

EXPLORATION UPDATE: SEPTEMBER 2021



FORWARD LOOKING STATEMENTS

DISCLAIMER

The information provided in this presentation is not intended to be a comprehensive review of all matters and developments concerning the Company and should be read in conjunction with all other disclosure documents of the Company. The information contained herein is not a substitute for detailed investigation or analysis. No securities commission or regulatory authority has reviewed the accuracy or adequacy of the information presented.

FORWARD-LOOKING STATEMENTS

This presentation contains statements and information that constitute forwardlooking information within the meaning of Canadian securities legislation, referred to herein as "forward-looking statements", include statements regarding proposed exploration and development activities and their timing, resource estimates, exploration potential and the PEA, including estimates of capital and sustaining costs, anticipated internal rates of return, mine production, estimated recoveries, mine life, estimated payback period and net present values, opportunities to enhance the value of the Tuvatu Gold Project and other plans and objectives of the Company. In making the forward-looking statements herein, the Company has applied several material assumptions, including that (1) required approvals, permits and financing will be obtained; (2) the proposed exploration and development of the Company's properties will proceed as planned and that actual results will be consistent management's expectations; (3) with respect to mineral resource estimates, the key assumptions and parameters on which such estimates are based; (4) market fundamentals will result in sustained metals and minerals prices; and (5) with respect to the PEA, the assumptions underlying the PEA, that the proposed mine plan and recoveries will be achieved, that capital costs and sustaining costs will be as estimated and that no unforeseen accident, fire, ground instability, flooding, labor disruption, equipment failure, metallurgical, environmental or other events that could delay or increase the cost of development will occur.

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the forward-looking statements, including: delays or inability to obtain required government or other regulatory approvals, permits or financing, the risk of unexpected variations in mineral resources, grade or recovery rates, of failure of plant, equipment or processes to operate as anticipated, of accidents, labor disputes, and unanticipated delays in completing exploration and development activities, the risk that estimated costs will be higher than anticipated and the risk that the proposed mine plan and recoveries will not be achieved, bad weather, exploration and development risks, actual results of exploration and/or development activities being materially different from those expected by management; uncertainties related to interpretation of drill results and geological tests, failure to meet expenditure and financing requirements, title matters, third party consents, operating hazards, metal prices, political and economic factors, competitive factors and general economic conditions. Actual results may vary from those implied or projected by forward-looking statements and therefore investors should not place undue reliance on such statements. The forward-looking statements herein are made as at the date of this presentation and the Company expressly disclaims any intention or obligation to update or revise any forward-looking statements except as required by applicable securities legislation.

TECHNICAL DISCLOSURE

The technical information in this presentation has been approved by Sergio Cattalani, P,Geo., Senior Vice President, Exploration of the Company and a Qualified Person as defined by National Instrument "NI" 43-101 Standards of Disclosure for Mineral Projects .

INVESTMENT PROFILE



INVESTORS & FUNDS

DONALD SMITH VALUE FUND (12.09%)
FRANKLIN PRECIOUS METALS (9.58%)
INVESCO GOLD FUND (4.84%)
REGAL FUNDS MANAGEMENT
RBC GLOBAL PRECIOUS METALS
AEGIS VALUE FUND
CI PRECIOUS METALS FUND
GABELLI GOLD FUND
MACKENZIE PRECIOUS METALS
WALTER BERUKOFF (13%)



Shares Outstanding	156,371,893
Options	9,480,000
Broker Warrants	1,303,010
Warrants	0
Shares Fully Diluted	167,154,903
Working Capital	CAD\$57M
Market Capitalization	\$172M*
* As of Sept. 1, 2021 @ \$1.10 per share	

TSX-V: LIO OTCQX: LOMLF ASX: LLO

LIO: \$1.10 52wk: \$2.16 \$1.00 Avg. vol: 180k

LEADERSHIP





Walter Berukoff Chairman & CEO

COMPANY BUILDER TRACK RECORD

Northern Orion sold to Yamana in 2007 for \$1.1B Miramar Mining sold to Newmont in 2008 for \$1.5B La Mancha sold in 2012 for \$600M

Emperor Gold Mines Fiji Gold Assets (Vatukoula & Tuvatu) purchased in 2008. Lion One Metals Limited created in 2011

DIRECTORS

STEPHEN MANN PGEO EX-NEWCREST & AREVA RICHARD MELI CA., EX-RIO TINTO, LA MANCHA KEVIN PUIL CFA RIVI ADVISORS DAVID TRETBAR PGEO SUMMIT USA (SUMITOMO)

MANAGEMENT

PATRICK HICKEY, COO EX-NEWMONT, KINROSS SERGIO CATTALANI, SVP EXPLORATION EX OSISKO

TONY YOUNG, CA CFO HAMISH GREIG, VP, CORP. SECRETARY

MINING DIVISION





Patrick Hickey
Chief Operating Officer
Engineer, mine builder, Ex
Newmont/Kinross



Kevin LiProject Manager
Engineer – Formerly Fluor, SNC
Lavalin, Saskpower, Pretium





Lion One Fiji Team
Over 200 years combined
experience in underground mining,
geology, drilling, and mineral
exploration

EXPLORATION DIVISION





Sergio Cattalani Senior VP, Exploration Economic geologist, Ex-Osisko Mining, Inco-CVRD, Equinox Gold

Will Ostrenga, P.GeoEconomic geologist,
Ex-Sumitomo, Novo Resources

Quinton Hennigh, P.GeoEconomic geologist,
Ex-Newmont, Novo Resources



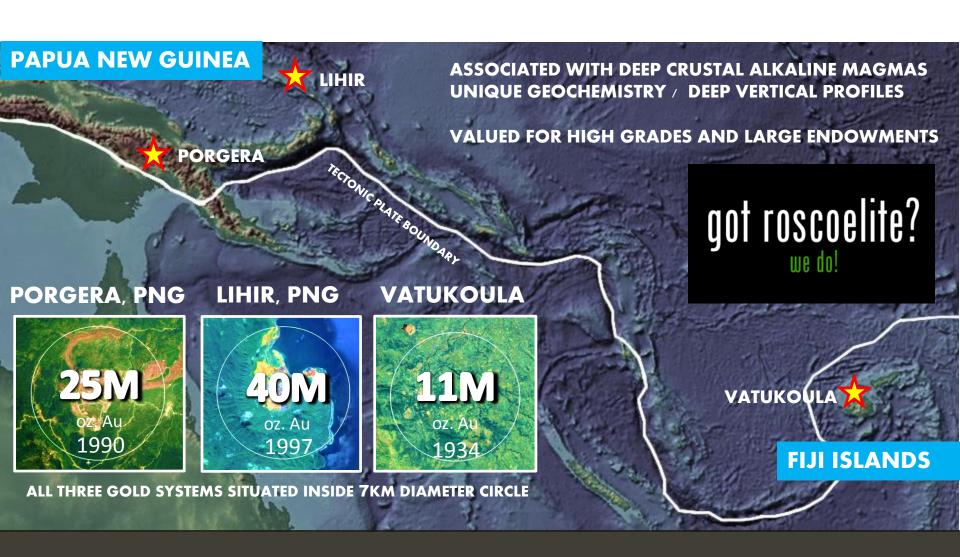




6 DRILL RIGS

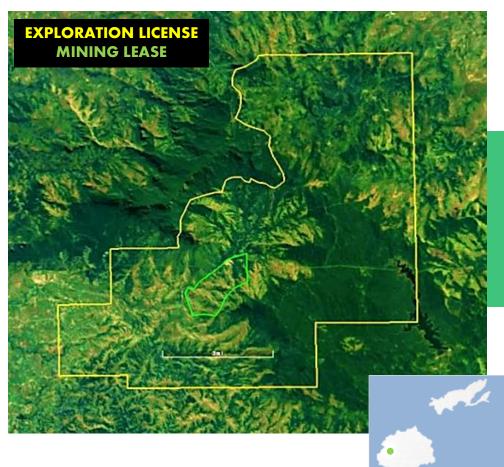
ALKALINE GOLD SYSTEMS





THE TUVATU PROJECT





+7M OZ HISTORIC PRODUCTION FROM 11M OZ MINERAL INVENTORY

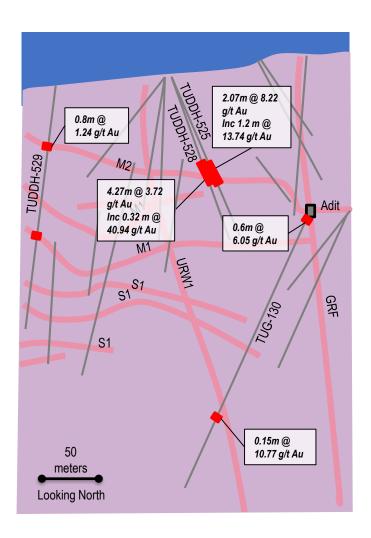
EXPLORATION STRATEGY

- 1. RESOURCE EXPANSION/UPGRADE
- 2. DEPTH EXTENSIONS
- 3. REGIONAL TARGETS

CONFIRMING EVIDENCE FOR ANOTHER MULTI-M OZ GOLD SYSTEM IN FIJI

1. RESOURCE EXPANSION





NEAR SURFACE DRILLING AT TUVATU

ONGOING NEAR-SURFACE INFILL DRILL PROGRAM UPGRADING RESOURCE FOR STARTER MINE 6,000M PROPOSED, ~30% COMPLETE

NOTABLE RECENT INTERCEPTS INCLUDE:

2.07m @ 8.22 g/t Au incl. 1.2 m @ 13.74 g/t Au 4.27m @ 3.72 g/t Au incl. 0.32m @ 40.94 g/t Au

3.7m @ 5.52 g/t Au

1.33m @ 12.23 g/t Au

3.51m @ 6.52 g/t Au

1.3m @ 97.4 g/t Au

8.48m @ 10.24 g/t Au incl. 2.24m @ 33.26 g/t Au and 3.30m @ 13.49 g/t Au from 111m

2. DEPTH EXTENSIONS



2020 TESTING OF DEEP TARGETS RETURNED:

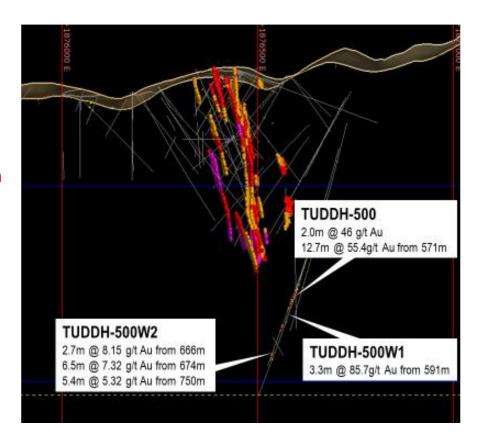
TUDDH 500: 55 g/t Au over 12.7m from 571.0m TUDDH 500w1: 85.7 g/t over 3.3m from 591.0m TUDDH 500w2: 7.32 g/t Au over 6.5m from 674.0m

5.32 g/t Au over 5.4m from 750.0m

RECENT RESULTS INCLUDE:

TUDDH 533: 55.44 g/t Au over 2.3m from 575.5m

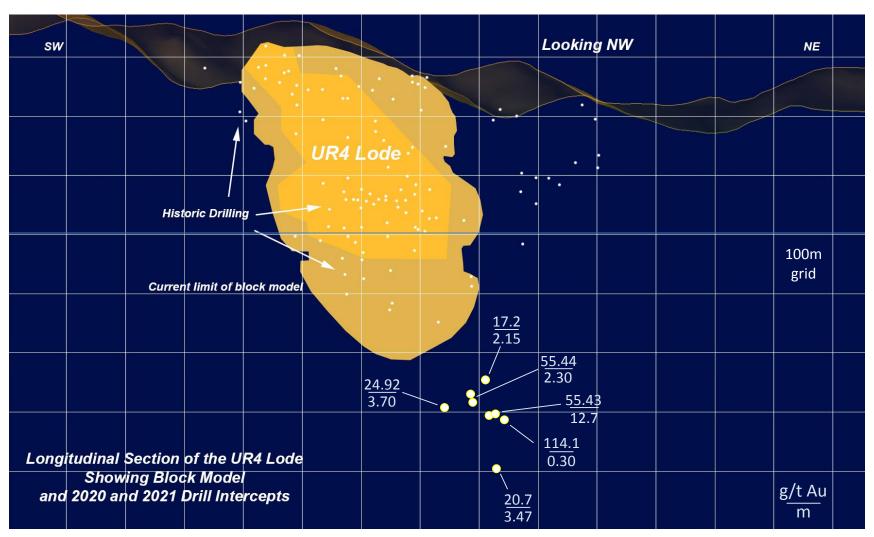
TUG135: 24.92 g/t Au over 3.70 m from 415.7m



HIGH GRADE INTERCEPTS ENCOUNTERED HUNDREDS OF METERS BELOW CURRENT RESOURCE: DRILLING IS ONGOING TO TEST DEEP FEEDER STRUCTURES

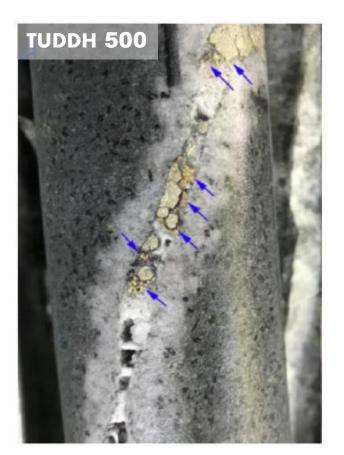
2. DEPTH EXTENSIONS UR4





DEEP FEEDER STRUCTURES







TUDDH 500 INCLUDES 55.43 g/t Au over 12.7m from 571.0m TUDDH 533 INCLUDES 55.44 g/t Au over 2.30m from 575.7m

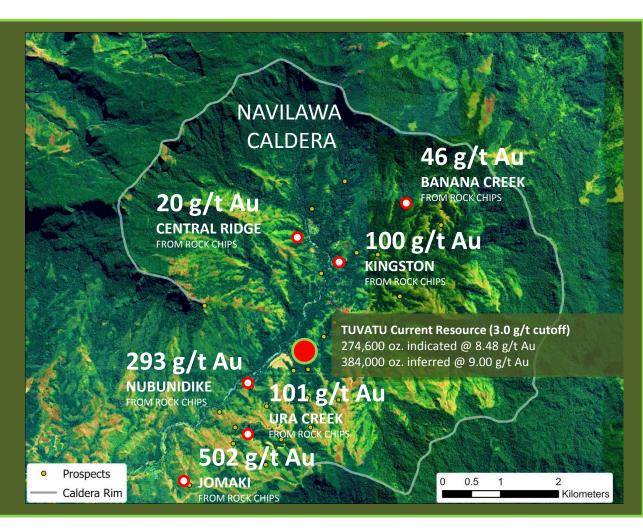
3. REGIONAL TARGETS



ANOMALOUS **HIGH GRADE**GOLD ACROSS 7KM WIDE
NAVILAWA CALDERA

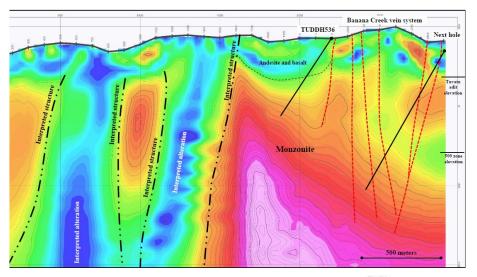
DRILLED RESOURCE AREA COVERS LESS THAN 5% OF LICENSE AREA

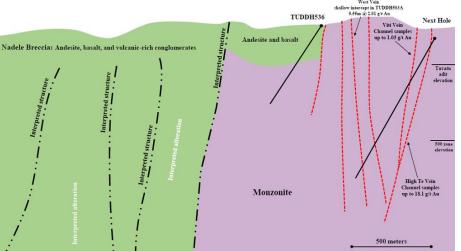
TARGET RICH DRILLING PIPELINE



3. BANANA CREEK TARGET







DISCOVERED IN 1980'S BY PANCONTINENTAL

1,400 X 400M VEIN SYSTEM 260M VERTICAL PROFILE EXPOSURE

CONSIDERED A POTENTIAL TUVATU ANALOGUE TUVATU LEVEL ENTIRELY PRESERVED

DRILLING UNDERWAY WILL TEST
NUMEROUS HIGH-GRADE VEINS
EXPOSED AT SURFACE AT THE LEVEL
OF TUVATU AND 500 HIGH-GRADE
ZONE

