



## **ANNUAL INFORMATION FORM**

**FOR THE FISCAL YEAR ENDED JUNE 30, 2023**

**September 27, 2023**

## TABLE OF CONTENTS

<p><b>GLOSSARY OF TERMS.....1</b></p> <p><b>METRIC CONVERSION TABLE .....2</b></p> <p><b>FORWARD LOOKING INFORMATION .....2</b></p> <p><b>FINANCIAL INFORMATION AND ACCOUNTING PRINCIPLES .....3</b></p> <p><b>CLASSIFICATION OF MINERAL RESOURCES.3</b></p> <p><b>NAME, ADDRESS, AND INCORPORATION.....4</b></p> <p><b>DESCRIPTION OF BUSINESS .....4</b></p> <p><b>INTERCORPORATE RELATIONSHIPS .....5</b></p> <p><b>EXPECTED CHANGES TO THE BUSINESS ....28</b></p> <p><b>OUTLOOK.....29</b></p> <p><b>COMPETITIVE CONDITIONS .....29</b></p> <p><b>ENVIRONMENTAL PROTECTION .....29</b></p> <p><b>SPECIALIZED SKILL AND KNOWLEDGE.....30</b></p> <p><b>FOREIGN OPERATIONS .....30</b></p> <p><b>SOCIAL AND ENVIRONMENTAL POLICIES....30</b></p> <p><b>TECHNICAL SUMMARY .....31</b></p> <p><b>PROPERTY DESCRIPTION AND LOCATION ..31</b></p> <p><b>PROPERTY OWNERSHIP .....31</b></p> <p><b>ENVIRONMENTAL STUDIES .....32</b></p> <p><b>MINERAL RIGHTS, AGREEMENTS AND ROYALTIES .....33</b></p> <p><b>SECURITY OF TITLE .....33</b></p> <p><b>ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY.....33</b></p> <p><b>HISTORY .....35</b></p> <p><b>GEOLOGICAL SETTING AND MINERALIZATION.....38</b></p> <p><b>GEOLOGIC INTERPRETATION .....42</b></p> <p><b>EXPLORATION.....43</b></p> <p><b>DRILLING.....44</b></p> <p><b>SAMPLE PREPARATION, ANALYSES, AND SECURITY .....49</b></p> <p><b>QUALITY ASSURANCE / QUALITY CONTROL .....52</b></p> <p><b>DATA VERIFICATION PROCEDURES.....56</b></p> <p><b>DRILL HOLE DATABASE REVIEW.....56</b></p> <p><b>MINERAL RESOURCE ESTIMATES .....57</b></p> <p><b>RESOURCE ESTIMATE .....58</b></p> <p><b>GEOTECHNICAL .....59</b></p>	<p><b>MINING METHOD ..... 60</b></p> <p><b>LIFE-OF-MINE PRODUCTION ..... 61</b></p> <p><b>MINERAL PROCESSING AND METALLURGICAL TESTING ..... 62</b></p> <p><b>GEOCHEMICAL AND METALLURGICAL LABORATORY..... 64</b></p> <p><b>PROJECT INFRASTRUCTURE..... 64</b></p> <p><b>CAPITAL AND OPERATING COSTS..... 66</b></p> <p><b>ECONOMIC ANALYSIS..... 69</b></p> <p><b>RISKS AND OPPORTUNITIES TO ENHANCE VALUE ..... 72</b></p> <p><b>RISK FACTORS ..... 73</b></p> <p><b>DIVIDEND POLICY ..... 84</b></p> <p><b>DESCRIPTION OF CAPITAL STRUCTURE .... 84</b></p> <p><b>MARKET FOR SECURITIES ..... 85</b></p> <p><b>DIRECTORS AND OFFICERS..... 87</b></p> <p><b>NAME, OCCUPATION AND SECURITY HOLDINGS ..... 87</b></p> <p><b>INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS..... 89</b></p> <p><b>TRANSFER AGENT AND REGISTRAR..... 89</b></p> <p><b>MATERIAL CONTRACTS..... 89</b></p> <p><b>INTERESTS OF EXPERTS..... 89</b></p> <p><b>INFORMATION ON AUDIT COMMITTEE ..... 90</b></p> <p><b>ADDITIONAL INFORMATION ..... 92</b></p> <p><b>APPENDIX A - AUDIT COMMITTEE CHARTER ..... 93</b></p>
---	---

## GLOSSARY OF TERMS

The abbreviations set forth below have the following meanings in this Annual Information Form (the “AIF”).

“**2022 Fiscal Year**” means the financial year of the Company ending June 30, 2022

“**Au**” chemical symbol for gold

“**ASX**” means the Australian Securities Exchange

“**Board of Directors**” or “**Board**” means the board of directors of the Company

“**Common Shares**” means the common shares of the Company

“**Diamond drilling**” means Rotary drilling technique using diamond set or impregnated bits, to cut a solid, continuous core sample of the rock. The core sample is retrieved to the surface, in a core barrel, by a wireline

“**External Auditor**” means Davidson & Company, LLP Chartered Professional Accountants

“**Indicated Mineral Resource**” means that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed

“**Inferred mineral resource**” means that part of a mineral resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes

“**Lion One**” or the “**Company**” means Lion One Metals Limited and its subsidiaries

“**Mineral deposit**” means an identified in-situ mineral occurrence from which valuable or useful minerals may be recovered. Mineral deposit estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence of mineralization and on the available sampling results

“**Mineralization**” means the concentration of metals and their chemical compounds within a body of rock

“**Mineral Reserve**” means the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined

“**Mineral Resource**” means a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge

“**NI 43-101**” means National Instrument 43-101 – Standards of Disclosure for Mineral Projects, of the Canadian Securities Administrators

“**NI 52-110**” means National Instrument 52-110 – *Audit Committees* of the Canadian Securities Administrators

“**NSR**” means Net Smelter Return

“**PEA**” Preliminary Economic Assessment

“**Qualified Person**” has the meaning given to it in NI 43-101

“**SML**” means Special Mining Lease as governed by the Mineral Resources Department of Fiji

“**SPL**” means Special Prospecting License as governed by the Mineral Resources Department of Fiji

“**TSX-V**” means the TSX Venture Exchange

## METRIC CONVERSION TABLE

For ease of reference, the following conversion factors are provided:

<u>Metric Unit</u>	<u>U.S. Measure</u>	<u>U.S. Measure</u>	<u>Metric Unit</u>
1 hectare (ha)	2.471 acres	1 acre.....	0.4047 hectares
1 meter (m)	3.281 feet	1 foot.....	0.3048 meters
1 kilometer (km)	0.621 miles	1 mile .....	1.609 kilometers
1 gram (g)	0.032 troy ounces	1 troy ounce .....	31.1 grams
1 kilogram (kg)	2.205 pounds	1 pound.....	0.454 kilograms
1 tonne (t)	1.102 short tons	1 short ton.....	0.907 tonnes
1 gram/tonne (g/t)	0.029 troy ounces/ton	1 troy ounce/ton .....	34.286 grams/tonne

## FORWARD LOOKING INFORMATION

This Annual Information Form may contain “forward-looking information” which may include, but is not limited to, statements with respect to the future financial or operating performances of Lion One, its subsidiaries and its projects (including the Tuvatu Gold Project); the ability to continue exploration and development plans on the Company’s projects (including the Tuvatu Gold Project); the presence of and continuity of metals at the Tuvatu Gold Project (as defined below) at estimated grades; the future price of gold; the estimation of mineral reserves and resources; the realization of mineral reserve estimates; the timing and amount of estimated future production revenues, margins, costs of production, capital, operating and exploration expenditures; costs and timing of the development of new deposits; costs and timing of future exploration; cost and timing of plant and equipment; requirements for additional capital; the ability to raise capital; government regulation of mining operations; environmental risks, reclamation and rehabilitation expenses; title disputes or claims; limitations of insurance coverage; the availability of personnel, machinery, and equipment at estimated prices and within estimated delivery times; currency exchange rates; impact of the COVID-19 pandemic on operations or other risks of the mining industry, and the timing and possible outcome of pending litigation and regulatory matters. Often, but not always, forward-looking information statements can be identified by the use of words such as “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, or “believes”, or variations (including negative variations) of such words and phrases, or state that certain actions, events or results “may”, “could”, “would”, “might”, or “will” be taken, occur or be achieved.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Lion One and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others, general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; the high degree of operational risk involved in mining operations; inherent exploration, development and operating risks; risks related to the costs relating to the development of the Tuvatu Gold Project; risks and uncertainties related to expected production rates and timelines; timing and amount of production and total costs of production; risks and uncertainties related to the accuracy of mineral resource estimates and estimates of future production; fluctuations in the value of the Canadian or US dollar or Australian dollar or Fijian dollar; competition in the mining industry; regulatory risks; risks associated with additional financing required to advance exploration properties; the Company's ability to repay its outstanding debt under the Loan Facility (as defined herein) and satisfy all covenants under the Loan Facility; price volatility of the Company's Common Shares, as well as those factors discussed in the section of this Annual Information Form entitled "Description of the Business - Risk Factors".

Although Lion One has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward-looking statements contained herein are made as of the date of this Annual Information Form based on the opinions and estimates of management, and Lion One disclaims any obligation to update any forward-looking statements, whether as a result of new information, estimates or opinions, future events or results or otherwise. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

## **FINANCIAL INFORMATION AND ACCOUNTING PRINCIPLES**

Unless otherwise indicated, all references to "CDN \$" or "Canadian dollars" in this AIF refer to the Canadian dollar. All financial information in this AIF is prepared in accordance with International Financial Reporting Standards ("IFRS").

The Company reports its financial results and prepares its financial statements in Canadian dollars. All currency amounts in this AIF are expressed in Canadian dollars, unless otherwise indicated. The Canadian exchange rates for the Company's principal operating currencies against the Canadian dollar are as follows:

<b>As at June 30</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Fijian dollar (F\$)	0.5955	0.5787	0.5895
Australian dollar (AUD\$)	0.9295	0.8892	0.8814

## **CLASSIFICATION OF MINERAL RESOURCES**

In this AIF, the definitions of indicated and inferred resources are those used by Canadian Securities Administrators and conform to the definitions utilized by the CIM and CIM Guidelines.

# LION ONE METALS LIMITED ANNUAL INFORMATION FORM

For its financial year ended June 30, 2023

## CORPORATE STRUCTURE

### NAME, ADDRESS, AND INCORPORATION

The Company was incorporated in British Columbia under the *Business Corporations Act* on November 12, 1996 under the name X-Tal Minerals Corp. (“X-Tal”). The Company changed its name to Lion One Metals Limited on January 28, 2011. On January 31, 2011, the Company completed the reverse takeover (the “RTO”) of American Eagle Resources, Inc. (“AME”). AME was a private British Columbia corporation holding five Special Prospecting Licenses (“SPL’s”) in the Fijian Islands under its subsidiary Lion One Limited (Fiji). The SPL’s were previously owned by the Emperor Gold Mining Company of Australia.

On June 19, 2013, the Company acquired 100% of the outstanding shares of Avocet Resources Limited (“Avocet”), a mineral exploration company based in Perth, Western Australia, through the issuance of 11,006,421 CHESS Depository Interests (“CDI”). Each CDI represents one common share of the Company. The CDI’s began trading on the ASX on June 20, 2013 under the trading symbol “LLO”. Avocet subsequently changed its name to Lion One Australia Pty Ltd. (“Lion One Australia”). The Company’s head office and principal address is 306 - 267 West Esplanade, North Vancouver, BC, Canada, V7M 1A5. The address of the Company’s registered and records office is Suite 1700 – 1055 West Hastings Street, Vancouver, BC, V6E 2E9.

### DESCRIPTION OF BUSINESS

Lion One is focused on advancing premium quality gold assets in Fiji that have: high grades, scope, district scale, and depth potential, with access to infrastructure in a mining-friendly jurisdiction. The Company’s 100% owned Tuvatu Gold Project (“Tuvatu”) has received all of the mandatory regulatory approvals, including a 10-year renewable mining lease Special Mining Lease (SML 62) and a 21-year surface lease, for the complete development of mining and processing operations. In August 2022, SML 62 was extended for an additional 10-year renewable term to February 28, 2035. The 384.5 hectare Tuvatu mining lease is located near its epicenter and hosts the high grade, permitted for production, Tuvatu gold resource. In May 2019, SPL 1512 was issued for the Navilawa tenement and 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 consists of four contiguous exploration licenses covering approximately 13,613 hectares.

Mineralization of the Tuvatu deposit is associated with the emplacement of an alkalic volcanic intrusive complex, with Navilawa Caldera being one of several large mineralized alkaline gold systems aligned along the Viti Levu Lineament, Fiji’s gold corridor. The geologic setting of Tuvatu shares affinities with the Vatukoula deposit in the neighboring Tavua Caldera, where over seven million ounces of gold have been recovered since mining commenced at Vatukoula in 1933.

The Fijian Islands are located along the Pacific Island Arc, which hosts a number of other well-known major mineralized alkaline gold deposits systems. 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 Pacific Island Arc including the Porgera (>25 million ounces gold) and Lihir (>40 million ounces gold) gold mines in Papua New Guinea, and Vatukoula in Fiji, 40km from Tuvatu. A North American example is the Cripple Creek gold mine, the richest gold mine in Colorado history. These deposits, like other alkaline hosted gold deposits, are associated with deep crustal magmas, alkaline rich alteration mineral assemblages, and are valued for their high grades and deep vertical profiles, resulting in large gold endowments.

In 2019, the Company commenced a deep diamond drilling program targeting feeder structures at depth below the known Tuvatu mineralization and discovered the Deep Feeder 500 Zone (“500 Zone”), which supports the alkaline gold model and the concept that Tuvatu has high-grade gold mineralization extending and evolving at great depths. The Company will continue this deep drilling program, up to depths of over 1,000m below the surface, to gain a better understanding of the underlying plumbing system which served as a conduit for the gold-rich fluids from the base of the crust in that area.

The Company's objective is to work towards a near-term 300 tonne per day initial processing plant, along with a regional exploration program aimed at deep high-grade and bonanza-grade resources for the eventual scaled-up development of a larger and richer resource base thereby proving the concept that the Tuvatu has the potential to become a gold camp with 10 to 20 million gold ounces.

The Company now utilizes eight fully-owned active diamond drilling rigs capable of operating year-round through the rainy season, and a fully operational, quick-response metallurgical and geochemical laboratory at its Fiji head office close to the project site. Lion One will continue to focus on testing the deep extensions of new high-grade zones of mineralization discovered below Tuvatu in 2020 and shallow resource infill drilling from the surface and underground targeting areas of planned early production.

An updated PEA and Technical Report (the "Report" or the "PEA") was completed in April 2022. The Report represents an update of the Project to comply with applicable disclosure regulations and is not the attainment of a new milestone for the development of the Project. In particular, the mineral resource estimate used in the PEA is from 2018 and does not include any drilling completed by the Company in its 2019 – 2022 drill programs. Furthermore, the potential development model set out in the PEA is confined to the mineral resource area inside the permitted mine lease (SML 62) and does not reflect the expanded Project area following the grant of the adjoining Navilawa Caldera tenement (SPL 1512) in 2019.

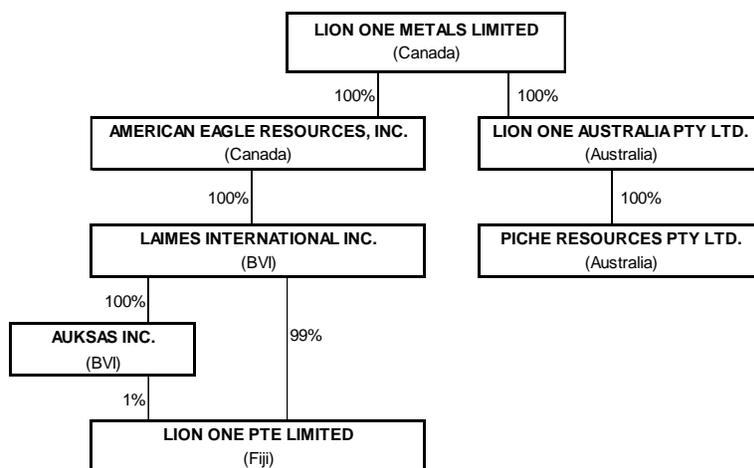
The Tuvatu project demonstrates robust economic potential for a low-cost, high-grade gold operation with low upfront capital costs, enabling rapid payback of capital even at a gold price of USD \$1,400 per ounce. The Tuvatu project has an estimated cash costs of USD \$503 per Au ounce and all-in-sustaining costs of USD \$586 per Au ounce over the first five years of its initial mine life. Projected production of 331,369 Au ounces at head grades of 8.6 g/t. The project generates net cash flow after tax of USD \$160.8 million over its five year production life and an IRR of 51% (after tax).

A PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Furthermore, there is no certainty that the PEA will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

For more information please view the technical report dated April 29, 2022 "Technical Report and Preliminary Economic Assessment Update for the Tuvatu Gold Project", available for download on the Company's profile at [www.sedar.com](http://www.sedar.com).

## INTERCORPORATE RELATIONSHIPS

The following organization chart shows the intercorporate relationships among the Company and its subsidiaries:



## BUSINESS DEVELOPMENT - THREE YEAR HISTORY

### Increase Drill Rig Fleet to 8 Rigs and Laboratory Expansion

In 2019, the Company purchased all of the drilling equipment from Geodrill, a Fijian drilling company, consisting of two diamond drill rigs. Lion One also employed several experienced drillers and offsideers from Geodrill. This strategic acquisition ensured the Company has available, cost-effective diamond drilling capabilities well into the future. Operating these drills “in-house” enables the Company to significantly reduce drilling costs, a huge benefit to the Company’s ability to implement cost-effective exploration. In 2020, the Company purchased its third diamond drill rig, with the capabilities to drill beyond 1,000 meters below surface. This rig was delivered to Fiji in August 2020 and commissioned in September 2020.

Two additional Canadian built Zinex underground drill rigs were purchased by the Company in late 2020 and arrived in Fiji in February 2021. Each of the two new rigs have 1,000 meter depth capacity and can be utilized from surface or deployed underground. Both of these rigs became fully operational in late April 2021 and are readily convertible from electric to diesel powerpacks and to date they are the best performing and lowest cost per meter drill rigs out of the current rig fleet. Moreover, additional drill rig capacity is needed with the Company’s Phase 2 infill drilling program underway and the ongoing deep target testing at Tuvatu. As such, the Company added two additional Zinex rigs from Canada which arrived in Fiji in September 2022. By purchasing the two additional rigs, the Company will have complete flexibility to deploy these high-performance rigs both underground and on surface, either at Tuvatu or on regional targets, or both, as required by our aggressive exploration and infill drill programs.

In December 2019, the Fiji Minister for Lands and Mineral Resources officially commissioned Lion One’s metallurgical and geochemical laboratory, located at the Company’s head office complex in Nadi, Fiji. The laboratory allows the Company to carry out cost effective and prompt geochemical analyses of its collected samples. The Company will continue to send confirmatory check samples to ALS in Australia for QA/QC purposes. An expansion of the laboratory to two 8-hour shifts was completed in May 2022 to exceed 8,000 samples per month to better meet its combined exploration drilling and underground development needs moving forward. The installation and commissioning of all new laboratory equipment was completed by late May 2022. The lab expansion consisted of new furnaces, including one additional electrical cupellation furnace, an LPG-fueled fusion furnace, a new 50-pot pouring system, and a new sample drying oven. Modifications to the lab itself include the addition of an LPG tank, construction of a concrete plinth and installation of underground gas lines, as well as various electrical upgrades, galvanized ducting, range hood and final installation and testing of all new equipment. A full expansion to maximum 24/7 operation which will allow the laboratory to process in excess of 12,000 samples per month is planned for October 2023.

### Exploration - Drill Programs 2020-2023

<b>2020-2021 Quarterly Exploration Summary</b>					
<b>Activity</b>	<b>Sep 2020</b>	<b>Dec 2020</b>	<b>Mar 2021</b>	<b>Jun 2021</b>	<b>Total</b>
# of drill holes completed	9	9	9	11	38
# of drill holes in progress at end of Quarter	4	4	4	5	
# of meters drilled	2,650.8	2,654	4,403	3,564.5	13,272.2

<b>2021-2022 Quarterly Exploration Summary</b>					
<b>Activity</b>	<b>Sep 2021</b>	<b>Dec 2021</b>	<b>Mar 2022</b>	<b>Jun 2022</b>	<b>Total</b>
# of drill holes completed	19	31	18	31	99
# of drill holes in progress at end of Quarter	3	3	5	4	
# of meters drilled	5,758.8	8,901.4	8,096.6	7,361.8	30,118.6

2022-2023 Quarterly Exploration Summary					
Activity	Sep 2022	Dec 2022	Mar 2023	Jun 2023	Total
# of drill holes completed	19	20	42	56	137
# of drill holes in progress at end of Quarter	6	7	5	5	
# of meters drilled	6,492.2	6,461.4	8,864.9	9,667.7	31,146.20

The Company is undertaking four tiers of drilling for exploration purposes:

- 1) shallow resource grade control drilling from surface and underground targeting areas of planned early production;
- 2) shallow resource infill drilling from surface targeting areas of planned mid-term production;
- 3) close spaced grade control drilling from below surface for higher resolution in areas targeted for near-term mining;
- 4) regional target areas within the Navilawa caldera, such as the new Lumuni occurrence, Banana Creek, Matanavatu, and Batiri and Qalibua creeks.

An additional tier of drilling for geotechnical and metallurgical purposes has also been initiated in 2022 and remains ongoing.

#### Highlights from High-grade Feeder Diamond Drill Program 2020-2021

The Company continues to advance its deposit-scale and regional diamond drilling program to demonstrate that the project has the potential to become a multi-million ounces gold camp, consistent with Tuvatu as an example of an alkaline gold mineralizing system. Alkaline gold systems typically have large gold endowments due to their high grade and deep vertical extents. Initially, Lion One intersected high grade gold mineralization in TUDDH493 late in 2019, and then once again returned very high-grade intersections in hole TUDDH500 and its two wedges in mid-2020 thereby discovering the 500 Zone Feeder.

Predominant vein minerals included a combination of quartz, biotite, potassium-rich feldspar, hydrothermal apatite, epidote, a vanadium-rich hydrothermal mica called roscoelite, characteristic of alkaline gold mineralized systems, as well as late-stage carbonate minerals. Gold occurs as native free Au, as well as in association with pyrite, lesser chalcopyrite, sphalerite, galena, trace tetrahedrite, and minor telluride minerals. The mineral textures observed reflect rapid deposition of gold from a metal-saturated ore-forming colloid or fluid; a process referred to as "flashing". Such rapid gold-deposition can result from sudden pressure drops or a sudden change in physico-chemical conditions which destabilizes the fluid triggering the rapid precipitation of metals, and are known to generate very high grades in epithermal gold systems. Tuvatu is a low-sulphur system, with sulphide minerals accounting for less than 5% overall, and include pyrite (2 generations), lesser marcasite, sphalerite, chalcopyrite, and traces of galena, arsenopyrite, tetrahedrite, and bornite.

Mineralization in hole TUDDH500 and the subsequent holes drilled as follow up to that hole display many diagnostic characteristics of feeder style mineralization from an alkaline gold system. Notably, remarkable vertical extent to the high-grade mineralization, and mineral textures that suggest rapid deposition (skeletal, dendritic crystals) from what was a mineral-saturated to supersaturated fluid. This is encouraging, as it suggests the mineralized system was preserved over an extensive vertical dimension, and that the Company has targeted the right part of the system to find additional mineralization.

During the year ended June 30, 2021, the Company continued to advance its deep diamond drilling program with the addition of three new drill rigs. Initially, Lion One intersected high grade gold mineralization in TUDDH493 late in 2019, and then once again returned very high-grade intersections in hole TUDDH500 and its two wedges. These holes displayed characteristics typical of feeder style mineralization in alkaline gold systems.

#### *TUDDH500, TUDDH500w1, TUDDH500w2*

On July 24, 2020, the Company announced that diamond drill hole TUDDH500 has intersected high-grade feeder style mineralization beneath Tuvatu (news release dated July 24, 2020). Initial assays were completed

using the fire assay method, but the Company has also completed gravimetric analysis on any sample returning greater than 10g/t Au. The gravimetric results were released on August 17, 2020, with high-grade intervals encountered in hole TUDDH500 include 2.0m grading 46.70g/t Au and 12.7m grading 55.43g/t Au including sub-intervals of 4.7m grading 144.81g/t Au with an exceptionally high-grade core of 0.9m grading 582.33g/t Au.

On August 17, 2020, the Company announced that it has completed diamond drill hole TUDDH500 to a depth of 863.4m and had commenced drilling a daughter wedge hole beginning at approximately 400m depth to retest the newly discovered high-grade feeder.

On August 31, 2020, the Company announced the results from the first wedged daughter hole from parent hole, TUDDH500. TUDDH500w1 was wedged from 392.5 meters downhole and was terminated at 709 meters, having intersected the main targeted ore zone. High-grade intervals from this wedge include 85.7 g/t Au over 3.3m including two narrower intervals of 305.0 g/t Au over 0.3m and 255.0 g/t Au over 0.6m.

On November 4, 2020, the Company also announced the results from the second wedged daughter hole from parent hole, TUDDH500. TUDDH500w2 was wedged from 381.5 meters downhole and was terminated in difficult ground conditions at 808.1 meters. The mineralized intercepts encountered in TUDDH500w2 provide Lion One with valuable information about the orientation of the newly discovered high-grade structure beneath the Tuvatu lode system.

Mineralization in hole TUDDH500 displays many diagnostic characteristics of feeder style mineralization from an alkaline gold system. Notably, textures of gold suggest rapid deposition from what was possibly a gold-saturated mineral-forming fluid. This is encouraging, as it suggests the Company is now in the right part of the system to find more such mineralization. Diamond drill holes TUDDH500, 500w1, 500w2, and TUDDH514 appear to have tested the targeted controlled source audio-magnetotelluric (“CSAMT”) gradient that corresponds to the location of the feeder zone. Multiple intervals of typical Tuvatu-style lode mineralization and associated alteration were noted during geologic logging of these holes.

#### *TUDDH514, TUDDH518, TUDDH517W, TUDDH520*

On January 18, 2021, the Company announced high-grade gold results from two recently completed drill holes one deep hole TUDDH514 and one shallow hole TUDDH518:

- Hole TUDDH514, a north-oriented diamond drill hole completed to a depth of 1,014.8m, tested an area approximately 100m vertically underneath and approximately 7m along strike from a deep high-grade lode (12.7m grading 55.43 g/t Au in hole TUDDH500). Two high-grade lodes were intersected in TUDDH514, 2.24m grading 13.31 g/t Au beginning at 495.60m including 0.35m grading 64.40 g/t Au and 3.47m grading 20.71 g/t Au beginning at 706.94m including an exceptionally high-grade subinterval of 0.23m grading 294.50 g/t Au. Interestingly, this hole also encountered a narrow intercept of 0.35m grading 10.52 g/t Au at a depth of 983.15m, the deepest mineralized intercept ever encountered at Tuvatu.
- Hole TUDDH518, an easterly-oriented diamond drill hole completed to a depth of 197.8m, tested a shallow area within the upper reaches of the Tuvatu lode system that lacked drilling. This hole encountered a narrow, but exceptionally high-grade interval of 0.25m grading 255.50 g/t Au beginning at 190.7m through what is thought to be the UR2 lode.

On February 3, 2021, the Company announced the recent shallow and deep high-grade gold drill results from two diamond drill holes (TUDDH520 and TUDDH517W):

- Hole TUDDH520, a southeast oriented diamond drill hole still in progress, encountered high-grade gold mineralization including 12.45m grading 21.31 g/t Au including 0.35m grading 544.00 g/t Au in a shallow intercept through the URW1 lode at a down hole depth beginning at 90.10m, or a depth below surface of approximately 75m. Lion One now takes the view that the URW1 lode is likely a deep-rooted high-grade lode structure worthy of further extensional deep testing.
- Hole TUDDH517W, a north-oriented diamond drill hole, encountered 3.0m grading 114.10 g/t Au beginning at a down hole depth of 594.60m. This intercept is believed to be in a splay structure coming off of a nearby deep high-grade lode being targeted by Lion One.

## Highlights from High-grade Feeder Diamond Drill Program 2021-2022

### *TUDDH526, TUDDH528, TUDDH532*

On July 7, 2021, the Company announced its latest high-grade gold intercepts including deep step-out intercepts from drilling beneath Tuvatu itself. Two deep intercepts including 6.0m @ 9.11 g/t Au beginning at a down hole depth of 444.0m in hole TUDDH526 and 2.15m @ 17.70 g/t Au beginning at a down hole depth of 505.65m in hole TUDDH528. Both of these intercepts are from previously untested areas beneath the Tuvatu resource. It is believed that the former intercept occurs within the UR4 lode, an indication there is a large panel of this lode open for further testing. The latter intercept is potentially associated with the "500" lode, nearly 75m above a high-grade intercept encountered in hole TUDDH500, which included 12.7m @ 55.43 g/t Au, intercepted last year.

Numerous lode intercepts occurring within shallower parts of the Tuvatu gold system. Most notably:

- 1.20m @ 8.85 g/t Au (UR4FW lode) in hole TUDDH526
- 6.47m @ 17.90 g/t Au including 0.35m @ 138.50 g/t Au (unknown lode) in hole TUDDH528
- 1.27m @ 11.58 g/t Au including 0.32m @ 40.94 g/t Au (M2FW lode) in hole TUDDH528
- 2.10m @ 10.41 g/t Au including 0.75m grading 16.99 g/t Au (UR2 lode) in hole TUDDH528
- 0.30m @ 31.09 g/t Au (M1HW lode) in hole TUDDH532
- 3.18m @ 5.72 g/t Au (S1 lode) in hole TUDDH532

The high-grade mineralization in Deep Feeder Zone 500 has now been demonstrated to extend over an area approximately 150m along strike and 250-300m vertically, completely outside the existing resource model. Furthermore, an improved understanding of the orientation of the 500 Zone now allows us to connect this high-grade feeder to the base of the existing resource. The Company is planning 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.

### *TUDDH533*

On July 26, 2021, the Company announced further assay results from its ongoing deep step-out drilling at Tuvatu (news release dated July 26, 2021). Multiple high-grade gold intercepts had been encountered in TUDDH533. The deepest intercept of 2.30m @ 55.44 g/t Au (including 221.60 g/t over 0.40m) from a downhole depth of 575.70m, is believed to be a continuation of the same structure that encountered 12.7m @ 55.44 g/t in TUDDH500, 40m to the SW, in July 2020 (see July 24, 2020 News Release). Evidence is growing that this deep NE-oriented structure is nearly vertical, with a strike length of at least 360m, and vertical extent of at least 720m from surface. It is believed to be an extension of the high grade UR4 lode, open both at depth and along strike where it projects from the Tuvatu resource area toward the Banana Creek target 3.5km to the NE.

Highlights TUDDH533 include:

- 0.65m @ 18.96 g/t Au from a down hole depth of 13.00m
- 0.60m @ 437.13 g/t Au from a down hole depth of 266.80m
- 1.45m @ 16.14 g/t Au from a down hole depth of 309.35m
- 2.30m @ 55.44 g/t Au from a down hole depth of 575.70m

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 (news release dated July 24, 2020) 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. These include 24.92 g/t Au over 3.70m (incl. 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.

These additional deep intercepts significantly increase the degree of confidence that the Tuvatu orebody extends to considerable depth, and that it remains fully open, laterally and at depth. The Company believes

that the current Tuvatu Resource represents only 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.

#### *TUDDH539, TUG135*

On September 7, 2021, the Company announced further high-grade intercepts from ongoing deep extensional step-out drilling and near-surface infill drilling from the Tuvatu gold project in Fiji (news release dated September 7, 2021). Highlights from deep extensional step-out drilling include:

- TUDDH539 (near surface infill program): 10.24 g/t Au over 8.48m from downhole depth of 111.20m, incl. 33.26 g/t Au over 2.44m from 111.20m, and 13.49 g/t Au over 3.30m from 115.40m
- TUG135 (Deep Feeder Zone 500): 24.92 g/t Au over 3.70m from downhole depth of 415.70m, incl. 83.63 g/t Au over 0.30m from 415.70m, and 159.30 g/t Au over 0.30m from 417.20m

#### *TUDDH544-W1 and W2*

On November 2, 2021, the Company announced further high-grade intercepts from two recently completed drillholes (TUDDH544-W1 and TUDDH544-W2) as part of ongoing deep extensional step-out drilling and confirm the following (news release dated November 2, 2021):

- Deep feeder Zone 500 extends over ~300 meters vertically and 150 meters laterally
- Zone 500 connects with base of Existing Resource at approximately 470 meter depth
- Drill extent of Tuvatu system increased by 53% to approximately 720 meter depth

Highlights include:

- TUDDH544-W2: 33.40 g/t Au over 3.90m from 629.30m incl. 105.0 g/t Au over 0.30m from 629.6m, 65.0 g/t Au over 0.30m from 630.2m, 112.0 g/t Au over 0.30m from 631.1m
- TUDDH544-W1: 48.74 g/t Au over 0.6m from 651.50m and 33.06 g/t Au over 0.6m from 658.2m

The growing number of intercepts has allowed for a remodeling of the 500 Zone structure such that the current best-fit orientation of the 500 Zone is now modelled with an azimuth of N060° and a dip of -88°, with all of the high-grade intercepts from the boreholes listed above captured by an approximately 50m wide envelope. This revised model for the 500 Zone structure connects the 500 Zone to the Tuvatu orebody at a depth of approximately -150m RSL by at least two historic drillholes (TUDDH212, previously interpreted as the base of UR2 lode; and TUG110, previously interpreted as part of the URW3 lode) which occur in the lowermost portion of the existing resource model. This area remains significantly under-drilled.

An additional update of results obtained from the deep drilling of the high-grade 500 Zone feeder include: 17.43 g/t Au over 1.5m from downhole depth of 643.1-644.6m from hole TUDDH544-W1.

#### *TUG 136, TUG138 and TUDDH573W1*

On April 8, 2022, the Company announced that the ongoing deep drilling has returned multiple high-grade intercepts, significantly extended the drill-confirmed vertical extent of the 500 Zone from recent drilling comprised 11 drill holes for 9,113.4 meters (news release dated April 8, 2022). Highlights from the deep drilling include:

- 23.14 g/t Au over 3.00m including 118.60 g/t Au over 0.30m from 571.50m (TUG 138)
- 25.83 g/t Au over 2.70m including 43.64 g/t Au over 0.30m from 582.50m (TUDDH 573W1)
- 87.83 g/t Au over 1.50m including 108.41 g/t Au over 0.60m from 445.10m (TUG 136)
- 12.19 g/t Au over 0.30m from 1,106.30 to 1,106.60 (TUDDH494 re-entry)

Deep drilling at Tuvatu extends Deep Feeder 500 Zone by approximately 300 meters below the base of the current resource, with two further holes intersecting high grade mineralization an additional 350m deeper, demonstrating vertical continuity of the Tuvatu gold system of at least 1,150m. These additional deep intercepts significantly increase the degree of confidence that the Tuvatu orebody extends to considerable depth, and that it remains fully open, laterally and at depth. The Company believes that the current Tuvatu Resource represents only 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.

## *TUG-141 – MAJOR NEW FEEDER STRUCTURE*

On June 6, 2022, the Company announced the discovery of a new major portion of the gold feeder including 20.86 g/t Au over 75.9m at depth beneath the existing resource at Tuvatu. Hole TUG-141, targeting a complex network of high-grade structures called the 500 Zone, encountered the longest high-grade intercept yet recorded at Tuvatu, 20.86 g/t Au over 75.9m, including 43.62 g/t Au over 30.0m which includes 90.35 g/t Au over 7.2m. The new discovery is located at depth beneath the current resource fully within the permit boundaries of the Tuvatu mining lease SML 62 (news release dated June 6, 2022).

High-grade intercepts from TUG-141 include:

- **20.86 g/t Au over 75.9m from 443.4-519.3m**
- including 35.25 g/t Au over 37.5m from 471.3-508.8m
- including 43.62 g/t Au over 30.0m from 477.6-507.6m
- including 90.35 g/t Au over 7.2m from 494.4-501.6m
- and notable individual high-grade assay intervals including:
  - 396.16 g/t Au over 0.30m from 479.1-479.4m
  - 340.07 g/t Au over 0.30m from 498.9-499.2m
  - 600.42 g/t Au over 0.30m from 499.5-499.8m

The mineralized intercepts reported by TUG-141 are a significant development, as the grades and continuity observed by the intercepts in hole TUG-141 are of a magnitude not previously documented at Tuvatu and highlights the largely untapped potential of this alkaline deposit. The significance of having identified what may be a new principal feeder conduit for Tuvatu confirms the model that has driven this deep exploration program since the discovery of hole TUDDH-500 in July 2020.

As part of the deep 500 Zone drill program, hole TUG-141 targeted the upper portion of the 500 Zone at depths between approximately 450-550m where it is projected to connect with the base of lodes making up the Inferred resource. TUG-141 was drilled into a very wide and exceptionally high-grade zone, 20.86 g/t Au over 75.9m, cored by hydrothermal breccia. Such a zone of extreme fracturing and brecciation has never before been observed at Tuvatu. It is significant to note that the bulk of this mineralized interval is hosted within andesite rather than by intrusive monzonite, the typical host rock for many lodes at Tuvatu.

Furthermore, it is also notable that the nearest drill holes to TUG-141 are TUG-135 (70m below), TUG-136 (45m to the east), and TUG-138 (60m to the west), indicating that there is considerable space for a substantial increase in the ultimate size of the feeder conduit. All three of these holes have returned previously reported bonanza grade mineralization, similar in tenor and texture to that in TUG-141, including:

- 24.92 g/t Au over 3.70m from 415.7-419.4m in hole TUG-135 including 159.3 g/t Au over 0.30m;
- 87.83 g/t Au over 1.5m from 445.1-446.6m in hole TUG-136 including 108.41 g/t Au over 0.60m;
- and 23.14 g/t Au over 3.0m from 571.5-574.5m in hole TUG-138 including 118.6 g/t Au over 0.30m

### Highlights from High-grade Feeder Diamond Drill Program 2022-2023 (including up to September 2023)

#### *TUDDH-601*

On August 15, 2022, the Company announced confirmation of the high-grade mineralization reported by TUG-141 by completing additional drilling into the 500 Zone with TUDDH-601. TUDDH-601 was drilled from surface at -85° and was designed to further test the high-grade zone encountered in TUG-141.

Highlight intercepts from hole TUDDH-601 include:

- 26.20 g/t Au over 1.20m from 165.7-166.9m;
- 115.42 g/t Au over 1.80m from 252.4-254.2m;
- **12.22 g/t Au over 54.90m from 576.1-631.0m**
- including 23.02 g/t Au over 20.10m from 576.1-596.2m, which includes 29.24 g/t Au over 15.6m;
- 8.09 g/t Au over 20.70m from 602.5-623.2m, incl. 9.25 g/t Au over 7.80m and 15.03 g/t Au over 5.40m

TUDDH-601 drilled from surface, was a near-vertical drill test of the high-grade gold zone encountered by TUG-141. TUDDH-601 is estimated to have drilled to within two meters of TUG-141. This test indicates that high-grade mineralization corresponding to that in TUG-141 is indeed hosted primarily by altered andesite rather than adjacent monzonite. High-grade mineralization, 54.9m of 12.22 g/t Au, was first intersected at a downhole depth of 576.1m continuing virtually uninterrupted to a downhole depth of 631.0m. Only one low-grade interval, hosted by monzonite and measuring 6.3m long was intersected. Above this low-grade interval, 23.02 g/t Au over 20.1m was encountered including 29.24 g/t Au over 15.60m, and below, 8.09 g/t Au over 20.7m, including 15.03 g/t Au over 5.40m and 9.25 g/t Au over 7.80m, respectively.

The Company's 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 lodes) 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 north south 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 1,100m in vertical extent. The Company continue to expand this critical zone of high-grade mineralization with ongoing drilling both from surface as well as from the underground decline.

#### *TUDDH-608*

On November 7, 2022, the Company announced the results from drillhole TUDDH-608 a direct follow-up to the TUG-141/TUDDH-601. The dip of this hole at this depth was approximately -64° equating to a true horizontal width of 10.4m. Highlight intercepts from hole TUDDH-608 include:

- 23.70m at 17.52 g/t Au from 594.5-618.2m, including 19.60m at 21.16 g/t Au from 594.5-614.1m:
  - 6.40m at 42.58 g/t Au from 596.7-603.1m
  - 1.20m at 85.1 g/t Au from 596.7-597.9m
  - 0.60m at 108.31 g/t Au from 599.8-600.4m

Results from TUDDH 608 provides Lion One with valuable information on the width and continuity of this zone. The outstanding results obtained of 17.52 g/t gold over 23.7m corresponds to a horizontal true width of 10.4m, which is approximately seven times the estimated average mining width, and at a grade that is nearly twice the average grade of the existing resource. The Company will continue drilling several additional holes to test the possible plunge extent estimated by oriented core structural measurements. With the completion of TUDDH-608 the Company is gaining a better understanding the true horizontal width and potential volume of the bonanza-grade feeder zone. The horizontal true width of the zone at the drilled location is 10.4m. Lion One regards the confirmation of the high-grade feeder zone initially identified by TUG-141 and TUGDDH-601 as transformational in that it confirms both continuity and implies extensive volume of the mineralized feeder zone below the current resource.

#### *TUG-149*

On November 18, 2022, the Company announced results from TUG-149 which include additional high grade drilling intercepts and expanded the Deep Feeder Zone 500 by increasing the vertical extent of the URW3 lode by at least 180 m. Highlights from TUG-149 including 12.89 g/t Au over 12.9 m from 254.4 m, 84.61 g/t Au over 3.9 m from 318.6 m, and 48.65 g/t Au over 5.4 m from 423.3 m. These intercepts define of a new portion of deep, high-grade feeder material that is separate from, and parallel to, the high-grade zone previously defined by TUG-141/TUDDH-601/TUDDH-608. The new drill intercepts, in conjunction with results from the previously drilled TUG-138 drill hole, correspond to a significant increase in grade with depth along the URW3 lode.

#### *TUG-147 and TUG-150*

On January 25, 2023, the Company announced the results from drillholes TUG-147 and TUG-150 targeting the 500 Zone feeder mineralization. Highlight intercepts include:

- TUG-147: 11.10m at 10.67 g/t Au from 263.1 to 274.4m, including
  - 5.7m at 13.45 g/t Au, 1.2m at 51.18 g/t Au, and 4.2m at 9.86 g/t Au.
- TUG-150: 8.4m at 8.84 g/t Au, including
  - 0.3m at 108.57 g/t Au and 1.2m at 14.71 g/t Au

TUG-147 was drilled across the UR2 structure, intersected 11.1m at 10.67 g/t Au from 263.1 to 274.4m, which includes 5.7m at 13.45 g/t Au, including 1.2m at 51.18 g/t Au, and 4.2m at 9.86 g/t Au corresponding to the intersection of the main NS-trending UR2 lode and NE-trending mineralized veining. The calculated true horizontal width of this intersection is 3.5m.

TUG-150 was targeted to cross the high-grade zone below TUG-141 and north of TUDDH-608 and only skimmed along the UR2 lode at a low angle, but nevertheless, very high-grade mineralization was intersected over a significant downhole length of 8.4m at 8.84 g/t Au, including 0.3m at 108.57 g/t Au, and 1.2m at 14.71 g/t Au which includes 0.3m at 28.51 g/t Au along the UR2 lode, further confirming the bonanza grade nature of the UR2 lode at this location.

#### Highlights from Infill Drill Program 2021-2022

Two phases of infill drilling have been planned at Tuvatu with the aim of infilling areas within the current resource and thus augmenting the data density, to further improve the resolution of the geological model in portions of the deposit scheduled for earliest production. Phase 1 infill drilling began in June 2021 and was completed over Zone 2 in mid-February 2022, adding over 8,400m of new data from drill core, including 7,475m of new drilling and 955m of sampling of previously unsampled historic drill core. Multiple bonanza-grade intercepts have been returned from this program, which is aimed at a thorough re-appraisal of the database in portions of the resource earmarked for earliest production. A total of 7,475m of drilling was completed in 42 holes and 955m of resampling of 28 historic drillholes as part of Phase 1 (news release dated February 23, 2022). Following the success of the Phase 1 Program, the Company started the Phase 2 Infill Drill Program in February 2022, which is planned for a total of 8,200m of diamond drilling from both surface and underground, and is expected to require six to eight months of drilling using three rigs to complete.

#### *PHASE 1 INFILL DRILL PROGRAM*

On November 30, 2021, the Company announced the results from the infill drill and re-sampling program undertaken in the near-surface portion of the Tuvatu deposit. This program was designed to further strengthen the database in the portion of the deposit earmarked for earliest production (news release dated November 30, 2021).

Highlights from near-surface infill drilling and re-sampling include:

- 20.61 g/t Au over 7.50m inc. 89.03 g/t Au over 1.50m, and 227.3 g/t Au over 0.30m from TUDDH545
- 21.34 g/t Au over 2.50m inc. 38.25 g/t Au over 1.30m, and 52.27 g/t Au over 0.30m from TUDDH548
- 33.52 g/t Au over 2.40m inc. 185.60 g/t Au over 0.40m from TUDDH553
- 9.13 g/t Au over 2.59m inc. 74.58 g/t Au over 0.30m from resampling of historic hole TUDDH362

On January 25, 2022, the Company announced additional results from the infill drill program undertaken in the near-surface portion of the Tuvatu deposit ((refer to news release dated January 25, 2022). Highlights from near-surface infill drilling include:

- 359.76 g/t Au over 1.80m incl. 1,616.0 g/t Au over 0.40m from TUDDH565
- 126.62 g/t Au over 0.70m incl. 294.50 g/t Au over 0.30m from TUDDH555
- 17.60 g/t Au over 5.0m incl. 125.50 g/t Au over 0.60m from TUDDH557
- 111.40 g/t Au over 0.40 from TUDDH562
- 22.80 g/t Au over 2.10m and 16.44 g/t Au over 4.20m incl. 26.11 g/t Au over 0.60m from TUG137

Final results were reported from a total of 10 holes, 7 of which were drilled specifically as part of the infill program (TUDDH555-562, 565) and three of which were drilled as part of the deep program testing the 500 Zone, but which intersected high grade mineralization in the near-surface (TUDDH563, TUG136, 137). Figures included in the news releases dated November 30, 2021 and January 25, 2022, illustrate schematically the location of many of the drill holes reported, and show mineralized intervals relative to modelled lodes.

The exceptional grades returned from hole TUDDH565 at a downhole depth of approximately 71.2m, of 1616.0 g/t Au corresponds to a complex vein of centimetric width at low to moderate angle to core axis, consisting of coarse, subhedral honey sphalerite, fine skeletal marcasite and coarse visible gold in a groundmass of amorphous gray quartz. The vein also contained coarse vugs lined by clear crustiform euhedral quartz crystals and abundant delicate wire native gold.

On February 23, 2022, the Company announced the remaining results from the Phase 1 Infill Drill Program (news release dated February 23, 2022). Highlights from the remaining results include:

- 77.11 g/t Au over 3.90m inc. 162.22 g/t Au over 1.8m from TUDDH571
- 12.56 g/t Au over 7.80m inc. 54.43 g/t Au over 1.2m from TUDDH572
- 16.08 g/t Au over 7.80m inc. 62.22 g/t Au over 1.8m from TUDDH573
- 22.80 g/t Au over 2.10m and 16.44 g/t Au over 4.20m incl. 26.11 g/t Au over 0.60m from TUG137

The consistent bonanza-grade results from many of the drill holes that are part of the Phase 1 program continue to suggest higher-than-expected continuity of high-grade mineralization as well as higher absolute grades between modelled lodes. Analysis of historic drill core material to eliminate sample gaps in areas where the current resource model lacked adequate data density has also yielded positive results, and in several instances, gold grades well above the resource average. These factors may result in additional Au ounces in the portion of the deposit earmarked for earliest production.

Following the success of the Phase 1 Program, the Company has started the Phase 2 Infill Drill Program in February 2022, which is planned for 5,000m of diamond drilling from the surface and 2,500m of grade control from the underground and is expected to require five to six months of drilling using three rigs to complete. On May 31, 2022, the Company announced the first 11 holes for the Phase 2 infill program on Zone 5, representing 2,375m of diamond drilling (news release dated May 31, 2022). The results to date indicate significant new intercepts of high- to bonanza-grade Au mineralization that was not known to occur as part of the existing resource model. The Phase 2 infill drill program, as per Phase 1, was designed to confirm the location, size, and continuity of the known mineralized lodes, in portions of the orebody slated for early production.

Phase 2 infill program top Intercepts include:

- 18.47 g/t Au over 1.20m from 104.7-105.9m, and 584.07 g/t Au over 0.30m from 122.4-122.7m from TUDDH-586 (new)
- 24.72 g/t Au over 0.60m from 187.4-188.0m, incl. 43.34 g/t Au over 0.30m from 187.7-188.0m from TUDDH-580 (new)
- 25.23 g/t Au over 1.20m from 70.9-72.1m, incl. 78.02 g/t Au over 0.30m from TUG-139
- 18.77 g/t Au over 2.10m from 118.8-120.9m, incl. 26.07 g/t Au over 1.50m from TUDDH-577
- 11.95 g/t Au over 2.70m from 55.9-58.6m, incl. 35.91 g/t Au over 0.60m from TUDDH-578
- 11.18 g/t Au over 1.20m from 153.5-154.7m, incl. 40.05 g/t Au over 0.30m from TUDDH-580

#### Highlights from Infill and Grade Control Drill Program 2022-2023 (including up to September 2023)

On September 8, 2022, the Company announced the results from 20 additional drill holes, as part of ongoing Phase 2 infill drilling, including 3,900m of diamond drilling in Zone 5 (news release dated September 8, 2022). The additional data outlines high-grade to bonanza-grade mineralized lode swarms less than 100m from surface. The Company will be upgrading its resource model in 2023, which is expected to be significantly improved by this round of drill results. The mineralization reported here is a significant development which is expected to upgrade the resource model, as it represents a critical addition of gold mineralisation to the resources model that grades well above the average resource grade, at relatively shallow levels. As a result, the newly identified mineralization enhances the economic model, by upgrading the production stream at Tuvalu.

Phase 2 infill program top Intercepts include:

- 20.59 g/t Au over 3.9m from 98.4-102.3m, including 52.89 g/t Au over 1.5m, including 171.5 g/t Au over 0.3m, and 79.18 g/t Au over 0.3m from TUG-144
- 12.22 g/t Au over 3.3m from 54.9-58.2m, including 32.08 g/t Au over 0.6m, 24.08 g/t Au over 0.6m from TUG-143
- 56.90 g/t Au over 1.8m from 144.6-146.4m, including 163.19 g/t Au over 0.6m from TUDDH-604
- 35.98 g/t Au over 1.8m from 53.0-54.8m, including 194.00 g/t Au over 0.3m from TUDDH-609
- 9.13 g/t Au over 3.3m from 60.3-63.6m, including 44.85 g/t Au over 0.6m from TUG-146, as well as 8.15 g/t Au over 5.1m from 97.5-102.6m, including 19.70 g/t Au over 1.8m from 99.3-101.7 including 13.28 g/t Au over 0.6, 11.73 g/t Au over 0.6m, and 34.08 g/t Au over 0.6m also from TUG-146

On December 8, 2022, the Company announced the discovery a new near-surface lode at Tuvatu. The new lode, named URA1 has been discovered during construction of the development decline; its location corresponds to Tuvatu's near-surface and earliest scheduled production area: Zone 2. The lode has been further defined through underground channel sampling and subsequent diamond drilling. Additionally, the Company also announced that it had intersected ore-grade mineralization several hundred meters to the east of Tuvatu, associated with a distinct CSAMT gradient anomaly in drillhole TUDDH-612.

Highlights include:

- Discovery of near-surface, high-grade URA1 lode from intersection with the development decline, defined through channel sampling (up to 29 g/t Au over 1m in MD-CH-002) and diamond drilling of holes TUDDH-617, 619, and 621 (up to 167.42g/t Au over 0.3m in TUDDH-617, and 27.99 g/t Au over 1.2m in TUDDH-621)
- Provides increase in volume of mineralized material within the portion of the deposit scheduled for earliest production.
- A general N-S orientation of the lode corresponds to other major lodes (e.g., URW1) and may indicate the presence of an additional series of undiscovered lodes further to the West of Tuvatu
- Underscores the substantial near-mine exploration upside.

Highlights TUDDH-612:

- New ore-grade mineralization of 18.53 g/t Au over 0.6m from 492m corresponding to a sharp CSAMT geophysical gradient anomaly.
- May represent the possible strike extension of the UR4 lode at Tuvatu, that may also include the deep high-grade intercept in TUDDH-494 at >1100m depth
- Tuvatu itself is coincident with a CSAMT gradient of similar magnitude; the recurring correspondence of mineralization with such gradients provides strong validation for the viability of this method for discovery of additional mineralized centers in the caldera. Once completed, this data will provide robust drill targets and substantial projected upside for new discovery.

## Grade Control Drilling

In September 2022, the Company commenced a grade control program from underground targeting areas of planned early production. On April 25, 2023, the Company announced the new high-grade results from grade control drilling at the Company's 100% owned Tuvatu Alkaline Gold Project in Fiji. Following on the initial mining and extraction of the URA1 lode, the Company reported new high-grade results from grade control drilling on the URW1 lode system, approximately 120m further east.

Highlights of new high-grade gold mineralization intersected by grade control drilling:

- 88.07g/t Au over 5.7m (including 1,396g/t Au over 0.3m) (TGC-0034)
- 27.52g/t Au over 5.55m (TUG-056)
- 20.93g/t Au over 7.2m (TGC-0003)
- 16.12g/t Au over 9.3m (TGC-0014)
- 16.48g/t Au over 9.6m (TGC-0002)
- 14.6g/t Au over 6.6m (TGC-0032)

- 14.97g/t Au over 5.4m (TGC-0018)
- 10.85g/t Au over 6.9m (TGC-0013)

Close spaced grade control drilling has resulted in much higher resolution of the lode arrays as compared to previous infill drilling, including the identification of bonanza grade (>50g/t Au) zones. Visible was gold observed in several drill holes.

The tightened drill pattern will facilitate optimized development and extraction of high-grade gold mineralization from the URW1 lodes while minimizing dilution. High-grade gold mineralization extracted from the URW1 lode system will contribute significantly to the growing high-grade stockpile constituting the initial feed for the Company's plant and processing facility.

The URW1 lode system consists of narrow, high-grade to locally bonanza-grade vein arrays and vein swarms that strike approximately N-S and dip sub-vertically to steeply east and is located approximately 120m east of the URA1 lode. A longitudinal section, the distribution of high-grade intercepts defining the URW1 lodes suggests a possible steep S plunging high-grade shoots. Mineralization consists of abundant free gold, typically in association with light to dark gray chalcedonic quartz and roscoelite, locally accompanied by minor amounts of pyrite, sphalerite, galena and lesser chalcopyrite.

On June 14, 2023, the Company announced the high-grade gold results from ongoing grade control drilling the URW1 lode system as well as the Zone 5 areas.

Highlights of new grade control drilling:

- 7.14 g/t Au over 21.6 m (including 18.61 g/t Au over 5.1 m) (TGC-0042, from 73.6 m depth)
- 52.05 g/t Au over 2.1 m (including 345.3 g/t Au over 0.3m) (TGC-0042, from 118.0 m depth)
- 23.11 g/t Au over 3.6 m (including 125.31 g/t Au over 0.3 m) (TGC-0040, from 65.4 m depth)
- 19.43 g/t Au over 3.3 m (including 80.87 g/t Au over 0.6 m) (TGC-0051, from 49.5 m depth)
- 21.15 g/t Au over 2.7 m (including 67.59 g/t Au over 0.6 m) (TGC-0047, from 123.3 m depth)
- 9.39 g/t Au over 4.2 m (including 67.30 g/t Au over 0.3 m) (TGC-0050, from 26.7 m depth)
- 10.13 g/t Au over 3.9 m (including 38.58 g/t Au over 0.6 m) (TGC-0043, from 66.3 m depth)
- 33.99 g/t Au over 0.9 m (including 100.89 g/t Au over 0.3 m) (TGC-0045, from 62.1 m depth)
- 78.03 g/t Au over 0.3 m (TGC-0052, from 40.2 m depth)

Assay results are presented here for grade control drilling completed on both the URW1 lode system as well as the Zone 5 area of the deposit, which encompasses the upper portion of lodes UR1, UR2, UR3, UR4, URW2, URW3, URW1A, and UR2A. As reported on May 18, 2023, initial mining of the URW1 lode system has already commenced and grade control drilling is being completed in advance of mining.

Grade control drilling is being conducted on 5-10 m centers and is designed to provide a much higher resolution of the lode arrays than compared to infill drilling, which is being conducted on approximately 20 m centers. This increased resolution provides a much better understanding of the geometry and mineralization of the lodes and helps to optimize mine development and extraction. The grade control drilling program is currently on schedule and the results to date confirm the local understanding of the URW1 and Zone 5 geological models.

The URW1 lode system consists of narrow, high-grade to locally bonanza-grade vein arrays and vein swarms that strike approximately N-S and dip sub-vertically to steeply east. Current modelling suggests that there are multiple separate lodes within the URW1 lode system. The first two of these lodes, URW1a and URW1b, are currently being mined. The URW1 lode system has a current strike length of approximately 300 m in the N-S direction, and a vertical extent of approximately 300 m.

#### Zone 5 Grade Control Drilling

The Zone 5 area of the Tuvatu deposit consists of the upper portion of a series of closely spaced lode systems. The lode systems targeted by the most recent grade control drilling in Zone 5 are the UR1, UR2, and URW3 lodes. These three lodes are located just east of the historical exploration decline, strike approximately N-S, and dip sub-vertically to steeply east, similar to the URW1 lodes. As currently modelled, the UR1, UR2, and URW3 lodes have vertical extents ranging from approximately 700 m to approximately 900 m, and strike lengths

ranging from 300 m to 600 m. All three of the lodes are open both along strike and at depth.

The Zone 5 area of the deposit is scheduled for mining in early 2024 and thus the grade control drilling in this area is being conducted in anticipation of future mining, as well as to increase the knowledge of the deposit in that area. Additional high-grade intersections peripheral to both the URW1 and the Zone 5 areas are also included in this release as part of the grade control program. On August 10 and 15, 2023, the Company announced exceptional high-grade gold results from ongoing infill and grade control drilling.

Assay results are presented here for infill and grade control drilling completed in the Zone 5 area of the deposit, which encompasses the near-surface portions of lodes UR1 to UR8, as well as URW2A and URW3. Grade control drilling is being conducted in anticipation of future mining and is therefore focused on the first part of Zone 5 to be mined whereas infill drilling is focused on the parts of Zone 5 scheduled to be mined later. Zone 5 includes the main north-south oriented lodes at Tuvatu (UR1, UR2, and UR3), and represents the upward extension of the Zone 500 feeder zone, which includes intercepts such as 20.86 g/t Au over 75.9 m (TUG-141), 12.22 g/t Au over 54.90 m (TUDDH-601), and 17.52 g/t Au over 23.7 m (TUDDH-608) (see June 6, 2022, August 15, 2022 and November 7, 2022 news releases). Zone 5 will be the second major part of Tuvatu to commence mining after mining in the URW1 area began on May 18, 2023. Once Zone 5 is in production, Tuvatu will have two major zones of very high-grade, near surface mineralization developing and producing simultaneously.

Highlights of new Zone 5 drilling:

- 83.47 g/t Au over 6.6 m (including 793.24 g/t Au over 0.6 m) (TUDDH-643, from 242.7 m depth)
- 314.27 g/t Au over 1.8 m (including 1,839.55 g/t Au over 0.3 m) (TGC-0067, from 48.2 m depth)
- 104.00 g/t Au over 0.9 m (including 300.47 g/t Au over 0.3 m) (TGC-0067, from 53.3 m depth)
- 9.96 g/t Au over 6.8 m (including 165.95 g/t Au over 0.3 m) (TUDDH-653, from 89.5 m depth)

The lodes within the main corridor at Tuvatu have a vertical extent in excess of 1000 m and appear to coalesce at approximately 450 m depth where they transition to Zone 500 – the very high-grade feeder zone at Tuvatu. Zone 5 is located approximately 250 m directly above Zone 500. The results reported in this news release therefore represent high-grade mineralization that is the direct vertical upward extension of the Zone 500 feeder zone. The region between Zone 5 and Zone 500 has only been tested by relatively wide-spaced exploration drilling. The results reported here represent the initial stages of a more systematic infill and locally grade control drilling program in Zone 5, which has a strike length in excess of 300 m in the north-south direction and a vertical extent of approximately 250 m.

#### Highlights of Metallurgical Drill Holes

On October 4, 2022, the Company announced the results from six metallurgical drill holes that were drilled from June to August 2022. The purpose of the program was to collect samples from areas scheduled for mining in the first 3 years of development for metallurgical testing. These assays presented are a result of one eighth split core, with the remaining seven eighths being sent to metallurgical laboratories Canada for test work to assist in the design of optimized recoveries. As this is a metallurgical program, the holes were designed to intersect some vein sets at an oblique angle in-order to maximize mineralized sample recovery and as such, while drill widths does not necessarily represent true widths, the results provide information on the continuity of Au grades. The URW1 lode is interpreted to strike north-south and dip steeply east and has a true width of approximately 1 to 7 meters. The Murau lodes are interpreted to strike east-west with a moderate southerly dip with multiple lodes of true-width between 0.3 and 4 meters. The SKL lodes are dip sub horizontally, with true-widths of between 0.3 and 1 meter.

TUDDM-001 intersecting the URW1 mineralized vein:

- 14.96 g/t Au over 24.0m from 81.8-105.8m including:
  - 105.19 g/t Au over 0.3m from 86.9-87.2m
  - 26.59 g/t Au over 0.9m from 95.6-96.5m
  - 33.76 g/t Au over 0.6m from 98.3-98.9m
- 78.64 g/t Au over 2.4m from 103.4-105.8m including:
  - 9.44 g/t Au over 0.6m from 104.6-105.2m
  - 297.70 g/t Au over 0.6m from 105.2-105.8m

TUDDM-003 intersecting the URW1 mineralized vein:

- 65.13 g/t Au over 3.2m from 78.8-82.0m including:
  - 98.88 g/t Au over 2.1m from 78.8-80.9m including 624.81 g/t Au over 0.3m from 79.1-79.4m
  - 97.45 g/t Au over 0.6m from 119.8-120.4m

TUDDM-004 intersecting SKL and URW1 mineralized veins:

- 260.44 g/t Au over 0.3m from 55.7-56.0m
- 213.52 g/t Au over 0.9m from 56.6-57.5m
- 40.08 g/t Au over 0.9m from 78.2-79.1m
- 10.03 g/t Au over 3.0m from 130.6-133.6m

TUDDM-005 intersecting Murau mineralized veins:

- 9.30 g/t Au over 5.4m from 127.7-133.1m including:
  - 31.56 g/t Au over 0.6m from 128.9-129.5m
  - 14.99 g/t Au over 1.2m from 129.5-130.7m
- 22.80g/t Au over 1.5m from 140.3-141.8m

TUDDM-006 intersecting the Murau mineralized veins:

- 9.87g/t Au over 3.9m from 141.8-145.7m including:
  - 10.01g/t Au over 1.2m from 141.8-143.0m
  - 13.74g/t Au over 0.6m from 143.3-143.9m
  - 13.49g/t Au over 1.2m from 144.5-145.7m

## Exploration - Surface Program

### CSAMT Geophysical Survey

To better define the underlying structural controls that hosts the high-grade vein network in the Navilawa Caldera, an initial controlled source audio-magnetotelluric (“CSAMT”) geophysical program was completed late in 2019. This technique is a specialized ground based geophysical technique that maps resistivity and conductivity of rocks to depths of up to 1,000m. CSAMT is a non-disturbing ground technique that leaves no impact upon the environment. The technique has been successfully applied to mineral exploration discovery in intrusive related (including alkaline gold systems) and epithermal mineral environments and can detect alteration and structure.

The Company conducted approximately 20,000m of line-based surveys across 12 lines stretching from just north of Korobebe to the north of the Navilawa village. The goal of this survey is to identify deep gold-bearing structures, and it complements a recent reinterpretation of an IP survey completed in 2012 that identifies significant deep geophysical anomalies north of the Tuvatu resource thought to be associated with the core of the hydrothermal system. The results from the CSAMT were integrated with other geophysics, surface geochemistry work and recent stream catchment BLEG analysis and geological interpretations. The CSAMT adds a considerable third dimension and will enable targeting at depth.

Following the interpretation of this CSAMT program, the deep drilling program was expanded to include targets identified from that survey. Lion One believes the Tuvatu region can host a deep, high-grade alkaline gold system associated with the interpreted underlying magma chamber beneath the Navilawa Caldera.

On June 20, 2023, Company announced that it has completed the CSAMT and the 2022-2023 CSAMT survey was designed to complement the 2019 survey by adding infill and extension lines to the previous survey area. The 2019 survey was moderately to widely spaced, with line spacing ranging from 300 m to 800 m, and station spacing every 100 m. Line and station spacing has improved significantly across the Navilawa Caldera following the 2022-2023 CSAMT survey, with line spacing ranging from 100 m to 400 m, and station spacing only 50 m apart on all new lines. The increased line and station density will provide greater resolution across the property and will assist in refining and generating new drill targets in the caldera.

The 2022 portion of the survey was completed on October 8, 2022 and the 2023 portion was completed on June 10, 2023. A total of 33 line-km were surveyed, with 11 km completed in 2022 and 22 km completed in 2023. In addition to the 22.5 line-km surveyed in 2019, Lion One has now surveyed a total of 55.5 line-km of CSAMT across the Navilawa Caldera. Notably, the 2022-2023 survey included 5 survey lines oriented north-south across the main Tuvatu deposit, providing a high-density grid of coverage across the Tuvatu area. This will provide high-quality resistivity data for the Tuvatu deposit and all near-mine exploration targets, such as the West Zone.

Lion One has also identified numerous regional prospects throughout the Navilawa Caldera, with multiple surface samples returning grades of over 100 g/t Au. One of the goals of the 2022-2023 CSAMT survey was to improve coverage and understanding of the structural architecture underlying these prospects, some of which are located on the edge of the 2019 survey lines where results can be less reliable. The 2022-2023 infill and extension lines will dramatically improve survey resolution and reliability in these areas and will help refine drill targets underlying those prospects.

For example, the newly discovered Lumuni occurrence overlies a prominent resistivity gradient identified in the 2019 CSAMT survey as a potential drill target. CSAMT is highly efficient in identifying subsurface structures, such as lithological contact zones, faults, fracture systems, and potential upflow zones especially if these are deep-rooted structures. In alkaline gold deposits such as Tuvatu, such deep-rooted structures provide the principal conduits for hydrothermal fluid flow from which gold and other metals are deposited.

The fact that the Lumuni structure not only appears to be sub-vertically dipping but that it also corresponds to a steeply-dipping resistivity gradient provides credence to the suggestion that the mineralization observed at surface may be associated with a deep-rooted structure, in similar fashion to the mineralized lodes at Tuvatu. The CSAMT survey data thereby provides viable drill targets to follow up the bonanza-grade surface sampling described in this news release. As reported on June 20, additional CSAMT lines were completed in 2023, the results of which once interpreted, will provide higher resolution imaging of the resistivity characteristics of the survey area.

#### Navilawa Tenement

The Company was notified in November 2017 by Fiji's Ministry of Lands and Natural Resources that it was the successful tenderer to acquire the Navilawa exploration. Following extensive discussions with landowners and finalization of access agreements in May 2019, SPL 1512 was issued for the Navilawa tenement for a 5-year term renewable in 2024. The Navilawa prospect area directly adjoins the northern boundary of Lion One's tenements at Tuvatu, which consolidates ownership of the entire Navilawa mineral complex under a tenement package with Tuvatu's 384.5 hectare Mining Lease (SML 62) and mining and processing site, at its center.. This is the first time that modern, systematic exploration has been able to be undertaken over the entire area. The Navilawa area has over 10 well defined prospects including the Kingston, Banana Creek, Matanavatu, and Tuvatu North. The most significant historic results returned were surface rock chip samples of 46.30 g/t Au from Banana Creek; 176.27 g/t Au from the Kingston, and 8.50 g/t Au from Tuvatu North. Although little systematic historical exploration has been previously undertaken in the area, a number of prospects have historic workings with short shafts or adits up to 15 meters deep or manual workings on copper- and gold-bearing rocks, as is the case at the Central Ridge prospect. Mapping, sampling and geophysics clearly demonstrates that the Tuvatu gold deposit extends north into the Navilawa tenement area.

Subsequent to the year ended June 30, 2020, Lion One's small capacity diamond drill rigs carried out limited drilling on new targets within the Navilawa tenement. Biliwi, where high-grade samples were collected early in 2020, was the first target to be tested in this tenement and following this drilling, the rig was moved to test other newly discovered lodes at Banana Creek discussed above. These drill holes confirmed the orientation and nature of the structures seen in the trenching and benching, and will enable better targeting of deeper drill holes during the 2021 program.

#### *TUDDH496 - TUDDH497*

In July 20, 2020, the Company announced discovery of Tuvatu style lodes at Banana Creek, approximately 3 km northeast of the Tuvatu resource. The Banana Creek project area is a new, high-priority greenfields target situated within Lion One's Navilawa tenement (SPL1512). Rig #2 has initiated drilling new targets within this

Navilawa license area. The Company completed two holes, TUDDH496 and TUDDH497, both north-oriented, at the western extremity of the Tuvatu West lode network in an area underlain by a profound controlled source audio-magnetotelluric (“CSAMT”) resistivity gradient thought to be a major, deep-rooted structural zone that may have allowed mineralizing fluids to ascend near surface. Hole TUDDH496, inclined at -55 degrees, encountered numerous mineralized intervals between 72.10 and 312.66m, the most significant of which include 0.73m grading 6.86 g/t Au beginning at 267.20m and 1.8 m grading 6.41 g/t Au. Hole TUDDH497, drilled from the same pad at a somewhat steeper inclination of -62 degrees, similarly encountered numerous mineralized intervals between 31.00 and 417.60m, the most significant of which include 3.00m grading 6.19 g/t Au beginning at 304.50m and 1.27m grading 4.41 g/t Au beginning at 357.63m. Given the broad distribution of numerous mineralized structures in these holes, Lion One believes these intercepts may represent high-level expressions of a deeper gold system underlying this area.

During the year ended June 30, 2021, the Company continued its aggressive opening of roads and excavation of trench cuts within the large Navilawa tenement situated north of the Tuvatu mining license. A program of channel rock chip samples have been collected from benches and trenches in this area to expose the underlying bedrock geology. Efforts have been focused at Banana Creek, located approximately 3 km northeast of the Tuvatu resource, where the Company’s team has continued to discover multiple outcropping lodes of similar nature to those seen at Tuvatu. Regional sampling and mapping ceased in this northern part of the project in November 2020, due to the commencement of the wet season and access difficulties. Regional sampling and mapping has been interrupted in this northern part of the project since November 2020, due to the commencement of the wet season and access difficulties.

In early July 2021, one rig was mobilized to the Navilawa tenement (SPL1512) to target regional targets as possible Tuvatu analogues 3.5km to the north. This drill rig was moved back to assist with deep exploration drilling at Tuvatu in November when wet conditions made it too difficult to pursue regional targets. Consequently, by the end of the quarter there were 3 drill rigs focused on deep feeder structures, 2 drill rigs on infill drilling and one rig on geotechnical and water well drilling.

In June 2022, the Company initiated a major benching program following up on positive results from 2021 along Qalibua creek, by extending a new bench in the Batiri creek area towards Banana creek. On August 29, 2022, the Company announced a new regional high grade gold discovery, the Batiri Creek Vein, located in the Navilawa Caldera 1.8 km northeast of the Tuvatu Alkaline Gold Project.

In August 2022, the Company mobilized a drill rig to this occurrence to test the Batiri Creek discovery. A three-hole program was planned with only two holes completed (TUDDH-611 and 614), with a third hole (TUDDH-615) abandoned due to extreme wet conditions. The highlights include 5.04 g/t Au over 0.3m in hole TUDDH-614. This new structure is characterized by an intense zone of veining on a lithological contact between monzonite and andesite, with two significant north-south and northeast-southwest oriented structural intersections. The lithological contact and structural intersections observed in the Batiri Vein are comparable to the lithological contact and structural intersections observed from deep extensional drilling in the 500 Zone below the Tuvatu.

Following the wet season which typically ends in late March-early April, a dedicated mapping/sampling program resumed, aiming to identify additional areas for follow-up by diamond drilling. For 2023, the regional mapping/sampling program commenced late April, and to the end of June, a total of 2034 regional samples had been added to the database. The regional work from April to July was focused in the Goat Hill, Nasiti Ridge and Ba road areas, north of Navilawa village, as well as in the Wailoaloa area just south of the Upper Qalibua bench.

The best regional sample results during the quarter ended June 30, 2023 include:

- 14.0m at 1.96 g/t Au and 1.2m at 1.21 g/t Au in two separate channels in the Goat Hill access road area;
- 0.6m at 1.65 g/t Au at Wailoaloa, in the Kinikinimaloku creek.

On August 24, 2023, the Company announced the discovery of a new mineralized structure carrying bonanza grade gold 1 km to the north of the company’s Tuvatu Alkaline Gold Project. The new mineralized structure was discovered on surface by Lion One’s regional exploration team and has been named the Lumuni

occurrence. The structure is located 1 km north of Tuvatu, approximately along strike from lodes UR1, UR2, and UR3.

Highlights of Lumuni channel sampling:

- 66.83 g/t Au over 0.7 m (CH3850)
- 48.45 g/t Au over 0.7 m (including 92.55 g/t Au over 0.3 m) (CH3851)
- 15.18 g/t Au over 1.1 m (including 31.25 g/t Au over 0.3 m) (CH3849)
- 14.66 g/t Au over 1.1 m (including 16.78 g/t Au over 0.7 m) (CH3855)
- 17.04 g/t Au over 0.6 m (including 30.59 g/t Au over 0.3 m) (CH3853)
- 10.30 g/t Au over 0.9 m (including 13.89 g/t Au over 0.6 m) (CH3852)

The continuity of the high-grade material is notable including the fact that a traceable lode of high to very-high grade material can be followed along at surface. Moreover, the high-grade samples coincide with a steeply dipping resistivity low is compelling as it provides the Company with immediate drill targets to pursue. The Company will now add Lumuni to our growing list of high-priority regional exploration targets.

#### Mine Development Optimization

During the year ended June 30, 2021, the Company conducted on-going optimization of the detailed engineering design of the initial tailings facilities storage, including the tailings dam, pond lining, foundation drainage, sediment control pond and upstream diversion ditches. An Environmental Impact Assessment (EIA) update for the tailing's facilities storage has been initiated with the planning of the general arrangement of the proposed process plant facilities is on-going. A Caterpillar 910KVA diesel generator and transformer was purchased to replace the existing 388KVA power plant at the existing portal to support underground drilling and mine development. The foundation slab for the new power plant has also been completed. The 1,000-voltage cable has been laid in the existing decline and the generator has arrived to site with the transformer arriving in May 2021. Fuel tanks are under fabrication locally and will be shipped to site for installation in June 2021. The Company has awarded contract to a local contractor to supply and install underground leaky feeder communication system.

During the year ended June 30, 2022, the Company continued to optimize the mine plan and procure for mining equipment. In October 2021, mining equipment including a Tamrock Single Boom Jumbo, a Caterpillar R1300 LHD Loader and a Manitou ST1030 Telehandler was delivered to Fiji for the planned mine development. The Company completed shotcrete on the batters outside the new main portal area and started to install steel sets at the portal. The underground mine development commenced in late-July 2022 and to date the decline face is approximately ninety meters from the main portal. Subsequent to the quarter ended June 30, 2022, the Company also procured additional mining equipment, including a single and a twin boom jumbo, Caterpillar R1700 Loader, other ancillary mining equipment.

The Environmental Impact Assessment (EIA) update for the overall project, including mining, process plant and surface infrastructures was approved the Ministry of Environment of Fiji in June 2022, resulting in the Company paying FJD65,205 as an environmental bond to the Ministry of Environment. The ERP software was also fully implemented in July 2022 for accounting, supply chain, cost control, and inventory.

During the year ended June 30, 2023, the Company achieved the following mining physicals:

- Total tonnes mined at 39,242 tonnes with 38,115 tonnes of waste and 1,127 tonnes of ore
- Total development meters at 827 meters
- Advanced decline by 524 meters, ore drives by 268 meters and vertical development by 35 meters

During the quarter ended September 30, 2022, the Company continued to optimize the mine plan and procure additional mining equipment. The Company completed the main portal development, including completing the shotcrete on the batters outside and installing the steel sets. The underground mine development commenced in late-July 2022.

During the quarter ended in December, 2022, the Company mined 6,958 tonnes of waste and the decline advanced over 90 meters with over 100 meters of lateral development. The Company continued to optimize the mine plan and procure additional mining equipment, with some equipment arriving to site by December

2022. The Company also procured additional mining equipment, including a single and a twin boom jumbo, Caterpillar R1700 Loader, other ancillary mining equipment. The diesel generator and distribution panel to supply power to the site administration office have also been delivered on site.

During the quarter ended March 31, 2023, the Company mined 9,850 tonnes, with 8,958 tonnes of waste and 892 tonnes of ore and achieved total development meters of 181.8 meters (including waste development 146.5 meters and ore drive development 35.3 meters). The decline was advanced by 103.2 meters and vertical development by 9.2 meters.

During the quarter ended June 30, 2023, the Company:

- Total tonnes mined at 18,280, with 17,217 tonnes of waste and 1,063 tonnes of ore
- Total development meters at 391.6
- Advanced decline by 199.5 meters and vertical development by 18.2 meters

During the quarter ended June 30, 2023, the underground mining of the URA1, URW1a and URW1b lodes continued. The main decline has reached a vertical depth of 99.4 m below surface and a total length of 344 m from the mine portal. The link drive connecting the main decline to the historical exploration decline has been completed and measures 140 m from the junction with the main decline to the junction with the historical exploration decline. The link decline was driven from the main decline to the exploration decline and broke through the exploration decline on June 21st, 2023.

The completion of the link drive is a major milestone in the development of the mine as it enables the Stage 1 primary ventilation system to be installed. The Stage 1 primary ventilation system consists of four 55KW exhaust fans that are being installed at the entrance to the historical exploration decline, and which will provide ventilation throughout the mine. The Stage 1 primary ventilation system will provide sufficient ventilation to mine all the way down to the 500 zone, which is part of the high-grade feeder zone underlying Tuvatu and which comprises a major component of the mine plan. The completion of the link drive also enables mineralized lodes to be mined both from the historical exploration decline as well as from the main decline, thereby increasing the number of faces available to mine and adding considerable flexibility to the mining operations. In addition to the link drive and ventilation system, a high voltage power plant and an underground compressor are also being installed to support underground mining operations.

The Company advises that it has not based its current mine development plan on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, including increased risks associated with developing a commercially mineable deposit

### Surface Development

During the year ended June 30, 2020, the Company completed the bulk earthworks for the platforms and shaping of slopes. Hydroseeding has been completed to stabilize the slope above the future main portal. HDPE liner has been installed for the water detention pond and the crushing plant platform retaining wall was completed. The concrete stormwater v-drain with rock lining along the diverted Navilawa public road has been completed and the road has now been open for public access. The Company has completed reinforcing last portion of the gabion wall along the access road to the future main portal. The site development work for this stage is substantially complete and the contractor has demobilized from site.

During the year ended June 30, 2021, the Company has 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. Proposals and quotations for the engineering and supply of a 300 tonne per day pilot processing plant have been received and are currently under evaluation. Purchasing orders have been issued to purchase a mobile crusher and a mobile screener, which will be set up at mine site to crush waste rocks from mine development for site road work, foundation improvement and surface platform hardstand. The construction of both the Bay 1 and Bay 2 exploration workshops at the mine site area has completed and put into use. New temporary magazines have been fabricated and installed at site close to the existing exploration portal. The contracts for water, power, tailings, explosives, and communications secured or in progress. The Company has acquired permits to build a mine workshop and an exploration workshop at the mine site area. Concrete footings for the workshops have been poured. Container modular for storage and office units of the workshops have been modified, sandblasted and painted. Fabrication of structural steel roof trusses, platforms and stairways

are almost completed. The Company has also 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.

During the year ended June 30, 2022, the Company awarded the contracts for engineering and procurement of the 300 tonne per day pilot processing plant and the manufacture of processing. The engineering design of the processing plant, including buildings, structures, piping, electrical and control systems, has also commenced. The construction of a new core shed storage has started with columns and roof structures completed and the Company also sent out the tender for construction of tailings storage facility to various Fijian contractors. The mobile crusher and mobile screener has arrived site, commissioned and started crushing waste rocks from mine development for site road works, foundation improvement and surface platform hardstand.

By June 2022, approximately ninety percent of engineering design, including process, buildings, structures, piping, electrical and control systems for the 300 tonne per day pilot processing plant has completed to date. The manufacture of processing equipment has progressed as planned and the first batch equipment is schedule to ship to Fiji in October 2022. The sixty-tonne mobile crane and a front loader for construction and operations has arrived to site and already in use. The mobile crusher and mobile screener continue to crush waste rocks from mine development for site road works, foundation improvement and surface platform hardstand. In June 2022, the contract for construction of tailings storage facility was awarded with construction of the tailings dam at over 3 meters in height at this time.

During the quarter ended in September 30, 2022, the Company completed the engineering design, including process, buildings, structures, piping, electrical and control systems for the 300 tonne per day pilot processing. The manufacture of processing equipment has progressed as planned and the first batch equipment is scheduled to ship to Fiji in November 2022. In August 2022, the contract for the construction of foundations for processing plant equipment and buildings was awarded and the foundation construction at the crusher and screen plant area has started. In July 2022, the construction of the new core shed storage was completed and the construction of site administration office was started. The storm water diversion dam was completed in September 2022 and the excavation of north diversion channel has reached the channel invert level. Tailings storage facility construction is underway and the storm water diversion dam was completed in September 2022 and the excavation of north diversion channel has reached the channel invert level. The ERP software was also fully implemented in July 2022 for accounting, supply chain, cost control, and inventory.

During the quarter ended in December 31, 2022, most of processing plant equipment has been shipped to or are currently in transit to Fiji. The remaining processing equipment, including the intensive leaching and gravity concentrate equipment supplied by Sepro Canada, will be delivered to site by February 2023. Construction of the processing plant equipment and buildings have started since September. Foundations for the crusher, screen plant, conveyors, and fine ore bin have been completed. Construction of foundations for the grinding circuit and leaching tank farm are ongoing. Foundations for the leaching reagent mixing warehouse are almost complete. The construction of site administration office was substantially completed by the end of December 2022.

During the quarter ended on March 31, 2023, all the pilot processing plant equipment, piping, electrical cables and other bulk materials have been shipped to Fiji and offloaded at the secured laydown yard next to Lion One Nadi office. Steel structure for the electrowinning building, leaching reagent mixing warehouse, and cyanide detox reagent mixing warehouse have been delivered to the laydown yard. The foundations for the crusher, screen plant, conveyors, fine ore bin, ball mills, thickeners, intensive leaching and gravity circuits have been completed and the construction of foundations for the leaching tank farm are ongoing. The foundations for the leaching reagent mixing warehouse and tailings reagent mixing warehouse are completed and handed over for building steel structure erection. In April 2023, the Company commenced the building of steel structure for the leaching reagent mixing warehouse and tailings reagent mixing warehouse. The pilot plant facilities, including sewage treatment plant, freshwater system, mine workshop, and mine change room were completed. The 300TPD pilot plant processing plant erection contractor mobilized to site in late March 2023 and started screening plant steel structure installation in early April 2023. The Tailings Storage Facility (TSF) construction has been slowed down due to severe wet weather during the rainy season.

On June 28, 2023, Company announced an update on construction progress:

- Mine construction is approximately 75% complete.
- Earthworks and concrete works are substantially complete, structural steel is 70% complete.

Mine construction is approximately 75% complete and remains on track for delivery of first gold during the quarter ending December 2023. Earthworks and concrete works are substantially complete, with over 3,500 m<sup>3</sup> of concrete poured to date. Structural steel is 70% complete and is progressing rapidly. All the components required to commission the processing plant are on site and a team of 350 contractors and employees are working together to bring the project towards completion.

During the quarter ended on June 30, 2023, all the 300 TPD pilot processing plant equipment and structural steel have been shipped to the site laydown yard and the purchase orders have also been issued for first draw consumables and spare parts. Since April 2023, TSF dam and pond construction started progressing well due to favorable dry weather. Along with continuous construction of TSF embankment, construction of sediment control pond was initiated by removal large boulders with rock breakers. Clearing and grubbing along the TSF spillway route was started in late April 2023.

As at June 30, 2023, the majority of the processing plant foundation works have been completed allowing for steel erection and equipment installation to progress. Steel structure installation at the crusher and screening area along with belt corridors have been completed. Other installation works completed are the thickener, fine ore bin and electrowinning warehouse steel structures. Steel fabrication of fine ore bin and 7 leaching tanks, process water tank, and buffer tank of filter presses were also completed and lifted to their respective positions. Major concrete work pending is the gold room and filter press which is currently being prioritized and scheduled to be completed by end of September. Power plant foundations at the processing plant and mining plant have been completed, genset and distribution room units are to be installed in July.

During the quarter ended June 30, 2023, the Company advanced the construction of the spillway, shaping of pond batters, foundation drain installation within the pond basin, excavation of south diversion channel (SDC) hilltop batters, and filling of zone A and zone B material at the embankment area continue to progress. The target is to have the spillway and pond basin ready for HDPE liner installation set for later this summer.

During the quarter ended June 30, 2023, the following works were completed:

#### Concrete works:

- Processing plant distribution room foundation: Poured concrete for raft slab and pedestals. Commenced pre-tying of tie-beams.
- Diesel generator: Poured concrete for raft slab and pedestals.
- 11KV power distribution room foundation: Poured concrete for raft slab and pedestals.
- Diesel generator power station for mine operation: Foundation and tie-beam concreting completed.
- Buffer tank for filter press: Foundation completed.
- Filter Press: Completed remaining 5 concrete columns and commenced fastening rebars for the sump.
- Gravity & leaching circuit foundation: Poured concrete for intensive leaching foundations and SJ-3 footings. Backfilled and compacted excavated areas. Ground slab concrete around the ball mill area is completed.

#### Processing Plant Installation:

- Crusher/Screening Area: All crushing plant steel structure and equipment are installed. Conveyor belt #1 to #3 installation completed. Cable tray installation in progress. Base plate grouting in progress. Roller belt installation completed.
- Fine Ore Bin: Bin platform assembly and installation has been completed. Fabrication of fine ore bin completed and installed to its position. Guard railing fabrication and checkered plates installation completed above the fine ore bin. Installed 3 chutes and a discharge hopper for the fine ore bin.
- Milling, gravity & intensive leaching circuits: Ball mills are in place. Steel structure platform installation completed.

- Cyanide leaching system: Fabrication and installation of the 7 leaching tanks have been completed and lifted to their position. The 2 cyanide detox tanks are currently under fabrication.
- Leaching thickeners: Thickener steel structure installation completed. Fabrication of thickener main body is in progress.
- 

Buildings:

- Leaching reagent warehouse: wall cladding near complete, window installation complete. Gutter and stormwater pipe installation complete.
- E/W building: Steel structure installation complete. Wall cleats, purlins, and roofing iron installation complete.
- Gold room: Ground floor tie-beam and suspended floor slab concreting complete. Construction and concreting of second floor columns in progress.
- Tailings reagent warehouse: Wall cladding and window installation complete. Floor concreting complete.

TSF Construction:

- Bulk excavation and shaping at TSF northern and dam basin batters continued and shaping of TSF spillway batters continues.
- Bulk excavation at south diversion channel hilltop and batters are on-going
- Rock breaking was carried out at TSF spillway, broken rocks were carted to stockpile.
- Filling TSF embankment area continued as Zone A & B levels reached 111.8m for stage 1 tailings dam.

Subsequent to the June Quarter 2023 end, the following activities are planned for the second half of 2023:

- Complete gold room building construction.
- Complete filter press foundation and miscellaneous concrete work.
- Complete installation of equipment at the crusher/screening areas, ball mill, Sepro gravity and intensive leaching systems, leaching reagent addition warehouse, cyanide detox reagent addition warehouse, EW workshop, and filter press.
- Complete and commission power plants for both processing plant and mining operation.
- Start up and commission each system of processing plant equipment.
- Continue miscellaneous civil and concrete works.
- Complete TSF spillway and shaping of TSF pond.
- Complete HDPE liner installation at the TSF spillway and TSF pond.

The Company advises that it has not based its current mine development plan on a feasibility study of mineral reserves, demonstrating economic and technical viability, and, as a result, there may be an increased uncertainty of achieving any particular level of recovery of minerals or the cost of such recovery, including increased risks associated with developing a commercially mineable deposit.

## Equity Raises

### *\$39.7 million August 2020*

On August 21, 2020, the Company completed a \$39,697,458 “bought deal” brokered private placement and concurrent non-brokered private placement of an aggregate of (i) 13,521,610 units (the “Tranche 1 Units”) of the Company at a price of \$1.70 per Tranche 1 Unit (the “Tranche 1 Price”) for gross proceeds of \$22,986,737, including the exercise in full of the underwriters’ option with respect to Tranche 1 Units, and (ii) 8,151,571 units (the “Tranche 2 Units” and together with the Tranche 1 Units, the “Units”) of the Company at a price of \$2.05 per Tranche 2 Unit (the “Tranche 2 Price”) for gross proceeds of \$16,710,721, including a partial exercise of the underwriters’ option with respect to Tranche 2 Units (the “Offering”).

Each Tranche 1 Unit is comprised of one common share (a “Common Share”) in the capital of the Company and one-half (1/2) of one common share purchase warrant (each whole common share purchase warrant attaching to a Tranche 1 Unit, a “Tranche 1 Warrant”) of the Company. The Company issued 6,760,805 Tranche 1 share purchase warrants and each Tranche 1 Warrant shall be exercisable to acquire one Common Share (a “Warrant Share”) at a price per Warrant Share of \$2.35 for a period of 12 months from the closing date of the Offering. Each Tranche 2 Unit will consist of one Common Share and one-half (1/2) of one common share purchase warrant (each whole common share purchase warrant attaching to a Tranche 2 Unit, a “Tranche 2 Warrant”) of the Company. The Company issued 4,075,786 Tranche 2 share purchase warrants and each Tranche Each Tranche 2 Warrant shall be exercisable to acquire one Warrant Share at a price per Warrant Share of \$2.75 for a period of 12 months from the closing date of the Offering. On August 21, 2021, 6,760,805 Tranche 1 and 4,075,786 Tranche 2 share purchase warrants expired.

### *\$17.3 million warrants exercised October 2020*

On August 25, 2020, the Company announced that it has elected to accelerate the expiry date of the outstanding \$1.20 common share purchase warrants originally issued by the Company as part of its \$11.5 million private placement of units which closed on December 6, 2019. On October 13, 2020, the Company announced that a total of 14,375,000 warrants representing 100% of the \$1.20 warrants issued in connection with the December 2019 private placement were exercised for gross proceeds of approximately \$17.3 million.

### *\$13.4 million September 2022*

On September 28, 2022, the Company closed a bought deal offering of 17,348,000 units including 1,108,000 Units issued pursuant the over-allotment option granted to Eight Capital and Canaccord Genuity Corp. at a price of \$0.77 per Unit for gross proceeds of \$13,357,960.

Each Unit consists of a common share of the Company and one-half of one common share purchase warrant. Each whole common share warrant may be exercised to purchase a common share at a price of \$1.05 for a period of 36 months following the closing date. In the event that the volume weighted average trading price of the common shares on the TSX-V or such other principal exchange on which the common shares are then trading, is greater than \$1.75 for a period of twenty consecutive trading days at any time after the closing of the Offering, the Company may accelerate the expiry date of the warrants by giving written notice to the holder thereof and in such case the warrants will expire on the 30th day after the date on which such notice is given by the Company.

The Company also issued 1,040,880 compensation warrants (the “Compensation Options”) to the Underwriters. Each Compensation Option is exercisable to purchase a Common Share at a price of \$0.77 for a period of 36 months following the closing date of the Offering.

### *\$27 million May 2023*

On May 11, 2023, the Company completed a bought deal offering of 29,350,000 units, at a price of \$0.92 per unit for gross proceeds of \$27,002,000. Each unit consists of a common share of the Company and one-half of one common share purchase warrant. Each whole common share warrant may be exercised to purchase a common share at a price of \$1.25 until November 11, 2025. The Company also issued 1,755,000 non-

transferable compensation options (“CO”) to the underwriters, each CO is exercisable to purchase a common share at a price of \$0.92 until November 11, 2025.

## Corporate

### *Nebari Financing Facility*

On January 19, 2023, the Company entered into a facility agreement (the “**Loan Facility Agreement**”) with Nebari Collateral Agent, LLC, as collateral agent, Nebari Gold Fund 1, LP, Nebari Natural Resources Credit Fund I, LP and Nebari Natural Resources Credit Fund II, LP (collectively, “Nebari”) for a financing facility of up to US\$37,000,000. The financing facility consists of a US\$35,000,000 senior secured first lien term loan (the “Loan Facility”) and a US\$2,000,000 equity investment. The total amount of the Loan Facility will be funded in up to three tranches, with US\$23,000,000 funded on February 10, 2023 (Tranche 1), and an additional US\$12,000,000 available at the Company’s option in up to two further tranches (Tranches 2 and 3) within 18 months of receiving Tranche 1.

On February 9, 2023, the Company received total proceeds of US\$25,000,000 (\$33,597,500) from its financing facility, which was comprised of US\$23,000,000 (\$31,125,900) from Tranche 1 and completion of the US\$2,000,000 (\$2,687,800) equity investment, with Nebari purchasing 3,125,348 common shares of the Company at a price of \$0.86 per share.

Interest on Tranche 1 is 8% (plus three-month secured overnight financing rate, as administered by Federal Reserve Bank of New York (“SOFR”)), and amortization is on August 8, 2026, being the maturity date 42 months from the Loan Facility closing date, with no closing fees payable. Tranches 2 and 3 funding is subject to an 8% original issue discount and interest is 10% plus SOFR, with progressive amortization over 42 months from the Tranche 2 funding date, with closing fees equal to 2% of the amounts funded.

In connection with the facility agreement, the Company will pay Nebari a royalty equal to 0.5% of the net smelter returns from the first 400,000 ounces (equivalent to 2,000 ounces) of gold produced and sold from the Tuvatu Gold Project following the first month in which the Tuvatu Gold Project produces at least 2,000 ounces of gold.

As part of the Tranche 1 Loan Facility with Nebari, the Company issued 15,333,087 non-transferrable purchase warrants in the Company (“Tranche 1 Warrants”) of the Company to Nebari, exercisable into common shares of the Company at a price of \$1.49 for a period of 48 months from issuance. The Tranche 1 Warrants are subject to an accelerator provision whereby the Company may accelerate the expiry date of up to 25% of the Tranche 1 Warrants in the event that the volume weighted average trading price of the common shares of the Company exceeds 100% over the strike price for a period of twenty consecutive days. The Company has the option to accelerate the expiry of further 25% portions of the Tranche 1 Warrants at four-month intervals, up to a maximum of 75% of the Tranche 1 Warrants issued.

All debts under the Loan Facility are guaranteed by the Company and its subsidiaries: American Eagle Resources, Inc., Laimes International Inc., Auksas Inc., and Lion One Pte Limited, and secured by the assets of the Company and pledges of the securities of the aforementioned Company’s subsidiaries.

## Management Changes

On June 2, 2021, the Company appointed Mr. Patrick Hickey, P.Eng., MBA, as Chief Operating Officer. Mr. Hickey has over 40 years of experience as an engineer and executive in the design and construction of world class mining, petroleum, and power generating operations throughout the world. He has worked for some of the world's leading operators, including Mobil in the USA and in the Middle East, Power in the Czech Republic, BHP Oil Refining in Hawaii, Kinross Gold Corp. in Africa and Spain, and Newmont Gold in Indonesia and Peru.

From 2010 to 2014, Mr. Hickey was Chief Executive of the African operations for Kinross Gold Corp., where he was responsible for eight Kinross subsidiaries and projects such as the Tasiast Gold Mine in Mauritania, and the Chirano Gold Mines in Ghana. Prior to that from 2008 to 2010 he served as the President and Managing Director for Sherritt International for the \$4.5 billion Ambatovy nickel-cobalt mine in Madagascar, and from 2004 to 2008 served Newmont Mining as the President and Director of the \$2 billion Batu Hijau copper-gold mine in Indonesia, and General Manager of the Yanacocha and Minas Conga gold projects in Peru.

On June 2, 2021, the Company appointed Mr. Sergio Cattalani, M.Sc., Geology, as Senior Vice President Exploration. Mr. Cattalani is an experienced economic geologist with over 35 years of experience and distinguished leadership in mineral exploration around the world. Following 3 years in an applied research position with the Mineral Exploration Research Institute in Montreal, Sergio accepted the position of senior geologist for Cominco based out of Noranda, Quebec. Sergio then moved on to Inco, then CVRD-Inco for 12 years as senior geologist where he was responsible for project generation and technical evaluations in Ontario, Quebec, and NWT in Canada, in Turkey, Indonesia, Tasmania and Western Australia, China and Brazil. In 2008 he was appointed Senior Geologist for Hecla Mining focused on South American projects before being appointed Vice President Exploration for Osisko Mining Corporation in 2009 where he managed their exploration and evaluations team in Canada, and subsequently their USA exploration portfolio before Osisko was acquired by Yamana Gold and Agnico Eagle Mines in 2014.

In 2016, Mr. Cattalani was appointed VP Exploration at Newcastle Gold to oversee a 40,000 meter drill program on the Castle Mountain gold project in California prior to the combination of Newcastle, Trek Mining, and Anfield Gold that created Equinox Gold Corp. in 2017. Mr. Cattalani was then appointed by Equinox as Vice President Exploration and retained responsibility for all aspects of exploration at Castle Mountain which now has P&P Reserves of 3.6 million oz. @ 0.56 g/t gold and expected to produce 30,000-40,000 oz. of gold in 2021. More recently, from 2018 to Dec. 2020 Sergio was Economic Geologist in the business development unit of Denver-based EMX Royalty Corp. working with EMX's Capital Group on technical evaluations for investment opportunities worldwide, and in developing EMX's Canadian business unit.

On June 2, 2021, the Company announced the resignation of Stephen Mann, Managing Director, effective August 31, 2021, for personal reasons. The Company would like to thank Mr. Mann for his lengthy service and many contributions including his instrumental role in building Lion One's exploration and drilling division, completion of the Tuvatu Environmental Impact Assessment, the development and commissioning of Lion One's own geochemical laboratory, all in Fiji, in addition to negotiating and securing a significant magnetite royalty on the Olary Creek iron asset in South Australia.

On September 3, 2022, the Company appointed Mr. Jeffrey Edelen, Masters of Economic Geology, as Vice-President Corporate Development. Mr. Edelen holds undergraduate degrees in Spanish Language and Physical Geology from the University of Idaho and a Master's degree in Economic Geology from the Colorado School of Mines. Mr. Edelen has 16 years of experience as an economic geologist focusing on prospect generation, royalty evaluation, and project development. In February 2023, the Company has accepted the resignation of Jeffrey Edelen, and would like to thank Mr. Edelen for his contributions.

## EXPECTED CHANGES TO THE BUSINESS

As of the date of this AIF, Lion One's management does not expect any material changes to the business; however, as is typical of the mineral exploration and development industry, from time to time Lion One reviews potential merger, acquisition, investment and joint venture transactions and opportunities that could enhance shareholder value. Furthermore, there can be no assurance that the results of exploration or development programs planned or underway will not result in material changes to the scientific and technical or financial and

general business information contained herein. Accordingly, readers of this AIF are urged to read the press releases issued by Lion One once they become available on SEDAR, for full and up-to-date information concerning the AIF.

## OUTLOOK

Lion One is focused on advancing premium quality gold assets in Fiji that have: high grades, scope, district scale, and depth potential, with access to infrastructure in a mining-friendly jurisdiction. The Company's 100% owned Tuvatu Gold Project ("Tuvatu") has received all of the mandatory regulatory approvals, including a 10-year renewable mining lease Special Mining Lease (SML 62) and a 21-year surface lease, for the complete development of mining and processing operations. In August 2022, SML 62 was extended for an additional 10-year renewable term to February 28, 2035. The 384.5 hectare Tuvatu mining lease is located near its epicenter and hosts the high grade, permitted for production, Tuvatu gold resource.

The Company's objective is to work towards a near-term 300 tonne per day initial processing plant, along with a regional exploration program aimed at deep high-grade and bonanza-grade resources for the eventual scaled-up development of a larger and richer resource base thereby proving the concept that the Tuvatu has the potential to become a gold camp with 10 to 20 million gold ounces.

The Company now utilizes eight fully-owned active diamond drilling rigs capable of operating year-round through the rainy season, and a fully operational, quick-response metallurgical and geochemical laboratory at its Fiji head office close to the project site. Lion One will continue to focus on testing the deep extensions of new high-grade zones of mineralization discovered below Tuvatu in 2020 and shallow resource infill drilling from the surface and underground targeting areas of planned early production.

## COMPETITIVE CONDITIONS

The Company's business of the acquisition, exploration and development of mineral properties is intensely competitive. The Company may be at a competitive disadvantage in acquiring additional mining properties or financing to further the development of its assets because it must compete with other individuals and companies, many of which have greater financial resources, operational experience and technical capabilities than the Company. The Company may also encounter increasing competition from other mining companies in efforts to hire experienced mining professionals. Competition for exploration resources at all levels is currently very intense, particularly affecting the availability of manpower and equipment. Increased competition could adversely affect the Company's ability to attract necessary capital funding or acquire suitable producing properties or prospects for mineral exploration in the future.

## ENVIRONMENTAL PROTECTION

The Company's operations are subject to environmental regulations promulgated by government agencies from time to time. Environmental legislation provides for restrictions and prohibitions of spills, releases or emissions of various substances related to mining industry operations, which could result in environmental pollution. A breach of such legislation may result in imposition of fines and penalties. In addition, certain types of operations require submissions to and approval of environmental impact assessments. Environmental legislation is evolving, which means stricter standards and enforcement, fines and penalties for non-compliance are becoming more stringent. Environmental assessment of proposed projects carries a heightened degree of responsibility for companies and directors, officers and employees. The cost of compliance with changes in governmental regulations has a potential to reduce the profitability of operations.

## EMPLOYEES

The Company's business is administered principally from its head office in North Vancouver, British Columbia, Canada. During the fiscal year ended June 30, 2023, the Company had 5 employees in Canada, and over 300 full time, part-time and temporary employees in Fiji in addition to its directors and officers.

## SPECIALIZED SKILL AND KNOWLEDGE

All aspects of the Company's business require specialized skills and knowledge. Such required areas of specialized skills and knowledge include geology, drilling, mine planning, metallurgy, engineering, construction, technological, community and public relations, regulatory compliance, accounting and law. Much of the specialized skill and knowledge is provided by the Company's management and operations team. The Company also engages administrative, financial, legal, geological and engineering consultants from time to time as required to assist in maintaining corporate records and preparing reporting requirements, evaluating its interests and recommending and conducting work programs.

## FOREIGN OPERATIONS

The Company maintains offices for its subsidiaries, Lion One Limited (Fiji) in Nadi, Fiji, and in Perth, WA for Lion One Australia. The Company's one material mineral property, the Tuvatu Gold Project, is located on the island of Viti Levu in Fiji. While the government of Fiji is considered by the Company to be supportive of mining and mineral exploration, no assurances can be provided that this will continue to be the case in the future. Additional information is provided in the "Risk Factors" section of this AIF.

## SOCIAL AND ENVIRONMENTAL POLICIES

Lion One's policy is to conduct its business responsibly and, in a manner, designed to protect its employees, adjacent communities and the natural environment. The Company is committed to achieving a safe, productive and healthy work environment and to uphold the values of human rights. These commitments are described in the Company's Environmental, Health and Safety and Social Responsibility Mission Statement.

## TUVATU GOLD PROJECT OVERVIEW

The Company's primary asset is the 100% held Tuvatu Gold Project ("Tuvatu"), located 17 km from the Nadi International Airport on the main island of Viti Levu in Fiji. Discovered in 1987, Tuvatu is a high-grade underground gold project situated along the Viti Levu lineament, Fiji's own corridor of high-grade alkaline gold deposits. Tuvatu is situated with a 5-hectare footprint inside a larger 384 hectare mining lease. The project contains numerous high-grade prospects proximal to Tuvatu, at depth, and up to 1.50 km along strike from the resource area, giving near-term production potential and further discovery upside on one of Fiji's largest and underexplored alkaline gold systems. The Tuvatu Project was acquired by Lion One in 2011 and has over 140,000 meters of drilling completed to date in addition to 1,600 meters of underground development.

The Fijian Islands are located along the Pacific Island Arc, which hosts a number of other well-known major mineralized alkaline gold deposits systems such as the Lihir and Porgera gold deposits in Papua New Guinea. 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 Barrick/ Goldcorp Porgera gold deposit (>25 million ounces gold) and the Newcrest Lihir gold deposit (>40 million ounces gold) are both alkaline host gold deposits situated in Papua New Guinea. These deposits, like other alkaline hosted gold deposits, are associated with deep crustal magmas, alkaline rich alteration mineral assemblages, and are valued for their high grades and deep vertical profiles, resulting in large gold endowments.

The Company holds a 100% interest in 4 SPL's including the Tuvatu Gold Project, covering 13,613 hectares in Fiji. The SPL's are held in the Company's subsidiary Lion One Limited (Fiji) and covers areas adjacent to the current mineral resource at Tuvatu. Lion One is focused on advancing premium quality gold assets in Fiji that have the attributes of: high grades, scope, district scale, and depth potential, with access to infrastructure in a mining-friendly jurisdiction. The Tuvatu Gold Project has received all of the mandatory regulatory approvals, including a 10-year renewable mining lease and a 21-year surface lease, for the complete development of mining and processing operations at Tuvatu. The Company will continue to advance its exploration program to add further high-grade resources in its effort to develop a large-scale alkaline gold project.

On March 3, 2015 Lion One received notice from the Director of Mines of the MRD that the Minister of Lands and Mineral Resources has approved the grant of a Special Mining Lease Number 62 (“SML 62”) covering 384.5 hectares encompassing the Tuvatu Resource. SML 62 provides exclusive rights for the potential development, construction, and operation of mining, processing, and waste management infrastructure at Tuvatu. The terms of the mining lease provide for certain performance and reporting requirements. The SML has been granted for a term of ten years provided the Company complies with the terms of the lease. Extensions to the term can be applied subject to the terms of the lease and the Mining Act. In August 2022, SML 62 was extended for an additional 10-year renewable term to February 28, 2035. Of the Company’s mineral property holdings, the Tuvatu Gold Project located in Fiji is considered material and is described further in the following sections.

## TECHNICAL SUMMARY

The disclosure set forth herein is the technical summary reproduced from a technical report entitled “Technical Report and Preliminary Economic Assessment Update for the Tuvatu Gold Project” dated April 29, 2022 in compliance with NI 43-101. The Technical Report is available on the SEDAR website at [www.sedar.com](http://www.sedar.com). The following information is of a summary nature and reference is made to the detailed disclosure contained in the Technical Report.

The Company’s Tuvatu Gold Project (the “Project”) involves the exploration and evaluation of the potential for development of a gold deposit located near the town of Nadi on the main island of Viti Levu in Fiji. The NI 43-101 compliant report on the Project was prepared by the independent consultants are listed below:

- Mining Associates Pty Ltd.(“MA”) – Geology and Mineral Resource estimate and related information
- GeoSpy – Geology, exploration
- Entech – Mining and mining-related operations, underground geotechnical investigations, mining-related capital and operating cost estimates
- Tetra Tech Canada Inc. – Metallurgical test work review, process and process-related cost estimates, G&A and surface service operating cost estimates, site infrastructures (excluding site geotechnical investigation and TSF), and environment
- Wood – Site geotechnical investigation and TSF

## PROPERTY DESCRIPTION AND LOCATION

The Tuvatu Gold Project is located near Nadi on the island of Viti Levu in Fiji. Tuvatu was previously explored and developed by the Emperor Gold Mining Company of Australia which during the 1997-2000 period completed over 87,000 meters of drilling, a 1,600 meter exploration decline, and feasibility study. Tuvatu is one of several gold projects aligned along the Viti Levu lineament; a regional trend hosting Fiji’s known epithermal gold deposits.

The tenements and mining lease are located in the upper reaches of Sabeto Valley approximately 24 km northeast of the town of Nadi on the west coast of Viti Levu, and 17 km by road from the Nadi International Airport. The Tuvatu gold deposit is located within SML62. SPL’s 1283, 1296, 1465 are contiguous leases with the existing Tuvatu mining lease, extending to the south to cover additional prospective geology and to cover the area that was previously demarcated for tailings dam Tuvatu Gold Mines (TGM) in its 2000 mining study. In November 2017, the Company became the successful tenderer to acquire the Navilawa exploration tenement directly adjoining the northern boundaries of Lion One’s Special Prospecting License (SPL 1283/1296) and Mining Lease areas (SML 62) covering the Tuvatu gold project. In May 2019, SPL 1512 was issued for the Navilawa tenement for a 5 year term ending in 2024, which consolidates ownership of the entire Navilawa mineral complex under a tenement package with Tuvatu’s 384.5 hectare Mining Lease SML 62 at its center.

## PROPERTY OWNERSHIP

The property ownership discussion herein has been updated subsequent to the Technical Report for the issuance of SML 62 and renewal of SPLs as they become due.

The Tuvatu property is situated within four contiguous SPL areas, and one SML area covering almost 5,000 hectares. The SML and SPL's are 100% owned by the Company. Three SPL's were originally held by the Emperor Gold Mining Company and acquired by Lion One Limited Fiji in 2009, before being acquired by Lion One Metals Limited in 2011. In May 2019, SPL 1512 was issued to the Company for the Navilawa tenement. The properties are subject to production royalties of 5% payable to the Fijian government. The SPL's carry minimum expenditure requirements as described in the following table.

**Table 2 - Tuvatu Project SPL Summary**

<b>SPL Number</b>	<b>Area (ha)</b>	<b>Expenditure Requirement (FJD\$)</b>	<b>Date of Renewal</b>	<b>Expiry</b>	<b>Interest</b>
1283 Tuvatu	1,578	1,400,000	August 24, 2020	August 23, 2025	100%
1296 Yavuna	1,303	1,600,000	August 24, 2020	August 23, 2025	100%
1465 Nagado	2,098	679,789	March 5, 2022	March 4, 2025	100%
1512 Navilawa	8,634	15,333,305	May 14, 2019	May 13, 2024	100%

The Fijian Minister of Lands and Mineral Resources had approved the grant of a Special Mining Lease (“SML”) for the Tuvatu Gold Project. SML 62 provides exclusive rights for the potential development, construction, and operation of mining, processing, and waste management infrastructure at Tuvatu and the surrounding lease area. The terms of SML 62 provide for certain performance and reporting requirements. The SML has been granted for a term of ten years provided the Company complies with the terms of the lease. Extensions to the term can be applied subject to the terms of the lease and the Mining Act. The Mining Lease area nominally covers 384.5 hectares and contains all of the current NI 43-101 Resource, in addition to a number of other significant exploration prospects.

There are three classifications of land in Fiji: native land, crown land, and freehold land. The Project area lies mostly, within native land, classified as native reserve land. This means that Lion One has to acquire consent through signatures of a minimum of 75% of adult members of the Land Owning Unit (LOU) for the land to be de-reserved. Lion One must then negotiate for a land lease that will require the consent of 50% of adults in the LOU. There are also native Fijian leaseholders in the Project area with whom Lion One must consult in its acquisition plans. Compensation agreements must be finalized with these leaseholders to gain access to their lease areas.

All land covered by the SPLs is native land, which comes under the control of the Native Land Trust Board (NLTB) on behalf of the native owners. Approximately 5% of the SPLs are under cane lease through the Agricultural Land and Tenants Act.

Native land is vested in the NLTB under the Native Land Trust Act, which means that only the NLTB may grant any legal interest in native land. Most, (approximately 95%) of the land required by Lion One for its mining tenements and native leases are within native land reserve, which cannot be leased out to any non-Fijian unless such land is de-reserved.

## ENVIRONMENTAL STUDIES

The studies conducted to date for the Project indicate that the aspects of greatest environmental concern are water quality and freshwater flora and fauna. Potential effects to these resources will be mitigated by engineering design, the CEMMP, and other management plans. Development of the project also has to adhere to the terms and conditions presented in the Environmental Impact Assessment (“EIA”) approval documents issued by the Fiji DE that have been received to date (the first dated September 27, 2013 for the primary EIA and the second dated May 29, 2018 for the Tuvatu Creek realignment). Lion One will continue to refine their management plans and Rehabilitation Plan in order to reduce potential effects on the biological and socio-

cultural environment. The Environmental Impact Assessment (EIA) update for the overall project, including mining, process plant and surface infrastructures was approved the Ministry of Environment of Fiji in June 2022, resulting in the Company posting a FJD65,205 as an environmental bond to the Ministry of Environment

## MINERAL RIGHTS, AGREEMENTS AND ROYALTIES

In the Republic of Fiji, a royalty is payable to the state government when a mineral is sold, disposed of or used. The Fiji Mineral Resources Act 1989 requires that the holder of a mining lease or mining claim lodge a royalty return and any royalty is payable at least annually for all leases and claims held, even if no production took place but saleable metal was won. The Minister allows samples with small quantities of gold to be sent for analysis, however, under the law in Fiji, trial mining and bulk sampling can be carried out and any significant gold won as determined by the Minister will be subject to royalties. Royalties for the Tuvatu Property will be 5% of the value of precious metal exported. This royalty is then split with parts compensating the community and other stakeholders.

In addition to the 5% NSR with the government of Fiji, the Fiji properties are subject to a perpetual production royalty of 0.5% to 1.5% of net smelter returns on the following schedule:

**Table 3 - Laimes Global Inc. Royalty Schedule**

0.5%	US\$ Au/oz < US\$500
1.0%	US\$ Au/oz > US\$500, <US\$1,000
1.5%	US \$Au/oz > US\$1,000

This NSR is payable to Laimes Global Inc., a company controlled by a common director.

## SECURITY OF TITLE

The Government acknowledges that security of land tenure is a critical issue for mineral sector investors. Hence, the Government is totally committed to enforcing investors land rights which are enshrined in both the 1990 Constitution and the Land Transfer Act (Cap. 131). The Land Lease itself is a legally binding document that guarantees security of land tenure.

## ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

### Accessibility

The Project lies on the west coast of Viti Levu, 24 km northeast of Nadi town and approximately 17 km by road from the Nadi International Airport. The area is steep and rugged, and access is via the Sabeto Road, which is sealed for about half the distance.

The Sabeto Road turnoff is located approximately 10 minutes north of the Nadi International Airport. The Sabeto Road follows the Sabeto River on its western side. The electricity pylons of the Monasavu Hydroelectricity power line can be seen from the road and crosses over the Project area. Further along the Sabeto Road, the road forks, with the left fork going to Korobebe village, and onto Navilawa village.

SPL 1283 and SPL 1296 cover land areas in the upper catchment of the Sabeto River immediately south of Navilawa village. SPL 1512 adjoins the northern boundary of SPL 1296 and covers the Navilawa Caldera, including catchments on the north side of the Sabeto range. The tenements are bounded to the southeast by the Namotomoto ridge. Nagado village is located on this ridgeline. The Korobebe village is located on the banks of the Sabeto River about 4 km southwest of the Tuvatu Prospect, and further downstream are the villages of Naboutini, Koroyaca, and Sabeto. On the opposite side of the river from Sabeto village is Natalau village. Indian cane farmers lease the land in between the Fijian villages.

Nadi is the closest city and is serviced by direct daily flights from Brisbane, Melbourne, Sydney, and Auckland by several Australian airlines, Fiji Airways, and Air New Zealand. On several days in each week there are flights to other New Zealand cities, Los Angeles and San Francisco in USA, South Korea, Hong Kong, and China, in

addition to other Pacific islands. The Project is readily accessed from Nadi International Airport by the Sabeto Road. A network of local formed roads and pastoral tracks provides good access to most of the Project area. During the wet season (November to March), major and minor creeks may be impassable for some days. In wet weather, four-wheel drive vehicles are required to access the tenements. Creeks and adjacent areas are generally thickly vegetated, while the spurs and ridges are dominated by open grasslands.

### Climate

Fiji experiences a mild tropical South Sea maritime climate without great extremes of heat or cold. Winds are generally light to moderate and blow from east-southeast during all seasons. Maximum temperatures average 28 to 30°C for the cooler months (May to October) while November to April temperatures are higher (31 to 32°C) with heavy downpours. Monthly minimum temperatures vary between 18 and 23°C.

The islands lie in an area occasionally traversed by tropical cyclones. These are mostly confined to the period November to April, with greatest frequency around January and February. On average, some ten to twelve cyclones per decade affect some part of Fiji, with two or three causing severe damage. Specific locations may not be directly affected for several years but the dominant northwest tracks give some increased risk of damage in the outlying northwest island groups.

Viti Levu's climate is dominantly controlled by oceanic temperatures and winds, restricting the diurnal temperature range heavily; the average daily range is 8.5 to 10.3°C. Average minimum temperatures for Nadi range from 18 to 23°C, while average maximum temperatures range from 28 to 32°C; these temperatures can be expected to be a good guideline for the Tuvatu area, given its close proximity to Nadi. Mean rainfall in the area varies from 50 mm in July to a high of 300 to 325 mm during the December to March wet season.

### Local Resources

The Project is located within the upper reaches of the Sabeto Valley. The area hosts a number of small villages that are dependent on the local waterways (e.g., Sabeto River) to supply water for local sustainable agricultural practices such as sugar cane, coconut oil, and fruits and vegetables. English is the official language; however, Fijian and Hindi are also taught in schools as part of the school curriculum.

The major towns in close proximity to the Project area are Lautoka, Nadi, and Ba. Lautoka, Fiji's second-largest city, is located 30 km from the Project. The local economy relies heavily on the sugar industry, and the Lautoka Sugar Mill has been operating since 1903. Nadi is Fiji's third-largest city and a tourist and business hub due to the presence of the Nadi International Airport.

The major land use in the Project region is pastoral, with most income generated from sugar cane, copra, and rice production. Fishing, manufacturing, and tourism industries are also employers in the region. Any skilled workforce for a mining development in the region would be expected to be drawn from the coastal Nadi-Lautoka-Ba region. There are also experienced former mine workers from the Vatukoula Gold Mine.

### Infrastructure

Fiji has one of the most developed economies of the Pacific islands, although a large subsistence sector still exists. Sugar exports, remittances from Fijians working abroad, and a growing tourism industry (with approximately 750,000 tourists annually) are the major sources of foreign exchange. Sugar processing makes up one-third of industrial activity.

Little infrastructure exists within the local area proximal to the Project other than a small exploration facility. Local villages utilize a combination of traditional and modern practices but do not contain any significant infrastructure. The majority of regional infrastructure, such as transport, telecommunication, and energy revolve around the nearby cities of Nadi and Lautoka.

Nadi is equipped with modern technology for both its internal and international telecommunications. All major towns have digital telephone exchanges and the islands are linked by cable and satellite to worldwide networks. The Project area is covered by 2G/3G mobile-phone reception.

Energy Fiji Ltd. (EFL) holds the monopoly in all facets of the energy sector, including generation, transmission, and distribution. It was formerly called the Fiji Electrical Authority. Hydroelectric and diesel are the two sources of power generation for EFL. Its installed power generation capacity currently stands at 237 MW; however, rising use of electricity has prompted the government to call for submissions from independent power producers. EFL has an 11 kV line at Korobebe village, which could supply 2 MW of power. This line could be upgraded by EFL to 33 kV from the Sabeto turnoff to the mine site. The villages around the Project chiefly utilize fuel wood and small diesel generators.

### Physiography

The upland areas of the Project area are grassland. Stream valleys and their perimeters are heavily vegetated. Several intermittent and perennial streams are located within the exploration tenements and mining lease area. Sabeto River is the largest perennial water feature in the Project area. Elevations of the Property range from 50 m to a maximum of 700 m above mean sea level. The area is hilly with slopes of 15 to 30% being common.

## HISTORY

### Previous Ownership

Historical activities began during the early part of the 20th century with prospecting in the upper reaches of the Sabeto River with no evidence that the mineralized lodes at Tuvatu were discovered. Some pitting and limited underground work took place between 1945 and 1952 when Bayley and Bryant operated PL 689. Later work in the area was undertaken by the Nadele Syndicate.

In the period from 1977 to 1979 Aquitaine Fiji explored the Tuvatu area. In 1987, Geopacific Ltd pegged out SPLs 1283 and 1296. During the next ten years, Geopacific Ltd invested approximately \$1.5M in exploration at Tuvatu. For three of these years, Geopacific Ltd was in association with Noranda Pty Ltd. In December 1995, Geopacific Ltd entered into an option agreement with Emperor Mines Ltd. and in June 1997, Emperor exercised its option to purchase 100% of the tenements. Emperor then incorporated the Tuvatu Gold Mining Company Limited ("TGM"), a subsidiary of Emperor Gold Mining Company, to manage the property.

In 2007 following the closure of the Vatukoula gold mine, Emperor Gold Mining Company (at the time a subsidiary of DRD Ltd), sold its Fijian assets including the Tuvatu property to Westech Gold Pty Ltd and Red Lion Management Ltd. Licenses covering the Tuvatu property were re-issued in the name of Lion One by the Fijian Government. Subsequently American Eagle Resources gained control of Lion One Limited, the holder of the Tuvatu project. Lion One Metals is the product of the reverse takeover in January 2011 of X-Tal by American Eagle Resources.

### Previous Exploration

All historical work described in this section was conducted within the tenements currently held by Lion One Limited. Some pitting and limited underground work was undertaken by Bayley and Bryant between 1945 and 1952 when they operated PL 689. Later geological work undertaken by the Nadele Syndicate included the pitting of two lodes, trenching and driving an adit but no records of the syndicate's work have been located.

Aquitaine Fiji explored the area from 1977 to 1979 and located a soil anomaly of 1.4g/t Au, which was not pursued. In 1987, Geopacific Ltd pegged out SPLs 1283 and 1296 in the area and investigated the soil anomaly previously identified by Aquitane Fiji. Geopacific discovered the outcrop of what is now called the Tuvatu lode in the vicinity of the soil anomaly.

From 1995 to 2001 Emperor's Tuvatu Gold Mines (TGM) conducted 3 phases of exploration at Tuvatu. The Phase 1 involved initial regional geological mapping and stream sediment sampling which located the Tuvatu gold deposit in the SKL-Nasivi area. A number of geophysical surveys were also completed including a dipole-dipole IP survey and airborne magnetics/radiometrics survey. Phase 2 included subsurface exploration and development, including limited trial mining and metallurgical testing.

Phase 3 commenced in 2000 with work on a feasibility study but the study was suspended in late 2000 as part

of a general cost-cutting exercise by Emperor due to the low gold price at the time. This Phase involved evaluation of the Tuvatu resource area including surface diamond and percussion drilling to test some peripheral anomalies as well as down-dip extensions of the various Upper Ridges lodes. The program also included mine and metallurgical design, environmental plans and social acceptance issues. In addition, re-mapping of the underground development took place in order to develop a robust structural model for the area. Further metallurgical test work was also completed.

Overall, during this time there had been three programs of drilling at the Property from exploration through to resource delineation. Drilling has been completed both on the surface and from the underground exploration decline. Drilling methods included both diamond drill (DD) and reverse circulation (RC).

In total, TGM completed 51,484 m of diamond core drilling and 9,265 m of RC surface drilling, as well as 13,407 m of underground drilling. A total of 1,341 m of decline, strike, and rise development was also undertaken in the project area, including a 600 m long exploration decline developed to a depth of 240 m below surface in the region of the Upper Ridges Lodes.

### Regional Exploration

Only limited regional exploration had been carried out in the area by explorers (primarily Aquitaine Fiji) before TGM's work. During 2001 to 2003, a regional exploration program was carried out by TGM that involved regional mapping, trenching, stream sediment, and soil sampling. This work identified more than ten new prospect areas outside the Project area.

Detailed exploration was carried out by TGM at Nubunidike, Ura Creek, Jomaki, Malawai, and Kubu Prospects. The Nubunidike and Ura Creek Prospects were the most advanced prospects. Exploration work commenced at Qualibua in June 2002. Subsequent ridge and spur soil geochemistry located high tenor gold-in-soil anomalies at the Korobebe Prospect.

Upon gaining control of the Property, Lion One commenced detailed mapping and geochemical sampling. Work concentrated on the region south of the Tuvatu resource area and around Qalibua Creek to the north. Two surface DD holes (DDHs) were completed in October 2008 at the Nubunidike Prospect to test the Nubunidike / Hornet Creek / 290 Vein system.

### Navilawa Area Exploration

Prior to the grant of SPL 1512 to Lion One in May 2019, the Navilawa SPL 1412 enclosed the majority of the under-explored Navilawa Caldera, to the north and directly along strike from the Project. It was considered prospective for similar high-grade epithermal, porphyry, and alkaline gold mineralization. Previous exploration on this area is summarized in Table 4.

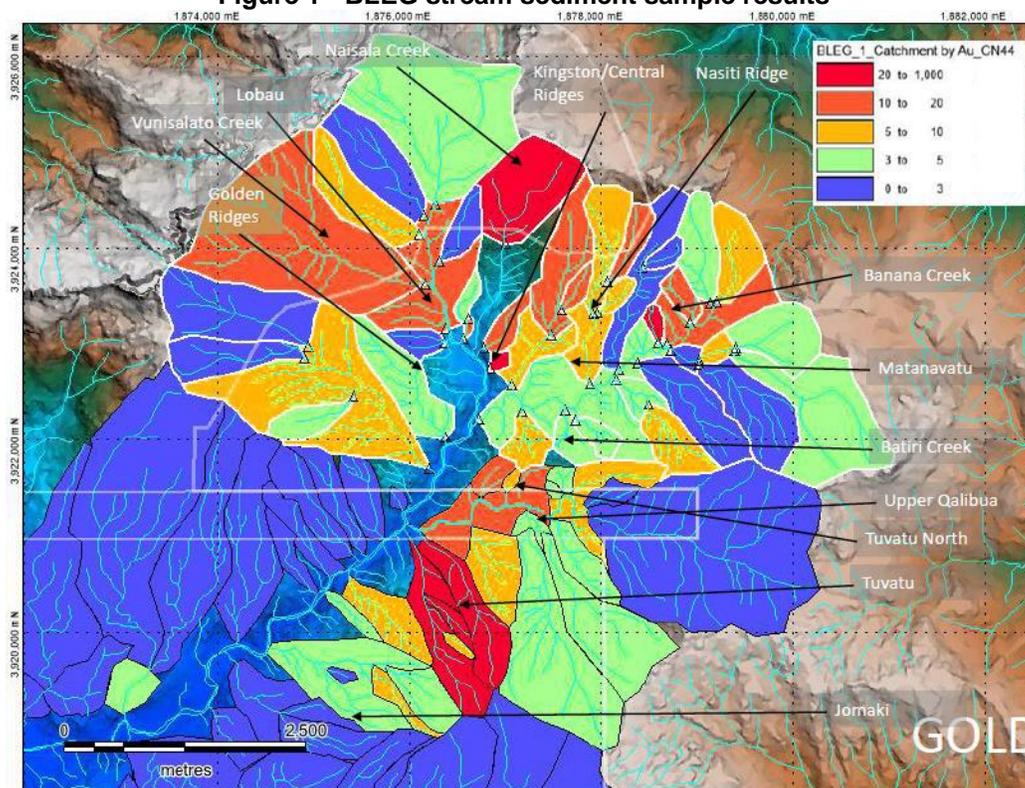
**Table 4 - Navilawa Area Previous Exploration Summary**

Year	Company	Prospects	Geochemistry	Geophysics	Drilling
1906–1923	-	Kingston Mine, Central Ridge, Blasting Rock, Nasiti Ridge, Qalyalo, Vunatawa, Golden Ridge	Bulk Samples, Trial Mining	-	-
1943–1947	South Pacific Mining	Kingston Mine, Central Ridge	Rocks	-	3 DDH
1963	Higgs & Coulson	Kingston Mine, Central Ridge	Streams, Soils	-	-
1963–1964	Geological Survey of Fiji	Kingston Mine, Central Ridge, Blasting Rock	Streams, Soils	-	9 DDH (393 m)
1968–1969	Amad JV with Ah Koy Mining Syndicate	Central Ridge, Nasiti Ridge	Streams (36), Soils (378), Rock (16)	Ground: IP	-
1970–1976	Barringer/ Amad	Kingston Mine, Central Ridge, Nasiti Ridge	Soils (804)	Ground: Magnetics & IP Airborne: Magnetics	5 DDH (731 m) No gold assays
1977–1979	Aquitaine/ Amoco	Central Ridge, Red Ridge, Nasiti Ridge, Vatume Hill	Soils (804), Rocks (66)	-	-
1979–1980	Aquitaine/ Cluff	Central Ridge, Red Ridge	Rocks (281)	-	1 DDH
1985–1986	Venture Exploration	Kingston Mine, Central Ridge, Nasiti Ridge, Golden Ridge	Soils, Rocks (152)	-	-
1986–1993	Pan Continental/ Venture	Kingston Mine, Central Ridge, Blasting Rock, Golden Ridge, Red Ridge, Vunatawa, Ngalyalo, Vatume Hill, Banana Creek	Soils (+106), Rocks (+857), Streams	Airborne: Magnetics	14 RC (1902 m)
1994–1998	CRAE	Nasiti Ridge, Nasala, Banana Creek, Tuvatu North	Rocks (90)	Ground: Magnetics, IP	3 DDH (623 m); 1 RC (128 m)
1999–2002	Mincor	Banana Creek	Soils (215), Rocks (6)	-	5 DDH (520 m)
2002–2004	Alcaston/ Mincor	Banana Creek, Central Ridge, Tuvatu North	Rocks (181)	-	3 DDH (595 m)
2007–2008	Golden Rim/ Mincor	Central Ridge, Tuvatu North	Rocks (+368), Soil (+858), Streams (+132)	Airborne: Magnetics, IP	8 DDH (1670.5 m)
2007–2008	Golden Rim/ Mincor	No field work done. Reassessment of all exploration data.	-	-	-

### Exploration – Navilawa

The Company commenced its 2019 Navilawa Caldera Exploration Program, the Company’s initial exploration work included specialized stream sediment sampling using a technique called bulk leach extractable gold (“BLEG”) over the entire concession area. Navilawa is an ideal place for BLEG sampling given that gold predominantly occurs as fine grains within small fractures that, when weathered, should yield appreciable fine gold that generates a strong analytic response. The BLEG sampling produces highly sensitive low-level anomalies that can help define and prioritize mineralized areas. The results will help guide further prospecting and target identification. During the year ended June 30, 2020, the Company completed a specialized stream sediment sampling program over the entire combined Tuvatu and Navilawa SPL area, using BLEG technique. See news release “Lion One Expands Navilawa Alkaline Gold System” dated November 7, 2019. Initial results confirm a clearly evident surface footprint of gold several times larger than previously thought, particularly to the N and NE of Tuvatu in the Navilawa Caldera. Lion One will further analysis the BLEG results, in conjunction with geophysical results from CSAMT technique to generate multiple new drill targets across several areas in the project area.

**Figure 1 - BLEG stream sediment sample results**



The results clearly indicate a much larger gold system is present within the Navilawa Caldera. Most exploration work has focused around Tuvatu in the south-central part of the caldera. Large anomalous areas lie to the north and northeast of Tuvatu. BLEG work is a first step in defining new areas to explore. Lion One is currently opening up these new areas to begin conducting surface prospecting, mapping and sampling. The Company expects to generate sufficient data to drill test many new targets in the future.

BLEG results demonstrate the footprint of gold mineralization at Navilawa is several times larger than previously thought. Lion One expects to generate numerous new drill targets within these new areas. The Company has recently been opening access into new gold anomalous areas so that prospecting, mapping and sampling can be conducted. Interestingly, many veins have already been exposed in new roadcuts. Vein material from Banana Creek displays fine crystalline, “wire,” gold, a promising initial indication.

In 2020 the Company was aggressively opening roads and trench cuts within the large Navilawa tenement situated north of the Tuvatu mining license. Efforts have been focused at Banana Creek located approximately 3 km northeast of the Tuvatu resource, where the Company’s team has discovered multiple outcropping lodes of similar nature to those seen at Tuvatu. Recent assay results including multiple high-grade results from the current benching and mapping program include 39.74 g/t Au over 0.60 m, 17.37 g/t Au over 0.45 m, 10.82 g/t Au over 0.70 m and 12.71 g/t Au over 0.40 m at Banana Creek and its access and 31.22 g/t Au over 0.80 m at the nearby Vunilolo prospect.

## GEOLOGICAL SETTING AND MINERALIZATION

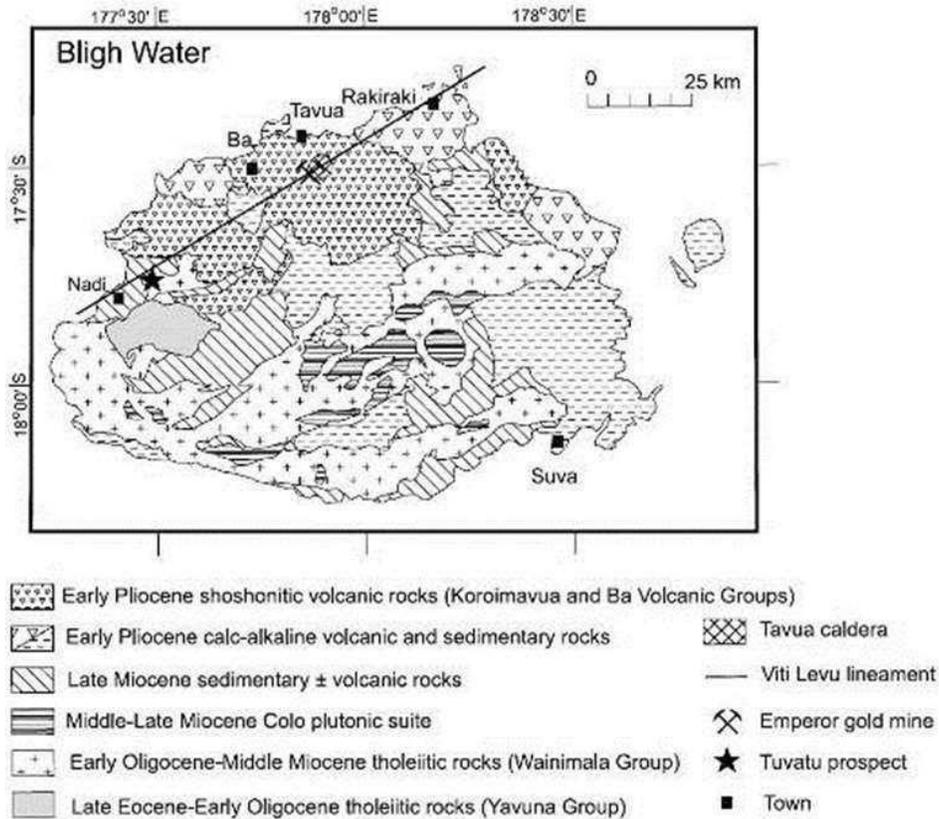
### Regional Geology

The information on regional geology is taken from Vigar, 2009, with minor changes where recent work has added to the knowledge of the area.

Fiji lies on the boundary of the Indo-Australian and Pacific tectonic plates, a zone marked by seafloor spreading and transform faulting. The island is at the midpoint of the opposing Tonga Kermadec and New Hebrides

convergence zones. It is separated from these actual convergence zones by two extensional back arc basins, the North Fiji Basin to the west and the Lau Basin to the east and a series of transform faults including the Fiji Fracture Zone and the Matthew Hunter Ridge. Approximately five million years ago (Miocene/Pliocene Period) the area was the site of a number of major shield volcanoes, formed along a northeast - southwest trend. Tuvatu is one of several epithermal gold systems along the >250 km northeast trending Viti Levu lineament, which are genetically associated with alkalic magmatism (Figure 1). A number of gold deposits have been discovered along this trend including Tuvatu, Vatukoula and Rakiraki. The Vatukoula or Emperor Mine has produced some 7 million ounces since 1937.

**Figure 2- Regional Geology. Location of Tuvatu Project with Respect to Viti Levu Lineament is**



The oldest unit in the region is the Nadele Breccia (Late Oligocene -Middle Miocene, 29 to 13 Ma). The Nadele Breccia is part of the earliest volcanic activity in Fiji which took place during a period of island arc development. The volcanic units were deposited within an active fore-arc basin as proximal dispersal aprons of volcanic sediment derived from volcanic edifices (Hathway, B. 1993).

Sabeto Volcanics (Late Miocene–Early Pliocene, 5.5 to 4.8 Ma) unconformably overlie the Nadele Breccia and represent the basal unit of the Korroimavua Volcanic Group, which is the oldest shoshonite volcanism in Fiji. The volcanics occur in a north east trending band across the north western side of Viti Levu and host a number of gold mines and prospects including Tuvatu, Vatukoula and Rakiraki. The unit consists of a series of interbedded andesitic volcanoclastics and flows.

The Navilawa Monzonite (Late Miocene – Early Pliocene, 4.85 Ma) intrudes the Nadele Breccia in the northeast of the project area and hosts the majority of the mineralization. The intrusive has been divided into two phases, a central coarse to medium grain monzonite and peripheral micro monzonite. Abundant dykes cut the area ranging in composition from pegmatite to andesite, aplite and monzonite. The composition of the monzonite is equigranular with plagioclase (45%) and K-feldspar (45%) with lesser biotite and pyroxene. Considerable local variation in composition occurs with changes in grain size and inclusion of country rock. The overall intrusive

complex is elongate in a north east orientation. Numerous small intrusive stocks, dominantly composed of micro monzonite also occur but tend to be elongated in a north-northwest direction.

A-Izzeddin (1997) suggested that there is a spatial and temporal relationship between the emplacement of the intrusive complex and mineralization. The Tuvatu area appears to have had one to two kilometres of overburden removed since emplacement of the intrusive complex, which may represent the magma source for overlying volcanism. The gold mineralization therefore represents deep-seated hydrothermal fluids emplaced in the very upper portions of the magma complex during the waning phases of volcanism.

### Local Geology

Tuvatu is one of several alkaline hosted gold prospects known from the Sabeto area of northwestern Viti Levu. Other gold and gold copper prospects in the local region are at Vuda, Navilawa (Kingston Mine and Banana Creek), and Nawainiu Creek, all associated with known or presumed centers of volcanic activity and/or volcanic core complexes within the shoshonitic Koroimavua Volcanic Group of late Miocene to early Pliocene age.

Basal units of the Sabeto Volcanics (part of the Late Miocene-Early Pliocene Koroimavua Volcanic Group) unconformably overlie Nadele Breccia in the Sabeto Valley. Members of the Sabeto Volcanics found outcropping in the area have shoshonitic affinities and include andesitic and biotite-bearing dacitic lithic and crystal tuffs, grits, agglomerates, and minor flows. Shoshonites belonging to the Koroimavua Volcanic Group have been age dated at 5.88 Ma.

The volcanoclastic units were subsequently intruded by a monzonitic stock. Earlier mapping by Emperor Gold Mining Company Limited geologists and latter mapping by Lion One indicated that it is a composite intrusive body with several different phases of intrusion associated with it. The monzonite within the Tuvatu prospect area is locally brecciated and varies in grain size. A series of pegmatite dykes, andesitic dykes, and stocks have also intruded the area. The monzonite has been dated at 4.85 Ma and is interpreted to be co-magmatic with the volcanic units of the Koroimavua Volcanic Group. It probably represents the root of a Caldera and is elongated in a northeast–southwest orientation.

Locally, the geology is structurally complex with the area cut by a 60 m wide east–west striking fault zone referred to as the Core Shed Fault (CSF), which is exposed near the portal of the decline and can be traced for over 5 km along strike. Additional westerly striking structures locally offset veins.

### Mineralization

Tuvatu is an alkaline hosted gold deposit. Mineralization is structurally controlled and occurs as sets and networks of narrow veins and cracks, with individual veins generally ranging from 1 to 200 mm wide. Zones of veining, which comprise the lodes, may be up to 5 m wide. The main mineralized zone (Upper Ridges) comprises eleven principal lodes with a strike length in excess of 500 m and a vertical extent of more than 300 m. Another major zone of mineralization (Murau) strikes east–west and consists of two major lodes with a mapped strike length in excess of 400 m.

Although gold mineralization is primarily hosted in monzonite, it can also occur in the volcanic units. Veins are narrow, generally less than 1 m up to a maximum of 7 m, and can contain significant gold grades. Lode mineralogy is varied, with most veins containing quartz, pyrite, and base metal sulphides.

A very high proportion of the gold occurs as either free gold or is contained in quartz or pyrite composite particles that can be floated. Free gold present is both fine and coarse grained. Mineralization is clean with respect to deleterious elements such as arsenic, selenium, and uranium.

A number of different lode structures were identified by TGM geologists in the Tuvatu resource area, and zones of veining which comprise the lodes may be up to 5 m wide. The main lode structures identified by TGM comprise ten lodes in the Upper Ridges area, two lodes in the Murau area, three lodes in the West (Plant Site) area, two lodes in the Tuvatu area, and three lodes in the SKL area. Lodes were reinterpreted by Lion One's geologists following infill and resource extension drilling.

## Structural Controls

Gold mineralization at Tuvatu is considered to have developed during an episode of northeast-southwest shearing and is intimately related to, but postdates the emplacement of a high-level monzonite intrusive.

## Paragenesis

Scherbarth and Spry (2006) suggest that the mineralized zone at Tuvatu may have originally developed as a porphyry system, which was overprinted by later intermediate-sulphidation gold mineralization. This interpretation was updated by another consultant who visited the Project and stated the Tuvatu system was dominated by intrusion related gold mineralization with a late intermediate sulphidation. The style of mineralization is thought to have evolved as the local monzonite intrusives cooled and magmatic fluids mixed with the groundwater fluids, resulting in the gradational changing of the mineralization and alteration styles.

Mineralization associated with the intrusive related gold is characterized by apatite-k feldspar-magnetite-biotite veins with intense potassic alteration selvages. These veins are considered to have developed as the monzonite intrusive was in the final stages of crystallization and early stages of cooling. As the system cooled, it was overprinted by a phase of phyllic alteration, which was characterized by a quartz-sericite-pyrite assemblage. The system was then overprinted by a set of quartz-adularia veins accompanied by lesser amounts of calcite, chalcopyrite, pyrite, galena, tellurides, and native gold. These veins generally have narrow chlorite-smectite-sericite selvages and commonly exhibit banded textures.

Minor roscoelite (vanadium K-mica) has also been observed in association with the quartz-adularia veins. Roscoelite is commonly observed at Vatukoula and many major deposits around the world (e.g., Porgera, Hishikari) and invariably has a close association with gold mineralization. The precipitation of roscoelite generally requires the reduction of a vanadium-bearing mineralizing fluid. Reduction of the mineralizing fluid may also lead to the precipitation of gold, tellurides, and pyrite. Also, rare occurrences of fluorite have been observed associated with the veins. The presence of fluorite further demonstrates the strong magmatic volatile content of the mineralizing fluids.

The following is an overview of the mineralization, modified after A-Izzeddin (2000):

- Hosted in structurally controlled sets of narrow quartz veins (generally less than 0.5 m), which may form mineralized lodes up to 5 m wide.
- Early intrusive related mineralization overprinted by late intermediate epithermal episode.
- Gold is free-milling and generally associated with silica/quartz, adularia, and minor base metals (galena and sphalerite) and tellurides.
- High grades may be encountered in lodes (e.g., 0.5 m at 1,620 g/t Au and 0.3 m at 1,130 g/t Au).

A-Izzeddin (1997) suggested that there is a spatial and temporal relationship between the emplacement of the intrusive complex and the mineralization. The Tuvatu area appears to have had 1 to 2 km of overburden removed since emplacement of the intrusive complex, which may represent the magma source for overlying volcanism. The gold mineralization is interpreted to have been derived from deep-seated hydrothermal fluids emplaced in the very upper portions of the magma complex during the waning phases of volcanism.

Tuvatu is an alkaline gold system related to the intrusion and subsequent cooling of a local monzonite. Stress regimes within intrusion systems can be quite complex. The resulting veins and stockwork zones will pinch and swell along various strike orientations. This style of emplacement will always result in a risk to the tonnes and grades of any model developed. The mineralization is typical of this style of deposit in being confined to narrow structures with little wall rock alteration, which are hence “blind” outside of the mineralization.

## Deposit Types

The Tuvatu Gold Property is an alkaline gold system (Hennigh 2019; Holden 2019). An alkali or alkaline gold system, according to Eric Jensen and Mark Barton, is a particular class of epithermal gold deposit wherein the

potential scale and grade is considerably larger than typical 'hot-spring' epithermal gold system (Jensen and Barton 2000). Hot-spring deposits are bonanza grade systems, due to the narrow vertical extent of boiling horizons, and do not show large vertical or lateral continuity. In addition, the mineral system forms principally in pipe-type deposits. Alkaline gold systems, as a class in the broadest definition of epithermal systems, can show large tonnages and vertical extents beyond 1,000 m (Hedenquist 2000).

According to Jensen and Barton (2000), Kelley and Luddington (2002), and a review from Hennigh (2019), alkaline gold systems are characterized with the following characteristics:

- Demonstrable connection to alkaline magmatism, both volcanic and plutonic.
- Large, often nebulous alteration systems dominated by potassium enrichment.
- General scarcity of silica within the alteration assemblage and in veins. While quartz is often present, veins are often dominated by potassium feldspar and carbonate minerals.
- Limited clay alteration.
- Overall low abundance of sulphide minerals.
- A large vertical profile, often in excess of 1,000 m.
- Gold deposition driven by fluid phase separation, hydrothermal "flashing", cooling, and fluid mixing.
- "Veins" that are commonly comprised of interconnected narrow veinlets. Individual veinlets commonly display extremely high gold grades such that a few small veinlets can carry economic mineralization over mineable widths.
- "Spider web" like networks of veins sometimes displaying a feeder structure at their core.
- Multiple mineralized centers within the great gold system.
- Gold occurring as native gold, gold tellurides, and gold-bearing pyrite.
- Enrichment in elements, including arsenic, tellurium, molybdenum, zinc, fluorine, and bismuth.
- Ag-to-Au ratios generally 1-to-1 or less.

More recently, following site visits and reviews by Quinton Hennigh and geologists from major companies, the recognition of similarities with other alkaline hosted deposits has been made, particularly Porgera, Lihir and of course Vatukoula. These alkaline hosted deposits are all large scale orebodies with very significant depth extents.

Other examples of alkaline gold systems include Vatukoula (Fiji), Porgera (Papua New Guinea), and Cripple Creek (Colorado, USA) (Jensen and Barton 2000; Kelley and Luddington 2002; Richards, Bray, Channer, and Spooner 1997).

## GEOLOGIC INTERPRETATION

Tuvatu is the largest gold prospects known from the Sabeto area of northwestern Viti Levu, but forms only a small part of the Navilawa Caldera, the dominant geologic feature in the area. Navilawa itself is one of the major Fijian mineral systems aligned along the Viti Levu Lineament, located 45 km from the Vatukoula gold deposit, another large alkaline gold system, and one which has produced over 7 million ounces over the last 85 years.

Mineralization is structurally controlled and is hosted by a series of sub-vertical veins, shallow dipping veins, and stockworks. The main mineralized zone (Upper Ridges) comprises eleven principal lodes with a strike length in excess of 500 m and a vertical depth of more than 300 m. Another major zone of mineralization (Murau) strikes east-west and consists of two major lodes with a mapped strike length in excess of 400 m. Although gold mineralization is primarily hosted in monzonite, it can also rarely occur in volcanic units. Lodes are narrow, generally less than 1 m up to a maximum of 7 m, and metal grades are erratic. Lode mineralogy is varied, with most veins containing quartz, pyrite, and base metal sulphides. A total of 47 different lode structures

were identified in the resource area including 11 lodes in the Upper Ridges area, 7 lodes in the Murau area, 7 lodes in the West area, 7 lodes associated with Snake and Nasivi lodes, 4 lodes in the Tuvatu area, and 9 stockwork veins in the SKL area.

Veins were identified as intercepts greater than 0.5 g/t Au; however, due to the tight nature of the veins, relatively few assays less than 1.0 g/t are incorporated. The low-grade boundary allowed networks of narrow veins (1 to 200 mm wide) to be “bulked” into substantial vein intersections. In areas where the vein has propagated as a single thin veinlet, assays as low as 0.3 g/t were incorporated as edge dilution, notably where veins/assay composites were less than 0.5 m thick. Portions of the vein were selected based on lithology logs or interpreted strike extensions despite supporting assay data in these situations consisting of values below 0.5 g/t Au. These low grade intercepts are required to constrain and ensure vein continuity or pre-define the dilution grade.

## EXPLORATION

Lion One has undertaken drilling exploration activities in the Tuvatu project in several phases: limited exploration drilling from 2008 to 2010 and more extensive drilling in 2012-2013, 2016-2017, 2018 and the current program in 2019-23. Detailed surface mapping, underground sampling, and surface sampling in the form of rock chip, trench and bench sampling, soil sampling and stream sediment sampling has been undertaken. Re-logging and additional sampling of previously drilled core has been ongoing bulk density samples have been taken on a systematic and regular basis of all drill core.

A core re-logging and re-sampling program was commenced with the objective of identifying mineralized intervals that were ignored by previous operators. As 3.0 g/t Au was the historical cut-off grade, Lion One geologists believed that the economic significance of many altered and mineralized zones within the hanging and foot walls were previously overlooked. To date, a total of 145 historic drill holes have been resampled, representing a total of 14,470 m of resampled drill core, and yielding a total of 21,820 samples.

Lion One also completed 58 line km of Induced Polarization (“IP”) survey and prepared additional lines to obtain further readings over areas with prospective chargeability and resistivity anomalies. The survey was initially planned to cover known mineral occurrences before extension to outlying areas. Lion One also completed 36 line km of soil sampling across the IP survey grid area.

Geological mapping and sampling is ongoing. With the granting and completion of an access agreement on the Navilawa tenement, a comprehensive exploration program is commencing on the entire tenement package. A review of the entire tenement portfolio, has resulted in an updated exploration model of formation of the alkaline gold deposits at Tuvatu. Extensions of the Murau and Far West Lodes were mapped at surface over 500 m to the west displaying consistent lateral continuity typical of many epithermal lode systems. Multiple sub-parallel near-surface, high-grade veins were encountered.

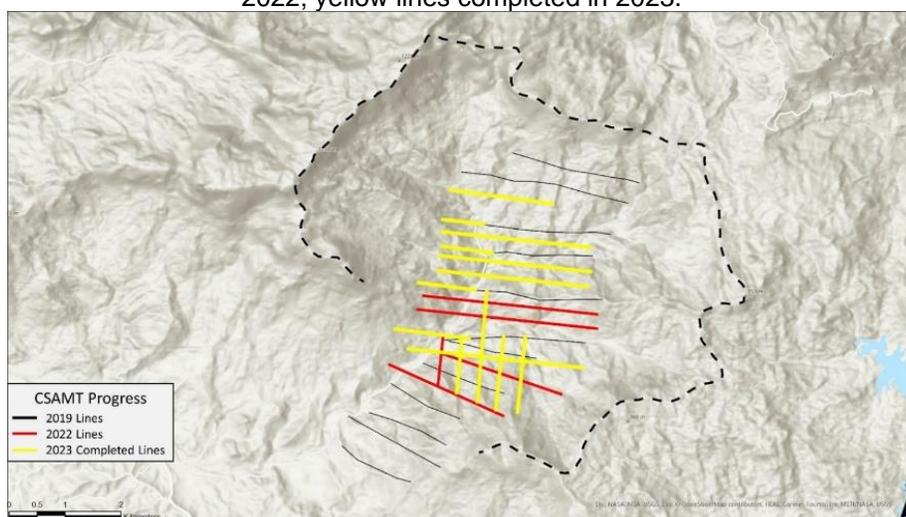
Lion One now controls the entire Navilawa caldera, a 7 km diameter alkaline gold system of which the Company’s Tuvatu high-grade gold deposit is a small part. The style of gold mineralization at Navilawa is remarkably similar to that seen in several large alkaline gold deposits. The main pulse of gold deposition occurred late within the overall volcanic and hydrothermal system, a common characteristic of most alkaline deposits. Virtually all significant gold intervals examined in core exhibit narrow dark grey silica-adularia veinlets, occasionally with fine specks of native gold. Their dark gray color comes from fine pyrite or other minerals, perhaps tellurides, scattered throughout the silica-adularia alteration zone. Dark green roscoelite often occurs along their margin. Late, white to tan carbonate minerals are sometimes present, usually filling voids within veinlets. Very subtle K-feldspar alteration appears to penetrate surrounding wallrock over a few millimeters to centimeters. Traces of disseminated pyrite are sometimes present in wallrock alteration. Veinlets at Tuvatu show strikingly similar style and mineralogy to veins at the Porgera and Lihir deposits in Papua New Guinea.

To better understand the extent and distribution of gold mineralization within the caldera, initial exploration work includes specialized stream sediment sampling using a variation of the technique called BLEG over the entire concession area. Navilawa is an idyllic place for BLEG sampling given that gold predominantly occurs as fine grains within small fractures that, when weathered, should yield appreciable fine gold (Au) that generates a strong analytic response.

A detailed CSAMT program has been completed in 2019 in the central part of the Navilawa caldera including areas around Lion One's Tuvatu mine. CSAMT is an important targeting tool successfully utilized in other alkaline systems such as at Cripple Creek, Colorado, where it is used to identify mineralized structural zones to depths of up to around 800 m. Numerous high-grade surface samples have been collected from various prospects along this corridor, and CSAMT provides the first picture of the underlying structural controls giving rise to this mineralization and help generate drill targets.

On June 20, 2023, Company announced that it has completed the CSAMT and the 2022-2023 CSAMT survey was designed to complement the 2019 survey by adding infill and extension lines to the previous survey area. The 2019 survey was moderate to widely spaced, with line spacing ranging from 300 m to 800 m, and station spacing every 100 m. Line and station spacing has improved significantly across the Navilawa Caldera following the 2022-2023 CSAMT survey, with line spacing ranging from 100 m to 400 m, and station spacing only 50 m apart on all new lines (Figure 3). The increased line and station density will provide greater resolution across the property and will assist in refining and generating new drill targets in the caldera.

**Figure 3:** Location of 2019-2023 CSAMT Survey Lines; black lines completed in 2019; red lines completed in 2022; yellow lines completed in 2023.



The 2022 portion of the survey was completed on October 8, 2022 and the 2023 portion was completed on June 10, 2023. A total of 33 line-km were surveyed, with 11 km completed in 2022 and 22 km completed in 2023. In addition to the 22.5 line-km surveyed in 2019, Lion One has now surveyed a total of 55.5 line-km of CSAMT across the Navilawa Caldera. Notably, the 2022-2023 survey included 5 survey lines oriented north-south across the main Tuvatu deposit, providing a high-density grid of coverage across the Tuvatu area. This will provide high-quality resistivity data for the Tuvatu deposit and all near-mine exploration targets, such as the West Zone.

Lion One has also identified numerous regional prospects throughout the Navilawa Caldera, with multiple surface samples returning grades of over 100 g/t Au. One of the goals of the 2022-2023 CSAMT survey was to improve coverage and understanding of the structural architecture underlying these prospects, some of which are located on the edge of the 2019 survey lines where results can be less reliable. The 2022-2023 infill and extension lines dramatically improve survey resolution and reliability in these areas and will help refine drill targets underlying those prospects.

## DRILLING

Drilling campaigns were completed in several phases by TGM from 1995-2001 and by Lion One between 2008 and 2019. Drilling prior to TGM and Lion One is not included in the table below, but does include CRA in 1995 (651.25m), Geopacific between 1985 and 1996 (3467.1m), Pancontinental in 1986 (1,902m), Oribi in 1999 (520.1m), and Golden Rim (948.4m). Lion One has undertaken exploration activities in the Tuvatu project in two main phases: surface work and limited exploration drilling from 2008 to 2010 and more extensive drilling in

2011-2013.

#### 2008-2010 Lion One Limited (Fiji) Exploration

During 2008, Lion One completed extensive mapping and geochemical sampling. Two surface drill holes were also completed. Field work was carried out by Lion One staff, W. Kuruisaravi, R. Sulua, and S. Bulu under the direction of various expatriate consulting geologists. The mapping, rock chip and channel sampling program involved the hiring of a trained team of permanent workers from Korobebe Village. Security staff at the Tuvatu Camp and core shed facility were hired from Korobebe, Nagado and Natawa Villages.

A number of highly prospective zones of mineralization that were identified in 2002-2003 were followed up. Detailed geological mapping, rock chip and channel sampling in the region south of the Tuvatu Resource Area and Qalibua Creek was carried out with about 11.5 line-km of creek mapping completed. Detailed 1:1000 scale geological mapping and sampling covered the area from Veto Creek to the boundary of SPL 1296 just north of the Tuvatu Resource Area. Lion One submitted 1,309 rock chip and channel samples between November 2008 and May 2010 to ALS Chemex laboratories in Brisbane. MA has not seen any reports on this mapping or sampling detailing geology, vein widths and assay results.

Two surface diamond drill holes (TUDDH-338 & TUDDH-340) totalling 375.90m were drilled during October 2008 at the Nubunidike Prospect, 1.6 km southwest of the Tuvatu Resource Area. Drilling was planned to intersect the Nubunidike/Hornet Creek/290 Vein system about 50 m below the surface over a strike length of 500 m and gain information on the dip and strike continuity of the vein system, as well as grade distribution within the structures.

#### Lion One Metals Limited Exploration

Following a comprehensive review of historic data that began in August 2010, Cambria Geosciences was contracted to assist in managing the exploration program at Tuvatu. In January 2011 Cambria mobilized a field team to the site to initiate a program of surface mapping, trenching and core re-logging and re-sampling of approximately 10,000 m of the total 60,000 m of core. In addition to the ongoing program of mapping, core re-logging and re-sampling, trenching and diamond drilling, this first phase exploration program was planned to include reconnaissance mapping, prospecting, stream sediment sampling, geophysical surveying, deposit modelling and dewatering of the decline. That review, along with ongoing mapping and prospecting conducted by Lion One geologists, resulted in the discovery of several near surface drill targets that became the focus of the trenching and surface mapping programs.

In excess of 1,200 m of trenching was completed to assess the near surface, open pit potential of the Tuvatu North area where drilling by previous operators had yielded several near surface high gold intervals in the northern portion of the Tuvatu Resource area. Principal objectives were to expose and confirm the presence of gold bearing veins and veinlets in the structures related to the Tuvatu Lode, H Lode and the Core Shed Fault ("CSF").

Initial sampling was between the CSF and the Tuvatu and H Lodes from four benches and two trenches excavated adjacent to and directly south of the portal of the existing decline. Excavations were completed across the CSF, with subsequent trenching above the surface expression of the Tuvatu (1 and 2) and H Lodes. Trenches were up to 2 m deep with an average depth of 1.5 m. Several benches along road cuts were also sampled as a part of the program. Most samples were continuous or semi continuous chip samples with composite samples taken when necessary.

A core re-logging and re-sampling program was commenced with the objective of identifying mineralized intervals that were ignored by previous operators. As 3.0 g/t Au was the historical cut-off grade, Lion One geologists believed that the economic significance of many altered and mineralized zones within the hanging and foot walls were previously overlooked.

Lion One also completed 58 km of Induced Polarization ("IP") survey and prepared additional lines to obtain further readings over areas with prospective chargeability and resistivity anomalies, including five additional lines covering the First Porphyry Development Area. The survey was initially planned to cover known mineral

occurrences before extension to outlying areas. Lion One also completed 36 line km of soil sampling across the IP survey grid area.

Extensions of the Murau and Far West Lodes were mapped at surface over 500 m to the west displaying consistent lateral continuity typical of many epithermal lode systems. Multiple sub-parallel near-surface, high-grade veins were encountered.

The surface sampling program was reported by Lion One as confirming the presence of gold bearing veins and veinlets within the CSF and the Tuvatu and H Lodes. Five samples were reported to return grades over 100 g/t Au, including 210 g/t Au across 0.05 m, 188 g/t Au across 0.87 m and 188 g/t Au across 0.70 m. Significant intervals included 8.7 g/t Au over 4.8 m from the surface expression of the north-west striking Tuvatu Lode.

Drilling campaigns were completed in several phases by TGM from 1995-2001 and by Lion One between 2008 and 2023. Completed drilling is summarised in Table 5a and 5b.

**Table 5a - Summary of Tuvatu Exploration Drilling inception to 2021**

Company	Surface RC Drilling		Surface Diamond Drilling		Underground Diamond Drilling	
TGM Phase 1	5,225 m (44 holes)	TURC101 to 171	42,783 m (193 holes)	TUDDH013 to TUDDH205	1,108 m (17 holes)	TUG01 to 17
TGM Phase 2	-	-	-	-	1,374 m (26 holes)	TUG18 to 43
TGM Phase 3	4,040 m (37 holes)	TURC172 to 208	8,702 m (24 holes)	TUDDH206 to TUDDH229	10,926 m (69 holes)	TUG45 to 113
Lion One 2008	-	-	376 m (2 holes)	TUDDH338 & TUDDH340	-	-
Lion One 2012-13	-	-	13,842 m (65 holes)	TUDDH341 to TUDDH405	-	-
Lion One 2015-16	-	-	2,472.9 m (12 holes)	TUDDH406 to TUDDH418	-	-
Lion One 2016-17	-	-	8,619.6 m (54 holes)	TUDDH419 to TUDDH472	1,684 m (16 holes)	TUG114 to 129
Lion One 2017-18	-	-	624 m (6 holes)	TUDDH-473 to TUDDH-478	-	-
Lion One 2018-19	-	-	3,733 m (15 holes)	TUDDH479- TUDDH493		
Lion One 2019-20	-	-	4,538 m (5 holes)	TUDDH494- TUDDH498		
Lion One 2020-21			13,272.3 m (38 holes)	TUDDH499, TUDDH500- TUDDH533		

**Table 5b - Summary of Tuvatu Exploration Drilling 2021-2023**

Company	Metallurgical Holes		Surface Diamond Drilling		Underground Diamond Drilling	
Lion One 2021-22	264 m (2 holes)	TUDDM-001 to TUDDM-002	25,997.1 m (78 holes)	TUDDH534 to TUDDH602	3,644.2 m (10 holes)	TUG134 to TUG144
Lion One 2022-23	863.3 m (5 holes)	TUDDM-003 to TUDDM-007	18,744.7 m (50 holes)	TUDDH603 to TUDDH653	4,505.1 m (7 holes)	TUG145 to TUG153
	Water Bores		Underground Grade Control		Raise Bore	
Lion One 2021-22	213.3 m (9 holes)	MW2021-1 to MW2022-4				
Lion One 2022-23			6,836 m (68 holes)	TGC-0001 to TGC-0068	537.1 m (3 holes)	TUDDG-001 to TUDDG-003

### TGM Drilling Phase 1 to 3 (1995 - 2001)

TGM completed three phases of drilling at Tuvatu from exploration through to resource delineation. Drilling was carried out both on the surface and from the 600 m underground exploration decline which was developed to a depth of 240 m below surface. Drilling methods included both diamond drill core and reverse circulation “RC”). Overall, TGM completed 51,484m of diamond core and 9,265 m of RC surface drilling, as well as 13,408m of underground drilling.

### Lion One Limited Drilling 2008

Two surface diamond drill holes (TUDDH-338 & TUDDH-340) totalling 375.90 m were drilled during October 2008 to test the Nubunidike / Hornet Creek / 290 Vein system over a strike length of 500 m at the Nubunidike Prospect, 1.6 km southwest of the Tuvatu Resource Area. Drilling was planned to intersect the veins about 50 m below the surface and gain information on the dip and strike continuity of the vein system, as well as grade distribution within the structures.

### Lion One Limited Drilling 2012 - 2013

In 2012, Lion One commenced a systematic program to delineate the extent of near surface gold mineralization. The Lion One exploration team planned and executed the drilling program under the supervision of Lion One's management at the time.

Drilling re-commenced in June 2012 with a combination of infill and step out holes. The program had three objectives:

- (i) infill drilling to increase the confidence level of the existing resource;
- (ii) step out drilling to expand the resource base; and
- (iii) exploratory drilling to test additional targets. Infill drill holes were planned to test areas of the intersections of the east-west trending Murau-Far West Lodes with the N-S trending Upper Ridge Lodes west of the north-south trending UR structural corridor and current resource.

Step out holes tested for mineralized extensions of the Tuvatu and H Lodes in the northern portion of the Tuvatu resource area, where surface mapping has identified continuous mineralization along a strike length of 300 m.

### Lion One Limited Drilling 2016 - 2017

Lion One's 2016 - 2017 diamond drilling program focussed on infilling gaps in the existing resource, particularly along strike and at depth, in areas considered priority mining areas for the first several years of potential mining development. There was a focus on determining continuity of grade and thickness of identified lodes, and completing holes in the northern extension of the Tuvatu resource (H and T lodes, now called the HT Corridor

lodes) and the southern extensions of various UR lodes. Underground diamond drilling focussed on infill of UR2, URW1, Tuvatu and H lodes, GRF and SKL lodes immediately to the north and south of the Core Shed Fault. Results from this program were released via various news releases during 2016 and 2017.

### Lion One Limited Drilling 2018

Lion One's 2018 diamond drilling program focussed on completing several regional holes into known surface mineralisation at Ura Creek to determine the nature of host rock, structures and alteration assemblage in the area.

### Lion One Limited Drilling 2019 – 2023

Lion One's 2019 - 2023 diamond drilling program has focussed on infill of known resource zones in the northern parts of the existing Tuvatu resource as well as completing several regional holes into known surface mineralisation at Jomaki Ridge and elsewhere. In October 2019, the Company announced the start of a diamond drill program, targeting the high-grade feeder structures beneath the Tuvatu resource area.

The Company is undertaking four tiers of drilling for exploration purposes:

- 1) shallow resource grade control drilling from surface and underground targeting areas of planned early production;
- 2) shallow resource infill drilling from surface targeting areas of planned mid-term production;
- 3) close spaced grade control drilling from below surface for higher resolution in areas targeted for near-term mining;
- 4) regional target areas within the Navilawa caldera, such as the new Lumuni occurrence, Banana Creek, Matanavatu, and Batiri and Qalibua creeks.

The Company's has encountered multiple high-grade intercepts from its high-grade feeder diamond drill program, which supports the alkaline gold model and the concept that Tuvatu has high-grade Au mineralization extending and evolving at great depths. The Company will continue this deep hole drill program, up to depths of 1,000m below the surface, to gain a better understanding of the underlying plumbing system which allowed a conduit for the gold-rich fluids from the base of the crust in that area. Drill targets are also quickly emerging at Navilawa. The two holes at Tuvatu West appear to have encountered high level splay structures, possibly above a deeper feeder structure and more holes are planned beneath Tuvatu itself where the company has intersected very high grade feeder structures. The Company plans to continue drilling at much deeper level at Tuvatu to prove the concept of the Navilawa Caldera hosting many millions of ounces of gold. Significant results have been the subject of various news releases and these programs are ongoing.

### Lion One Drilling Procedures

Drilling by Lion One was diamond core drilling from surface and the following procedures were used:

- Drill core was digitally photographed and placed into the database;
- Core was logged manually onto log sheets and all data entered into the database;
- Information included hole number, date drilled, name of driller/company, location, coordinates, core recovery, lithology, structure, RQD values, alteration, gangue minerals, sulphide minerals, mineralization, sample numbers, intervals samples, analytical values, comments, date logged and by whom. Specific gravity of selected intervals and lithologies were measured; and
- A summary log was prepared after the hole was logged.

Underground diamond drilling was also completed in 2017 and the same procedures were undertaken.

Drill core was cut in half with a core saw for sampling. Prior to late 2018, half-core samples were dispatched to the ALS sample preparation facility in Suva, Fiji. Samples were first crushed and pulverised at Suva, Fiji prior to analysis at ALS Minerals, an independent and qualified analytical laboratory in Brisbane, Australia. Gold is determined by fire assay and silver by Aqua regia digestion and AAS. From the commencement of the 2012 drilling program, all samples were also assayed for a large range of elements using the ICP method. Consistent

with industry standard practice, sample standards and blanks and other control methods are used to ensure quality control. Following the closure of the ALS preparation facility in Suva, all samples were couriered to ALS in either Brisbane or Townsville for complete sample preparation and analysis.

In late 2018, Lion One commissioned its own state of the art geochemical and metallurgical laboratory in Fiji. For completeness, a brief review of the Company's laboratory's processes and procedures are included in this section, in addition to the Company's QA/QC summary.

## SAMPLE PREPARATION, ANALYSES, AND SECURITY

This section describes the sampling methods, analytical techniques and assay QA/QC protocols employed at the Lion One. All exploration programs were managed by Lion One, and all work was carried out in accordance with Lion One's internal procedures.

### Sampling methods

Rock chip channel samples were collected by Lion One from surface outcrops, roadcuts and underground workings. Continuous samples were collected from sample lines across lodes using a hammer and chisel. Surface outcrop and roadcut sample lines were orientated perpendicular to the strike of lodes and samples were collected at intervals corresponding to geology. Underground samples were collected from ribs of tunnels that cross-cut lodes.

Samples were collected in plastic bags. Sample information was recorded in a sample tag book pre-numbered with a unique sample identifier and multiple tear-off tags. One sample tag is included in the plastic bag with the sample. The sample number is written on each bag with a permanent marker. Plastic bags are sealed with staples and tape, so the sample cannot be accessed by any other person.

Grab samples were collected by Lion One from selected outcrop exposures of lodes and structures. Lion One uses rock chip channel sampling as the preferred sampling method, so there is a limited number of grab samples.

All drilling completed at the Property between October 2019 and April 2021 was completed by contract and Lion One diamond drillers.

Core sampling was completed by Lion One personnel at the company's on-site core facility. The core is logged, and sample intervals are identified by geologists based on geology. Individual sample intervals are physically marked on the core using a crayon at intervals between 0.3 and 1.2 m lengths and respecting geological, structural, and alteration contacts and poor sample recovery (voids, sample loss) as appropriate. Drill holes are sampled top to bottom, regardless of visible mineralization or alteration.

During this sampling process the geologist records the hole ID and relevant interval distance of the sample in a sample tag book pre-numbered with a unique sample identifier and two tear-off tags. A cut line is marked along the core axis with a permanent marker or crayon by geologists.

The core is photographed (every tray of core is photographed separately with tray number and interval clearly marked) and core to be sampled is cut in half along the cut line using a diamond saw. Half of the core is then collected consistently from one side of the cutting line and placed into sample bags pre-labelled with a corresponding unique sample number. One tear-off sample tag is affixed to the core box in the middle of the sample interval and the other tear-off tag is placed into the sample bag.

Once sampling is complete, the geologist reviews the samples and seals the plastic sample bags with staples and tape. QA/QC samples are inserted into the sample sequence and sample bags are then placed into large poly-weave sample bags for transportation to the laboratory. The polyweave bags are sealed with zip lock ties.

Lion One manages all aspects of sampling from the collection of samples to sample delivery to the laboratory. Drill core is collected from each drilling site and transported to the on-site core facility every 24 hours. All drill

core, rock chip, and grab samples are transported to the laboratory the day of sample collection.

Lion One has 24-hour security posted at the site core facility and 24-hour security posted at drill rigs when drill crews are on time off.

### Laboratory Analysis Procedures

All pre-2000 assaying by Emperor Gold Mining Company Limited for TGM used a 50 g subsample that was analyzed via fire assay with an AAS finish at the mine laboratory at Vatukoula. All samples above 1 g/t Au were re-assayed.

All analyses in the exploration programs by Lion One in 2008 and 2012 to 2019 were carried out by ALS Minerals laboratories in Brisbane, Australia. Gold was analyzed by fire assay with a 30 g charge and AAS finish. Samples with higher grade gold (greater than 3 g/t Au) were re-assayed. Silver was analyzed by aqua regia digestion and AAS.

Both drilling, rock chip, and costean/trench exploration samples were analyzed for 33 elements using a four-acid digestion and inductively coupled plasma atomic emission spectrometry, as well as for gold.

Following the commissioning of the Lion One Limited geochemical laboratory in Fiji in October 2019, Lion One has completed its own sample analysis to the same standard as that undertaken by ALS in Australia. Lion One sends check samples to ALS in Australia for appropriate QA/QC. Samples are analyzed at Lion One's own geochemical laboratory in Fiji, whilst duplicates are sent to ALS laboratories in Australia. All samples are pulverized to 80% passing through 75 microns. Gold analysis is carried out using fire assay with an AA finish (ALS code Au-AA26). Samples that returned grades greater than 10 g/t Au by Au-AA26 are re-analyzed by gravimetric method (ALS code Au-GRA22). The results are all analyzed by ALS Townsville, Queensland, Australia and include Au-AA26, and also Au-GRA22 where applicable.

### Sample preparation and analysis

All drill core, rock chip and grab samples collected by Lion One since the start of 2019 were dispatched to its own Lion One laboratory (LOL) in at its head office in Fiji, at Waimalika Nadi, Fiji for sample preparation, and for geochemical analysis. The site has 24-hour security when the laboratory is not operating.

All samples are prepared in accordance with LOL preparation standard which involves the logging of samples in the tracking system (register book) and loaded in the drying oven. After drying, the entire portion of samples is subjected to preliminary coarse crushing using jaw crusher to 70% passing 16 mm followed by fine crushing using Boyd crusher to better than 80% passing a 2mm (Tyler 10 mesh) screen. A split of up to 1,000 g is taken using rotary splitter (Boyd crusher/rotary splitter combination) and then pulverize in a grinding mill with a standard steel bowl (LM2 pulverizer) to better than 85% passing a 75 µm (Tyler 200 mesh) screen. Compressed air and brushes are used to clean the pulverizing bowl between each sample. Barren materials are crushed between samples to clean the equipment (Jaw crusher & Boyd crusher/splitter). To minimize cross-contamination, cleaning of pulverizing bowls between samples, (pulverizing with barren materials). A 250g pulp sample is manually split by simply turning the bowl upside down on the mat and taking random samples from the pile and 250 grams sample is transferred into a small plastic bag, (scoop in 10 increments) and the analysis is done on this pulp. All excess pulverized samples are packed in a separate plastic bag and kept in a storage container as a bulk pulp with a coarse reject (any unpulverized remaining sample) for future reference. The LOL laboratory sample preparation QC includes a screen test on every 15th sample for the coarse crush and on every 10th sample for the pulp. Any sample that failed the screen test was re-processed and re-screened.

Lion One's laboratory team has detailed documentation of all processes and procedures carried out in its laboratory.

All pulp samples are then processed further for sample analysis. A summary of analytical methods used is presented in the table below.

Sample analysis for gold, 25g charge weight fire assayed by lead collection and the resulting prill digested with aqua regia followed by Atomic Absorption Spectrometer (LOL code FA25AAS), and multi-element geochemistry samples aqua regia digest and Inductively Coupled Plasma (ICP) Optical Emission Spectroscopy (OES) analysis of Ag, As, Cu, Pb, Fe, Se, Te, V and Zn (LOL code AR05OES). Samples returning assay results greater than 10 g/t Au were analyzed by fire assay and gravimetric finish (LOL code Au-GRA).

Lion One Laboratory sample analysis

<b>Drill campaign</b>	<b>LOL analysis code *</b>	<b>Elements</b>	<b>Detection range</b>	<b>Description</b>	<b>Protocol notes</b>
2023	FA25AAS	Au	0.01 – 160 ppm	25g Fire assay, AAS analysis	Initial analysis
	Ag-AR05OES Pb-AR05OES Cu-AR05OES Zn-AR05OES	Ag Pb Cu Zn	0.2 - 200 ppm 2 – 10,000 ppm 1 – 10,000 ppm 1 – 2000 ppm	0.5g sample Aqua-regia digest ICP-OES analysis	Initial analysis
	Au-GRA	Au	10-10,000 ppm	25/50g sample by Fire assay, gravimetric analysis	Au samples > 10 ppm analyzed by Au-GRA
	Ag-OG4 Cu-OG4 Pb-OG4 Zn-OG4	Ag Cu Pb Zn	0.2 - 200 ppm 1 – 10,000 ppm 2 – 10,000 ppm 1 – 2000 ppm	0.5g sample Aqua-regia digest ICP-OES analysis	Overlimit samples analyzed by OG-4
	As-AR05OES Fe-AR05OES Se-AR05OES Te-AR05OES V-AR05OES	As Fe Se Te V	2 – 10,000 ppm 0.01 - 10 % 5 – 2000 ppm 5 – 2000 ppm 1 – 20,000 ppm	0.5g sample Aqua-regia digest ICP-OES analysis	Initial analysis

Sample Security

All prepared drill core and rock chip samples, (master pulp, bulk & coarse reject) are locked in the sample storage sea containers located at the lay-down area. Surveillance cameras are installed in the sample preparation and analytical area. Video surveillances are used to validate entry authorization by viewing the identity of the worker and verify identity of unauthorized personnel after authorized access.

Laboratory Independence and Certification

The laboratory at the Vatukoula Gold Mine used by TGM was a private laboratory operated by Emperor Gold Mining Company Limited. The ALS Minerals laboratories used by Lion One are part of the worldwide ALS Limited group of companies. ALS Minerals has been used by Lion One for all subsequent geochemical assay work.

## Bulk density

Density measurements are completed by Lion One personnel as part of routine core processing procedures. Samples are selected in both mineralized and non-mineralized areas. Measurements are completed at a density weigh station where water displacement is used to approximate volume. Density is calculated by dividing the dry weight by the calculated volume. This method is appropriate for Tuvatu core because the rock is primarily competent and non-porous. Weighing scale calibration is completed regularly as part of the density sampling program.

## QUALITY ASSURANCE / QUALITY CONTROL

Lion One laboratory has established QA/QC procedures which cover sample collection and processing at the Lion One Property. All drilling programs completed on the project incorporate the insertion of certified reference materials (CRMs), blanks, and duplicates into the sample stream on a batch-by-batch basis. Lion One Laboratory completed a detailed review of QA/QC protocols in 2020. The following discussion is based on Lion One findings of drilling and QA/QC databases associated with the drillholes from which assays have been received at the effective date of the Mineral Resource. Quality assurance (QA) is necessary to demonstrate that the assay data has precision and accuracy within generally accepted limits for the sampling and analytical methods used. Quality control (QC) consists of procedures used to ensure that an adequate level of quality is maintained in the process of sampling, preparing, and assaying the samples. In general, QA/QC programs are designed to prevent or detect contamination and allow analytical precision and accuracy to be quantified. In addition, a QA/QC program can disclose the overall sampling and assaying variability of the sampling method itself.

The assay performance of the primary laboratory used by Lion One was assessed by a review of results from the insertion of certified reference material (CRM) standards. The CRM is a sample of known value that is used to assess laboratory performance. A coarse blank is employed to help identify any contamination issues that may occur at the preparation stage of the assay procedure. This barren rock, or blank, is devoid of significant mineralization and is likewise inserted into the sample stream at a prescribed rate.

Assay precision is assessed by reprocessing duplicate samples from designated stages of the analytical process from the primary stage of sample splitting, through sample preparation stages of crushing, pulverizing/splitting, and assaying. Assay accuracy is assessed using by comparing the analytical data against the certified mean and standard deviation (SD) of the CRM.

Lion One Laboratory employed a standard quality QA/QC program during its October 2019-June 2023 drilling programs which consisted of regularly inserting control samples into the sample stream. QA/QC samples employed in the Lion One laboratory program consisted of CRMs, blanks, and duplicate samples.

Lion One monitors Au, Ag, Cu, Pb, and Zn assay values in CRMs, blanks, and duplicates however only the results of Gold are discussed in this report as silver, copper, lead, and zinc are not components of the Mineral Resource. A summary of QA/QC samples included during the October 2019 – June 2023 program is presented in the table below.

Lion One Geology QA/QC samples by year

<b>Year</b>	<b>Drill samples</b>	<b>CRMs</b>	<b>Blanks</b>	<b>field duplicates (¼ core)</b>	<b>Coarse reject umpire duplicates</b>
2019	809	21	19	19	n/a
2020	9,053	191	193	188	n/a
2021	22,499	483	484	450	n/a
2022	51,577	1091	1096	1075	n/a
2023	29,477	629	627	611	n/a
<b>Total</b>	<b>113,415</b>	<b>2,415</b>	<b>2,419</b>	<b>2,343</b>	

Source: Compiled by Lion One lab.

## Lion One Geology QA/QC insertion rates

Year	CRMs	Blanks	Field duplicates (¼ core)	Coarse reject umpire duplicates	Total QA/QC
2019	2.60%	2.35%	2.35%	n/a	7.29%
2020	2.11%	2.13%	2.08%	n/a	6.32%
2021	2.15%	2.15%	2.00%	n/a	6.30%
2022	2.12%	2.12%	2.08%	n/a	6.32%
2023	2.13%	2.13%	2.07%	n/a	6.33%
<b>Overall</b>	<b>2.22%</b>	<b>2.18%</b>	<b>2.12%</b>		<b>6.51%</b>

### Certified Reference Materials

Four different CRMs were used by Lion One Laboratory in the October 2019 – June 2023 laboratory programs. All CRMs were supplied by Gannet Holdings PTY Ltd, Geostats and ORE research & Exploration Australia and certified for Au analysis by Fire Assay and AAS and Ag, Cu, Pb, and Zn analysis by four-acid digest and ICP. All CRMs have a relative standard deviation (RSD) of less than 5%.

### Lion One Geology CRMs

Twenty four CRMs were used by Lion One in the 2019 – 2023 drill programs. All CRMs were supplied by Rocklabs Ltd of Auckland, New Zealand and ORE research & Exploration Australia and both certified for Au analysis.

CRMs are supplied as both 100 g individual sealed packages and in bulk 1 kg containers. Lion One personnel package bulk material into 100 g 'zip-lock' bags for insertion into the sample stream. Disposable gloves and spoons are used to ensure contamination does not occur during this process.

Lion One Lab's internal procedures require that one CRM be inserted for every 20 samples. CRM performance is monitored on a batch-by-batch basis. For gold analysis, Lion One lab accepts assay results within 10% plus 2 times the detection limit of the expected value of the CRM.

Lion One Geology's internal procedures require that one CRM be inserted for every 50 samples. CRM performance is monitored on a batch-by-batch basis.

CRMs contain standard, predetermined concentrations of material (Au) which are inserted into the sample stream to check the analytical accuracy of the laboratory. CRMs should be monitored on a batch-by-batch basis and remedial action taken immediately if required. For each economic mineral, the use of at least three CRMs with values:

- At the approximate cut-off grade of the deposit.
- At the approximate expected grade of the deposit.
- At a higher grade.

A total of 2,544 CRMs were submitted between October 2019 and June 2023 representing an average overall insertion rate of 2.0%.

Comparison between CRM values and analytical results are included in the table below

CRM			Analytical results			Comparison	
CRM	Expected Au value (ppm)	SD	Number of assays	Mean	SD	Mean vs expected	SD of results vs expected
OxJ120	2.365	0.063	24	2.405	0.059	98.33%	93%
SQ88	39.723	0.947	3	39.835	0.203	99.72%	21%
SL76	5.96	0.192	20	5.919	0.146	99.32%	76%
OxD144	0.417	0.009	8	0.405	0.016	97.12%	21%
OxL78	5.876	0.153	59	5.978	0.035	98.27%	23%
OxG60	1.025	0.028	63	0.989	0.024	96.53%	86%
SQ88	39.723	0.947	205	39.694	1.024	99.93%	92%
SP89	18.455	0.265	201	18.564	0.457	99.41%	28%
SN104	9.182	0.184	161	9.153	0.270	99.68%	53%
SL108	5.774	0.138	213	5.787	0.188	99.78%	64%
HiSiK4	3.463	0.09	164	3.487	0.062	99.31%	69%
SH82	1.333	0.027	199	1.305	0.026	97.93%	96%
SF100	0.86	0.016	217	0.857	0.035	99.64%	17%
OREAS-230	0.337	0.013	397	0.336	0.016	99.84%	79%
OREAS-234	1.2	0.03	52	1.200	0.025	99.97%	83%
OREAS-242	8.67	0.215	394	8.641	0.233	99.67%	92%
OREAS-257b	14.22	0.373	33	14.064	0.383	98.90%	97%

Lion One uses material collected from local roadcuts as the source of coarse blank material. Cobble to boulder sized material is collected and pulverized by Lion One personnel for insertion into the sample stream. A sandy siltstone and a sandy conglomerate are used as blank material.

#### Geology Duplicate samples

Lion One Geology's has submitted a total of 2,305 quarter core duplicate samples till June 2023. Duplicate samples are selected once assay results have been received to ensure that duplicate samples encompass the entire grade range. Duplicate samples are collected by cutting the remaining half core in half. One portion of the quarter core is submitted for duplicate analysis, and the remaining portion of quarter core is returned to the core tray.

The purpose of this is to measure the precision of the entire sampling and analysis procedure as well as providing a measure of the inherent variability and heterogeneity of the mineralized bodies (nugget effect). Duplicates were the last samples submitted in each batch of samples from a given drill hole to make it less obvious to the laboratory which sample was being duplicated.

Lion One lab has submitted a total of 1,331 pulp reject/residue samples from October 2019 and December 2020 to ALS laboratory in Townsville Australia for check assay analysis and a part of QA/QC programme. ALS lab is an independent geochemical laboratory certified according to ISO standard. A single value of a LOL laboratory is compared with a single value of ALS laboratory. For any sample returning an assay above 0.5g/t Au, and any sample below 0.5g/t Au but within a broader potentially reportable interval, and any sample returning an assay more than 0.2% Cu, Pb, Zn, and any sample returning an assay more than 5ppm Ag, or other anomalous elements as directed by the technical team, the pulp samples will be sent to ALS for QA/QC checks.

285 sample pulps from the 2019 drilling program and 1,046 sample pulps from the 2020 drilling program were

submitted to ALS for check assay purposes. Samples from the first quarter 2021 drilling program will be submitted for check assays in early June 2021. Out of 1,331 pulp samples submitted to ALS for QA/QC checks, only 5-7 % samples fall out of tolerance.

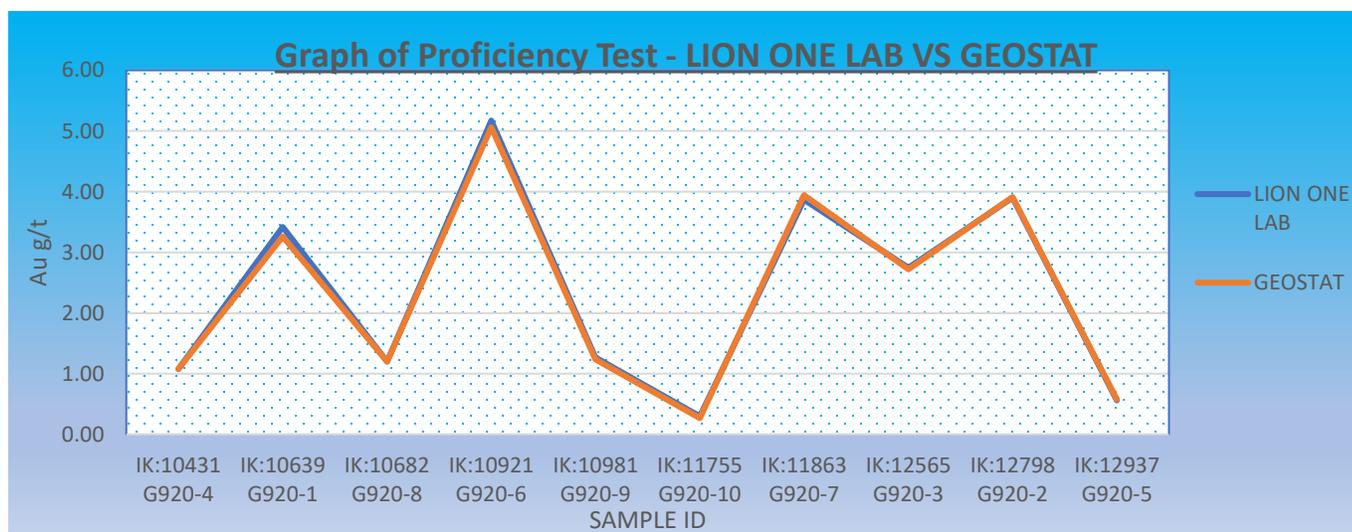
### Proficiency test

Proficiency testing determines the performance of individual laboratories for specific tests or measurements and is used to monitor laboratories' continuing performance and for laboratory accreditation. As this term implies, proficiency testing compares the measuring results obtained by different laboratories, also called inter-laboratory comparison.

The samples submitted to the lion One laboratory consisted of:

- 10 gold samples
- 10 geochemical base metal samples
- 6 ore-grade base metal samples

These pre-prepare pulp samples with unknown values were submitted by GEOSTATS AUSTRALIA to Lion One lab to carry out the Au plus other base metal analysis. The results obtained by Lion One lab were sent to Geostats Australia for comparison, and are included in the graph below, Lion One Lab Proficiency test graph.



Lion One lab has developed and implemented sound procedures which manage sample preparation, analytical and security procedures. Drilling programs completed on the Property between October 2019 and mid 2021 have included QA/QC monitoring programs which have incorporated the insertion of CRMs, blanks, and duplicates into the sample streams, and (check) assays at a separate laboratory.

During pre-2000 drilling by TGM, all samples were dispatched to the Emperor Mine laboratory at Vatukoula for preparation and analysis. The whole sample was pulverized in a 5 kg ring mill prior to splitting.

In the Lion One programs, DD core was logged and sampled on site at Tuvatu by Lion One staff. Core samples were delivered by Lion One to the Suva, Fiji sample preparation facility of ALS Minerals, a division of Australian Laboratory Services Pty. Ltd., an independent accredited analytical laboratory.

The samples were finely crushed (greater than 75% passing through -2 mm) and a 1 kg split then pulverized (greater than 85% passing through -75  $\mu$ m) prior to dispatch to ALS Minerals in Brisbane, Australia, an independent accredited analytical laboratory, for analysis.

Following the closure of the ALS Minerals sample preparation laboratory in Suva in 2015, Lion One dispatched the entire sample to ALS Minerals in Australia for sample preparation and analysis. Samples were securely dispatched via DHL courier.

The same process of sample preparation was applied for the 2016 to 2017 diamond drilling program and the rock chip, trench, and costean sampling.

Following the commissioning of the Lion One Limited geochemical laboratory in Fiji in October 2019, Lion One has completed its own sample preparation to the same standard as that undertaken by ALS in Australia. Lion One sends check samples to ALS in Australia for appropriate QA/QC.

The assay analyses performed during Lion One's post 2008 drilling programs and all trench, bench and rock chip samples was subject to a formal quality assurance and quality control (QA/QC) program that was under the supervision of the various Lion One's onsite managers at the time.

Certified reference materials (CRM), blanks, and field duplicates samples were inserted prior to shipment from site to monitor the quality control of the data. MA understands that 3 CRM samples were inserted every 100 samples and 2 field duplicates were inserted in every batch of 100 samples. MA received and reviewed QA/QC summary reports (for CRM's, field duplicates, and assay laboratory duplicates) from rOREdata Pty Ltd. database consultants.

#### Standards Results - Accuracy

Accuracy is identifying the true grade of a sample, often achieved by submitting certified reference material ("CRM") commonly referred to as standards ("STD").

Ten different gold CRM standards supplied by Rocklabs Ltd. of New Zealand were used by Lion One for quality control in core sampling and rock chip sampling.

#### DATA VERIFICATION PROCEDURES

The data verification involved database integrity checking, site visit, and independent sample collection.

#### Drill Hole Database

Lion One provided MA with a large amount of data relating to the Project. Lion One's current drill hole database, historic block models, and geological wireframes were used, as were reports on Mineral Resource estimation. MA also accessed archived data used for Mineral Resource estimation in 2000 and 2009.

#### DRILL HOLE DATABASE REVIEW

MA was provided with an export of Lion One's current drill hole database in Microsoft® Access format, named Database ExportDrillHoles.mdb. The database contained tables for collar details, collar metadata, downhole surveys, assays, weathering, lithology, alteration, geotechnical, specific gravity data, and lode tags.

#### Database Validation

Microsoft® Access queries were used to perform basic validation checks, and holes were then loaded into GEOVIA Surpac™ for a second round of validation.

#### Assessment of RC Drill Holes

Sample assay data from diamond (surface plus underground, all dates) and RC drilling were compared.

From the available data, it was concluded that there appears to be no major problem with utilising RC samples as part of a resource estimate.

## MINERAL RESOURCE ESTIMATES

The Mineral Resource models and estimates, and the site visit were conducted by Mr. Ian Taylor, B.Sc. (Hons), G.Cert. Geostats, M.AusIMM (CP) (Qualified Person [QP]) of Mining Associates Pty Ltd. ("MA"), who visited the site from February 25 to 28, 2014; July 31 to August 5, 2017; and September 28 to October 3, 2017. On January 2, 2018, Lion One engaged MA to prepare an updated Mineral Resource model suitable for mine design and scheduling of the resources for the Project.

A number of historical mineral resource studies have been carried out for the Project by previous operators over the period from 1997 to 2010. Previous Mineral Resources were developed with classic techniques suited to broad zones of mineralization of relatively homogenous mineralization. Specifically, the compositing of individual samples to 1 m downhole and utilizing Inverse Distance Cubed linear weighting techniques of the capped data.

MA considers that a two-dimensional (2D) estimate using grade and thickness across the narrow vein is a better method. The model has to incorporate a level of conceptual interpretation (implicit modelling) as the veins are very narrow. Traditional cross-section interpretation (explicit modelling) is near impossible.

The methodology used in this style of Mineral Resource estimate is chosen as it facilitates better models of vein thicknesses and does not have the problems introduced by attempting to construct very narrow wireframes (vein walls crossing and too many small blocks). The 2D refolded model provides a more realistic vein model ideal for underground design or open pit design where veins come to surface.

Following the completion of the 2016/2017 diamond drilling program, MA undertook a study to update the Mineral Resources with the results of that drilling program and other work completed by Lion One to December 2017. In January 2018, MA was commissioned by Lion One to review the geology and create a Mineral Resource estimate for the Project. The Mineral Resource was estimated for each vein individually using OK of width and grade, the latter using accumulations, into a 3D block model.

MA updated the Mineral Resource Estimate in January 2018. The extrapolation of the vein extents is generally less than 30 m. The parent block size of the model is 10 m<sup>3</sup> with sub-blocks down to 0.3125 m<sup>3</sup>. The small sub-block size allows more accurate design of stopes and dilution during the mine design phase.

In particular, drilling added significant additional information in the HT Corridor zone of mineralization (H and Tuvatu Lodes), whilst reinterpretation and surface work in the area of the Western Veins (which are interpreted to be the western extension of the Murau Lodes) also added significant information to Lion One's knowledge. Stricter parameters and tighter controls than those used for the 2014 estimate (which was put together for the 2015 PEA study) were used in this study. As a consequence of these tight controls, the Mineral Resource estimate related to some lodes was reduced in tonnes and/or grade. The study has not dramatically changed the interpretation or mineral inventory of that part of the mineralized body since the 2015 Mineral Resource report, Lion One's understanding of the geological controls within the area has increased considerably.

### Drill Hole Spacing

Drill hole data spacing is variable within each domain. Above 50 m reduced level (RL), the drill spacing in Upper Ridges is reasonably tight on a 20 m grid, and below 50 m RL, the drill spacing increases to approximately 50 m grid. Upper Ridges Western Lodes are less well drilled. Development exists on UR2, UR5, and GRF Veins, and short drifts have been developed on the SKL Lodes. Murau Veins are shallower and are generally drilled at 20 m spacing. The 2016 and 2017 drilling has focused on the high-grade proportions of the UR Veins and the SKL Lodes. Surface holes focused on the Tuvatu (T) and H Lodes

### Channel samples

Channel samples were used to guide the location, grade and thickness of veins at surface. In areas of intense channel sampling or where channels were sampled twice only, one channel was selected to inform the estimate.

## Summary Statistics

Summary statistics for vein gold, thickness, and grams multiplied by meters by area are presented in Table 14-4 and Table 14-5 in the PEA. Informing sample grades (uncapped) for the Upper Ridges Veins range from 2.66 g/t Au and 0.42 m thickness for UR7 and 10.12 g/t Au and 0.79 m thickness for URW1 (Table 14-4 in the PEA). In the Murau Area, veins range from 3.06 g/t Au and 0.89 m thickness for M1 to 7.60 g/t Au and 1.68 m thickness for Snake Vein (Table 14-5 in the PEA). SKL Veins have a very high vein at 12.45 g/t Au (Table 14-5 in the PEA).

## RESOURCE ESTIMATE

Based on the study herein reported, delineated mineralization of the Tuvatu Mineral Resource is classified as a Mineral Resource according to the definitions from Canadian Institute for Mining, Metallurgy and Petroleum Definition Standards (2014).

The Resource reported in 2018 is presented in Table 6, at the higher cut off for all material of 3 g/t Au there is an Indicated resource of 1,007,000 tonnes at 8.5 g/t Au for 274,600 oz and an Inferred resource of 1,325,000 tonnes at 9.0 g/t Au for 384,000 oz of Au.

**Table 6 - Tuvatu Resource Reported at Various Cut-offs**

Cut off g/t Au	Indicated Resource			Inferred Resource		
	Tonnes	g/t Au	oz Au	Tonnes	g/t Au	oz Au
1.0	1,530,000	6.3	308,400	2,265,000	6.1	444,600
2.0	1,283,000	7.2	296,400	1,822,000	7.2	423,300
3.0	1,007,000	8.5	274,600	1,325,000	9.0	384,000
5.0	687,000	10.6	234,300	788,000	12.5	317,500

The reporting of tonnages and grade figures reflects the relative uncertainty of the estimate, and rounding to the appropriately significant figures have been reported, some discrepancy in the addition of rounded figures may occur.

The Mining Study release in 2018 considered Indicated and Inferred Mineral Resources. There are no Measured Mineral Resources. The Mining Study is based on a metal price of US\$1,3500/oz gold. Due to the high amount of Inferred Mineral Resources in the mine plan and the preliminary nature of the Study, no Mineral Reserves are reported.

## Bulk Density

For use in the 2018 resource estimate, a total of 2,079 bulk density measurements were reported from the drill hole cores at Tuvatu, with an average reported bulk density of 2.61 t/m<sup>3</sup> (Table 14-17 in the PEA). The statistical average of the bulk density measurements is assigned to all lithologies for this Mineral Resource estimate.

Bulk density data is stored in the drill hole database with a rock type code associated with each reading (Table 14-18 in the PEA). The majority of material is logged as either monzonite (MZ) or medium-grained monzonite (MMZ), each reporting average densities of 2.61 t/m<sup>3</sup> and 2.62 t/m<sup>3</sup>, respectively. Mineralized samples are likely to be from vein breccia (VBX) or unmineralized veins (UV) with a density of 2.58 t/m<sup>3</sup> and 2.50 t/m<sup>3</sup>, respectively.

Density values for mineralization were extracted from the drill hole database and 228 samples were found to be within defined mineralization. The average of mineralized samples used in definition of wireframe interpretations is 2.57 t/m<sup>3</sup> (Table 14-18 in the PEA). This is a similar result to the average of 46 VBX and 53 UV samples. The bulk density assigned to mineralization is 2.57 t/m<sup>3</sup>.

Waste material is assigned the average bulk density of monzonite (2.61 t/m<sup>3</sup>). The average density of all measurements at Tuvatu is 2.61 t/m<sup>3</sup>.

## GEOTECHNICAL

In 2017, AMC conducted a review and update of the previously completed geotechnical assessments (AMC 2000; 2014) for the Project. Additional information was collected from recent resource diamond drilling and observed during a site visit. The report provided geotechnical guidelines for when underground mining begins. The geotechnical drill hole database was significantly built upon from previous studies. A total of 27 holes were logged geotechnically from drill core photos to supplement knowledge of ground conditions on the various lodes. Logging was conducted on and immediately adjacent to the main mineralized lodes.

Furthermore, the report discussed the site visit, an underground tour, and the limited viewing of drill core to confirm parameters such as joint planarity and alteration, which cannot be accurately estimated from photos. At the time of the report, handheld shrinkage stoping and breast stoping mining methods were being considered as the main methods of extracting the mineralized material bodies.

Entech reviewed the planned stoping dimensions and found these fit for purpose for the mining method considered in AMC (2017). The report also provided recommendations for ground support in decline, access, and mineralized material drive development. The designs utilized empirical ground support charts to first estimate ground support requirements, followed by detailed kinematic analysis utilizing Unwedge software package. AMC (2017) did not specify the use of surface support in mineralized material drives; however, the report did specify the use of surface support (mesh) in all decline development and other long-term access development. The ground support designs were found to be sound and fit for purpose; however, Entech recommends the use of mesh surface support in all mineralized material drives.

Lion One engaged Entech to complete a geotechnical gap analysis to review the sufficiency of geotechnical work undertaken to date. After reviewing the available reports, performing an underground site visit, and check-logging over 20 DDHs for verification, Entech concluded the following:

- The geotechnical drill hole data is sufficient in spread to account for spatial variability in ground conditions and accounts for the different mineralized material lodes present.
- Entech verified rock mass conditions by check logging and found that in some cases the condition of joints has been underestimated (only slightly). This has been factored by Entech.
- Ground support designs meet the demand requirements and serviceability of the mine; however, Entech recommends that all tunnels are meshed on the back to the shoulder as a minimum surface support, in line with Australian mining standards. This is important as the proposed mining method in this Technical Report is considering mechanized mining methods as opposed to the hand-held mining methods considered in previous studies.

In this Technical Report, Entech recommends the employment of top-down open stoping with rib pillars. This mining method is widely used in narrow vein mineralized material bodies, is well suited to good ground conditions, is mechanized and therefore speeds up the mining process, and is operationally one of the lowest cost narrow vein mining methods. Entech reviewed the stable stoping spans (Table 16-2 of the PEA), with a strategy of leaving in situ rib pillars for local and global stability.

Pillar dimensions are recommended as follows:

- Rib pillars are to be 3 m along strike and the full stope height. Where the mineralized material body exceeds 3 m in thickness, pillar length should be increased to be equal to the stope width to maintain a 1:1 ratio of width to length. Rib pillars must be staggered from level to level.
- Sill pillars are to be left for the length of the full level, with a height of 5 m, where the down dip span of the individual mineralized material body exceeds 100 m.
- If stopes are 7.5 m apart or closer (i.e., a footwall and hangingwall lode), then the stopes should either be combined, or the highest value stope mined only. If parallel stopes are greater than 7.5 m apart, then the footwall lode should be mined first, and both stopes should be extracted on the same level before proceeding to the next level below.
- Stopes separated 30 m or greater can be considered independent of one another.

## MINING METHOD

Perth-based mining consultant, Entech, produced a mine design and schedule for the Project using Deswik mining software. Entech prepared a PEA-level mining assessment of the Project, which provides a basis for underground mine development. The mine operations will consist of narrow vein mining, which has resulted in constraints to mining productivity and the estimated costs being higher than for wide vein operations as expected. Mine planning is an ongoing activity at an operating mine, and as such, the mine plan, costs, and productivities will be updated as mining progresses. The Project has a mineralization body amenable to longhole mining methods and has a positive economic outlook based on the mining work compiled by various consultants. Further work related to determining the economic viability of expanding the mineralized material drives and minimum mining width combined with additional geotechnical data is likely to show that the Project is viable.

The Project is a planned underground mine, which is currently accessed through an exploration portal and decline that was initially mined in 1997. Currently, no mining is taking place, but access has been maintained for dewatering and follow-up geological sampling purposes. Lion One is currently completing site excavations to establish mining and processing facilities.

The proposed ventilation layout uses the exploration and main declines as fresh air intakes, with the air then exhausting through the return air network and to surface via raise bores.

Level spacing of 15 m was selected to suit the proposed longhole stoping method, although shorter “blind” stopes can be taken as required. Stopes are proposed to remain open for the life of the Project.

The Tuvatu deposit mineralization is primarily sub-vertical ranging from 70 to 80°, with less than 1% of stope tonnes contained in flat lying mineralization ranging from 0 to 30°. The veins are a series of parallel lodes with varying distance of separation of waste between lodes.

The proposed mining method is longhole stoping, with minor airleg stoping. Originally, the operation was envisioned as a handheld mining project due to the narrow veins; however, Lion One’s production and financial targets have led to adopting mechanized longhole stoping as the primary stoping method. Stoping of flatter dipping mineralized areas (less than 1% of the stope tonnes), where longhole stoping is not viable, will be excavated via handheld airlegs.

The Tuvatu deposit is a high-grade, narrow vein deposit in competent ground. This mineralization style excludes many bulk mining techniques. Handheld airleg mining, mechanised longhole stoping, and mechanised cut-and-fill methods were considered as three viable methods for comparison. The high backfill cost associated with underhand cut-and-fill meant only overhand cut-and-fill was considered. The generally good geotechnical conditions allow for relatively small in situ pillars, reducing the benefits of a higher extraction, but more expensive backfill method.

The three mining methods were assessed with a ranking system that took into account level spacing (lateral development cost), mineralized material extraction ratio, dilution control, productivity, production cost, geotechnical risk, and safety risk. The results of the quantitative analysis show longhole stoping to be the most suitable mining method.

### Development Design - Decline

The Tuvatu deposit has a north–south strike of approximately 800 m. The proposed layout shows mine access from two portals: the existing exploration portal and a new portal, which will access the main haulage decline. The existing exploration decline was previously mined to approximately 3.0 m wide x 3.0 m high. The new design proposes stripping this decline to a 4.5 m wide x 4.5 m high drive size (the same profile as the main decline) to allow a second means of access at a sufficient size for the selected truck fleet. The exploration decline will be the primary haulage route for the initial part of the Project until the link drive is established to the new main decline. At this point, the main decline will become the main haulage and travel point into the mine, with the exploration decline serving as a second means of egress and additional fresh air intake into the mine.

## LIFE-OF-MINE PRODUCTION

### Mining Scheduling

Entech completed the mine scheduling using Deswik planning and scheduling software. Multiple iterations of the schedule were completed, considering alterations to the mining sequence, flexing of productivity rates, as well as detailed review of linking and interaction between activities in the schedule.

A focus on producing a practical, realistic, and executable mining plan is of key importance at Tuvatu. Several iterations of the schedule were provided to a mining contractor to provide cost estimates, and consideration was given to their feedback, which has been integrated into the mining schedule.

**Table 7 – Mining Annual Physicals**

	Units	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Totals
Total Mined Mill Feed	t	32,150	311,553	361,192	337,138	297,533	44,501	1,384,067
Gold Grade Mined	g/t	7.77	7.42	8.50	10.40	8.09	7.31	8.57
Gold Mined	oz	8,032	74,356	98,596	112,718	77,364	10,466	381,532
Lateral Development	m	4,917	14,575	14,049	6,282	0	0	39,823
Vertical Development	m	385	2,209	2,019	1,938	1,203	70	7,824
Production Drilling	m	6,315	76,215	91,125	96,660	98,107	16,221	384,643
Haulage	tkm	135,703	434,447	653,107	469,505	387,502	40,007	2,120,271

### Mining Fleet and Manning Requirements

Mobile fleet equipment requirements are based on the specified equipment list the mining contractor provided in their cost submission. The fleet estimates outlined in this section represent the equipment necessary to perform the following duties:

- Excavate the lateral and decline development in both mined mill feed material and waste.
- Install all ground support, including rock bolting and surface support.
- Maintain the underground road surfaces.
- Drill, charge, and bog (including remote bogging) all stoping mineralized material.
- Haul all material out of the mine to Run-of-Mine (ROM) pad or waste dump.
- Drill slot raises for production stoping and other miscellaneous longhole drilling.

Twin-boom jumbos are planned to be used for most capital development. Single-boom jumbos have been assumed for smaller profile mineralized material driving and small amounts of capital, with booms of a suitable length to allow adequate installation of ground support.

A 5 m<sup>3</sup> sized loader (CAT 1700 or equivalent) has been assumed for the majority of capital development bogging and truck loading. 1.5 m<sup>3</sup> sized loaders (LH203 or equivalent) have been assumed for smaller profile mineralized material development and stope bogging.

Production drilling will be achieved using a drill capable of accurately drilling the required 64 mm diameter hole lengths such as the Resemin Muki drill or equivalent.

Haulage will be via 16 t trucks. Vertical development is planned to be excavated with a combination of raisebore drills, airleg rising, and longhole rising.

## MINERAL PROCESSING AND METALLURGICAL TESTING

### Metallurgical Testing

Five laboratories, including AMMTEC, Metcon, OMC, Gekko, ALS Metallurgy, and Metallurgical Company Yantai Jinpeng Group (Jinpeng Group), conducted the initial test work for preliminary processing flowsheet development test work and optimization.

Extensive metallurgical test work has been conducted on the samples collected from the Tuvatu Property. The test work covers mineralogy, comminution, gold and silver recovery, cyanide destruction, and process related parameter determination tests. The major conclusions are made as follows.

- The mineralogical determination shows that significant amount of the gold occurs in form of fine nugget gold grains. Some of the gold is closely associated with tellurium.
- The gold recovery tests indicate that the gold in the Tuvatu mineralization responded reasonably well to the process consisting of gravity concentration followed by further gold recovery by flotation and cyanidation. However, some metallurgical performance variations were observed from the test programs. Further test work should be conducted to optimize process flowsheet and conditions. Also it appears that the intensive cyanidation procedure produces promising results. Further test work is required to verify this finding and optimize intensive cyanidation conditions. The recommended test work is detailed in Section 26 of this Technical Report.

The test results appear to show that the gold recovery is more closely related to mineralogical characteristics, compared to feed grade. According to the test results produced, the average gold recovery reporting to the final doré is expected to be approximately 87.5%, including gold loss during gold-loaded carbon stripping and melting treatments.

### Process Plant

The processing facility has been designed as a 1,000 t/d on-site facility to produce gold doré based on metallurgical test work conducted to date. Significant metallurgical test work has been conducted on various samples. The tested gold recovery methods included whole-ore leaching, gravity concentration, flotation and gravity-flotation-cyanidation combined treatments. Preliminary pre-treatment prior to cyanidation, including intensive cyanidation, were also tested. The metallurgical test work indicates that there is a significant amount of the gold occurring in nugget gold form. The Tuvatu mineralization is amenable to gravity concentration and flotation followed by cyanidation processes.

The proposed process plant will consist of a three-stage crushing, two-stage grinding including a gravity concentration in the primary grinding stage to recover coarse-free gold grains, followed by flotation processes, and a respective cyanide leaching on both the flotation concentrates after regrinding and floatation tailings. Gold dissolved in the pregnant solutions will be extracted via a series of operations, including a common CIP adsorption, acid elution, electrowinning, and refining steps to produce the final gold doré. The leaching residues will be treated by SO<sub>2</sub>/air to lower the WAD cyanide level to less than 1 ppm and then transferred to the TSF.

**Table 8 – Production Summary**

		Year 1	Year 2	Year 3	Year 4	Year 5	Totals
Total Mill Feed Mined	t	329,960	330,864	329,960	329,960	63,323	1,384,067
Gold Grade Milled	g/t	7.60	8.93	10.49	7.70	6.42	8.57
Gold Milled	oz	80,588	94,985	111,238	81,643	13,078	381,532
Gold Recovery	%	86.5	87.5	87.5	87.5	87.5	87.3
Gold Recovered, including refining loss	oz	69,359	82,696	96,847	71,081	11,385	331,369

The proposed process plant will include the following unit operations:

- Primary Crushing – A truck dump hopper with a fixed grizzly, a vibrating grizzly, and a jaw crusher in open circuit producing a final product of 80% passing approximately 70 mm.
- Secondary/Tertiary Crushing – Two cone crushers in closed circuit with a vibrating double deck screen to further reduce the particle size of the primary crushing discharge to approximately 80% passing 8 to 10 mm.
- Primary Grinding – Two ball mills in series in closed circuit, with hydrocyclones to further reduce the crushed materials to a product of 80% passing approximately 60 to 65 µm.
- Gravity Separation – Integrated with the primary grinding circuit, a gravity separation circuit receiving approximately 33% of the hydrocyclone underflow to recover the coarse-free gold grains using two centrifugal concentrators and one shaking table.
- Flotation – Sulphide flotation of the hydrocyclone overflow to produce a gold-bearing sulphide concentrate.
- Flotation Concentrate Regrinding – A regrind vertical mill together with hydrocyclones in open circuit to regrind the flotation concentrate to a particle size of 80% passing approximately 20 µm.
- Cyanide Leaching – Gold leaching of the flotation tailings and the reground concentrate through the two separate leaching circuits followed by one common CIP circuit. The leach circuit will be aerated with air.
- Loaded Carbon Acid Washing, Desorption, and Refining – The loaded carbon from the CIP circuit to be treated by elution to produce a gold rich solution for electrowinning and then melting to produce gold doré. The stripped carbon will be reused in the CIP circuit either after acid washing to remove inorganic contaminants or treated by thermal regeneration.
- Carbon Handling – Thermal regeneration of barren carbon to remove organic foulants and preparation of make-up new carbon by attrition and sizing.
- Cyanide Detoxification – Detoxification of cyanide leach residue slurry using the SO<sub>2</sub>/air process to destruct WAD cyanide to less than 1 ppm level prior to disposal of the detoxified tailings in the conventional TSF.
- Final Tailings Disposal – The detoxified leach residue slurry to be pumped to the TSF where a reclaimed water system will pump the collected water back to the mill site for process use.

Lion One contracted Jinpeng Mining to complete a process design for gold recovery from the Tuvatu mineralization. Jinpeng Mining is a process equipment manufacturer who has a technical support team for process design. Jinpeng Mining completed the flowsheet development, mass balance, equipment sizing, general plant layouts, and circuit layouts. Tetra Tech was also involved in the process design and reviewed the design. The general process design and process description are discussed in the following sections.

The metallurgical test work results described in Section 13.0 of the PEA were used to select the recovery method for the Project and to develop the process design criteria. The metallurgical test results indicate that the Tuvatu mineralization is amenable to a combined process of gravity concentration and flotation followed by cyanidation. The process facility, together with the process flowsheet, was designed based on the process design criteria. Design factors, where applicable, are included in the equipment sizing and circuit design.

The proposed process plant will process the mineralized material at a rate of 1,000 t/d with an average LOM head grade of 8.56 g/t Au. The average gold recovery is estimated to be approximately 87.5%. The comminution circuits, including two-stage grinding circuit, will grind the mill feed to a grind size of 80% passing (P<sub>80</sub>) 60 to 65 µm. A gravity separation circuit will be integrated with the primary grinding circuit to recover the coarse-free gold grains. The hydrocyclone overflow from the primary grinding circuit will be concentrated by flotation to separate sulphide minerals from non-sulphide minerals. The resulting flotation concentrate will be reground to 80% passing approximately 20 µm, followed by aeration pre-treatment prior to cyanide leaching. The flotation tailings will be cyanide leached as well. CIP treatment is proposed for extracting the gold and associated silver from the mill feed. The loaded carbon will be stripped, and the pregnant solution will be treated by a heated and pressured electrowinning unit to recover the gold from the solution. The carbon stripping and gold

electrowinning will be operated in a closed circuit. Gold doré will be produced from an electric furnace located on site. The leach residue will be treated by cyanide destruction using the SO<sub>2</sub>/air procedure prior to being pumped to the TSF. The crushing circuit will operate during the day shift, while the milling and leaching circuits will operate 24 h/d and 330 d/a or 365 d/a with an availability of 90.4%. Carbon stripping and gold electrowinning circuits will operate 16 h/d.

## GEOCHEMICAL AND METALLURGICAL LABORATORY

A geochemical and metallurgical laboratory has been constructed at the Nadi office site to assay samples from exploration activities. The laboratory is equipped with necessary sample preparation equipment and analytical instruments (atomic absorption and Inductively coupled plasma – optical emission spectrometers), which can be used to provide routine assays for exploration, mine, process, and environmental departments. The assay laboratory has functioned to provide the assays required for geological exploration, including gold fire assay. The metallurgical units are also planned, and some metallurgical test devices, including one flotation machine and leaching cells, have been installed.

As planned, the laboratory will be upgraded in the future to provide routine assays and metallurgical testing to support the planned operation. The data obtained from the assay and testing will be used for routine process optimization for metallurgical performance improvement and metallurgical balance accounting. The samples from various process streams will be manually collected and assayed for daily metallurgical balance and process optimization.

## PROJECT INFRASTRUCTURE

### Site Development

Primary site development will consist of multiple platform construction to minimize cut-and-fill activities due to building/equipment foundation considerations and the steepness of the terrain. Process facilities, including the crushing plant, will be located on separate platforms as will the ROM stockpiles and ancillary facilities, such as storm water detention pond, power generation system, mine truck shop, and mine dry. There is an existing exploration decline that will be enlarged and reused for the mining operation.

The proposed process plant is planned to be located northwest of the existing exploration decline. It is proposed to construct most of the process plant facilities in cut area, in an effort to establish the concrete foundations on competent soils. Numerous boulders on the site will generate a significant portion of the bulk aggregate for construction activities. The larger boulders will be crushed for additional rock fill across weak foundation areas. Soil within the final TSF impoundment footprint will be used to provide materials for the embankment construction. Removal of these soils from the TSF area will create more tailings storage capacity at the same time.

The mined material from the proposed mine pre-production will be stockpiled on ROM pads. The extracted waste rock expected to be non-acid generating from the mineralized material extraction will be crushed and used as road subbase at plant site and underground development areas and retaining walls throughout the operational area. The surplus waste rock is also expected to be sold to quarry operators in the area.

Site preparation, including ground clearing and grubbing, stormwater drainage, sediment control structures, and bulk earthworks, to develop multiple platforms, will be constructed prior to the start of process plant construction and mine development. Slope stability and site water management will be key considerations in the Project design. Lion One has conducted preliminary site preparation, including diverting some water courses that may impact future construction of facilities.

### Roads

The Tuvatu site is accessed via Sabeto Road, which follows the Sabeto River Valley from its junction with Queen's Road, which is the primary access from Nadi International Airport. From Queen's Road junction to Nagado Junction (approximately 9 km from the proposed Project site), the majority of the road is paved and in good condition. The section of road from Nagado Junction to the proposed Project site is a public road with a

gravel covered surface. Although an all-weather access, this section of the road is narrow and in relatively poor condition due to lack of regular maintenance. Lion One negotiated with Fiji Road Authority (FRA) to share the costs of upgrading the road and bridges to allow heavy freight to be transported to the proposed Project site. Lion One has completed reconstruction of the Nubuyagiyagi Bridge (located approximately 3 km from the proposed Project site), and FRA is currently upgrading sections of this existing road. Lion One has also completed the relocation of the main road past the proposed process plant and the construction of a new bridge at where the new road crosses over the Tuvatu Creek.

### Site Internal Roads

The current section of the public road that runs through the mine site has been rerouted closer to the Sabeto River to eliminate public access to the site. A new bridge over Tuvatu Creek was constructed to accommodate the rerouted road. Haul roads will be constructed to service the main portal, the ventilation portal, and the exploration portal sites. With the proximity of the portals and mine surface infrastructure to the plant site, traffic control guidelines will be in place given the relatively confined site in order to minimize interactions between haul fleet and light vehicles. Service roads will also be constructed to access the main diversion ditches above the process plant site and mine portals. A new road will also be required to link the existing access road to the tailings dam embankment.

### Tailings Storage Facility

The TSF will contain tailings from the process plant for a design capacity of 2,555 kt in dry solids mass. Higher capacity is achievable with substantially higher earthwork quantities. Wood designed the TSF according to the local government guidelines adopted from Guidelines on Tailings Dams established by the Australian National Committee on Large Dams (ANCOLD) in 2012 as well as the Canadian Dam Association (CDA) standards in 2014 since Lion One is a Canadian mining company.

Various test programs were conducted on the tailings samples to facilitate the preliminary design. The results indicate that the future tailings materials are potentially acid generating (PAG) and/or metal leaching (ML). Only, limited geochemical information is available. A deposition plan has been included in this preliminary design for acid rock drainage (ARD) management. Settling tests and drying tests were performed to determine tailings densities and specific gravity (SG) levels.

The TSF dam will be constructed primarily with geochemically acceptable mine rock and natural clay overburden and weathered rock materials borrowed from the TSF valley. The starter dam will be constructed for the Year 1 production, then raised in approximately 5 to 6 m following the first year of operation using centerline construction method. The yearly raise height will be decreased to 1 to 3 m for the final years of tailings disposal operation.

A tailings reclaim pond will be formed to the back of the TSF basin. A floating pump barge is proposed to send tailings water back to the process plant for reuse. A settling control pond will be constructed to collect water samples for monitoring contact water quality and to receive potential seepage from the TSF. Water will be released to the environment when it meets the required discharge criteria. Should the collected water not meet discharge quality, it will be pumped back to the TSF pond for reuse in the milling process.

Based on the geotechnical and geophysical results, Wood determined that the proposed TSF is suitable for a wet, slurry tailings deposit, while additional information and details need to be obtained to develop the full TSF prefeasibility and detailed design. Wood's recommendations are discussed in Section 26.0 of the PEA.

### Site Water Management

A site water management plan has been developed for the Project to meet the requirement for a full coverage of the tailings to mitigate acid generation. Surface water diversions will be constructed for the TSF, process plant site, and ROM pad areas. The supernatant water from TSF will be monitored and treated to meet the release criteria before discharge. A sediment control structure will be constructed to reduce the impacts of construction activities.

## Site Geotechnical Investigations

The geotechnical investigations and some site preparation work (rough grading at the proposed process plant and crusher areas) were reviewed by Wood for this Technical Report. As detailed in Section 18.0 of the PEA, various geotechnical testing programs were conducted at the proposed process plant site, adjacent structures, and TSF site. The test results and the hydrogeological data were used for the conceptual TSF design. For the process plant site and crusher/screen structures, the locations have been selected by Lion One and have been under active development when preparing the geotechnical review work by Wood. The site preparation involved cut-and-fill earthworks with some perimeter slopes. However, the bearing capacity for foundation design of the processing plant is highly variable across the site. Wood recommends that the results of the geophysical survey program, together with the historic borehole results, should be used to define the extent of soil improvement, including the size (thickness and horizontal extent) of any engineered fill for the structures and foundation members individually. F

## Process Auxiliary Facilities

Plant air services, water supply systems, and reagent handling/storage system have been included in the process design. Low-pressure air will be provided by air blowers; high-pressure air will be provided from air compressors. One fresh water and two process water systems are proposed. Reagent handling and storage will be housed in a containment area.

A geochemical and metallurgical laboratory, which has been constructed at the Owner's office site in Nadi for supporting current exploration, will be used for assaying the routine samples for exploration, mining, processing, and environmental departments. The metallurgical laboratory is equipped with metallurgical test equipment and will perform metallurgical testing to optimize the process flowsheet and improve metallurgical performance.

## Utilities

The utility facilities will provide water and electrical power consumed in mining, processing, and tailings management operations, as well as mobile phone and internet services. Site water will be sourced from reclaim water, runoff water, and mine dewatering. Additional make-up water may be required from the Sabeto River. The Project will generate its own power via a hybrid solar power generation system / containerized diesel power station. An overhead transmission line will be used to carry the solar power to the mine site. The site mobile phone and internet systems have been upgraded and expanded for current exploration and operation use.

## Buildings/Structures

The on-site buildings/structures will be constructed for administration, emergency medical services, general maintenance, warehouse, as well as for mining operation services, including mine dry and explosive magazines. No on-site accommodations will be required as proximity to Nadi, Latouka, and local villages which can provide enough service capabilities.

## On-site/Off-site Facilities

The Project site comprises steep topography coupled with multiple creek lines that flow into the Sabeto River. Currently on the site, there are core storage facilities and associated infrastructure for exploration activities, and a decline, which was built by Emperor Gold Mining Company Limited in 1999. In addition, Lion One maintains an operations office in Nadi. A geochemical and metallurgical laboratory has been constructed in Nadi to service current exploration activities and future site operations.

## CAPITAL AND OPERATING COSTS

### Capital Costs

Tetra Tech prepared a capital cost estimate for the PEA with inputs from Entech, Wood, and Lion One. Tetra Tech established the capital cost estimate using a hierarchical work breakdown structure. The accuracy range of the estimate is +35%/-30%. The base currency of the estimate is Canadian dollars. The total estimated initial capital cost for the design, construction, installation, and commissioning of the Project is USD\$66.8 million

(CDN\$89.1 million), including an average contingency of approximately 16% of the total direct costs. See Estimated Capital Costs table below:

**Table 9 – Estimated Initial Capital Costs**

<b>Direct Costs</b>	<b>USD\$ (millions)</b>
Underground Mining	20.8
Process	13.7
Tailings Storage Facility	4.1
Overall Site	3.2
On-site Infrastructure	1.8
<b>Direct Costs Subtotal</b>	<b>43.6</b>
Project Indirect Costs	11.5
Owner's Costs	4.8
<b>Indirect Costs Subtotal</b>	<b>16.3</b>
<b>Contingencies</b>	<b>6.9</b>
<b>Total Capital Costs</b>	<b>\$66.8</b>

#### Mining Capital Cost Estimate

The mine plan execution is based on owner management and owner technical services staff, with the initial three years of underground mining to be executed using an underground mining contractor. After three years, the operation plans to transition to owner-operator mining. Lion One engaged an underground mining contractor to provide pricing in a fixed and variable pricing format.

The mining capital cost estimate is based on the UG mining contractor pricing and other Lion One supplied inputs; the costs have not been directly estimated by Entech. Entech has reviewed the mining capital cost inputs and considers them appropriate. All mining costs are presented in US dollars unless otherwise specified. The estimated level of accuracy of the projected operating and capital costs is  $\pm 25\%$ .

The mining capital costs include mining equipment, surface and underground infrastructure, establishment costs, as well as capital lateral and vertical development. A total of USD\$23.97 million (CDN\$31.96 million) was estimated for initial underground mining capital cost, including initial capital mining contingency and pre-production operating costs. Table 10 shows a summary of initial, sustaining, and LOM mining capital costs. The fleet costs described in Table 10 are applicable to equipment that is planned to be directly purchased by Lion One, as opposed to equipment that is provided by the mining contractor and has been priced into the mining rates.

**Table 10 - Mining capital cost summary (USD\$ millions)**

<b>Description</b>	<b>Total Mining Capital</b>	<b>Initial Capital</b>	<b>Sustaining Capital</b>
Lateral Development	22.11	7.16	14.95
Vertical Development	3.97	2.31	1.66
Mining Equipment and Infrastructure Development	10.03	7.98	2.05
Additional Mine Site Surface Facilities	0.26	0.26	-
Initial Capital Mining Contingency	3.11	3.11	-
<b>Total Mining Capital Cost Estimate</b>	<b>39.48</b>	<b>20.82</b>	<b>18.66</b>
Mining Pre-Production	3.15	3.15	-
<b>Total Mining Capital Cost Estimate, with Pre-Production</b>	<b>42.63</b>	<b>23.97</b>	<b>18.66</b>

### Processing and Overall Site Infrastructure Capital Cost Estimate

Major mechanical costs are based on detailed quotations from vendors. All equipment and material costs are included as free carrier or free board marine manufacturer plants and are exclusive of spare parts, taxes, duties, freight, and packaging. These costs, if appropriate, are covered in the indirect cost section of the estimate.

Earthwork costs are based on actual cost spent to date and quotations received from contractors. Infrastructure, material, and equipment erection costs were based on quotations from contractors.

Project indirect costs, including construction indirects, spare parts, and freight and logistics are based on quotations. Costs for initial fills for grinding media, reagents, lubricants, and fuel were provided by vendors. Engineering, procurement, and construction management; commissioning; and start-up costs are estimated based on quotations. Owner's costs are based on the estimates from Lion One according to the construction plan. The estimated contingencies are allowances for undefined items of work incurred within the defined scope of work covered by the estimate.

The overall direct initial capital cost for processing and overall site infrastructure (excluding TSF) was estimated to be USD\$18.68 million (CDN\$24.91 million), including an initial direct capital cost of USD\$13.67 million (CDN\$18.23 million) for processing-related facilities.

### Tailings Storage Facility Capital Cost Estimate

The initial TSF capital costs include installation labour cost based on Fiji contractors' rates. The material take-off for earthworks and mechanical equipment were provided by Wood. Pipeline costs for both supply and installation were based on the in-house data.

### Operating Cost Estimate

The on-site average operating costs, at a mill feed rate of 1,000 t/d were estimated to be USD\$97.35/t (CDN\$129.81/t) of material processed. The operating costs are defined as the direct operating costs including mining, processing, site servicing, and G&A costs, including related freight costs.

The cost estimates in this section are based on the consumable prices and labour salaries/wages from Q2 2020, or information from Tetra Tech and other clients' in-house database. The expected accuracy range of the operating cost estimate is +35%/-30%. It is assumed that operation personnel will reside in towns or villages nearby. There will be no accommodation or catering services provided at site. Personnel will be bussed to site by the Owner. The operating costs exclude shipping and refining charges for the doré produced; these costs are included in the financial analysis.

**Table 11 - Operating Cost Estimate**

<b>Description</b>	<b>Operating Cost (USD\$/t milled)</b>
Mining**	47.24
Process	41.49
Reclaim Water Handling	0.30
G&A	6.66
Site Services	1.66
<b>Total Operating Cost Estimate *</b>	<b>97.35</b>

Notes: \*Numbers may not total due to rounding.

\*\*LOM average, excluding pre-production related costs.

## ECONOMIC ANALYSIS

This Technical Report is a summary compilation of additional work completed on the Project since the 2015 PEA (Freudigmann et al. 2015). A PEA is preliminary in nature and includes Mineral Resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Furthermore, there is no certainty that the conclusions or results reported in the Technical Report will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. As such, the financial modeling of the Project does not demonstrate economic viability in accordance with NI 43-101 requirements. There is no certainty that the economic results presented in this study will be realized.

Tetra Tech prepared an economic evaluation of the Project based on a pre-tax model and an after-tax financial model prepared by Lion One. For the five-year LOM and 1.348 Mt of mine plan tonnage and the gold price of USD\$1,400/oz (base case), the following financial parameters were calculated:

This section includes forward-looking information regarding cash flow forecasts as a result of the study's projected mine production rates, projected gold recoveries, and associated process construction and mine development schedules. Factors that may cause actual results to differ materially from those presented in this economic analysis include:

- The ability to obtain skilled labour, major construction equipment, or long-lead items in a timely fashion.
- The ability to obtain the many permits required on an appropriate timely basis in order to construct and/or operate the mine and process facilities.
- To achieve the assumed mine production rates at the assumed grades.

The processing plant feed grades are based on adequate sampling that is reasonably expected to be representative of the realized grades from mining and processing operations.

Pre- and after-tax estimates of project values were prepared for comparative purposes and for approximating the true investment value, respectively. It must be noted, however, that tax estimates involve many complex variables that can only be accurately calculated during actual operations, and as such, the after-tax results are only approximations.

The basis of the economic evaluation of the Project was obtained from a variety of information sources including:

- In discussions with Lion One, Tetra Tech, with mining capital cost estimates from Entech and TSF material take-off inputs from Wood, prepared the capital cost estimates and expenditure schedules.
- Entech prepared the mine operating cost estimates and mine schedule.
- Owner's capital costs, sustaining capital costs, and closure costs were estimated based upon assumptions or on detail provided by Tetra Tech, Entech, Wood, and Lion One.
- Tetra Tech, in discussions with Lion One, estimated the process operating, G&A, and site services costs.
- Metal pricing, royalties, and refining charges were based upon guidelines provided by Lion One and Tetra Tech.
- The projected gold recovery was derived from metallurgical test work results by various test programs. The economic evaluation reflects one metal price scenario and considered only cash flows from the start of the construction period, based on an 18-month design and construction period, assuming the expenditures for construction initiate in Month 7 of Year -2, and that gold production commences in Month 1 of Year 1.

Other assumptions used in the economic analysis include:

- Discount rate of 5%.
- Costs, revenues, costs and taxes are calculated for the period in which they occur rather than actual.
- Corporate tax rate of 20%.
- Working capital has been excluded from the capital cost estimate.
- Capital depreciation has been considered based on a declining balance approach; however, no provision has been made for escalation or inflation.
- Results are presented on a 100% equity basis, i.e., the cash flow model assumes full equity funding.
- No financing costs or management fees have been considered and no provision has been made for interest or cost of capital.
- VAT has assumed to be recoverable while there has been no provision made for any additional taxation or costs related to the repatriation of funds from Fiji.
- No provision has been made for corporate head office G&A costs during operations.
- Pre-development and sunk costs up to the start of detailed engineering are excluded.
- No contractual arrangements for refining exist at this time.

These assumptions are appropriate and typical for this level of study.

The reader is cautioned that the gold price used in this study is an estimate based on recent historical commodity performance in the markets, and there is no guarantee it will be realized if the Project proceeds into production. The gold price is based on complex factors, and there are no reliable long-term predictive tools. The economic evaluation has applied a gold price of USD\$1,400/oz representing the approximate average spot gold price for the last two years. A refinery gold payable rate of 99.5% has been applied with a refining charge of USD\$0.75 per payable ounce.

The reader is cautioned that this study includes the use of Inferred Mineral Resources, which are considered too speculative geologically to have the appropriate economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and as such, there is no certainty the economic results presented in this study will be realized. This Technical Report is preliminary in nature and uses Inferred mineralized material.

A discounted cash flow model was prepared based on the mining schedule and estimated capital and operating costs. The pre-production mine operating costs have been capitalized.

**Table 12- PEA Summary**

Production Mine Life (Years)	5
Total Au Produced (oz)	331,369
Average Au Annual Production (oz)	77,969
Average Au Head Grade LOM (g/t)	8.6
Total Mill Feed Mined (tonnes)	1,384,067
Nominal Production Rate (tonnes/annum)	330,000
Average Gold Recovery	87.3%

**Table 13 - Summary Economics at USD\$1,400 per oz Gold (reported in USD\$)**

Total LOM Revenue (USD\$ millions)	\$463.9
Total LOM Pre-Tax Cash Flow (USD\$ millions)	\$202.8
Average Annual Pre-Tax Cash Flow (USD\$ millions)	\$47.7
Total LOM After-Tax Cash Flow ((USD\$ millions)	\$160.8
Average Annual Pre-Tax Cash Flow ((USD\$ millions)	\$37.8
Cash Costs USD\$ per oz Au (Pre-tax)	\$503
All-In Sustaining Cash Costs USD\$ per oz Au (Pre-tax)	\$586
All-In Costs USD\$ per oz Au (Pre-tax) including initial capital costs	\$788
Pre-Tax NPV (USD\$ millions, 5% discount rate)	\$155.8
Pre-Tax IRR	60.3%
Pre-Tax Payback (Years)	1.5
After-Tax NPV (USD\$ millions, 5% discount rate)	\$121.7
After-Tax IRR	50.9%
After-Tax Payback (Years)	1.7

**Table 14 - Project Cash Flow Summary at USD\$1,400 per oz Gold**

<b>Project Cash Flow</b>	<b>USD\$ millions</b>	<b>USD\$/t mill feed</b>	<b>USD\$/oz Au</b>
Mine Operating Costs	65.39	47.24	197.33
Processing Cost	58.64	42.37	176.97
G&A and Site Service Cost	11.66	8.43	35.20
Smelting and Refining Costs	0.96	0.70	2.91
Royalties	30.15	21.79	91.00
<b>Total Cash Operating Cost</b>	<b>166.81</b>	<b>120.52</b>	<b>503.40</b>
Revenue (at Au \$1,400 oz)	463.92	335.18	1,400.00
<b>Operating Cash Flow</b>	<b>297.11</b>	<b>214.66</b>	<b>896.60</b>
Initial Capital Cost	66.82	48.28	201.65
Sustaining Capital Costs	27.44	19.83	82.82
<b>Total Capital Cost</b>	<b>94.27</b>	<b>68.11</b>	<b>284.47</b>
<b>All in Sustaining Cost (Pre-tax)</b>	<b>194.26</b>	<b>140.35</b>	<b>586.22</b>
<b>All in Costs (Pre-tax)</b>	<b>261.08</b>	<b>188.63</b>	<b>787.88</b>
Estimated Income Tax	42.02	30.36	126.82
<b>All in Sustaining Cost (After-tax)</b>	<b>236.28</b>	<b>170.71</b>	<b>713.04</b>
<b>All in Costs (After-tax)</b>	<b>303.10</b>	<b>218.99</b>	<b>914.69</b>

**Table 15 - Annual pre-tax and after-tax cash flows (USD\$ millions)**

<b>Year</b>	<b>-1.5</b>	<b>-1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Net Cash Flow, pre-tax	-13.4	-53.5	36.7	62.5	91.0	65.4	14.7
Net Cash Flow, after-tax	-13.4	-53.5	31.9	52.0	75.2	54.7	14.5
Cumulative Cash Flow, pre-tax	-13.4	-66.8	-30.1	32.4	123.4	188.7	203.4
Cumulative Cash Flow, after-tax	-13.4	-66.8	-34.9	17.0	92.2	146.9	161.4

## Sensitivity NPV and IRR to Variations in Gold Price

Tetra Tech prepared an economic evaluation of the Project using the gold price of USD\$1,400/oz (base case), the following financial parameters were calculated:

- Pre-tax IRR of 60.3% and After-tax IRR of 50.9%
- Pre-tax NPV of USD\$155.8 million and After-tax NPV of USD\$121.7 million (5% discount rate)
- 1.5-year payback (pre-tax) and 1.7-year (after-tax) on USD\$66.8 million of initial capital

The economic evaluation of the Project includes a sensitivity analysis to variations in gold price (see table below). At USD\$2,000 per Au oz, the following financial parameters were calculated:

- Pre-tax IRR of 99.3% and After-tax IRR of 85.0%
- Pre-tax NPV of USD\$307.9 million and After-tax NPV of USD\$243.4 million (5% discount rate)
- 0.88-year payback (pre-tax) and 1.04 year (after-tax) on USD\$66.8 million of initial capital

**Table 16 - Sensitivity of Pre-tax and After-tax NPV and IRR to Variations in Gold Price**

Gold Price	Pre-Tax NPV5%	Pre-Tax IRR	After-Tax NPV5%	After-Tax IRR	Payback (After-tax years)	Pre-Tax Cash Flow undiscounted (in USD\$ millions)	After-Tax Cash Flow undiscounted (in USD\$ millions)
1,000	54.4	27.1%	40.0	22.1%	2.61	79.0	61.1
1,200	105.1	44.7%	80.9	37.4%	2.09	140.9	111.1
<b>1,400</b>	<b>155.8</b>	<b>60.3%</b>	<b>121.7</b>	<b>50.9%</b>	<b>1.67</b>	<b>202.8</b>	<b>160.8</b>
1,600	206.5	74.4%	162.2	63.2%	1.38	264.7	210.3
1,800	257.2	87.3%	202.8	74.5%	1.19	326.6	259.9
<b>2,000</b>	<b>307.9</b>	<b>99.3%</b>	<b>243.4</b>	<b>85.0%</b>	<b>1.04</b>	<b>388.5</b>	<b>309.4</b>
2,200	358.7	110.5%	284.0	94.9%	0.91	450.4	358.9
2,400	409.4	121.1%	324.5	104.3%	0.80	512.3	408.4

## RISKS AND OPPORTUNITIES TO ENHANCE VALUE

There are numerous risks and opportunities that influence any mining venture, and as such, there are also risks and opportunities for the Project. External factors such as fluctuations in metal prices and exchange rates are not within control of the Project, while other risks are usually associated with insufficient technical information, such as resource estimate, underground mining associated issues (underground geotechnical and hydrological conditions), unforeseen weather conditions, and gold recovery projections. Other factors that may impact the project economics include permit acquisitions and local skilled labour sources. Potential opportunities for further improvement of the Project economic viability may include an increase in mineral resources with further exploration, further improvement in gold extraction, gold recovery flowsheet optimization, and mine plan optimization.

The Project is considered economically viable based on this Technical Report. Approvals have been received for initial and updated environmental assessments. It is recommended to advance the Project to the next stage. Please refer to Section 26 of the PEA for complete list of activities are suggested to further improve the Project economics and/or lower the Project risks.

### Preliminary Economic Assessment Parameters – Cautionary Statement

A PEA should not be considered a prefeasibility or feasibility study, as the economics and technical viability of the Project have not been demonstrated at this time. A PEA is preliminary in nature and includes Mineral Resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Furthermore, there is no certainty that the conclusions or results reported in the Technical Report will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

The Study referred to in this report is based on low accuracy level technical and economic assessments and is insufficient to support estimation of mineral reserves or to provide assurance of an economic development case at this stage; or to provide certainty that the conclusions of the Preliminary Economic Assessment will be realized. There is a low level of geological confidence associated with some inferred mineral resources and there is no certainty that further exploration work will result in the conversion of inferred mineral resources to indicated mineral resources or that the production target itself will be realized.

## **RISK FACTORS**

An investment in securities of Lion One is speculative and involves significant risks and uncertainties which should be carefully considered by prospective investors before purchasing such securities. The occurrence of any one or more of these risks and uncertainties could have a material adverse effect on the value of any investment in Lion One and the business, prospects, financial position or operating results of the Company. The risks noted below do not necessarily comprise all those faced by the Company. Each risk factor identified below should, unless specifically referring to one or more of the mineral projects of the Company, be considered in the context of each mineral project of the Company and the Company as a whole. In addition to the other information set forth elsewhere in this Annual Information Form, including, without limitation, the financial statements and notes, prospective investors should carefully review the following risk factors:

Resource exploration is a speculative business and involves a high degree of risk. There is a significant probability that the expenditures made by the Company in the exploring its properties will not result in discoveries of commercial quantities of minerals. A high level of ongoing expenditures is required to locate and estimate ore reserves, which are the basis for further development of a property. Capital expenditures to attain commercial production stage are also very substantial.

The following sets out the principal risks faced by the Company:

The Company is subject to a number of inherent exploration, development and operating risks.

Lion One is an exploration stage Company engaged in mineral exploration and development. Mineral exploration and development is highly speculative in nature and involves many risks and is frequently not economically successful. While Lion One has a limited number of specific identified exploration or development prospects, management will continue to evaluate prospects on an ongoing basis in a manner consistent with industry standards. The long-term commercial success of Lion One depends on its ability to find, acquire and commercially develop reserves. No assurance can be given that minerals will be discovered in sufficient quantities at any of Lion One's projects to justify commercial operations or that funds required for additional exploration or development will be obtained on a timely basis. Increasing mineral resources or mineral reserves depends on a number of factors including, among others, the quality of a Company's management and their geological and technical expertise and the quality of land available for exploration.

Once mineralization is discovered it may take several years of additional exploration and development until production is possible during which time the economic feasibility of production may change. Substantial expenditures are required to establish proven and probable reserves through drilling or drifting, to determine the optimal metallurgical process and to finance and construct mining and processing facilities. At each stage of exploration, development, construction and mine operation various permits and authorizations are required. Applications for many permits require significant amounts of management time and the expenditure of substantial amounts for engineering, legal, environmental, social and other activities. At each stage of a project's life delays may be encountered because of permitting difficulties. Such delays add to the overall cost of a project and may reduce its economic viability. There is no assurance that surface rights agreements that may be necessary for future operations will be obtained when needed, on reasonable terms, or at all, which could adversely affect the business of Lion One. As a result of these uncertainties, there can be no assurance that the Company's mineral exploration and development programs will result in profitable commercial production.

Companies engaged in mining activities are subject to all of the hazards and risks inherent in exploring for and developing natural resource projects. These risks and uncertainties include, but are not limited to, environmental hazards, industrial accidents, labour disputes, increases in the cost of labour, social unrest, fires, changes in the regulatory environment, impact of non-compliance with laws and regulations, encountering unusual or unexpected geological formations or other geological or grade problems, unanticipated metallurgical characteristics or less than expected mineral recovery, encountering unanticipated ground or water conditions, cave ins, pit wall failures, flooding, rock bursts, periodic interruptions due to inclement or hazardous weather conditions, earthquakes, seismicity, natural disasters and other acts of God or unfavourable operating conditions and losses. Should any of these risks or hazards affect a Company's exploration, development or mining activities it may: cause the cost of development or production to increase to a point where it would no longer be economic to produce metal from the Company's mineral resources or expected reserves; result in a write-down or write-off of the carrying value of one or more mineral projects; cause delays or stoppage of mining or processing; result in the destruction of mineral properties, processing facilities or third party facilities necessary to the Company's operations; cause personal injury or death and related legal liability; or result in the loss of insurance coverage — any or all of which could have a material adverse effect on the financial condition, results of operations or cash flows of the Company. Such incidents may also result in a breach of the conditions of a mining lease or other consent or permit of a relevant regulatory regime, with consequent exposure to enforcement procedures, including the possible revocation of such leases, consents and permits.

The economics of any future commercial production from the Company's mineral properties depend on many factors, including the cost of operations, the size and quality of the mineral deposit, proximity to infrastructure, financing costs and Government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting minerals and environmental protection. The effects of these factors cannot be accurately predicted, but any combination of these factors could adversely affect the economics of commencement or continuation of commercial mineral production.

The Company's resource estimates are based on interpretations and assumptions and may yield less mineral production under actual conditions than is currently estimated.

Mineral resource estimates for development projects are, to a large extent, based on interpretations of geological data obtained from drill holes and other sampling techniques. There is significant uncertainty in any mineral resource estimate and the actual deposits encountered may differ materially from the Company's estimates. Mineral resources which are not mineral reserves do not have demonstrated economic viability.

Estimated mineral resources are periodically recalculated based on changes in prices of mineral products, changes in expected operating and capital costs and asset retirement obligations, further exploration or development activity or actual production experience. Such recalculations could materially and adversely affect estimates of the volume or grade of mineralization or other important factors which influence mineral resources.

The inclusion of mineral resource estimates should not be regarded as representation that these amounts can be economically exploited and no assurance can be given that such resource estimates will be converted into mineral reserves.

The Tuvatu Gold Project is in Fiji and is subject to risks associated with operations in foreign jurisdictions.

The Company's operations are subject to the risks normally associated with the conduct of business in foreign emerging countries and such risks may be increased because the Tuvatu Gold Project is in Fiji.

The Company's ability to carry on its business in the normal course may be adversely affected by political and economic considerations (such as civil unrest), labour disputes, corruption, sovereign risk (including

coup d'état), political instability, the failure of foreign parties or governments to honour contractual relations, consents, rejections or waivers granted, changing government regulations with respect to mining including environmental requirements, taxation, land tenure, foreign investments, income repatriation and capital recovery (which changes may be arbitrary and with little or no notice), severe fluctuations in currency exchange and inflation rates, import and export restrictions, challenges to the Company's title to properties, problems renewing licenses and permits, opposition to mining from environmental or other nongovernmental organizations, increased financing costs, instability due to economic underdevelopment, inadequate infrastructure, and the expropriation of property interests. Any of these events could result in conditions that delay or prevent the Company from ultimately developing the Tuvatu Gold Project.

It may be difficult for investors to enforce judgments or effect service of process on directors and officers of the Company who reside outside of Canada.

Three directors of the Company reside outside of Canada. Some or all of the assets of such person may be located outside of Canada. Therefore, it may not be possible for investors to collect or to enforce judgments obtained in Canadian courts predicated upon the civil liability provisions of applicable Canadian securities laws against such person. Moreover, it may not be possible for investors to effect service of process within Canada upon such person.

The Company's properties contain no known mineral reserves.

All of the Company's properties are in the exploration stage, meaning that the Company has not determined whether such properties contain "mineral reserves". Only those mineral deposits that the Company can economically and legally extract or produce, based on a comprehensive evaluation of cost, grade, recovery and other factors, are considered mineral reserves. The resource estimates contained in the PEA are inferred and indicated resource estimates only and no assurance can be given that any particular level of recovery of gold or other minerals from mineralized material will in fact be realized or that an identified mineralized deposit will ever qualify as a commercially mineable (or viable) reserve. Further, the PEA is preliminary in nature, and actual capital costs, operating costs, production, economic returns and other estimates contained in studies or estimates prepared by or for the Company may differ from those described in the PEA, and there can be no assurance that actual costs will not be higher than anticipated. Substantial additional work, including mine design and mining schedules, metallurgical flow sheets and process plant designs, would be required in order to determine if any economic deposits exist on the Company's properties. Substantial expenditures would be required to establish mineral reserves through drilling and metallurgical and other testing techniques. The costs, timing and complexities of upgrading the mineralized material at the Tuvatu Gold Project to proven or probable reserves may be greater than the Company anticipates and may not be undertaken prior to development, if at all. Failure to discover economically recoverable reserves on a mineral property will require the Company to write-off the costs capitalized for that property in its financial statements. No assurance can be given that any level of recovery of any mineral resources will be realized or that any identified mineral deposit will ever qualify as a commercially mineable ore body that can be legally and economically exploited.

The Company is subject to government regulation.

Mining operations and exploration activities are subject to extensive laws and regulations governing exploration, development, production, exports, taxes, labour standards, waste disposal, protection and remediation of the environment, reclamation, historic and cultural resources preservation, mine safety and occupation health, handling, storage and transportation of hazardous substances and other matters. The costs of discovering, evaluating, planning, designing, developing, constructing, operating, and closing the Tuvatu Alkaline Gold Project or other facilities in compliance with such laws and regulations are significant. It is possible that the costs and delays associated with compliance with such laws and regulations could become such that the owners or operators of mining operations would not proceed with the development of or continue to operate a mine. As part of their normal course operating, and development activities, such owners or operators have expended significant resources, both financial and managerial, to comply with governmental and environmental regulations and permitting requirements and will continue to do so in the

future. Moreover, it is possible that future regulatory developments, such as increasingly strict environmental protection laws, regulations and enforcement policies thereunder, and claims for damages to property and persons resulting from mining operations could result in substantial costs and liabilities in the future.

### Environmental Regulation

All phases of mining and exploration operations are subject to governmental regulation, including environmental regulation. Environmental legislation is becoming stricter, with increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and heightened responsibility for companies and their officers, directors and employees. While efforts to reduce emissions may be partially offset by improved energy efficiency, technological advancements, and the growing demand for minerals, the evolving regulatory landscape may lead to additional transition costs at certain operations. Consequently, the Company anticipates increased compliance costs as a result of changes in laws and regulations.

There can be no assurance that possible future changes in environmental regulation will not adversely affect mining operations. Additionally, environmental hazards may exist on a property in which the owners or operators of mining operations hold an interest which were caused by previous or existing owners or operators of the properties and of which such owners or operators are not aware at present and which could impair the commercial success, levels of production and continued feasibility and project development and mining operations on these properties.

The Company will require various permits to enable it to conduct its current and anticipated future operations.

The Company's current and anticipated future operations, including further exploration and development activities and the commencement of production from the Company's portfolio of exploration and evaluation assets in Fiji require the granting of the necessary permits from various federal and local authorities. The granting, continuing validity and enforcement of the terms of such concessions and permits are, as a practical matter, often subject to the discretion of the applicable governments or government officials. There can be no assurance that all concession and permits that the Company requires will be obtainable on reasonable terms, or at all, or will continue to be valid. Further, delays or failure to obtain such concession and permits, the withdrawal, expiry or non-renewal of existing concessions and permits, or failure to comply with the terms of such concessions and permits could have a material adverse impact on the Company.

The Company's four special prospecting licenses and one special mining lease in Fiji have been granted by the Fijian government. The Company has complied with all requests from the MRD and associated governmental organizations. The Company works with its Fijian stakeholders on an on-going basis to ensure the successful grant of all required permits. Changes in government personnel can cause procedural delays and additional requests.

There is no assurance that the Company's title to its mineral properties will not be challenged.

The acquisition of title to mineral properties is a very detailed and time-consuming process. Title to and the area of mineral properties may be disputed. While the Company has diligently investigated title to its mineral properties and has received a title opinion with respect to the Tuvatu Gold Project, this should not be construed as a guarantee of title to any of the Company's mineral properties. The Company's mineral properties may be subject to prior unregistered agreements or transfers and title may be affected by undetected defects. The Company has not surveyed the boundaries of all of its mineral properties and consequently the boundaries of the properties may be disputed. The Company's mineral properties may also be subject to prior unregistered agreements of transfer or aboriginal land claims, and title may be affected by undetected defects.

The Company's potential profitability is partly dependent upon factors beyond the Company's control.

As with other enterprises in the mining industry, the Company's mineral exploration and development related activities are subject to conditions beyond the Company's control that may impact upon the potential profitability of its mineral projects. For instance, world prices of and markets for minerals are unpredictable, highly volatile, potentially subject to governmental interference, currency pegging and/or controls and respond to changes in domestic, international, political, social and economic environments. Another factor is that a decline in the market price of metals including gold, could also have a material adverse impact on the ability of the Company to finance the exploration and development of its existing projects.

Profitability will also depend on the costs of operations, including costs of labour, equipment, electricity, environmental compliance, diesel prices, cost of sulphuric acid and other production inputs, the discovery and/or acquisition of additional mineral reserves and mineral resources, the successful conclusion of feasibility and other mining studies, access to adequate capital for project development and sustaining capital, design and construction of efficient mining and processing facilities within capital expenditure budgets, securing and maintaining title to concessions and other mining rights, obtaining permits, consents and approvals necessary for the conduct of exploration, development, construction and production, the ability to procure major equipment items and key consumables in a timely and cost-effective manner. Such costs will fluctuate in ways the Company cannot predict and are beyond the Company's control, and such fluctuations will impact on profitability and may eliminate profitability altogether. Additionally, due to worldwide political and economic uncertainty, the availability and cost of funds for development and other costs have become increasingly difficult, if not impossible, to predict. These changes and events may materially affect the Company's financial performance.

The Company has limited operating history and the Company is expected to continue to incur losses.

The Company has a limited operating history in the mineral exploration and development business and there can be no assurance that the Company will ever be profitable. Lion One is in the business of mineral exploration with the ultimate goal of developing and producing minerals from the Tuvatu Alkaline Gold Project in Fiji. Lion One has not commenced commercial production and has no history of earnings or cash flow from its operations. As a result of the foregoing, there can be no assurance that Lion One will be able to develop any of its properties profitably or that its activities will generate positive cash flow. Lion One will have limited cash and other assets. A prospective investor in Lion One must be prepared to rely solely upon the ability, expertise, judgment, discretion, integrity, and good faith of Lion One's management in all aspects of the development and implementation of the Company's business activities.

The Company experiences negative cash flow.

The Company experiences negative cash flow from operations and anticipates incurring negative cash flow from operations for 2023 and beyond as a result of the fact that it does not have revenues from mining or any other activities. In addition, as a result of Lion One's business plans for the development of its mineral projects, Lion One expects cash flow from operations to continue to be negative until Lion One is able to establish the economic viability and the development of one of its mineral projects, of which there is no assurance. Completion of the exploration and development programs planned to be completed by Lion One will only advance the exploration of its mineral projects and mine development and will not result in revenues from mining activities. Accordingly, Lion One's cash flow from operations will be negative for the foreseeable future as a result of expenses to be incurred in connection with advancement of exploration on its mineral projects, and Lion One will require additional financing.

Such negative operating cash flows can be common for companies in the exploration and/or development stages in respect of material mineral properties, as is the case for the Company. To the extent the Company has negative operating cash flow in future periods, the Company may need to allocate a portion of its cash reserves to fund such negative cash flow. The Company may also be required to raise additional funds

through the issuance of equity or debt securities. There can be no assurance that additional capital or other types of financing will be available if or when needed or that these financings will be available on terms favourable to the Company or at all.

The Company has not paid dividends and may not pay dividends in the foreseeable future.

No dividends on the Common Shares have been paid by the Company to date. The Company does not intend to declare or pay any cash or in-kind dividends in the foreseeable future. Payment of any future dividends will be at the discretion of the board of directors of the Company, after taking into account a multitude of factors appropriate in the circumstances, including the Company's operating results, financial condition and current and anticipated cash needs.

The Company has outstanding indebtedness.

As at June 30, 2023, the Company has an outstanding debt of approximately US\$24,178,190 under the Loan Facility (which includes original loan principal of US\$23,000,000 plus capitalized interest of approximately US\$1,178,190) that bears interest at a rate of 8% per annum plus 3 month SOFR (plus three-month secured overnight financing rate, as administered by Federal Reserve Bank of New York "SOFR"). As a result of this indebtedness, the Company is required to use a portion of its cash to service the principal and interest on this debt, which will limit the cash available for other business opportunities. The Company's ability to pay interest, repay the principal or to refinance its indebtedness depends on the Company's future performance, which is subject to economic, financial, competitive and other factors beyond its control. The Company currently does not generate cash flows from operations and relies on financing. If the Company is unable to generate cash flow, it may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. The Company's ability to refinance its indebtedness will depend on the capital markets and its financial condition at such time. The Company may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on its debt obligations.

Restrictive covenants in the Loan Facility may impact business activities.

Pursuant to the Loan Facility, the Company must satisfy certain financial covenants as well as other restrictive and affirmative covenants in respect of the Company's operations. These covenants include, without limitation, restrictions on the Company's ability to incur additional indebtedness; pay dividends or make other distributions; make loans or investments; sell, transfer or otherwise dispose of assets; and incur or permit to exist certain liens. Compliance with these covenants may impair the Company's ability to finance its future operations or capital needs or to take advantage of other favourable business opportunities. The Company's ability to comply with these covenants will depend on its future performance, which may be affected by events beyond its control. The Company's failure to comply with any of these covenants, if left uncured, could result in an event of default under the Loan Facility and could result in the acceleration of the indebtedness under the Loan Facility. If the Company is unable to repay any amounts outstanding as they come due under the Loan Facility, Nebari may be entitled to, among other things, take possession of any collateral securing the Loan Facility to the extent required to repay the outstanding amounts.

Management identifies a material uncertainty regarding the Company's ability to continue as a going concern.

Management continues to identify a material uncertainty that raises substantial doubt about the Company's ability to continue as a going concern. The Company will need to raise additional funding in order to continue as a going concern and the Company cannot provide any assurance that it will be successful in doing so. If the Company is unable to improve its liquidity position when required, the Company may not be able to continue as a going concern.

The Company has no history of mineral production.

The Company currently has no advanced exploration projects other than the Tuvatu Gold Project. The Tuvatu Gold Project is an exploration project that has no operating history upon which to base estimates of future cash operating costs, future capital spending requirements or future site remediation costs or asset retirement obligations.

The Company's properties, including the Tuvatu Gold Property, may not be brought into a state of commercial production.

Development of mineral properties involves a high degree of risk and few properties that are explored are ultimately developed into producing mines. The commercial viability of a mineral deposit is dependent upon a number of factors which are beyond the Company's control, including the attributes of the deposit, commodity prices, government policies and regulation and environmental protection. Fluctuations in the market prices of minerals may render resources and deposits containing relatively lower grades of mineralization uneconomic. There is no assurance that the Company's mineral exploration activities will result in the discovery of a body of commercial ore on any of its properties, including the Tuvatu Gold Property, and several years may pass between the discovery of a deposit and, if at all, its exploitation. Most exploration projects do not result in the discovery of commercially mineable mineralized deposits.

Future Production Estimates Cannot be stated with Certainty.

Forecasts of future gold production are estimates based on interpretation and assumptions, and actual production may be less than estimated. The Company has prepared estimates of future production from the Tuvatu Gold Project. The Company's production forecasts are based on full production being achieved. The Company's ability to achieve and maintain its estimated full production rates at the Tuvatu Gold Project is subject to a number of risks and uncertainties. These production estimates are dependent on, among other things, the accuracy of Mineral Resource estimates, the accuracy of assumptions regarding ore grades and recovery rates, ground conditions, physical characteristics of ores, such as hardness and the presence or absence of particular metallurgical characteristics, and the accuracy of estimated rates and costs of mining and processing. The actual production may vary from our estimates for a variety of reasons, including, risks and hazards associated with mining; natural phenomena, such as inclement weather conditions, water availability, floods, and earthquakes; and unexpected labor shortages, strikes, local community opposition or blockades. The failure of the Company to achieve its estimated production at the Tuvatu Gold Project could have a material adverse effect on the Company's operations and financial condition.

The Company's resource estimates are based on interpretations and assumptions and may yield less mineral production under actual conditions than is currently estimated.

Mineral resource estimates for development projects are, to a large extent, based on interpretations of geological data obtained from drill holes and other sampling techniques. There is significant uncertainty in any mineral resource estimate and the actual deposits encountered may differ materially from the Company's estimates. Mineral resources which are not mineral reserves do not have demonstrated economic viability.

Estimated mineral resources are periodically recalculated based on changes in prices of mineral products, changes in expected operating and capital costs and asset retirement obligations, further exploration or development activity or actual production experience. Such recalculations could materially and adversely affect estimates of the volume or grade of mineralization or other important factors which influence mineral resources.

The inclusion of mineral resource estimates should not be regarded as representation that these amounts can be economically exploited and no assurance can be given that such resource estimates will be converted into mineral reserves.

#### Costs and Cost Estimates Cannot be stated with Certainty.

We have prepared estimates of operating costs and capital costs in respect to the Tuvatu Gold Project. Our estimated costs are dependent on a number of factors, including the exchange rate between the United States dollar, the Canadian dollar and the Fijian dollar, smelting and refining charges, penalty elements in concentrates, royalties, the price of gold and by-product metals, the cost of inputs used in mining operations and events that impact estimated production levels.

However, despite our best efforts to budget and estimate such operating costs and capital costs, including any targeted cost reductions, as a result of the substantial expenditures involved in the development of mineral projects and the fluctuation of costs over time, development projects and operating mines are often prone to material cost overruns. Our actual costs may vary from estimates for a variety of reasons, including changing waste-to-ore ratios, ore grade metallurgy, labour and other input costs, commodity prices, general inflationary pressures and currency exchange rates. Failure to achieve our estimated costs could have an adverse impact on Lion One's business, results of operations and financial condition. The Company may be required to seek additional debt or equity capital in order to complete construction at the Tuvatu Gold Project and we may not be able to access capital on commercially reasonable terms or at all and, even if successful, we may not be able to raise enough capital to allow us to fully fund the capital costs required to complete construction at the Tuvatu Gold Project.

#### Uncertainties and Risks Relating to the Technical Report.

There is no certainty that the Technical Report will be realized. While the Technical Report is based on the best information available to the Company, it cannot be certain that actual costs will not significantly exceed the estimated cost. While the Company incorporates what it believes is an appropriate contingency factor in cost estimates to account for this uncertainty, there can be no assurance that the contingency factor is adequate. Many factors are involved in the determination of the economic viability of a mineral deposit, including the achievement of satisfactory mineral reserve estimates, the level of estimated metallurgical recoveries, capital and operating cost estimates and estimates of future metal prices. Resource estimates are based on the assay results of many intervals from many drill holes and the interpolation of those results between holes and may also be materially affected by metallurgical, environmental, permitting, legal title, socio-economic factors, marketing, political and other factors.

#### Disclosure and Internal Controls

Internal controls over financial reporting are procedures designed to provide reasonable assurance that transactions are properly authorized, assets are safeguarded against unauthorized or improper use, and transactions are properly recorded and reported. Disclosure controls and procedures are designed to ensure that information required to be disclosed by a company in reports filed with securities regulatory agencies is recorded, processed, summarized, and reported on a timely basis and is accumulated and communicated to the company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance with respect to the reliability of reporting, including financial reporting and financial statement preparation.

#### Currency fluctuations.

Fluctuations in currency exchange rates (principally the Australian dollar/CDN \$, the United States dollar/CDN\$ and Fijian dollar/CDN \$ exchange rates) may significantly impact the Company's exploration and development costs. The appreciation of the Argentinean peso and/or Australian dollar against the Canadian dollar would increase the cost of exploration and development of the Company's mineral properties located in Australia and Argentina which could have a material adverse effect on the financial condition of the Company. The appreciation of the Fijian dollar against the Canadian dollar would increase the cost of exploration and development of the Company's mineral properties (including the Tuvatu Gold Project) located in Fiji which could have a material adverse effect on the financial condition of the Company.

#### Competition in the mining industry could adversely affect the Company's ability to acquire mineral claims, leases and other mineral interests.

There is aggressive competition within the mining industry for the discovery and acquisition of properties considered to have commercial potential. The Company will be competing with other mining companies, many of which have greater financial resources than it does, for the acquisition of mineral claims, leases and other mineral interests as well as for the recruitment and retention of qualified employees and other personnel. There can be no assurance that the necessary funds can be raised or that any projected work will be completed.

#### The Company is subject to litigation risks and judgments obtained in Canadian courts may not be enforceable in foreign jurisdictions.

The Company may be subject to legal claims, with and without merit and the cost to defend and settle such legal claims can be substantial, regardless of the merit of the claim. Substantially all of the Company's assets are located outside of Canada. It may be difficult or impossible to enforce judgments obtained in Canadian courts predicated upon the civil liability provisions of the securities laws of the various Canadian provinces against the Company's assets located outside of Canada.

#### The Company's insurance coverage may not cover all losses and liabilities and certain risks are uninsured or uninsurable.

The mining industry is subject to significant risks, including unexpected or unusual geological formations or operating conditions, rock bursts, cave ins, fires, floods, earthquakes and other environmental occurrences, and political and social instability, which could result in damage to, or destruction of, mineral properties or producing facilities, personal injury or death, environmental damage, delays in mining and monetary losses and possible legal liability. Accordingly, the Company may become subject to losses, liabilities, delays or damages against which it cannot insure or against which it may elect not to insure because insurance costs are too expensive relative to the perceived risk.

Of the risks which the Company may elect to insure, the liability could exceed the policy limits or otherwise determined to be excluded by the coverage. The impact of the potential cost associated with any liabilities in excess of the Company's insurance coverage or of any uninsured liabilities may have a material adverse effect on the financial condition, results of operations or cash flows of the Company. The Company has not purchased insurance for environmental risks (including potential liability for pollution or other hazards as a result of the disposal of waste products occurring from exploration and production) as it is not generally available at a reasonable price.

#### The Company is reliant upon management and other key personnel and employees.

The Company is heavily reliant on the personal efforts, experience and expertise of its directors and senior officers. If any of these individuals should cease to be available to manage the affairs of the Company, its activities and operations could be adversely affected. Recruiting and retaining qualified personnel is critical to the Company's success. The number of persons skilled in acquisition, exploration and development of mining properties is limited and competition for such persons is intense. As the Company's business activity grows, the Company will require additional key financial, administrative and mining personnel as

well as additional operations staff. Although the Company believes that it will be successful in attracting, training and retaining qualified personnel, there can be no assurance of such success. If the Company is not successful in attracting and training qualified personnel, the efficiency of its operations could be affected, which could have an adverse impact on the Company's future cash flows, earnings, results of operations and financial condition.

#### Attraction and Retention of Key Personnel Including Directors

Lion One has a small management team and the loss of a key individual or inability to attract suitably qualified staff could have a material adverse impact on the business of the Company. Lion One may also encounter difficulties in obtaining and maintaining suitably qualified staff. The success of the Company depends on the ability of management to interpret market data correctly and to interpret and respond to economic, market and other conditions in order to locate and adopt appropriate opportunities. No assurance can be given that individuals with the required skills will continue employment with Lion One or that replacement personnel with comparable skills can be found. Lion One will be dependent on the services of key executives, including the directors of Lion One and a small number of highly skilled and experienced executives and personnel. Due to the relatively small size of Lion One, the loss of these persons or Lion One's inability to attract and retain additional highly skilled employees may adversely affect its business and future operations.

#### The Company may not be able to raise additional financing if required to advance exploration properties.

As the Company's exploration efforts on the Tuvatu Gold Project proceed, additional funds may be required to continue exploration and to develop an economic ore body and place it into commercial production. Exploration and future development of these mineral properties may depend on the Company's ability to obtain adequate financing through the joint venturing of projects, debt financing, equity financing or by other means. There can be no assurance that the Company will be successful in obtaining the required financing. Failure to obtain such financing would result in delay or indefinite postponement of exploration and future development work on the Tuvatu Gold Project.

#### Fluctuating Metals Prices.

The Company's revenues, if any, are expected to be in large part derived from the extraction and sale of gold and other metals or interests related thereto. The price of those commodities has fluctuated widely, particularly in recent years, and is affected by numerous factors beyond the Company's control including international, economic and political trends, expectations of inflation, currency exchange fluctuations, interest rates, global or regional consumptive patterns, speculative activities and increased production due to new extraction developments and improved extraction and production methods. The effect of these factors on the price of gold, and therefore the economic viability of any of the Company's exploration projects, cannot accurately be predicted.

#### Inflation may affect the Company's estimates for costs to complete its planned exploration programs, and the Company may need to raise additional funds or reduce expenditures.

Inflation has risen significantly in 2022 and 2023 and has resulted in higher costs for the goods, such as fuel, and services required for the Company's expenditure programs. Accordingly, if inflation is to continue to rise, there is a risk that the Company's estimates for the costs to complete its planned exploration programs could rapidly become out-of-date. If this happens, the Company will need to either raise additional funds through additional equity issuances, causing equity dilution, or reduce its expenditures and reduce progress. Increases in inflation may result in central bank interest rate hikes which can trigger negative capital market conditions making financing difficult. While inflation increases may lead to higher precious metals prices, there can be no assurance of that the Company's plan of operations and its share price will not be adversely affected by increased inflation.

## Global Demand and International Trade Restrictions

The international gold industry is subject to extensive government regulation and policies. In general, trade agreements, governmental policies and/or trade restrictions are beyond the control of the Company and may affect the supply of minerals available internationally. Similarly, trade restrictions or foreign policy have the potential to impact the ability to supply gold to developing markets, such as China and India.

## The Company's Common Shares may experience price volatility and the market price of the Common Shares cannot be assured.

There can be no assurance that an active market for the Common Shares will be sustained. If an active or liquid market for the Common Shares fails to develop or be sustained, the prices at which the Common Shares trade may be adversely affected. Securities of mining companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include macroeconomic developments in North America and globally, and market perceptions of the attractiveness of particular industries. The price of the securities of the Company is also likely to be significantly affected by short-term changes in commodity prices, other precious metal prices or other mineral prices, prevailing interest rates and the market for similar securities, the market price of the Company's other securities, general economic conditions and the Company's financial condition, historic financial performance and future prospects, currency exchange fluctuation, the political environment in Fiji, or in its financial condition or results of operations as reflected in its quarterly earnings reports.

Other factors unrelated to the performance of the Company that may have an effect on the price of the securities of the Company include the following: the extent of analyst coverage available to investors concerning the business of the Company may be limited if investment banks with research capabilities do not follow the Company's securities; lessening in trading volume and general market interest in the Company's securities may affect an investor's ability to trade significant numbers of securities of the Company; the size of the Company's public float may limit the ability of some institutions to invest in the Company's securities; and a substantial decline in the price of the securities of the Company that persists for a significant period of time could cause the Company's securities to be delisted from an exchange, further reducing market liquidity. If an active market for the securities of the Company does not continue, the liquidity of an investor's investment may be limited and the price of the securities of the Company may decline and investors may lose their entire investment in the Common Shares.

As a result of any of these factors, the market price of the securities of the Company at any given point in time may not accurately reflect the long-term value of the Company. Securities class-action litigation often has been brought against companies following periods of volatility in the market price of their securities. The Company may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

Any volatility in the price of the Common Shares may affect the ability of shareholders to sell their Common Shares at an advantageous price. Market price fluctuations in the Common Shares may be due to the Company's operating results failing to meet the expectations of securities analysts or investors in any quarter, downward revision in securities analysts' estimates, governmental regulatory action, adverse changes in general market conditions or economic trends, including changes resulting from the COVID-19 pandemic and the Russian Federation's military invasion of Ukraine, acquisitions, dispositions or other material public announcements by the Company or its competitors, along with a variety of additional factors, including, without limitation, those set forth under "Cautionary Note Regarding Forward-Looking Statements" in this AIF.

The Company may issue additional securities which may affect market prices of the Common Shares and subject a holder to dilution.

#### Future Sales of Shares by Existing Shareholders

Sales of a large number of Lion One's Common Shares in the public markets, or the potential for such sales, could decrease the trading price of the Common Shares and could impair Lion One's ability to raise capital through future sales of its Common Shares. The Company may from time to time have previously issued securities at an effective price per share which will be lower than the market price of its Common Shares. Accordingly, certain shareholders of Lion One may have an investment profit in the Company's Common Shares that they may seek to liquidate.

#### Conflicts of interest may arise between Lion One's directors and officers.

Certain of the directors and officers of Lion One may also serve from time to time as directors and/or officers of other companies involved in natural resource exploration, development and mining operations and consequently there exists the possibility for such directors and officers to be in a position of conflict. Any decision made by any of such directors and officers will be made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of Lion One and its shareholders. In addition, each of the directors is required to declare and refrain from voting on any matter in which such directors may have a conflict of interest in accordance with the procedures set forth in the Business Corporations Act of BC and other applicable laws.

#### Any future acquisitions by the Company may not be successful or acceptable.

Lion One's business strategy includes continuing to seek new property and corporate acquisition, merger and joint venture opportunities. In pursuit of such opportunities, Lion One may fail to select appropriate acquisition candidates or negotiate acceptable arrangements, including arrangements to finance acquisitions or integrate the acquired businesses and their personnel into Lion One. Lion One cannot assure that it can complete any acquisition or business arrangement that it pursues, or is pursuing, on favourable terms, or that any acquisitions or business arrangements completed will ultimately benefit Lion One's business.

### **DIVIDEND POLICY**

No dividends on the Common Shares have been paid by Lion One to date. Lion One anticipates that for the foreseeable future it will retain future earnings and other cash resources for the operation and development of its business. Payment of any future dividends will be at the discretion of Lion One's board of directors after taking into account many factors, including Lion One's operating results, financial condition and current and anticipated cash needs. Further, Lion One conducts its major operations through subsidiaries. Lion One's ability to obtain dividends or other distributions from subsidiaries may be subject to restrictions on dividends or repatriation of earnings under applicable local law, monetary transfer restrictions and credit facilities. There can be no assurance that there will be no future restrictions on repatriation, the payment of dividends or other distributions from subsidiaries which are necessary to enable the Company to pay dividends in the future.

### **DESCRIPTION OF CAPITAL STRUCTURE**

The Company is authorized to issue an unlimited number of common shares without par value of which, as of June 30, 2023, 206,245,241 common shares are issued and outstanding and as of the date of this report 206,320,241 common shares are issued and outstanding. The common shares do not carry any pre-emptive, subscription, redemption, retraction, conversion or exchange rights, nor do they contain any sinking or purchase fund provisions. The holders of Common Shares are entitled to receive notice of any meeting of Lion One shareholders and to attend and vote thereat. Each Common Share entitles its holder to one vote. The holders of Common Shares are entitled to receive on a *pro rata* basis such dividends as the board of directors of Lion One may declare out of funds legally available therefor. In the event of the dissolution, liquidation,

winding-up or other distribution of the assets of Lion One, such holders are entitled to receive on a *pro rata* basis all of the assets of Lion One remaining after payment of all of Lion One's liabilities. The Common Shares carry no pre-emptive, conversion, redemption or retraction rights. The Common Shares carry no other special rights and restrictions other than as described herein.

Lion One is authorized to issue securities for quotation on the ASX in the form of CHESS Depository Instruments ("CDIs"). The Company's CDIs are listed and freely tradable on the ASX with each CDI representing a beneficial ownership interest in one common share of the Company and have materially the same rights as common shares of the Company. CDIs are issued as regulatory constraints do not allow for the listing and trading of common shares of foreign corporations on the ASX.

## MARKET FOR SECURITIES

The common shares of the Company are listed and posted for trading on the TSX-V under the symbol "LIO". As at June 30, 2023 a balance of 13,532,844 CDIs remain listed on the ASX under the symbol "LLO". Each CDI represents one common share of the Company.

Country	Symbol	Exchange/Market
Canada	LIO	TSX Venture Exchange
USA	LOMLF	OTCQX Market
Germany	LY1	Frankfurt Stock Exchange
Australia	LLO	Australia Securities Exchange

## TRADING PRICE AND VOLUME

The Company's common shares traded on the TSX-V (trading symbol "LIO") during fiscal year ended June 30, 2022. The table below presents the high and low trading range, closing prices, and monthly trading volumes on the TSX-V for the period from July 1, 2022 to June 30, 2023. All prices are in Canadian dollars.

Month	High	Low	Close (as at month end)	Trading Volume (Monthly)
July 2022	1.53	1.17	1.38	2,902,425
August 2022	1.43	1.08	1.11	3,320,463
September 2022	1.11	0.63	0.77	10,873,840
October 2022	0.84	0.59	0.69	9,121,859
November 2022	0.97	0.67	0.79	6,432,341
December 2022	1.04	0.74	0.99	4,400,752
January 2023	1.07	0.88	0.91	3,596,522
February 2023	0.98	0.78	0.82	1,563,712
March 2023	0.90	0.79	0.83	1,627,322
April 2023	1.05	0.83	1.03	2,902,322
May 2023	1.06	0.65	0.68	15,991,465
June 2023	0.74	0.64	0.71	6,228,403

The Common Shares are listed for trading on the ASX under the trading symbol "LLO". The table below presents the high and low trading range, closing prices, and monthly trading volumes for CDI's on the ASX for the period from July 1, 2022 to June 30, 2023. All prices are in Australian dollars.

Month	High	Low	Close (as at month end)	Trading Volume (Monthly)
July 2022	1.80	1.425	1.60	106,586
August 2022	1.59	1.25	1.38	292,226
September 2022	1.38	0.76	0.85	436,061
October 2022	1.02	0.72	0.78	511,669
November 2022	1.165	0.77	0.895	582,761
December 2022	1.17	0.85	1.17	258,639
January 2023	1.25	0.985	1.01	369,545
February 2023	1.085	0.88	0.90	250,902
March 2023	0.975	0.89	0.96	88,109
April 2023	1.28	0.93	1.18	309,861
May 2023	1.20	0.76	0.76	1,205,697
June 2023	0.86	0.835	0.79	444,106

## PRIOR SALES

The only securities the Company has outstanding which are not listed or quoted on the market place are stock options granted under the Company's stock option plan and compensation options (refer to Note 12c and 12e ) in the consolidated year end financial statements.

The following stock options are outstanding and exercisable as at June 30, 2023:

	Number of Options Outstanding	Exercise price	Number of Options Exercisable	Expiry date
Stock Options	2,195,000	0.75	2,195,000	March 1, 2024
	75,000	1.00	75,000	March 1, 2024
	1,800,000	1.50	1,800,000	June 3, 2025
	3,420,000	1.25	2,577,500	June 2, 2026
	3,648,333	1.25	1,238,331	September 3, 2027
	<u>11,138,333</u>		<u>7,885,831</u>	

The following compensation stock options are outstanding and exercisable as at June 30, 2023:

	Number of Options	Exercise Price	Expiry Date
September 2023 bought deal	1,040,880	0.77	September 28, 2025
May 2023 bought deal	1,755,000	0.92	November 11, 2025
Balance outstanding and exercisable	<u>2,795,880</u>		

## ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER

As at June 30, 2023, the Company had no shares held in escrow. The following securities of the Company are subject to contractual restrictions on transfer as of June 30, 2023:

Designation of Class	Number of Securities Subject to Contractual Restriction on Transfer	Percentage of Class
Stock Options	7,885,831	100%

<sup>(1)</sup> Contractual restrictions on transfer apply pursuant to the Company's stock option plan.

## DIRECTORS AND OFFICERS

### NAME, OCCUPATION AND SECURITY HOLDINGS

The name, province, state of residence, position and principal occupation within the five preceding years for each of the directors and officers of the Company at the date of this report are set out in the following table.

Name, Province/State and Country of Residence, and Position with the Company	Principal Occupations During The Five Preceding Years <sup>(1)</sup>	Director or Officer Since
<b>Walter H. Berukoff (3)</b> West Vancouver, BC, Canada <i>Chairman, CEO and Director</i>	Chairman and CEO of Lion One Metals Limited since 2010 and Merchant banker; President of Red Lion Management Ltd., a Vancouver-based merchant banking company	December 1, 1997
<b>Kevin Puil (1)(2)(4)</b> Vancouver, BC, Canada <i>Director</i>	Managing Partner at RIVI Capital LLC since 2014	September 30, 2013
<b>Richard J. Meli (1)(2)(3)(4)</b> New York, New York, USA <i>Director</i>	Independent businessman focused on mining industry	February 12, 2004
<b>David Tretbar (1)(4)</b> Sedalia, Colorado, USA <i>Director</i>	Director and Senior Vice President Exploration for San Cristobal Mining Inc. Vice President of Exploration and Mineral Resources for Summit Mining International, a subsidiary of Sumitomo Corporation of Japan from 2010 to 2022.	June 1, 2020
<b>Hamish Greig</b> Vancouver, BC, Canada <i>Vice-President, Corporate Secretary</i>	Vice President and Corporate Secretary of Lion One Metals Limited since 2010	June 22, 2012
<b>Tony Young</b> Burnaby, BC, Canada <i>Chief Financial Officer</i>	CFO of Lion One Metals Limited since 2017 and Director of Finance and Controller with various TSX listed gold mining companies.	November 10, 2017
<b>Sergio Cattalani</b> Denver, Colorado, USA <i>Senior Vice-President, Exploration</i>	Vice President Exploration at Newcastle Gold Equinox Gold from 2016-2018, Economic Geologist at EMX Royalty Corp. from 2018-2020	May 1, 2021
<b>Patrick Hickey</b> Golden, Colorado, USA <i>Chief Operating Officer</i>	President and Director of PHNG, a mining consultancy, Chief Executive of the African operations for Kinross Gold Corp from 2010 – 2014	June 1, 2021

<sup>(1)</sup> Member of the Company's Audit Committee

<sup>(2)</sup> Member of the Company's Compensation Committee

<sup>(3)</sup> Member of the Company's Corporate Governance Committee

<sup>(4)</sup> Independent in accordance with the definition of 52-110

<sup>(5)</sup> The information as to principal occupation, business or employment and Common Shares beneficially owned or controlled has been provided by the respective directors and officers.

Each director elected will hold office until the conclusion of the next annual general meeting of the Company at which a director is elected, unless the director's office is vacated earlier in accordance with the Articles of the Company or the provisions of the *Business Corporations Act* (British Columbia).

As of the date of this AIF, the directors and executive officers of the Company and its subsidiaries as a group beneficially owned or controlled or directed, directly or indirectly, or exercised control or direction over 22,152,969 common shares of the Company, representing 10.7% of the issued and outstanding common shares, and options to acquire 6,510,000 common shares. This total includes 20,897,609 common shares beneficially owned or controlled, directly or indirectly, by Walter H. Berukoff, Chairman and Chief Executive Officer, representing 10.1% of the issued and outstanding common shares of the Company.

## CEASE TRADE ORDERS OR BANKRUPTCIES

To the best of the Company's knowledge, other than as set forth below, no director or executive officer of the Company is, as at the date of this AIF, or was, within ten years before the date of this AIF, a director, chief executive officer or chief financial officer of any company (including the Company), that (a) was subject to a cease trade or similar order or an order that denied the relevant company access to any exemption under the securities legislation, for a period of more than 30 consecutive days, or (b) was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

To the best of the Company's knowledge, other than as set forth below, no director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company (a) is, as at the date of the AIF, or has been within the 10 years before the date of this AIF, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, or (b) has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder, except as set out below.

## PENALTIES OR SANCTIONS

To the best of the Company's knowledge, no director, or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to (a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

## CONFLICTS OF INTEREST

To the best of the Company's knowledge, except as otherwise noted in this AIF, there are no existing or potential conflicts of interest among the Company, its directors, officers, or other members of management of the Company except that certain of the directors, officers and other members of management serve as directors, officers and members of management of other public companies and therefore it is possible that a conflict may arise between their duties as a director, officer or member of management of such other companies and their duties as a director, officer or member of management of the Company.

The directors and officers of the Company are aware of the existence of laws governing accountability of directors and officers for corporate opportunity and requiring disclosure by directors of conflicts of interest and the Company will rely upon such laws in respect of any directors' or officers' conflicts of interest or in respect of any breaches of duty to any of its directors and officers. All such conflicts must be disclosed by such directors or officers in accordance with the *Business Corporations Act* (British Columbia).

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

The Company or its subsidiaries is not a party, nor are any of the Company's properties subject to any pending legal proceedings the outcome of which would have a material adverse effect on the Company. Management has no knowledge of any material legal proceedings in which the Company may be a party which are contemplated by governmental authorities or otherwise.

## **INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

The management of the Company is not aware of any material interest, direct or indirect, of any insider of the Company, or any Associate or Affiliate of any such Person, in any transaction during the Company's three last completed financial years, or during the current financial year, except as set out elsewhere in this AIF, that has materially affected or is reasonably expected to materially affect the Company.

## **TRANSFER AGENT AND REGISTRAR**

Lion One's registrar and transfer agent for its Common Shares is Computershare Trust Company of Canada at its principal offices in Vancouver, British Columbia.

## **MATERIAL CONTRACTS**

On April 1, 2023, the Company renewed its Management and Corporate Services Agreement ("Services Agreement") with Cabrera Capital Corp. ("Cabrera"), a company controlled by Walter Berukoff, the CEO and director of the Company, for an additional 5-year term. Under the Services Agreement, Cabrera agrees to provide a fully furnished and equipped business premises as well as management, business administration, shareholder services, securities administration, and corporate and general administration services to the Company for an initial period of five years from the date of the Services Agreement.

The Company has agreed to pay Cabrera a monthly fee equal to the actual out of pocket expenses incurred by Cabrera, its advisers, sub-agents and employees in connection with the provision of these services and any additional direct costs associated with providing these services. In addition, the Company has agreed to pay \$15,000 per month in rent for its office premises. The Company can terminate the Services Agreement at any time by paying Cabrera a year's worth of fees based on the average monthly fee paid to Cabrera since April 1, 2023.

During the year ended June 30, 2023, the Company paid \$174,405 in rent to Lions Den (Fiji) Pte Limited, a company controlled by Walter Berukoff, the CEO and director of the Company, for short-term and long-term accommodations including utilities in Fiji.

The Company entered into the Loan Facility Agreement with Nebari on January 19, 2023 for the Loan Facility of up to US\$37,000,000.

Lion One entered into a warrant indenture with Computershare Trust Company of Canada on May 11, 2023 in connection with the issuance of up to a maximum of 16,876,250 warrants pursuant to a prospectus supplement dated May 5, 2023 to the short form base shelf prospectus dated May 13, 2022.

Lion One entered into a warrant indenture with Computershare Trust Company of Canada on September 28, 2022 in connection with the issuance of up to a maximum of 9,338,000 warrants pursuant to a prospectus supplement dated September 22, 2022 to the short form base shelf prospectus dated May 13, 2022.

The Company did not enter into any contract during the most recently completed financial year, and has not entered into any contract before June 30, 2023 that is still in effect that may be considered material to the Company, other than the material contracts disclosed herein and those entered into in the ordinary course of business not required to be filed under National Instrument 51-102 Continuous Disclosure Obligations.

## **INTERESTS OF EXPERTS**

The following are names of persons or companies (i) that have prepared a or certified a report, valuation statement or opinion described or included in a filing, or referred to in a filing made under NI 51-102 by the Company during, or relating to the Company's most recently completed financial year; and (ii) whose profession or business gives authority to the report, valuation statement or opinion made by the person or company:

- (a) Mining Associates Pty Ltd. (“MA”) – Geology and Mineral Resource estimate and related information in the PEA
- (b) GeoSpy – Geology, exploration in the PEA
- (c) Entech – Mining and mining-related operations, underground geotechnical investigations, mining-related capital and operating cost estimates in the PEA
- (d) Tetra Tech Canada Inc. – Metallurgical test work review, process and process-related cost estimates, G&A and surface service operating cost estimates, site infrastructures (excluding site geotechnical investigation and TSF), and environment in the PEA
- (e) Wood – Site geotechnical investigation and TSF in the PEA

Based on information provided by the experts, none of the experts named above, when or after they prepared the statement, report or valuation, has received or will receive any registered or beneficial interests, direct or indirect, in any securities or other property of the Company or of one of the Company’s associates or affiliates (based on information provided to the Company by such experts). As at the date hereof, the aforementioned persons, and the directors, officers, employees and partners, as applicable, of each of the aforementioned companies and partnerships beneficially own, directly or indirectly, in total, less than one percent of the securities of the Company.

The auditors of the Company are Davidson & Company LLP, Chartered Professional Accountants, of Vancouver, British Columbia. Davidson & Company LLP, has advised the Company that it is independent within the meaning of the Code of Professional Conduct of the Chartered Professional Accountants of British Columbia.

Neither the aforementioned persons, nor any director, officer, employee or partner, as applicable, of the aforementioned companies or partnerships, is currently expected to be elected, appointed or employed as a director, officer or employee of the Company or of any associate or affiliate of the Company.

## **INFORMATION ON AUDIT COMMITTEE**

The Company is subject to National Instrument 52-110 *Audit Committees* (“NI 52-110”), which has been adopted by the Canadian Securities Administrators and which prescribes certain requirements in relation to audit committees. NI 52-110 requires the Company to disclose annually certain information concerning the constitution of its Audit Committee and its relationship with its independent auditors, which is set forth below.

### AUDIT COMMITTEE CHARTER

The Company’s Audit Committee is governed by an audit committee charter, the text of which is set out in Appendix “A” of this AIF.

### COMPOSITION OF THE AUDIT COMMITTEE

The Company’s Audit Committee is comprised of three directors: Richard J. Meli, Kevin Puil and David Tretbar. All members are considered independent members of the Audit Committee pursuant to the meaning of “independent” provided in NI 52-110 and all members of the Audit Committee are considered financially literate as provided for in NI 52-110. Mr. Richard Meli acts as chair of the Audit Committee. The Company’s board of directors is reviewing the composition of the Audit Committee and plans to identify and appoint a new director to serve on the Audit Committee.

### RELEVANT EDUCATION AND EXPERIENCE

This section described the education and experience of the Company’s Audit Committee members that is relevant to the performance of their responsibilities in that role.

*Richard J. Meli*

Mr. Meli earned a B.S. in Economics in 1969 and a M.S. in Accounting in 1971, both from the Wharton School

at the University of Pennsylvania. Mr. Meli began his career with PricewaterhouseCoopers (former known as Price Waterhouse & Co.) in 1971, spending eight years in the firm's New York office, becoming a CPA and reaching the level of audit manager. Mr. Meli was President of La Mancha Resources Inc. from September, 2004 until May, 2006; President of Luzenac America, a subsidiary of Rio Tinto plc. from 1999 to 2001; Senior Executive Business Development of Rio Tinto plc from 1996 to 1999.

#### *Kevin Puil*

Mr. Puil holds a degree in Economics from the University of Victoria in British Columbia, and is a Chartered Financial Analyst (CFA). He has held the positions of advisor and analyst with Goepel McDermid (now Raymond James), and was a partner and portfolio manager at Bolder Investment Partners (now Haywood Securities), both located in Vancouver, British Columbia. From 2008 to 2014 he was an analyst and portfolio manager at a natural resource fund in California. He is currently Managing Partner at RIVI Capital LLC.

#### *David Tretbar*

Mr. Tretbar holds a Bachelor of Science from Northern Arizona University and a Master's of Science in Geochemistry from the Mackay School on Mines, University of Nevada, Reno. He is a Registered Professional Geologist in the state of Arizona and Certified Professional Geologist through the American Institute of Professional Geologists. He is currently Director and Senior Vice President Exploration for San Cristobal Mining Inc. From 2010 to 2022, he held the position of Vice President of Exploration and Mineral Resources for Summit Mining International, a 100% -owned subsidiary of Sumitomo Corporation of Japan. His duties with Summit included new business development, technical evaluations, and providing exploration and operations support to Sumitomo's global mineral program. Previously Mr. Tretbar worked as Chief Geologist at Minera San Cristóbal Mine in Bolivia, Senior Exploration Geologist for Alamos Gold at the Mulatos Mine in Mexico, Mill Manager of the Ashdown Molybdenum Mine in Nevada, and as Process Mineralogist for Barrick Gold at the Goldstrike Operation in Nevada. He spent many years working as an underground mine geologist at various Nevada gold mines.

### AUDIT COMMITTEE OVERSIGHT

Since the commencement of the Company's most recently completed financial year ended June 30, 2023, the Company's board of directors has not failed to adopt a recommendation of the Audit Committee to nominate or compensate an external auditor.

### RELIANCE ON CERTAIN EXEMPTIONS

Since the commencement of the Company's most recently completed financial year ended June 30, 2023, the Company has not relied on the exemptions contained in Section 2.4 "De Minimis Non-Audit Services" or Section 8 "Exemptions" of NI 52-110. Section 2.4 provides an exemption from the requirement that the Audit Committee must pre-approve all non-audit services to be provided by the auditor, where the total amount of fees related to the non-audit services are not expected to exceed 5% of the total fees payable to the auditor in the fiscal year in which the non-audit services were provided. Section 8 permits a company to apply to a securities regulator authority for an exemption from the requirements of NI 52-110, in whole or in part.

The Company has not relied on and is not currently relying on any of the exemptions to the requirement to have all audit committee members be independent (as contained in sections 2.4, 3.2, 3.3(2), 3.4, 3.5 and 3.6 of NI 52-110) or that all committee members be financially literate (as contained in section 3.8 of NI 52-110) or the exemption from NI 52-110, in whole or in part, granted under Part 8 of NI 52-110.

### PRE-APPROVAL POLICIES AND PROCEDURES

The Audit Committee has not adopted specific policies and procedures for the engagement of non-audit services. Subject to the requirements of NI 52-110, the engagement of non-audit services is considered by the Company's board of directors, and where applicable the Audit Committee, on a case-by-case basis.

## EXTERNAL AUDIT SERVICE FEES

The fees paid by the Company to its auditor in each of the last two financial years, by category, are as follows:

Financial Year Ending	Audit Fees	Non Audit Related Fees	Tax Fees	All Other Fees
June 30, 2023	\$75,000	\$45,000	\$Nil	\$10,000
June 30, 2022	\$46,000	\$20,000	\$Nil	\$6,500

## **ADDITIONAL INFORMATION**

Additional information relating to the Company may be found on SEDAR at [www.sedar.com](http://www.sedar.com). Additional information, including the remuneration and indebtedness of the directors and officers of the Company, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans, compliance with securities law and corporate governance assessment will be contained in the Company's management information circular for its upcoming annual meeting of shareholders of the Company. Additional financial information is provided in the Company's consolidated financial statements and management discussion and analysis for the 2023 Fiscal Year.

When the securities of the Company are in the course of a distribution pursuant to a short form prospectus, or a preliminary short form prospectus has been filed in respect of a distribution of its securities, copies of the following documents may be obtained via SEDAR ([www.sedar.com](http://www.sedar.com)) or upon request from the Corporate Secretary of the Company, Lion One Metals Limited, 306 - 267 West Esplanade, North Vancouver, British Columbia, Canada V7M 1A5:

- (a) this AIF, together with one copy of any document, or the pertinent pages of any document, incorporated by reference in this AIF;
- (b) Lion One's comparative financial statements for its most recently completed financial year for which financial statements have been filed, together with the Company's report of the auditor and a copy of the most recent interim financial statements of the Company that have been filed, if any, for any period after the end of its most recently completed financial year;
- (c) Lion One's information circular in respect of its most recent annual meeting of shareholders; and
- (d) any other documents that are incorporated by reference into the preliminary short form prospectus or the short form prospectus that is not required to be provided under paragraphs (a), (b) or (c).

At any other time, copies of any other documents referred to in paragraphs (a), (b) and (c) above may be obtained upon request from the Corporate Secretary of the Company. A person who is not a security holder of the Company may be required to pay a reasonable charge for such copies.

## **APPENDIX A - AUDIT COMMITTEE CHARTER**

National Instrument 52-110 (the “Instrument”) relating to the composition and function of audit committees applies to every TSX Venture Exchange listed company, including the Company. The Instrument requires all affected issuers to have a written audit committee charter (the “Charter”) which must be disclosed, as stipulated by Form 52-110 F2, in the management information circular of the Company wherein management solicits proxies from the security holders of the Company for the purpose of electing directors to the Board.

This Charter has been adopted by the Board in order to comply with the Instrument and to more properly define the role of the Audit Committee in the oversight of the financial reporting process of the Company. Nothing in this Charter is intended to restrict the ability of the Board or Audit Committee to alter or vary procedures in order to comply more fully with the Instrument, as amended from time to time.

### **1.0 PURPOSE**

The purpose of the Audit Committee (the “Committee”) is to: a) assist the Board in fulfilling its oversight responsibilities with respect to financial reporting and disclosure requirements; b) ensure that an effective risk management and financial control framework has been implemented by management of the Company; and c) be responsible for external and internal processes.

### **2.0 COMPOSITION AND MEMBERSHIP**

The Board will appoint the members (“Members”) of the Committee after the annual general meeting of shareholders of the Company. The Members will be appointed to hold office until the next annual general meeting of shareholders of the Company or until their successors are appointed. The Board may remove a Member at any time and may fill any vacancy occurring on the Committee. A Member may resign at any time and a Member will cease to be a Member upon ceasing to be a director. The Committee will consist of three directors that meet the criteria for independence and financial literacy established by applicable laws and the rules of the stock exchange upon which the Company’s securities are listed, including Multilateral Instrument 52-110 Audit Committees. In addition, each director will be free of any relationship which could, in the view of the Board, reasonably interfere with the exercise of a member’s independent judgment. The Board will appoint one of the Members to act as the Chairman of the Committee. The secretary of the Company (the “Secretary”) will be the secretary of all meetings and will maintain minutes of all meetings and deliberations of the Committee. In the absence of the Secretary at any meeting, the Committee will appoint another person who may, but need not, be a Member to be the secretary of that meeting.

### **3.0 MEETINGS**

Meetings of the Committee will be held at such times and places as the Chairman may determine. Twenty- four (24) hours advance notice of each meeting will be given to each Member orally, by telephone, by facsimile or email, unless all Members are present and waive notice, or if those absent waive notice before or after a meeting. Members may attend all meetings either in person or by conference call. At the request of the external auditors of the Company, the Chief Executive Officer or the Chief Financial Officer of the Company, or any member of the Committee, the Chairman will convene a meeting of the Committee. Any such request will set out in reasonable detail the business proposed to be conducted at the meeting so requested. The Chairman, if present, will act as the Chairman of meetings of the Committee. If the Chairman is not present at a meeting of the Committee, then the Members present may select the acting Chairman of the meeting. A majority of Members will constitute a quorum for a meeting of the Committee. Each Member will have one vote and decisions of the Committee will be made by an affirmative vote of the majority. The Chairman will not have a deciding or casting vote in the case of an equality of votes. Powers of the Committee may also be exercised by written resolution signed by all Members. The Committee may invite from time to time such persons as it sees fit to attend its meetings and to take part in the discussion and consideration of the affairs of the Committee. In advance of every regular meeting of the Committee, the Chairman, with the assistance of the Secretary, will prepare and distribute to the Members and others as deemed appropriate by the Chairman, an agenda of matters to be addressed at the meeting together with appropriate briefing materials. The Committee may require officers and employees of the Company to produce such information and reports as the Committee may deem appropriate in order to fulfill its duties.

## **4.0 DUTIES AND RESPONSIBILITIES**

The duties and responsibilities of the Committee are as follows:

### *4.1 Financial Reporting and Disclosure*

- a) Review and recommend to the Board for approval, the quarterly financial statements, management discussion and analysis, financial reports and any public release of financial information through press release or otherwise.
- b) Review and recommend to the Board for approval, the audited annual financial statements, including the auditors' report thereon, management discussion and analysis and financial reports.
- c) Review and recommend to the Board for approval, where appropriate, financial information contained in any prospectuses, annual information forms, material change disclosures of a financial nature and similar disclosure documents.
- d) Review with management of the Company and with external auditors significant accounting principles and disclosure issues and alternative treatments under Canadian generally accepted accounting principles ("GAAP") all with a view to gaining reasonable assurance that financial statements are accurate, complete and present fairly the Company's financial position and the results of its operations in accordance with Canadian GAAP.

### *4.2 Internal Controls and Audit*

- e) Review and assess the adequacy and effectiveness of the Company's system of internal control and management information systems through discussions with management and the external auditors.
- f) Satisfy itself that adequate procedures are in place for the review of the Company's disclosure of financial information extracted or derived from the Company's financial statements.
- g) Periodically assess the adequacy of such systems and procedures to ensure compliance with regulatory requirements and recommendations.
- h) Review and discuss the Company's major financial risk exposures and the steps taken to monitor and control such exposures, including the use of any financial derivatives and hedging activities.
- i) Review annually insurance programs relating to the Company and its investments.

### *4.3 External Audit*

- j) Review the performance of the external auditors who are accountable to the Committee and the Board as representatives of the shareholders and recommend to the Board the external auditors to be nominated for the purpose of preparing or issuing an audit report.
- k) Oversee the work of the external auditors appointed by the shareholders of the Company with respect to preparing and issuing an audit report.
- l) Review the results of the external audit and the report thereon including, without limitation, a discussion with the external auditors as to the quality of accounting principles used, any alternative treatments of financial information that have been discussed with management of the Company, the ramifications of their use as well as any other material changes.
- m) Review the reasons for any proposed change in the external auditors which is not initiated by the Committee or Board and any other significant issues related to the change, including the response of the incumbent auditors, and enquire as to the qualifications of the proposed auditors before making its recommendations to the Board.
- n) Review the independence of the external auditors, including a written report from the external auditors respecting their independence and consideration of applicable auditor independence standards.

#### *4.4 Associated Responsibilities*

Establish, monitor and periodically review a whistleblower policy and associated procedures for the receipt, retention and treatment of: a) complaints received by the Company regarding accounting, internal accounting controls or auditing matters; and b) the confidential, anonymous submission by directors, officers and employees of the Company of concerns regarding questionable accounting or auditing matters.

#### *4.5 Non-Audit Services*

Pre-approve all non-audit services to be provided to the Company or any subsidiary entities by its external auditors. The Committee may delegate to one or more of its members the authority to pre-approve non-audit services but pre-approval by such member or members so delegated shall be presented to the full audit committee at its first scheduled meeting following such pre-approval.

#### *4.6 Oversight Function*

While the Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Committee to plan or conduct audits or to determine that the Company's financial statements are complete and accurate or are in accordance with GAAP and applicable rules and regulations. These are the responsibilities of Management and the external auditors. The Committee, the Chairman and any Members identified as having accounting or related financial expertise are members of the Board, appointed to the Committee to provide broad oversight of the financial, risk and control related activities of the Company, and are specifically not accountable or responsible for the day-to-day operation or performance of such activities. Although the designation of a Member as having accounting or related financial expertise for disclosure purposes is based on that individual's education and experience, which that individual will bring to bear in carrying out his or her duties on the Committee, such designation does not impose on such person any duties, obligations or liability that are greater than the duties, obligations and liability imposed on such person as a member of the Committee and Board in the absence of such designation. Rather, the role of a Member who is identified as having accounting or related financial expertise, like the role of all Members, is to oversee the process, not to certify or guarantee the internal or external audit of the Company's financial information or public disclosure.

### **5.0 REPORTING**

The Chairman will report to the Board at each Board meeting on the Committee's activities since the last Board meeting. The Secretary will circulate the minutes of each meeting of the Committee to the members of the Board.

### **6.0 ACCESS TO INFORMATION AND AUTHORITY**

The Committee will be granted unrestricted access to all information regarding the Company and all directors, officers and employees will be directed to cooperate as requested by members of the Committee. The Committee has the authority to retain, at the Company's expense, independent legal, financial and other advisors, consultants and experts, to assist the Committee in fulfilling its duties and responsibilities. The Committee also has the authority to communicate directly with internal and external auditors.

### **7.0 REVIEW OF CHARTER**

The Committee will review and assess, on an annual basis, the adequacy of this Charter and recommend any proposed changes to the Board for approval.