



#### 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.

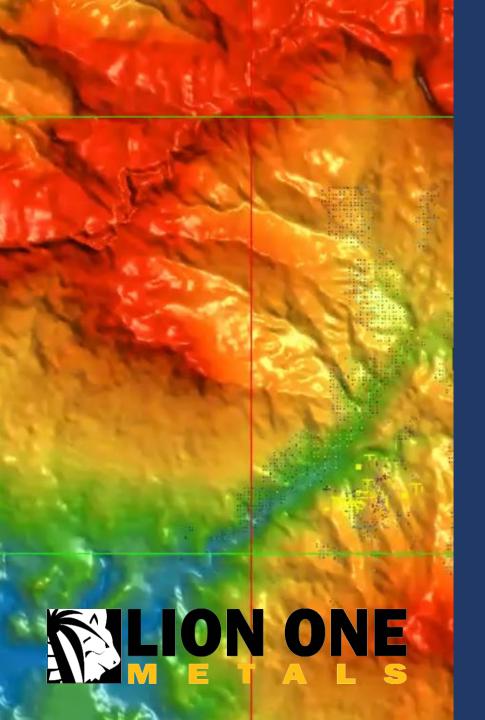
#### FORWARD-LOOKING STATEMENTS

This presentation contains statements and information that constitute forward-looking 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 forwardlooking 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 Stephen Mann, P.Geo ., Managing Director of the Company and a Qualified Person as defined by National Instrument "NI" 43-101 Standards of Disclosure for Mineral Projects .



# HIGHLIGHTS: HIGH GRADE GOLD ASSETS IN FIJI

Rare 7km-wide high grade alkaline gold complex with vast structural network mapped at >1.2km depth.

Extremely high grade depth extensions of current resource discovered in 2020 within Tuvatu mining lease permit area.

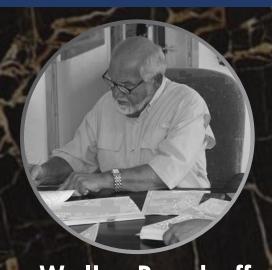
Fully permitted for production through the granted Tuvatu Mining Lease.

Only alkaline deposit with comparable characteristics owned by a junior.

Lion One continues to develop production infrastructure, starting with the Assay Lab at Nadi HQ and on-site civil earthworks in 2019.

Debt free, with over \$61M working capital.

# LEADERSHIP AND TECHNICAL TEAM HAVE A LONG HISTORY OF SUCCESS



Walter Berukoff
Chief Executive Officer

#### Founder and CEO of notable gold mining startups:

- Northern Orion Resources acquired by Yamana Gold in 2007 for \$1.1B
- **Miramar Mining** acquired by Newmont Mining in 2008 for \$1.5B
- La Mancha Resources acquired by Weather Investments in 2012 for \$600M
- **Emperor Gold Mines** Fiji Gold Assets (Vatukoula & Tuvatu) purchased in 2008



Stephen Mann

Managing Director

Formerly BHP, Newcrest, Cogema/AREVA, La Mancha, Avocet Resources



Kevin Li

Project Manager - Tuvatu

Formerly Fluor, SNC-Lavalin, Saskpower, Project Controls, Pretium Resources



#### Dr. Quinton Hennigh

**Economic Geologist** 

Chairman of Novo Resources. Formerly Homestake, Newcrest, Newmont

### INVESTMENT PROFILE: \$61M WORKING CAPITAL

#### **ISSUED & OUTSTANDING CAPITAL**

Shares: 155,455,493

Warrants: 11,371,590

Broker units: 1,405,049

Options: 8,211,540

Fully Diluted: 176,443,672

Share Price: \$1.33

Market Cap: \$207 million

Market Cap (FD): \$235 million

Cash: \$61 million

Debt: Nil

#### **ANALYST COVERAGE**

Eight Capital David Talbot





#### TOP INSTITUTIONAL SHAREHOLDERS

Donald Smith & Co.
Franklin Precious Metals Fund
Regal Funds Management
Invesco Oppenheimer Gold & Special
Minerals Fund





# Greenfield exploration upside coupled with brownfield development opportunity

First company to consolidate the Navilawa Gold System

Tuvatu mining lease (SML62) located at center of 200 km<sup>2</sup> exploration license area

Significant unexplored land holding within bounds of exploration license likely to yield further large deposits

Company has commissioned its own laboratory for analyses and diamond drilling dept.

# DUAL EXPL-DEV OPPORTUNITY NAVILAWA ALKALINE GOLD SYSTEM TUVATU HIGH GRADE GOLD PROJECT



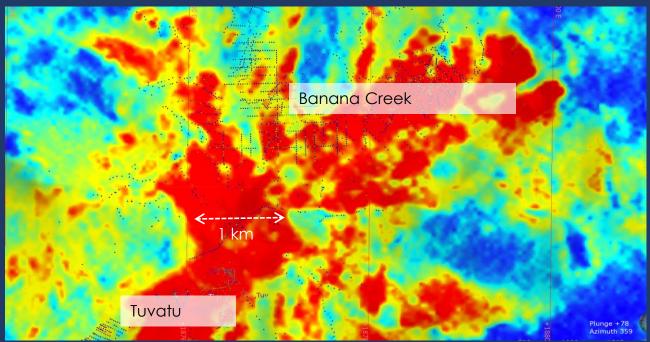
### OUR FOCUS IS ON HIGH GRADE DEPTH EXTENSION

over 30 geochemical anomalies in excess of 5 g/t Au along 7km strike

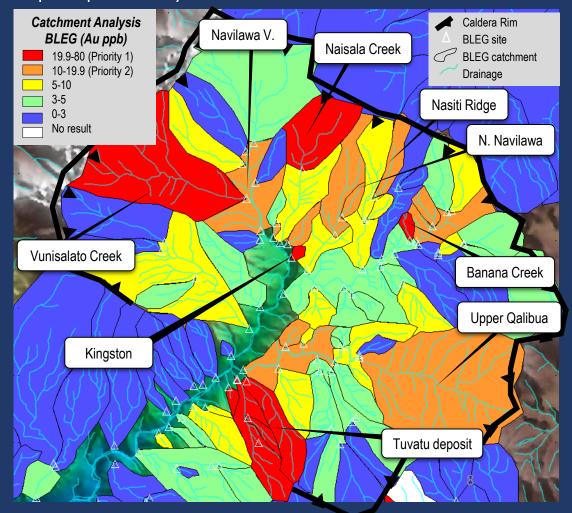


# USING SCIENCE TO REALISE THE POTENTIAL OF THE NAVILAWA CALDERA

Potassium radiometrics reveals scale of fluid migration through system in Navilawa caldera. Radiometrics reveal gold-enriched mineralizing system over 7km in diameter.



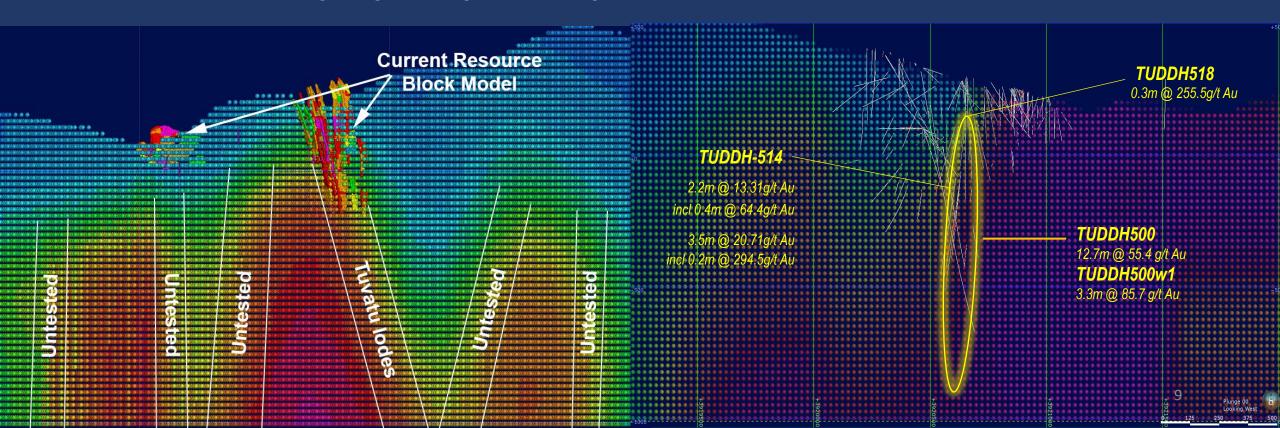
BLEG Sampling of catchments highlights prospectivity of entire Navilawa Caldera



# USING SCIENCE TO REALISE THE POTENTIAL OF THE NAVILAWA CALDERA

#### CSAMT / DEEP DRILLING PROGRAM

2020-2021 drilling program targets CSAMT gradients to confirm deep-rooted feeder pathways



Ongoing diamond drilling program has extended the known resource to 750m depth and remains open

Results include:

**TUDDH493:** 

4.29m @ 33.2 g/t Au

**TUDDH500:** 

2.0m @ 46 g/t Au

12.7m @ 55.4 g/t Au

TUDDH 500w1:

3.3m @ 85.7 g/t Au

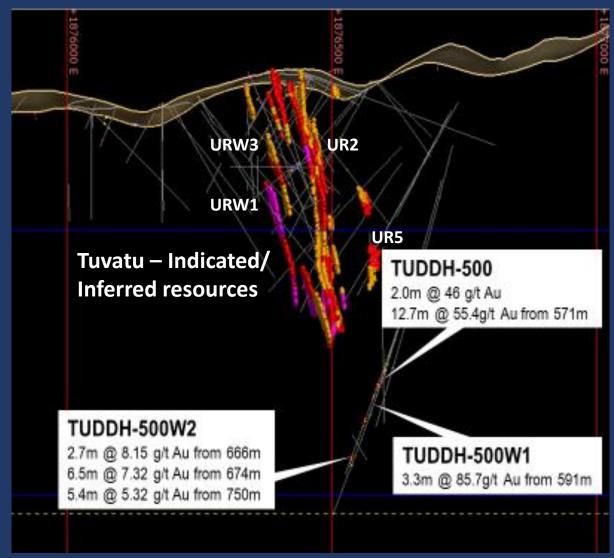
**TUDDH500w2:** 

6.5m @ 7.32 g/t Au

5.4m @ 5.32 g/t Au



# HIGH GRADE DEPTH EXTENSIONS DEEP ROOTED FEEDER STRUCTURES







### Alkaline gold systems are known to continue to great depths

**TUDDH514:** 

2.24m @ 13.31 g/t Au from 495.6m incl 0.35m @ 64.40 g/t Au

3.47m @20.71 g/t Au from 703.7m incl 0.23m @294.5 g/t Au

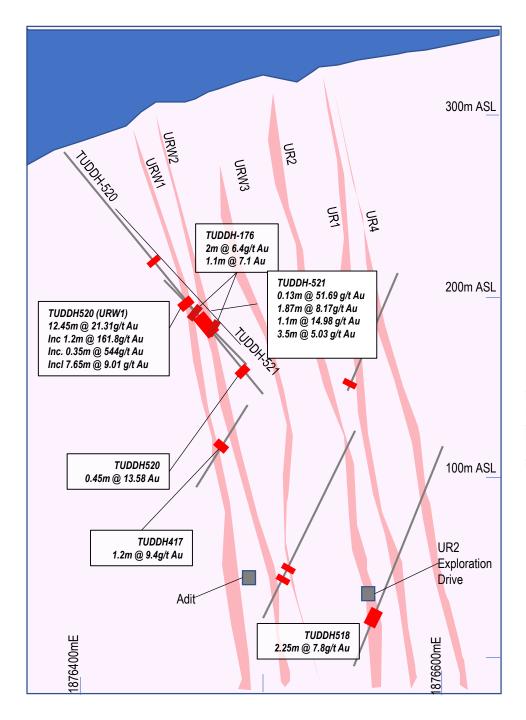
0.35m @ 10.52 g/t Au from 983.15m (photograph to left) (deepest intersection at Tuvatu to date)

"This is a big step-out and gives us high confidence we have discovered a significant root structure below the Tuvatu lode system".

Quote by Quinton Hennigh (technical advisor to Lion One Metals)

# Recent drilling extending mineralization targeted for early mining

Hole No	from	to	interval	grade
	(m)	(m)	(m)	(g/tAu)
TUDDH520	90.10	102.55	12.45	21.31
incl	90.1	91.3	1.2	161.85
with	90.1	90.45	0.35	544.00
and incl	94.9	102.55	7.65	9.01
with	95.7	96.05	0.35	16.32
and	97.3	98.7	1.4	28.23
and	100.7	101	0.3	17.74
and	102.3	102.55	0.25	41.98
	125.85	128.20	2.35	4.00
incl	126.60	127.05	0.45	13.58
and	127.50	127.70	0.2	11.82



Hole No	from (m)	to (m)	Interval (m)	Grade (g/t Au)
TUDDH521	57.59	57.72	0.13	51.69
	69.70	71.57	1.87	8.17
ncl	70.25	70.50	0.25	39.32
	74.12	75.22	1.1	14.98
ncl	74.84	75.22	0.38	30.05
	78.56	82.06	3.5	5.03
ncl	81.83	82.06	0.23	32.23

### DISTRIBUTION OF ALKALINE SYSTEMS IN THE SOUTH PACIFIC

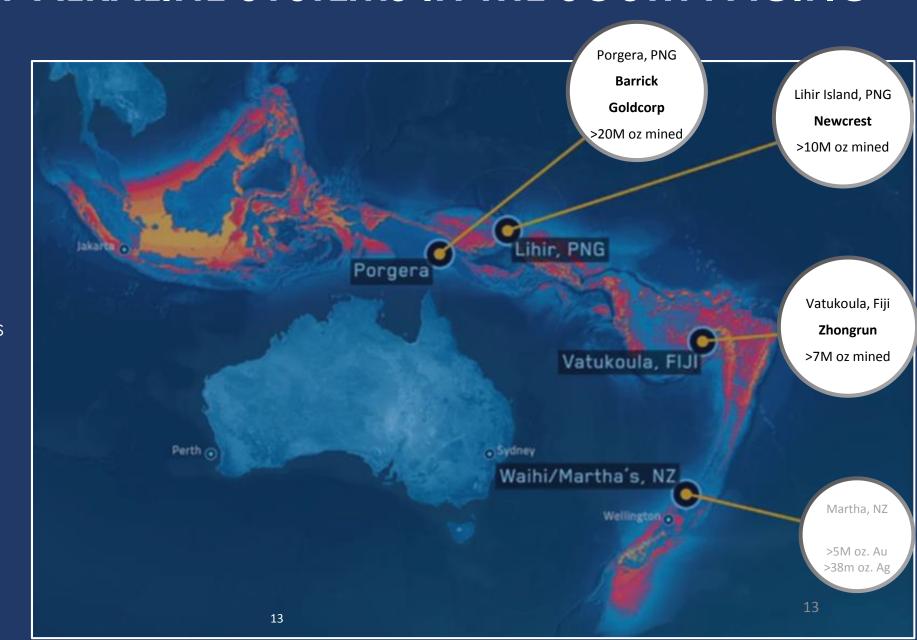
Associated with deep crustal alkaline magmas and expansive structural networks

Valued for high grades, large endowments, deep vertical profiles

Prized by major mining companies

– rarely held by juniors

Notable alkaline systems throughout world include Cripple Creek, Macassa, Porgera and Lihir, Cadia, Cowal, Springpole



# WORLD CLASS EXAMPLES OF ALKALINE GOLD SYSTEMS IN THE REGION HIGHLIGHTS POTENTIAL YIELD

Tier 1 mines in the South Pacific region with geologically similar alkaline complexes can exceed 40M oz, highlighting the potential yield of the Tuvatu project once fully explored.



Disc 1960's >90% explored Prod commenced 1990



Disc 1982—>80% explored Prod commenced 1997



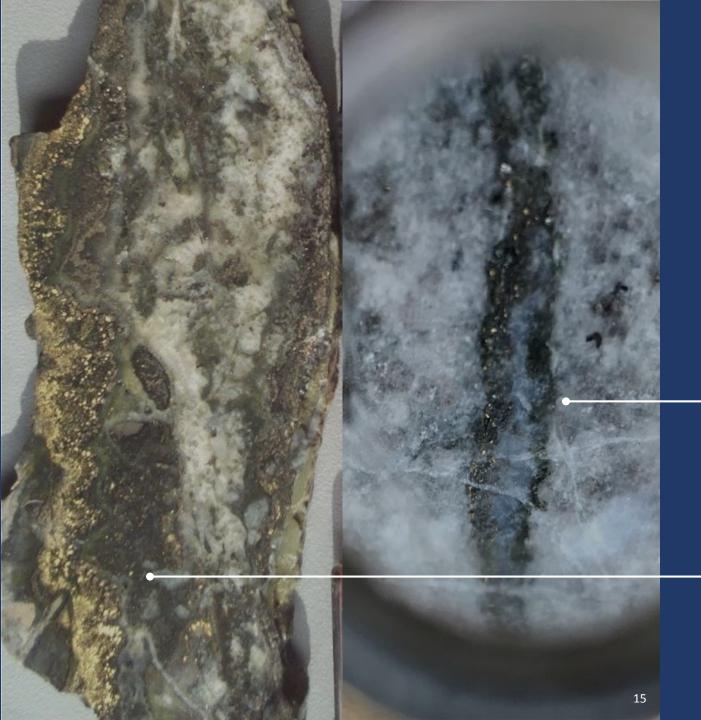
Disc 1932 – >70% explored Prod commenced 1934



Disc 1990's – 5% explored Prod to commence

"...Tuvatu has similarities not only to Vatukoula and other large alkaline systems in the South Pacific, but also to several multi-million oz. alkaline gold systems in North America including Newmont's Cripple Creek...."

Quinton Hennigh, Technical Advisor to Lion One



# ROSCOELITE: INDICATOR MINERAL DIAGNOSTIC FOR ALKALINE SYSTEMS

High-grade (~300 g/t) visible gold vein with Roscoelite

(Tuvatu, Fiji)

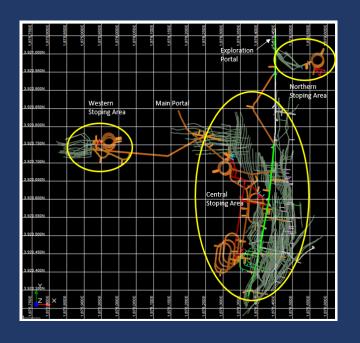
High-grade gold bearing vein with Roscoelite

(Porgera, PNG)



### TUVATU: UPDATED ECONOMIC STUDY

High grade, low cost, fully permitted production opportunity



After-tax economics at U\$\$2000/oz gold price initial five year mine life

Cash flow: \$309 million on US\$66.8 million CAPEX

Production: 331,369 oz Au at average of 8.6 g/t Au

Operating Cost: U\$\$543/oz AISC: U\$\$626/oz

IRR 85%

NPV<sub>5%</sub> US\$243 million

### **TUVATU MINING LEASE: ONGOING DEVELOPMENT**

Evaluating Configuration for Pilot Plant and Starter Mine Operation;
Bulk Earthworks Substantially Complete



While instructive as to the size and scale of project that the Tuvatu resource might support, the 2018 Tuvatu PEA is preliminary in nature, includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.

### REFINING OUR VISION POST-COVID: KEY OUTCOMES FROM 2021 AND BEYOND



- Process plant route
- Process plant supplier
- Tenders for underground mining equipment
- 4<sup>th</sup> surface drill purchase
- Detailed design of tailings storage facility

- Acquisition of underground diamond drill rigs (min. 1)
- Acquisition of further surface drill ria
- Start new decline
- Slash out old decline
- Initiate process plant build
- Extraction of first gold ores

- Ongoing drilling of CSAMT and coincident surface geochemical anomalies

#### **Annual revision:**

- Health and safety policies
- Management workflow
- Operational assessment

- Process plant build completion and audit
- Increase staffing to support scale of production

production

Acceleration of exploration schedule through Tuvatu and the Navilawa Caldera through deep diamond drilling, geophysical and geochemical analyses and spatial mapping. Target of 20,000m of core drilling pa. Further activities as needed to support >10M oz gold deposit hypothesis. Lion One Metals Limited 306-267 West Esplanade North Vancouver BC V7M 1A5 Canada



**Investor Relations** 

Tel: 604-998-1250 Fax: 604-998-1253

Toll Free: 1-855-805-1250

email: info @ liononemetals.com www.liononemetals.com

#### KEY DEVELOPMENTS & ADAPTATIONS DURING COVID-19

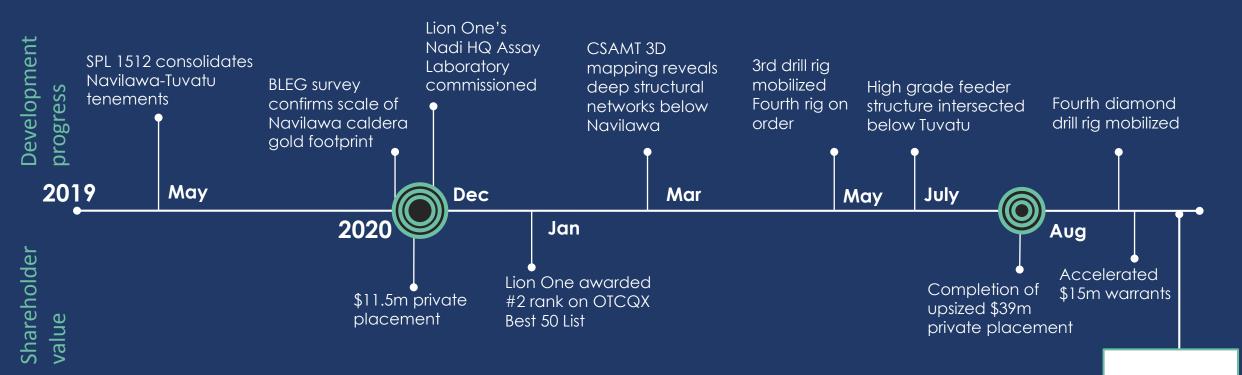
Remain committed to accelerating exploration and development program to deliver maximum value to shareholders

- Protected staff and community health through the implementation of Lion One's CovidSafe guidelines before first documented case of Covid-19 in Fiji, in line with international best practice
- Continue to engage community leaders, educational institutions and government bodies to proactively empower the community and uphold common values.
- Refocus and reaffirm investor support through progress updates and investor presentations via virtual conferences
  - Maintained company personnel growth (30% gain) and employee health (zero employee Covid-19 cases) throughout Covid-19 with pre-emptive operational assessments and health policies.
- Furthered our pledge to environmental health by banning the use of high-sulphur diesel for all activities and reducing projected diesel consumption by 50% through the planned construction of solar arrays

As we continue to fight Covid-19 across the world, Lion One remains committed to ensuring the health and safety of our workforce whilst our Tuvatu project moves towards production.

Stephen Mann, Managing Director

### **2019-2020 KEY MILESTONES**

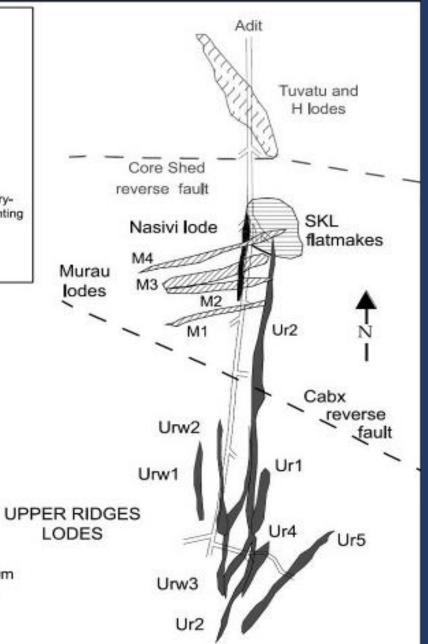


In 2019-20 Lion One raises funds to accelerate exploration and plans to aggressively pursue development progress to continue its vision of establishing itself as one of the world's significant gold producers.

Cash reserve







### Simplified interpretation of Tuvatu lode system

#### Four main lode orientations

- (1) Tuvatu and H lodes

  NW-SE strike, dip steeply to NE
- (2) SKL lodes

  20 to 40° dip to E-SE
- (3) UR, GRF and URW lodes

  N-S strike, steep dip to E, UR4-8 splay to NW strike
- (4) Murau lodes

  E-W strike, steep dip to south

200m

## Drilling lode extensions to the south and at depth

TUDDH518: UR2 lode:

0.25m @ 255.50g/t Au from 190.70m







TUDDH517: drill hole in progress mineralized structures between 539.7 – 541.0m (yet to be sampled)
Target depth to high grade feeder zone 700m







# Regional mapping and sampling has identified numerous additional structures for follow up in 2021

UR5 lode outcrop – surface outcrop averaging 6 g/t Au in the southern part of Tuvatu

Navilawa tenement – possible UR5 lode extension 3km to the north of Tuvatu

Navilawa tenement – one of many benches with mineralized structures, silicified quartz, carbonate, sulphides and manganese oxides









(2)

(1, 2) TUDDH500: 0.30m @ **1400 g/t Au** from 582.80m

(3) TUDDH500w1: 0.30m @ **305 g/t Au** from 592.40m



Murau 2 lode: Drill hole TUDDH493 0.35m @ **105g/t Au** from 177.25m (with visible gold specs)





Intersections in TUDDH493 3.83m @ **10.21g/t Au** from 322.17m

TUDDH493 4.29m @ **33.22 g/t Au** from 422.50m





### TION ONE

GEOCHEMICAL & METALLURGICAL LABORATORY

**OFFICE & LABORATORY** 

PH: 672 8414 FAX: 672 8417





Lion One's state of the art laboratory with FA, ICP, water testing and metallurgical facilities

Processed over 17,000 samples for >140,000 analyses to date

Planning underway for international certification

