55.44
incl	576.68	578.00	1.32	96.13
incl	577.60	578.00	0.40	221.60
TUDDH533w1	536.30	540.86	4.56	1.50
	546.94	549.44	2.50	1.85
	612.10	613.90	1.80	3.34
	614.50	614.80	0.30	0.56
TUDDH534	66.69	67.08	0.39	0.67
	71.40	71.72	0.32	4.03
	90.95	94.19	3.24	2.95
incl	90.95	91.42	0.47	7.72
and	93.80	94.19	0.39	14.76
	100.57	100.84	0.27	0.66
	120.49	121.10	0.61	1.97
	123.23	126.94	3.71	5.52
incl	124.66	125.00	0.34	15.59
and	125.47	125.94	0.47	18.44
TUDDH537	83.56	83.90	0.34	1.91
	126.57	127.36	0.79	3.99
	128.50	129.78	1.28	4.04
	134.15	135.48	1.33	12.23
incl	134.15	134.50	0.35	30.50
and	135.17	135.48	0.31	16.07
	138.93	142.44	3.51	6.52
incl	142.06	142.44	0.38	19.46
	144.62	146.39	1.77	3.50
incl	145.31	145.53	0.22	14.13
TUDDH538	143.81	144.24	0.43	0.68
	177.78	178.04	0.26	103.50
TUDDH539	86.27	88.28	2.01	4.26
	102.82	103.14	0.32	10.78



	111.20	119.68	8.48	10.24
incl	111.20	113.64	2.44	33.26
and	115.40	118.70	3.30	13.49
	121.65	122.31	0.66	26.55
TUDDH540	97.95	98.25	0.30	79.65
	103.90	105.20	1.30	97.40
incl	103.90	104.50	0.60	210.29
which incl	103.90	104.20	0.30	41.58
and	104.20	104.50	0.30	379.00
	109.20	110.20	1.00	1.12
TUG135	4.60	4.90	0.30	1.12
	28.60	34.40	5.80	7.53
incl	29.40	32.00	2.60	13.64
	66.10	67.00	0.90	2.37
	95.40	95.70	0.30	0.69
	105.10	105.40	0.30	0.69
	106.60	107.20	0.60	20.70
incl	106.90	107.20	0.30	40.55
	108.90	110.70	1.80	1.37
	178.20	178.50	0.30	0.53
	260.50	261.30	0.80	1.83
	263.10	263.70	0.60	1.18
	265.00	265.30	0.30	1.84
	276.40	280.40	4.00	3.59
	284.30	285.60	1.30	1.49
	288.40	288.70	0.30	2.77
	294.90	295.20	0.30	1.26
	299.55	299.85	0.30	2.02
	346.70	350.10	3.40	3.61
	374.60	374.90	0.30	0.96
	415.70	419.40	3.70	24.92
incl	415.70	416.00	0.30	83.63
and	417.20	417.50	0.30	159.30
and	418.10	418.40	0.30	17.68
	508.10	510.60	2.50	2.89
incl	508.10	508.80	0.70	8.93
	511.50	511.90	0.40	0.56



Table 2: Survey details of diamond drill holes referenced in this release (Fiji Map Grid)

Hole No	coordinates		RL	final depth	dip	azimuth
	N	E				
TUDDH533	3920795	1876351	209.4	818.7	-60	130
TUDDH533W1	3920795	1876351	209.4	773.8	-60	130
TUDDH534	3920736.01	1876267	225.83	179.4	-70	16
TUDDH537	3920735.17	1876267	225.98	206.5	-80	11
TUDDH538	3920735	1876267	225.98	239.60	-83	80
TUDDH539	3920731	1876300	228.00	186.20	-72	0
TUDDH540	3920731	1876300	228.00	168.20	-60	0
TUG135	3920761	1876454	139.28	underway	-64.00	131

Drilling and Assay 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. Samples for assays reported here will be sent to ALS Global Laboratories for check assays shortly. 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 10g/t Au are then re-analyzed by gravimetric method. 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 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. 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, comprises 1,120,000 tonnes indicated at 8.17 g/t Au (294,000 oz. Au) and 1,300,000 tonnes inferred at 10.60 g/t Au (445,000 oz. Au) at a cut-off grade of 3 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.

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

"Walter Berukoff"

Chairman and CEO

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