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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K**

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended **December 31, 2022**

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

**000-55139**

(Commission File Number)

**Lion Copper and Gold Corp.**

(Exact Name of Registrant as specified in its charter)

**British Columbia, Canada**

(State or other Jurisdiction of Incorporation or organization)

**98-1664106**

(I.R.S. Employer  
Identification No.)

**c/o #1200 - 750 West Pender Street  
Vancouver, British Columbia**

(Address of Principal Executive Offices)

**V6C 2T8**

(Zip Code)

Registrant's Telephone Number, including area code: **(917) 371-2966**

Securities registered pursuant to Section 12(b) of the Act: **None**

Securities registered pursuant to Section 12(g) of the Act: **Common Shares without par value**  
(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

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Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large Accelerated Filer ☐

Accelerated Filer ☐

Non-Accelerated Filer ☐

Smaller Reporting Company ☒

Emerging Growth Company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter: **\$ 16,030,950 as at June 30, 2022.**

Indicate the number of shares outstanding of each of the registrant's classes of common equity, as of the latest practicable date: **309,567,975 common shares as at March 9, 2023.**

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K, which Proxy Statement is to be filed within 120 days after the end of the registrant's fiscal year ended December 31, 2022.

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## TABLE OF CONTENTS

|                                                                                                                                             |                           |
|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <a href="#"><u>Note about Forward-Looking Statements</u></a>                                                                                | <a href="#"><u>4</u></a>  |
| <a href="#"><u>Glossary of Terms</u></a>                                                                                                    | <a href="#"><u>6</u></a>  |
| <a href="#"><u>ITEM 1. BUSINESS</u></a>                                                                                                     | <a href="#"><u>9</u></a>  |
| <a href="#"><u>ITEM 1A. RISK FACTORS</u></a>                                                                                                | <a href="#"><u>12</u></a> |
| <a href="#"><u>ITEM 2. PROPERTIES</u></a>                                                                                                   | <a href="#"><u>17</u></a> |
| <a href="#"><u>ITEM 3. LEGAL PROCEEDINGS</u></a>                                                                                            | <a href="#"><u>54</u></a> |
| <a href="#"><u>ITEM 4. MINE SAFETY DISCLOSURES</u></a>                                                                                      | <a href="#"><u>54</u></a> |
| <a href="#"><u>ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES</u></a> | <a href="#"><u>54</u></a> |
| <a href="#"><u>ITEM 6. [Reserved]</u></a>                                                                                                   | <a href="#"><u>57</u></a> |
| <a href="#"><u>ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS</u></a>                       | <a href="#"><u>57</u></a> |
| <a href="#"><u>ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u></a>                                                  | <a href="#"><u>57</u></a> |
| <a href="#"><u>ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA</u></a>                                                                  | <a href="#"><u>57</u></a> |
| <a href="#"><u>ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE</u></a>                         | <a href="#"><u>57</u></a> |
| <a href="#"><u>ITEM 9A. CONTROLS AND PROCEDURES</u></a>                                                                                     | <a href="#"><u>58</u></a> |
| <a href="#"><u>ITEM 9B. OTHER INFORMATION</u></a>                                                                                           | <a href="#"><u>58</u></a> |
| <a href="#"><u>ITEM 15. EXHIBITS, FINANCIAL STATEMENTS SCHEDULES</u></a>                                                                    | <a href="#"><u>59</u></a> |

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## PART I

"Company," "Lion CG," "we," "us," "our" and similar words of similar meaning refer to Lion Copper and Gold Corp.

### *Note about Forward-Looking Statements*

This annual report of Lion CG contains forward-looking statements within the meaning of applicable United States and Canadian securities legislations ("**Forward-Looking Statements**"). Forward-Looking Statements reflect the expectations of management and consist of statements that are not only historical fact but also relate to predictions, expectations, belief, plans, projections, objectives, assumptions, future events, or future performance. Forward-Looking Statements may be identified by such terms as "believes", "anticipates", "expects", "estimates", "may", "could", "would", "will", "plan" or similar words. Although the Company believes that such information is reasonable, it can give no assurance that such expectations will prove to be correct. The Company cautions investors that any Forward-Looking Statements provided by the Company is not a guarantee of future results or performance, and that actual results may differ materially from those in Forward-Looking Statements as a result of various estimates, risks, and uncertainties. Readers should not place undue reliance on Forward-Looking Statements. Forward-Looking Statements in this annual report and in documents incorporated by reference herein include, but are not limited to, statements with regard to:

- planned exploration activity including both expected drilling and geological and geophysical related activities;
- future foreign exchange rates;
- future sources of liquidity, cash flows and their uses;
- realization of anticipated benefits of acquisitions and dispositions;
- expected levels of operating costs, general and administrative costs, costs of services and others; and
- treatment under government regulation and taxation regimes.

Forward-Looking Statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the Forward-Looking Statements, including, without limitation:

- risks related to exploration and development of natural resource properties;
- the uncertain nature of estimating mineral resources and mineral reserves;
- uncertainty in the Company's ability to obtain funding;
- copper price fluctuations;
- recent market events and conditions;
- risks related to governmental regulations;
- risks related to the Company's business being subject to environmental laws and regulations;
- risks related to the Company's inability to meet its financial obligations under agreements to which it is a party; and
- risks related to the Company's ability to recruit and retain qualified personnel.

These Forward-Looking Statements are based on the beliefs of our management as well as on assumptions made by and information currently available to us at the time such statements were made. We undertake no obligation to update forward-looking statements should circumstances or estimates or opinions change.

## DIFFERENCES IN UNITED STATES AND CANADIAN REPORTING PRACTICES

### **Financial Information**

All financial information in this annual report for the year ended December 31, 2022 has been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and thus our current financial statements will not be comparable to prior year financial statements of the Company prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by International Accounting Standards Board ("IASB"). Comparative figures, which were previously presented in accordance with IFRS as issued by the ISAB have been adjusted as necessary to be compliant with the Company's policies under U.S. GAAP

### **Resource and Reserve Estimates**

The SEC has adopted final rules, that become effective on February 25, 2019, to replace SEC Industry Guide 7 with new mining disclosure rules in Regulation S-K Subpart 1300 under the U.S. Securities Act ("S-K 1300"). The new rules replace the historical property disclosure requirements included in SEC Industry Guide 7. As a result of the adoption of S-K 1300, the SEC now recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources". In addition, the SEC has amended its definitions of "proven mineral reserves" and "probable mineral reserves" to be substantially similar to international standards. The disclosure rules in S-K 1300 became mandatory for U.S. reporting companies beginning with the first fiscal year commencing on or after January 1, 2021.

## EMERGING GROWTH COMPANY STATUS

The Company is an "emerging growth company" as defined in section 3(a) of the U.S. Securities Exchange Act of 1934 (as amended by the U.S. Jumpstart Our Business Startups Act (the "**JOBS Act**"), enacted on April 5, 2012), and the Company will continue to qualify as an "emerging growth company" until the earliest to occur of: (a) the last day of the fiscal year during which the Company has total annual gross revenues of \$1,000,000,000 (as such amount is indexed for inflation every five years by the SEC) or more; (b) the last day of the fiscal year of the Company following the fifth anniversary of the date of the first sale of common equity securities of the Company pursuant to an effective registration statement under the U.S. Securities Act of 1933, as amended; (c) the date on which the Company has, during the previous three-year period, issued more than \$1,000,000,000 in non-convertible debt; or (d) the date on which the Company is deemed to be a "large accelerated filer", as defined in Rule 12b-2 under the U.S. Securities Exchange Act of 1934, as amended. The Company expects that it will continue to qualify as an emerging growth company for the foreseeable future.

## *Glossary of Terms*

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Anomaly:</b>                    | A geological feature distinguished by geological, geochemical or geophysical means, which is detectably different than the general surroundings and is sometimes of potential economic value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Breccia:</b>                    | Rock consisting of more or less angular fragments in a matrix of finer-grained material or cementing material.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Diamond drill:</b>              | A type of drill in which the cutting is done by abrasion using diamonds embedded in a matrix rather than by percussion. The drill cuts a core of rock which is recovered in long cylindrical sections.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Dilution:</b>                   | Process whereby unwanted gangue or waste rock is mixed with ore during mining.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Fracture:</b>                   | Breaks in a rock, usually due to intensive folding or faulting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gangue:</b>                     | Term used to describe worthless minerals or rock waste mixed in with the valuable minerals.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Gouge:</b>                      | The finely ground rock that results from the abrasion along a fault surface.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Grade:</b>                      | The concentration of each ore metal in a rock sample, usually given as weight percent. Where extremely low concentrations are involved, the concentration may be given in grams per tonne (g/t) or ounces per ton (oz/t). The grade of an ore deposit is calculated, often using sophisticated statistical procedures, as an average of the grades of a very large number of samples collected from throughout the deposit.                                                                                                                                                                                                                                                 |
| <b>Indicated Mineral Resource:</b> | An Indicated Mineral Resource is 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 out-crops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed. |
| <b>Inferred Mineral Resource:</b>  | An Inferred Mineral Resource is 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.                                                                                                                                                                                                                                   |
| <b>Lithology:</b>                  | The physical characteristics of a rock or a rock formation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Mafic:</b>                      | A term used to describe ferromagnesian minerals. Rocks composed mainly of ferromagnesian minerals are correctly termed melanocratic.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Massive:</b>                    | A term used to describe sulfide ores containing more than 50% volume of sulphide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Measured Mineral Resource:</b>               | A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity. |
| <b>Mineral Deposit or Mineralized Material:</b> | A mineralized body which has been intersected by sufficient closely spaced drill holes and or underground sampling to support sufficient tonnage and average grade of metal(s) to warrant further exploration-development work. This deposit does not qualify as a commercially mineable ore body (Reserves), as prescribed under SEC standards, until a final and comprehensive economic, technical, and legal feasibility study based upon the test results is concluded.                                                                                                                                                                                                                     |
| <b>Mineral Resource:</b>                        | A Mineral Resource is a concentration or occurrence of natural, solid, inorganic or fossilized organic material 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.                                                                                                                                                                                                                                               |
| <b>Mineral Reserve:</b>                         | A Mineral Reserve is 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.                                                                                                                                                                                                      |
| <b>Mineralization:</b>                          | Usually implies minerals of value occurring in rocks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Ore:</b>                                     | A natural aggregate of one or more minerals which may be mined and sold at a profit, or from which some part may be profitably separated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Probable Mineral Reserve:</b>                | A Probable Mineral Reserve is the economically mineable part of an Indicated, and in some circumstances a Measured, 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.                                                                                                                                                                                                                                                                                  |
| <b>Proven Mineral Reserve:</b>                  | A Proven Mineral Reserve is the economically mineable part of a Measured 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 is justified.                                                                                                                                                                                                                                                                                                                                  |

|                                   |                                                                                                                                                                           |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reserve(s):</b>                | A natural aggregate of one or more minerals which, at a specified time and place, may be mined and sold at a profit, or from which some part may be profitably separated. |
| <b>Reverse circulation drill:</b> | A rotary percussion drill in which the drilling mud and cuttings return to the surface through the drill pipe.                                                            |
| <b>Tailings:</b>                  | Material rejected from a mill after recoverable valuable minerals have been extracted.                                                                                    |

### GLOSSARY OF ABBREVIATIONS

|                     |                                                                                           |
|---------------------|-------------------------------------------------------------------------------------------|
| <b>Ac-ft:</b>       | Acre feet                                                                                 |
| <b>Ag:</b>          | Silver                                                                                    |
| <b>Ag g/t:</b>      | Silver grade measured in grams per metric tonne                                           |
| <b>Au:</b>          | Gold                                                                                      |
| <b>Au g/t:</b>      | Gold grade measured in grams per metric tonne                                             |
| <b>Cu:</b>          | Copper                                                                                    |
| <b>g/t or gpt:</b>  | grams per tonne                                                                           |
| <b>IP:</b>          | Induced Polarization geophysical survey                                                   |
| <b>NI 43-101:</b>   | Canadian National Instrument 43-101 - <i>Standards of Disclosure for Mineral Projects</i> |
| <b>NSR:</b>         | Net smelter return royalty                                                                |
| <b>Oz:</b>          | Troy ounce                                                                                |
| <b>oz/t or opt:</b> | Ounces per ton.                                                                           |
| <b>PEA:</b>         | Preliminary Economic Assessment                                                           |
| <b>ppb:</b>         | Parts per billion                                                                         |
| <b>ppm:</b>         | Parts per million                                                                         |
| <b>RC:</b>          | Reverse Circulation                                                                       |
| <b>TCu:</b>         | Total Copper                                                                              |

### CONVERSION TABLES

| Conversion Table      |   |           |             |
|-----------------------|---|-----------|-------------|
| Imperial              |   |           | Metric      |
| 1 Acre                | = | 0.404686  | Hectares    |
| 1 Foot                | = | 0.304800  | Metres      |
| 1 Mile                | = | 1.609344  | Kilometres  |
| 1 Ton                 | = | 0.907185  | Tonnes      |
| 1 Ounce<br>(troy)/ton | = | 34.285700 | Grams/Tonne |

### Precious metal units and conversion factors

|     |                    |        |     |   |         |     |   |          |      |
|-----|--------------------|--------|-----|---|---------|-----|---|----------|------|
| ppb | - Part per billion | 1      | ppb | = | 0.0010  | ppm | = | 0.000030 | oz/t |
| ppm | - Part per million | 100    | ppb | = | 0.1000  | ppm | = | 0.002920 | oz/t |
| oz  | - Ounce (troy)     | 10,000 | ppb | = | 10.0000 | ppm | = | 0.291670 | oz/t |



|         |                         |   |         |   |          |      |   |          |         |
|---------|-------------------------|---|---------|---|----------|------|---|----------|---------|
| oz/t    | - Ounce per ton (avdp.) | 1 | ppm     | = | 1.0000   | ug/g | = | 1.000000 | g/tonne |
| g       | - Gram                  |   |         |   |          |      |   |          |         |
| g/tonne | - gram per metric ton   | 1 | oz/t    | = | 34.2857  | ppm  |   |          |         |
| mg      | - milligram             | 1 | Carat   | = | 41.6660  | mg/g |   |          |         |
| kg      | - kilogram              | 1 | ton     | = | 907.1848 | kg   |   |          |         |
|         |                         |   | (avdp.) |   |          |      |   |          |         |
| ug      | - microgram             | 1 | oz      | = | 31.1035  | g    |   |          |         |
|         |                         |   | (troy)  |   |          |      |   |          |         |

## ITEM 1. BUSINESS

### General

Lion CG was incorporated under the *Company Act* (British Columbia) on May 11, 1993, originally under the name Acquaterre Mineral Development Ltd. On November 30, 1993, the Company changed its name to Aquaterre Mineral Development Ltd. and became Quatterra Resources Inc. on November 13, 1997. On November 22, 2021, the Company changed of its name from Quatterra Resources Inc. to Lion Copper and Gold Corp.

The Company's common shares are listed on the TSX Venture Exchange ("TSXV") under the symbol "LEO" and trade on the OTCQB Market under the symbol "LCGMF". Additional information about Lion CG, including the Company's press releases, quarterly and annual reports, is available through the Company's filings with the securities regulatory authorities in Canada at [www.sedar.com](http://www.sedar.com) or the United States Securities Exchange Commission at [www.sec.gov/edgar](http://www.sec.gov/edgar).

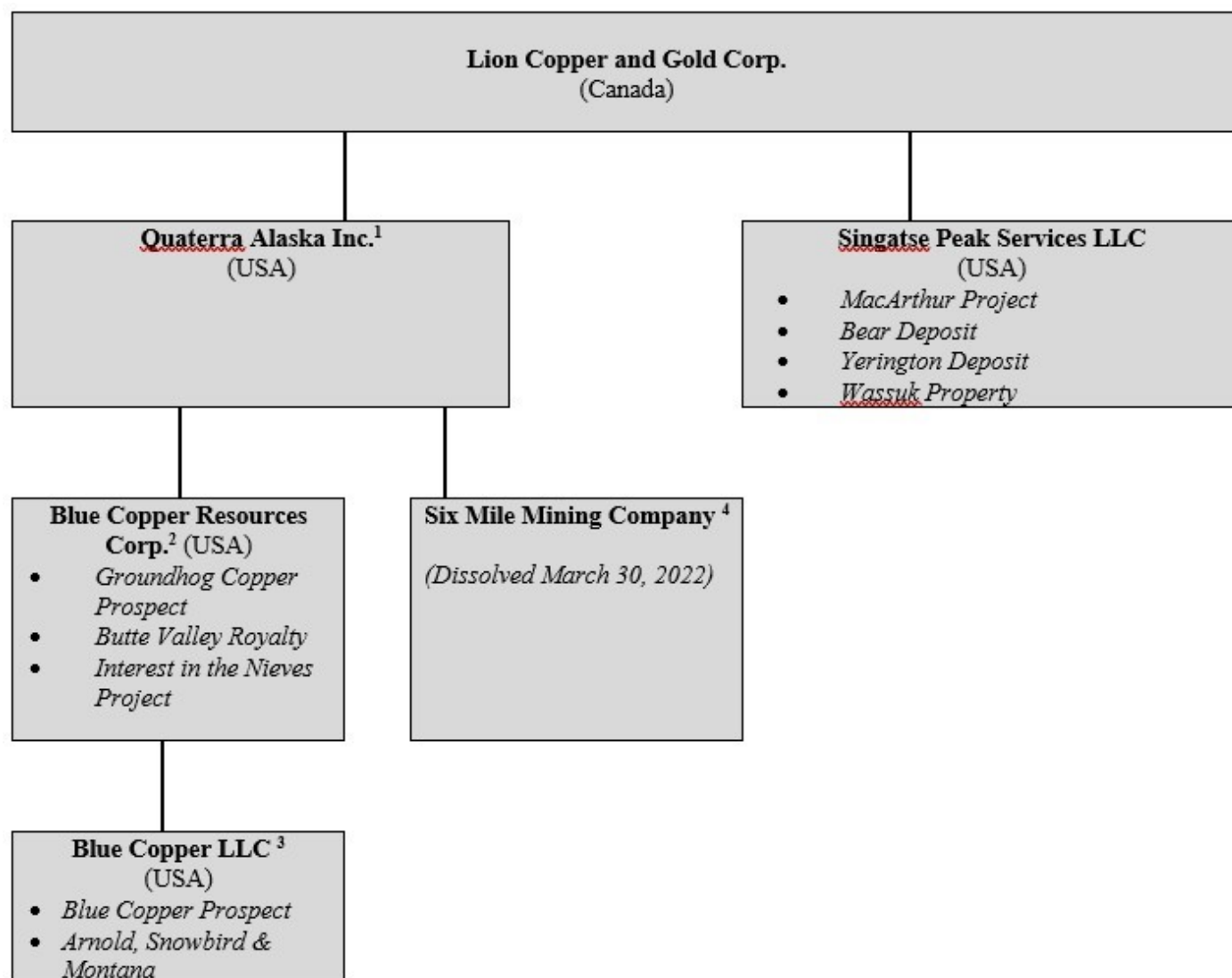
Lion CG's domicile is British Columbia, Canada and the Company operates under the *Business Corporations Act* (British Columbia).

The Company's registered and records offices are located at Suite 1200 - 750 West Pender Street, Vancouver, British Columbia, Canada, V6C 2T8. The Company's head office is located at 143 South Nevada Street Yerington, NV 89447. The Company's website is [www.lioncg.com](http://www.lioncg.com).

Since our incorporation, substantially all of our capital has been deployed to the development of our exploration stage business. We have not undertaken any material mergers or acquisitions other than in the ordinary course of business. There have been no public takeover offers by third parties with respect to our shares and we have made no public takeover offers with respect to another company's shares.

## Intercorporate Relationships

The chart below illustrates our corporate structure on December 31, 2022, including our subsidiaries, the jurisdictions of incorporation, and the percentage of voting securities held.



Note 1: Quaterra Alaska, Inc. is 100% owned by Lion Copper and Gold Corp. On April 5, 2022, the Company completed the assignment of the two option agreements for the Butte Valley Property to Falcon Butte Minerals Corp (formerly: 1301666 B.C. Ltd.) ("**Falcon Butte**"), a private British Columbia company established to acquire mineral resource properties.

Note 2: On December 13, 2022, Quaterra Alaska Inc., assigned and transferred 100% of its outstanding interest in Blue Copper LLC, which holds the Groundhog property, the Butte Valley Royalty, and an interest in the Nieves project, to Blue Copper Resources Corp. As consideration, on the date of transfer of assets to Blue Copper Resources Corp, Quaterra Alaska was issued 57,513,764 common shares of Blue Copper Resources Corp which represented 79.3% of all issued and outstanding shares at December 13, 2022 and December 31, 2022.

Note 3: On October 4, 2021, Blue Copper LLC was incorporated in the state of Montana, USA. Blue Copper LLC acquired and staked a district scale exploration and resource discovery opportunity (the "**Blue Copper Prospect**"), comprising more than 7,430 acres in Powell County and Lewis & Clark County in Montana, USA.

Note 4: On March 30, 2022, Six Mile Mining Company, a 100% wholly owned subsidiary of the Company, was dissolved and its assets were transferred to Quaterra Alaska Inc. which is a 100% wholly owned subsidiary of the Company.

## **Business Operations**

### **Company Summary**

The Company is a mineral exploration company engaged in the acquisition, exploration and development of copper projects currently in Nevada, Alaska and Montana in the United States and British Columbia, Canada. The amounts shown as mineral properties represent acquisition costs incurred to date, less amounts recovered and/or written off, and do not necessarily represent present or future values. The underlying value of mineral properties and related capitalized costs are dependent on the existence of economically recoverable reserves, securing and maintaining title and beneficial interest in the properties, and obtaining necessary financing.

The Company is an exploration stage issuer as defined in S-K 1300. Under S-K 1300, a mining company can be classified as an exploration stage issuer, a development stage issuer, or a production stage issuer. To be classified as a development stage issuer or production stage issuer, a company must have established mineral reserves, and the Company has not established mineral reserves as defined in S-K 1300.

### *Environment*

We are committed to an approach we call "Conservation by Design," applying best practices, sound science, and state-of-the-art technology to the design and operation of our mining projects for minimal emissions and water conservation.

### *Social*

We are committed to creating opportunities and value for the communities in which we work by engaging with them early and often in the mining process.

### *Financing*

The Company ensures that sufficient funds are raised from equity offerings or debt financings to meet its operating requirements, after considering existing cash and expected exercise of stock options and share purchase warrants. During the year ended December 31, 2022 the Company raised \$2 million from private placements.

For more information about our business, please refer to "ITEM 2. PROPERTIES" below.

### *Competitive Conditions*

The Company competes with other mining companies in the recruitment and retention of qualified managerial and technical employees, for supplies and equipment, as well as for capital. As a result of this competition in the mining industry, some of which is with large established mining companies holding substantial capabilities and with greater financial and technical resources than ours, we may be unable to effectively develop and operate mines or obtain financing on terms we consider acceptable.

### *Governmental Regulations and Environmental Laws*

Our current and planned operations are subject to local, provincial, state and federal environmental laws and regulations. Those laws and regulations provide strict standards for compliance, and potentially significant fines and penalties for non-compliance. These laws address emissions, waste discharge requirements, management of hazardous substances, protection of endangered species and reclamation of lands disturbed by mining. Compliance with environmental laws and regulations requires significant time and expense, and future changes to these laws and regulations may cause material changes or delays in the development of mines or our future activities on site.

### *Employees*

As at January 1, 2023, we have eight full and part time employees and approximately twenty individuals working on a consulting basis. Our operations are managed by our officers with input from our directors. We engage geological, metallurgical, and engineering consultants from time to time as required to assist in evaluating our property interests and recommending and conducting work programs.

## **ITEM 1A. RISK FACTORS**

In addition to the factors discussed elsewhere in this Form 10-K, the following are certain material risks and uncertainties that are specific to our industry and properties that could materially adversely affect our business, financial condition and results of operations.

***The Company's securities should be considered a highly speculative investment and investors should carefully consider all of the information disclosed in the Company's Canadian and U.S. regulatory filings prior to making an investment in the Company.***

***Resource exploration and development is a speculative business, characterized by a number of significant risks including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits but also from finding mineral deposits, which, though present, are insufficient in quantity and/or quality to return a profit from production. Without limiting the foregoing, the following risk factors should be given special consideration when evaluating an investment in the Company's securities. Additional risks not currently known to the Company, or that the Company currently deems immaterial, may also impair the Company's operations.***

***The Company may require additional funding to complete further exploration programs.***

The Company does not generate operating revenue and must finance exploration activity by other means, such as selling assets, raising funds through optioning certain property interests, and the issuance of debt and/or equity. The Company cannot provide any assurance that additional funding will be available for further exploration of the Company's projects or to fulfill anticipated obligations under existing property agreements.

Failure to obtain necessary financing could result in delay or postponement of further exploration and development, and the property interests of the Company with the possible dilution or loss of such interests. Further, financing will depend upon the success of exploration programs and general market conditions for natural resources.

***Risks related to the Rio Tinto option agreement***

There is no guarantee that Rio Tinto (defined below) will proceed with its option to earn-in a 65% interest in the Company's Mason Valley projects. There is no guarantee the Company will secure the funding required to meet its obligations under the Rio Tinto option agreement and to not have its interest diluted in its Mason Valley properties. There is no guarantee that the exploration results on the Mason Valley properties will support further exploration or extraction.

***The Company has a history of losses and anticipates incurring losses for the foreseeable future.***

The Company has had a history of losses. None of the Company's properties are currently in production, and there is no certainty that the Company will succeed in placing any of its properties into production in the near future, if at all.

Lion CG anticipates continued losses for the foreseeable future until one or more of the properties enters into commercial production and generates sufficient revenues to fund the Company's continuing operations.

***Future equity transactions could cause dilution of present and prospective shareholders.***

Historically, the Company has financed operations through the sale of equity securities including convertible debt being converted into equity securities or through the sale of its mineral interests. The Company may issue additional equity securities in order to finance future operations and development efforts. The Company cannot predict the size and terms of future issuances of equity securities or debt instruments. Any transaction involving the issue of equity securities or securities convertible into common shares, could result in dilution, possibly substantial, to present and prospective security holders. Similarly, the Company cannot predict the value of any asset sale nor its effect on the market price of its common shares.

***The Company's exploration programs may not result in a commercial mining operation.***

Mineral exploration involves significant risk because few properties that are explored contain bodies of ore that would be commercially economic to develop into producing mines. Lion CG's mineral properties are without a known body of commercial ore and the proposed programs are an exploratory search for ore. The Company cannot provide any assurance that current exploration programs will result in any commercial mining operation. If the exploration programs do not result in the discovery of commercial ore, the Company will be required to acquire additional properties and write-off all investments in existing properties.

***The Company does not have Proven Mineral Reserves or Probable Mineral Reserves.***

The Company has not established the presence of any Proven Mineral Reserves or Probable Mineral Reserves (as such terms are defined in S-K 1300 or NI 43-101) at any of Lion CG's mineral properties. The Company cannot provide any assurance that future feasibility studies will establish Proven Mineral Reserves or Probable Mineral Reserves at Lion CG's properties. The failure to establish Proven Mineral Reserves or Probable Mineral Reserves could restrict the Company's ability to successfully implement its strategies for long-term growth.

***Mineral resource estimates are subject to updates which may differ from prior estimates and adversely affect the value of the Company's properties.***

The estimating of mineralization is a subjective process, and the accuracy of estimates is a function of the quantity and quality of available data, the accuracy of statistical computations, and the assumptions used, and judgments made in interpreting engineering and geological information. There is significant uncertainty in these Mineral Resource estimates, and the actual deposits encountered and the economic viability of mining a deposit may differ significantly from our estimates. From time to time, Lion CG obtains updated resource estimates and technical reports related to the Company's mineral properties.

***The Company's future business and financial condition are dependent upon resource prices.***

Resource prices have fluctuated widely, particularly in recent years, and are affected by numerous factors beyond the Company's control. These include international economic and political trends, inflation, currency exchange fluctuations, interest rates, global or regional consumption patterns, speculative activities and increased production due to new and improved extraction and production methods. These factors may negatively affect the marketability of any ore or minerals discovered at, and extracted from, Lion CG's properties. If, because of a sustained decline in prices, financing was not available to meet cash operating costs, the feasibility of continuing operations would be evaluated and if warranted, would be discontinued.

***The Company's common share price has been and may continue to be subject to volatility.***

U.S. and Canadian securities markets in recent years have experienced high levels of price and volume volatility, and the market price of securities of many companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance for underlying assets values or prospects of such companies. Factors unrelated to Lion CG's financial performance or prospects include macroeconomic developments in North America and globally, and market perceptions of the attractiveness of particular industries. The Company's share price, financial condition, and results of operations are all also likely to be significantly affected by short-term changes in copper prices. Continual fluctuations in metal prices may occur. As a result of any of these factors, the market price of the Company's shares at any given point in time may be subject to wide swings unrelated to any direct action by Lion CG's operations.

***Some of the Company's directors and officers may have conflicts of interest due to their involvement with other natural resource companies.***

Some of the Company's directors and officers may also be directors or officers of other natural resource or mining-related companies and these associations may give rise to conflicts of interest from time to time. As a result of these conflicts of interest, Lion CG may miss the opportunity to participate in certain transactions, which may have a material, adverse effect on the Company's financial position.

***The Company may experience difficulty attracting and retaining qualified management to grow Lion CG's business.***

The Company is dependent on the services of key executives including the Chief Executive Officer, President and Chief Financial Officer and other highly skilled and experienced executives and personnel focused on advancing corporate objectives as well as the identification of new opportunities for growth and funding. Due to the Company's relatively small size, the loss of these persons or Lion CG's inability to attract and retain additional highly skilled employees required for activities may have a material adverse effect on the Company's business and financial condition.

***The Company may be limited in its ability to manage growth.***

Should the Company be successful in its efforts to develop mineral properties or to raise capital for such development or for the development of other mining ventures, it may experience significant growth in operations. Any expansion of the Company's business would place demands on management, operational capacity, and financial resources. The Company anticipates that it will need to recruit qualified personnel in all areas of operations. There can be no assurance that Lion CG will be effective in retaining current personnel or attracting and retaining additional qualified personnel, expanding operational capacity or otherwise managing growth. The failure to manage growth effectively could have a material adverse effect on the Company's business, financial condition and results of operations.

***Environmental and other regulatory requirements may limit the Company's operations and increase expenses.***

The Company's operations are subject to environmental regulations promulgated by U.S. government agencies. Claims and current and future operations will be governed by laws and regulations governing mineral concession acquisition, prospecting, development, mining, production, exports, taxes, labor standards, occupational health, waste disposal, toxic substances, land use, environmental protection, mine safety and other matters. Companies such as ours that engage in exploration activities often experience increased costs and delays in schedules as a result of the need to comply with applicable laws, regulations and permits. Issuance of permits for Lion CG's exploration activities is subject to the discretion of government authorities, and the Company may be unable to obtain or maintain such permits. Permits required for future exploration or development may not be obtainable on reasonable terms or on a timely basis. Existing and possible future laws, regulations and permits governing operations and activities of exploration companies, or more stringent implementation thereof, could have a material adverse impact and cause increases in capital expenditures or require abandonment or delays in exploration.

***Operating hazards associated with mining may expose the Company to liability.***

Mining operations generally involve a high degree of risk, including hazards such as fire, explosion, floods, structural collapses, industry accidents, unusual or unexpected geological conditions, power outages, cave-ins, inclement weather, and mechanical equipment failure in the Company's operations. These and others may result in work stoppages, damage to or destruction of mines and other producing facilities, damage to or loss of life and property, environmental damage and possible legal liability for any or all damage or loss.

Safety measures implemented by the Company may not be able to obtain insurance to cover these risks at economically feasible premiums or at all. Insurance against certain environmental risks is not generally available to the Company or to other companies within the mining industry.

***The Company's properties may be subject to uncertain title.***

The acquisition of title to resource properties or interest therein is a very detailed and time-consuming process. Title to and the area of resource concessions may be disputed. The Company has investigated title to all of its mineral properties and, to the best of the Company's knowledge, title to all of Lion CG's properties are in good standing.

The properties may be subject to prior, and in some cases, not fully ascertainable unregistered agreements or transfers, and title may be affected by undetected defects. Title may be based upon interpretation of a country's laws, which may be ambiguous, inconsistently applied and subject to reinterpretation or change.

***Enforcement of judgments or bringing actions outside the United States against the Company and its directors and officers may be difficult.***

Lion CG is organized under the laws of, and headquartered in British Columbia, Canada, and several of the Company's directors and officers are citizens or residents of the U.S. As a result, it may be difficult or impossible for one to (a) enforce in courts outside the U.S. judgments against the Company and a majority of Lion CG's directors and officers, obtained in U.S. courts based upon the civil liability provisions of U.S. federal securities laws or (b) bring in courts outside the U.S. an original action against the Company and its directors and officers to enforce liabilities based upon such U.S. securities laws.

***Climate change-related risks may have a negative impact on the Company's operations, financial position and market performance.***

Many governments and regulatory bodies have introduced or are contemplating regulatory changes in response to the potential impacts of climate change. These changes may create more stringent regulatory obligations, which may result in increased costs for the Company's operations. Further, these changes could also lead to new and/or more extensive monitoring and reporting requirements.

In addition, the physical risks of the physical climate change, including temperature and precipitation shifts and more frequent and severe extreme weather events, may affect the stability and effectiveness of infrastructure and equipment, environmental protection and site closure practices, and the availability of transportation routes. Climate change may also impact the stability and cost of water and energy supplies.

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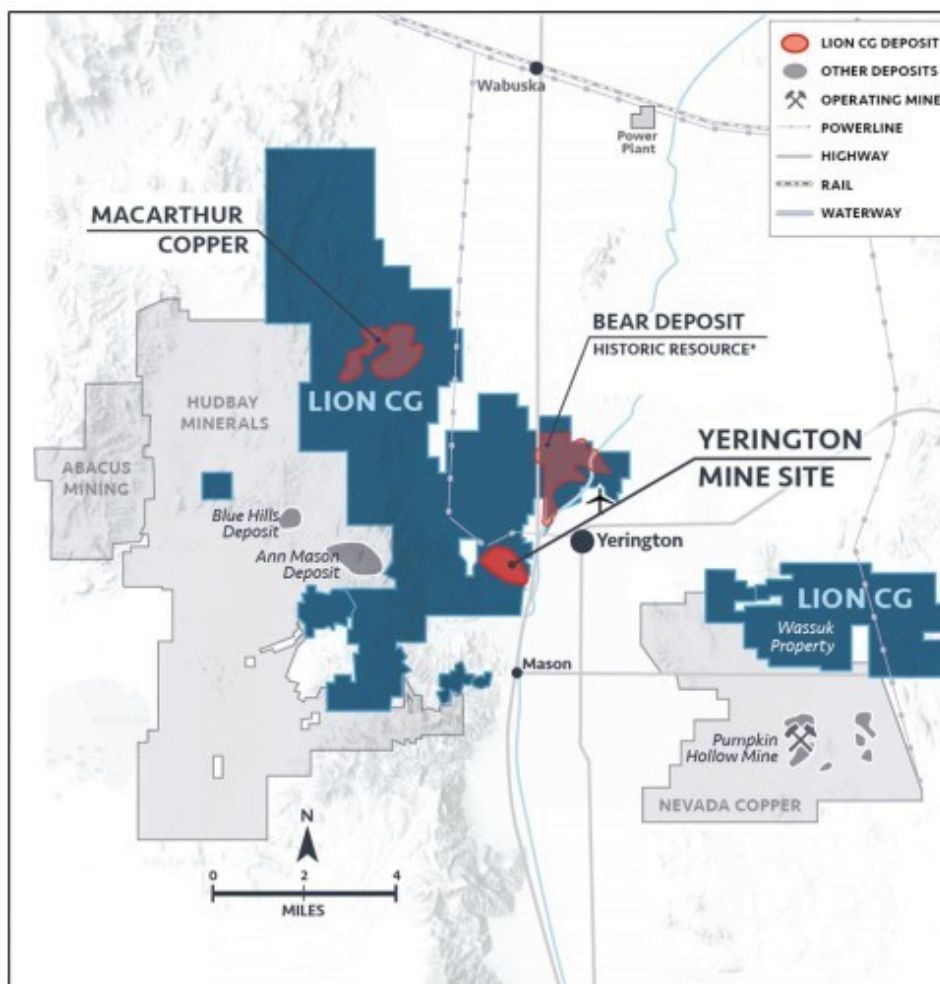
## ITEM 2. PROPERTIES

### Yerington Copper Projects - Nevada

Lion CG's Mason Valley Projects - located in the historic Yerington Copper District, about 70 miles southeast of Reno, Nevada, consist of the MacArthur oxide and sulfide resources, the Yerington pit oxide and sulfide resources previously mined by the Anaconda Mining Company; the Bear porphyry copper deposit; and the Wassuk property. These assets include a number of untested exploration targets. Lion CG's 51-square-mile land package is situated in a mining-friendly jurisdiction with a history of copper production and good infrastructure.

The location of the Company's Mason Valley copper projects is provided on the following map.

*Lion CG Property Map showing Mason Valley copper projects*



The Yerington deposit refers to the former Anaconda mine site, a large partially mined porphyry copper system that includes the Yerington mine and a portion of the Bear copper deposits. The Anaconda Company conducted open pit mining from 1953 to 1978, producing 1.75 billion pounds of copper from first oxide, and later, sulfide ores. The Atlantic Richfield Company bought the Anaconda Company in 1977 and terminated mining at the site shortly thereafter.

## Acquisition and Staking of Claims

The Yerington Mine property totals approximately 11 square miles. The project mineral rights consist of 2,768 acres of fee simple mineral properties and patented mining claims as well as 208 unpatented lode and placer claims totaling 4,300 acres on lands administered by the BLM.

On May 1, 2007, Singatse Peak Services, LLC ("**SPS**"). received approval from the bankruptcy court for the acquisition of certain assets of Arimetco Inc. ("**Arimetco**") in the Yerington Mining District, subject to completion of due diligence. The purchase price comprised \$500,000 cash, 250,000 of the Company's common shares and a 2% net smelter return royalty capped at \$7.5 million dollars on production from any claims owned by the Company in the Yerington Pit and MacArthur Deposit mine areas.

SPS purchased the Yerington Mine properties along with the appurtenant ground water rights from the Arimetco bankruptcy court in April 2011. This included private land, patented claims, and 23 unpatented mining claims related to the Yerington Mine. The acquisition followed three years of due-diligence studies and negotiations with state and federal agencies and the receipt of Bona Fide Prospective Purchaser ("**BFPP**") letters from the U.S. Environmental Protection Agency ("**EPA**"), the Nevada Division of Environmental Protection ("**NDEP**") and the US Bureau of Land Management ("**BLM**") to protect SPS from liability emanating from activities of the former mine owners and operations.

SPS owns approximately 6,014 ac-ft of primary ground water rights with various priority dates. In addition to these primary ground water rights, SPS also has decree, supplemental and storage water rights associated with options it holds on to private land over the Bear deposit.

Private properties related to the Arimetco acquisition are located in Township 13 North, Range 25 East in Sections 4, 5, 8, 9, 16, 17, and 21, and patented claims are located within Township 13 North, Range 25 East in Sections 16, 17, 19-21, 31-33 and in Township 13 North, Range 24 East in Sections 22-27 and 36. An additional 441 unpatented claims in Sections 1, 2, 11-13, 23-26, 35, and 36 Township 13 North, Range 24 East and in Sections 4-9, 16-21, 28, and 30 Township 13 North, Range 25 East, and in Sections 1, 2 Township 12 North, Range 24 East Mount Diablo Base & Meridian were staked prior to or subsequent to the acquisition by SPS.

## Expenditures to Date

Acquisition and exploration costs incurred as of December 31, 2022 were \$5.2 million (2021 - \$3.8 million) net of recovery from water rights sales and option payments made by Freeport Nevada.

## Water Rights

Included in the asset purchase from the Arimetco bankruptcy court, the Company acquired approximately 8,700 ac-ft of primary ground water rights that are permitted for Mining and Milling. Since acquisition, the Company has filed annual Extensions of Time to Prevent Forfeiture ("**EOTs**") with the Nevada Division of Water Resources ("**NDWR**") to keep the water rights in good standing.

Between March 2019 and July 2020, the company sold 2,614.3 ac-ft of primary ground water rights under three separate transactions. The combined sale price for the three sales was \$7.9 million. Following the sale of these water rights, the Company retained approximately 6,014.5 ac-ft of primary water rights, although certain of these remaining water rights are subject to a forfeiture notice from the State, as discussed below. The Company also controls decree, supplemental and storage water rights associated under the terms of various option agreements it holds to private lands associated with the Bear deposit.

On February 24, 2021, the Company announced a fourth purchase and sale agreement to sell certain primary groundwater rights to Desert Pearl Farms LLC ("**Desert Pearl**"), a Yerington-based company involved in agriculture, for \$2,910,000 (the "**Purchase and Sale Agreement**"). In early March, 2021, the Company filed an application with the NDWR to change the manner of use of the water rights from Mining and Milling to Irrigation, and their place of use to certain agricultural wells in Mason Valley ("**Change Application**"). The Change Application was subsequently withdrawn on October 17, 2022.

Under the terms of the Purchase and Sale Agreement, Desert Pearl made a \$1,000,000 initial payment to the Company on March 5, 2021. On May 26, 2022, the Company announced it had reached an amicable agreement with Desert Pearl to terminate the contract on the sale of the Company's water rights. As a consequence of the termination, the Company recovered the water permit designated for mining and milling use. The \$1,000,000 deposit has been returned to Desert Pearl. This water permit is currently subject to court proceedings and settlement discussions between the Company and the State of Nevada, as discussed in the following paragraph.

On July 23, 2021, the Company received a notice (the "**Forfeiture Notice**") from the State of Nevada that three water rights permits had been forfeited and that the application for an extension of time to prevent forfeiture of a fourth certificate was denied. The permits affected are components of the Purchase and Sale Agreement. On August 20, 2021, the Company filed a Petition for Judicial Review of the Forfeiture Notice and has retained legal counsel to vigorously undertake the appeal process. SPS subsequently filed and was granted a Stay of the Forfeiture Notice on September 15, 2021. SPS filed its Opening Brief on March 28, 2022. The State Engineer filed its Answering Brief on July 8, 2022. SPS filed its Reply Brief on August 25, 2022. A hearing regarding the status of the forfeiture appeal was held in the Third Judicial Court District in Lyon County on November 4, 2022. Since receipt of the Forfeiture Notice, SPS has been in contact with the State Engineer's office in an attempt to resolve the Forfeiture Notice.

### **Option Agreement**

On March 18, 2022, the Company entered into an option to earn-in agreement with Rio Tinto America Inc. ("**Rio Tinto**") to advance studies and exploration at Lion CG's copper assets in Mason Valley, Nevada. Under the agreement, Rio Tinto has the option to earn a 65% interest in the assets, comprising 34,494 acres of land, including the historic Yerington mine, MacArthur Project, Wassuk property, the Bear deposit and associated water rights. In addition, Rio Tinto will evaluate the potential commercial deployment of its Nuton<sup>TM</sup> technologies at the site.

The option agreement sets out the following stages:

Stage 1: Rio Tinto will pay up to \$4 million for an exclusive earn-in option and agreed-upon Mason Valley study and evaluation works to be completed by the Company no later than December 31, 2022.

Stage 2: Within 45 days of the completion of Stage 1, Rio Tinto will provide notice to the Company whether Rio Tinto elects to proceed with Stage 2, upon which Rio Tinto will pay up to \$5 million for agreed-upon Mason Valley study and evaluation works to be completed by the Company within 12 months from the date that the parties agree upon the scope of Stage 2 work. Stages 1 and 2 may be accelerated at Rio Tinto's option.

Stage 3: Within 60 days of the completion of Stage 2, Rio Tinto shall provide notice to the Company whether Rio Tinto will exercise its option and finance a feasibility study based on the results of the stage 1 and stage 2 work programs. Rio Tinto will fully finance the feasibility study and ancillary work completed the Company in amount not to exceed \$50 million.

Upon completion of the feasibility study, Rio Tinto and the Company will decide whether to create an investment vehicle into which the mining assets will be transferred, with Rio Tinto holding not less than a 65% interest in the investment vehicle. If Rio Tinto elects to not create the investment vehicle, then the Company shall grant to Rio Tinto a 1.5% NSR on the mining assets. If Rio Tinto elects to create the investment vehicle but the Company elects not to create the investment vehicle, then, at Rio Tinto's option, the Company shall create the investment vehicle and Rio Tinto will purchase the Company's interest in the investment vehicle for fair market value.

Following the formation of the investment vehicle, any project financing costs incurred will be financed by Rio Tinto and the Company in proportion to their respective ownership interest in the investment vehicle. Rio Tinto may elect to finance up to \$60 million of the Company's project financing costs in exchange for a 10% increase in Rio Tinto's ownership percentage. In addition, upon mutual agreement of Rio Tinto and the Company, Rio Tinto may finance an additional \$40 million of the Company's project financing costs in exchange for an additional 5% increase in Rio Tinto's ownership percentage. If the Company's ownership percentage in the investment vehicle is diluted to 10% or less, then the Company's ownership interest will be converted into a 1% uncapped NSR.

On April 27, 2022, the TSX Venture Exchange approved the Company's option agreement with Rio Tinto.

On June 7, 2022, Rio Tinto approved the Stage 1 Work Program and provided \$4,000,000 to the Company for an exclusive earn-in option and agreed-upon Mason Valley study and evaluation works, which has been completed as of December 31, 2022. During the year ended December 31, 2022, the Company incurred expenditures of \$3,400,000 in connection with the work program.

On January 5, 2023, the Company and Rio Tinto completed the Stage 1 work program and reached a final agreement on the scope of the Stage 2 work program referenced in the option agreement with Rio Tinto. Rio Tinto provided Stage 2 funding of \$5,000,000 and an immediate advance of \$2,500,000 on part of the Stage 3 funding, for a total amount of \$7,500,000 to the Company for Mason Valley project development, exploration efforts and other agreed-upon corporate purposes.

#### **a. MacArthur Copper Project, Nevada**

##### **Acquisition and Staking of Mineral Claims**

The MacArthur Deposit consists of 897 unpatented lode claims totaling approximately 18,533 acres on lands administered by the BLM. A significant number of the claims were held by means of a mineral lease with an option to purchase, executed with North Exploration LLC ("**North Exploration**") on August 27, 2005, and subsequently amended. The option was exercised and the final payment of \$212,000 plus interest to North Exploration was made on February 10, 2015. Lion CG's purchase is subject to a 2% NSR, 1% of which may be purchased for \$1,000,000, leaving a perpetual 1% NSR. The agreement is in good standing.

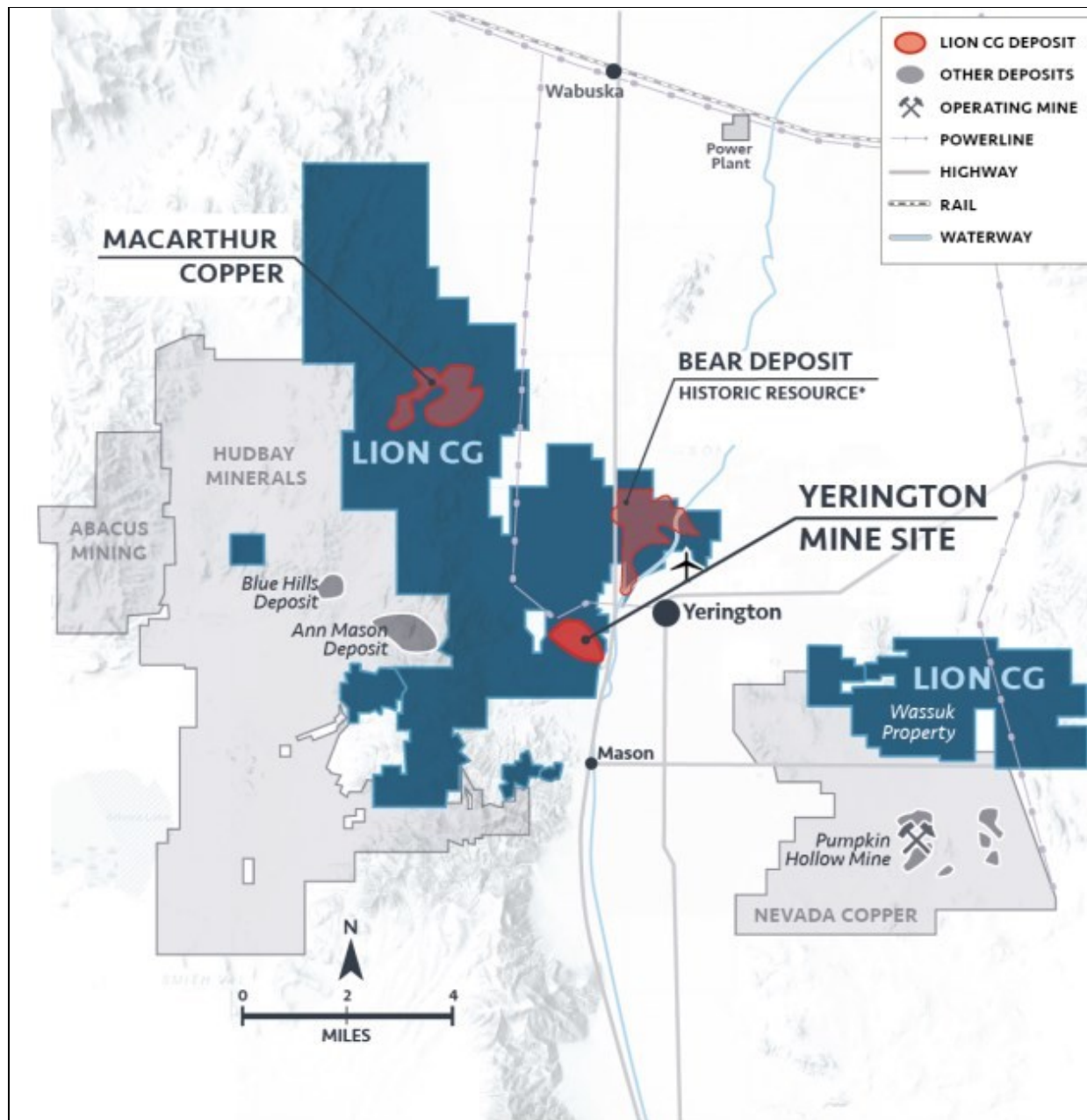
## **Expenditures to Date**

Acquisition and exploration costs incurred by the Company for the MacArthur Deposit to December 31, 2022 were \$22.6 million (2021 - \$20.5 million).

## **Location, Access and Infrastructure**

The MacArthur Deposit is located near the geographic center of Lyon County, Nevada, USA, along the northeastern flank of the Singatse Range approximately seven miles northwest of the town of Yerington, Nevada. The project is accessible from Yerington by approximately five miles of paved roads and two miles of maintained gravel road. A 100-foot-wide gravel haul road that accessed the MacArthur open pit copper mine during the 1990s leads 3.5 miles south to the Yerington Mine Site. Beyond the MacArthur Deposit pit area are several existing historic two-track dirt roads that provide access throughout the property. Topographic coverage is on US Geological Survey "Mason Butte" and "Lincoln Flat" 7.5' topographic quadrangles. The nearest major city is Reno, Nevada approximately 80 miles to the northwest. The following map provides information on the location of the MacArthur Deposit.

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## Geology

The MacArthur Project is located within the western Basin and Range Province in Nevada on the east side of the Sierra Nevada Mountains. Within the Basin and Range, north trending normal faults have down-dropped basins on either side of upland ranges. In a similar setting in western Nevada, the Singatse Range and Wassuk Range form the western and eastern boundaries, respectively, of the Mason Valley. The MacArthur Project, in the Yerington Mining District, is located in the west-central portion of Mason Valley along the eastern slopes of the Singatse Range.

The regional geology is displayed in Figure 7-1 (Proffett and Dilles, 1984). The oldest rocks in the Yerington area of Mason Valley consist of an approximate 4,000-foot-thick section of Late Triassic, intermediate and felsic metavolcanics and lesser sedimentary rocks, the McConnell Canyon Formation, associated with volcanic arc development along the North American continent during the Mesozoic.

This sequence is disconformably overlain by a series of Upper Triassic carbonates, clastic sediments, and volcanoclastics that are in turn overlain by the Norian (aka Mason Valley) Limestone, a massive limestone nearly 1,000 feet thick. During the Upper Triassic - Lower Jurassic, a section of limestones, clastic sediments, tuffs, and argillites, in part correlative with the Gardnerville Formation, were deposited. The Ludwig Limestone, containing gypsum, sandstone, and arkose, overlies the Gardnerville Formation.

Mesozoic plutonism, possibly related to the igneous activity that formed the Sierra Nevada Mountains, followed during the Middle Jurassic with emplacement of the Yerington batholith of granodiorite (field name) composition and the Bear quartz monzonite. Mesozoic plutonism, emplaced approximately 169 Ma (Proffett and Dilles, 1984), was closely followed by Middle Jurassic quartz monzonite porphyry dikes and dike swarms related to the Luhr Hill granite porphyry. Andesite and rhyolite dikes represent the final phase of Mesozoic igneous activity.

Mesozoic rocks were deeply eroded and then overlain by Mid-Tertiary tuffs and lesser sedimentary rocks. Coarser grained andesite dikes are tabbed as Tertiary. The entire package was subsequently faulted along north-trending, down-to-the-east dipping faults that resulted in extension and major westerly tilting.

The MacArthur Deposit is one of several copper deposits and occurrences hosted in or related to Middle Jurassic intrusive rocks within the Yerington Mining District, Lyon County, Nevada. The Yerington area is underlain by early Mesozoic volcanic and sedimentary rocks now exposed along uplands in the Singatse Range to the west and the Wassuk Range to the east. These Mesozoic rocks were intruded by three Middle Jurassic batholiths, the oldest known as the McLeod Hill Quartz Monzodiorite (field map name granodiorite), followed by the Bear Quartz Monzonite that comprise the majority of outcropping rocks on the MacArthur Property. A finer grained phase of the Bear Quartz Monzonite, known as the Border Phase Quartz Monzonite, occurs at the contact between the McLeod Hill Quartz Monzonite and the Bear Quartz Monzonite. These batholiths were subsequently intruded during the Middle Jurassic by the Luhr Hill Granite, the source of quartz monzonitic (or granite) porphyries, consisting of moderately to steeply north dipping quartz-biotite-hornblende porphyry dike swarms, responsible for copper mineralization, striking west-northwesterly across the MacArthur Property as well as across the entire Mining District.

The geologic record is absent until the middle Tertiary when basalt and voluminous ash flow tuffs were deposited over the Mesozoic rocks.

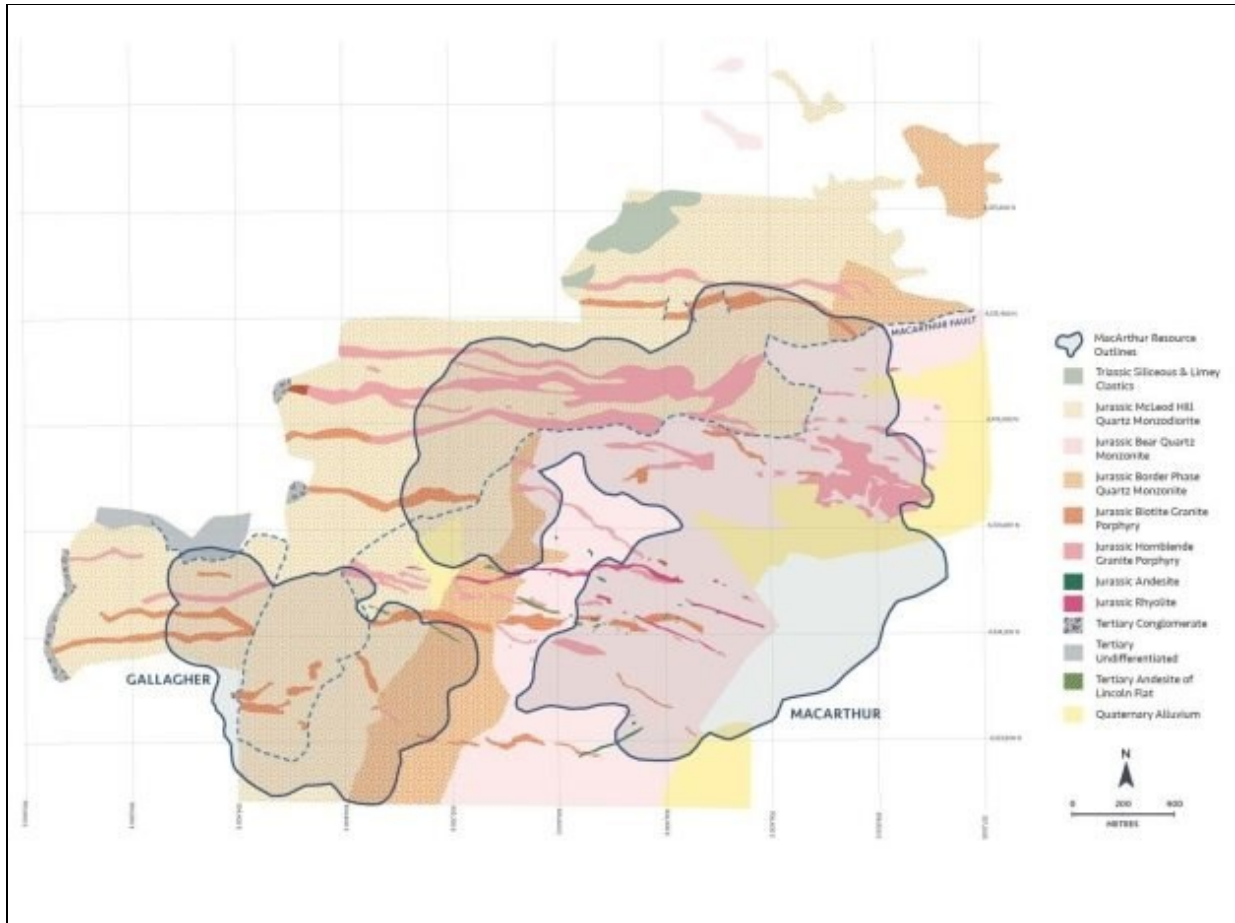
During advent of Basin and Range normal faulting, ca 18-17 Ma, this entire package of rocks was down-dropped to the east along northerly striking, east dipping, low-angle faults that flatten at depth creating an estimated 2.5 miles of west to east dilation-displacement (Proffett and Dilles, 1984). Such extension rotated the section such that the near vertically-emplaced batholiths were tilted westerly to an almost horizontal position. Pre-tilt, flat-lying younger volcanics now crop out as steeply west dipping units in the Singatse Range west of the MacArthur Property. Easterly extension thus created a present-day surface that in plan view actually represents a cross-section of the geology.

The MacArthur Deposit is underlain by two Middle Jurassic batholiths, granodiorite (McLeod Hill Quartz Monzodiorite) intruded by quartz monzonite, (Bear Quartz Monzonite) both of which are intruded by Middle Jurassic quartz porphyry hornblende and quartz porphyry biotite (hornblende) dikes. The north dipping porphyry dike swarms follow penetrative west-northwest and east-west structural fabrics. Narrow (<10 feet) fine grained andesite and rhyolite dikes, post porphyry dike, also occur with variable structural orientations.

The McLeod Hill Quartz Monzodiorite, aka granodiorite, weathers as an irregularly orange stained, medium olive green, fine to medium grained rock underlying most of the northern and western parts of Lion CG's claim block. Greenish epidote and minor orange limonite staining are present to common. Megascopic rock constituents include ~50% plagioclase, ~20% orthoclase, <20% quartz, 5 to 20% mafics (hornblende and biotite), 1 to 10% epidote, and minor magnetite and other opaques.

The quartz monzonite, formal designation as Bear Quartz Monzonite, cropping out along the east part of the claim block and underlying the MacArthur pit as shown in Figure 7-2 is beige to light gray to off white, fine to medium grained, hard but well-fractured, with minor textural variants. Megascopic constituents include ~30% orthoclase, ~30% plagioclase, ~20% quartz, and 5- to 10-percent hornblende. In bench walls at the MacArthur pit, quartz monzonite hosts conspicuous light brown limonite banding (averaging 4 to 6 per foot) sub-parallel to the steeply north dipping, west-northwest trending quartz porphyry dikes. Along the eastern portions of the Property, including the eastern third of the MacArthur pit, quartz monzonite assumes a light gray color due to widespread sodic-calcic alteration.

*MacArthur Area Geology Map*



A phase known as the "border-phase quartz monzonite" is found at the top of the Bear Quartz Monzonite pluton (Proffett and Dilles, 1984) and is often mapped at the contact between the granodiorite and the quartz monzonite. The border-phase is finer-grained than the quartz monzonite and contains more abundant potassium feldspar.



Quartz-hornblende / biotite porphyry dikes, originating from the Jurassic Luhr Hill Granite intrude both the granodiorite and quartz monzonite at the MacArthur Property and are recognized in dike swarms regionally throughout the Yerington Mining District. Porphyry dikes hosted a large portion of the primary copper mineralization at Anaconda's Yerington mine and are associated with all copper occurrences in the district. Not all porphyry dikes host copper mineralization, be it sulphide or oxide. Porphyry dikes strike west-northwesterly, dipping moderate to steeply north, typically as ridge-formers with widths to 50 feet or more. Porphyry dikes at MacArthur are classified by dominant mafic minerals as quartz biotite porphyry and quartz hornblende porphyry, each subdivided further based on composition and alteration. Dikes contain feldspar crystals and either hornblende or biotite crystals set in an aphanitic matrix. MacArthur pit walls offer excellent exposures of the dikes that host (fracture-controlled) oxide copper mineralization. The following descriptions originate from Lion CG's surface mapping and from core and chip logging:

- Quartz biotite porphyry: contains 2 to 4 mm, generally euhedral, blackish biotite "books" (5 to 10%) and 2 to 8 mm cloudy quartz phenocrysts ("quartz eyes") 2 to 5%. Hornblende is rare to absent. Feldspars commonly 3 to 5 mm. May host sulphide or oxide copper. May or may not have indigenous limonite. If hornblende is present and altered to secondary biotite, the dike is mapped as QMpb-2, otherwise mapped as QMpb-1.
- Quartz hornblende porphyry: contains acicular hornblende crystals, typically thin, "needle-like" to 5 mm long; feldspars vary from 2 to 5 mm. Variety QMph-1 contains 1-5% sulphide (mostly pyrite) with or without indigenous limonite and 3-5% quartz phenocrysts (2 to 5 mm). Variety QMph-2 contains 2-3% sulphides (common) and always has indigenous glass (resinous) limonite derived from primary oxidized chalcopyrite, it also contains oxide copper, and quartz phenocrysts (2-5 mm) present to 2-5%. Variety QMph-3 commonly contains large (to 10 mm) epidote "splotches" (phenocrysts or "epidotization") with 0% to trace fine grained (~1 mm) quartz phenocrysts, 0% to trace sulphides. Any oxide copper is transported from nearby copper-bearing rocks and not oxidized from the porphyry itself.

The best exposures of Jurassic age andesite dikes are found in the walls of the MacArthur pit where the typically soft- to medium-hard, recessive, olive-greenish dikes can be traced from bench to bench and in some cases followed across the pit floors. Andesite dikes are commonly very fine grained, plagioclase-bearing porphyries that pinch and swell as they fill fractures. Fist-sized pillows may be a weathering product. Andesite dikes intrude the hornblende and biotite quartz porphyry dikes, again best exposed in MacArthur pit walls. Andesite dikes commonly contain oxide copper derived from nearby copper-bearing rocks rather than from the andesite dikes themselves.

Jurassic age rhyolite dikes are also well exposed within the MacArthur pit walls. The rhyolite is a white to gray, dense, siliceous rock. Rhyolite dikes contain approximately 5% mafic minerals (hornblende and biotite) and rare (1-2%) quartz phenocrysts. Within the MacArthur pit the rhyolite can contain oxide copper mineralization; elsewhere on the Property it is barren.

Tertiary hornblende andesite dikes have also been identified on the MacArthur Property. These dikes are similar, but coarser grained than the Jurassic andesite dikes, containing abundant, acicular, black hornblende phenocrysts and occasionally plagioclase phenocrysts up to 5-10 mm in long dimension. Tertiary hornblende andesite dikes are frequently observed intruding Basin & Range fault structures. These dikes occasionally contain exotic oxide copper mineralization.

The Mesozoic intrusive rocks are unconformably overlain by a series of nine, moderate to steeply west dipping Mid-Tertiary ash flow tuff units with minor mafic flows and tuffaceous sediments dated at 27.1 to 25.1 Ma (Proffett and Proffett, 1976). The volcanic units make up the uplands in this part and throughout the Singatse Range and cover alteration and structure in the Jurassic igneous rocks.

The dominant west-northwest (N60°W to N80°W) structural fabric recognized throughout the Yerington District is manifested at the MacArthur Property as porphyry dike swarms and as high angle shears, faults, and joints along which andesite dikes developed. Structure played a key role in localizing copper oxide mineralization around the historic pit area, principally along the west-northwest fabric and, secondarily, along generally orthogonal northeast structure bearing N20°E to N40°E.

The MacArthur fault, a low angle, easterly striking, north dipping, normal fault is the largest structure recognized on Lion CG's claims. The hanging wall of the fault displaces the basal unit of the Tertiary ash flow tuff sequence approximately 2,000 feet to the east. The displacement of Jurassic intrusive as defined by the offset of the contact of the border quartz monzonite with granodiorite is on the order of 4,000 feet to the east. The MacArthur fault is one of few faults in the Yerington district known to have been active in both Jurassic and Tertiary time.

Chalcocite/oxide mineralization has a close spatial relation to the trace of the MacArthur fault north and west of the MacArthur pit. Gouge in the fault frequently contains chalcocite and/or copper oxide suggesting a structural mineralizing trap.

### **Alteration Types**

Alteration types recognized at the MacArthur Property represent those found in mineralized porphyry copper systems. The following descriptions are derived from field observation and from drill core and chip logging.

#### **Propylitic Alteration**

Propylitic alteration is common throughout the MacArthur Property in the granodiorite, quartz monzonite, quartz monzonite porphyries, and in the Jurassic andesite. This alteration type occurs as chlorite replacing hornblende, and especially epidotization as veining, coatings, and or flooding on the granodiorite. Calcite veining is present but not common, observed largely in core or drill cuttings. Feldspars are commonly unaltered. Propylitic alteration frequently overprints or occurs with the alteration types described below.

#### **Quartz-Sericite-Pyrite (QSP) or Phyllic Alteration**

Phyllic alteration is most frequently characterized by tan or light green sericite partially or completely replacing hornblende and/or biotite sites. When phyllic alteration becomes more intense, plagioclase and/or K-feldspar sites are also replaced by sericite. Maroon limonite, hematite, and trace sulphide (chalcocite, pyrite, and chalcopyrite) accompany sericite. However, these minerals do not replace mafic or felsic sites. Sericitic altered zones are often quite siliceous; however, it is unclear if it is due to quartz addition or simply the destruction of other primary minerals.

Phyllic alteration is most pervasive and intense in the Gallagher area and in the northeastern part of the deposit, around hole QM-072. Weak and less pervasive phyllic alteration is found just west of the MacArthur pit and in limited areas around the MacArthur fault. The alteration type does not show preference with rock type and has been described in the granodiorite, quartz monzonite, and quartz monzonite porphyries.

#### **Potassic Alteration**

Potassic alteration occurs as shredded, fine-grained biotite replacing hornblende and rarely as pinkish potassium feldspar flooding or in vein haloes, along with disseminated magnetite.

Potassic alteration occurs as shredded secondary biotite on the northwestern and western portions of the property, but is most prevalent in the western and central areas of the MacArthur pit. Potassic alteration of some degree has been identified in the granodiorite, quartz monzonite, and quartz monzonite porphyries.

### **Sodic-Calcic Alteration**

Pervasive sodic-calcic alteration has been identified within the eastern portions of the MacArthur pit and as broad zones in the far northeastern portion of the district and south of the MacArthur pit. This type of alteration most frequently occurs as albite replacing K-feldspar and as chlorite replacing hornblende in the quartz monzonite; sodic-calcic alteration has also been identified in the granodiorite and quartz monzonite porphyries. Epidote staining and phenocrysts as well as sphene crystals are ubiquitous. Actinolite replaces hornblende in the more intense zones of sodic-calcic alteration occurring most commonly in the Albite Hills east of the MacArthur pit.

### **Silicification**

Silicification occurs as a wholesale replacement of the rock, but only occurs as small and irregular zones that are less than 200 feet across. Typically, silicification is confined as a narrow halo (less than five feet) along structure and quartz veining. Silicification is present in the western portion of the district, around the Gallagher area and as isolated occurrences within the MacArthur pit.

### **Multiple Alteration Types**

Multiple alteration types are common throughout the area and tend to occur together. Shreddy chlorite has been identified in the MacArthur pit, which likely represents propylitic alteration overprinting potassic alteration. Zones of QSP and propylitic alteration have been identified between the Gallagher area and the MacArthur pit.

### **Supergene Alteration**

Sulfuric acid ( $H_2SO_4$ ), formed by the oxidation of sulphides, has altered feldspars and mafic minerals to clay and sericite. At the Gallagher area and north of the MacArthur pit, supergene alteration has formed leached capping which is underlain by chalcocite mineralization.

### **Geologic Model**

The main characteristics for the geological model of the Company in MacArthur Project is as follows:

- An oxidized portion of a porphyry copper deposit that has been subjected to several weathering, oxidation, and enrichment cycles;
- Hosted in Jurassic aged granodiorite and quartz monzonite that has been intruded by multiple north-northwest trending quartz monzonite porphyry dikes;
- The lithology & multiple oxidation cycles have been incorporated into the block model to create four different oxidation zones:
  1. Leach Cap - a zone with copper-bearing iron-oxide minerals and pods of copper silicates
  2. Oxide Zone - a zone with multiple copper silicates minerals, predominantly chrysocolla & neotocite
  3. Transition Zone - a zone predominantly consisting of chalcocite with pods of copper silicates and minor chalcopyrite
  4. Sulphide Zone - a zone of predominantly chalcopyrite; and

- 25ft x 25ft x 25ft blocks were appropriately coded using an inverse distance cubed estimation.

## Mineralization

Copper mineralization has been identified across nearly the entire area investigated by Lion CG's drilling programs at the MacArthur Project area. Copper mineralization covers an area of approximately two square miles defined by drill holes on 500 feet to 250 feet spacing north of the MacArthur pit to approximately 150 feet spacing within the pit.

Oxide, chalcocite, and primary copper mineralization is hosted in granodiorite, quartz monzonite, and in quartz biotite-hornblende (quartz monzonite) porphyry dikes all of middle Jurassic age. An insignificant percentage of oxide copper is also hosted in northwest striking andesite dikes that make up less than approximately one to two percent of the host rocks on the Property. Fracturing and favorable ground preparation supplied the passageways for the copper to migrate.

Copper oxide minerals are exposed throughout the MacArthur Deposit, evidenced in the pit walls as primarily green and greenish-blue chrysocolla  $\text{CuSiO}_3 \cdot 2\text{H}_2\text{O}$  along with black neotocite, aka copper wad  $(\text{Cu, Fe, Mn}) \text{SiO}_2$ , with very minor azurite  $\text{Cu}_3(\text{OH})_2(\text{CO}_3)$  and malachite  $\text{Cu}_2(\text{OH})_2\text{CO}_3$ , while tenorite  $(\text{CuO})$  was identified with the electron microprobe (Schmidt, 1996). Copper-enriched limonite was identified by Anaconda as the mineral delafossite  $(\text{CuFeO}_2)$ . Chalcocite has been identified in drill holes below and north of the MacArthur pit and in drilling throughout the Property. The sulphides digenite  $(\text{Cu}_9\text{S}_5)$  and covellite  $(\text{CuS})$  have been identified petrographically in drill cuttings. Bornite  $(\text{Cu}_5\text{FeS}_4)$  has also been identified petrographically in the Gallagher area. The oxide copper mineralization is fracture controlled, coating joint and fracture surfaces and within shears and faults. Both green and black copper oxides are frequently found on 1 to 5 millimeter fractures, as coatings and selvages and may be mixed with limonite. The fractures trend overall N60°W to N80°W (bearing 300° to 280° azimuth) and generally dip to the north. Limited turquoise is found on the Property, mainly in small veinlets. On a minor scale, oxide copper mineralization replaces feldspar phenocrysts in the igneous host units, favoring andesite.

A significant amount of chalcocite has been intersected in drill holes. Chalcocite is seen on drill chips or drill core coating pyrite and replacing chalcopyrite as tiny, blackish "dustings" and thin to thick coatings, strongest when occurring on and near the MacArthur fault. Chalcopyrite is present as disseminations and veinlets, with or without chalcocite. As much of the historic and current drilling was stopped at shallow (less than 400 to 500 foot) depths, the scope and extent of chalcopyrite mineralization has not been fully defined.

Both copper oxide and chalcocite mineralization occur over approximately 10,000 feet east-west by 5,000 feet north-south. Copper oxides are structurally controlled coating fractures, joint surfaces, and developed as green or black "streaks" within shears and faults over several feet. Oxide mineralization occurs as tabular, flat-lying shapes extending with good continuity 150 feet below surface and less continuously up to 600 feet below surface. Chalcocite mineralization in tabular geometry ranges to 50 feet or more in thickness, mixed with or below oxide mineralization.

Primary chalcopyrite mineralization occurs as porphyry style disseminations or as veinlets in quartz monzonite associated with potassic alteration below both the oxide and chalcocite mineralization. Significant chalcopyrite mineralization was intersected from 4,500 feet to 5,500 feet north of the MacArthur pit in core holes QM-100 (0.58% Cu over 65 feet) and QM-164 (1.32% Cu over 64 feet) respectively. Both intercepts represent veinlet and disseminated primary mineralization, open to the north. Lion CG's drilling program in the Gallagher area has delineated a zone of chalcopyrite mineralization that extends over a north-south distance of 2,500 feet. The primary sulphide zone has a defined width of 500 feet and extends to a depth of approximately 650 feet. Lion CG's drilling within the MacArthur pit has just touched upon primary copper mineralization, generally occurring in wispy quartz chalcopyrite veinlets. This mineralization remains open at depth.

Petrographic study of drill core from holes QM-100 and QM-164 describes veinlet and disseminated copper mineralization as well as copper-bearing sheared, milled quartz veining underlain by potassic feldspar flooding.

### **Deposit Types**

The MacArthur Deposit is a supergene enriched, oxidized porphyry copper system. Although the porphyry system likely developed in near-vertical geometry, regional studies (Proffett and Dilles, 1984) suggest the deposits in the Yerington area are tilted westerly approximately 60 to 90 degrees from its original vertical position and extended to the east so that the map view is actually a structural cross-section. The original northwest strike of the near vertical porphyry dikes resulted in a northerly dip of the structures with the post mineral tilting.

The alteration visible in outcrops and drill samples is consistent with the west tilted, near horizontal orientation of the porphyry system. Phyllic alteration from the upper portion of the porphyry system dominates to the west. The alteration grades to potassic in the central MacArthur pit area and pervasive sodic-calcic alteration dominates in the eastern portions of the MacArthur pit and in the far northeastern portion of the Property.

Copper occurrences in the MacArthur pit area are related to primary copper sulphides associated with a porphyry copper center. The primary chalcocite ( $\text{Cu}_2\text{S}$ ) was enriched by supergene chalcocite ( $\text{Cu}_2\text{S}$ ) and later exposed to oxidation forming chrysocolla ( $\text{CuSiO}_3$ ) and black copper wad ( $\text{Cu}$ ,  $\text{Fe}$ ,  $\text{Mn}$ ,  $\text{SiO}_2$ ) (Figure 8-1). In the North Ridge area, the chalcocite blanket shows only minor oxidation. The supergene blanket follows current topography except to the north of 14,189,500E (approximately) where it has a shallow dip to the north (Figure 8-2).

Primary porphyry copper sulphides have also been intersected north of the North Ridge area in drill thicknesses up to 100 feet, and also in the Gallagher area. These intercepts may be related to the MacArthur porphyry center or a new, yet-to-be discovered porphyry copper deposit.

*[Remaining page is intentionally left blank]*

Figure 8-1. East-West Cross-Section

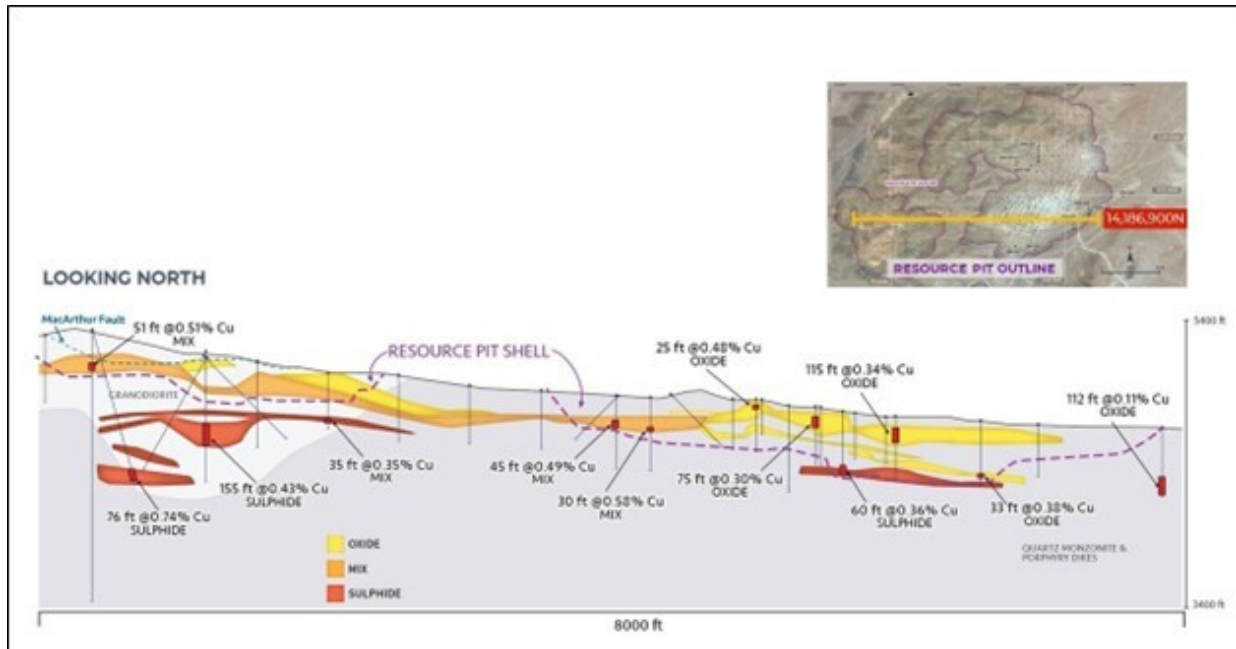
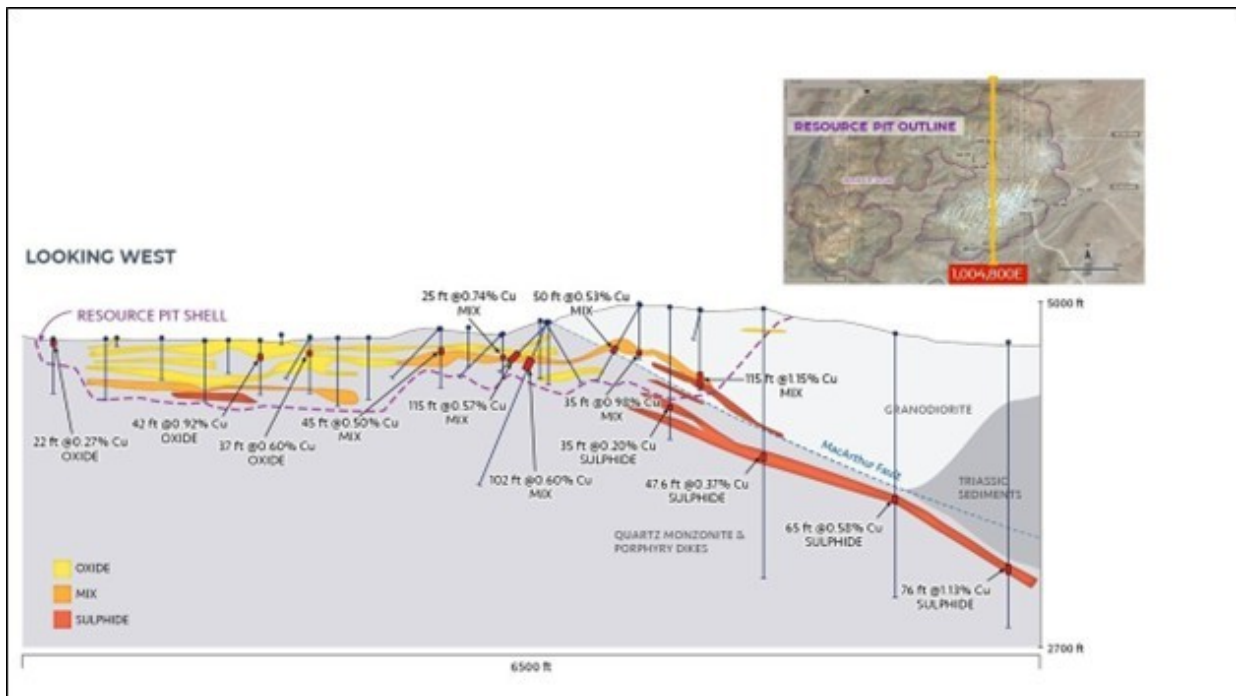


Figure 8-2. North-South Cross-Section



## **Exploration and Drilling Results**

From April 2007 to November 2011, the Company completed 414 drill holes. In 2021, ten additional exploration diamond core holes were completed. The ten-hole program was designed to assess the likelihood that further drilling would upgrade portions of the resource from Inferred to Indicated and expand the overall size of the current resource.

There are three different mineralization zones encountered at MacArthur. All three mineralization zones - oxide, mixed chalcocite/oxide, and primary sulphide - have grown with additional drilling and none are yet entirely closed off.

### **Oxide Zone Exploration**

The extents of the oxide mineralization on the Property remain open to the south-southeast.

Five thousand feet west of the MacArthur pit, holes QM-133 and QM-153 intersected 0.27% Cu over 235 feet and 0.16% Cu over 125 feet, respectively, of oxide and acid soluble copper. The mineralization is open 1,000 feet further to the west.

Southeast of the MacArthur pit, holes spaced from 500 to 1,000 feet apart contain 0.1 to 0.3% Cu intercepts. Holes QM-142, QM-108, and QM-140 encountered 0.21% Cu over 50 feet to 0.31% Cu over 10 feet in an area that remains untested for 3,000 feet to the Shuman area (3,500 feet south of the MacArthur pit) where oxide intercepts of 0.24% Cu over 45 feet and 0.39% Cu over 30 feet were encountered from surface. Mineralization in these holes (referred to as the Shuman drill holes) is open in all directions, but obscured to the south by Tertiary volcanic cover.

Holes QM-326 and QM-327, drilled on the southern edge of the current oxide resource, each intersected near surface oxide mineralization. Significant intercepts include 0.27% Cu over 22 feet and 0.70% Cu over 24 feet from QM-326 and QM-327, respectively. Both holes also indicate the potential for additional oxide resource expansion to the south and southeast.

Holes QM-321 and QM-322 were drilled on the south/southeastern edge of the current oxide resource. Both holes intersected near surface oxide mineralization; QM-321 intersected 0.17% Cu over 45 feet and QM-322 intersected 0.11% Cu over 102 feet. Both holes also indicate the potential for an additional oxide resource to the south.

### **Chalcocite - Oxide Zone Exploration**

Three holes (QM-319, QM-320, and QM-328) were drilled on the north to northwestern edge of the current resource. Each hole intersected oxide and chalcocite mineralization. Significant chalcocite intercepts include hole QM-320 (0.58% Cu over 102 feet, including 0.70% Cu over 74 feet); QM-328 (0.44% Cu over 77 feet); and QM-319 (0.13% Cu over 48 feet). Each hole contains additional acid soluble copper intercepts.

Additionally, hole QM-324 (which was testing for infill oxide mineralization) identified chalcocite coating pyrite and chalcopyrite, including 0.39% Cu over 32 feet.

## Primary Sulphide Zone Exploration

Primary, porphyry - style copper mineralization has been encountered in the Gallagher area and in the north porphyry target area. In the Gallagher area, primary copper mineralization occurs from 450 feet depth in QM-010, with 0.43% Cu over 155 feet to 0.74% over 76 feet in QM-046 from 1,279 feet depth as chalcopyrite disseminations and veinlets. Additional drilling to target primary sulphide mineralization is warranted for as there are only eight holes exceeding 800 feet depth over an approximate one-half square mile area.

Lion CG's drilling program at the north porphyry target, some 3,000 feet north of the MacArthur pit, encountered 115 feet of mineralization (partially enriched with chalcocite) averaging 1.15% Cu at a depth of 470 feet in drill hole QM-068. A similar section of mineralization in QM-070 (500 feet east of QM-068) averaged 1.02% Cu over a thickness of 45 feet at a depth of 435 feet. Together with mineralized intercepts in QM-072, (500 feet east of QM-070) which cut 15 feet of 1.2% Cu; the results indicated a possible porphyry center in the foot wall of the MacArthur fault. In 2010 this concept was favorably tested 1,500 feet north of QM-068 where hole QM-100 intersected 0.58% Cu over 65 feet from 1,203.5 feet. During 2011, QM-100 was offset 1,000 feet north by QM-164 returning 1.32% Cu over 64 feet from 1,673 feet depth. These primary sulphide intercepts define a 6,000-foot mineralized zone (corridor), including the oxide mineralization at the MacArthur pit north to the sulphide intercepts in QM-164, untested 500 feet east and west of QM-100 and QM-164 and open to the north.

Holes QM-319 and QM-320 were drilled to depths of 800 feet and 1,188.5 feet, respectively, to test under-drilled induced polarization geophysical anomalies. Both holes intersected zones of primary mineralization, occurring as wispy quartz-sericite-biotite-sulphide veinlets/vein haloes, which are commonly associated with porphyry-style mineralization in the Yerington District. These two holes provide important guidance for primary sulphide drilling in future programs. Hole QM-323 (also designed to infill oxide mineralization) identified 0.20% Cu over 80 feet and additional shorter zones of chalcopyrite mineralization. Multiple untested induced polarization and geologic targets remain untested, mainly on the northeastern portion of the Property.

## Geophysics

Two major datasets exist for the geophysical work undertaken in the Yerington District. The first is magnetic data which includes historical and more recent studies undertaken by Lion CG.

The historical data includes an Anaconda Company 1966 fixed wing survey running 400 m N-S lines. The goal was to identify magnetic lows which could indicate magnetite-destructive alteration similar to the Yerington deposit. Additionally, two HeliMag surveys were undertaken by Lion CG in 2007 and 2012 over the Yerington District. These surveys confirmed many of the magnetic lows identified in the Anaconda survey and further identified additional magnetic lows, some of which include the MacArthur Project.

The second major dataset includes Induced Polarization/Resistivity (IPR) surveys run over MacArthur Project. Historically, Bear Creek ran 11 N-S oriented lines in 1963 and McPhar Geophysics ran an additional 26 lines N-S lines. The two surveys covered over four kilometers in the east-west direction and five kilometers in the north-south direction. The nominal depth of investigation was limited, looking less than 1,000 feet of depth. The data was inverted using Zonge International 2d inversion software and found to be of good quality.



Lion CG followed up with multiple IPR surveys in 2009 (7 N-S lines), 2011 (4 N-S lines, and 2016 (4 N-S lines) with the goal expanding the depth and lateral extent of the previous surveys. Investigation depths of these surveys range from ~1,200 feet to greater than 4,500 feet.

The surveys undertaken by Lion CG has identified multiple IPR targets. As expected, the targets are below the oxidized portion of the Project remain untested. Lion CG is evaluating and prioritizing which geophysical targets are of the most interest for future exploration.

### **Exploration and Drilling History**

Despite the numerous shallow pits and prospects across the MacArthur Property, there is little available published production information. Over the history of the Project, several operators have contributed to the pre-Lion CG drill hole database of more than 300 holes. Table 10-1 summarizes the exploration history of the MacArthur area prior to Lion CG's entry. Figure 10-1 shows the location of all historical drill holes.

### **Recent Drilling**

In 2011, drilling centered on an approximate one-half square mile area from the North Ridge area to the present-day MacArthur pit, and the Gallagher area located west of the existing MacArthur pit. Drill spacing was reduced to 250-foot centers on several drill fences. South-bearing angle holes tested the WNW, north dipping structural / mineralized grain and east- and west-bearing angle holes tested orthogonal structure. In 2021, a focus was made to continue upgrading the resource calculation in the main portion of the MacArthur Project as well as to step out to the east-southeast to test for additional acid soluble copper mineralization. Holes were drilled both vertically and south bearing to test for the structure grain.

Also during 2011, 3,275 feet of PQ size core was drilled at 26 sites for the purpose of metallurgical test work. PQ holes twinned existing Lion CG RC and core holes. PQ holes were prefixed by "PQ-11" followed by the ID of the twinned hole.

In 2021, 5,147 feet of exploration drilling in ten holes was completed, and 4,445 feet of PQ size core was drilled in thirteen holes for metallurgical sampling.

In 2022, 2,291 feet of drilling was completed in three core holes. Two of the drill holes (QM-329 and QM-330) were drilled in the central portion of the resource shell, with each drill hole intersecting oxide and chalcocite mineralization. Significant intercepts include drill hole QM-329 (371 ft of 0.16% TCu, including 76.5 ft of 0.27% TCu) and QM-330 (157 ft of 0.25% TCu, including 58.5 ft of 0.40% TCu). Additionally, QM-329 intersected primary sulphide mineralization (40 ft of 0.17% TCu). QM-331, drilled on the eastern edge of the resource shell, also intersected oxide mineralization (10 ft of 1.06% TCu) and a mixture of chalcocite and chalcopyrite mineralization (16.5 ft of 0.18% TCu).

At the Mason Pass prospect, located 1.5 miles from MacArthur pit, at-surface, ore-grade, copper oxide mineralization was encountered in trenches excavated in 2022, with mineralization remaining open and untested in most directions. The Mason Pass prospect was first identified by Company geologists through geologic mapping of outcropping copper oxide mineralization occurring within the Singatse fault system, a district-wide flat dipping fault that bounds the eastern edge of the outcropping mineralization. The program involved five trenches totaling 1,873 linear feet. The trenches ranged from 6 to 15 ft in depth and were mapped and channel sampled at ten-foot intervals. The four trenches that reached bedrock all encountered copper oxide mineralization. The results from the trenching indicated that the copper oxide mineralization occurs from one-inch to five-foot wide flat-lying veins, striking in a southwest-to-northeast direction, and extends out from the Singatse fault into the western and southern directions for an as-yet-undetermined distance. The Company is considering further exploration to evaluate the extent of this mineralization to the west, south, and at depth, as well as testing for potential to the east, beneath the cover of volcanics that postdate the mineralization. The character of the mineralization observed in the trench exposures is similar to that exposed in the MacArthur pit where historic benching exposes copper oxide mineralization primarily in the footwall of the low angle MacArthur fault and ranging from 30 to 250 feet in thickness.

## **Current Drilling Methods**

Lion CG has explored the MacArthur Project with both RC) and diamond core drilling methods. RC holes have been drilled by Diversified Drilling LLC, Missoula, Montana, DeLong Construction Inc., Winnemucca, Nevada, and by Leach Drilling Inc., Silver Springs, Nevada. During 2007-2008 the core drilling was contracted to Kirkness Diamond Drilling of Dayton, Nevada, and Kirkness Brothers Diamond Drilling (aka KB Drilling Co, Inc.) of Carson City, Nevada. Major Drilling America, Inc., Salt Lake City, Utah, conducted core drilling during 2009-2010. Core drilling during 2011 was contracted to Ruen Drilling Inc., Clark Fork, Idaho. In 2021, core drilling was contracted to National EWP, Elko, Nevada, and in 2022, core drilling was contracted to IG Drilling LLC of Provo, Utah.

The total area covered by MacArthur Project drilling is approximately 12,500 feet east-west by 6,000 feet north-south at approximate drill spacing of 500 feet. Drill spacing reduces to approximately 250 feet within an approximate 1,500 feet east-west by 1,000 feet north-south within the northeast portion of the MacArthur pit and reduces to 250 foot spacing over portions of a 5,000 foot square area north of the MacArthur pit. Historic Anaconda drill spacing is approximately 125 feet in the MacArthur pit.

### **Reverse Circulation ("RC") Drilling Sampling Method**

All RC drilling is conducted with water added to eliminate dust. A percussion hammer with interchange sampling system has been used by the RC drill. Samples are collected in a conventional manner via a cyclone and standard wet splitter in 17-inch by 26-inch cloth bags placed in five-gallon buckets to avoid spillage of material. Sample bags are pre-marked by Lion CG personnel at five-foot intervals and also include a numbered tag bearing the hole number and footage interval. Collected samples, weighing approximately 15 to 20 pounds each, are wire tied, and then loaded onto a ten-foot trailer with wood bed allowing initial draining and drying. Each day, Lion CG personnel, or the drillers at end of their shift, haul the sample trailer from drill site to Lion CG's secure sample preparation warehouse in Yerington, Nevada. Geologic logging samples are collected at the drill site in a mesh strainer, washed, and placed in standard plastic chip trays collected daily by Lion CG personnel.

### **Core Drilling Sampling Method**

For exploration drilling core diameter was HQ (approximately 2.75-inch). Following convention, at the drill site core was placed in wax-impregnated, ten-foot capacity cardboard boxes. Sample intervals vary from less than one foot to six feet, dependent upon rock consistency. Sample boxes were delivered to Lion CG's secure sample warehouse in Yerington, Nevada by the drill crew following each 12-hour shift.

PQ core drilling for metallurgical testwork followed similar protocol as exploration drilling. PQ core was placed in wax-impregnated, five-foot capacity cardboard boxes and delivered to Lion CG's secure sample warehouse by the drill crew following each 12-hour shift. After logging, PQ core was wrapped in airtight plastic bags to prevent oxidization.

Core boxes were stacked on pallets, secured with plastic wrap and steel banding for shipment. For the metallurgical studies, samples were sent to METCON Research Laboratories in Tucson, Arizona via UPS Freight. The samples currently undergoing assay and column testwork were shipped to McClelland Laboratories, Inc. in Sparks, Nevada via UPS Freight.

### **Drilling, Sampling and Recovery Factors**

No factors were shown that could materially impact the accuracy and reliability of the above results. With few exceptions, core recovery exceeded 80% while RC recovery is estimated to be greater than 95%.

### **Sample Quality**

It is IMC's opinion that Lion CG's samples of the MacArthur Project are of high quality and are representative of the Property. This statement applies to samples used for the determination of grades, lithologies, densities, and for planned metallurgical studies.

It is the opinion of the author that during the period in 1972 to 1973 when Anaconda explored and drill tested the MacArthur Property, the drill samples taken by Anaconda were representative of the deposit and the methodologies commonly used by the industry at that time. This statement applies to samples used for the determination of grades, lithology, and densities, as well as metallurgical performance, supported by similar determinations and conditions being carried out at that time at Anaconda's Yerington mine operation and as referenced below in an internal Anaconda report (Heatwole, 1972), portions of which follow:

*"From March to November, 1972, over 225 holes were drilled... Approximately 33,000 feet of vertical hole and 13,000 feet of angle hole were drilled using percussion and rotary methods."*

The majority (62%) of the drilling, which was supervised by Anaconda's Mining Research Department, was accomplished using Gardner-Denver PR123J percussion drills. The percussion drill was fitted with a sampling system designed by the Mining Research Department, which collected the entire sample discharged from the hole. The remainder of the drilling was done by Boyles Brothers Drilling Company using rotary and down-the-hole percussion equipment.

While no details are available regarding Anaconda's exact assaying protocol and quality control during drilling at the MacArthur Property, an interview conducted by Lion CG personnel in October 2008 with Mr. Henry Koehler, Anaconda's Chief Chemist during the 1960s and 1970s, confirmed that the techniques and procedures implemented conformed to industry standards for that era. Mr. Koehler was employed in Anaconda's analytical laboratory from 1952 to mine closure in 1978. He currently resides in Yerington, Nevada.

### **Sample Preparation, Analysis and Security of Samples**

IMC has reviewed all of the Lion CG sample preparation, handling, analyses, and security procedures during its site visit on February 14 and 15, 2022. No drilling was in progress at the time, but all procedures were reviewed and meet accepted industry protocol. It is IMC's opinion that the current practices meet NI 43-101 and CIM-defined requirements. During an earlier review by Tetra Tech, it was recommended that standards be stored in a locked and secured area, which is the current practice.

## **Reverse Circulation Sample Preparation and Security**

RC sample bags, having been transported on a ten-foot trailer by Lion CG personnel from the drill site to the secure sample warehouse, are unloaded onto suspended wire mesh frames for further drying. Diesel-charged space heaters assist in drying during winter months. Once dry, sets of three samples are combined in a 24- by 36-inch woven polypropylene transport ("rice") bag, wire tied, and carefully loaded on plastic lined pallets. Each pallet, holding approximately 13 to 15 rice bags, is shrink-wrapped and further secured with wire bands. Lion CG's samples were shipped via UPS Freight to Skyline Assayers & Laboratories (Skyline), Tucson, Arizona through 2008. During the 2009-2010 drill campaign, Skyline dispatched a transport truck from Tucson to collect samples. In 2011, Skyline established a sample preparation facility in Battle Mountain, Nevada, from which trucks were dispatched to pick up Lion CG's drill samples under a chain of custody protocol. Following sample preparation in the Battle Mountain facility, Skyline ships a representative pulp sample to the Skyline laboratory in Tucson, Arizona for analysis.

Complying with earlier recommendations from Tetra Tech, Lion CG now weighs each shrink-wrapped pallet of samples prior to departure from Yerington. Rejects and pulps are returned to Lion CG and stored under cover in a secure location.

## **Core Sample Preparation and Security**

Drill core, having been transported at end of each shift by the drill crew to Lion CG's secure sample warehouse, is logged by a Lion CG geologist who marks appropriate sample intervals (approximately 5 feet) with colored flagging tape and marks the core with a wax pencil to indicate appropriate location for sawing or splitting. Each core box, bearing a label tag showing drill hole number, box number, and box footage interval, is then photographed. Rock quality designations (RQD), magnetic susceptibility, and recovery measurements are taken. Core preceding drill hole QMCC-20 was sawed in half by Lion CG personnel; core holes QM-026, QM-036, QM-041, QM-046, and QM-049 were split in half using a hydraulic powered blade at the warehouse by Lion CG personnel. From 2010-2011 core holes were sawed by ALS Minerals Laboratory, Reno, Nevada (ALS). In 2021, SPS personnel sawed and/or split the core samples. Samples with a large percentage of clay were split to preserve the fines.

When on-site sawing and or splitting was done, one half of the split was bagged in 11- by 17-inch cloth bags marked with drill hole number, footage interval, and sample number for assay while the other half was returned to the appropriate core box for storage in the sample warehouse. From 2007-2011, approximately five to six cloth sample bags were combined in a larger 24- by 36-inch transport polypropylene ("rice") bag, wire tied, and carefully loaded on plastic lined pallets. Each pallet, holding approximately 13 to 15 rice bags, was shrink-wrapped and further secured with wire bands for shipment to Skyline in Tucson. In 2021, the cloth sample bags were placed in plastic storage bins provided by the assay lab. The sample bins are covered, loaded onto a flat- bed truck, and transported to Skyline in Tucson, Arizona by laboratory staff. The same chain of custody protocol is used for both RC and core samples.

Following geologic logging and RQD measurements, the core portions of holes QM-099, QM-100, and QM-109 (2009-2010) and QM-163, QM-164, QM-165, QM-177 and QM-185 (2011 program) were strapped and shrink wrapped on pallets for shipment to ALS. Core samples were picked up from the warehouse by a Reno, Nevada-based ALS Minerals driver, and sample pallets were weighed upon receipt by the laboratory. ALS personnel sawed the core in half, one half for assay at the ALS laboratory, storing the other half in the core box for return to Lion CG. Chain of custody procedures for ALS Minerals follow the format described for Skyline.

Following geologic logging, magnetic susceptibility and RQD measurements, and photography, PQ core for metallurgical testing was shrink-wrapped in its cardboard core box, stacked on pallets, shrink-wrapped together, wire banded, and weighed. In 2011, pallets were shipped to METCON Research Laboratories, Tucson, Arizona via UPS Freight. Chain of Custody was signed upon departure from Yerington and receipt in Tucson. In 2021, PQ samples were shipped to McClelland Laboratories, Sparks, Nevada via UPS Freight with the sample chain of custody procedures.

### Sample Analysis

During 2007, 12 core holes were analyzed at American Assay Laboratories (AAL) in Sparks, Nevada. AAL is ISO/IEC 17025 certified as well as a Certificate of Laboratory Proficiency PTP-MAL from the Standards Council of Canada.

Lion CG elected to use Skyline Assayers & Laboratories (Skyline) an ISO certified assay lab in Tucson, Arizona for all further analytical work. Samples submitted to AAL were re-assayed (pulp or rejects) by Skyline for consistency of the data set. Lion CG samples arrived at Skyline via UPS freight from 2007-2008.

Core from holes QM-099, QM-100, and QM-109 (2009-2010) and QM-163, QM-164, QM-165, QM-166, QM-177 and QM-185 (2011 program) were submitted to ALS Minerals, Sparks, Nevada. ALS Minerals is an ISO registered and accredited laboratory in North America. From 2009-2011 samples were picked up by a transport truck dispatched by Skyline from its temporary facility in Battle Mountain, Nevada and 2021 by a transport truck dispatched from Tucson by Skyline. A quality assurance and quality control assay protocol (QA/QC) has been implemented by Lion CG where one blank and one standard are inserted with every 18 drill hole samples going into the assay stream. The Skyline assay procedures are as follows:

- For Total Copper: a 0.2000 to 0.2199 gram (g) sample is weighed into a 200-milliliter (ml) flask in batches of 20 samples plus two checks (duplicates) and two standards per rack. A three-acid mix, 14.5 ml total is added and heated to about 250°C for digestion. The sample is made to volume and read on an ICP/AAS using standards and blanks for calibration.
- For Acid Soluble Copper: a 1.00 to 1.0199 g sample is weighed into a 200 ml flask in batches of 20 samples plus two checks (duplicates) and two standards per rack. Sulfuric acid (2.174 l) in water and sodium sulfite in water are mixed and added to the flask and allowed to leach for an hour. The sample is made to volume and read on an ICP/AAS using standards and blanks for calibration.
- For Ferric Soluble Copper (QLT): a 0.500 to 0.5099 g sample is weighted into a 200 ml flask in batch of 20 samples plus two checks (duplicates) and standards per rack. Sulfuric acid ferric sulfate mixed with deionized water are mixed and added to the flask and allowed to leach for an hour. The filtrate is cooled, made up to a standard volume, and the copper determined by AA with appropriate standards and blanks for calibration.
- For Sequential Copper Leach: consists of four analyses: Total Copper, Acid Soluble Copper, Cyanide Soluble Copper, and the difference, or Residual. Following analysis for Total Copper and Acid Soluble Copper, the residue from the acid soluble test is leached (shake test) in a sodium cyanide solution to determine percent cyanide soluble minerals. The Sequential Copper Leach is a different approach to the Ferric Soluble Copper (QLT) leach, with possible greater leaching of certain sulphides (e.g. chalcocite or bornite) during the cyanide leach step.

- For Acid Consumption of Pulps: a 2.00 to 2.10 grams is weighted into a 50 ml screw cap centrifuge in batches of 24 with two checks (duplicates) and two standards per rack. Sulfuric acid is added to the sample and the shaken for an hour. The sample is decanted into a 50 ml screw cap centrifuge tube where titration is undergone and acid consumption calculated with the Tiamo software program.

From 2009-2011, Lion CG requested 34-element trace element geochemistry from Skyline on selected samples which were analyzed by ICP.OES Aqua Regia Leach.

During 2009-2010 Lion CG core samples were picked up at Lion CG's warehouse facility by ALS Minerals personnel and transported to ALS Minerals laboratory in Sparks, Nevada. ALS Minerals personnel sawed the core, saving one-half for return to Lion CG. ALS assayed core for trace element geochemistry with 48-element Four Acid "Near-Total" Digestion.

In keeping with Tetra Tech recommendations, beginning in 2009, Lion CG began a program to re-assay selected samples when blanks, standards, or repeat assays exceeded or were below the expected values by 15%, or blanks returned an assay of  $>.015\%$  Cu. The QC program now re-assays standards outside  $\pm 2$  standard deviations of the expected value, repeat assays  $\pm 15\%$  of the original assay, and blanks greater than  $.015\%$  Cu.

In 2020, to better understand acid consumption of the acid soluble mineralized zones, 111 pulps were analyzed by Skyline Laboratories.

### **Metallurgical Testing**

The MacArthur Project generally consists of a Leach cap that grades into an oxidized copper zone ,transitioning through a mixed oxide/secondary copper zone and) into primary sulphides at depth. Essentially all metallurgical testwork to date has been conducted on the copper oxide resources with a few tests having been performed on secondary sulphide material.

The MacArthur Project has a long testing history of metallurgical bottle roll and column testwork from 1976 through 2011. Historical testwork by Anaconda in 1976 included bottle roll and column leach tests on samples collected from surface trenches. Arimetco performed a number of bottle and column leach tests on surface samples between 1992 and 1995 using several different metallurgical laboratories. Lion CG performed bottle roll and column tests between 2010 and 2011 through METCON Research ("METCON") in Tucson, Arizona (Carneiro, R.R.).

Of significance, Anaconda operated a vat leach facility processing oxide material from the Yerington Pit, the results from which were documented over the many years of operation. Arimetco also operated a number of leach pads between 1989 and 1995 treating oxide and transition material mined from the Yerington Pit. However, between 1994 and 1997, approximately 5.0 million tons of ore was mined from the MacArthur pit and hauled Run of Mine ("ROM") to the Arimetco pads for processing. This commercial operational database for both the vat and heap leach operations was significant since both Yerington and MacArthur deposits are very similar in origin, geology and mineralization. A summary of several years of data from the vat leach operation is available for review.

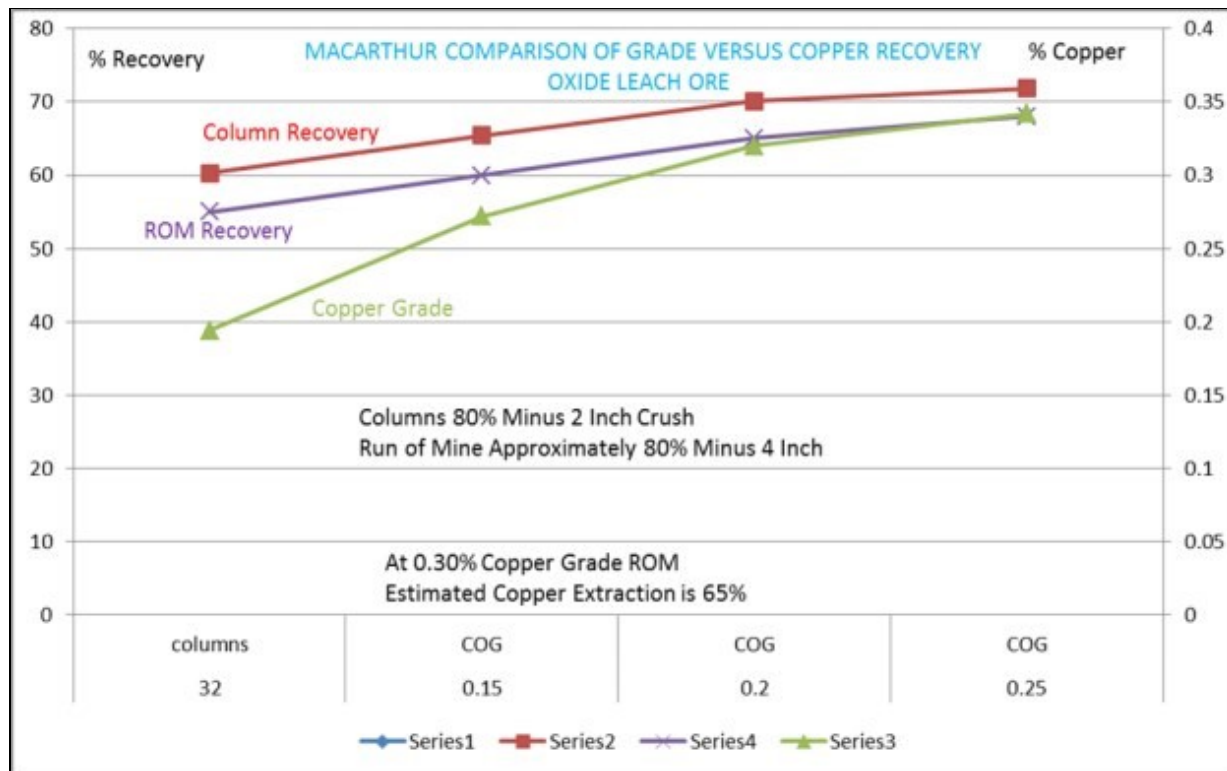
A review of the METCON metallurgical testwork shows good copper extraction but variable acid consumption spatially throughout the deposit. METCON column testwork (32 columns) conducted in 2011 using material from 32 different PQ core holes (rather than material taken during surface sampling) was completed in 2011.

Combined, the 2011 METCON study, the Anaconda vat leaching data, and the Arimetco commercial leach pad data provided sufficient metallurgical information to gain a preliminary level of confidence. However, additional metallurgical testwork is necessary to better understand acidification techniques and the resultant copper extraction spatially in the mineralized resource area. Recommendations for this test program are provided in Section 26 of the report.

### Oxide Material Copper Extraction

Predicted copper extraction and acid consumption was derived from the existing metallurgical data base, METCON columns and Arimetco historical information. Figure 13-1 below shows column copper extraction versus grade during a 120-day leach cycle. The 32 METCON columns average 60% extraction, which is globally near the extraction achieved by Arimetco at a similar copper grade. As grade increases, copper extraction increases. Figure 13-1 shows column copper extraction of 65%. Using a permanent heap leach pad, extraction is predicted to increase during residual leaching of the overlaid pads, greater than offsetting solution copper inventory buildup in the pad. A 71% extraction was applied for the Oxide zone.

Figure 13-1. Comparison of Grade versus Copper Recovery Oxide Leach Material



### Oxide Material Acid Consumption

Column testwork assumed the use of an acid cure application followed by continued acidification during leaching/rinsing of the columns. During the cure stage, 31.59 pounds of acid per ton of mineralized material was added. Following the acid cure, leaching of most columns consumed almost an equal amount of additional acid during the 120-day leach cycle. Most columns were operated between 1.5 and 1.6 pH during this leach cycle. It is probable that all 32 columns were over acidified both during the acid cure and leaching which resulted in excess acid consumption, averaging 57.3 pounds of sulfuric acid per ton of mineralized material processed.

The acid consumption was determined to be 45.4 pounds of sulfuric acid per ton of mineralized material outside of the Gallagher area. These testwork results, taken in conjunction with qualified opinion predicts that acid consumption may be reduced approximately 20% to 30 pounds of acid per ton of mineralized material considering the column over acidification that was realized combined with shortening of the leach cycle time to 90 days. Arimetco added 25 to 30 pounds of acid per ton of mineralized material with 7.7 pounds of acid consumed per pound of copper produced. A higher acid consumption of 50 pounds per ton of mineralized material has been attributed to the Gallagher area based upon the column testwork. The higher acid consumption is likely due to the more mafic rich granodiorite host rock.

### **Transition Material Extraction and Acid Consumption**

Research for prediction of copper leach extraction from secondary sulphides (chalcocite) is limited to one METCON column. A number of bottle roll tests with high levels of secondary copper were also run but bottle roll tests are only considered index tests. The total grade of the METCON column #4 was 0.363% copper with a cyanide soluble copper of 0.203% (secondary sulphide). Leach extraction of the secondary copper values was 56%, the extraction kinetics being slower than the oxide columns which is typical of secondary sulphide leaching. Leach extraction after 120 days was still significant and would continue in practice through the residual leaching of lifts as this material is overlaid by fresh mineralized material.

The total head iron content was 3.87% Fe with a tail residue of 3.32% Fe, showing an iron leach extraction of 6.22%. Test results from this column showed the least continuing acid consumption and iron extraction. Acid added during the cure was 32.5 pounds of acid per ton of mineralized material. A total of 45.56 pounds of acid per ton of mineralized material were consumed during this 120-day column test. The pH of the leach solution on day one of the column test was 0.43 indicating that the column was likely over acidified, accounting for the over acidification, the acid consumption in the transition zone is considered to be 30 pounds of acid per ton of mineralized material.

During the leach cycle the column pH ran between 1.45 and 1.55 and was much easier to maintain at this level.

Ferric iron concentration was 14.3 g/l the first day of rinsing which supplies ferric iron for chalcocite leaching. The ferrous iron was near zero after about 20 days of leaching showing that first stage chalcocite leaching was complete. The solution oxidation/reduction potential (ORP) remained about 650 mV after 20 days, ideal for second stage chalcocite leaching.

The head screen analysis of the one secondary sulphide column tested was coarser than the materials in the other 31 columns. This column also showed minimal chemical degradation. The head screen analysis was significantly coarser than the column averages and very little chemical degradation occurred. Chalcocite may tend to be more disseminated within the host rock than oxide material. Although the copper grade in the column is not high, some acid will be generated during residual leaching as the second stage of chalcocite (covellite) is slowly leached resulting in elemental sulfur formation. Therefore, considering a shorter leach cycle time, acid consumption for secondary sulphide material leaching was predicted to be 30 pounds of sulfuric acid per ton of mineralized material. Copper leach extraction with residual leaching is predicted at 65 percent.



## **Leach Cap and Sulphide Extraction and Acid Consumption**

No column testwork has been performed on material from the Leach Cap and Sulphide zones. Most of the copper-bearing material in the Leach Cap is considered to be oxide copper. However, considering it has already undergone a natural leach cycle, the copper extraction is likely to be less. A 60% extraction has been applied to this zone. A 40% extraction was applied to the primary sulphide material based upon the limited solubility studies of pulps as described in Section 11 of this report. An acid consumption of 30 pounds per ton of mineralized material was also applied, the same as the main portion of the MacArthur Project.

Additional column testwork is necessary to fully understand leach kinetics and acid consumption for the MacArthur Project. These additional tests are currently underway.

### **b. Yerington Mine**

#### **Location, Access and Infrastructure**

The Yerington Mine property is located near the geographic center of Lyon County, Nevada, USA, along the eastern flank of the Singatse Range. The property centers on the historical Anaconda open pit mine, flanked on the west by Weed Heights, Nevada (a small private community; the original company town of Anaconda) and on the east by the town of Yerington, Nevada. The property is easily accessed from Yerington by a network of paved roads that were used as principal transportation and access routes during the former operating period of the mine. SPS controls approximately 5,000 acre-feet of groundwater rights and the Yerington Pit contains an estimated 45,000 ac-ft of water. Power is currently on-site and a new substation is being constructed a quarter mile to the South. Nevada Energy operates a 226-Megawatt natural gas fueled power plant within ten miles of the site. Power for future mining operations is expected to be readily available. Topographic coverage is on US Geological Survey "Yerington" and "Mason Butte" 7.5' topographic quadrangles. The nearest major city is Reno, Nevada, approximately 80 miles to the northwest.

Soil and groundwater contamination, alleged to stem from the former mining operations at Yerington, have been identified on the property. As a result, a portion of the property acquired by SPS in 2011 previously under the jurisdiction of the EPA is now being managed by the NDEP, a division of the Nevada Department of Conservation and Natural Resources. Liability for the contamination on site is the responsibility of a third party which is actively engaged in remedial investigation and remediation activities under the supervision of the NDEP.

In order to establish SPS's position and rights, the acquisition by SPS of the Arimetco properties required a series of rigorous environmental, legal, and technical due diligence studies. The Chambers Group Inc. and Golder Associates Inc. completed a Phase 1 Environmental Site Assessment Report to allow SPS to complete one of the requirements necessary to establish liability protection as a Bona Fide Prospective Purchaser ("BFPP"). Prior to closing on the property, SPS received letters from the NDEP, BLM and the USEPA indicating the post-closing requirements then applicable to the Yerington Pit site for SPS to maintain its defense to liability as a BFPP regarding the activities of the former mine owners and operators.

In September 2012, SPS reached a voluntary agreement with the EPA (the "EPA Agreement") to participate in upgrading the system that manages fluids from the historic mining operation at the Yerington mine site. In exchange for SPS's participation in this work, the Company obtained a site-wide 'Covenant Not to Sue' for the contamination left at the site by former owners and operators of the historic mine operations.

The EPA Agreement provides for immediate environmental improvements to the site and allows SPS to continue exploration at the site while working cooperatively with the EPA, NDEP and the community. The EPA Agreement's 'Covenant Not to Sue' strengthens SPS's 'Bona Fide Prospective Purchaser Defense' against liability resulting from the contamination at the site prior to SPS's purchase.

The first phase of the fluid management project was completed in the fourth quarter of 2012. The Company co-funded the repairs to the on-site fluid management system ("FMS") by the EPA as well as the relining of one of the system ponds. During Phase 2 of the project, the Company completed a study of the FMS to determine what additional repairs or other modifications are necessary to ensure that the system is capable of handling the fluids from the former mine operations for a period of five years. The Study was completed by the Company's contractor in June 2013. EPA decided not to implement the five-year capacity alternative recommended in the Study. Rather, EPA decided to build new ponds to address the FMS capacity issues.

The Company decided not to fund construction of the additional ponds. Rather, the Company agreed to provide property at the site to construct the new ponds.

In September 2014, SPS submitted to EPA a Final Report that documented the work SPS performed under the EPA Agreement. On January 7, 2015, the EPA issued a Notice of Completion to SPS confirming that the obligations of the Work to Be Performed and the Payment of Response Costs sections of the Settlement Agreement had been met. With the issuance of the Notice of Completion, SPS believes it does not have further obligations under the EPA Agreement, except for those as a landowner and as a Bona Fide Prospective Purchaser.

In December 2015, the EPA sent a request to the Nevada Governor seeking the State's support for listing the Anaconda-Yerington Mine Site on the EPA National Priorities List ("NPL"). EPA has been considering an NPL listing as a mechanism to provide federal funds for remediation of contamination of the site left by former owners Arimetco Inc. This portion of the Site is referred to as Operable Unit 8 ("OU8") and was an unfunded liability due to Arimetco's bankruptcy. The Governor responded to the EPA noting that the State will not object to the initiation of the listing process.

On September 9, 2016, via publication in the Federal Register, the EPA proposed 10 new sites for NPL listing. The Anaconda Copper Mine in Yerington Nevada was one of those ten sites proposed for listing. EPA proposed to list the entire Site despite the fact that there was a responsible party for the operable units other than OU8, Atlantic Richfield Company, which had and continues to perform its obligations at the Site. SPS has a 'Covenant Not to Sue' with the EPA, and believes it qualifies for the 'Bona Fide Prospective Purchaser Defense' to CERCLA liability. The existing contamination at the Site, other than that related to OU 8 is the responsibility of the Atlantic Richfield Company that has been working with EPA to study the contamination, design remedial activities and implement remediation at the Site. SPS's work program at the Bear deposit was not affected by the EPA proposed listing of the Site. Also, SPS does not believe that an NPL listing precludes advancing mineral exploration and development at the Site. Only the Yerington mine site falls within the area of the proposed NPL listing; the Company's other targets in the district occur outside the area of the proposed listing.

In July 2017, NDEP made a formal request to EPA to defer the listing of the Site on the NPL. Since the original request, NDEP, EPA and Atlantic Richfield have worked toward a deferral of the listing process noted above. In support of a deferral action NDEP and EPA negotiated the terms of a Deferral Agreement, NDEP and Atlantic Richfield negotiated the terms of an Interim Administrative Order on Consent, and Atlantic Richfield and NDEP negotiated a Statement of Work for a Site-Wide Remedial Investigation and Feasibility Study.

In February 2018, the EPA and NDEP signed an agreement that transferred oversight responsibility for remediation of the Yerington mine site from the federal government to the state of Nevada. The deferral agreement requires that the responsible party fund and undertake remedial investigations, feasibility studies and cleanup of the Yerington site consistent with CERCLA standards. The cleanup, which is being overseen by NDEP, must be protective of human health, protective of ecological health, give preference for solutions that are durable over the long term, and will comply with all federal requirements as defined in CERCLA, the NCP and EPA guidance, and any more stringent state requirements.

On June 3, 2019, the Company announced that SPS had entered into an agreement ("ARC-SPS Agreement") with Atlantic Richfield that outlines how the two entities will work together on the Site allowing Atlantic Richfield to complete its remedial activities and the Company to move forward with its development of the Site. The ARC-SPS Agreement is part of a state-regulated, privately-funded solution to long-standing environmental issues associated with previous mining activity at the Anaconda Copper Mine site. SPS has complied with the terms of the agreement as required to date.

The ARC-SPS Agreement memorializes the parties' commitments concerning cooperation, access, property rights, liabilities, federal land acquisition, and ensures preservation of SPS's property and mineral rights. The ARC-SPS Agreement also contains covenants not to sue and indemnification provisions between the parties.

Of particular note, the ARC-SPS Agreement will:

- Further reduce SPS's risks regarding environmental liabilities at the Yerington site associated with past mining prior to SPS's acquisition in 2011. This includes both the former Anaconda mining operations and the former Arimetco area known as OU8, previously an unfunded liability. ARC has agreed to design, build, operate and fund the remedy for the Arimetco portion of the Site as well as to implement a CERCLA-protective remedy for the Site.
- Provide SPS with the opportunity to consolidate its land position at Yerington with the possible conversion of certain BLM mining claims into private land transferred to SPS at nominal cost without attached liability for previous mining activity.
- Dovetail with more comprehensive plans by government agencies to transfer oversight of the Yerington mine site from federal to state jurisdiction under NDEP.
- Assist in creating a simpler path for mine cleanup and development by way of private land ownership and state oversight.

The ARC-SPS agreement is one part of a larger set of agreements being negotiated among ARC, the EPA, NDEP and the BLM, to permanently address the impacts from previous mining activities by the Anaconda Mining Company and Arimetco Inc. at Yerington. ARC has continued its remediation activities at the site under previous orders by NDEP and the EPA. Once arrangements are completed, it will finalize cleanup of the Yerington site consistent with Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") standards. The cleanup is being overseen by NDEP.

## **Geology and Mineralization**

The Yerington Pit property includes both the Yerington deposit (the "Yerington Deposit") and a portion of the Bear Deposit which represent two of three known porphyry copper deposits in the Yerington copper district. The porphyry systems are hosted in middle Jurassic intrusive rocks of the Yerington Batholith. Unless noted otherwise, the following discussions refer to the Yerington Deposit.

Mineralized porphyry dikes associated with three phases of intrusive activity related to the Yerington Batholith form an elongate body of mineralization that extends 6,600 feet along a strike of N118°E. The mineralization has an average width of 2,000 feet and has been defined by drilling to an average depth of 250 feet below the Yerington Pit bottom at the 3,800-ft elevation. Because of the economic constraints of low copper prices at the time, many of the 792 historic Anaconda drill holes used in the SPS study were stopped in mineralization and very few were drilled below the 3,400-ft level where the porphyry system remained largely unexplored.

Only four historic holes have actually explored the deep vertical projection of copper mineralization in the pit. Three of the holes were drilled along a single N-S oriented section through the center of the pit. According to M. T. Einaudi in an internal 1970 Anaconda report, the deep drilling program defined a series of nested, concave upward, grade shells that are elongated down the N 70° dip of the dikes with the 0.2% Cu zone extending to approximately the 2,600-ft level; an overall dip distance of 2,200 feet. Although the program encountered an increasing ratio of pyrite to chalcopyrite, there was no indication of a "barren core", the porphyry dikes showed a "remarkable continuity" down dip and molybdenum mineralization became more abundant with increasing depth.

Secondary oxide copper formed much of the upper Yerington Deposit. Chrysocolla was the dominant copper oxide mineral, occurring as fracture coatings and fillings to a depth of approximately 400 feet below the surface. Below the 4,100-ft level, chalcopyrite is the dominant copper sulfide mineral with minor bornite primarily hosted in A-type quartz veins in the older porphyry dikes. The unmineralized material below the current pit bottom is primarily of chalcopyrite mineralization.

### **Exploration and Drilling Results**

Exploration work on the Yerington Pit project commenced with a technical review of all available historical information relating to mineralization in and around the Yerington Pit. A huge inventory of Anaconda data was available at the Anaconda Collection - American Heritage Center, University of Wyoming at Laramie. Approximately 10,000 pages of drill hole records from the library were scanned. The records included drill hole lithology, assays, and/or survey coordinates for almost 800 drill holes. Although some holes contained only lithologic or assay summary information, 892 holes contained adequate detailed assay, hole location and orientation information to be used in a resource estimation. Core from historical drilling left on site by Anaconda was photographed, described and selected intervals from 45 Anaconda core holes were shipped to Skyline Labs for re-assay.

Information obtained from the review of historical information was used to guide a two-pronged program of drilling during the last half of 2011. A total of 21,887 feet were drilled in 42 holes. The core holes and four RC holes were drilled to twin Anaconda core holes, while the remaining RC holes were targeted for expansion of mineralization laterally and below historic drill intercepts along the perimeter of the Yerington Pit.

A drilling program to sample residuals (historic dumps and tailings) at the Yerington Pit site was completed in September 2012. A total of 9,585 feet of sonic drilling in 95 holes have provided material for the characterization of the vat leach tails, heap leach pads, and the W-3 sub-grade waste dump. Selected samples were sent to Metcon Labs in Tucson, Arizona for metallurgical testing. The residuals are referenced in the MacArthur Deposit PEA and the Yerington Technical Report, as "mineralized material" and therefore are neither an NI 43-101 compliant resource nor a historical resource. Additional details regarding the residuals are described in the Yerington Technical Report. The residuals are not included in the resource estimate at the Yerington Pit site or in the MacArthur Deposit PEA or resource estimate at the MacArthur Deposit site.

In 2022, one core drill hole, YM-046, totaling 1,792.5 feet, was drilled beneath the Yerington pit to test for additional sulphide mineralization. The drill hole was located on the central portion of the southern pit rim, angled northeasterly to prospect beneath the pit. This hole identified both oxide (374 ft of 0.12% TCu) and sulphide (1,222 ft of 0.13% TCu, including 75 ft of 0.23% TCu) mineralization. A portion of the sulphide mineralization is located beneath the known resource.

In 2022, one core drill hole, MY-001, totaling 668 feet, was drilled at the Montana-Yerington prospect to test for copper oxide and sulphide potential beneath an outcropping phyllic altered leached cap. Additionally, the drill hole tested for the eastern portion of a sulphide vein that was underground mined in the early 1900s. The drill hole was located on the south-central edge of the target, angled northerly to test beneath the leached cap. This drill hole identified two sulphide vein structures, likely associated with the historical underground mining operations. Intercepts include 23.5 ft of 0.49% TCu and 8.5 ft of 1.64% TCu. Additionally, a low-grade sulphide intercept was identified below these veins (114 ft of 0.10% TCu) which may be an eastward continuation of the Ann Mason copper deposit.

### **Sampling, Analysis and Security of Samples**

Tetra Tech's review of sample preparation, handling, analyses, and security procedures for the Yerington drilling and sampling program has determined that the Company's current practices meet NI 43-101 and CIM defined requirements.

Samples taken during the period from 1952 to 1979, when Anaconda operated the Yerington Pit, including samples used for the determination of mine head grades, lithology, densities, and metallurgical performance were determined by Tetra Tech to be representative of the deposit. While no details are available regarding Anaconda's exact assaying protocol and quality control during the period the Yerington Pit copper mine was operating, public records of profit and cost confirmed that the techniques and procedures implemented conformed to industry standards for that era.

SPS explored the Yerington Pit copper property with both RC and diamond core drilling methods. The drilling program was supervised in the field by the project geologist for monitoring recovery, proper sample handling and accuracy in labeling. Approximately 4,300 samples were collected during the 2011 program and shipped for sample analyses. The samples were analyzed for total copper (TCu), gold, and a 47-element trace element package. Samples representing oxide mineralization and acid soluble sulfide copper were also analyzed for acid soluble copper and for ferric sulfate soluble copper. Rock quality designations ("**RQD**") and magnetic susceptibility measurements were taken on all core which was photographed following geologic logging.

The RC samples are collected in a conventional manner via a cyclone and standard wet splitter, placed in cloth bags that are pre-marked by SPS personnel at five-foot intervals and include a numbered tag inserted into a plastic bag bearing the hole number and footage interval. Collected samples, weighing approximately 15 to 20 pounds each, are wire tied and then loaded onto a ten-foot trailer with wood bed allowing initial draining and drying. Each day SPS personnel or the drillers at the end of their shift, haul the samples to SPS's secure sample preparation warehouse in Yerington, Nevada where the samples are dried, loaded on plastic lined pallets, weighed, and trucked by Skyline Assayers and Laboratories ("Skyline") personnel to Skyline's sample preparation facility in Battle Mountain, Nevada. A chain of custody form accompanies all shipments from Yerington to Battle Mountain. Once Skyline preps each sample in its Battle Mountain facility, approximately 50-gram sample pulps are air-freighted to Skyline's analytical laboratory in Tucson, Arizona for analyses and assay.

Samples from the core drilling program are handled in a similar manner. Core samples with a diameter of approximately 2.75 -inches (HQ) are placed in wax-impregnated, ten-foot capacity cardboard boxes and delivered to SPS's secure sample warehouse in Yerington, Nevada by the drill crew following each 12-hour shift. The core is logged by a SPS geologist who marks appropriate sample intervals (one to nominal five feet) with colored flagging tape. Lines are marked along the length of core with red wax crayons to indicate where the core piece should be sawed. Each core box, bearing a label tag showing drill hole number, box number, and box footage interval, is then photographed. RQD, magnetic susceptibility, and recovery measurements are taken. Core is then loaded on a pallet, shrink wrapped, and secured with wire bands for trucking by Skyline personnel to Skyline's sample preparation facility in Battle Mountain, Nevada. The core is sawed in half by Skyline personnel, one half designated for sample preparation/assay, the second half placed in its core box for return to SPS. Chain of custody procedures for core shipments picked up by Skyline at the SPS core shed follow the format for RC samples.

Drilling samples from the Yerington Pit project were analyzed by Skyline in Tucson, Arizona, which is accredited by the American Association for Laboratory Accreditation (A2LA - certificate no. 2953.01) and by ISO17025-compliant ALS Minerals Laboratories in Sparks, Nevada. SPS implements a quality assurance and quality control assay protocol whereby either one blank or one standard is inserted with every ten samples into the assay stream. Rejects from the previously analyzed samples are sent to ALS Minerals in Reno, Nevada for check assays.

### **Future Work Plans**

Lion CG believes the Yerington Pit project has potential for additional copper resources. Historic and current drilling data indicate that horizontal and vertical limits to the mineralization at the Yerington Pit have not yet been found. Additional exploration and in-fill drilling are being considered in an attempt to both expand and upgrade the current copper resources of the project prepared under NI 43-101 subject to financing. Historic and current drilling data indicate that horizontal and vertical limits to the mineralization at the Yerington Pit have not yet been found.

### **c. Bear Prospect, Nevada**

The Bear deposit is located south-southeast of the MacArthur Project and is a large porphyry copper system that was discovered and partially delineated by Anaconda in the 1960s and by Phelps Dodge in the 1960s and 1970s. The deposit is open in several directions and was previously never consolidated under single owner. Lion CG currently controls the Bear deposit through private land option agreements covering over 2,300 acres. Additionally, Lion CG has data from 49 holes totaling 126,400 feet that defines a system covering an area of at least 2 square miles. The portion of the deposit controlled by Anaconda in the 1960s covered approximately 25% of this area. It has been estimated that the Anaconda drilling program defined more than 500,000,000 tons of mineralized material with an average copper grade of 0.40% (Dilles and Proffett, 1995).

The Company has five option agreements, entered from March 2013 to May 2015, to acquire a 100% interest in private land in Yerington, Nevada, known as the Bear deposit. Under the terms of these option agreements, as amended, the Company is required to make \$5,673,000 in cash payments over 15 years (\$5,222,000 paid) to maintain the exclusive right to purchase the land, mineral rights, and certain water rights and to conduct mineral exploration on these properties. Two of the properties are subject to a 2% NSR which can be reduced to a 1% NSR for consideration of \$1,250,000.

Outstanding payments to keep the five option agreements current are as follows, by year:

- \$193,000 due in 2022 (paid);
- \$201,000 due in 2023; and
- \$50,000 due yearly from 2024 to 2028.

Outstanding purchase payments under the five option agreements are as follows:

- \$1,250,000 for Taylor, purchase option expiring April 4, 2023. The Company is in the process of negotiating an extension;
- \$250,000 for Chisum, purchase option has no expiry date, \$50,000 per year payment required for continuation;
- \$5,000,000 for Yerington Mining, purchase option expiring in 2024;
- \$8,975,000 for Circle Bar N, purchase option expiring in 2024; and
- \$22,770,000 for Desert Pearl, purchase option expiring in 2029.

From 2015 to 2016, SPS conducted a drill program consisting of six holes totaling 20,474 feet. Four of the holes extended known mineralization 2,000 feet N-NE by 3,000 feet NW-SE with intercepts averaging about 1,000 feet, ranging in grade from 0.14% to 0.42% TCu.

The Bear Deposit was discovered in 1961 by Anaconda condemnation drilling in the sulfide tailings disposal area and was further delineated in the 1960s and 1970s. Currently the deposit is open in several directions and has never been consolidated under a single owner. A part of Lion CG's recently acquired acreage was not previously accessible for exploration and is adjacent to the highest grade mineralization discovered during previous exploration of the area.

The Bear Deposit is a large porphyry copper system that occurs below 500 to 1,000 feet of valley fill and volcanic rocks of Tertiary age. Mineralization occurs predominantly in quartz monzonite, border phase quartz monzonite, and quartz monzonite porphyry dikes of Jurassic age. There does not seem to be any relation between the Jurassic rock type and the sulfide occurrence. Copper mineralization occurs most commonly as chalcopyrite with minor bornite within platings and veinlets of fresh feldspar and shreddy biotite. No copper oxide mineralization is present and only minor occurrences of chalcocite have been noted. Molybdenite is a common sulfide within the deposit, usually occurring with the best copper mineralization. However, only about 20% of the historic core samples have been analyzed for molybdenite and more studies are necessary to better understand its average grade and distribution.

The deposit is displaced by the gently east-dipping normal fault known as the Bear fault. The fault is defined by strongly sheared dark clay gouge with andesite and sulfide fragments. On the western part of the deposit the mineralization occurs within the foot wall of the fault while to the east the mineralization occurs deeper within the hanging wall.

The Bear Deposit is prospective because of its very large size, historic drilling and potential for higher grades than district averages. Molybdenum could also represent a by-product credit.

Acquisition and exploration costs incurred by the Company for the Bear Deposit to December 31, 2022 were \$1.9 million (2021 - \$1.7 million) net of option payments made.

#### **d. Wassuk, Nevada**

The Company has an option, as further amended, to earn a 100% interest in certain unpatented mining claims in Lyon County, Nevada, over ten years and is required to make \$1,405,000 in cash payments (paid) and incur a work commitment of \$50,000 by December 31, 2021 (completed). During 2021 two final option payments of \$125,000 due by August 1, 2021, and the final \$125,000 due by October 10, 2021, were both paid and form part of the total payments of \$1,405,000.

The property is subject to a 3% NSR royalty which can be reduced to a 2% NSR royalty for consideration of \$1,500,000.

As at December 31, 2022, the Company had satisfied all obligations of the Wassuk property, allowing the Company to exercise their right to acquire 100% interest in the property. On January 14, 2023, the Company exercised this right, and transfer of claims are expected to occur in April 2023.

#### **e. Groundhog Prospect, Alaska**

The Groundhog copper project is a 54,880-acre property situated in an established copper porphyry belt situated 200 miles southwest of Anchorage, Alaska. It is located on State of Alaska claims covering the northern extension of a 10-kilometer wide north-northeast trending structural zone that hosts a number of porphyry copper-gold prospects.

Lion CG signed a lease agreement dated April 20, 2017, further amended, with Chuchuna Minerals Company ("**Chuchuna**"), an Alaska corporation, giving Lion CG an option to purchase a 90% interest in the Groundhog copper prospect. Lion CG committed to funding \$1 million for exploration in the first year of the agreement, and a minimum of \$500,000 in each of the following seven years. Lion CG can earn its 90% interest in Groundhog by providing a total of \$5 million in funding for exploration over seven years, and by paying Chuchuna a lump sum of \$3 million by the end of the final year. Lion CG has no obligation to exercise its option and can terminate the agreement at its discretion annually. Chuchuna will be the operator of the project and will plan, implement and manage exploration field programs as set out in a budget and work plan approved by Lion CG.

During 2019, the Company completed a 1,664 line kilometer ZTEM and magnetic survey covering 165 square miles of the Groundhog property. Sixty additional claims were staked together with a modest program of surface sampling and mapping. The survey identified 19 targets that are worthy of follow-up. A limited geologic reconnaissance program over the strongest ZTEM anomalies did not identify any significant geochemical anomalies, due primarily to thick overburden and scarce outcrop.

In May 2020, the Company filed an independent technical report on Groundhog which supports its assessment that the property has potential to host copper-gold mineralization similar to the nearby Pebble deposit.

If Lion CG exercises its option to acquire 90% of Groundhog, Chuchuna and Lion CG will enter into a joint venture agreement. Chuchuna will retain a 10% interest in the property carried to production, and a NSR of 1.75%. Within the first ten years Lion CG may purchase 50% of the NSR by paying Chuchuna \$25,000,000.

On December 13, 2022, the Groundhog property was transferred from Lion CG to Blue Copper Resources Corp.



## 2021 and 2022 Exploration

The Company has met the annual work commitments required to spend a minimum of \$160,000. The Company incurred exploration expenditures of \$166,000 for the year-ended December 31, 2021. In addition, the Company incurred exploration expenditures of \$107,000 for the year-ended December 31, 2022.

### Future plans

Previous geologic, geochemical, and geophysical studies conducted on the property by a major international mining company, identified a number of large, high priority, magnetic and induced polarization (IP) targets. It is the intention to evaluate these, and other targets identified by more recent work by Chuchuna, by mapping, sampling, additional IP geophysical surveying and drilling.

#### **f. Butte Valley, Nevada**

The Butte Valley Property is a large potential project, based on amplitude of magnetic anomaly, size of IP anomaly and volume of alteration system drilled to date with the main following characteristics:

- Near the Robinson porphyry copper deposit held by KGHM
- 38 miles NNW of Ely, Nevada
- 21 square miles of claims

The Company entered into an option agreement dated August 22, 2019, as amended on December 6, 2019 and July 30, 2021, with North Exploration, to purchase a 100% interest in six hundred unpatented mining claims in White Pine County, Nevada, for \$600,000 over five years. North Exploration will retain a 2.5% NSR, of which 1% can be purchased for \$1,000,000. A further 0.5% NSR can be purchased within the first ten years after the option is exercised for \$5,000,000.

On December 3, 2019, the Company entered into an option agreement with Nevada Select Royalty, Inc. ("**Nevada Select Royalty**"), to purchase a 100% interest in seventy-eight unpatented claims in White Pine County, Nevada associated with the Butte Valley Property for \$250,000 over five years. Nevada Select Royalty will retain a 2% NSR, of which 1% can be purchased by the Company during the ten-year term of the option for \$10,000,000.

On January 26, 2022, the Company entered into a property acquisition agreement to assign its options to acquire the Butte Valley Property to Falcon Butte.

Pursuant to the agreement, Lion CG's 100% owned subsidiary Quatterra Alaska, Inc. will be granted an equity position in Falcon Butte. In addition, Quatterra Alaska, Inc. will maintain a 1.5% NSR on each of the Butte Valley Property optioned properties, which is subject to a buy-down to a 1.0% NSR in exchange for a payment of \$7,500,000 per property (the "**Butte Valley Royalty**").

On April 5, 2022, the Company received 16,049,444 shares in Falcon Butte (the "Falcon Butte Shares"), a private British Columbia company, in connection with a property acquisition agreement to assign the Company's options to acquire the Butte Valley Property. In addition, the Company received a payment of \$500,000 from Falcon Butte as a reimbursement of exploration expenditures and related costs incurred by the Company on the Butte Valley Property. At the time of acquisition, the Falcon Butte Shares represented 25.54% of shares outstanding, or 20.48% of the potential voting rights of Falcon Butte (which includes unexercised warrants). Concurrently, Falcon Butte completed a private placement of 15,531,130 units at a price of C\$0.20 per unit for total proceeds of C\$3,106,226. Each unit consists of one common share and one non-transferable common share purchase warrant exercisable for 24 months at an exercise price of C\$0.30 per share. As at December 31, 2022, the Company's share ownership was reduced to 19.44%.

On April 13, 2022, the Company amended the assignment agreement. Pursuant to the addendum, Falcon Butte will pay a total of \$500,000 in exchange for a 0.5% buy-down and retirement of certain NSRs held by the Company. The Company will retain a 0.5% NSR. As of September 30, 2022, the Company has received \$500,000.

On December 13, 2022, the Butte Valley Royalty rights were transferred from Lion CG to Blue Copper Resources Corp.

**g. Chaco Bear and Ashton, British Columbia**

The Chaco Bear Property is in Northern British Columbia, Canada. The project is situated in the Omineca Mining Division, and approximately 5 kilometers west of Bear Lake that is 155 kilometers due north of Smithers. The property is comprised of five contiguous tenures that total 2,807.104 Ha. The Chaco Bear is geologically located within the Stikine Terrane - Mineralization hosted by the Telkwa Formation of the Hazelton Group, separated from the younger Hazelton formations by a major unconformity. This is the same host rocks as the Golden Triangle.

The property has been explored at various times and to different levels since the late 1940s and more seriously since in the late 1960s. The current surface level of erosion is interpreted to be too shallow to allow exposure of more concentrated mineralogy and this may be concealed laterally and at depth.

On August 25, 2021, the Company entered into a non-binding letter of intent (the "LOI") with Houston Minerals Ltd. ("Houston") setting forth the terms of an option whereby the Company may acquire a 100% interest in the Chaco Bear Property located directly east of the Golden Triangle of British Columbia, and the Ashton Property located near Lytton, British Columbia (collectively, the "Properties").

Under the terms of the LOI, the Company and Houston proposed to enter into a definitive agreement whereby the Company can earn up to a 100% interest in the Properties by making the following issuances and payments over a four-year period:

- issuing 8,000,000 common shares of the Company on closing (issued on March 17, 2022);
- making annual lease payments on the Properties after 2021;
- incurring C\$150,000 of exploration expenditures on the Chaco Bear Property and C\$50,000 of exploration expenditures on the Ashton Property before the end of 2021 for C\$200,000 (paid);
- incurring exploration expenditures of at least the value of the annual assessment multiplied by 1.5 for periods after 2021 (claims were renewed and extended through to early 2025, resulting in no obligation on exploration expenditures until 2024);
- paying C\$1,500,000 for the Chaco Bear Property and C\$1,000,000 for the Ashton Property on or before 4 years from the closing, which amounts are payable in cash or common shares of the Company; and
- making annual advance royalty payments in the fourth and fifth year from the closing in the amounts of C\$250,000 on the Chaco Bear Property and C\$150,000 on the Ashton Property.

On September 17, 2021, the parties agreed to an amendment to the LOI to include a 2.5% NSR on each property. Prior to feasibility, the Company may reduce the NSR to 1.0% on the Chaco Bear Property in consideration for a payment of C\$6,000,000 and 1.0% on the Ashton Property for a payment of C\$3,000,000. Post feasibility, the Company may purchase the remaining 1.0% NSR on the Chaco Bear Property for C\$12,000,000 and the remaining 1.0% NSR on the Ashton Property for C\$6,000,000.

On January 26, 2022, the Company entered into an option agreement with Houston to replace the LOI dated August 25, 2021. Pursuant to the terms of the option agreement, the Company may acquire a 100% interest in the Chaco Bear Property located directly east of the Golden Triangle of British Columbia, and the Ashton Property located near Lytton, British Columbia, subject to a 2.5% net smelter returns royalty.

The consideration terms under the terms of the option agreement are unchanged from the LOI except that the term of the option has changed from a four year period to a ten year period and annual advance royalty payments in the amounts of C\$250,000 on the Chaco Bear Property and C\$150,000 on the Ashton Property are to be paid starting on the fifth year from closing through to the ninth year from closing instead of only in the fourth and fifth years from the closing. All other consideration terms remain unchanged.

In addition, commencing on January 31, 2022, and on January 31 of each year thereafter during the option period, Lion CG shall pay the following option maintenance fees to Houston: (a) C\$60,000 in respect of the Chaco Bear Property; and (b) C\$40,000 in respect of the Ashton Property.

On March 16, 2022, the Company closed its previously announced option agreement with Houston by issuing 8,000,000 common shares of the Company to Houston and funding an initial work program of C\$200,000 on the properties in consideration for the grant of the option. The Company may exercise the option for a period of up to ten years to acquire (i) the Chaco Bear property by paying C\$1,500,000 to Houston, in cash or in common shares of the Company at the Company's option; and/or (ii) the Ashton Property by paying C\$1,000,000 to Houston in cash or in common shares of the Company at the Company's option, and in either case common shares will be valued using the volume weighted average trading price of the Company's common shares for the twenty trading day period ending three trading days prior to the date of issuance of such Lion CG shares, with such cash payments being subject to a discount of between 5% and 15% based on the timing of exercise and cumulative exploration expenditures incurred as at the time of exercise. Houston will retain a 2.5% net smelter returns royalty on any of the Properties for which an option has been exercised by the Company.

#### Additional exploration targets

- Potential for epithermal gold and related base metal mineralization
- Target deposit types are:
  - a) High grade epithermal gold-silver vein and/or network vein mineralization hosted in the andesite-dacite volcanics
  - b) Porphyry-copper-gold prospect (Rusty Lake Area)
  - c) Strata-controlled bedded replacement bodies within the Hazelton Group volcanics or in the deeper unexposed country rocks
- Property is inadequately explored by field methods of mapping, rock chip sampling, and drill tests of anomalous mineralized areas
- Broader application of field exploration methods combined with appropriate geophysical surveys will define new exploration targets throughout the property.

#### **h. Ashton Property, British Columbia**



Ashton Property are located within 10 km of Lytton in southern BC at the Spences Bridge Gold Belt at 19 km south of Spences Bridge on the east bank of the Thompson River within a few hundred meters of the Trans-Canada Highway and the mainline of the Canadian Pacific Railway.

The going forward exploration strategy, includes additional geological mapping and surface prospecting, further mapping and surface sampling will be focused on the southern portion of the Ashton Project where there is extensive gold in soil anomalies. drilling to evaluate a potential gold skarn and the propylitic alteration on the project area will be further investigated for other mineralized stocks.

## History

The Ashton Property is a composite copper-gold and project in south eastern British Columbia and located some 170 km northeast from Vancouver and 15 km east of the town of Lytton. The project consists of seven contiguous claims that that comprises an area of 1429 hectares. The northern boundary of the property lays a few hundred metres south of the Trans-Canada Highway (Fraser Canyon) and the mainline of the Canadian Pacific Railway. The surrounding infrastructure provides all the required features required to expedite the development of a low capital and profitable mining operation. The major Highland Valley Copper operations are located some 40 km to the northeast and independently validate the potential of this project.

### Local geology and alteration

Strong propylitic alteration at Ashton indicates the presence of a concealed porphyry system

- Situated near, and likely a major source for, the famous Nicoaman placer gold deposits that sparked the Thompson River gold rush
- Propylitic alteration of a diorite intrusive can be subdivided into a central actinolite dominant zone and a more distal epidote-chlorite-calcite zone
- The central actinolite altered zone containing actinolite, epidote, chlorite, and calcite covers an area approximately 100 m X 100 m
- Correlates with some of the best MMI and soil sample copper anomalies
- Minor phyllic alteration also present in central zone
- The chlorite-epidote-calcite zone extends up to 500 m from the central actinolite alteration zone

### **Additional gold potential**

Gold mineralization is found to the south of the copper porphyry at Ashton (MMI anomaly) and additional gold pathfinder elements are associated with Au anomaly (As, Te, Hg, Sb, Se, and Ag). Epithermal gold can have a direct relationship with a porphyry system and low sulfidation gold deposits are laterally displaced from the magmatic porphyry (Sillitoe Model). This gold area is a large, underexplored target in the southern area of Ashton.

### **Exploration strategy**

The exploration strategy includes additional geological mapping and surface prospecting, further mapping and surface sampling will be focused on the southern portion of the Ashton Project where there is extensive gold in soil anomalies. drilling to evaluate a potential gold skarn and the propylitic alteration on the project area will be further investigated for other mineralized stocks.

### **Letter of Intent and Definitive Agreement**

See Chaco Bear property discussion above.

#### **i. Blue Copper Prospect**

During the year ended as of December 31, 2021, the Company's acquired and staked a district scale exploration and resource discovery opportunity (the "**Blue Copper Prospect**"), comprising more than 7,430 acres in Powell County and Lewis & Clark County in Montana, USA. The area is prospective for high grade copper-gold skarns and porphyry copper-gold mineralization. The claim block encompasses a group of more than 14 historic small mines that produced high grade gold, copper and tungsten.

As a part of the Blue Copper Prospect, Blue Copper LLC entered into a purchase agreement with Four O Six Mining & Exploration LLC ("**406 Mining**") to acquire certain existing and additional unpatented mining claims. In exchange for the unpatented mining claims, as part of the closing of the transaction, on February 17, 2022, the Company issued 1,500,000 common shares in the capital of the Company and the subsidiary provided a NSR of 2.0% with a buy-down of 1.0% NSR for \$1,500,000.

The Blue Copper Prospect, located approximately 25 miles WNW of Helena, Montana, is centered on the Late Cretaceous Blackfoot City Stock (the "**BCS**"), which was intruded into the Black Mountain syncline, composed primarily of a Paleozoic sequence of limestone, dolomite, shale and sandstone. The BCS crystallized at the same time as the nearby Boulder batholith, which is host to the world-famous Butte copper mines. The area is prospective for high grade copper-gold skarns and porphyry copper-gold mineralization.

The claim block encompasses a group of more than 14 historic small mines that produced high grade gold, copper and tungsten. Importantly, the streams draining the BCS have a recorded production of almost 200,000 ounces of placer gold through 1959, although the actual production was most likely much higher. Despite the extensive placer production, only one lode gold mine operated historically and produced less than 10,000 ounces. Several major companies conducted exploration programs in the area during the late 1980s and early 1990s. The Company is currently acquiring, compiling and interpreting historic data to develop a 2022 work plan which will be provided when available.

Blue Copper LLC has staked an additional 131 claims to expand the Blue Copper Prospect. The Company has provided a NSR of 2.0% with a buy-down of 1.0% NSR for \$600,000 to 406 Mining for these claims.

On February 14, 2022, as a part of the closing of the Blue Copper Prospect transaction, the Company issued 1,500,000 common shares.

On October 28, 2022, Blue Copper LLC entered into a mining lease agreement with Snowshoe Creek LLC ("**Snowshoe**"), a Montana limited liability company owned by the CEO of the Company. Pursuant to the Agreement, Snowshoe will lease the Arnold, Snowbird and Montana property, including the patented mining claims on such property, to Blue Copper LLC for a term of 20 years and extendable on sole discretion of Blue Copper LLC.

As consideration, 15,000,000 preferred stock in Blue Copper Resources Corp. was issued to the CEO of the Company. The transaction was measured using the fair value of the asset received as the cost was more clearly evident. The fair value of the asset received was calculated using the original cost incurred to acquire the property and was determined to be \$500,000.

### ***ITEM 3. LEGAL PROCEEDINGS***

We are not a party to any pending legal proceedings and, to the best of our knowledge, none of our properties or assets are the subject of any pending legal proceedings.

### ***ITEM 4. MINE SAFETY DISCLOSURES***

The Company has no active mining operations or dormant mining assets currently and has no outstanding mine safety violations or other regulatory safety matters to report.

## **PART II**

### ***ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES***

#### **Market Information**

The principal market on which our common shares are traded is the TSX Venture Exchange under the symbol "LEO". Our common shares also trade on the OTCQB under the symbol "LCGMF."

#### **Exchange Rates**

We maintain our books of account in United States dollars and references to dollar amounts herein are to the lawful currency of the United States except that we are traded on the TSX Venture Exchange and, accordingly, stock price quotes and sales of stock are conducted in Canadian dollars (C\$). The following table sets forth, for the periods indicated, certain exchange rates based on the noon rate provided by the Bank of Canada. Such rates are the number of Canadian dollars per one (1) U.S. dollar (US\$). The high and low exchange rates for each month during the previous six months were as follows:

|                | <u>High</u> | <u>Low</u> |
|----------------|-------------|------------|
| February 2023  | 1.3622      | 1.3312     |
| January 2023   | 1.3658      | 1.3314     |
| December 2022  | 1.3687      | 1.3468     |
| November 2022  | 1.3749      | 1.3288     |
| October 2022   | 1.3856      | 1.3547     |
| September 2022 | 1.3726      | 1.298      |

The following table sets out the exchange rate (price of one U.S. dollar in Canadian dollars) information as at each of the years ended December 31, 2022 and 2021.

|                       | Year Ended December 31<br>(Canadian \$ per U.S. \$) |             |
|-----------------------|-----------------------------------------------------|-------------|
|                       | <u>2021</u>                                         | <u>2022</u> |
| Rate at end of Period | 1.2678                                              | 1.3544      |
| Low                   | 1.2040                                              | 1.2451      |
| High                  | 1.2942                                              | 1.3856      |

## Shareholders

As of March 9, 2023, there were 267 registered holders of record of the Company's common shares and an undetermined number of beneficial holders.

## Securities Authorized for Issuance under Compensation Plans

The following table sets forth information as of December 31, 2022, respecting the compensation plans under which shares of the Company's common shares are authorized to be issued.

| <b>Plan Category</b>                                       | <b>Number of securities to be issued upon exercise of outstanding options, warrants and rights</b> | <b>Weighted-average exercise price of outstanding options, warrants and rights</b> | <b>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</b> |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                            | <b>(a)</b>                                                                                         | <b>(b)</b>                                                                         | <b>(c)</b>                                                                                                                                         |
| Equity compensation plans approved by security holders     | 34,947,617 <sup>(1)</sup>                                                                          | \$0.11 <sup>(2)</sup>                                                              | 26,339,841 <sup>(3)</sup>                                                                                                                          |
| Equity compensation plans not approved by security holders | Nil                                                                                                | Nil                                                                                | Nil                                                                                                                                                |
| Total                                                      | 34,947,617                                                                                         | \$0.11                                                                             | 26,339,841                                                                                                                                         |

(1) 29,614,283 stock options and 5,333,334 restricted share units.

(2) Weighted-average exercise price of 29,614,283 stock options.

- (3) 24,997,327 shares available for issuance under the Company's restriction share unit plan and 1,342,514 shares available for issuance under the Company's stock option plan.

### Recent Sales of Unregistered Securities

On February 17, 2022, pursuant to closing of the Blue Copper Prospect transaction, the Company issued 1,500,000 common shares with a fair value of \$119,000.

On March 17, 2022, the Company issued 8,000,000 common shares with a fair value of \$506,000 pursuant to the option agreement with Houston Minerals Ltd. to acquire a 100% interest in the Chaco and Ashton properties.

On April 25, 2022, the Company agreed to settle outstanding debt of C\$80,000 with a creditor by issuing 800,000 common shares of the Company at a deemed price of C\$0.10 per share. The amount of indebtedness represents an outstanding account for services provided to the Company.

On June 17, 2022, the Company completed a private placement of unsecured convertible debentures for gross proceeds of \$1,075,000 (the "**June Debentures**"). The June Debentures bear interest at a rate of 14% per annum and mature on February 17, 2024. The June Debentures may be converted into shares of the Company at \$0.067 per share until June 17, 2023 and thereafter at \$0.078 per share. The holder has the option to elect to be repaid in kind at any time prior to maturity of the June Debentures by way of the Falcon Butte Shares at the rate of \$0.25 per Falcon Butte Share, provided that any June Debenture held by an insider of the Company requires prior stock exchange approval prior to being repaid in kind. In connection with the sale of the June Debentures, the Company issued to the purchasers one detachable warrant (a "**June Warrant**") for every \$0.06 of principal amount of the June Debentures subscribed for. The Company issued 16,044,774 June Warrants in connection with the second tranche of the June Debenture Financing. Each June Warrant entitles the holder to acquire a common share of the Company at a price of \$0.067 for a period of 20 months.

On June 29, 2022, the Company issued 2,000,000 common shares in connection with warrants exercised for proceeds of \$100,000.

On July 5, 2022, the Company issued 1,212,121 common shares with a fair value of \$75,000 to settle outstanding debt of \$77,000 and recognized a gain on the settlement of \$2,000.

On July 8, 2022, the Company completed a second tranche of its private placement of unsecured convertible debentures for gross proceeds of \$925,000 (the "**July Debentures**"). The July Debentures are unsecured, and bear interest at 14% per annum payable annually. The July Debentures may be converted into shares of the Company at \$0.0067 per share until July 8, 2023 and thereafter at \$0.078 per share. The holder has the option to elect to be repaid in kind at any time prior to maturity of the July Debentures by way of the Falcon Butte Shares at the rate of \$0.25 per Falcon Butte Share, provided that any July Debenture held by an insider of the Company requires prior stock exchange approval prior to being repaid in kind. In connection with the sale of the July Debentures, the Company issued to the purchasers one detachable warrant (a "**July Warrant**") for every \$0.06 of principal amount of the July Debentures subscribed for. The Company issued 13,805,964 July Warrants in connection with the second tranche of the July Debenture Financing. Each July Warrant entitles the holder to acquire a common share of the Company at a price of \$0.067 for a period of 20 months.

On July 28, 2022, the Company issued 1,333,333 common shares, with a fair value of \$93,000 in relation to the release of 1,333,333 restricted share units.



On August 23, 2022, the Company issued 915,910 common shares with a fair value of \$49,000 to settle outstanding debt of \$61,000 and recognized a gain on the settlement of \$12,000.

On March 2, 2023, the Company completed private placement of unsecured convertible debentures for gross proceeds of \$1,306.172 (the “**December Debentures**”). The December Debentures are unsecured, and bear interest at 14% per annum payable annually. The December Debentures may be converted into shares of the Company at \$0.07 per share until January 2, 2024 and thereafter at \$0.074 per share. The holder has the option to elect to be repaid in kind at any time prior to maturity of the December Debentures by way of the Falcon Butte Shares at the rate of \$0.28 per Falcon Butte Share, provided that any December Debenture held by an insider of the Company requires prior stock exchange approval prior to being repaid in kind. In connection with the sale of the December Debentures, the Company issued to the purchasers one detachable warrant (a “**December Warrant**”) for every \$0.07 of principal amount of the December Debentures subscribed for. Each December Warrant entitles the holder to acquire a common share of the Company at a price of \$0.07 for a period of 20 months.

On March 2, 2023, the Company completed a financing of its U.S. controlled subsidiary Blue Copper Resources Corp. (“Blue Copper”), a Wyoming corporation that holds the Blue Copper prospect. Pursuant to the financing, Blue Copper received an aggregate of \$2,000,000 through the sale of shares of its common stock by way of private placement, and a further \$867,500 pursuant to the conversion of Simple Agreement for Future Equity (“**SAFE**”) notes. Following the financing of Blue Copper, the Company retains a 48.8% interest in Blue Copper. The proceeds will be applied to advance exploration of the Blue Copper prospect and to pursue other greenfields exploration targets.

#### **Purchases of Equity Securities by the Company and Affiliated Purchasers**

Neither the Company nor an affiliated purchaser of the Company purchased common shares of the Company in the year ended December 31, 2022.

#### ***ITEM 6. [Reserved]***

#### ***ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS***

The Management's Discussion and Analysis of Financial Conditions and Results of Operations of the Company are attached to this report following the signature page.

#### ***ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK***

Not applicable.

#### ***ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA***

The Consolidated Financial Statements of the Company and the notes thereto are attached to this report following the signature page and Certifications.

#### ***ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE***

For the fiscal years ended December 31, 2022 and 2021, we did not have any disagreement with our accountants on any matter of accounting principles, practices, or financial statement disclosure.

## **ITEM 9A. CONTROLS AND PROCEDURES**

### **Disclosure Controls and Procedures**

The Company's management, including our principal executive officer and our principal financial officer, evaluated the effectiveness of disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) as of the end of the period covered by this report. Based on that evaluation, the principal executive officer and principal financial officer concluded that as of the end of the period covered by this report, the Company has maintained effective disclosure controls and procedures in all material respects, including those necessary to ensure that information required to be disclosed in reports filed or submitted with the SEC (i) is recorded, processed, and reported within the time periods specified by the SEC, and (ii) is accumulated and communicated to management, including the principal executive officer and principal financial officer, as appropriate to allow for timely decision regarding required disclosure.

### **Management's Report on Internal Control over Financial Reporting**

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) or 15d-15(f) of the Exchange Act). Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022, using criteria established in *Internal Control-Integrated Framework* issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Even an effective internal control system, no matter how well designed, has inherent limitations, including the possibility of human error and circumvention or overriding of controls and therefore can provide only reasonable assurance with respect to reliable financial reporting. Furthermore, the effectiveness of an internal control system in future periods can change with conditions.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022, based on the framework established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on that assessment, management concluded that, as of December 31, 2022, we had one deficiency which results in a more than remote likelihood that a material misstatement of the annual or interim consolidated financial statements, thereby comprising a material weakness: the lack of adequate resources allocated to the Company's financial reporting function for complex transactions. In order to address this deficiency, management will augment its finance function with additional resources to review complex and non-routine transactions.

### **Changes in Internal Control**

There have been no changes in internal control over financial reporting that occurred during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

## **ITEM 9B. OTHER INFORMATION**

None.

### PART III

Information with respect to Items 10 through 14 is set forth in the definitive Proxy Statement to be filed with the Securities and Exchange Commission on or before April 30, 2022, and is incorporated herein by reference. If the definitive Proxy Statement cannot be filed on or before April 30, 2023, the Company will instead file an amendment to this Form 10-K disclosing the information with respect to Items 10 through 14.

### PART IV

#### ITEM 15. EXHIBITS, FINANCIAL STATEMENTS SCHEDULES

##### Financial Statements and Management's Discussion and Analysis

The following Consolidated Financial Statements are filed as part of this report.

| Description                                                                                                    | Page                        |
|----------------------------------------------------------------------------------------------------------------|-----------------------------|
| <a href="#">Financial statements for the years ended December 31, 2022 and 2021 and audit reports thereon.</a> | <a href="#">F-1 - F41</a>   |
| <a href="#">Management's Discussion and Analysis for the years ended December 31, 2022 and 2021.</a>           | <a href="#">F-42 - F-66</a> |

##### Exhibits

The following table sets out the exhibits filed herewith or incorporated herein by reference.

| Exhibit                            | Description                                                                                                                                                    |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">3.1<sup>(4)</sup></a>  | <a href="#">Certificate of Incorporation and Certificates of Change of Name</a>                                                                                |
| <a href="#">3.2<sup>(1)</sup></a>  | <a href="#">Notice of Articles dated December 8, 2021</a>                                                                                                      |
| <a href="#">3.3<sup>(2)</sup></a>  | <a href="#">Articles dated June 21, 2018</a>                                                                                                                   |
| <a href="#">10.1<sup>(4)</sup></a> | <a href="#">Stock Option Plan and RSU Plan</a>                                                                                                                 |
| <a href="#">10.2<sup>(3)</sup></a> | <a href="#">Shareholder Rights Plan dated June 21, 2018</a>                                                                                                    |
| <a href="#">10.3<sup>(4)</sup></a> | <a href="#">Management Contract with Charles Travis Naugle</a>                                                                                                 |
| <a href="#">19.1<sup>(4)</sup></a> | <a href="#">Insider Trading Policy</a>                                                                                                                         |
| <a href="#">21.1<sup>(4)</sup></a> | <a href="#">List of Subsidiaries</a>                                                                                                                           |
| <a href="#">31.1<sup>(4)</sup></a> | <a href="#">Certification Pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934 of the Principal Executive Officer</a>           |
| <a href="#">31.2<sup>(4)</sup></a> | <a href="#">Certification Pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934 of the Principal Financial Officer</a>           |
| <a href="#">32.1<sup>(4)</sup></a> | <a href="#">Section 1350 Certification of the Principal Executive Officer</a>                                                                                  |
| <a href="#">32.2<sup>(4)</sup></a> | <a href="#">Section 1350 Certification of the Principal Financial Officer</a>                                                                                  |
| 101.INS                            | Inline XBRL Instance Document—the instance document does not appear in the Interactive Data File as its XBRL tags are embedded within the Inline XBRL document |
| <a href="#">101.SCH</a>            | <a href="#">Inline XBRL Taxonomy Extension Schema Document</a>                                                                                                 |
| <a href="#">101.CAL</a>            | <a href="#">Inline XBRL Taxonomy Extension Calculation Linkbase Document</a>                                                                                   |
| <a href="#">101.DEF</a>            | <a href="#">Inline XBRL Taxonomy Extension Definition Linkbase Document</a>                                                                                    |
| <a href="#">101.LAB</a>            | <a href="#">Inline XBRL Taxonomy Extension Label Linkbase Document</a>                                                                                         |
| <a href="#">101.PRE</a>            | <a href="#">Inline XBRL Taxonomy Extension Presentation Linkbase Document</a>                                                                                  |
| 104                                | Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).                                                                      |

(1) Previously filed as exhibit to the Form 20-F/A filed May 31, 2022 and incorporated herein by reference.

(2) Previously filed as exhibit to the Form 20-F filed April 30, 2020 and incorporated herein by reference.

(3) Previously filed as exhibit to Form 6-K filed June 26, 2018 and incorporated herein by reference.

(4) Filed herewith.



## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

### LION COPPER AND GOLD CORP.

By: *"Stephen Goodman"*

\_\_\_\_\_  
Stephen Goodman  
President and Chief Financial Officer

Date: March 31, 2023

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

| <u>Signatures</u>                                              |                                                                                                 | <u>Date</u>    |
|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------|
| <u><i>"Charles Travis Naugle"</i></u><br>Charles Travis Naugle | Chief Executive Officer and<br>Director (Principal Executive Officer)                           | March 31, 2023 |
| <u><i>"Stephen Goodman"</i></u><br>Stephen Goodman             | President, Chief Financial Officer and Director<br>(Principal Financial and Accounting Officer) | March 31, 2023 |
| <u><i>"Thomas Patton"</i></u><br>Thomas Patton                 | Chairman and Director                                                                           | March 31, 2023 |
| <u><i>"Tony Alford"</i></u><br>Tony Alford                     | Director                                                                                        | March 31, 2023 |
| <u><i>"Thomas Pressello"</i></u><br>Thomas Pressello           | Director                                                                                        | March 31, 2023 |



**Lion Copper and Gold Corp.**

*(Formerly Quaterra Resources Inc.)*

**Consolidated Financial Statements**

**For the years ended December 31, 2022 and 2021**

**(Expressed in thousands of U.S. Dollars)**

## Report of Independent Registered Public Accounting Firm

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To the Board of Directors and Stockholders of Lion Copper and Gold Corp.

### Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Lion Copper and Gold Corp. (the Company) as of December 31, 2022 and 2021, and the related consolidated 'statements of operations, changes in stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2022, and the related notes (collectively referred to as the consolidated financial statements).

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2022 and 2021, and the results of its consolidated operations and its consolidated cash flows for each of the years in the two-year period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

### Material Uncertainty Related to Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raises substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

### Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2021.

Vancouver, Canada

*"MNP LLP"*

March 20, 2023

Chartered Professional Accountants  
1930

**Lion Copper and Gold Corp.**

Consolidated Balance Sheets

As at December 31, 2022 and 2021

(In thousands of U.S. Dollars)

|                                                                                                                             | Note   | December 31, 2022 | December 31, 2021 |
|-----------------------------------------------------------------------------------------------------------------------------|--------|-------------------|-------------------|
| <b>ASSETS</b>                                                                                                               |        |                   |                   |
| <b>Current assets</b>                                                                                                       |        |                   |                   |
| Cash                                                                                                                        |        | \$ 1,365          | \$ 842            |
| Other receivables                                                                                                           |        | 7                 | 6                 |
| Prepaid and deposit                                                                                                         |        | 56                | 43                |
|                                                                                                                             |        | 1,428             | 891               |
| Mineral properties                                                                                                          | 4,13   | 7,884             | 6,821             |
| Reclamation bonds                                                                                                           |        | 23                | 35                |
| Investment in associate                                                                                                     | 5      | 1,504             | -                 |
| <b>Total assets</b>                                                                                                         |        | <b>\$ 10,839</b>  | <b>\$ 7,747</b>   |
| <b>LIABILITIES</b>                                                                                                          |        |                   |                   |
| <b>Current liabilities</b>                                                                                                  |        |                   |                   |
| Accounts payable                                                                                                            |        | \$ 232            | \$ 358            |
| Accrued liabilities                                                                                                         |        | 4                 | 1,000             |
| Rio Tinto Deposit                                                                                                           | 6      | 613               | -                 |
| SAFE Notes                                                                                                                  | 10     | 1,131             | -                 |
| Derivative liabilities                                                                                                      | 8      | 4                 | 55                |
|                                                                                                                             |        | 1,984             | 1,413             |
| Convertible debentures                                                                                                      | 8,9,13 | 1,874             | -                 |
| <b>Total liabilities</b>                                                                                                    |        | <b>3,858</b>      | <b>1,413</b>      |
| <b>Stockholders' equity</b>                                                                                                 |        |                   |                   |
| Share capital, No par value, unlimited common shares authorized;<br>309,567,975 issued and outstanding (2021 - 293,806,611) |        |                   |                   |
|                                                                                                                             | 11     | 105,384           | 104,340           |
| Additional paid-in capital                                                                                                  | 12     | 23,043            | 22,012            |
| Deficit                                                                                                                     |        | (121,834)         | (120,018)         |
| Non-controlling interest                                                                                                    | 7      | 388               | -                 |
| <b>Total stockholders' equity</b>                                                                                           |        | <b>6,981</b>      | <b>6,334</b>      |
| <b>Total liabilities and stockholders' equity</b>                                                                           |        | <b>\$ 10,839</b>  | <b>\$ 7,747</b>   |

**NATURE OF OPERATIONS AND GOING CONCERN (Note 1)****COMMITMENTS (Note 15)****CONTINGENCIES (Note 16)****SUBSEQUENT EVENTS (Note 19)**

Approved on behalf of the Board of Directors on March 20, 2023:

/s/ "Travis Naugle"  
Chief Executive Officer

/s/ "Stephen Goodman"  
President & Chief Financial Officer

*The accompanying notes form an integral part of these consolidated financial statements.*



**Lion Copper and Gold Corp.**

## Consolidated Statements of Operations

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars, except for shares and per share amounts)

|                                                                          | Note  | For the years ended December 31, |                    |
|--------------------------------------------------------------------------|-------|----------------------------------|--------------------|
|                                                                          |       | 2022                             | 2021               |
| <b>Operating Expenses</b>                                                |       |                                  |                    |
| Exploration expenditures                                                 | 4     | 4,302                            | 3,642              |
| General office                                                           |       | \$ 140                           | \$ 58              |
| Interest                                                                 |       | 144                              | -                  |
| Insurance                                                                |       | 61                               | 30                 |
| Investor relations and corporate development                             |       | 52                               | 206                |
| Proceeds from Rio Tinto                                                  | 6     | (3,237)                          | -                  |
| Professional fees                                                        |       | 715                              | 493                |
| Rent                                                                     |       | 14                               | 13                 |
| Salaries and benefits                                                    | 13    | 733                              | 938                |
| Share-based payments                                                     | 12,13 | 1,173                            | 1,077              |
| Transfer agent and regulatory                                            |       | 104                              | 108                |
| Travel                                                                   |       | 54                               | 87                 |
| <b>Operating loss</b>                                                    |       | <b>(4,255)</b>                   | <b>(6,652)</b>     |
| <b>Non-operating Income/(expenses)</b>                                   |       |                                  |                    |
| Fair value (loss) gain on derivative liabilities                         | 8     | 429                              | (4)                |
| Foreign exchange gain                                                    |       | 13                               | 11                 |
| Gain on settlement of debt                                               | 11    | 20                               | -                  |
| Gain on transfer of shares                                               | 5     | 19                               | -                  |
| Accretion expense                                                        | 9     | (108)                            | -                  |
| Gain on sale of Butte Valley                                             | 4,13  | 2,207                            | -                  |
| NSR buy-down                                                             | 4,13  | 500                              | -                  |
| Share of loss in associate                                               | 5     | (389)                            | -                  |
| Interest and other income                                                |       | -                                | 8                  |
| Loss on revaluation of SAFE notes                                        | 10    | (364)                            | -                  |
| Realized gain (loss) on marketable securities                            |       | -                                | 189                |
|                                                                          |       | 2,327                            | 204                |
| <b>Net loss and comprehensive loss for the year</b>                      |       | <b>\$ (1,928)</b>                | <b>\$ (6,448)</b>  |
| <b>Net loss and comprehensive loss attributed to:</b>                    |       |                                  |                    |
| Stockholders of the Company                                              |       | (1,816)                          | (6,448)            |
| Non-controlling interest                                                 | 7     | (112)                            | -                  |
| <b>Loss per share, basic and diluted</b>                                 |       | <b>\$ (0.01)</b>                 | <b>\$ (0.03)</b>   |
| <b>Weighted average number of shares outstanding - basic and diluted</b> |       | <b>304,538,938</b>               | <b>239,831,079</b> |

*The accompanying notes form an integral part of these consolidated financial statements.*

# Lion Copper and Gold Corp.

Consolidated Statements of Changes in Equity  
For the years ended December 31, 2022 and 2021  
(In thousands of U.S. Dollars, except for shares)

|                                        | Notes | Common shares         | Share capital     | Additional paid-in capital | Deficit              | Non-controlling interest | Total stockholders' equity |
|----------------------------------------|-------|-----------------------|-------------------|----------------------------|----------------------|--------------------------|----------------------------|
| <b>Balance at January 1, 2021</b>      |       | 218,715,610 \$        | 101,553 \$        | 19,406                     | \$(113,570)\$        | - \$                     | 7,389                      |
| Stock options and warrants exercised   | 11,12 | 5,885,000             | 589               | (266)                      | -                    | -                        | 323                        |
| Shares issued in settlement agreements | 11    | 403,665               | 27                | -                          | -                    | -                        | 27                         |
| Shares issued for private placements   | 11    | 68,802,336            | 4,128             | -                          | -                    | -                        | 4,128                      |
| Fair value of warrants                 |       | -                     | (1,795)           | 1,795                      | -                    | -                        | -                          |
| Share issuance costs                   |       | -                     | (162)             | -                          | -                    | -                        | (162)                      |
| Share-based payments                   | 12    | -                     | -                 | 1,077                      | -                    | -                        | 1,077                      |
| Net loss for the year                  |       | -                     | -                 | -                          | (6,448)              | -                        | (6,448)                    |
| <b>Balance at December 31, 2021</b>    |       | <b>293,806,611 \$</b> | <b>104,340 \$</b> | <b>22,012</b>              | <b>\$(120,018)\$</b> | <b>- \$</b>              | <b>6,334</b>               |
| Shares issued for mineral properties   | 4,11  | 9,500,000             | 625               | -                          | -                    | -                        | 625                        |
| Shares issued to settle debt           | 11    | 2,928,031             | 181               | -                          | -                    | -                        | 181                        |
| Shares issued for warrants exercised   | 11,12 | 2,000,000             | 149               | (49)                       | -                    | -                        | 100                        |
| BCRC issuance of preferred shares      | 4, 7  | -                     | -                 | -                          | -                    | 500                      | 500                        |
| Grant of RSUs                          | 11,12 | 1,333,333             | 93                | -                          | -                    | -                        | 93                         |
| Share issuance costs                   |       | -                     | (4)               | -                          | -                    | -                        | (4)                        |
| Share-based payments                   | 12    | -                     | -                 | 1,080                      | -                    | -                        | 1,080                      |
| Net loss for the year                  |       | -                     | -                 | -                          | (1,816)              | (112)                    | (1,928)                    |
| <b>Balance at December 31, 2022</b>    |       | <b>309,567,975 \$</b> | <b>105,384 \$</b> | <b>23,043</b>              | <b>\$(121,834)\$</b> | <b>388 \$</b>            | <b>6,981</b>               |

*The accompanying notes form an integral part of these consolidated financial statements.*

**Lion Copper and Gold Corp.**

Consolidated Statements of Cash Flow

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars)

|                                                             | <b>For the years ended December 31,</b> |                |
|-------------------------------------------------------------|-----------------------------------------|----------------|
|                                                             | <b>2022</b>                             | <b>2021</b>    |
| <b>Cash flows used in operating activities</b>              |                                         |                |
| Loss for the year                                           | \$ (1,928)                              | \$ (6,448)     |
| Non-cash transactions:                                      |                                         |                |
| Interest expense                                            | 144                                     | -              |
| Gain on settlement of debt                                  | (20)                                    | -              |
| Accretion expense                                           | 108                                     | -              |
| Fair value loss (gain) on derivative liabilities - warrants | (428)                                   | 4              |
| Gain on sale of Butte Valley                                | (2,207)                                 | -              |
| Gain on transfer of investment shares                       | (19)                                    | -              |
| Share of loss of investment in associate                    | 389                                     | -              |
| Realized loss on marketable securities                      | -                                       | (189)          |
| Wages settled through transfer of investment shares         | 32                                      | -              |
| Share-based payments                                        | 1,173                                   | 1,077          |
| Loss on revaluation of SAFE notes                           | 364                                     | -              |
| Changes in operating assets and liabilities:                |                                         |                |
| Other receivables                                           | (1)                                     | (3)            |
| Trade payables and other liabilities                        | (143)                                   | 94             |
| Prepaid and deposit                                         | (13)                                    | (38)           |
| Rio Tinto deposit                                           | 763                                     | -              |
| <b>Net cash used in operating activities</b>                | <b>(1,786)</b>                          | <b>(5,503)</b> |
| <b>Cash flows used in investing activities</b>              |                                         |                |
| Expenditures on mineral properties                          | (62)                                    | (475)          |
| Sale of marketable securities                               | -                                       | 830            |
| Net (refund)/proceeds from water rights sale                | (1,000)                                 | 1,000          |
| Sale of Butte Valley property                               | 500                                     | -              |
| Proceeds from reclamation bond reduction                    | 8                                       | -              |
| <b>Net cash used in investing activities</b>                | <b>(554)</b>                            | <b>1,355</b>   |
| <b>Cash flows provided by financing activities</b>          |                                         |                |
| Convertible debentures                                      | 2,000                                   | -              |
| Exercise of options and warrants                            | 100                                     | 323            |
| Proceeds from Private Placement                             | -                                       | 4,128          |
| Share issuance costs                                        | (4)                                     | (162)          |
| Proceeds from SAFE notes                                    | 767                                     | -              |
| <b>Net cash provided by financing activities</b>            | <b>2,863</b>                            | <b>4,289</b>   |
| <b>Increase (decrease) in cash</b>                          | <b>523</b>                              | <b>141</b>     |
| <b>Cash, beginning of year</b>                              | <b>842</b>                              | <b>701</b>     |
| <b>Cash, end of year</b>                                    | <b>\$ 1,365</b>                         | <b>\$ 842</b>  |
| <b>Supplemental cash flow information</b>                   |                                         |                |
| Shares issued to settle debt                                | 199                                     | 27             |
| Shares issued for mineral properties                        | 1,124                                   | -              |

*The accompanying notes form an integral part of these consolidated financial statements.*

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **1. NATURE OF OPERATIONS AND GOING CONCERN**

Lion Copper and Gold Corp. (together with its subsidiaries, "Lion CG" or the "Company") is a Canadian-based Company advancing its flagship copper assets in Mason Valley, Nevada with Rio Tinto America, Inc. The Company is incorporated in British Columbia, Canada. Its registered and records offices are located at 1200 - 750 West Pender Street, Vancouver, British Columbia, Canada, V6C 2T8. On November 22, 2021, the Company changed its name from Quaterra Resources Inc. to Lion Copper and Gold Corp. The shares of the Company commenced trading under the new name at the open of trading on November 23, 2021. The Company's common shares are listed on the TSX Venture Exchange ("TSXV") under the symbol "LEO" and trade on the OTCQB Market under the symbol "LCGMF".

The Company acquires its mineral properties through option or lease agreements and capitalizes all acquisition costs related to the properties. The underlying value of the amounts recorded as mineral properties does not reflect current or future values. The Company's continued existence depends on discovering economically recoverable mineral reserves and obtaining the necessary funding to complete the development of these properties.

These consolidated financial statements are prepared on a going concern basis, which contemplates that the Company will be able to meet its commitments, continue operations and realize its assets and discharge its liabilities in the normal course of business for at least twelve months from the date of the auditor's report. The Company has incurred ongoing losses and expects to incur further losses in the advancement of its business activities. For the year ended December 31, 2022, the Company incurred a net loss of \$1,928 (2021 - \$6,448). As at December 31, 2022, the Company had cash of \$1,365 (2021 - \$842), working capital deficit of \$556 (2021 - deficit of \$522) and an accumulated deficit of \$121,834 (2021 - \$120,018).

The Company continues to incur losses, has limited financial resources, and has no current source of revenue or cash flow generated from operating activities. To address its financing requirements, the Company plans to seek financing through, but not limited to, debt financing, equity financing and strategic alliances. However, there is no assurance that such financing will be available. If adequate financing is not available or cannot be obtained on a timely basis, the Company may be required to delay, reduce the scope of or eliminate one or more of its exploration programs or relinquish some or all of its rights under the existing option and acquisition agreements. The above factors give rise to material uncertainties that cast substantial doubt on the Company's ability to continue as a going concern.

If the going concern assumptions were not appropriate for these consolidated financial statements, then adjustments would be necessary to the carrying values of assets, liabilities, the reported expenses, and the consolidated statement of financial position classifications used. Such adjustments could be material.

### **2. BASIS OF PRESENTATION**

#### **Statement of compliance**

Under U.S. federal securities laws, issuers must assess their foreign private issuer status as of the last business day of their second fiscal quarter. It was announced that more than 50% of the Company's common shares are held by U.S. stockholders, and the Company no longer meets the definition of a foreign private issuer under the United States securities laws. As a result, commencing in 2023, the Company is required to use forms and rules prescribed for U.S. domestic companies, including the requirement that financial statements be presented in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") instead of International Financial Reporting Standards ("IFRS") as issued by the IAASB. The Company's common shares will continue to be listed on the TSX Venture Exchange and quoted on the OTCQB. These consolidated financial statements have been prepared in accordance with U.S. GAAP.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 2. BASIS OF PRESENTATION (continued)

#### Statement of compliance (continued)

These consolidated financial statements have been prepared in accordance with U.S. GAAP effective for the financial year ended December 31, 2022. Comparative figures, which were previously presented in accordance with IFRS as issued by the International Accounting Standards Board have been adjusted as necessary to be compliant with the Company's policies under U.S. GAAP and are further described in note 3.

These consolidated financial statements have been prepared on a historical cost basis except for certain financial instruments which are measured at fair value. In addition, these consolidated financial statements have been prepared using the accrual basis of accounting, except for the cash flow information.

The Company consolidates an entity when it has power over that entity, is exposed, or has rights, to variable returns from its involvement with that entity and can affect those returns through its control over that entity. All material intercompany transactions, balances and expenses are eliminated on consolidation.

These consolidated financial statements include the financial statements of Lion Copper and Gold Corp., and its subsidiaries:

| Subsidiaries                             | Percentage ownership        |                   | Country of incorporation |
|------------------------------------------|-----------------------------|-------------------|--------------------------|
|                                          | December 31, 2022           | December 31, 2021 |                          |
| Quaterra Alaska Inc. ("Quaterra Alaska") | 100.0%                      | 100.0%            | United States            |
| Singatse Peak Services, LLC ("SPS")      | 100.0%                      | 100.0%            | United States            |
| Six Mile Mining Company ("Six mile")     | N/A                         | 100.0%            | United States            |
| Blue Copper Resources Corp ("BCRC")      | 79.3%                       | N/A               | United States            |
| Blue Copper LLC                          | 79.3% indirect through BCRC | 100.0%            | United States            |

On March 30, 2022, Six Mile was dissolved and its assets were transferred to Quaterra Alaska.

On December 13, 2022, Quaterra Alaska assigned and transferred 100% of its outstanding interest held in Blue Copper LLC to BCRC.

For partially owned subsidiaries, the interest attributable to non-controlling stockholders is reflected in non-controlling interest.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### 3. SIGNIFICANT ACCOUNTING POLICIES

#### Accounting estimates and judgments

The preparation of these consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and judgments that affect the application of policies, reported amounts and disclosures. By their nature, these estimates and judgments are subject to uncertainty and the effect on these consolidated financial statements of changes in such estimates in future years could be significant. Actual results could differ from those estimates.

Key sources of estimation uncertainty that has a significant risk of causing material adjustment to the amounts recognized in the consolidated financial statements exist as follows:

- **Share-based payments:** The Company has a stock option plan pursuant to which the fair value of options issued is estimated by using the Black Scholes option pricing model on the date of the grant based on certain assumptions. Those assumptions are described in Note 12 and include expected volatility, expected life of the options and number of options expected to vest.
- **Investment in Associate:** The Company received common shares of Falcon Butte Minerals Corp. during the year ended December 31, 2022 (Note 5). Due to Falcon Butte Minerals Corp. being a privately owned company, management estimated the value of the shares using the subscription price of units issued pursuant to a private placement completed on the same day as the transaction.
- **Fair value of Simple Agreement for Future Equity ("SAFE") notes:** During the year ended December 31, 2022, the Company entered into various SAFE agreements which are accounted for under ASC 480 which require revaluation to fair value. The determination of fair value was determined using valuation caps implicit to each SAFE agreement which required significant assumptions to be made by management.
- **Valuation of warrants:** During the year ended December 31, 2022, the Company granted freestanding warrants pursuant to the closing of convertible debenture financings. The Black Scholes option pricing model was used to determine fair value for the warrants and required significant assumptions to be made by management.
- **Valuation of derivative liabilities:** During the year ended December 31, 2022, the Company completed multiple tranches of convertible debenture financings. The convertible debentures include certain conversion features which were valued using the option pricing model and required significant assumptions to be made by management to value.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### 3. SIGNIFICANT ACCOUNTING POLICIES (continued)

#### Accounting estimates and judgments (continued)

Significant judgments used in the preparation of these consolidated financial statements include, but are not limited to:

- **Mineral properties:** Judgment is required in assessing whether certain factors would be considered an indicator of impairment. Both internal and external information is considered to determine whether there is an indicator of impairment present and, accordingly, whether impairment testing is required;
- **Going concern:** In the determination of the Company's ability to meet its ongoing obligations and future contractual commitments, management relies on the Company's planning, budgeting and forecasting process to help determine the funds required to support the Company's normal operations on an ongoing basis and its expansionary plans. The key inputs used by the Company in this process include forecasted capital deployment, results from operations, results from the exploration and development of its properties and general industry conditions;
- **Taxes:** Judgement is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable income realized, including the usage of tax planning strategies;
- **Influence over investment in associate:** Classification of investments require judgment on whether the Company controls, has joint control or significant influence over the strategic, financial and operating decisions relating to the activity of the investee. In assessing the level of control or influence that the Company has over an investment, management considers ownership percentages, board representation as well as other relevant provisions in stockholder agreements; and
- **Valuation of the Arnold, Snowbird, and Montana property:** During the year ended December 31, 2022, the Company entered into a property lease agreement with a related party. Management used judgment in determining the fair value of the leased property.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimates are revised and in any future years affected.

# Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

## 3. SIGNIFICANT ACCOUNTING POLICIES (continued)

### a) First-time adoption of U.S. GAAP

These Consolidated Financial Statements for the year ended December 31, 2022, are the first the Company has prepared in accordance with U.S. GAAP. The Company previously prepared its financial statements, up to and including nine months ended September 30, 2022, in accordance with International Financial Reporting Standards.

Accordingly, the Company has prepared financial statements that comply with U.S. GAAP applicable as at December 31, 2022, together with the comparative year data for the year ended December 31, 2021. In preparing the financial statements, the Company's opening balance sheets were prepared as at January 1, 2021 to provide comparative numbers under U.S. GAAP. This note explains the principal adjustments made by the Company in restating its U.S. GAAP financial statements.

### Reconciliation of Balance sheets as at January 1, 2021

|                                                   | Notes     | IFRS          | Effect of Transition<br>to U.S. GAAP | U.S. GAAP       |
|---------------------------------------------------|-----------|---------------|--------------------------------------|-----------------|
| <b>Assets</b>                                     |           |               |                                      |                 |
| <b>Current assets</b>                             |           |               |                                      |                 |
| Cash                                              | \$        | 701           | \$ -                                 | \$ 701          |
| Other receivables                                 |           | 3             | -                                    | 3               |
| Marketable securities                             |           | 641           | -                                    | 641             |
| Prepaid and deposit                               |           | 5             | -                                    | 5               |
|                                                   |           | 1,350         | -                                    | 1,350           |
| Mineral properties                                | (1)       | 28,236        | (21,958)                             | 6,278           |
| Reclamation bonds                                 |           | 34            | -                                    | 34              |
| <b>Total assets</b>                               | <b>\$</b> | <b>29,620</b> | <b>\$ (21,958)</b>                   | <b>\$ 7,662</b> |
| <b>Liabilities</b>                                |           |               |                                      |                 |
| <b>Current liabilities</b>                        |           |               |                                      |                 |
| Accounts payable and accrued liabilities          | \$        | 222           | \$ -                                 | \$ 222          |
|                                                   |           | 222           | -                                    | 222             |
| Derivative liabilities - warrants                 |           | 51            | -                                    | 51              |
| <b>Total liabilities</b>                          |           | <b>273</b>    | <b>-</b>                             | <b>273</b>      |
| <b>Stockholders' Equity</b>                       |           |               |                                      |                 |
| Share capital                                     |           | 101,553       | -                                    | 101,553         |
| Contributed surplus                               | (2)       | 19,406        | (19,406)                             | -               |
| Additional paid-in capital                        | (2)       | -             | 19,406                               | 19,406          |
| Deficit                                           | (1)       | (91,612)      | (21,958)                             | (113,570)       |
| <b>Total stockholder's equity</b>                 |           | <b>29,347</b> | <b>(21,958)</b>                      | <b>7,389</b>    |
| <b>Total liabilities and stockholders' equity</b> | <b>\$</b> | <b>29,620</b> | <b>\$ (21,958)</b>                   | <b>\$ 7,662</b> |



# Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

## 3. SIGNIFICANT ACCOUNTING POLICIES (continued)

*Reconciliation of financial position as at December 31, 2021*

|                                                   | Notes     | IFRS          | Effect of Transition<br>to U.S. GAAP | U.S. GAAP       |
|---------------------------------------------------|-----------|---------------|--------------------------------------|-----------------|
| <b>Assets</b>                                     |           |               |                                      |                 |
| <b>Current assets</b>                             |           |               |                                      |                 |
| Cash                                              | \$        | 842           | \$ -                                 | \$ 842          |
| Other receivables                                 |           | 6             |                                      | 6               |
| Prepaid and deposit                               |           | 43            | -                                    | 43              |
|                                                   |           | 891           | -                                    | 891             |
| Mineral properties                                | (1)       | 32,203        | (25,382)                             | 6,821           |
| Reclamation bonds                                 |           | 35            | -                                    | 35              |
| <b>Total assets</b>                               | <b>\$</b> | <b>33,129</b> | <b>\$ (25,382)</b>                   | <b>\$ 7,747</b> |
| <b>Liabilities</b>                                |           |               |                                      |                 |
| <b>Current liabilities</b>                        |           |               |                                      |                 |
| Accounts payable and accrued liabilities          | \$        | 1,358         | \$ -                                 | \$ 1,358        |
| Derivative liabilities - warrants                 |           | 55            | -                                    | 55              |
| <b>Total liabilities</b>                          |           | <b>1,413</b>  | <b>-</b>                             | <b>1,413</b>    |
| <b>Stockholders' Equity</b>                       |           |               |                                      |                 |
| Share capital                                     |           | 104,340       | -                                    | 104,340         |
| Contributed surplus                               | (2)       | 22,012        | (22,012)                             | -               |
| Additional paid-in capital                        | (2)       | -             | 22,012                               | 22,012          |
| Deficit                                           | (1)       | (94,636)      | (25,382)                             | (120,018)       |
| <b>Total stockholder's equity</b>                 |           | <b>31,716</b> | <b>(25,382)</b>                      | <b>6,334</b>    |
| <b>Total liabilities and stockholders' equity</b> | <b>\$</b> | <b>33,129</b> | <b>\$ (25,382)</b>                   | <b>\$ 7,747</b> |

# Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

## 3. SIGNIFICANT ACCOUNTING POLICIES (continued)

*Reconciliation of operation results for the year ended December 31, 2021*

|                                                                        | Notes     | IFRS               | Effect of<br>Transition to<br>U.S. GAAP | U.S. GAAP          |
|------------------------------------------------------------------------|-----------|--------------------|-----------------------------------------|--------------------|
| <b>General administrative expenses</b>                                 |           |                    |                                         |                    |
| General office                                                         | \$        | 58                 | \$ -                                    | \$ 58              |
| Insurance                                                              |           | 30                 | -                                       | 30                 |
| Investor relations                                                     |           | 206                | -                                       | 206                |
| Professional fees                                                      |           | 493                | -                                       | 493                |
| Rent                                                                   |           | 13                 | -                                       | 13                 |
| Salaries and benefits                                                  |           | 938                | -                                       | 938                |
| Share-based payments                                                   |           | 1,077              | -                                       | 1,077              |
| Transfer agent                                                         |           | 108                | -                                       | 108                |
| Travel                                                                 |           | 87                 | -                                       | 87                 |
| <b>Operating loss</b>                                                  |           | <b>(3,010)</b>     | -                                       | <b>(3,010)</b>     |
| Fair value gain on derivative liabilities - warrants                   |           | (4)                | -                                       | (4)                |
| General exploration                                                    | (1)       | (218)              | (3,424)                                 | (3,642)            |
| Realized gain on marketable securities                                 |           | 189                | -                                       | 189                |
| Unrealized gain (loss) on foreign exchange                             |           | 11                 | -                                       | 11                 |
| Interest and other income                                              |           | 8                  | -                                       | 8                  |
|                                                                        |           | (14)               | (3,424)                                 | (3,438)            |
| <b>Loss and comprehensive loss for the year</b>                        | <b>\$</b> | <b>(3,024)</b>     | <b>\$ (3,424)</b>                       | <b>\$ (6,448)</b>  |
| <b>Basic and diluted loss per share</b>                                | <b>\$</b> | <b>(0.01)</b>      | <b>\$ -</b>                             | <b>\$ (0.03)</b>   |
| <b>Basic and diluted weighted average number of shares outstanding</b> |           | <b>239,831,079</b> | -                                       | <b>239,831,079</b> |

### Notes to the reconciliations

The reconciling items between IFRS and U.S. GAAP presentation have no significant effect on the cash flows generated. Therefore, a reconciliation of cash flows has not been presented above.

#### (1) Mineral properties

Under IFRS, the Company capitalized both acquisition and exploration costs relating to the Company's mineral properties. Under U.S. GAAP, the industry standard is to capitalize acquisition costs but expense exploration costs unless a proven or probable reserve can be established at the mineral property. Adjustments has been made to expense previously capitalized exploration costs to be in accordance with U.S. GAAP.

#### (2) Contributed surplus and Additional paid-in capital

Under IFRS, share-based payments were presented as contributed surplus. Upon transition to U.S. GAAP, a reclassification adjustment has been made to present the amount as additional paid-in capital.

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **3. SIGNIFICANT ACCOUNTING POLICIES (continued)**

#### **b) Investment in associate**

Investment in associate is comprised of the Company's investment in Falcon Butte Minerals Corp. ("Falcon Butte"). An associate is an entity over which the Company has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not in control or joint control over those policies. The Company's investment in Falcon Butte is accounted for using the equity method. Under the equity method, the investment in an associate or a joint venture is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Company's share of net assets of the associate since the acquisition date. Goodwill relating to the associate is included in the carrying amount of the investment and is not tested for impairment separately.

After application of the equity method, the Company determines whether a loss in the fair value of an investment below its carrying value is a temporary decline. If it is other than temporary, the investor calculates an impairment as the excess of the investment's carrying amount over the fair value. Reversals of impairments on equity method investments are prohibited.

Upon loss of significant influence over the associate, the Company measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the associate upon loss of significant influence and the fair value of the retained investment and proceeds from disposal is recognized in profit or loss.

#### **c) Translation of foreign currencies**

The functional currency for each of the Company's subsidiaries is the currency of the primary economic environment in which the entity operates. Determination of functional currency may involve certain judgments to determine the primary economic environment and the Company reconsiders the functional currency of its entities if there is a change in events and conditions that determined the primary economic environment. The Company's presentation currency is the U.S. dollar (" \$" or "USD"). The functional currency of the Company and its significant subsidiaries is the USD. In preparing the financial statements, transactions in currencies other than an entity's functional currency ("foreign currencies") are recorded at the rates of exchange prevailing at the dates of the transactions. At each balance sheet date, monetary assets and liabilities are translated using the year-end foreign exchange rate. Non-monetary assets and liabilities are translated using the historical rate on the date of the transaction. All gains and losses on translation of these foreign currency transactions are included in the statement of loss.

#### **d) Mineral properties**

Direct costs related to the acquisition of mineral properties held or controlled by the Company are capitalized on an individual property basis until the property transitions to the development stage, is sold, abandoned, or determined to be impaired. Exploration and administration costs are expensed as incurred. The Company classifies its mineral properties as exploration and evaluation assets until the technical feasibility and commercial viability of extracting a mineral resource are demonstrable. At this point, the mineral properties' carrying value is tested for impairment and subsequently transferred to property and equipment. The establishment of technical feasibility and commercial viability of a mineral property is assessed based on a combination of factors, such as the extent of established mineral reserves, the results of feasibility and technical evaluations, and the status of mineral leases or permits. Proceeds from the sale of properties are accounted for as reductions to the capitalized acquisition costs, while property water rights are recorded as other income.

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **3. SIGNIFICANT ACCOUNTING POLICIES (continued)**

Cash proceeds received from farm-out option agreements are recorded as a liability once received and reduced as the obligation to incur expenditures related to the agreement are met. Funds received for expenditures incurred are recorded as other income on the statement of loss and comprehensive loss or as a reduction to the capitalized acquisition costs, depending on the nature of the expenditure incurred.

#### **e) Impairment**

The Company assesses the carrying costs of the capitalized mineral properties for impairment indicators under ASC 360-10, "Impairment of long-lived assets". If impairment indicators are identified, the Company evaluates its carrying value under ASC 930-360, "Extractive Activities - Mining". An impairment is recognized if the sum of the expected undiscounted future cash flows is less than the carrying amount of the mineral properties. Impairment losses, if any, are measured as the excess of the carrying amount of the mineral properties over its estimated fair value.

Based on the Company's evaluation, no impairment indicators were identified on the mineral properties for the years ended December 31, 2022 and 2021.

#### **f) Share-based payments**

The fair value of stock options granted to directors, officers, employees and consultants is calculated using the Black Scholes option pricing model and is expensed over the vesting periods. If and when stock options are exercised, the value attributable to the stock options is transferred to share capital.

#### **g) Cash**

Cash consists of cash on hand and bank deposits. As at December 31, 2022, the Company held \$15 CAD (2021 - \$442 CAD) in bank accounts denominated in CAD.

#### **h) Financial instruments**

Financial instruments are recognized in the balance sheet when the Company becomes a party to a contractual obligation. At initial recognition, the Company classifies and measures its financial instruments as one of the following:

- held to maturity (amortized cost);
- available for sale (fair value through other comprehensive income);
- otherwise, they are classified as trading (fair value through net income).

Financial assets are classified and measured at fair value with subsequent changes in fair value recognized in either profit and loss as they arise unless restrictive criteria are met for classifying and measuring the asset at either amortized cost or FVOCI. Financial liabilities are measured at amortized costs unless they are elected to be or required to be measured at fair value through profit and loss.

Financial assets are derecognized when the rights to receive cash flows from the assets have expired or have been transferred, and the Company has transferred all risks and rewards of ownership. Financial liabilities are derecognized when the obligations specified in the contract are discharged, cancelled, or expire.

The Company's cash, accounts payable and Rio Tinto deposit approximate fair value due to their short-term nature.

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **3. SIGNIFICANT ACCOUNTING POLICIES (continued)**

The convertible note is classified as a liability at amortized cost, with the conversion feature and related warrants classified as liabilities to be measured at fair value at each reporting period. The debt liability was initially recorded at fair value and is subsequently measured at amortized cost using the effective interest rate method and will be accreted to the face value over the term of the convertible debenture.

The SAFE notes are classified as liabilities pursuant to ASC 480 and were measured at fair value at each reporting period, with changes in fair value recorded within the Consolidated Statements of Operations.

#### **i) Provisions**

Provisions are recognized when a present legal or constructive obligation exists as a result of past events where it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and the amount of the obligation can be reliably estimated. The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, considering the risks and uncertainties surrounding the obligation. The Company had no material provisions as of December 31, 2022 and 2021.

#### **j) SAFE Notes**

The Company issued SAFE notes to investors during the year ended December 31, 2022 and determined that the SAFE notes are not a legal form of debt (i.e., no creditors' rights). The Company allowed for redemption based upon certain events that are outside of the control of the Company. Therefore, the SAFE Instruments were classified as liabilities pursuant to ASC 480 and were measured at fair value at each reporting period, with changes in fair value recorded within the Consolidated Statements of Operations.

#### **k) Earnings (loss) per share**

Basic earnings (loss) per share is calculated using the weighted average number of common shares outstanding during the year. The Company uses the treasury stock method to compute the dilutive effect of options, warrants and similar instruments. Under this method, the dilutive effect on earnings per share is calculated, presuming the exercise of in-the-money outstanding options, warrants and similar instruments. It assumes that the proceeds of such exercise would be used to repurchase common shares at the average market price during the year. However, the calculation of diluted loss per share excludes the effects of various conversions and exercise of options and warrants that would be anti-dilutive.

#### **l) Income tax**

Income tax comprises current and deferred tax. Income tax is recognized in net loss, except to the extent it is related to items recognized directly in equity or other comprehensive loss. Deferred tax is recognized in respect of temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax is determined on a non-discounted basis using tax rates and laws that have been enacted by the reporting date and are expected to apply when the deferred tax asset or liability is settled. Deferred tax assets are recognized to the extent that their recovery is more likely than not.

#### **m) Non-controlling interest**

On December 13, 2022, Quaterra Alaska was issued 57,513,764 common shares of Blue Copper Resources Corp which represented 79.3% of all issued and outstanding shares at December 13, 2022 and December 31, 2022. For partially owned subsidiaries, the interest attributable to non-controlling shareholders is reflected in non-controlling interest.

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **3. SIGNIFICANT ACCOUNTING POLICIES (continued)**

#### **n) Recently Issued Accounting Standards**

In August 2020, the FASB issued ASU 2020-06, Debt-Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40). This update amends the guidance on convertible instruments and the derivatives scope exception for contracts in an entity's own equity and improves and amends the related EPS guidance for both Subtopics. This standard is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2023, which means it will be effective for our fiscal year beginning April 1, 2024. Early adoption is permitted but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. Upon transition to US GAAP, the Company has adopted ASU 2020-06 in the preparation of the consolidated financial statements for the years ended December 31, 2022 and 2021.

In November 2021, FASB issued ASU 2021-10, Disclosures by Business Entities about Government Assistance. ASU 2021-10 was issued to increase the transparency of government assistance including the disclosure of (1) the types of assistance, (2) an entity's accounting for the assistance, and (3) the effect of the assistance on an entity's financial statements. Requiring disclosures about government assistance in the notes to financial statements will provide comparable and transparent information to investors and other financial statement users to enable them to understand an entity's financial results and prospects for future cash flows. The amendment applies to all business entities, except those explicitly excluded. The amendments are effective for fiscal years beginning after December 15, 2021 and upon transition to US GAAP, the Company has adopted ASU 2021-10 in the preparation of the consolidated financial statements for the years ended December 31, 2022 and 2021.

In May 2021, FASB issued ASU 2021-04, Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options. ASU 2021-04 was issued to clarify and reduce diversity in an issuer's accounting for modifications or exchanges of freestanding equity-classified written call options (for example, warrants) that remain equity classified after modification or exchange. The amendments in this Update are effective for all entities for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Upon transition to US GAAP, the Company has adopted ASU 2021-04 in the preparation of the consolidated financial statements for the years ended December 31, 2022 and 2021.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 4. MINERAL PROPERTIES

Total mineral property acquisition costs are listed in the table below:

|                                          | Singatse Peak Services |              |              |              | Lion CG             | Quaterra Alaska | Blue Copper Resources Corp |           |             |              |
|------------------------------------------|------------------------|--------------|--------------|--------------|---------------------|-----------------|----------------------------|-----------|-------------|--------------|
| (In thousands of U.S dollars)            | MacArthur              | Yerington    | Bear         | Wassuk       | Chaco Bear & Ashton | Butte Valley    | Blue Copper                | Groundhog | Blue Copper | Total        |
|                                          | \$                     | \$           | \$           | \$           | \$                  | \$              | \$                         | \$        | \$          | \$           |
| <b>Balance January 1, 2021</b>           | <b>2,489</b>           | <b>1,195</b> | <b>1,339</b> | <b>1,155</b> | -                   | <b>100</b>      | -                          | -         | -           | <b>6,278</b> |
| Acquisition costs                        | -                      | -            | 193          | 250          | -                   | 100             | -                          | -         | -           | 543          |
| Total additions (disposals) for the year | -                      | -            | 193          | 250          | -                   | 100             | -                          | -         | -           | 543          |
| <b>Balance December 31, 2021</b>         | <b>2,489</b>           | <b>1,195</b> | <b>1,532</b> | <b>1,405</b> | -                   | <b>200</b>      | -                          | -         | -           | <b>6,821</b> |
| Acquisition costs                        | -                      | -            | 193          | -            | 602                 | -               | 118                        | -         | 500         | 1,413        |
| Assignment of Butte Valley               | -                      | -            | -            | -            | -                   | (200)           | -                          | -         | -           | (200)        |
| Transfer to BCRC                         | -                      | -            | -            | -            | -                   | -               | (118)                      | -         | 118         | -            |
| Paid by Rio Tinto                        | -                      | -            | (150)        | -            | -                   | -               | -                          | -         | -           | (150)        |
| Total additions (disposals) for the year | -                      | -            | 43           | -            | 602                 | (200)           | -                          | -         | 618         | 1,063        |
| <b>Balance December 31, 2022</b>         | <b>2,489</b>           | <b>1,195</b> | <b>1,575</b> | <b>1,405</b> | <b>602</b>          | -               | -                          | -         | <b>618</b>  | <b>7,884</b> |

The Company owns a 100% interest in the MacArthur and Yerington properties. It has an option to earn a 100% interest in the Bear and Wassuk properties in Nevada, and a 100% interest in the Chaco Bear and Ashton property in British Columbia.

During the year ended December 31, 2022, the Company:

- Sold and assigned the Butte Valley option agreements to Falcon Butte Minerals Corp.(Note 4(e));
- Transferred its 100% interest in the Blue Copper Project in Montana and its 90% interest in the Groundhog property in Alaska to Blue Copper Resources Corp., an entity in which the Company holds 79% ownership of, which also holds a leased interest in the Arnold, Snowbird & Montana property (Notes 4(d)(e)(g)).

# Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

## 4. MINERAL PROPERTIES (continued)

Total exploration expenditures recorded on the statement of loss and comprehensive loss are listed in the tables below:

*Exploration expenditures incurred for the year ended December 31, 2022*

|                                               | Singatse Peak Services |                |          |             | Lion CG                   |           | Quaterra Alaska | Blue Copper Resources Corp |            |             |                |
|-----------------------------------------------|------------------------|----------------|----------|-------------|---------------------------|-----------|-----------------|----------------------------|------------|-------------|----------------|
|                                               |                        |                |          |             | Chaco<br>Bear &<br>Ashton |           |                 |                            |            |             |                |
| (In thousands of U.S dollars)                 | MacArthur              | Yerington      | Bear     | Wassuk      | Ashton                    | Groundhog | Butte Valley    | Blue Copper                | Groundhog  | Blue Copper | Total          |
|                                               | \$                     | \$             | \$       | \$          | \$                        | \$        | \$              | \$                         | \$         | \$          | \$             |
| Property maintenance                          | 167                    | 64             | -        | 55          | -                         | -         | 2               | 161                        | 107        | 41          | 597            |
| Assay & Labs                                  | 86                     | 33             | -        | -           | -                         | -         | -               | -                          | -          | -           | 119            |
| Drilling                                      | 478                    | 437            | -        | -           | -                         | -         | -               | -                          | -          | -           | 915            |
| Environmental                                 | 292                    | 489            | -        | -           | -                         | -         | -               | 11                         | -          | -           | 792            |
| Geological & mapping                          | 1                      | -              | -        | -           | 18                        | -         | -               | 25                         | -          | -           | 44             |
| Geophysical surveys                           | 61                     | 1              | 5        | -           | -                         | -         | 11              | 59                         | -          | 35          | 172            |
| Technical study                               | 341                    | 411            | -        | -           | -                         | -         | -               | -                          | -          | -           | 752            |
| Field support                                 | 635                    | 16             | -        | -           | -                         | 44        | 10              | 56                         | -          | 150         | 911            |
| <b>Total expenses incurred</b>                | <b>2,061</b>           | <b>1,451</b>   | <b>5</b> | <b>55</b>   | <b>18</b>                 | <b>44</b> | <b>23</b>       | <b>312</b>                 | <b>107</b> | <b>226</b>  | <b>4,302</b>   |
| <b>Total Expenditures funded by Rio Tinto</b> | <b>(1,637)</b>         | <b>(1,394)</b> | <b>-</b> | <b>(55)</b> | <b>-</b>                  | <b>-</b>  | <b>-</b>        | <b>-</b>                   | <b>-</b>   | <b>-</b>    | <b>(3,086)</b> |
| <b>Total Expenditures funded by Lion CG</b>   | <b>424</b>             | <b>57</b>      | <b>5</b> | <b>-</b>    | <b>18</b>                 | <b>44</b> | <b>23</b>       | <b>312</b>                 | <b>107</b> | <b>226</b>  | <b>1,216</b>   |

*Exploration expenditures incurred for the year ended December 31, 2021*

|                                |              |            |           |            | Chaco<br>Bear &<br>Ashton |            | Butte Valley | Blue Copper |              |
|--------------------------------|--------------|------------|-----------|------------|---------------------------|------------|--------------|-------------|--------------|
| (In thousands of U.S dollars)  | MacArthur    | Yerington  | Bear      | Wassuk     | Ashton                    | Groundhog  | Valley       | Copper      | Total        |
|                                | \$           | \$         | \$        | \$         | \$                        | \$         | \$           | \$          | \$           |
| Property maintenance           | 159          | 69         | -         | 55         | -                         | 98         | 147          | 401         | 929          |
| Assay & Labs                   | 231          | -          | -         | -          | -                         | -          | -            | -           | 231          |
| Drilling                       | 892          | -          | -         | 47         | -                         | -          | 500          | -           | 1,439        |
| Environmental                  | 43           | 142        | -         | -          | -                         | -          | -            | -           | 185          |
| Geological & mapping           | 22           | -          | -         | -          | 160                       | -          | -            | 16          | 198          |
| Geophysical surveys            | 20           | -          | 63        | -          | -                         | -          | 47           | 15          | 145          |
| Technical study                | 276          | 11         | -         | -          | -                         | 1          | -            | -           | 288          |
| Field support                  | 46           | 5          | -         | 3          | -                         | 67         | 59           | 47          | 227          |
| <b>Total expenses incurred</b> | <b>1,689</b> | <b>227</b> | <b>63</b> | <b>105</b> | <b>160</b>                | <b>166</b> | <b>753</b>   | <b>479</b>  | <b>3,642</b> |



## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### 4. MINERAL PROPERTIES (continued)

#### a) MacArthur and Yerington Properties, Nevada

On February 24, 2021, the Company entered into a purchase and sale agreement to sell certain primary groundwater rights to Desert Pearl Farms LLC ("Desert Pearl"), a Yerington-based company involved in agriculture, for \$2,910 (the "Purchase and Sale Agreement"). In early March, 2021, the Company filed an application with the State of Nevada Division of Water Resources ("NDWR") to change the manner of use of the water rights from mining to agriculture and their place of use ("Change Application"). The Change Application was subsequently withdrawn on October 17, 2022.

Under the terms of the Purchase and Sale Agreement, Desert Pearl made a \$1,000 initial payment to the Company on March 5, 2021. On May 26, 2022, the company announced it had reached an amicable agreement with Desert Pearl Farms to terminate the contract on the sale of the Company's water rights. As a consequence of the termination, the Company will recover the water permit designated for mining and milling use. The \$1,000 deposit has been returned to Desert Pearl Farms. This water permit is currently subject to court proceedings and settlement discussions between the Company and the State of Nevada, as discussed in the following paragraph.

On July 23, 2021, the Company received a notice from the State of Nevada that three water rights permits had been forfeited. Further, the application for an extension of time to prevent forfeiture of a fourth certificate was denied. The Company is vigorously appealing the State's decision and hired legal counsel to challenge and reverse the State's decision. As discussed in the previous paragraph, one of the permits affected by the State's letter was subject to the Purchase and Sale Agreement announced on February 24, 2021. On August 20, 2021, the Company filed a Petition for Judicial Review of the Forfeiture Notice and has retained legal counsel to vigorously undertake the appeal process. SPS subsequently filed and was granted a Stay of the Forfeiture Notice on September 15, 2021. SPS filed its Opening Brief on March 28, 2022. The State Engineer filed its Answering Brief on July 8, 2022. SPS filed its Reply Brief on August 25, 2022. A hearing regarding the status of the forfeiture appeal was held in the Third Judicial Court District in Lyon County on November 4, 2022. On December 6, 2022, the Judge remanded the case back to the State for further written findings based on issues raised at the hearing. The Company has not received a response from the State since the Remand Order was issued. Since receipt of the Forfeiture Notice, SPS has been in contact with the State Engineer's office in an attempt to resolve the Forfeiture Notice.

On May 15 2022, the Company and Rio Tinto America mutually agreed on a Stage 1 program of work with funding supplied by Rio Tinto to be applied against the Company's MacArthur and Yerington properties as work progresses (Notes 4(h), 6).

#### b) Bear Deposit, Nevada

The Company has five option agreements, entered from March 2013 to May 2015, to acquire a 100% interest in private land in Yerington, Nevada, collectively known as the Bear deposit. Under the terms of these option agreements, as amended, the Company is required to make \$5,673 in cash payments over 15 years (\$5,222 paid) to maintain the exclusive right to purchase the land, mineral rights, and certain water rights and to conduct mineral exploration on these properties. Two of the properties are subject to a 2% NSR upon commencing commercial production, which can be reduced to a 1% NSR in consideration of \$1,250 total.

Outstanding payments to keep the five option agreements current are as follows, by year:

- \$193 due 2022 (paid);
- \$201 due in 2023;
- \$50 due in years 2024 to 2028.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### 4. MINERAL PROPERTIES (continued)

Outstanding purchase payments under the five option agreements are as follows:

- \$1,250 for Taylor, purchase option expiring April 4, 2023. The Company is in the process of negotiating an extension;
- \$250 for Chisum, purchase option has no expiration date, \$50 per year payment required for continuation;
- \$5,000 for Yerington Mining, purchase option expiring in 2024;
- \$8,975 for Circle Bar N, purchase option expiring in 2024;
- \$22,770 for Desert Pearl Farms, purchase option expiring in 2029.

On May 15, 2022, the Company and Rio Tinto America mutually agreed on a Stage 1 program of work with funding supplied by Rio Tinto to be applied against the Company's Bear property as work progresses (Notes 4(h), 6).

#### c) Wassuk, Nevada

The Wassuk property consists of 310 unpatented lode claims totaling approximately 6,400 acres on lands administered by the BLM.

The Company has completed all requirements to earn a 100% interest in certain unpatented mining claims in Lyon County, Nevada, (\$1,405 in cash payments and a work commitment of \$50). During 2021, two final option payments were paid and form part of the total payments of \$1,405. As at December 31, 2021, the Company had satisfied all conditions required to execute the option to purchase and on January 14, 2023, the option was executed (Note 20).

The property is subject to a 3% NSR upon commencing commercial production, which can be reduced to a 2% NSR royalty in consideration of \$1,500.

On May 15, 2022, the Company and Rio Tinto America mutually agreed on a Stage 1 program of work with funding supplied by Rio Tinto to be applied against the Company's Wassuk property as work progresses (Notes 4(h), 6).

#### d) Groundhog, Alaska

On April 20, 2017, the Company entered a lease with option to purchase agreement with Chuchuna Minerals Company ("Chuchuna") to earn a 90% interest in the Groundhog copper prospect, located two hundred miles southwest of Anchorage, Alaska.

During the year ended December 31, 2021, the lease agreement was further extended from six to seven years, providing the Company more time to make the required exploration expenditures and lump sum payment. To earn the 90% interest, the Company must fund a total of \$5,000 (\$2,839 funded) of exploration expenditures and make a lump sum payment to Chuchuna of \$3,000 by the end of April 20, 2024. The Company can terminate the Agreement at its discretion.

The property is subject to a 1.75% NSR upon commencing commercial production, which can be reduced to a 0.875% NSR royalty in consideration of \$25,000.

On December 13, 2022, the Groundhog property was transferred from Quaterra Alaska to BCRC (Note 7).

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **4. MINERAL PROPERTIES (continued)**

#### **e) Butte Valley Prospect, Nevada**

On January 26, 2022, the Company entered into a property acquisition agreement to sell and assign its options to acquire the Butte Valley property to Falcon Butte Minerals Corp. (formerly 1301666 B.C. Ltd, or "Falcon Butte.") which is a private British Columbia company established to acquire mineral resource properties.

Pursuant to the agreement, Lion CG's 100% owned subsidiary Quaterra Alaska was granted an equity position in Falcon Butte (Note 5). In addition, Quaterra Alaska will maintain a 1.5% NSR on each of the Butte Valley optioned properties, which is subject to a buy-down to a 1.0% NSR in exchange for a payment of \$7,500 per property ("Butte Valley Royalty").

On April 5, 2022, the Company completed the assignment of the two option agreements for the Butte Valley Property and the Company received 16,049,444 common shares of Falcon Butte with a fair value of \$1,906 and \$500 cash for the property, resulting in a gain on sale of \$2,207 (Note 5, 13).

On April 13, 2022, the Company amended the agreement. Pursuant to the addendum Falcon Butte was to pay a total of \$500 in exchange for a 0.5% buy-down and retirement of certain NSRs held by the Company. As of December 31, 2022, the Company has received the full consideration of \$500, which is recorded as other income.

On December 13, 2022, the Butte Valley Royalty rights were transferred from Quaterra Alaska to BCRC (Note 7).

#### **f) Chaco Bear and Ashton Properties, British Columbia**

On August 25, 2021, the Company entered into a non-binding letter of intent (the "LOI") with Houston Minerals Ltd. ("Houston") setting forth the terms of an option whereby the Company may acquire a 100% interest in the Chaco Bear Property located directly east of the Golden Triangle of British Columbia, and the Ashton Property located near Lytton, British Columbia (Collectively, the "Properties").

Under the terms of the LOI, the Company and Houston proposed to enter into a definitive agreement whereby the Company can earn up to a 100% interest in the Properties by making the following issuances and payments over a four-year period:

- issuing 8,000,000 common shares of the Company on closing (issued on March 17, 2022);
- making annual lease payments on the Properties after 2021;
- incurring CAD\$150 of exploration expenditures on the Chaco Bear Property and CAD\$50 of exploration expenditures on the Ashton Property before the end of 2021 for CAD\$200 (paid);
- incurring exploration expenditures of at least the value of the annual assessment multiplied by 1.5 for periods after 2021 (claims were renewed and extended through to early 2025, resulting in no obligation on exploration expenditures until 2024);
- paying CAD\$1,500 for the Chaco Bear Property and CAD\$1,000 for the Ashton Property on or before 4 years from the closing, which amounts are payable in cash or common shares of the Company; and
- making annual advance royalty payments in the fourth and fifth year from the closing in the amounts of CAD\$250 on the Chaco Bear Property and CAD\$150 on the Ashton Property.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### 4. MINERAL PROPERTIES (continued)

#### f) Chaco Bear and Ashton Properties, British Columbia (continued)

On September 17, 2021, the parties agreed to an amendment to the LOI to include a 2.5% NSR on each property. Prior to feasibility, the Company may reduce the NSR to 1.0% on the Chaco Bear Property in consideration for a payment of CAD\$6,000 and 1.0% on the Ashton Property for a payment of CAD\$3,000. Post feasibility, the Company may purchase the remaining 1.0% NSR on the Chaco Bear Property for CAD\$12,000 and the remaining 1.0% NSR on the Ashton Property for CAD\$6,000.

On January 26, 2022, the Company entered into an option agreement with Houston Minerals Ltd. to replace the LOI dated August 25, 2021. Pursuant to the terms of the option agreement, the Company may acquire a 100% interest in the Chaco Bear Property located directly east of the Golden Triangle of British Columbia, and the Ashton Property located near Lytton, British Columbia, subject to a 2.5% net smelter returns royalty.

The terms of the option agreement are unchanged from the LOI except that the term of the option has changed from a four year period to a ten year period and annual advance royalty payments in the amounts of CAD\$250 on the Chaco Bear Property and CAD\$150 on the Ashton Property are to be paid starting on the fifth year from closing through to the ninth year from closing instead of only in the fourth and fifth years from the closing. All other consideration terms remain unchanged.

In addition, commencing on January 31, 2022, and on January 31 of each year thereafter during the Option Period, Lion CG shall pay the following option maintenance fees to Houston: (a) CAD\$60 in respect of the Chaco Bear Property; and (b) CAD\$40 in respect of the Ashton Property.

Lion CG funded an initial work program in 2021 of CAD\$200 on the Properties in consideration for the grant of the Option, and on March 16, 2022, the transaction was closed. The Company may exercise the Option for a period of up to ten years to acquire (i) the Chaco Bear property by paying CAD\$1,500 to Houston, in cash or in common shares of the Company at the Company's option; and/or (ii) the Ashton Property by paying CAD\$1,000 to Houston in cash or in common shares of the Company at the Company's option, and in either case common shares will be valued using the volume weighted average trading price of the Company's common shares for the twenty trading day period ending three trading days prior to the date of issuance of such Lion CG shares, with such cash payments being subject to a discount of between 5% and 15% based on the timing of exercise and cumulative exploration expenditures incurred as at the time of exercise. Houston will retain a 2.5% net smelter returns royalty on any of the Properties for which an Option has been exercised by the Company.

#### g) Blue Copper Prospect, Montana

During the year ended December 31, 2021, Blue Copper LLC acquired and staked a district scale exploration and resource discovery opportunity (the "Blue Copper Prospect"), comprising more than 7,430 acres in Powell County and Lewis & Clark County in Montana, USA. The area is prospective for high grade copper-gold skarns and porphyry copper-gold mineralization. The claim block encompasses a group of more than fourteen historic small mines that produced high grade gold, copper, and tungsten.

As a part of the transaction, Blue Copper LLC entered into a purchase agreement with Four O Six Mining & Exploration LLC to acquire certain existing and additional unpatented mining claims. In exchange for the unpatented mining claims, as part of the closing of the transaction, the Company issued 1,500,000 common shares of the capital of the Company (Note 11) and provided a NSR of 2.0% with a buy-down of 1% NSR for \$1,500.

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **4. MINERAL PROPERTIES (continued)**

#### **g) Blue Copper Prospect, Montana (continued)**

Blue Copper LLC has staked an additional 131 claims to expand the Blue Copper Prospect. The Company has provided a NSR of 2% with a buy-down of 1% NSR for \$600 to Four O Six Mining & Exploration LLC for these claims.

On February 14, 2022, as a part of the Blue Copper Prospect transaction, the Company issued 1,500,000 common shares as part of the closing of the transaction (Note 11).

On December 13, 2022, Quaterra Alaska's interest in Blue Copper LLC was transferred to BCRC (Note 7).

On October 28, 2022, prior to the transaction in Note 7, Blue Copper LLC entered into a mining lease agreement with Snowshoe Creek LLC ("Snowshoe"), a Montana limited liability company owned by the CEO of the Company. Pursuant to the Agreement, Snowshoe will lease the Arnold, Snowbird and Montana property, including the patented mining claims on such property, to Blue Copper LLC for a term of 20 years and extendable on sole discretion of Blue Copper LLC. Blue Copper LLC has the ability to extend the term in 12-month increments upon providing written notice no later than 180 days prior to the expiration of the current term (Note 19).

As consideration, 15,000,000 preferred stock in Blue Copper Resources Corp. was issued to the CEO of the Company. The transaction was measured using the fair value of the asset received as the cost was more clearly evident. The fair value of the asset received was calculated using the original cost incurred to acquire the property and was determined to be \$500.

#### **h) Option to Earn-in Agreement with Rio Tinto**

On March 18, 2022, the Company entered into an Option to Earn-in Agreement with Rio Tinto America Inc. ("Rio Tinto") to advance studies and exploration at Lion CG's copper assets in Mason Valley, Nevada. Under the agreement, Rio Tinto has the option to earn a 65% interest in the assets, comprising 34,494 acres of land, including the historic Yerington mine, greenfield MacArthur Project, Wassuk property, the Bear deposit, and associated water rights (the "Mining Assets"). In addition, Rio Tinto will evaluate the potential commercial deployment of its Nuton™ technologies at the site. Nuton™ offers copper heap leaching technologies developed by Rio Tinto to deliver greater copper recovery from mined ore and access new sources of copper such as low-grade sulphide resources and reprocessing of stockpiles and mineralized waste. The technologies have the potential to deliver leading environmental performance through more efficient water usage, lower carbon emission, and the ability to reclaim mine sites by reprocessing waste.

The stages of the Agreement are set out below.

##### **Stage 1**

Rio Tinto will pay up to four million U.S. dollars (\$4,000) for an exclusive earn-in option and agreed-upon Mason Valley study and evaluation works to be completed by Lion CG no later than December 31, 2022 (Note 6).

##### **Stage 2**

Within forty-five (45) days of the completion of Stage 1, Rio Tinto will provide notice to Lion CG whether Rio Tinto elects to proceed with Stage 2, upon which Rio Tinto will pay up to five million U.S. dollars (\$5,000) for agreed-upon Mason Valley study and evaluation works to be completed by Lion CG within 12 months from the date that the parties agree upon the scope of Stage 2 work.

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **4. MINERAL PROPERTIES (continued)**

#### **i) Option to Earn-in Agreement with Rio Tinto (continued)**

Stages 1 and 2 may be accelerated at Rio Tinto's option.

#### **Stage 3 - Feasibility Study**

Within sixty (60) days of the completion of Stage 2, Rio Tinto shall provide notice to Lion CG whether Rio Tinto will exercise its Option and fund a Feasibility Study based on the results of the Stage 1 and Stage 2 work programs. Rio Tinto will fully-fund the Feasibility Study and ancillary work completed by Lion CG in amount not to exceed fifty million U.S. dollars (\$50,000).

#### **Investment Decision**

Upon completion of the Feasibility Study, Rio Tinto and Lion CG will decide whether to create an investment vehicle into which the Mining Assets will be transferred, with Rio Tinto holding not less than a 65% interest in the investment vehicle.

- If Rio Tinto elects to not to create the investment vehicle, then Lion CG shall grant to Rio Tinto a 1.5% NSR on the Mining Assets.
- If Rio Tinto elects to create the investment vehicle but Lion CG elects not to create the investment vehicle, then, at Rio Tinto's option, Lion CG shall create the investment vehicle and Rio Tinto will purchase Lion CG's interest in the investment vehicle for fair market value.

#### **Project Financing**

- Following the formation of the investment vehicle, any project financing costs incurred will be funded by Rio Tinto and Lion CG in proportion to their respective ownership interest in the investment vehicle.
- Rio Tinto may elect to fund up to sixty million U.S. dollars (\$60,000) of Lion CG 's project financing costs in exchange for a 10% increase in Rio Tinto's ownership percentage. In addition, upon mutual agreement of Rio Tinto and Lion CG, Rio Tinto may fund an additional forty million U.S. dollars (\$40,000) of Lion CG's project financing costs in exchange for an additional 5% increase in Rio Tinto's ownership percentage.
- If Lion CG's ownership percentage in the investment vehicle is diluted to 10% or less, then Lion CG's ownership interest will be converted into a 1% uncapped NSR.

On April 27, 2022, the Company TSX Venture Exchange approved the Company's Option to Earn-in Agreement with Rio Tinto America Inc.

On May 17, 2022, Rio Tinto approved the Stage 1 Work Program and provided \$4,000 to the Company for the development of the Mason Valley projects, which has been completed as of December 31, 2022. The remaining funds of the \$4,000 will be spent per agreement with Rio Tinto in 2023 for Stage 2. (Note 6).

Subsequent to December 31, 2022, the Company reached an agreement with Rio Tinto on the scope of the Stage 2 Program of Work. As a result, the Company received \$7,500, comprising of \$5,000 for Stage 2 work and \$2,500 as an immediate advance on part of the Stage 3 financing.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 5. INVESTMENT IN ASSOCIATE

On April 5, 2022, the Company received 16,049,444 shares in Falcon Butte Minerals Corp. (formerly 1301666 BC Ltd., "Falcon Butte"), which is a private British Columbia company established to acquire mineral resource properties, in connection with a property acquisition agreement to assign the Company's options to acquire the Butte Valley property (Note 4). At the time of acquisition, the 16,049,444 shares represented 25.54% of shares outstanding, and as at December 31, 2022, the Company's share ownership was reduced to 19.44%. The Company and Falcon Butte have common directors and managerial personnel, as such, management has assessed that the Company has significant influence over Falcon Butte and that the investment should be accounted for using the equity method of accounting.

The opening balance of the investment was determined to be \$1,906 (\$2,374 CAD) which represents the fair value of the shares received. The value of the shares was determined based on Falcon Butte's unit financing that closed concurrently with the property acquisition using Goal Seek analysis to determine the value of the shares. This analysis required various estimates such as volatility which was estimated to be 100%, and discount rate estimated to be 0.02%. The Company's share of net loss for the period from acquisition on April 5, 2022 to December 31, 2022 is \$389. The portion of net loss attributable to the Company was determined based on the percentage of the Company's ownership throughout the period.

On December 8, 2022, the Company transferred 116,071 shares of Falcon Butte to the CEO of the Company, pursuant to amended terms of the CEO's employment agreement. The cost value of the shares associated with the transfer was determined to be \$13 and a gain of \$19 was recorded on the transaction.

Summarized financial information of Falcon Butte and a reconciliation of the carrying amount of the investment in the consolidated financial statements are set out below:

#### Summarized statement of loss

(Expressed in thousands of U.S. Dollars)

|                                         | Period from April 5 to December 31, 2022 |
|-----------------------------------------|------------------------------------------|
| <b>Operating expenses</b>               |                                          |
| General and administrative expenses     | \$ 3,313                                 |
| Total operating expenses                | 3,313                                    |
| Gain on settlement of debt              | (100)                                    |
| Fair value loss on derivative liability | 4                                        |
| Other income                            | (1,093)                                  |
| Foreign exchange (gain)                 | (396)                                    |
| <b>Net loss</b>                         | <b>\$ 1,728</b>                          |

A continuity of the Company's investment in associate is as follows:

|                                  |                 |
|----------------------------------|-----------------|
| <b>Balance December 31, 2021</b> | <b>\$ -</b>     |
| Initial investment               | 1,906           |
| Transfer of shares to the CEO    | (13)            |
| Company's share of net loss      | (389)           |
| <b>Balance December 31, 2022</b> | <b>\$ 1,504</b> |

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 6. RIO TINTO DEPOSIT

On May 15, 2022, the Company received \$4,000 in connection to Stage 1 of the option to Earn-in Agreement with Rio Tinto America Inc (Note 4 (h)). The Company and Rio Tinto America mutually agreed on the Stage 1 program of work and the balance of the deposit will be applied against the Company's Yerington, MacArthur, Wassuk property, and Bear mineral properties as work progresses. On January 5, 2023, the Company announced it had completed the Stage 1 Program of Work pending final approval of expenditures by Rio Tinto.

A continuity of the Company's Rio Tinto deposit is as follows:

|                                                         |           |            |
|---------------------------------------------------------|-----------|------------|
| <b>Balance December 31, 2021</b>                        | <b>\$</b> | <b>-</b>   |
| Proceeds received                                       |           | 4,000      |
| Funds applied to capitalized acquisition costs (Note 4) |           | (150)      |
| Funds applied to exploration expenditures (Note 4)      |           | (3,086)    |
| Funds applied to general operating expenditures         |           | (151)      |
| <b>Balance December 31, 2022</b>                        | <b>\$</b> | <b>613</b> |

### 7. NON-CONTROLLING INTEREST

On December 13, 2022, Quaterra Alaska assigned and transferred all right, title and interest in the Groundhog property, Butte Valley Royalty, 100% of the outstanding membership interest held in Blue Copper LLC, and the interest in the Nieves project to Blue Copper Resources Corp.

As consideration, on the date of transfer of assets to Blue Copper Resources Corp, Quaterra Alaska was issued 57,513,764 common shares of Blue Copper Resources Corp which represented 79.3% of all issued and outstanding shares at December 13, 2022 and December 31, 2022. This transaction was considered a transaction between entities under common control, and thus was recorded at carrying value.

The following table summarizes the balance recognized as NCI during the year ended December 31, 2022:

|                                                                    |           |            |
|--------------------------------------------------------------------|-----------|------------|
| <b>Balance December 31, 2021</b>                                   | <b>\$</b> | <b>-</b>   |
| Preferred stock issued for the Arnold, Snowbird & Montana property |           | 500        |
| Net loss and comprehensive loss attributable to NCI                |           | (112)      |
| <b>Balance December 31, 2022</b>                                   | <b>\$</b> | <b>388</b> |

### 8. DERIVATIVE LIABILITIES

#### *Warrants & Conversion Feature Derivative Liability*

As at December 31, 2021, the Company had certain outstanding share purchase warrants that are exercisable in a currency different from the Company's functional currency. These warrants were classified as derivative liabilities and carried at fair value and revalued at each reporting date. These warrants expired during the twelve months ended December 31, 2022 and thus, the derivative liability attached to these warrants have been reduced to \$nil.

During the year ended December 31, 2022, the Company issued certain share purchase warrants and issued convertible debt with a conversion feature that are both exercisable in a currency different from the Company's functional currency (Note 9). The warrants and the conversion feature were classified as derivative liabilities, carried at fair value and revalued at each reporting date.



## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 8. DERIVATIVE LIABILITIES (continued)

A continuity schedule of the Company's derivative liabilities is as follows:

|                                                                     |           |           |
|---------------------------------------------------------------------|-----------|-----------|
| <b>Balance December 31, 2020</b>                                    | <b>\$</b> | <b>51</b> |
| Fair value change on derivative liabilities                         |           | 4         |
| <b>Balance December 31, 2021</b>                                    |           | <b>55</b> |
| Expiry of warrants                                                  |           | (55)      |
| Issuance of Warrants (Note 9)                                       |           | 247       |
| Issuance of convertible debentures with conversion feature (Note 9) |           | 131       |
| Fair value change on derivative liabilities                         |           | (374)     |
| <b>Balance December 31, 2022</b>                                    | <b>\$</b> | <b>4</b>  |

### 9. CONVERTIBLE DEBENTURES

On June 17, 2022, the Company closed the first tranche of its non-brokered private placement of unsecured convertible debentures for gross proceeds of \$1,075 (Note 12). The debentures bear interest at a rate of 14% per annum and mature on February 17, 2024 and are convertible into shares of the Company at \$0.067 (\$0.085 CAD) per share until June 17, 2023 and thereafter at \$0.078 (\$0.10 CAD) per share. The holder also has the option to elect at any time prior to the election date to be repaid by way of shares the Company owns of Falcon Butte (Note 5) at the rate of \$0.25 per Falcon Butte share.

In conjunction with the first tranche of the convertible debt financing, the Company issued 16,044,774 warrants. The warrants are exercisable into one common share of the Company at \$0.067 (\$0.085 CAD) per share and expire on February 17, 2024.

The convertible debentures were determined to be a financial instrument comprising a host debt component, a conversion feature classified as a derivative liability, and freestanding warrants classified as a derivative liability. The warrants and conversion features were determined to be derivative liabilities because the exercise prices are denominated in both the functional currency of the Company and a foreign currency. Thus, the instrument fails to meet the criterion of an equity instrument that states that the instrument must be indexed to its own stock.

On initial recognition, the warrants and the conversion feature were fair valued, with the proceeds first allocated to the freestanding warrants, then the conversion feature. The residual proceeds are then allocated to the host debt component with an effective interest rate of 27.90%. Regarding the warrant and conversion feature, the volatility input was calibrated such that the conversion feature, warrants, and host debt component, on issuance date, equates proceeds. The fair values of the freestanding warrants and conversion features were calculated to be \$143 and \$77, respectively, and the fair value allocated to the host debt component was \$855.

On July 8, 2022, the company closed the second tranche of its non-brokered private placement of unsecured convertible debentures for gross proceeds of \$925 (Note 12). The debentures bear interest at a rate of 14% per annum and mature on March 8, 2024 and are convertible into shares of the Company at \$0.067 (\$0.085 CAD) per share until July 8, 2023 and thereafter at \$0.078 (\$0.10 CAD) per share. The holder also has the option to elect at any time prior to the election date to be repaid by way of shares the Company owns of Falcon Butte (Note 5) at the rate of \$0.25 per Falcon Butte share.

In conjunction with the second tranche of the convertible debt financing, the Company issued 13,805,964 warrants. The warrants are exercisable into one common share of the Company at \$0.067 (\$0.085 CAD) per share and expire on March 8, 2024.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 9. CONVERTIBLE DEBENTURES (continued)

The convertible debentures were determined to be a financial instrument comprising a host debt component, a conversion feature classified as a derivative liability, and freestanding warrants classified as a derivative liability. On initial recognition, the warrants and the conversion feature were fair valued, with the proceeds first allocated to the freestanding warrants, then the conversion feature. The residual proceeds are then allocated to the host debt component with an effective interest rate of 14%-27.46%. Regarding the warrant and conversion feature, the volatility input was calibrated such that the conversion feature, warrants, and host debt component, on issuance date, equates proceeds. The fair values of the freestanding warrants and conversion features were calculated to be \$104 and \$54, respectively, and the residual value allocated to the host debt component was \$767.

The fair value of the warrants were determined using the Black-Scholes Option Pricing Model using the assumptions set out as follows:

|                         | At initial recognition |
|-------------------------|------------------------|
| Risk-free interest rate | 3.20% - 3.26%          |
| Expected volatility     | 10%                    |
| Dividend yield          | 0%                     |
| Expected life           | 1.36 - 1.67 years      |

The fair value of the conversion feature was determined using the Black-Scholes Option Pricing Model using the assumptions set out as follows:

|                         | At initial recognition |
|-------------------------|------------------------|
| Risk-free interest rate | 3.20% - 3.84%          |
| Expected volatility     | 10%                    |
| Dividend yield          | 0%                     |
| Expected life           | 1.36 - 1.67 years      |

A continuity schedule of the Company's convertible debt is as follows:

|                                        |           |              |
|----------------------------------------|-----------|--------------|
| <b>Balance as at January 1, 2022</b>   | <b>\$</b> | <b>-</b>     |
| Issued                                 |           | 2,000        |
| Fair value of conversion feature       |           | (131)        |
| Fair value of warrants                 |           | (247)        |
| Accretion                              |           | 108          |
| Interest                               |           | 144          |
| <b>Balance as at December 31, 2022</b> | <b>\$</b> | <b>1,874</b> |

### 10. SIMPLE AGREEMENT FOR FUTURE EQUITY

During the year ended December 31, 2022, Blue Copper Resources Corp. raised \$198 with a valuation cap of \$1,450 and \$569 with a valuation cap of \$4,120, respectively, by entering into Simple Agreement for Future Equity Notes ("SAFE Note") with several parties. The valuation cap provides the basis for the price at which the SAFE notes are converted into common stock of BCRC. The SAFE Notes resulted in cash proceeds to the Company in exchange for the right to stock of the Company, or cash at a future date in the occurrence of certain events, as follows:

If there is an equity financing before the expiration or termination of the instrument, the Company will automatically issue to the investor, a number of shares of common stock equal to the purchase amount divided by the conversion price. The conversion price is equal to the price per share equal to the Valuation Cap divided by the Company capitalization immediately prior to the transaction.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 10. SIMPLE AGREEMENT FOR FUTURE EQUITY (continued)

If there is a liquidity event before the expiration or termination of the instrument, the investor will, at its option, either (i) receive a cash payment equal to the purchase amount, or (ii) automatically receive from the Company a number of shares of common stock equal to the purchase amount divided by the liquidity price, if the investor fails to select the cash option.

If there is a dissolution event before the instrument expires or terminates, the Company will pay an amount equal to the purchase amount, due and payable to the investor immediately prior to, or concurrent with, the consummation of the dissolution event.

The SAFE notes were classified as liabilities pursuant to ASC 480 as certain redemptions are based upon the occurrence of certain events that are outside of the control of the Company, and were measured at fair value at each reporting period, with changes in fair value recorded within the Consolidated Statements of Operations.

A continuity of the Company's SAFE notes are as follows:

|                                            |           |              |
|--------------------------------------------|-----------|--------------|
| <b>Balance as at January 1, 2022</b>       | <b>\$</b> | <b>-</b>     |
| Issued                                     |           | 767          |
| Loss on change in fair value of SAFE notes |           | 364          |
| <b>Balance as at December 31, 2022</b>     | <b>\$</b> | <b>1,131</b> |

### 11. SHARE CAPITAL

The Company is authorized to issue an unlimited number of common shares without par value.

*Share transactions for the year ended December 31, 2022*

- On February 17, 2022, as part of the Blue Copper Prospect transaction, the Company issued 1,500,000 common shares with a fair value of \$119 as part of the closing of the transaction (Note 4(g)).
- On March 17, 2022, the Company issued 8,000,000 common shares with a fair value of \$506 as part of the option agreement with Houston Minerals Ltd. to acquire a 100% interest in the Chaco, and the Ashton Properties (Note 4(f)).
- On April 25, 2022, the Company issued 800,000 common shares with a fair value of \$56 to settle debt in the amount of \$62 (CAD\$80) and recognized a gain on the settlement of \$6.
- On June 29, 2022, the Company issued 2,000,000 common shares in connection with warrants exercised for proceeds of \$100 (Note 12).
- On July 5, 2022, the Company issued 1,212,121 common shares with a fair value of \$75 to settle outstanding debt of \$77 and recognized a gain on the settlement of \$2.
- On July, 28, 2022, the Company issued 1,333,333 common shares, with a fair value of \$93 in relation to the release of 1,333,333 restricted share units.
- On August 23, 2022, the Company issued 915,910 common shares with a fair value of \$49 to settle outstanding debt of \$61 and recognized a gain on the settlement of \$12.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### 11. SHARE CAPITAL (continued)

#### *Share transactions for the year ended December 31, 2021*

- a) On September 13, 2021, the Company closed the first tranche of a non-broker Private Placement for gross proceeds of \$1,566. The Company issued 26,105,833 units (each, a "Unit") of the Company at a price of \$0.06 per Unit.

Each Unit of the Private Placement is comprised of one common share (a "Common Share") and one common share purchase warrant (a "Warrant"). Each Warrant entitles the holder thereof to purchase one additional Common Share of the Company at a price of \$0.10 per Common Share within a period of three years from the date of closing. The Warrants contain a forced exercise provision if the daily volume weighted average trading price of the Common Shares of the Company on the TSX Venture Exchange is equal to or greater than \$0.30 for a period of ten consecutive trading days.

In connection with the completion of the first tranche of the Private Placement, the Company paid a total of \$23 and issued 382,900 finder's warrants as finder's fees. The finder's warrants will be exercisable at \$0.10 per share for a period of 3 years from the date of closing.

- b) On September 27, 2021, the Company closed the second tranche of a non-brokered private placement for gross proceeds of \$772. The Company issued 12,863,669 units of the Company at a price of \$0.06 per Unit.

In connection with the completion of the second tranche of the Private Placement, the Company paid a total of \$17 and issued 289,240 finder's warrants as finder's fees to PI Financial Corp. and Haywood Securities Inc. The finder's warrants will be exercisable at \$0.10 per share for a period of 3 years from the date of closing.

- c) On October 21, 2021, the Company closed the third and final tranche of its oversubscribed Private Placement. The Company issued 29,832,834 Units at a price of \$0.06 per Unit for gross proceeds of \$1,790. Combined with the first and second tranches, the Company raised an aggregate of \$4,128 in the Private Placement.

In connection with the completion of the third tranche of the Private Placement, the Company paid a total of \$110 and issued an aggregate of 1,839,798 finder's warrants as finder's fees. The finder's warrants are exercisable at a price of \$0.10 per share for a period of 3 years from the date of closing.

- d) On October 14, 2021, the Company agreed to settle outstanding debt of \$27 with Manex Resource Group Inc. ("Manex") a former related party by issuing 403,665 common shares of the Company at a market price of CAD\$0.0825 per share. The amount of indebtedness represents an outstanding account for services provided to the Company. The transaction was approved by the TSXV.
- e) During the year ended December 31, 2021, the Company issued 5,885,000 common shares in connection with options and warrants exercised for proceeds of \$323.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 12. ADDITIONAL PAID-IN CAPITAL

#### a) Stock options

The Company has a stock option plan under which the Company is authorized to grant stock options of up to 10% of the number of common shares issued and outstanding of the Company at any given time.

Stock option activity during the year ended December 31, 2022 is summarized below:

- i. On May 25, 2022, the Company granted 9,000,000 stock options with an exercise price of \$0.085 CAD and an expiry date of May 25, 2027 which vested immediately upon grant.
- ii. On August 18, 2022, the Company granted 2,394,283 stock options with an exercise price of \$0.072 CAD and an expiry date of August 18, 2025 which vested immediately upon grant.

The continuity of the number of stock options issued and outstanding as of December 31, 2022, and December 31, 2021 is as follows:

|                                 | As at December 31, 2022 |                                       | As at December 31, 2021 |                                       |
|---------------------------------|-------------------------|---------------------------------------|-------------------------|---------------------------------------|
|                                 | Number of options       | Weighted average exercise price (CAD) | Number of options       | Weighted average exercise price (CAD) |
| Outstanding, beginning of year  | 19,915,000              | 0.12                                  | 14,690,000              | 0.08                                  |
| Granted                         | 11,394,283              | 0.08                                  | 12,900,000              | 0.16                                  |
| Expired                         | (1,695,000)             | 0.10                                  | (275,000)               | 0.65                                  |
| Cancelled                       | -                       | -                                     | (2,515,000)             | 0.15                                  |
| Exercised                       | -                       | -                                     | (4,885,000)             | 0.07                                  |
| <b>Outstanding, end of year</b> | <b>29,614,283</b>       | <b>0.11</b>                           | <b>19,915,000</b>       | <b>0.12</b>                           |

As of December 31, 2022, and December 31, 2021, the number of stock options outstanding and exercisable were:

| Expiry date                           | Exercise price (CAD) | Number of options outstanding | Remaining contractual life in years | Number of options exercisable |
|---------------------------------------|----------------------|-------------------------------|-------------------------------------|-------------------------------|
| September 20, 2023                    | 0.06                 | 1,470,000                     | 0.72                                | 1,470,000                     |
| June 21, 2024                         | 0.07                 | 1,900,000                     | 1.47                                | 1,900,000                     |
| August 8, 2024                        | 0.06                 | 500,000                       | 1.61                                | 500,000                       |
| June 20, 2025                         | 0.08                 | 2,450,000                     | 2.47                                | 2,450,000                     |
| August 18, 2025                       | 0.072                | 2,394,283                     | 2.63                                | 2,394,283                     |
| June 18, 2026                         | 0.25                 | 3,950,000                     | 3.47                                | 3,950,000                     |
| September 17, 2026                    | 0.11                 | 4,500,000                     | 3.72                                | 4,500,000                     |
| October 21, 2026                      | 0.09                 | 2,700,000                     | 3.81                                | 2,700,000                     |
| December 12, 2026                     | 0.12                 | 750,000                       | 3.95                                | 750,000                       |
| May 25, 2027                          | 0.085                | 9,000,000                     | 4.40                                | 9,000,000                     |
| <b>Outstanding, December 31, 2022</b> |                      | <b>29,614,283</b>             |                                     | <b>29,614,283</b>             |

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 12. ADDITIONAL PAID-IN CAPITAL (continued)

| Expiry date                           | Exercise price<br>(CAD) | Number of<br>options<br>outstanding | Remaining<br>contractual life<br>in years | Number of<br>options<br>exercisable |
|---------------------------------------|-------------------------|-------------------------------------|-------------------------------------------|-------------------------------------|
| June 23, 2022                         | 0.10                    | 1,695,000                           | 0.48                                      | 1,695,000                           |
| September 20, 2023                    | 0.06                    | 1,470,000                           | 1.72                                      | 1,470,000                           |
| June 21, 2024                         | 0.07                    | 1,900,000                           | 2.47                                      | 1,900,000                           |
| August 8, 2024                        | 0.06                    | 500,000                             | 2.61                                      | 500,000                             |
| June 20, 2025                         | 0.08                    | 2,450,000                           | 3.47                                      | 2,450,000                           |
| June 18, 2026                         | 0.25                    | 3,950,000                           | 4.47                                      | 1,975,000                           |
| September 17, 2026                    | 0.11                    | 4,500,000                           | 4.72                                      | 2,250,000                           |
| October 21, 2026                      | 0.09                    | 2,700,000                           | 4.81                                      | 675,000                             |
| December 12, 2026                     | 0.12                    | 750,000                             | 4.95                                      | 187,500                             |
| <b>Outstanding, December 31, 2021</b> |                         | <b>19,915,000</b>                   |                                           | <b>13,102,500</b>                   |

During the year ended December 31, 2022, an amount of \$918 (2021 - \$1,077) was expensed as share-based payments related to the vesting of options. The portion of share-based payments recorded is based on the vesting schedule of the options. The following weighted average assumptions were applied using the Black-Scholes Option Pricing model used to estimate the weighted average fair value of stock options granted during the years ended December 31, 2022, and 2021:

|                         | Year ended December<br>31, 2022 | Year ended December<br>31, 2021 |
|-------------------------|---------------------------------|---------------------------------|
| Risk-free interest rate | 2.58% - 3.28%                   | 0.97% - 1.33%                   |
| Expected life (years)   | 3 - 5                           | 5                               |
| Annualized volatility   | 147% - 150%                     | 101% - 107%                     |
| Forfeiture rate         | 0%                              | 0%                              |
| Dividend yield          | 0%                              | 0%                              |

#### b) Share purchase warrants

Warrant activity during the year ended December 31, 2022, is summarized below:

- On June 17, 2022, the Company granted 16,044,774 warrants with an exercise price of \$0.067 (\$0.085 CAD) and an expiry date of February 17, 2024 pursuant to the grant of \$1,075 in convertible debt (Note 9).
- On June 29, 2022, the Company issued 2,000,000 common shares in connection with the exercise of warrants with an exercise price of \$0.05 for proceeds of \$100 (Note 13).
- On July 8, 2022, the Company granted 11,940,293 warrants with an exercise price of \$0.067 (\$0.085 CAD) and an expiry date of March 8, 2024 pursuant to the grant of \$800 in convertible debt (Note 9).
- On October 28, 2022, the Company granted 1,865,671 warrants with an exercise price of \$0.067 (\$0.085 CAD) and an expiry date of March 8, 2024 pursuant to the grant of \$125 in convertible debt (Note 9).

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 12. ADDITIONAL PAID-IN CAPITAL (continued)

The continuity of the number of share purchase warrants outstanding as of December 31, 2022, and December 31, 2021, is as follows:

|                                       | December 31, 2022  |                                 | December 31, 2021  |                                 |
|---------------------------------------|--------------------|---------------------------------|--------------------|---------------------------------|
|                                       | Number of warrants | Weighted average exercise price | Number of warrants | Weighted average exercise price |
| <b>Outstanding, beginning of year</b> | <b>83,083,504</b>  | <b>\$ 0.09</b>                  | 12,769,230         | \$ 0.05                         |
| Issued                                | 29,850,738         | 0.067                           | 71,314,274         | 0.10                            |
| Exercised                             | (2,000,000)        | 0.05                            | (1,000,000)        | 0.05                            |
| Expired                               | (9,769,230)        | 0.05                            | -                  | -                               |
| <b>Outstanding, end of year</b>       | <b>101,165,012</b> | <b>\$ 0.09</b>                  | 83,083,504         | \$ 0.09                         |

The following table summarizes warrants outstanding as of December 31, 2022, and December 31, 2021:

| Expiry date                               | Currency | Exercise price | December 31, 2022  | December 31, 2021 |
|-------------------------------------------|----------|----------------|--------------------|-------------------|
| August 28, 2022                           | USD      | 0.05           | -                  | 11,000,000        |
| September 20, 2022                        | CAD      | 0.065          | -                  | 769,230           |
| September 13, 2024                        | USD      | 0.10           | 26,488,733         | 26,488,733        |
| September 27, 2024                        | USD      | 0.10           | 13,152,909         | 13,152,909        |
| October 21, 2024                          | USD      | 0.10           | 31,672,632         | 31,672,632        |
| February 17, 2024                         | USD      | 0.067          | 16,044,774         | -                 |
| March 8, 2024                             | USD      | 0.067          | 13,805,964         | -                 |
| <b>Outstanding at the end of the year</b> |          |                | <b>101,165,012</b> | 83,083,504        |

#### c) Restricted share units

At the 2022 Annual General Meeting, the Company's stockholders approved issuance of common shares from treasury pursuant to the Company's Amended 2021 Restricted Share Unit Plan (the "RSU Plan") and reserved 30,330,661 shares for issuance under the RSU Plan. Under the RSU Plan, if the Company divests its interests, including the option to purchase, absent a merger, sale or similar transaction in a) one of either the Chaco Bear or Ashton projects, then 50% of the total RSUs that have not vested will be cancelled, or b) both the Chaco Bear or Ashton projects, then 100% of the total RSUs that have not vested will be cancelled.

Restricted share units ("RSU") activity during the year ended December 31, 2022, is summarized below:

- On June 3, 2022, the Company issued 8,000,000 RSUs to the CEO and the President/CFO of the Company. 33.33% of the RSUs vested on June 3, 2022, 33.33% vest on the first anniversary and 33% vest on the second anniversary (Note 13).
- On June 3, 2022, 1,333,333 RSUs were released. The RSUs were converted into shares on July 28, 2022 (Note 13).
- On June 3, 2022, 1,333,333 RSUs were cancelled (Note 13).

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 12. ADDITIONAL PAID-IN CAPITAL (continued)

During the year ended December 31, 2022, an amount of \$255 (2021 - \$Nil) was expensed as share-based payments related to the grant of RSU's.

The continuity of the number of RSUs issued and outstanding as of December 31, 2022, and December 31, 2021 is as follows:

|                                         | Number of<br>RSUs |
|-----------------------------------------|-------------------|
| Outstanding at December 31, 2021        | -                 |
| Granted                                 | 8,000,000         |
| Released                                | (1,333,333)       |
| Cancelled                               | (1,333,333)       |
| <b>Outstanding at December 31, 2022</b> | <b>5,333,334</b>  |

### 13. RELATED PARTY TRANSACTIONS

The Company's related parties include its directors and officers whose remuneration was as follows, subject to change of control provisions for officers:

|                                   | For the years ended December 31 |                 |
|-----------------------------------|---------------------------------|-----------------|
|                                   | 2022                            | 2021            |
| Salaries                          | \$ 504                          | \$ 491          |
| Directors' fees                   | 13                              | 6               |
| Share-based payments              | 904                             | 504             |
| Interest on convertible debenture | 53                              | -               |
|                                   | <b>\$ 1,474</b>                 | <b>\$ 1,001</b> |

- a) On January 26, 2022, the Company entered into a property acquisition agreement to assign its options to acquire the Butte Valley property to Falcon Butte, which is a private British Columbia company established to acquire mineral resource properties. Directors and officers of Falcon Butte are also directors and officers of Lion CG and as such the transaction is a non-arm's length transaction under TSXV rules.

On April 5, 2022, the Company completed the assignment of the two option agreements for the Butte Valley property. Pursuant to the assignment agreement, Lion CG received 16,049,444 common shares of Falcon Butte (Note 5). In addition, the Company received a payment of \$500 from Falcon Butte, as a reimbursement of exploration expenditures and related costs incurred by the Company on the Butte Valley Property. The Company recorded a gain of \$2,207 on the sale of the Butte Valley property (Note 4(e)).

On April 13, 2022, the Company amended the agreement. Pursuant to the addendum Falcon Butte will pay a total of \$500 in exchange for a 0.5% buy-down and retirement of certain NSRs. As of December 31, 2022, the Company has received \$500 (Note 4(e)).



## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### 13. RELATED PARTY TRANSACTIONS (continued)

- b) As per their agreements with the Company, the CEO and President/CFO are entitled to receive an annual grant of options under the Stock Option Plan of the Company on each Annual Review Date. The number of options will be determined by the Board based on a minimum of 50% and maximum of 150% of the annual base compensation. The exercise price per common share of the Company will be equal to the Market Price (as defined in the TSXV policies) of the Company's common shares as at the Annual Review Date, subject to a minimum exercise price per share of CAD\$0.05. The applicable percentage on the annual base salary will be determined by the Board based on an assessment of the performance of the CEO and President/CFO in achieving the Annual Objectives for the relevant Annual Review Period. On May 25, 2022, the CEO and President/CFO were issued a combined 3,300,000 bonus options with an exercise price of \$0.085 and an expiry date of May 25, 2027 (Note 12(a)). The CFO was granted 1,470,000 stock options and the CEO was granted 1,830,000 stock options.
- c) On June 29, 2022, a director of the Company exercised 2,000,000 warrants with an exercise price of \$0.05 per share for gross proceeds of \$100 (Note 11,12 (b)).
- d) As per their agreements with the Company, the CEO and President/ CFO were each granted 4 million RSUs on October 21, 2021, which were granted subject to vesting in three equal installments over three years. The grant of RSUs is subject to stockholder approval and further subject to Exchange approval of the RSU Plan and the aforementioned grant thereunder. Pursuant to Exchange policies, RSUs granted prior to stockholder approval of the RSU Plan must be specifically approved by a vote of stockholders excluding the votes of the holders of the Restricted Share Units. The Company's stockholders approved the grant of 4 million RSUs to both the CEO and President/ CFO at the AGM on May 18, 2022 and the Exchange approved the RSU Plan on June 3, 2022, resulting in 8,000,000 RSUs granted on June 3, 2022 (Note 12 (c)).
- e) On June 2, 2022, 1,333,333 RSUs issued to the President/CFO were cancelled ((Note 12 (c)). All Share-based payments recognized pursuant to these RSUs were reversed upon cancellation.
- f) On June 3, 2022, 1,333,333 RSUs issued to the CEO were released. The RSUs were converted into shares on July 28, 2022.
- g) On November 1, 2022, the Company amended an employment agreement with the CEO of the Company. The CEO will continue to receive remuneration of \$250, however, 52% of the salary will be paid in shares of Falcon Butte. The deemed price will be equal to the greater of \$0.28 per share and the latest cash financing price raised by Falcon Butte. On November 1, 2022, \$32.5 of the annual salary was converted to Falcon Butte shares and on February 1, 2023, \$32.5 will be converted to Falcon Butte shares. The payment terms are applicable for six months beginning November 1, 2022, and these payment terms can be extended on a quarterly basis.

As a result, for the year ended December 31, 2022, the CEO of the Company was paid as follows:

- \$228,333 in cash
- \$21,667 in Falcon Butte shares.

As at December 31, 2022, there was \$10,833 in prepaid expenses to the CEO of the Company relating to wages paid during the year for services subsequent to year end.

- h) During the year ended December 31, 2022, 3,500,000 options were granted to directors of the Company with an exercise price of \$0.067 and expire on May 25, 2027. In addition, 957,713 options were issued to a director of the Company with an exercise price of \$0.055 and expires on August 18, 2025.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 13. RELATED PARTY TRANSACTIONS (continued)

- i) During the year ended December 31, 2022, a director of the Company subscribed for \$250 of unsecured convertible debentures in the first tranche (Note 9). The debentures bear interest at a rate of 14% per annum and mature on February 17, 2024 and are convertible into shares of the Company at \$0.067 (\$0.085 CAD) per share until June 17, 2023, and thereafter at \$0.078 (\$0.10 CAD) per share. As of December 31, 2022, the Company accrued \$19 in interest related to the convertible debentures.
- j) During the year ended December 31, 2022, certain directors and officers of the Company subscribed for \$500 of unsecured convertible debentures in the second tranche (Note 9). The debentures bear interest at a rate of 14% per annum and mature on March 8, 2024 and are convertible into shares of the Company at \$0.067 (\$0.085 CAD) per share until July 8, 2023, and thereafter at \$0.078 (\$0.10 CAD) per share. As of December 31, 2022, the Company accrued \$34 in interest related to the convertible debentures.
- k) Blue Copper Resources Corp. has a mineral property lease agreement with a company owned by the CEO of the Company, to lease a mineral property. The value of the leased property was determined to be \$500 (Note 4(h)).

### 14. SEGMENTED INFORMATION

The Company operates in one reportable operating segment, being mineral exploration. Geographic segment information relating to the Company's mineral properties as at December 31, 2022, and the year ended December 31, 2021 is as follows:

|                    | December 31, 2022 |          |          | December 31, 2021 |          |          |
|--------------------|-------------------|----------|----------|-------------------|----------|----------|
|                    | Canada            | USA      | Total    | Canada            | USA      | Total    |
| Mineral properties | \$ 602            | \$ 7,282 | \$ 7,884 | \$ -              | \$ 6,821 | \$ 6,821 |

### 15. COMMITMENTS

To acquire certain mineral property interests as per Note 4, the Company must make optional acquisition expenditures to satisfy the terms of existing option agreements, failing which the rights to such mineral properties will revert to the property vendors.

### 16. CONTINGENCIES

On July 23, 2021, the Company received notice from the State of Nevada that the State has not approved extensions of three water rights permits purchased by its subsidiary, SPS in 2011. The State also advised that a fourth permit would not be extended after a period of an additional year.

This appeal process is ongoing as discussed in Note 4(a). The latest development in the appeal process is a Remand Order was issued by the District Court Judge on December 6, 2022. The State's response to the Remand Order is not known at this time. Therefore, the impact of the State's decision on the Company's business is not known at this time. If the State's decision is not reversed and the Company does not retain some or all of the subject water rights, the Company will need to acquire sufficient replacement water rights to support its future mining in Mason Valley. Engineering studies to define the amount of water required to support the Company's future mining operations are ongoing.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

### 17. DEFERRED INCOME TAX

A Reconciliation of income tax provision computed at Canadian statutory rates to the reported income tax provision is provided as follows:

|                                                | 2022     | 2021       |
|------------------------------------------------|----------|------------|
| Tax loss for the year                          | (1,928)  | (6,448)    |
| Canadian statutory rate                        | 27%      | 27%        |
| Income tax benefit computed at statutory rates | \$ (520) | \$ (1,741) |
| Adjustment for foreign tax rates               | 313      | 148        |
| Provision to return adjustments and other      | (235)    | -          |
| Share issuance costs                           | -        | (98)       |
| Foreign exchange gains and losses              | 580      | (34)       |
| Permanent difference                           | 324      | 190        |
| Change in valuation allowance                  | (462)    | 1,535      |
| Income tax expense (recovery)                  | \$ -     | \$ -       |

The tax effect of temporary differences that give rise to significant portions of deferred tax assets and deferred tax liabilities as at December 31, 2022 and 2021 respectively are presented below:

|                                                      | 2022     | 2021     |
|------------------------------------------------------|----------|----------|
| Deferred tax assets:                                 |          |          |
| Non-capital loss and net operating loss carryforward | \$ 8,934 | \$ 9,414 |
| Mineral properties                                   | 7,536    | 7,304    |
| Capital losses                                       | 2,117    | 2,313    |
| Financing and other                                  | 56       | 77       |
| SAFE notes                                           | 76       | -        |
| Total gross deferred tax assets                      | 18,719   | 19,108   |
| Less: valuation allowance                            | (18,646) | (19,108) |
| Net deferred tax assets                              | 73       | -        |
| Deferred tax liabilities:                            |          |          |
| Convertible debentures                               | (73)     | -        |
| Total deferred tax liabilities                       | (73)     | -        |
| Deferred tax assets and liabilities                  | -        | -        |

The Company's unused tax losses expire as follows:

|             | Canada    | US        |
|-------------|-----------|-----------|
| 2026        | \$ 508    | \$ -      |
| 2027 - 2042 | 21,413    | -         |
| 2034 - 2037 | -         | 11,779    |
| Indefinite  | -         | 2,579     |
|             | \$ 21,921 | \$ 14,358 |

The Company's unused capital losses of \$15,680 are available to carry forward indefinitely.

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **18. FINANCIAL INSTRUMENT RISKS**

The board of directors has overall responsibility for establishing and oversight of the Company's risk management framework. The Company examines the various financial instrument risks to which it is exposed and assesses the impact and likelihood of those risks. Financial instruments consist of cash, accounts payable, Rio Tinto deposit, SAFE notes, convertible debentures, derivative liability conversion feature and derivative liability warrants.

Financial instruments recorded at fair value on the consolidated statements of financial position are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The three levels of the fair value hierarchy are:

- Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 - Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 - Inputs that are not based on observable market data.

The Company's activities expose it to financial risks of varying degrees of significance, which could affect its ability to achieve its strategic objectives for growth and stockholder returns. The principal financial risks to which the Company is exposed are, liquidity risk, currency risk, interest rate risk, credit risk and commodity price risk. The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework and reviews the Company's policies on an ongoing basis.

The carrying values of cash, accounts payable, and Rio Tinto deposit approximate their fair values because of their immediate or short term to maturity and the Company's convertible debentures are recorded at amortized cost.

The Company's derivative liabilities is measured at its fair value at the end of each reporting period and is categorized as Level 2 in the fair value hierarchy.

The SAFE notes are classified as liabilities pursuant to ASC 480 and were measured at fair value at each reporting period, with changes in fair value recorded within the Consolidated Statements of Operations and are categorized as Level 3 in the fair value hierarchy.

#### **a) Liquidity risk**

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company manages liquidity risk through the management of its capital structure. To mitigate this risk, the Company has a planning and budgeting process in place to determine the funds required to support its ongoing operations and capital expenditures. The Company ensures that sufficient funds are raised from equity offerings or debt financings to meet its operating requirements, after considering existing cash and expected exercise of stock options and share purchase warrants. See Note 1 for further discussion.

#### **b) Currency risk**

Foreign exchange risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company operates in the United States and Canada; therefore, it is exposed to currency risk from transactions denominated in CAD. Currently, the Company does not have any foreign exchange hedge programs and manages its operational CAD requirements through spot purchases in the foreign exchange markets. Based on CAD financial assets and liabilities' magnitude, the Company does not have material sensitivity to CAD to USD exchange rates.

## Lion Copper and Gold Corp.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### 18. FINANCIAL INSTRUMENT RISKS (continued)

#### c) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company is exposed to the interest rate risk on its liabilities through its outstanding borrowings and the interest earned on cash balances. The Company monitors its exposure to interest rates and maintains an investment policy that focuses primarily on the preservation of capital and liquidity.

#### d) Credit risk

Credit risk is the risk of a financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Company is exposed to credit risk through its cash and cash equivalents. Cash and cash equivalents are held in large Canadian financial institutions that have high credit ratings assigned by international credit rating agencies.

### 19. SUBSEQUENT EVENTS

- I. On January 13, 2023, the Company received \$7,500 from Rio Tinto, comprising of \$5,000 for stage 2 work and \$2,500 as an immediate advance on part of the stage 3 financing.
- II. On March 2, 2023, the Company granted 350,000 stock options with an exercise price of \$0.095 CAD and an expiry date of March 2, 2028.
- III. On March 2, 2023, the Company closed a private placement of unsecured convertible debentures for gross proceeds of \$1,306. The debentures bear interest at a rate of 14% per annum, mature on November 2, 2024, and are convertible into shares of the Company at \$0.07 (\$0.095 CAD) per share up to January 2, 2024 and thereafter at \$0.074 (\$0.10 CAD) per share. The holder also has the option to elect at any time prior to the election date to be repaid by way of shares the Company owns of Falcon Butte at the rate of \$0.28 per Falcon Butte share.

In connection with the sale of the Debentures, the Company also issued 18,461,015 common share purchase warrants to the purchasers. Each Warrant entitles the holder to acquire a common share of the Company at a price of \$0.07 (\$0.095 CAD) until November 2, 2024.

- IV. As at December 31, 2022, the Company had satisfied all obligations of the Wassuk property, allowing the Company to exercise their right to acquire 100% interest in the property. On January 14, 2023, the Company exercised this right, and transfer of claims are expected to occur in April 2023.
- V. On March 2, 2023, BCRC completed a financing of \$2,000 by way of a private placement and issued 23,809,524 units at a price of \$0.084 per share. Each unit consists of one common share, and one common share purchase warrant exercisable at \$0.15 for a period of 1 year.

At December 31, 2022, BCRC had received \$767.5 in SAFE Notes, and an additional \$100 subsequent to the year. The private placement described above was considered a triggering event as described in Note 10, and the face value of SAFE Notes of \$867.5 were converted into common shares of BCRC resulting in 21,629,386 common shares being issued.

As a result, Lion CG's ownership in BCRC was reduced to 48.8% as of March 2, 2023.

## **Lion Copper and Gold Corp.**

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

(In thousands of U.S. Dollars except for shares and per share amounts)

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### **19. SUBSEQUENT EVENTS (continued)**

- VI. On March 11, 2023, the agreement between Blue Copper LLC and Snowshoe Creek LLC was amended to include an extension term, that after the lease term of 20 years, Blue Copper LLC has the ability to extend the term in 12-month increments upon providing written notice no later than 180 days prior to the expiration of the current term.
- VII. Pursuant to an option agreement for the Chaco Bear and Ashton property, the Company is required to pay \$100 in maintenance fees by January 31, 2023. The Company has defaulted on these terms as at January 31, 2023 and has a ninety day period to remedy the default. As of the date of these financial statements, the Company has not paid the maintenance fees.



**Lion Copper and Gold Corp.**

*(Formerly Quaterra Resources Inc.)*

**Management's Discussion and Analysis**  
**For the year ended December 31, 2022**

Dated: March 20, 2023

(In U.S. dollars)

## General

This Management's Discussion and Analysis ("MD&A") of Lion Copper and Gold Corp. and its wholly owned subsidiaries (collectively, "Lion CG" or the "Company"), dated March 20, 2023, should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2022 and 2021, and related notes thereto which have been prepared in accordance with accounting principles generally accepted in the United States ("US GAAP"). All dollar amounts in this MD&A are United States dollars unless otherwise noted.

Additional information about the Company, including the Company's press releases, quarterly and annual reports, and Form 10-K, is available through the Company's filings with the securities regulatory authorities in Canada at [www.sedar.com](http://www.sedar.com) or the United States Securities Exchange Commission at [www.sec.gov/edgar](http://www.sec.gov/edgar). Information about mineral resources, as well as risks associated with investing in the Company's securities is contained in the Company's most recently filed 10-K.

Under U.S. federal securities laws, issuers must assess their foreign private issuer status as of the last business day of their second fiscal quarter. It was announced that more than 50% of the Company's common shares are held by U.S. shareholders, and the Company no longer meets the definition of a foreign private issuer under the United States securities laws. As a result, commencing in 2023, the Company is required to use forms and rules prescribed for U.S. domestic companies, including the requirement that financial statements be presented in accordance with US GAAP instead of International Financial Reporting Standards ("IFRS"). The Company's common shares will continue to be listed on the TSX Venture Exchange and quoted on the OTCQB.

Herbert E. Welhener, an employee of Independent Mining Consultants, Inc., is a Qualified Person under National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101"), and has approved the scientific and technical information in this MD&A.

## Company Profile

Lion Copper and Gold Corp. is a Canadian-based Company advancing its flagship copper projects at Yerington, Nevada through an Option to Earn-in Agreement with Rio Tinto.

The Company also looks for opportunities to acquire projects on reasonable terms that have the potential to host large mineral deposits attractive to major mining companies. The Company is incorporated in British Columbia, Canada. Its registered and records offices are located at 1200 - 750 West Pender Street, Vancouver, British Columbia, Canada, V6C 2T8.

On November 22, 2021, the Company changed its name from Quaterra Resources Inc. to Lion Copper and Gold Corp. The shares of the Company commenced trading under the new name at the open of trading on November 23, 2021. The Company's common shares are listed on the TSX Venture Exchange ("TSXV") under the symbol "LEO" and traded on the OTCQB Market under the symbol "LCGMF".

The Company prepares its consolidated financial statements on a going concern basis, which contemplates that the Company will be able to meet its commitments, continue operations and realize its assets and discharge its liabilities in the normal course of business for at least twelve months from December 31, 2022. The Company has incurred ongoing losses and expects to incur further losses in the advancement of its business activities. For the year ended December 31, 2022 and 2021, the Company incurred a net loss of \$1,928,000 (2021 - \$6,448,000). As at December 31, 2022, the Company had cash of \$1,365,000 (2021 - \$842,000), working capital deficit of \$556,000 (2021 - deficit of \$522,000) and an accumulated deficit of \$121,834,000 (2021 - \$120,018,000).



The Company continues to incur losses, has limited financial resources, and has no current source of revenue or cash flow generated from operating activities. To address its financing requirements, the Company plans to seek financing through, but not limited to, debt financing, equity financing and strategic alliances. However, there is no assurance that such financing will be available. If adequate financing is not available or cannot be obtained on a timely basis, the Company may be required to delay, reduce the scope of or eliminate one or more of its exploration programs or relinquish some or all of its rights under the existing option and acquisition agreements. The above factors give rise to material uncertainties that may cast substantial doubt on the Company's ability to continue as a going concern.

If the going concern assumptions were not appropriate for these consolidated financial statements, then adjustments would be necessary to the carrying values of assets, liabilities, the reported expenses, and the consolidated balance sheet classifications used. Such adjustments could be material.

## Mineral Properties

The following table summarizes the balance of exploration and evaluation assets as at December 31, 2022 and December 31, 2021 and the changes in exploration and evaluation assets for the years then ended.

|                                          | Singatse Peak Services |           |       |        | Lion CG                   | Quaterra Alaska | Blue Copper Resources Corp |           |             |       |
|------------------------------------------|------------------------|-----------|-------|--------|---------------------------|-----------------|----------------------------|-----------|-------------|-------|
|                                          |                        |           |       |        | Chaco<br>Bear &<br>Ashton | Butte<br>Valley | Blue<br>Copper             |           |             |       |
| (In thousands of U.S dollars)            | MacArthur              | Yerington | Bear  | Wassuk |                           |                 |                            | Groundhog | Blue Copper | Total |
|                                          | \$                     | \$        | \$    | \$     | \$                        | \$              | \$                         | \$        | \$          | \$    |
| Balance December 31, 2020                | 2,489                  | 1,195     | 1,339 | 1,155  | -                         | 100             | -                          | -         | -           | 6,278 |
| Acquisition costs                        | -                      | -         | 193   | 250    | -                         | 100             | -                          | -         | -           | 543   |
| Total additions (disposals) for the year | -                      | -         | 193   | 250    | -                         | 100             | -                          | -         | -           | 543   |
| Balance December 31, 2021                | 2,489                  | 1,195     | 1,532 | 1,405  | -                         | 200             | -                          | -         | -           | 6,821 |
| Acquisition costs                        | -                      | -         | 193   | -      | 602                       | -               | 118                        | -         | 500         | 1,413 |
| Assignment of Butte Valley               | -                      | -         | -     | -      | -                         | (200)           | -                          | -         | -           | (200) |
| Transfer to BCRC                         | -                      | -         | -     | -      | -                         | -               | (118)                      | -         | 118         | -     |
| Paid by Rio Tinto                        | -                      | -         | (150) | -      | -                         | -               | -                          | -         | -           | (150) |
| Total additions (disposals) for the year | -                      | -         | 43    | -      | 602                       | (200)           | -                          | -         | 618         | 1,063 |
| Balance December 31, 2022                | 2,489                  | 1,195     | 1,575 | 1,405  | 602                       | -               | -                          | -         | 618         | 7,884 |

During the year ended December 31, 2022, the balance of mineral properties increased by \$1,063,000. The increase is mainly due to the Company making property acquisition payments pursuant to property option agreements on the Chaco Bear and Ashton property, and the Arnold, Snowbird & Montana property. In addition, the Company transferred its 100% interest in the Blue Copper Project in Montana and its 90% interest in the Groundhog property in Alaska to Blue Copper Resources Corp., an entity in which the Company holds 79% ownership of, which also holds a leased interest in the Arnold, Snowbird & Montana property. Additions were offset when the Company entered into a property acquisition agreement to sell and assign its options in the Butte Valley property to Falcon Butte Minerals Corp. (formerly 1301666 B.C. Ltd "Falcon Butte."), as a result the Company derecognized the property value of \$200,000.

Total exploration expenditures recorded on the consolidated statement of operations are listed in the tables below:

*Exploration expenditures incurred for the year ended December 31, 2022*

|                                               | Singatse Peak Services |                |          |             | Lion CG             |           | Quaterra Alaska | Blue Copper Resources Corp |            |             |                |
|-----------------------------------------------|------------------------|----------------|----------|-------------|---------------------|-----------|-----------------|----------------------------|------------|-------------|----------------|
| (In thousands of U.S dollars)                 | MacArthur              | Yerington      | Bear     | Wassuk      | Chaco Bear & Ashton | Groundhog | Butte Valley    | Blue Copper                | Groundhog  | Blue Copper | Total          |
|                                               | \$                     | \$             | \$       | \$          | \$                  | \$        | \$              | \$                         | \$         | \$          | \$             |
| Property maintenance                          | 167                    | 64             | -        | 55          | -                   | -         | 2               | 161                        | 107        | 41          | 597            |
| Assay & Labs                                  | 86                     | 33             | -        | -           | -                   | -         | -               | -                          | -          | -           | 119            |
| Drilling                                      | 478                    | 437            | -        | -           | -                   | -         | -               | -                          | -          | -           | 915            |
| Environmental                                 | 292                    | 489            | -        | -           | -                   | -         | -               | 11                         | -          | -           | 792            |
| Geological & mapping                          | 1                      | -              | -        | -           | 18                  | -         | -               | 25                         | -          | -           | 44             |
| Geophysical surveys                           | 61                     | 1              | 5        | -           | -                   | -         | 11              | 59                         | -          | 35          | 172            |
| Technical study                               | 341                    | 411            | -        | -           | -                   | -         | -               | -                          | -          | -           | 752            |
| Field support                                 | 635                    | 16             | -        | -           | -                   | 44        | 10              | 56                         | -          | 150         | 911            |
| <b>Total expenses incurred</b>                | <b>2,061</b>           | <b>1,451</b>   | <b>5</b> | <b>55</b>   | <b>18</b>           | <b>44</b> | <b>23</b>       | <b>312</b>                 | <b>107</b> | <b>226</b>  | <b>4,302</b>   |
| <b>Total Expenditures funded by Rio Tinto</b> | <b>(1,637)</b>         | <b>(1,394)</b> | <b>-</b> | <b>(55)</b> | <b>-</b>            | <b>-</b>  | <b>-</b>        | <b>-</b>                   | <b>-</b>   | <b>-</b>    | <b>(3,086)</b> |
| <b>Total Expenditures funded by Lion CG</b>   | <b>424</b>             | <b>57</b>      | <b>5</b> | <b>-</b>    | <b>18</b>           | <b>44</b> | <b>23</b>       | <b>312</b>                 | <b>107</b> | <b>226</b>  | <b>1,216</b>   |

*Exploration expenditures incurred for the year ended December 31, 2021*

|                               | Chaco Bear & |           |      |        |        |           |              |             |       |
|-------------------------------|--------------|-----------|------|--------|--------|-----------|--------------|-------------|-------|
| (In thousands of U.S dollars) | MacArthur    | Yerington | Bear | Wassuk | Ashton | Groundhog | Butte Valley | Blue Copper | Total |
|                               | \$           | \$        | \$   | \$     | \$     | \$        | \$           | \$          | \$    |
| Property maintenance          | 159          | 69        | -    | 55     | -      | 98        | 147          | 401         | 929   |
| Assay & Labs                  | 231          | -         | -    | -      | -      | -         | -            | -           | 231   |
| Drilling                      | 892          | -         | -    | 47     | -      | -         | 500          | -           | 1,439 |
| Environmental                 | 43           | 142       | -    | -      | -      | -         | -            | -           | 185   |
| Geological & mapping          | 22           | -         | -    | -      | 160    | -         | -            | 16          | 198   |
| Geophysical surveys           | 20           | -         | 63   | -      | -      | -         | 47           | 15          | 145   |
| Technical study               | 276          | 11        | -    | -      | -      | 1         | -            | -           | 288   |
| Field support                 | 46           | 5         | -    | 3      | -      | 67        | 59           | 47          | 227   |
| Total expenses incurred       | 1,689        | 227       | 63   | 105    | 160    | 166       | 753          | 479         | 3,642 |

On March 18, 2022, the Company entered into an Option to Earn-in Agreement with Rio Tinto America Inc. ("Rio Tinto") to advance studies and exploration at the Company's copper assets in Mason Valley, Nevada, see Option to Earn-in Agreement with Rio Tinto below for further details. In connection with Stage 1 of the agreement, the Company received \$4,000,000 for an exclusive earn-in option and agreed-upon Mason Valley study and evaluation works. During the year ended December 31, 2022, the Company incurred expenditures of \$3,387,000 in connection with the work program. The funds incurred in connection with this work program were offset against additions to mineral properties and general expenditures as follows:

|                                                            |            |
|------------------------------------------------------------|------------|
| (In thousands of U.S dollars)                              |            |
| <b>Balance December 31, 2021</b>                           | <b>-</b>   |
| Proceeds received                                          | 4,000      |
| Funds applied to capitalized mineral property expenditures | (150)      |
| Funds applied to exploration expenditures:                 |            |
| Property maintenance                                       | (287)      |
| Assay & labs                                               | (66)       |
| Drilling                                                   | (915)      |
| Environmental                                              | (692)      |
| Geological & mapping                                       | (1)        |
| Technical study                                            | (495)      |
| Field support & other                                      | (630)      |
| Funds applied to general operating expenditures            | (151)      |
| <b>Balance December 31, 2022</b>                           | <b>613</b> |

On February 24, 2022, the Company filed a technical report titled "Mineral Resource Estimate" for its MacArthur Project, which can be found on the SEDAR website at [www.sedar.com](http://www.sedar.com) and on the Company's website. Refer to Mineral Resource Estimate below for a summary of the report.

#### **MacArthur Copper Project and Yerington Mine Property, Nevada**

Located in the historic copper district of Yerington, Nevada, the Company's Yerington Copper Projects include the MacArthur Copper Project and Yerington Mine Property, which are 100% owned by Singatse Peak Services LLC, a wholly-owned subsidiary of Lion CG.

The MacArthur Property consists of 897 unpatented lode claims totaling approximately 18,500 acres on lands administered by the U.S. Department of Interior - Bureau of Land Management (BLM).

Lion CG has a National Instrument 43-101 compliant resource.

The MacArthur Project is subject to a 2% net smelter return royalty (the "NSR") upon commencing commercial production, which can be reduced to a 1% NSR in consideration of \$1,000,000.

The Yerington Mine Property covers approximately 11 square miles centered on the former Anaconda open pit copper mine. This includes 2,768 acres of fee simple parcels and patented mining claims as well as 208 unpatented lode and placer claims totaling approximately 4,300 acres on lands administered by the BLM.

Lion CG has a National Instrument 43-101 compliant resource for the Yerington Mine Property and believes that the project has potential for additional copper resources. Historic and current drilling data indicate that horizontal and vertical limits to the mineralization at the Yerington Mine Property have not yet been found.

The Yerington Mine Property is subject to a 2% NSR upon commencing commercial production. The total lifetime royalty is capped at \$7,500,000.

## **Bear Deposit, Nevada**

The Bear deposit consists of approximately 2,300 acres of private land located to the northeast of the Yerington Mine Property.

The Company has five option agreements, entered from March 2013 to May 2015, to acquire a 100% interest in private land in Yerington, Nevada, collectively known as the Bear deposit. Under the terms of these option agreements, as amended, the Company is required to make \$5,673,290 in cash payments over 15 years (\$5,222,290 paid) to maintain the exclusive right to purchase the land, mineral rights, and certain water rights and to conduct mineral exploration on these properties. Two of the properties are subject to a 2% NSR upon commencing commercial production, which can be reduced to a 1% NSR in consideration of \$1,250,000 total.

Outstanding payments to keep the five option agreements current are as follows, by year:

- \$193,000 due 2022 (\$193,000 paid);
- \$201,000 due in 2023;
- \$50,000 due in years 2024 to 2028.

Outstanding purchase payments under the five option agreements are as follows:

- \$1,250,000 for Taylor, purchase option expiring April 4, 2023. The Company is in the process of negotiating an extension;
- \$250,000 for Chisum, purchase option has no expiration date, \$50,000 per year payment required for continuation;
- \$5,000,000 for Yerington Mining, purchase option expiring in 2024;
- \$8,975,000 for Circle Bar N, purchase option expiring in 2024;
- \$22,770,000 for Desert Pearl Farms, purchase option expiring in 2029.

## **Wassuk, Nevada**

The Wassuk property consists of 310 unpatented lode claims totaling approximately 6,400 acres on lands administered by the BLM.

On December 19, 2007, the Company entered into a Mining Lease with Option to Purchase, as further amended, to earn a 100% interest in certain unpatented mining claims in Lyon County, Nevada, and was required to make \$1,405,000 in cash payments (paid) and incur a work commitment of \$50,000 by December 31, 2021 (completed). During 2021, two final option payments were paid and form part of the total payments of \$1,405,000. As at December 31, 2021, the Company had satisfied all conditions required to execute the option to purchase and on January 14, 2023, the option was executed.

The property is subject to a 3% NSR royalty upon commencing commercial production, which can be reduced to a 2% NSR in consideration of \$1,500,000.

## **Groundhog Project, Alaska**

On April 20, 2017, the Company signed an agreement (the "Agreement") with Chuchuna Minerals Company, an Alaska corporation, giving it an option to purchase a 90% interest in the Groundhog copper prospect, a 40,000-acre property located on an established copper porphyry belt, two hundred miles southwest of Anchorage, Alaska.

The Groundhog claims cover the northern extension of a structural zone that hosts a number of porphyry copper-gold prospects. To earn the 90% interest, the Company must fund a total of \$5,000,000 (\$2,839,475 funded) of exploration expenditures and make a lump sum payment to Chuchuna of \$3,000,000 by the end of April 20, 2024. During the year ended December 31, 2021, the lease agreement was further extended from six to seven years, providing the Company more time to make the required exploration expenditures and lump sum payment. The Company can terminate the Agreement at its discretion.

The property is subject to a 1.75% NSR upon commencing commercial production, which can be reduced to a 0.875% NSR royalty in consideration of \$25,000,000.

On December 13, 2022, the Groundhog property was transferred from Quaterra Alaska to Blue Copper Resources Corp.

### **Butte Valley Prospect, Nevada**

On January 26, 2022, the Company entered into a property acquisition agreement to sell and assign its options to acquire the Butte Valley property to Falcon Butte Minerals Corp. (formerly 1301666 B.C. Ltd., or "Falcon Butte") which is a private British Columbia company established to acquire mineral resource properties.

Pursuant to the agreement, Lion CG's 100% owned subsidiary Quaterra Alaska will be granted an equity position in Falcon Butte. In addition, Quaterra Alaska will maintain a 1.5% NSR on each of the Butte Valley optioned properties, which is subject to a buy-down to a 1.0% NSR in exchange for a payment of \$7,500,000 per property.

On April 5, 2022, the Company completed the assignment of the two option agreements for the Butte Valley Property.

On April 13, 2022, the Company amended the assignment agreement. Pursuant to the addendum Falcon Butte was to pay a total of \$500,000 in exchange for a 0.5% buy-down and retirement of certain NSRs held by the Company. During the year ended December 31, 2022, the full consideration of \$500,000 was received.

On December 13, 2022, the Butte Valley Royalty rights were transferred from Quaterra Alaska to Blue Copper Resources Corp.

### **Chaco Bear and Ashton Properties, British Columbia**

On August 25, 2021, the Company entered into a non-binding letter of intent (the "LOI") with Houston Minerals Ltd. ("Houston") setting forth the terms of an option whereby the Company may acquire a 100% interest in the Chaco Bear Property located directly east of the Golden Triangle of British Columbia, and the Ashton Property located near Lytton, British Columbia (Collectively, the "Properties").

Under the terms of the LOI, the Company and Houston propose to enter into a definitive agreement whereby the Company can earn up to a 100% interest in the Properties by making the following share issuances and cash payments over a four-year period:

- issuing 8,000,000 common shares of the Company on closing (issued on March 17, 2022);
- making annual lease payments on the Properties after 2021;
- incurring CAD\$150,000 of exploration expenditures on the Chaco Bear Property and CAD\$50,000 of exploration expenditures on the Ashton Property before the end of 2021 (paid);
- incurring exploration expenditures of at least the value of the annual assessment multiplied by 1.5 for periods after 2021 (claims were renewed and extended through to early 2025, resulting in no obligation on exploration expenditures until 2024);
- paying CAD\$1,500,000 for the Chaco Bear Property and CAD\$1,000,000 for the Ashton Property on or before 4 years from the closing, which amounts are payable in cash or common shares of the Company; and
- making annual advance royalty payments in the fourth and fifth year from the closing in the amounts of CAD\$250,000 on the Chaco Bear Property and CAD\$150,000 on the Ashton Property.

On September 17, 2021, the parties agreed to an amendment to the LOI to include a 2.5% NSR on each property. Prior to feasibility, the Company may reduce the NSR to 1.0% on the Chaco Bear Property in consideration for a payment of CAD\$6,000,000 and 1.0% on the Ashton Property for a payment of CAD\$3,000,000. Post feasibility, the Company may purchase the remaining 1.0% NSR on the Chaco Bear Property for CAD\$12,000,000 and the remaining 1.0% NSR on the Ashton Property for CAD\$6,000,000.

On January 26, 2022, the Company entered into an option agreement with Houston to replace the LOI. The consideration terms under the LOI are unchanged except that the term of the option has changed from a four-year period to a ten-year period and annual advance royalty payments in the amounts of CAD\$250,000 on the Chaco Bear Property and CAD\$150,000 on the Ashton Property are to be paid starting on the fifth year from closing through to the ninth year from closing instead of only in the fourth and fifth years from the closing. All other consideration terms remain unchanged.

In addition, commencing on January 31, 2022, and on January 31 of each year thereafter during the Option Period, Lion CG shall pay the following option maintenance fees to Houston: (a) CAD\$60,000 in respect of the Chaco Bear Property; and (b) CAD\$40,000 in respect of the Ashton Property.

Lion CG funded an initial work program in 2021 of CAD\$200 on the properties in consideration for the grant of the option, and on March 16, 2022, the transaction was closed. The Company may exercise the Option for a period of up to ten years to acquire (i) the Chaco Bear property by paying CAD\$1,500,000 to Houston, in cash or in common shares of the Company at the Company's option; and/or (ii) the Ashton Property by paying CAD\$1,000,000 to Houston in cash or in common shares of the Company at the Company's option, and in either case common shares will be valued using the volume weighted average trading price of the Company's common shares for the twenty trading day period ending three trading days prior to the date of issuance of such Lion CG shares, with such cash payments being subject to a discount of between 5% and 15% based on the timing of exercise and cumulative exploration expenditures incurred as at the time of exercise. Houston will retain a 2.5% net smelter returns royalty on any of the Properties for which an Option has been exercised by the Company.

### **Blue Copper Prospect, Montana**

During the year ended as of December 31, 2021, Blue Copper LLC acquired and staked a district scale exploration and resource discovery opportunity (the "Blue Copper Prospect"), comprising more than 7,430 acres in Powell County and Lewis & Clark County in Montana, USA. The area is prospective for high grade copper-gold skarns and porphyry copper-gold mineralization.

The Blue Copper Prospect, located approximately 25 miles WNW of Helena, Montana, is centered on the Late Cretaceous Blackfoot City Stock (the "BCS"), which was intruded into the Black Mountain syncline, composed primarily of a Paleozoic sequence of limestone, dolomite, shale and sandstone. The BCS crystallized at the same time as the nearby Boulder batholith, which is host to the world-famous Butte copper mines.

The claim block encompasses a group of more than 14 historic small mines that produced high grade gold, copper and tungsten. Importantly, the streams draining the BCS have a recorded production of almost 200,000 ounces of placer gold through 1959, although the actual production was most likely much higher. Despite the extensive placer production, only one lode gold mine operated historically and produced less than 10,000 ounces. Several major companies conducted exploration programs in the area during the late 1980s and early 1990s. The Company is currently acquiring, compiling and interpreting historic and recent field mapping, sampling and lab data to develop a 2022 work plan which will be provided when available.

As a part of the Blue Copper Prospect, Blue Copper LLC entered into a purchase agreement with Four O Six Mining & Exploration LLC to acquire certain existing and additional unpatented mining claims. In exchange for the unpatented mining claims, as part of the closing of the transaction, the Company issued 1,500,000 common shares of the capital of the Company and provided a NSR of 2% with a buy-down of 1% NSR for \$1,500,000.

Blue Copper LLC has staked an additional 131 claims to expand the Blue Copper Prospect. The Company has provided a NSR of 2% with a buy-down of 1% NSR for \$600,000 to Four O Six Mining & Exploration LLC for these claims.

On February 14, 2022, as a part of the Blue Copper Prospect transaction, the Company issued 1,500,000 common shares as part of the closing of the transaction.

On December 13, 2022, Quaterra Alaska's interest in Blue Copper LLC was transferred to Blue Copper Resources Corp.

On October 28, 2022, Blue Copper LLC entered into a mining lease agreement with Snowshoe Creek LLC ("Snowshoe"), a Montana limited liability company owned by the CEO of the of the Company. Pursuant to the Agreement, Snowshoe will lease the property, including the patented mining claims on the Arnold, Snowbird and Montana, to Blue Copper LLC for a term of 20 years and extendable on the sole decision of Blue Copper LLC.

As consideration, 15,000,000 preferred stock in Blue Copper Resources Corp. was issued to the CEO of the Company. The transaction was measured using the fair value of the asset received as the cost was more clearly evident. The fair value of the asset received was calculated using the original cost incurred to acquire the property and was determined to be \$500,000.

### **Option to Earn-in Agreement with Rio Tinto**

On March 18, 2022, the Company entered into an Option to Earn-in Agreement with Rio Tinto to advance studies and exploration at Lion CG's copper assets in Mason Valley, Nevada. Under the agreement, Rio Tinto has the option to earn a 65% interest in the assets, comprising 34,494 acres of land, including the historic Yerington mine, greenfield MacArthur Project, Wassuk property, the Bear deposit, and associated water rights (the "Mining Assets"). In addition, Rio Tinto will evaluate the potential commercial deployment of its Nuton™ technologies at the site. Nuton™ offers copper heap leaching technologies developed by Rio Tinto to deliver greater copper recovery from mined ore and access new sources of copper such as low-grade sulphide resources and reprocessing of stockpiles and mineralized waste. The technologies have the potential to deliver leading environmental performance through more efficient water usage, lower carbon emission, and the ability to reclaim mine sites by reprocessing waste.

The stages of the Agreement are set out below.

#### **Stage 1**

Rio Tinto will pay up to four million U.S. dollars (\$4,000,000) for an exclusive earn-in option and agreed-upon Mason Valley study and evaluation works to be completed by Lion CG no later than December 31, 2022.

#### **Stage 2**

Within forty-five (45) days of the completion of Stage 1, Rio Tinto will provide notice to Lion CG whether Rio Tinto elects to proceed with Stage 2 (notice provided), upon which Rio Tinto will pay up to five million U.S. dollars (\$5,000,000) for agreed-upon Mason Valley study and evaluation works to be completed by Lion CG within 12 months from the date that the parties agree upon the scope of Stage 2 work (\$7,500,000 paid January 13, 2023, representing \$5,000,000 for Stage 2 and an advance of \$2,500,000 for Stage 3).

Stages 1 and 2 may be accelerated at Rio Tinto's option.

#### **Stage 3 - Feasibility Study**

Within sixty (60) days of the completion of Stage 2, Rio Tinto shall provide notice to Lion CG whether Rio Tinto will exercise its Option and fund a Feasibility Study based on the results of the Stage 1 and Stage 2 work programs. Rio Tinto will fully-fund the Feasibility Study and ancillary work completed by Lion CG in amount not to exceed fifty million U.S. dollars (\$50,000,000).

#### **Investment Decision**

Upon completion of the Feasibility Study, Rio Tinto and Lion CG will decide whether to create an investment vehicle into which the Mining Assets will be transferred, with Rio Tinto holding not less than a 65% interest in the investment vehicle.

- If Rio Tinto elects to not to create the investment vehicle, then Lion CG shall grant to Rio Tinto a 1.5% NSR on the Mining Assets.
- If Rio Tinto elects to create the investment vehicle but Lion CG elects not to create the investment vehicle, then, at Rio Tinto's option, Lion CG shall create the investment vehicle and Rio Tinto will purchase Lion CG's interest in the investment vehicle for fair market value.

#### **Project Financing**

- Following the formation of the investment vehicle, any project financing costs incurred will be funded by Rio Tinto and Lion CG in proportion to their respective ownership interest in the investment vehicle.
- Rio Tinto may elect to fund up to sixty million U.S. dollars (\$60,000,000) of Lion CG 's project financing costs in exchange for a 10% increase in Rio Tinto's ownership percentage. In addition, upon mutual agreement of Rio Tinto and Lion CG, Rio Tinto may fund an additional forty million U.S. dollars (\$40,000,000) of Lion CG's project financing costs in exchange for an additional 5% increase in Rio Tinto's ownership percentage.

- If Lion CG's ownership percentage in the investment vehicle is diluted to 10% or less, then Lion CG's ownership interest will be converted into a 1% uncapped NSR.

On April 27, 2022, the Company TSX Venture Exchange approved the Company's Option to Earn-in Agreement with Rio Tinto America Inc.

On May 15, 2022, Rio Tinto approved the Stage 1 Work Program and provided \$4,000,000 to the Company for the development of the Mason Valley projects, which has been completed as of December 31, 2022. The remaining funds of the \$4,000,000 will be spent per agreement with Rio Tinto in 2023 for Stage 2.

Subsequent to December 31, 2022, the Company reached an agreement with Rio Tinto on the scope of the Stage 2 Program of Work. As a result, the Company received \$7,500,000, comprising of \$5,000,000 for Stage 2 work and \$2,500,000 as an immediate advance on part of the Stage 3 financing.

## **Performance Highlights**

### **• Mason Valley Stage 1 Work Program**

In May 2022, the Company commenced on the Stage 1 Work Program which included the following scopes and ran through to the end of 2022:

- Project Permitting and Baseline Studies
  - o Pre-Application Pre-Plan of Operations submitted to agencies
  - o MacArthur Exploration Plan of Operations Update
  - o Water Resources studies (surface and groundwater)
  - o Wildlife Baseline
  - o Risk and Opportunity Register
  - o Draft Stakeholder Engagement Plan / strategy development
  - o Permitting Plan / strategy development
  - o Agency kickoff meeting
- Metallurgical Testing of MacArthur and Yerington Samples
  - o Column testing for MacArthur oxide ores was substantially completed
  - o The Rio Tinto Bundoora and Bingham laboratories have tested MacArthur sulphide, Yerington sulphide and Yerington S23 materials.
- Engineering Studies
  - o Yerington Pit Dewatering Evaluation
  - o Yerington Starter Facility Infrastructure Evaluation
  - o Update of MacArthur 2022 Internal Scoping Study to include Nuton™ technology
  - o Concept Study for the Yerington Project to include Nuton™ technology
- Exploration
  - o As communicated in the news release dated August 22, 2022, exploration drilling objectives included evaluation of the mineralized potential beneath the legacy Yerington pit, the Montana-Yerington prospect located between the Ann Mason project and the Yerington pit, and verification work around the MacArthur Project. Additionally, an expansion of this year's exploration scope allowed the Company to initiate surface trenching at the Mason Pass oxide copper prospect.
  - o Yerington Pit: One core drill hole, YM-046, totaling 1,792.5 feet, was drilled beneath the Yerington pit to test for additional sulphide mineralization below the known resource (NI 43-101 Technical Report, Yerington Copper Project, January 3, 2014). The drill hole was located on the central portion of the southern pit rim, angled northeasterly to prospect beneath the pit. This drill hole identified both oxide (374 ft of 0.12% TCu) and sulphide (1,222 ft of 0.13% TCu, including 75 ft of 0.23% TCu) mineralization. A portion of the sulphide mineralization is located beneath the known resource.



- o Montana-Yerington Prospect: One core drill hole, MY-001, totaling 668 feet, was drilled at the Montana-Yerington prospect to test for copper oxide and sulphide potential beneath an outcropping phyllic altered leached cap. Additionally, the drill hole tested for the eastern portion of a sulphide vein that was underground mined in the early 1900s. The drill hole was angled northerly to test beneath the leach cap and prospect for the sulphide vein. This drill hole identified two sulphide vein structures associated with the historical underground mining operations. Intercepts include 23.5 ft of 0.49% TCu and 8.5 ft of 1.64% TCu. Additionally, a low-grade sulphide intercept was identified below these veins (114 ft of 0.10% TCu) which may be an eastward continuation of the Ann Mason copper deposit.
- o MacArthur Project: Three core drill holes totaling 2,291 feet were drilled at the MacArthur Project. Two of the drill holes (QM-329 and QM-330) were drilled in the central portion of the resource shell, with each drill hole intersecting oxide and chalcocite mineralization. Significant intercepts include drill hole QM-329 (371 ft of 0.16% TCu, including 76.5 ft of 0.27% TCu) and QM-330 (157 ft of 0.25% TCu, including 58.5 ft of 0.40% TCu). A portion of the QM-330 intercept is below the current resource pit shell. Additionally, QM-329 intersected primary sulphide mineralization (40 ft of 0.17% TCu). QM-331, drilled on the eastern edge of the resource shell, also intersected oxide mineralization (10 ft of 1.06% TCu) and a mixture of chalcocite and chalcopyrite mineralization (16.5 ft of 0.18% TCu).
- o Mason Pass Oxide Copper Prospect: An expansion of the 2022 exploration scope included surface trenching at the Mason Pass oxide copper prospect located approximately 1.5 miles south-southwest of the MacArthur pit. Two trenches totaling 848 linear feet were completed initially, and subsequently expanded to five trenches totaling 1,873 linear feet due to the appearance of visible oxide copper in the first two trenches. The trenches range from 6 to 15 ft in depth and were mapped and channel sampled at ten-foot intervals within each trench, with samples analyzed by ALS Chemex in Reno, Nevada. The Company announced in the December 13, 2022 press release further assay results from the Mason Pass prospect surface trenching program, as previously discussed in the November 10, 2022 press release. The highlights of the exploration at the Mason Pass Oxide Prospect include:
  - o At-surface, ore-grade, copper oxide mineralization has been encountered in recently excavated trenches at Mason Pass, with mineralization remaining open and untested in most directions.
  - o Trench 4 includes 200 ft of 0.28% TCu and 30 ft of 0.22% TCu, and averages 0.14% TCu over the full length of the trench (568 ft).
  - o Trench 1 includes 20 ft of 0.70% TCu and 90 ft of 0.34% TCu, and averages 0.14% TCu over 390 ft (from 50 to 440 ft).
  - o Trench 2 includes 50 ft of 0.20% TCu, and averages 0.08% TCu over 358 ft (from 50 to 408 ft).

The four trenches that reached bedrock all encountered copper oxide mineralization.. The Company is now planning further exploration to evaluate the extent of this mineralization to the west, south, and at depth, as well as testing for potential to the east, beneath the cover of volcanics that postdate the mineralization. The character of the mineralization observed in the trench exposures is similar to that exposed in the MacArthur pit where historic benching exposes copper oxide mineralization primarily in the footwall of the low angle MacArthur fault and ranging from 30 to 250 feet in thickness. On May 12, 2022, the Company initiated the Project environmental permitting process with the U.S. Bureau of Land Management, a first step in formalizing the Company's permitting efforts.

The Company delivered a bulk metallurgical sample to Rio Tinto's Nuton<sup>TM</sup> labs, where comprehensive metallurgical testing and optimization studies are being undertaken on oxide, transitional and sulphide material sourced from both the MacArthur and Yerington deposits.

The Company announced on February 10, 2023 the commencement of its 2023 exploration program as funded by US\$5,000,000 received for Stage 2 Program of Work and a US\$2,500,000 early advance of the Stage 3 Program of Work.

The exploration program is composed of 10,000 ft of core drilling, 9,500 ft of reverse circulation drilling and various soil and rock chip sampling programs.

Primary exploration targets include:

- Bear Deposit
- MacArthur East
- MacArthur Wedge
- Mason Pass Prospect
- Reno Prospect
- Singatse Target

- **MacArthur Copper Project Resource Estimate**

On February 25, 2022, the Company announced the results of an updated mineral resource estimate for the MacArthur Copper Project located in Mason Valley, Nevada. The mineral resource estimate was prepared pursuant to NI 43-101 by Independent Mining Consultants of Tucson, Arizona.

The resource estimate includes total contained copper within a pit shell using a variable recovery of four relevant oxidation material types.

Highlights:

- a) Measured and Indicated Resource: 300,331,000 tons, grading 0.167% TCu containing 1,000,408,000 pounds of total copper.
- b) Inferred Resource: 156,450,000 tons, grading 0.151% TCu containing 471,714,000 pounds of total copper.
- c) The updated mineral resource estimate results in an increase of over 55% of the Measured and Indicated Resource compared to the prior resource estimate as constrained within the 2014 PEA pit design (MacArthur Copper Project Amended NI 43-101 Technical Report Preliminary Economic Assessment, January 17, 2014).
- d) The oxide and transition mineralized envelope of the deposit is confirmed to be open to the south-southeast. Additional sulfide mineralization remains open to the north and east.

- **Mineral Resource Estimate**

The updated Measured and Indicated and Inferred Resources for the MacArthur Copper Project are reported in Table 1 as set out below. The changes to the mineral resource are based on the 2021 infill drill and assay program, updated geology shapes, and updated metallurgical review and analyses.

Table 1: Mineral Resource Estimate

Measured + indicated Resources  
February 25, 2022

| Material Type | Cutoff Grade | Ktons   | Average Grade<br>% TCu | Contained Copper<br>(lbs x 1000) |
|---------------|--------------|---------|------------------------|----------------------------------|
| Leach Cap     | 0.06         | 15,610  | 0.12                   | 37,482                           |
| Oxide         | 0.06         | 226,524 | 0.159                  | 718,692                          |
| Transition    | 0.06         | 43,382  | 0.213                  | 185,049                          |
| Sulphide      | 0.06/0.08    | 14,815  | 0.2                    | 59,185                           |
| Total         |              | 300,331 | 0.167                  | 1,000,408                        |

| Material Type | Cutoff Grade | Ktons   | Average Grade<br>% TCu | Contained Copper<br>(lbs x 1000) |
|---------------|--------------|---------|------------------------|----------------------------------|
| Leach Cap     | 0.06         | 18,579  | 0.085                  | 31,486                           |
| Oxide         | 0.06         | 105,525 | 0.146                  | 309,149                          |
| Transition    | 0.06         | 23,283  | 0.202                  | 94,137                           |
| Sulphide      | 0.06/0.08    | 9,063   | 0.204                  | 36,942                           |
| Total         |              | 156,450 | 0.151                  | 471,714                          |

(%) = percent, TCu = total copper, lbs = pounds, Ktons = short tons x 1000

1. The cutoff grades used for reporting the mineral resources are at or above the internal cutoff grades of between 0.03% and 0.06% TCu for the Leach Cap, Oxide and Transition zones. The sulphide zone internal cutoff grades are 0.06% TCu for the MacArthur and North zones and 0.08% TCu for Gallagher because of a higher acid consumption.
2. Mr. Herbert E. Welhener, MMSA-QPM, an employee of Independent Mining Consultants, Inc. is the Qualified Person for the Mineral Resource estimate.
3. The "reasonable prospects for eventual economic extraction" shape has been created based on a copper price of US\$3.75/lb, employment of heap leach extraction methods, processing costs of US\$1.56 or \$2.20 per short ton, and mining costs of \$1.92/short ton for rock and \$1.46/short ton alluvium, a variable copper recovery, and tonnage factor of 12.5 cubic feet per short ton for in situ rock.
4. Rounding as required by Best Practices established by the CIM reporting guidelines may result in slight apparent differences between tonnes, grade and contained metal content.

#### Cautionary Note to Investors

While the terms "measured (mineral) resource," "indicated (mineral) resource" and "inferred (mineral) resource" are recognized and required by National Instrument 43-101 - Standards of Disclosure for Mineral Projects, investors are cautioned that except for that portion of mineral resources classified as mineral reserves, mineral resources do not have demonstrated economic viability. Investors are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be upgraded into mineral reserves. Additionally, investors are cautioned that inferred mineral resources have a high degree of uncertainty as to their existence, as to whether they can be economically or legally mined or will ever be upgraded to a higher category.

#### • Resource Estimate Methodology

##### Drill Hole Database

The resource estimate was completed using data from 747 drill holes for a total of 299,045 feet drilled. These holes include 23 holes drilled in 2021; 10 as infill holes and 13 holes drilled for metallurgical samples. The total of core drilling is 64,681 ft in 102 holes and the total rotary drilling is 234,360 ft in 636 holes.

##### Geologic Model

The MacArthur Project is an oxidized portion of a porphyry copper system that has been subjected to several weathering, oxidation and enrichment cycles. The copper mineralization is hosted in altered and weathered Middle Jurassic granodiorite and quartz monzonite intruded by west-northwesterly-trending, moderate to steeply north-dipping quartz porphyry dike swarms.

The geology of the deposit has been interpreted on forty-one north-south sections and on thirty-three east-west sections. The deposit was interpreted into four mineral type zones and definition completed as three-dimensional digital models.

Both lithology and oxidization states have been incorporated into the block model based upon geologic domains developed from the drill hole geologic logs. The oxidization zones of leach cap, oxide, transition, and sulphide have been incorporated into the block model and are used as boundaries for the estimation of total copper grades using an inverse distance cubed estimation method. Surfaces of the oxidation zones have been used to create domain boundaries and used to code the assay, composite, and block model. The block model has been created to encompass all of the drill holes available, within 25ft x 25ft x 25ft (vertical) blocks. In plan view, the resource block model covers an area of 14,500 ft in the north-south direction and 18,100 ft in the east-west direction. The block model encompasses three copper mineralization deposits: MacArthur, North Area and Gallagher.

The mineral resource is tabulated within a defined open pit shell based on economic inputs developed from the metallurgical test work and engineering completed on the project to date. The pit shell economics are based on the premise that the Project will employ a heap leach, SX-EW recovery process. The shapes created by open pit optimization software used the following parameters:

- Copper price = US\$3.75/lb
- Leach Cap - recovery of total copper grade = 60%
- Oxide zone - recovery of total copper grade = 71%
- Transition zone - recovery of total copper grade = 65%
- Sulphide zone - recovery of total copper grade = 40%

#### Block Model Validation

The model was validated through comparisons of grades, grade distribution and tonnage-grade curves of the ID grades with the distribution of drill hole composited grades.

- **Water Rights Sale**

On February 24, 2021, the Company announced a purchase and sale agreement to sell certain primary groundwater rights to Desert Pearl Farms LLC ("Desert Pearl"), a Yerington-based company involved in agriculture, for \$2,910,000 (the "Purchase and Sale Agreement"). In early March 2021, the Company filed an application with the State of Nevada Division of Water Resources ("NDWR") to change the manner of use of the water rights from mining to agriculture and their place of use ("Change Application"). The Change Application was subsequently withdrawn on October 17, 2022.

Under the terms of the Purchase and Sale Agreement, Desert Pearl made a \$1,000,000 initial payment to the Company on March 5, 2021. On May 26, 2022, the company announced it had reached an amicable agreement with Desert Pearl Farms to terminate the contract on the sale of the Company's water rights. As a consequence of the termination, the Company will recover the water permit designated for mining and milling use. The \$1,000,000 deposit has been returned to Desert Pearl Farms. This water permit is currently subject to court proceedings and settlement discussions between the Company and the State of Nevada, as discussed in the following paragraph.

On July 23, 2021, the Company received a notice from the State of Nevada that three water rights permits had been forfeited. Further, the application for an extension of time to prevent forfeiture of a fourth certificate was denied. The Company is vigorously appealing the State's decision and hired legal counsel to challenge and reverse the State's decision. As discussed in the previous paragraph, one of the permits affected by the State's letter was subject to the Purchase and Sale Agreement announced on February 24, 2021. On August 20, 2021, the Company filed a Petition for Judicial Review of the Forfeiture Notice and has retained legal counsel to vigorously undertake the appeal process. SPS subsequently filed and was granted a Stay of the Forfeiture Notice on September 15, 2021. SPS filed its Opening Brief on March 28, 2022. The State Engineer filed its Answering Brief on July 8, 2022. SPS filed its Reply Brief on August 25, 2022. A hearing regarding the status of the forfeiture appeal was held in the Third Judicial Court District in Lyon County on November 4, 2022. On December 6, 2022, the Judge remanded the case back to the State for further written findings based on issues raised at the hearing. The Company has not received a response from the State since the Remand Order was issued. Since receipt of the Forfeiture Notice, SPS has been in contact with the State Engineer's office in an attempt to resolve the Forfeiture Notice.

## **Investment in Associate**

On April 5, 2022, the Company received 16,049,444 shares in Falcon Butte Minerals Corp. (formerly 1301666 BC Ltd., "Falcon Butte"), which is a private British Columbia company established to acquire mineral resource properties, in connection with a property acquisition agreement to assign the Company's options to acquire the Butte Valley property. At the time of acquisition, the 16,049,444 shares represented 25.54% of shares outstanding, and as at December 31, 2022, the Company's share ownership was reduced to 19.44%. The Company and Falcon Butte have common directors and managerial personnel, as such, management has assessed that the Company has significant influence over Falcon Butte and that the investment should be accounted for using the equity method of accounting.

The opening balance of the investment was determined to be \$1,906,000 (\$2,374,000 CAD) which represents the fair value of the shares received. The value of the shares was determined based on Falcon Butte's financing that closed concurrently with the property acquisition. The Company's share of net loss for the period from acquisition on April 5, 2022 to December 31, 2022 is \$389,000. The portion of net loss attributable to the Company was determined using the weighted average percentage of voting rights held by the Company throughout the period.

On December 8, 2022, the Company transferred 116,071 shares of Falcon Butte to the CEO of the Company, pursuant to amended terms of the CEO's employment agreement. The cost value of the shares associated with the transfer was determined to be \$13,000 and a gain of \$19,000 was recorded on the transaction.

## **Non-controlling interest**

On December 13, 2022, Quaterra Alaska assigned and transferred all right, title and interest in the Groundhog property, Butte Valley Royalty, 100% of the outstanding membership interest held in Blue Copper LLC, and the interest in the Nieves project to Blue Copper Resources Corp.

As consideration, on the date of transfer of assets to Blue Copper Resources Corp, Quaterra Alaska was issued 57,513,764 common shares of Blue Copper Resources Corp which represented 79.3% of all issued and outstanding shares at December 13, 2022 and December 31, 2022.

## **Simple Agreement for Future Equity**

During the year ended December 31, 2022, Blue Copper Resources Corp. raised \$197,500 with a valuation cap of \$1,450,000 and \$569,000 with a valuation cap of \$4,120,000, respectively, by entering into Simple Agreement for Future Equity Notes ("SAFE Note") with several parties. The valuation cap provides the basis for the price at which the SAFE notes are converted into common stock of BCRC. The SAFE Notes resulted in cash proceeds to the Company in exchange for the right to stock of the Company, or cash at a future date in the occurrence of certain events, as follows:

If there is an equity financing before the expiration or termination of the instrument, the Company will automatically issue to the investor, a number of shares of common stock equal to the purchase amount divided by the conversion price. The conversion price is equal to the price per share equal to the Valuation Cap divided by the Company capitalization immediately prior to the transaction.

If there is a liquidity event before the expiration or termination of the instrument, the investor will, at its option, either (i) receive a cash payment equal to the purchase amount, or (ii) automatically receive from the Company a number of shares of common stock equal to the purchase amount divided by the liquidity price, if the investor fails to select the cash option.

If there is a dissolution event before the instrument expires or terminates, the Company will pay an amount equal to the purchase amount, due and payable to the investor immediately prior to, or concurrent with, the consummation of the dissolution event.

The SAFE notes were classified as liabilities pursuant to ASC 480 as certain redemptions are based upon the occurrence of certain events that are outside of the control of the Company, and were measured at fair value at each reporting period, with changes in fair value recorded within the Consolidated Statements of Operations.

## Proposed Transactions

The Company has no proposed transactions other than as disclosed in this MD&A.

## Results of Operations

The following table summarizes the Company's financial results for the years ended December 31, 2022 and 2021.

| Years ended December 31,<br>(In thousands of U.S dollars) | 2022<br>\$     | 2021<br>\$     | Change<br>\$   | Change<br>% |
|-----------------------------------------------------------|----------------|----------------|----------------|-------------|
| <b>Operating expenses</b>                                 |                |                |                |             |
| Exploration expenditures                                  | 4,302          | 3,642          | 660            | 18          |
| General Office                                            | 140            | 58             | 82             | 143         |
| Interest                                                  | 144            | -              | 144            | 100         |
| Insurance                                                 | 61             | 30             | 31             | 103         |
| Investor Relations                                        | 52             | 206            | (154)          | (75)        |
| Professional fees                                         | 715            | 493            | 222            | 45          |
| Rent                                                      | 14             | 13             | 1              | 8           |
| Rio Tinto deposit                                         | (3,237)        | -              | (3,237)        | (100)       |
| Salaries and benefits                                     | 733            | 938            | (205)          | (22)        |
| Share-based payments                                      | 1,173          | 1,077          | 96             | 9           |
| Transfer agent and regulatory                             | 104            | 108            | (4)            | (4)         |
| Travel                                                    | 54             | 87             | (33)           | (38)        |
| <b>Operating loss</b>                                     | <b>(4,255)</b> | <b>(6,652)</b> | <b>(2,397)</b> |             |
| Fair value gain (loss) on derivative liabilities          | 429            | (4)            | 433            | 10,825      |
| Foreign exchange gain (loss)                              | 13             | 11             | 2              | 18          |
| Gain on settlement of debt                                | 20             | -              | 20             | 100         |
| Gain on transfer of shares                                | 19             | -              | 19             | 100         |
| Accretion expense                                         | (108)          | -              | (108)          | (100)       |
| Gain on sale of Butte Valley                              | 2,207          | -              | 2,207          | 100         |
| NSR buy-down                                              | 500            | -              | 500            | 100         |
| Share of loss in associate                                | (389)          | -              | (389)          | (100)       |
| Interest and other income                                 | -              | 8              | (8)            | (100)       |
| Loss on revaluation of SAFE notes                         | (364)          | -              | (364)          | (100)       |
| Realized gain on marketable securities                    | -              | 189            | (189)          | (100)       |
| <b>Loss and comprehensive loss</b>                        | <b>(1,928)</b> | <b>(6,448)</b> | <b>4,520</b>   |             |

For the year ended December 31, 2022, the Company incurred a net loss of \$1,928,000 compared to a net loss of \$6,448,000 in the prior year. The decrease in net loss of \$4,520,000 is due to a few major transactions including the sale of the Butte Valley property to Falcon Butte whereby the Company received 16,049,444 common shares of Falcon Butte with a fair value of \$1,906,000 and \$500,000 cash for the property, resulting in a gain on sale of \$2,207,000. Pursuant to an addendum to the agreement with Falcon Butte, Falcon Butte was to pay a total of \$500,000 in exchange for a 0.5% buy-down and retirement of certain NSR, which as of December 31, 2022, \$500,000 has been received and included in loss and comprehensive loss for the period. Furthermore, the Company received \$4,000,000 from Rio Tinto for an exclusive earn-in option, of which, the Company incurred \$3,237,000 on agreed-upon Mason Valley study and evaluation works that was completed during the year.

The decrease in net loss is partially offset by the recognition of the Company's share of net loss of its investment in associate for the period of \$389,000 coupled with a revaluation loss on the revaluation of SAFE notes issued during 2022.

Other notable variances within expense items are summarized as follows:

- Increase in share-based payments of \$96,000 due to the issuance of 11,394,283 stock options in the year ended December 31, 2022.
- Increase in professional fees of \$222,000 is primarily due to legal fees incurred in connection with the purchase of the Chaco Bear and Ashton property, sale of the Butte Valley property, issuance of convertible debentures, and option to earn-in agreement with Rio Tinto America Inc. The Company also incurred fees for the valuation of the Butte Valley property and transaction based strategic consulting.
- Decrease in investor relations of \$154,000 due to the Company completed significant equity private placements in the prior year. There was no such equity financings in the current year.
- Interest and accretion expense increased by \$144,000 and \$108,000, respectively. This is due to the Company issuing convertible debentures during the year ended December 31, 2022.

### Summary of Quarterly Financial Information

For the three months ended December 31, 2022, the Company incurred a net loss of \$1,133,000 compared to a net loss of \$910,000 during the three months ended September 30, 2022. The increase in net loss is primarily due to a loss on the revaluation of SAFE notes of \$364,000 issued by Blue Copper Resources Corp., and recognized in the quarter, which was not present in the quarter ended September 30, 2022. This is coupled with an increase in share of loss of investment in associate as a result of greater expenses incurred in the quarter for Falcon Butte. See Performance Highlights for further details.

The following table sets out the quarterly financial information for each of the last eight quarters:

| (In thousands of U.S dollars except for per share amount) | Q4'22          | Q3'22         | Q2'22        | Q1'22          | Q4'21          | Q3'21          | Q2'21          | Q1'21         |
|-----------------------------------------------------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|---------------|
| General administration                                    | (515)          | (1,001)       | (806)        | (868)          | (943)          | (676)          | (1,116)        | (275)         |
| Fair value (loss) gain on derivative liabilities          | 377            | 17            | (2)          | 37             | (31)           | 84             | (38)           | (19)          |
| Foreign exchange gain (loss)                              | (11)           | 12            | (4)          | 16             | (38)           | 31             | 15             | 3             |
| Other Income                                              | -              | -             | -            | -              | -              | 8              | -              | -             |
| Loss on settlement of convertible notes                   | -              | -             | -            | -              | -              | -              | -              | -             |
| Gain on transfer of shares                                | 19             | -             | -            | -              | -              | -              | -              | -             |
| Gain on settlement of debt                                | -              | 14            | 6            | -              | -              | -              | -              | -             |
| Accretion                                                 | (57)           | (47)          | (4)          | -              | -              | -              | -              | -             |
| Gain on sale of Butte Valley                              | -              | -             | 2,207        | -              | -              | -              | -              | -             |
| Loss on revaluation of SAFE notes                         | (364)          | -             | -            | -              | -              | -              | -              | -             |
| NSR buy-down                                              | -              | 250           | 250          | -              | -              | -              | -              | -             |
| Share of loss of investment in associate                  | (316)          | (42)          | (31)         | -              | -              | -              | -              | -             |
| Exploration Expenditures                                  | (1,370)        | (1,002)       | (1,349)      | (581)          | (1,733)        | (1,019)        | (826)          | (64)          |
| Rio Tinto Deposit                                         | 1,104          | 889           | 1,244        | -              | -              | -              | -              | -             |
| Gain (loss) on marketable securities                      | -              | -             | -            | -              | (9)            | (70)           | 397            | (129)         |
| <b>Net loss</b>                                           | <b>(1,133)</b> | <b>(910)</b>  | <b>1,511</b> | <b>(1,396)</b> | <b>(2,754)</b> | <b>(1,642)</b> | <b>(1,568)</b> | <b>(484)</b>  |
| <b>Basic income (loss) per share</b>                      | <b>(0.00)</b>  | <b>(0.00)</b> | <b>0.00</b>  | <b>(0.01)</b>  | <b>(0.01)</b>  | <b>(0.01)</b>  | <b>(0.01)</b>  | <b>(0.00)</b> |

## Liquidity and Capital Resources

The Company is an exploration stage company that has not earned any production revenue. Its operations have been dependent mainly on the option agreement with Rio- Tinto and private placements in the last few years without diluting shareholders' value. The Company may have capital requirements in excess of its currently available resources. In the event the Company's plans change, its assumptions change or prove inaccurate, or its capital resources in addition to projected cash flow, if any, prove to be insufficient to fund operations, the Company may be required to seek additional financing. There can be no assurance that the Company will have sufficient financing to meet its future capital requirements or that additional financing will be available on terms acceptable to the Company in the future.

The following table summarizes the Company's cash flows for the years ended December 31, 2022 and 2021:

| <b>(In thousands of U.S dollars)</b>            | <b>2022</b>     | <b>2021</b>   |
|-------------------------------------------------|-----------------|---------------|
| Cash used in operating activities               | \$ (1,786)      | \$ (5,503)    |
| Cash provided by (used in) investing activities | (554)           | 1,355         |
| Cash provided by financing activities           | 2,863           | 4,289         |
| Increase (decrease) in cash                     | 523             | 141           |
| Cash, beginning of period                       | 842             | 701           |
| <b>Cash, end of period</b>                      | <b>\$ 1,365</b> | <b>\$ 842</b> |

As at December 31, 2022, the Company had cash of \$1,365,000 (December 31, 2021 - \$ 842,000) and working capital deficit of \$556,000 (December 31, 2021 - deficit of \$522,000). The increase in working capital deficit of \$34,000 is primarily due to the issuance of \$767,500 in SAFE notes by Blue Copper Resources Corp., with a fair value of \$1,131,000 at December 31, 2022 which are classified as a current liability. This is partially offset by an increase in cash of \$523,000. The increase in cash is primarily due the \$2,000,000 cash proceeds raise under the Company's private placement of unsecured convertible debentures, the \$767,000 raised on the issuance of SAFE notes, and \$500,000 received pursuant to a NSR buydown. These increases are partially offset by \$613,000 of the Rio Tinto proceeds that have yet to be spent on the work program (Rio Tinto Deposit).

As of December 31, 2022, the Company had convertible debentures with a face value of \$2,000,000 and a carrying value of \$1,874,000. The debentures bear interest at a rate of 14% per annum and mature on February 17, 2024 and March 8, 2024 and are convertible into shares of the Company at \$0.067 (\$0.085 CAD) per share until June 17, 2023 and July 8, 2023, and thereafter at \$0.078 (\$0.10 CAD) per share. The holder also has the option to elect at any time prior to the election date to be repaid by way of shares the Company owns of Falcon Butte at the rate of \$0.25 per Falcon Butte share.

The Company has no operating revenues and therefore must utilize its cashflows from financing transactions to maintain its capacity to meet ongoing operating activities.



## Related Party Information

The Company's related parties include its directors and officers whose remuneration was as follows, subject to change of control provisions for officers:

| (In thousands of U.S dollars)                    | Year ended<br>December 31, 2022 | Year ended<br>December 31, 2021 |
|--------------------------------------------------|---------------------------------|---------------------------------|
| Salaries <sup>(1)</sup>                          | \$ 504                          | \$ 491                          |
| Director's fees <sup>(2)</sup>                   | 13                              | 6                               |
| Share-based payments <sup>(3)</sup>              | 904                             | 504                             |
| Interest on convertible debenture <sup>(4)</sup> | 53                              | -                               |
|                                                  | \$ 1,474                        | \$ 1,001                        |

(1) Charles Travis Naugle, CEO - \$250 (2021 - \$149); Stephen Goodman, President, CFO and Corporate Secretary - \$200 (2021 - \$126); Thomas Patton, Director - \$54 (2021 - \$100), Gerald Prosalendis, former President and CEO - \$Nil (2021 - \$49), Lei Wang, former CFO - \$Nil (2021 - \$51), Lawrence Page, former Corporate Secretary - \$Nil (2021 - \$16).

(2) Thomas Pressello, Director - \$13 (2021 - \$Nil), John Kerr, former director - \$Nil (2021 - \$2), Terence Eyton, former director - \$Nil (2021 - \$4).

(3) Charles Travis Naugle, CEO - \$367 (2021 - \$129); Stephen Goodman, President, CFO and Corporate Secretary - \$251 (2021 - \$129); Thomas Patton, director \$46 (2021 - \$30); Thomas Pressello, director - \$73 (2021 - \$Nil); Tony Alford, director - \$167 (2021 - \$66), Lei Wang, former CFO - \$Nil (2021 - \$30), John Kerr, former director - \$Nil (2021 - \$30), Leroy Wilkes, former director - \$Nil (2021 - \$30), Terence Eyton, former director - \$Nil (2021 - \$30), Lawrence Page, former Corporate Secretary - \$Nil (2021 - \$30).

(4) Charles Travis Naugle, CEO - \$10 (2021 - \$Nil); Tony Alford, director - \$39 (2021 - \$Nil); Ekaterina Naugle, spouse of the CEO - \$2 (2021 - \$Nil); Stephen Goodman, President, CFO and Corporate Secretary \$1 (2021 - Nil); Thomas Pressello, director - \$1 (2021 - \$Nil)

- a) On January 26, 2022, the Company entered into a property acquisition agreement to assign its options to acquire the Butte Valley property to Falcon Butte, which is a private British Columbia company established to acquire mineral resource properties. Falcon Butte was founded by two individuals that are also directors and officers of Lion CG and as such the transaction is a non-arm's length transaction under TSXV rules.

On April 5, 2022, the Company completed the assignment of the two option agreements for the Butte Valley property. Pursuant to the assignment agreement, Lion CG received 16,049,444 common shares of Falcon Butte. In addition, the Company received a payment of \$500,000 from Falcon Butte, as a reimbursement of exploration expenditures and related costs incurred by the Company on the Butte Valley Property. The Company recorded a gain of \$2,207,000 on the sale of the Butte Valley property.

On April 13, 2022, the Company amended the agreement. Pursuant to the addendum Falcon Butte was to pay a total of \$500,000 in exchange for a 0.5% buy-down and retirement of certain NSRs. As of December 31, 2022, the Company has received \$500,000.

- b) As per their agreements with the Company, Charles Travis Naugle, CEO and Stephen Goodman President, CFO are entitled to receive an annual grant of options under the Stock Option Plan of the Company on each Annual Review Date. The number of options will be determined by the Board based on a minimum of 50% and maximum of 150% of the annual base compensation. The exercise price per common share of the Company will be equal to the Market Price (as defined in the TSXV policies) of the Company's common shares as at the Annual Review Date, subject to a minimum exercise price per share of CAD\$0.05. The applicable percentage on the annual base salary will be determined by the Board based on an assessment of their performance in achieving the Annual Objectives for the relevant Annual Review Period. On May 25, 2022, Charles Travis Naugle, CEO was issued 1,830,000 bonus options and Stephen Goodman, President and CFO, was granted 1,470,000 bonus options. The bonus options have an exercise price of \$0.085 and an expiry date of May 25, 2027.
- c) On June 29, 2022, Thomas Patton, a director of the Company., exercised 2,000,000 warrants with an exercise price of \$0.05/ share or gross proceeds of \$100,000.
- d) As per their agreements with the Company, Charles Travis Naugle, CEO and Stephen Goodman President and CFO were each granted 4 million Restricted Stock Units ("RSUs") on October 21, 2021, which were granted subject to vesting in three equal installments over three years. The grant of RSUs is subject to shareholder approval and further subject to Exchange approval of the RSU Plan and the aforementioned grant thereunder. Pursuant to Exchange policies, RSUs granted prior to shareholder approval of the RSU Plan must be specifically approved by a vote of shareholders excluding the votes of the holders of the Restricted Share Units. As a result of these pending approvals, the RSUs cannot commence vesting any earlier than on date of receipt of the same. If at any point the Company divests its interests, including the option to purchase, absent a merger, sale or similar transaction in a) one of either the Chaco Bear or Ashton projects, then 50% of the total RSUs that have not vested will be

cancelled, or b) both the Chaco Bear or Ashton projects, then 100% of the total RSUs that have not vested will be cancelled.

On May 18, 2022, at AGM, Charles Travis Naugle, CEO and Stephen Goodman President and CFO were each granted 4 million RSUs.

- e) On June 2, 2022, 1,333,333 RSUs issued to Stephen Goodman President and CFO were voluntarily cancelled.
- f) On June 3, 2022, 1,333,333 RSU's issued to Charles Travis Naugle, CEO, were released. The RSUs were converted into shares on July 28, 2022.
- g) On November 1, 2022, the Company amended an employment agreement with the CEO of the Company. The CEO will continue to receive remuneration of \$250,000, however, 52% of the salary will be paid in shares of Falcon Butte. The deemed price will be equal to the greater of \$0.28 per share and the latest cash financing price raised by Falcon Butte. On November 1, 2022, \$32.5 of the annual salary was converted to Falcon Butte shares and on February 1, 2023, \$32.5 will be converted to Falcon Butte shares. The payment terms are applicable for six months beginning November 1, 2022, and these payment terms can be extended on a quarterly basis.

As a result, for the year ended December 31, 2022, the CEO of the Company was paid as follows:

- \$228,333 in cash
- \$21,667 in Falcon Butte shares.

As at December 31, 2022, there was \$10,833 in prepaid expenses to the CEO of the Company relating to wages paid during the year for services subsequent to year end.

- h) During the year ended December 31, 2022, 3,500,000 options were granted to directors of the Company with an exercise price of \$0.067 and expire on May 25, 2027. In addition, 957,713 options were issued to a director of the Company with an exercise price of \$0.055 and expires on August 18, 2025.
- i) During the year ended December 31, 2022, Tony Alford, director, subscribed for \$250,000 of unsecured convertible debentures in Tranche 1. The debentures bear interest at a rate of 14% per annum and mature on February 17, 2024 and are convertible into shares of the Company at \$0.067 (\$0.085 CAD) per share until June 17, 2023 and thereafter at \$0.078 (\$0.10 CAD) per share. As of December 31, 2022, the Company accrued \$19,000 in interest related to the convertible debentures.
- j) During the year ended December 31, 2022, Tony Alford (director), Charles Travis Naugle (CEO), Stephen Goodman (CFO), Thomas Pressello (director), and Ekaterina Naugle (spouse of CEO) subscribed for \$300,000, \$147,400, \$15,000, \$10,000, and \$27,600 respectively of unsecured convertible debentures in Tranche 2. The debentures bear interest at a rate of 14% per annum and mature on March 8, 2024 and are convertible into shares of the Company at \$0.067 (\$0.085 CAD) per share until July 8, 2023 and thereafter at \$0.078 (\$0.10 CAD) per share. As of December 31, 2022, the Company accrued \$34,000 in interest related to the convertible debentures.
- k) Blue Copper Resources Corp. has a mineral property lease agreement with a company owned by Charles Travis Naugle, to lease a mineral property. The value of the leased property was determined to be \$500,000.

## Outstanding Share Information at Date of Report

Authorized: Unlimited number of common shares

Number of common shares issued and outstanding as of the date of the MD&A: 309,567,975

Number of stock options outstanding as of the date of the MD&A: 29,964,283

Number of warrants outstanding as of the date of the MD&A: 119,626,027

Number of restricted share units outstanding as of the date of the MD&A: 5,333,334

As of the date of the MD&A, the number of stock options outstanding and exercisable were:

| Expiry date                                    | Exercise price (CAD) | Number of options outstanding | Remaining contractual life in years | Number of options exercisable |
|------------------------------------------------|----------------------|-------------------------------|-------------------------------------|-------------------------------|
| September 20, 2023                             | 0.06                 | 1,470,000                     | 0.47                                | 1,470,000                     |
| June 21, 2024                                  | 0.07                 | 1,900,000                     | 1.23                                | 1,900,000                     |
| August 8, 2024                                 | 0.06                 | 500,000                       | 1.36                                | 500,000                       |
| June 20, 2025                                  | 0.08                 | 2,450,000                     | 2.22                                | 2,450,000                     |
| August 18, 2025                                | 0.072                | 2,394,283                     | 2.39                                | 2,394,283                     |
| June 18, 2026                                  | 0.25                 | 3,950,000                     | 3.22                                | 3,950,000                     |
| September 17, 2026                             | 0.11                 | 4,500,000                     | 3.47                                | 4,500,000                     |
| October 21, 2026                               | 0.09                 | 2,700,000                     | 3.56                                | 2,700,000                     |
| December 12, 2026                              | 0.12                 | 750,000                       | 3.70                                | 750,000                       |
| May 25, 2027                                   | 0.085                | 9,000,000                     | 4.15                                | 9,000,000                     |
| March 2, 2028                                  | 0.095                | 350,000                       | 4.93                                | 350,000                       |
| <b>Outstanding at the date of the MD&amp;A</b> |                      | <b>29,964,283</b>             |                                     | <b>29,964,283</b>             |

As of December 31, 2022 and December 31, 2021 the number of stock options outstanding and exercisable were:

| Expiry date                           | Exercise price (CAD) | Number of options outstanding | Remaining contractual life in years | Number of options exercisable |
|---------------------------------------|----------------------|-------------------------------|-------------------------------------|-------------------------------|
| September 20, 2023                    | 0.06                 | 1,470,000                     | 0.72                                | 1,470,000                     |
| June 21, 2024                         | 0.07                 | 1,900,000                     | 1.47                                | 1,900,000                     |
| August 8, 2024                        | 0.06                 | 500,000                       | 1.61                                | 500,000                       |
| June 20, 2025                         | 0.08                 | 2,450,000                     | 2.47                                | 2,450,000                     |
| August 18, 2025                       | 0.072                | 2,394,283                     | 2.63                                | 2,394,283                     |
| June 18, 2026                         | 0.25                 | 3,950,000                     | 3.47                                | 3,950,000                     |
| September 17, 2026                    | 0.11                 | 4,500,000                     | 3.72                                | 4,500,000                     |
| October 21, 2026                      | 0.09                 | 2,700,000                     | 3.81                                | 2,700,000                     |
| December 12, 2026                     | 0.12                 | 750,000                       | 3.95                                | 750,000                       |
| May 25, 2027                          | 0.085                | 9,000,000                     | 4.40                                | 9,000,000                     |
| <b>Outstanding, December 31, 2022</b> |                      | <b>29,614,283</b>             |                                     | <b>29,614,283</b>             |

| Expiry date                           | Exercise price (CAD) | Number of options outstanding | Remaining contractual life in years | Number of options exercisable |
|---------------------------------------|----------------------|-------------------------------|-------------------------------------|-------------------------------|
| June 23, 2022                         | 0.10                 | 1,695,000                     | 0.48                                | 1,695,000                     |
| September 20, 2023                    | 0.06                 | 1,470,000                     | 1.72                                | 1,470,000                     |
| June 21, 2024                         | 0.07                 | 1,900,000                     | 2.47                                | 1,900,000                     |
| August 8, 2024                        | 0.06                 | 500,000                       | 2.61                                | 500,000                       |
| June 20, 2025                         | 0.08                 | 2,450,000                     | 3.47                                | 2,450,000                     |
| June 18, 2026                         | 0.25                 | 3,950,000                     | 4.47                                | 1,975,000                     |
| September 17, 2026                    | 0.11                 | 4,500,000                     | 4.72                                | 2,250,000                     |
| October 21, 2026                      | 0.09                 | 2,700,000                     | 4.81                                | 675,000                       |
| December 12, 2026                     | 0.12                 | 750,000                       | 4.95                                | 187,500                       |
| <b>Outstanding, December 31, 2021</b> |                      | <b>19,915,000</b>             |                                     | <b>13,102,500</b>             |

The following table summarizes warrants outstanding as of the date of the MD&A, as at December 31, 2022 and December 31, 2021:

| Expiry date        | Currency | Exercise price | Date of MD&A       | December 31, 2022  | December 31, 2021 |
|--------------------|----------|----------------|--------------------|--------------------|-------------------|
| August 28, 2022    | USD      | 0.05           | -                  | -                  | 11,000,000        |
| September 20, 2022 | CAD      | 0.065          | -                  | -                  | 769,230           |
| September 13, 2024 | USD      | 0.10           | 26,488,733         | 26,488,733         | 26,488,733        |
| September 27, 2024 | USD      | 0.10           | 13,152,909         | 13,152,909         | 13,152,909        |
| October 21, 2024   | USD      | 0.10           | 31,672,632         | 31,672,632         | 31,672,632        |
| February 17, 2024  | USD      | 0.067          | 16,044,774         | 16,044,774         | -                 |
| March 8, 2024      | USD      | 0.067          | 13,805,964         | 13,805,964         | -                 |
| November 2, 2024   | USD      | 0.070          | 18,461,015         | -                  | -                 |
| <b>Outstanding</b> |          |                | <b>119,626,027</b> | <b>101,165,012</b> | <b>83,083,504</b> |

The following table summarizes Restricted share units outstanding as of the date of the MD&A, as of December 31, 2022 and December 31, 2021:

|                                                                             | Number of RSUs   |
|-----------------------------------------------------------------------------|------------------|
| Outstanding at December 31, 2021                                            | -                |
| Granted                                                                     | 8,000,000        |
| Released                                                                    | (1,333,333)      |
| Cancelled                                                                   | (1,333,333)      |
| <b>Outstanding at December 31, 2022 and as of the date of this MD&amp;A</b> | <b>5,333,334</b> |

## Risks Factors and Uncertainties

The Company is subject to many risks and uncertainties, each of which could have an adverse effect on the results, business prospects or financial position.

The board of directors has overall responsibility for establishing and oversight of the Company's risk management framework. The Company examines the various financial instrument risks to which it is exposed and assesses the impact and likelihood of those risks. Financial instruments consist of cash, investments, accounts payable, derivative liabilities and convertible debentures.

Financial instruments recorded at fair value on the consolidated balance sheets are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The three levels of the fair value hierarchy are:

- Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 - Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 - Inputs that are not based on observable market data.

The Company's activities expose it to financial risks of varying degrees of significance, which could affect its ability to achieve its strategic objectives for growth and shareholder returns. The principal financial risks to which the Company is exposed are, liquidity risk, currency risk, interest rate risk, credit risk and commodity price risk. The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework and reviews the Company's policies on an ongoing basis.

The investment in Falcon Butte is considered to represent a level 3 fair value measurement.

a) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company manages liquidity risk through the management of its capital structure. To mitigate this risk, the Company has a planning and budgeting process in place to determine the funds required to support its ongoing operations and capital expenditures. The Company ensures that sufficient funds are raised from equity offerings or debt financings to meet its operating requirements, after considering existing cash and expected exercise of stock options and share purchase warrants.

b) Currency risk

Foreign exchange risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company operates in the United States and Canada; therefore, it is exposed to currency risk from transactions denominated in CAD. Currently, the Company does not have any foreign exchange hedge programs and manages its operational CAD requirements through spot purchases in the foreign exchange markets. Based on CAD financial assets and liabilities' magnitude, the Company does not have material sensitivity to CAD to USD exchange rates.

c) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company is exposed to the interest rate risk on its liabilities through its outstanding borrowings and the interest earned on cash balances. The Company monitors its exposure to interest rates and maintains an investment policy that focuses primarily on the preservation of capital and liquidity.

d) Credit risk

Credit risk is the risk of a financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Company is exposed to credit risk through its cash and cash equivalents. Cash and cash equivalents are held in large Canadian financial institutions that have high credit ratings assigned by international credit rating agencies.

### **Subsequent Events**

- I. On January 13, 2023, the Company received \$7,500,000 from Rio Tinto, comprising of \$5,000,000 for stage 2 work and \$2,500,000 as an immediate advance on part of the stage 3 financing.
- II. On March 2, 2023, the Company granted 350,000 stock options with an exercise price of \$0.095 CAD and an expiry date of March 2, 2028.
- III. On March 2, 2023, the Company closed a private placement of unsecured convertible debentures for gross proceeds of \$1,306,172 (\$1,753,796.50 CAD). The debentures bear interest at a rate of 14% per annum, mature on November 2, 2024, and are convertible into shares of the Company at \$0.07 (\$0.095 CAD) per share up to January 2, 2024 and thereafter at \$0.074 (\$0.10 CAD) per share. The holder also has the option to elect at any time prior to the election date to be repaid by way of shares the Company owns of Falcon Butte at the rate of \$0.28 per Falcon Butte share.

In connection with the sale of the Debentures, the Company will also issued 18,461,015 common share purchase warrants to the purchasers. Each Warrant entitles the holder to acquire a common share of the Company at a price of \$0.07 (\$0.095 CAD) until November 2, 2024.

- IV. As at December 31, 2022, the Company had satisfied all obligations of the Wassuk property, allowing the Company to exercise their right to acquire 100% interest in the property. On January 14, 2023, the Company exercised this right, and transfer of claims are expected to occur in April 2023.

- V. On March 2, 2023, BCRC completed a financing of \$2,000,000 by way of a private placement and issued 23,809,524 units at a price of \$0.084 per share. Each unit consists of one common share, and one common share purchase warrant exercisable at \$0.15 for a period of 1 year.

At December 31, 2022, BCRC had received \$767,500 in SAFE Notes, and an additional \$100,000 subsequent to the year. The private placement described above was considered a triggering event, and the face value of SAFE Notes of \$867,500 were converted into common shares of BCRC resulting in 21,629,386 common shares being issued.

As a result, Lion CG's ownership in BCRC was reduced to 48.8% as of March 2, 2023.

- VI. On March 11, 2023, the agreement between Blue Copper LLC and Snowshoe Creek LLC was amended to include an extension term, that after the lease term of 20 years, Blue Copper LLC has the ability to extend the term in 12-month increments upon providing written notice no later than 180 days prior to the expiration of the current term.
- VII. Pursuant to an option agreement for the Chaco Bear and Ashton property, the Company is required to pay \$100,000 in maintenance fees by January 31, 2023. The Company has defaulted on these terms as at January 31, 2023 and has a ninety day period to remedy the default. As of the date of these financial statements, the Company has not paid the maintenance fees.

### **Off - Balance Sheet Arrangements**

The Company has not entered any off-balance sheet arrangements.

### **Initial adoption of new accounting standards**

Adoption of new accounting standards have been disclosed in Note 3 of the Company's consolidated financial statements for the year ended December 31, 2022 and 2021.

### **Significant Accounting Policies**

The consolidated financial statements for the year ended December 31, 2022 have been prepared in accordance with U.S. GAAP.

See Note 3 to the consolidated financial statements for significant accounting policies used in the preparation of the consolidated financial statements.

### **Critical Accounting Judgements and Key Sources of Estimation Uncertainty**

The preparation of these consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and judgments that affect the application of policies, reported amounts and disclosures. By their nature, these estimates and judgments are subject to uncertainty and the effect on these consolidated financial statements of changes in such estimates in future periods could be significant. Actual results could differ from those estimates.

See Note 3 to the consolidated financial statements for critical accounting judgements and estimates used in the preparation of the consolidated financial statements.

### **Changes in Accounting Policies**

The Consolidated Financial Statements for the year ended December 31, 2022 are the first the Company has prepared in accordance with U.S. GAAP. The Company previously prepared its financial statements, up to and including nine months ended September 30, 2022, in accordance with International Financial Reporting Standards.

Accordingly, the Company has prepared financial statements that comply with U.S. GAAP applicable as at December 31, 2022, together with the comparative period data for the year ended December 31, 2021. The most significant change in accounting policy is as follows:

### ***Mineral properties***

Under IFRS, the Company capitalized both acquisition and exploration costs relating to the Company's mineral properties. Under U.S. GAAP, the industry standard is to capitalize acquisition costs but expense exploration costs unless a proven or probable reserve can be established at the mineral property. Adjustments has been made to expense previously capitalized exploration costs to be in accordance with U.S. GAAP.

### **Forward-Looking Statements**

This Management's Discussion and Analysis contains "forward-looking information" and "forward-looking statements" within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, Section 21E of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), and other applicable securities laws.

Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, identified by words or phrases such as "expects", "is expected", "anticipates", "believes", "plans", "projects", "estimates", "assumes", "intends", "strategy", "goals", "objectives", "potential", "possible" or variations thereof or stating that certain actions, events, conditions or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved, or the negative of any of these terms and similar expressions) are not statements of historical fact and may be forward-looking statements.

The Forward-Looking Statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the Forward-Looking Statements. Such factors include, but are not limited to, general business and economic uncertainties; exploration and resource extraction risks; uncertainties relating to surface rights; the actual results of current exploration activities; the outcome of negotiations; conclusions of economic evaluations and studies; future prices of natural resource based commodities; increased competition in the natural resource industry for properties, equipment and qualified personnel; risks associated with environmental compliance and permitting, including those created by changes in environmental legislation and regulation; the risk of arbitrary changes in law; title risks; and the risk of loss of key personnel.

The foregoing lists of factors and assumptions are not exhaustive. The reader should also consider carefully the matters discussed under the heading "Risks Factors and Uncertainties" elsewhere in this MD&A. Forward-Looking Statements contained herein are made as of the date hereof (or as of the date of a document incorporated herein by reference, as applicable). No obligation is undertaken to update publicly or otherwise revise any Forward-Looking Statements or the foregoing lists of factors and assumptions, whether as a result of new information, future events or results or otherwise, except as required by law. Because Forward-Looking Statements are inherently uncertain, readers should not place undue reliance on them. The Forward-Looking Statements contained herein are expressly qualified in their entirety by this cautionary statement.



NUMBER: 446713



**COMPANY ACT**

CANADA  
PROVINCE OF BRITISH COLUMBIA

**CERTIFICATE OF INCORPORATION**

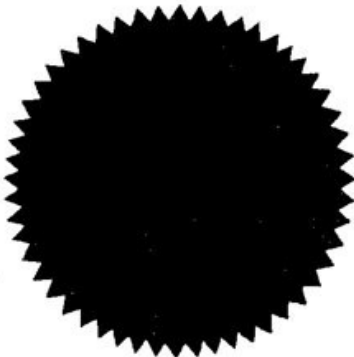
*I Hereby Certify that*  
**ACQUATERRE MINERAL DEVELOPMENT LTD.**

has this day been incorporated under the *Company Act*

*Issued under my hand at Victoria, British Columbia*  
*on May 11, 1993*

A handwritten signature in cursive script, reading "J. Powell".

JOHN S. POWELL  
*Registrar of Companies*



NUMBER: 446713



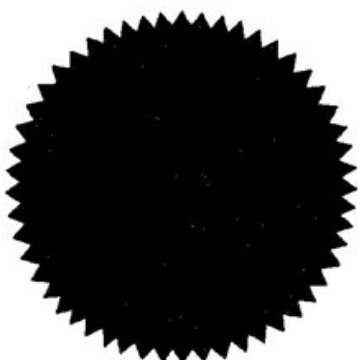
**CERTIFICATE  
OF  
CHANGE OF NAME**  
*COMPANY ACT*

CANADA  
PROVINCE OF BRITISH COLUMBIA

*I Hereby Certify that*  
ACQUATERRE MINERAL DEVELOPMENT LTD.

has this day changed its name to  
AQUATERRE MINERAL DEVELOPMENT LTD.

*Issued under my hand at Victoria, British Columbia  
on November 30, 1993*

A handwritten signature in black ink, reading "J. Powell".

JOHN S. POWELL  
*Registrar of Companies*

DUPLICATE

NUMBER: 446713



**CERTIFICATE  
OF  
CHANGE OF NAME**

**COMPANY ACT**

CERTIFIED TRUE COPY OF A DOCUMENT  
FILED WITH THE REGISTRAR OF COMPANIES

CANADA  
PROVINCE OF BRITISH COLUMBIA

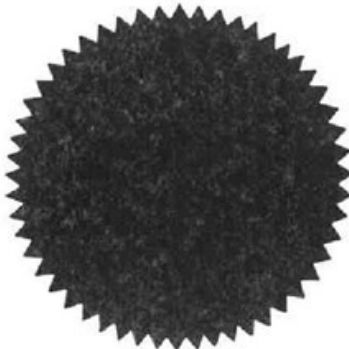
JUL 23 2010

  
3 RON TOWNSHEND  
REGISTRAR OF COMPANIES  
PROVINCE OF BRITISH COLUMBIA

*I Hereby Certify that*  
AQUATERRE MINERAL DEVELOPMENT LTD.

has this day changed its name to  
**QUATERRA RESOURCES INC.**

*Issued under my hand at Victoria, British Columbia  
on November 13, 1997*



JOHN S. POWELL  
*Registrar of Companies*



Number: BC0446713

# **CERTIFICATE OF CHANGE OF NAME**

*BUSINESS CORPORATIONS ACT*

I Hereby Certify that QUATERRA RESOURCES INC. changed its name to LION COPPER AND GOLD CORP. on November 22, 2021 at 01:59 PM Pacific Time.



ELECTRONIC CERTIFICATE

*Issued under my hand at Victoria, British Columbia  
On November 22, 2021*

**CAROL PREST**  
*Registrar of Companies*  
Province of British Columbia  
Canada

**LION COPPER AND GOLD CORP.**  
**2022 STOCK OPTION PLAN**

## TABLE OF CONTENTS

|                                                                   | Page                   |
|-------------------------------------------------------------------|------------------------|
| 1. <a href="#">PURPOSE</a>                                        | <a href="#">- 1 -</a>  |
| 2. <a href="#">DEFINITIONS AND INTERPRETATION</a>                 | <a href="#">- 1 -</a>  |
| 3. <a href="#">ADMINISTRATION</a>                                 | <a href="#">- 4 -</a>  |
| 4. <a href="#">OPTIONEES</a>                                      | <a href="#">- 4 -</a>  |
| 5. <a href="#">THE OPTION SHARES</a>                              | <a href="#">- 4 -</a>  |
| 6. <a href="#">GRANT OF OPTIONS</a>                               | <a href="#">- 5 -</a>  |
| 7. <a href="#">TERMINATION OF OPTIONS</a>                         | <a href="#">- 7 -</a>  |
| 8. <a href="#">ADJUSTMENT OF AND CHANGES IN THE OPTION SHARES</a> | <a href="#">- 9 -</a>  |
| 9. <a href="#">CHANGE OF CONTROL</a>                              | <a href="#">- 9 -</a>  |
| 10. <a href="#">PAYMENT</a>                                       | <a href="#">- 10 -</a> |
| 11. <a href="#">SECURITIES LAW AND EXCHANGE REQUIREMENTS</a>      | <a href="#">- 11 -</a> |
| 12. <a href="#">EFFECTIVENESS AND TERMINATION OF PLAN</a>         | <a href="#">- 11 -</a> |
| 13. <a href="#">AMENDMENT OF THE PLAN</a>                         | <a href="#">- 11 -</a> |
| 14. <a href="#">UNITED STATES REQUIREMENTS</a>                    | <a href="#">- 12 -</a> |
| 15. <a href="#">MISCELLANEOUS</a>                                 | <a href="#">- 13 -</a> |
| 16. <a href="#">SHAREHOLDER APPROVAL</a>                          | <a href="#">- 13 -</a> |
| <a href="#">SCHEDULE "A" - STOCK OPTION CERTIFICATE</a>           | <a href="#">- 14 -</a> |
| <a href="#">SCHEDULE "B" - EXERCISE NOTICE</a>                    | <a href="#">- 16 -</a> |

**LION COPPER AND GOLD CORP.**  
**(the "Corporation")**

**2022 STOCK OPTION PLAN**

**1. PURPOSE**

The purpose of this Plan is to provide an incentive to Eligible Persons, as that term is defined below, to acquire a proprietary interest in the Corporation, to continue their participation in the affairs of the Corporation and to increase their efforts on behalf of the Corporation.

**2. DEFINITIONS AND INTERPRETATION**

In this Plan, the following words have the following meanings:

- (a) **"Blackout Period"** means a period of time during which the Corporation prohibits Optionees from exercising the Options;
- (b) **"Board"** means the board of directors of the Corporation;
- (c) **"Business Day"** means any day, other than a Saturday, a Sunday or a statutory holiday in Vancouver, British Columbia;
- (d) **"Company"** means a corporation, incorporated association or organization, body corporate, partnership, trust, association or other entity other than an individual;
- (e) **"Consultant"** means, in relation to the Corporation, an individual (other than an Employee or a Director of the Corporation) or Company that:
  - (i) is engaged to provide on an ongoing bona fide basis, consulting, technical, management or other services to the Corporation or to any of its subsidiaries, other than services provided in relation to a distribution;
  - (ii) provides the services under a written contract between the Corporation or any of its subsidiaries and the individual or the Consultant Company, as the case may be; and;
  - (iii) in the reasonable opinion of the Corporation, spends or will spend a significant amount of time and attention on the affairs and business of the Corporation or any of its subsidiaries.
- (f) **"Consultant Company"** means a Consultant that is a Company;
- (g) **"Corporation"** means Lion Copper and Gold Corp.;
- (h) **"Director"** means a director, senior officer or Management Company Employee of the Corporation, or of an unlisted Company seeking a listing on the Exchange, or a director, senior officer or Management Company Employee of the Corporation's subsidiaries or an unlisted Company's subsidiary;
- (i) **"Early Expiry Date"** means 4:00 pm local time in Vancouver on:
  - (i) the date fixed by the Board for early expiry of each Option, which date will be no more than one year from the date on which the Optionee ceases to be an Eligible Person for any reason other than death, disability or cause; or

- (ii) the date that is 90 days from the date on which the Optionee ceases to be an Eligible Person for any reason other than death, disability or cause, if no date is fixed by the Board under (i) above;
- (j) **"Eligible Person"** means a person who is a Director, Employee or Consultant of the Corporation or its subsidiary on the Grant Date;
- (k) **"Employee"** means:
  - (i) an individual who is considered an employee of the Corporation or its subsidiary under the *Income Tax Act* (Canada) (and for whom income tax, employment insurance and CPP deductions must be made at source);
  - (ii) an individual who works full-time for the Corporation or its subsidiary providing services normally provided by an employee and who is subject to the same control and direction by the Corporation over the details and methods of work as an employee of the Corporation, but for whom income tax deductions are not made at source; or
  - (iii) an individual who works for the Corporation or its subsidiary on a continuing and regular basis for a minimum amount of time per week providing services normally provided by an employee and who is subject to the same control and direction by the Corporation over the details and methods of work as an employee of the Corporation, but for whom income tax deductions are not made at source;
- (l) **"Exchange"** means the TSX Venture Exchange;
- (m) **"Expiry Date"** means the date so fixed by the Board at the time the Option is awarded;
- (n) **"Grant Date"** means the date of grant of an Option to an Optionee;
- (o) **"Investor Relations Activities"** means any activities, by or on behalf of the Corporation or a shareholder of the Corporation, that promote or reasonably could be expected to promote the purchase or sale of securities of the Corporation, but does not include:
  - (i) the dissemination of information provided, or records prepared, in the ordinary course of business of the Corporation:
    - (A) to promote the sale of products or services of the Corporation, or
    - (B) to raise public awareness of the Corporation,
 that cannot reasonably be considered to promote the purchase or sale of securities of the Corporation;
  - (ii) activities or communications necessary to comply with the requirements of:
    - (A) applicable Securities Laws, or
    - (B) Exchange requirements or the by-laws, rules or other regulatory instruments of any other self-regulatory body or stock exchange having jurisdiction over the Corporation;



- (iii) communications by a publisher of, or writer for, a newspaper, magazine or business or financial publication, that is of general and regular paid circulation, distributed only to subscribers to it for value or to purchasers of it, if:
  - (A) the communication is only through the newspaper, magazine or publication, and
  - (B) the publisher or writer receives no commission or other consideration other than for acting in the capacity of publisher or writer; or
- (iv) activities or communications that may be otherwise specified by the Exchange;
- (p) **"Management Company Employee"** means an individual, employed by a Person, providing management services to the Corporation, which are required for the ongoing successful operation of the business enterprise of the Corporation, but excluding a person engaged in Investor Relations Activities;
- (q) **"Material Change"** has the definition prescribed by applicable Securities Laws;
- (r) **"Material Fact"** has the definition prescribed by applicable Securities Laws;
- (s) **"Material Information"** means Material Fact and/or Material Change as defined by applicable Securities Laws and Exchange policy;
- (t) **"Option"** means the option granted to an Optionee under this Plan;
- (u) **"Option Certificate"** means the option certificate in the form attached as Schedule "A" to this Plan and issued to an Optionee;
- (v) **"Option Period"** means the period of time between the Grant Date and the Expiry Date, during which the Option may be exercised subject to any vesting conditions;
- (w) **"Option Price"** is the price at which the Optionee is entitled, pursuant to the Plan and as described in the Option Certificate, to acquire Option Shares;
- (x) **"Option Shares"** means the Shares which the Optionee is entitled to acquire pursuant to this Plan and as described in the Option Certificate;
- (y) **"Optionee"** means an Eligible Person to whom an Option has been granted by the Corporation;
- (z) **"Person"** means an individual or a Company;
- (aa) **"Plan"** means this 2022 Stock Option Plan, as may be amended from time to time in accordance with the provisions hereof;
- (bb) **"Securities Laws"** means securities legislation, securities regulation and securities rules, as amended, and the policies, notices, instruments and blanket orders in force from time to time that are applicable to the Corporation; and
- (cc) **"Shares"** means common shares in the authorized share capital of the Corporation.

The Plan will be interpreted and construed in accordance with the laws of the Province of British Columbia.

### 3. ADMINISTRATION

The Plan will be administered by the Board in accordance with the provisions of the Plan and subject to the rules of the Exchange from time to time (as applicable), and the Board will have full authority to:

- (a) determine which Eligible Persons will receive a grant of Options;
- (b) set the Option Price;
- (c) grant Options to Eligible Persons in such amounts and on such terms as the Board may determine;
- (d) set the Expiry Date and the Early Expiry Date for each Option provided that the Expiry Date will be a date that is no later than 10 years from the Grant Date (subject to extension where the Expiry Date falls within a Blackout Period);
- (e) impose vesting conditions on Options; and
- (f) interpret the Plan and make such rules and regulations and establish such procedures as it deems appropriate for the administration of the Plan, taking into consideration the recommendations of management of the Corporation.

The interpretation by the Board of any of the provisions of the Plan will be final and conclusive. No member of the Board will be liable for any action or determination in connection with the Plan made or taken in good faith, and each member of the Board will be entitled to indemnification with respect to any such action or determination.

### 4. OPTIONEES

Optionees must be Eligible Persons (or companies wholly owned by Eligible Persons) who, in the opinion of the Board, are in a position to contribute to the success of the Corporation. If the Optionee is a Company, excluding Optionees that are Consultant Companies, then such Optionee must:

- (i) provide the Exchange with a completed Form 4F- *Certification and Undertaking Required from a Company Granted an Incentive Stock Option* or similar form required by Securities Laws; and
- (ii) not effect or permit any transfer of ownership or option of shares of the Corporation nor issue further shares of any class in the Corporation to any other individual or entity as long as the Option remains outstanding, except with the written consent of the Exchange.

### 5. THE OPTION SHARES

- (a) The aggregate number of Option Shares reserved for issuance under the Plan may not exceed 10% of the Corporation's issued and outstanding Shares on the Grant Date (the "**Maximum Number**").
- (b) Options issued prior to the adoption of the Plan will be included in the Maximum Number and will be subject to the terms of the Plan. To the extent of any conflict between the terms of the Plan and any previous terms governing options issued prior to the adoption of the Plan, the terms under the Plan will govern.

## 6. GRANT OF OPTIONS

Options may be granted by the Board in accordance with the Plan at any time prior to the termination of the Plan. Options granted pursuant to the Plan will be further described in an Option Certificate and will be subject to the following terms and conditions:

### (a) Option Price

The Option Price will be determined by the Board in its sole discretion, subject to the following:

- (i) if the Shares are listed on the Exchange, the Option Price will not be lower than the last closing price for the Shares as quoted on the Exchange prior to the Grant Date, less any discount permitted by the Exchange, and provided that the Option Price will not be lower than the "**Discounted Market Price**" (as defined in the policies of the Exchange);
- (ii) if the Shares are newly listed on the Exchange, or the Corporation has just been recalled for trading following a suspension or halt, the Corporation must wait until a satisfactory market has been established before setting the exercise price for and granting the Option. In general, the Exchange will not consider that a satisfactory market has been established until at least 10 trading days have passed since the date of listing or the day on which trading in the Corporation's securities resumes, as the case may be;
- (iii) if the Shares are not listed on the Exchange, the price will be determined by the Board, subject to the rules or policies of any stock exchange or quotation system on which the Shares are listed;
- (iv) if the Options are granted within 90 days of a distribution by a prospectus, the minimum exercise price of those Options will be the greater of the Discounted Market Price and the per share price paid by the public investors for the listed shares acquired under the distribution. The 90 day period begins:
  - (A) on the date a final receipt is issued for the prospectus; or
  - (B) in the case of an initial public offering, on the date of listing; and
- (v) a minimum Option Price cannot be established unless the Options are allocated to particular Persons. More specifically, the Corporation cannot grant Options unless and until the Options have been allocated to a particular Person or Persons.

### (b) Exercise of Options

The Options must be exercised in accordance with the Plan and the Option Certificate and on the terms set out in the resolutions of the Board pursuant to which the grant of the Options are authorized. The Corporation will not be required to issue Option Shares in an amount less than a "**Board Lot**" (as defined in the policies of the Exchange), unless such number of Option Shares represents the balance of the Option Shares. The exercise price of the Option must be paid in cash.

### (c) Re-issuance of Options

Options which are exercised, cancelled, or expire prior to exercise continue to be issuable under the Plan.

(d) Blackout Period

The Expiry Date of the Options will be automatically extended by the amount of time set out in this subsection in the event that the Expiry Date falls within a Blackout Period and all of the following conditions exist:

- (i) the Blackout Period is formally imposed by the Corporation pursuant to its internal trading policies as a result of the bona fide existence of undisclosed Material Information. For greater certainty, in the absence of the Corporation formally imposing the Blackout Period, the Expiry Date of the Options will not be automatically extended in any circumstances;
- (ii) the Blackout Period expires upon the general disclosure of the undisclosed Material Information; and
- (iii) the Optionee or the Corporation is not subject to a cease trade order (or similar order under Securities Laws) in respect of the Corporation's securities.

If the Expiry Date falls within a Blackout Period and all of the above conditions exist, then the Expiry Date of the Options affected by the Blackout Period will be extended by the length of the Blackout Period plus ten (10) Business Days.

(e) Transferability of Option

All Options are non-transferable and non-assignable.

(f) Other Terms and Conditions

The Option Certificate may contain such other provisions as the Board deems appropriate, provided such provisions are not inconsistent with the Plan and the requirements of the Exchange.

For as long as the Shares of the Corporation are listed on the Exchange, the Corporation will comply with the following requirements:

- (i) the Corporation may not grant, to any one Consultant, Options to acquire more than an aggregate of 2% of the issued and outstanding Shares of the Corporation in any 12 month period, calculated at the date the Options are granted to the Consultant;
- (ii) the Corporation may not grant, to all Persons retained to provide Investor Relations Activities, Options to acquire more than an aggregate of 2% of the issued and outstanding Shares of the Corporation in any 12 month period, calculated at the date the Options are granted to any such person. For greater certainty persons retained to provide Investor Relations Activities include any Consultant that performs Investor Relations Activities and any Employee or Director whose role and duties primarily consist of Investor Relations Activities;
- (iii) Options issued to Persons retained to provide Investor Relations Activities must vest in stages over a period of not less than 12 months with no more than 25% of the Options vesting in any three month period;
- (iv) the approval of the disinterested shareholders of the Corporation will be obtained:

- (A) for Options granted to any one Person (including to companies wholly-owned by that Person) within a 12 month period to acquire more than 5% of the issued and outstanding Shares of the Corporation, calculated on the date the Options are granted to the Person;
- (B) for Options which will result in the number of Options granted to Insiders (as a group) within a 12 month period exceeding 10% of the issued and outstanding Shares of the Corporation;
- (C) for Options which will result in the number of Options granted to Insiders (as a group) at any point in time exceeding 10% of the issued and outstanding Shares of the Corporation;
- (D) for any amendment to or reduction in the Option Price if the Optionee is an Insider of the Corporation at the time of the proposed amendment or reduction;
- (E) for any amendment that would result in a benefit to an Insider; and
- (F) for any extension to Options granted to individuals that are Insiders at the time of the proposed amendment.

For the purposes of this subsection, the term "**Insider**" has the meaning assigned in the *Securities Act* (British Columbia) and Options held by an Insider at any point in time that were granted to such Person prior to it becoming an Insider will be considered Options granted to an Insider irrespective of the fact that the Person was not an Insider at the time of grant;

- (v) for Options granted to Employees, Consultants or Management Company Employees of the Corporation, the Corporation and the Optionee will be responsible for ensuring and confirming that the Optionee is a bona fide Employee, Consultant or Management Company Employee of the Corporation, as the case may be;
- (vi) the Corporation must issue a news release disclosing the grant of Options to Insiders or persons retained to provide Investor Relations Activities; and
- (vii) in addition to any resale restrictions under Securities Laws, and any other circumstance for which the Exchange hold period may apply, where Options are granted to Insiders or where the Option Price includes a discount as permitted by the Exchange, the Options and any Option Shares issued on the exercise of such Options must be legended with a four (4) month Exchange hold period commencing on the Grant Date.

## **7. TERMINATION OF OPTIONS**

- (a) All rights to exercise Options will terminate upon the earliest of:
  - (i) the Expiry Date; and
  - (ii) the date set out in Section 7(b) or (c), as applicable.

(b) Ceasing to Hold Office

If the Optionee holds his or her Option as a Director and such Optionee ceases to be a Director prior to the end of the Option Period, then the Option will terminate on the Early Expiry Date, unless the Optionee:

- (i) ceases to be a Director as a result of the death or disability of the Optionee, in which case the Option will terminate one year from the date of death or disability of the Optionee;
- (ii) ceases to be a Director:
  - (A) as a result of being convicted in or out of British Columbia of an offence in connection with the promotion, formation or management of a corporation or unincorporated business, or of an offence involving fraud;
  - (B) by order of the British Columbia Securities Commission (the "BCSC"), the Exchange or any other regulatory body having jurisdiction to so order;
  - (C) where the Director is required to resign as a consequence of ceasing to meet the director qualifications specified in the *Business Corporations Act* (British Columbia);
 in which case, the Option will terminate on the date on which the Optionee ceases to be a Director; or
- (iii) remains an Eligible Person, in which case the Board may, in its discretion, allow the Optionee to retain the Option.

(c) Ceasing to be Employed

If the Optionee holds his or her option as an Employee, Consultant or Management Company Employee and such Optionee ceases to be an Employee, Consultant or Management Company Employee prior to the end of the Option Period, then the Option will terminate on the Early Expiry Date, unless the Optionee:

- (i) ceases to be an Employee, Consultant or Management Company Employee as a result of the death or disability of the Optionee, in which case the Option will terminate one year from the date of death or disability of the Optionee;
- (ii) ceases to be an Employee, Consultant or Management Company Employee:
  - (A) as a result of the Corporation terminating the Optionee for cause; or
  - (B) by order of the BCSC, the Exchange or any other regulatory body having jurisdiction to so order,
 in which case, the Option will terminate on the date on which the Optionee ceases to be an Employee, Consultant or Management Company Employee; or
- (iii) remains an Eligible Person, in which case the Board may, in its discretion, allow the Optionee to retain the Option.

(d) Vesting on Termination

Unless otherwise provided by the Board, any options that are unvested on the date that the Corporation provides the Optionee with written notice of termination or the Optionee provides the Corporation with written notice of resignation, will automatically terminate on the date of such notice.

(e) Exercise after Death or Disability of Optionee

In the event of the death of an Optionee, the Optionee's Option must be exercised only by the person or persons to whom the Optionee's rights under the Option will pass by the Optionee's will or the laws of descent and distribution. In the event of the death or disability of an Optionee, the Optionee's Option may be exercised to the extent that the Optionee was entitled to exercise the Option at the date of the Optionee's death or disability. The period in which the Optionee's Option may be exercised must not exceed one year from the date of the Optionee's death.

**8. ADJUSTMENT OF AND CHANGES IN THE OPTION SHARES**

## (a) If the Corporation:

- (i) changes its capital structure through stock splits, reverse split, consolidations, recapitalizations, reclassifications, changes in or elimination of par value shares;
- (ii) declares any dividends or makes other distributions to holders of shares;
- (iii) grants any rights to purchase shares at prices substantially below the Option Price as determined in accordance with Section 0(a) to holders of shares of the Corporation; or
- (iv) converts or exchanges its shares for any other securities as a result of a business combination,

then in any such case the Corporation may make such adjustments in the right to purchase granted hereby which are appropriate and reflective of such event, and as may be required to prevent substantial dilution or enlargement of the rights granted to or available for the Optionee hereunder.

- (b) Options for fractional Option Shares resulting from any adjustment in Options pursuant to this Section 8 will be terminated. Any adjustment will be effective and binding on each Optionee for all purposes of the Plan.
- (c) Any adjustment to Options granted or issued (except in relation to a consolidation or share split) is subject to the prior acceptance of the Exchange.

**9. CHANGE OF CONTROL**

In the event of:

- (a) a business combination in which the Corporation is not the surviving Company;
- (b) the Shares being converted into securities of another entity or exchanged for other consideration; or

- (c) an offer for 50% or more of shares being made by a third party that constitutes a take-over bid as that term is defined in Multilateral Instrument 62-104 of the Canadian Securities Administrators ("**MI 62-104**") or would constitute a take-over bid as that term is defined in the MI 62-104 but for the fact that the offeree is not in British Columbia,

all outstanding Options will immediately vest, provided that the acceleration of vesting provisions required by the Exchange is subject to the prior written consent of the Exchange, and provided that if such transaction does not close, all such Options which remain unexercised will be deemed not to have vested. In addition, the Board may make such arrangements as the Board deems appropriate for the exercise of outstanding Options or continuance of outstanding Options in the surviving Company.

#### **10. PAYMENT**

- (a) Subject as hereinafter provided, the full purchase price for each of the Option Shares will be paid by money wire, certified cheque or bank draft in favour of the Corporation upon exercise thereof. An Optionee will have none of the rights of a shareholder in respect of the Option Shares until the shares are issued to such Optionee.
- (b) Upon exercise of an Option, the Optionee will, upon notification of the amount due and prior to the delivery of the certificates representing the Option Shares, pay to the Corporation by money wire, certified cheque or bank draft, such amount as the Corporation will determine is required to be withheld and remitted to Canada Revenue Agency (the "**CRA**") to satisfy applicable federal and provincial tax and, if applicable, Canada Pension Plan ("**CPP**") withholding and remittance requirements, or will make alternative arrangements satisfactory to the Corporation (acting in its sole discretion) in respect of such requirements. Such alternative arrangements for satisfying the withholding and remittance requirements may include, but will not be limited to, the following:
  - (i) the Corporation may retain and withhold from any payment of cash due or to become due from the Corporation to the Optionee, whether under this Plan or otherwise, the amount of taxes and, if applicable, CPP contributions, required to be withheld or otherwise deducted and remitted by the Corporation to the CRA in respect of such payment, and will remit the amount so withheld to the CRA, as source deductions withheld by it in respect of the issue of the Option Shares; and
  - (ii) the Corporation may deduct from the Option Shares to be issued to the Optionee, a number of Option Shares (the "**Cashed-Out Shares**") having a market value of not less than the amount of taxes and, if applicable, CPP contributions, required to be withheld or otherwise deducted and remitted by the Corporation to the CRA in respect of such payment and will remit to the CRA the amount (the "**Cash-Out Amount**") that is equal to the market value of the Cashed-Out Shares, as source deductions withheld by it in respect of the issue of the Option Shares. The Cashed-Out Shares may be retained or sold by the Corporation. In such cases, the Corporation may, at its sole discretion, elect under s. 110(1.1) of the *Income Tax Act* (Canada) not to deduct the Cash-Out Amount in computing its income for any taxation year.



## **11. SECURITIES LAW AND EXCHANGE REQUIREMENTS**

- (a) No Option will be exercisable in whole or in part, nor will the Corporation be obligated to issue any Option Shares pursuant to the exercise of any such Option, if such exercise and issuance would, in the opinion of counsel for the Corporation, constitute a breach of any applicable laws from time to time, or the rules from time to time of the Exchange. Each Option will be subject to the further requirement that if at any time the Board determines that the listing or qualification of the Option Shares under any securities legislation or other applicable law, or the consent or approval of any governmental or other regulatory body (including the Exchange), is necessary as a condition of, or in connection with, the issue of the Option Shares hereunder, such Option may not be exercised in whole or in part unless such listing, qualification, consent or approval has been effected or obtained free of any conditions not acceptable to the Board.
- (b) By accepting and not returning an Option Certificate within five (5) days of receiving it in connection with a grant of Options, an Optionee is deemed to have expressly consented to the disclosure by the Corporation of personal and other information regarding the Optionee to any governmental or other regulatory body (including the Exchange or such other self-regulatory body or stock exchange having jurisdiction over the Corporation). In addition, the Optionee is deemed to have consented to the collection, use and disclosure of personal or other information by such governmental or other regulatory body (including the Exchange or such other self-regulatory body or stock exchange having jurisdiction over the Corporation) for such purposes as may be identified by such governmental or other regulatory body, from time to time.

## **12. EFFECTIVENESS AND TERMINATION OF PLAN**

- (a) The Plan will be effective upon the later of:
  - (i) approval of the shareholders of the Corporation, if such approval is required;
  - (ii) approval of the Board;
  - (iii) acceptance by the Exchange; and
  - (iv) acceptance by any other regulatory authority having jurisdiction over the Corporation's securities.
- (b) The Board may terminate the Plan at any time provided that the Corporation adopts a new stock option plan. Upon termination of the Plan, previously granted Options will be governed by the provisions of the Corporation's stock option plan adopted by the Corporation from time to time.

## **13. AMENDMENT OF THE PLAN**

- (a) The Board may from time to time amend the Plan and the terms and conditions of any Option granted thereunder, provided that any amendment, modification or change to the provisions of the Plan will:
  - (i) not adversely alter or impair any Option previously granted, except as permitted by Section 8 or 9;
  - (ii) be subject to any regulatory approvals, where required, including the approval of the Exchange where necessary;

- (iii) be subject to shareholder approval in accordance with the rules of the Exchange in circumstances where the amendment, modification or change of the Plan and terms and conditions of any Option would amend the:
  - (A) Eligible Persons who may be granted Options under the Plan;
  - (B) method for determining the Exercise Price of the Options;
  - (C) maximum term of the Options under Section 3;
  - (D) expiry and termination provisions relating to the Options under this Plan;
  - (E) limitations under the Plan on the number of Options that may be granted to any one person or category of persons, including insiders, as set out in this Plan;
  - (F) maximum number or percentage, as the case may be, of Shares that may be reserved under the Plan for issuance pursuant to the exercise of the Options;
  - (G) Plan to include a Net Exercise provisions (as defined in the policies of the Exchange); or
  - (H) amend this Section 13; and
- (iv) not be subject to shareholder approval in circumstances where the amendment, modification or change of the Plan would:
  - (A) be of a "housekeeping nature", including any amendment to the Plan or an Option that is necessary to comply with applicable laws, tax or accounting provisions or the requirements of any regulatory authority or the Exchange, and any amendment to the Plan or an Option to correct or rectify any ambiguity, defective provision, error or omission therein, including amendment to any definitions;
  - (B) clarify existing provisions of the Plan that do not have the effect of altering the scope, nature and intent of such provisions;
  - (C) be necessary for the Option to qualify for favourable treatment under applicable tax laws;
  - (D) alter, extend or accelerate any vesting terms or conditions in the Plan or any Option; or
  - (E) amend Section 8 or 9;
- (b) Subject to shareholder approval, the Board may from time to time retroactively amend the Plan and, with the consent of the affected Optionee, retroactively amend the terms and conditions of any Options which have previously been granted.

#### **14. UNITED STATES REQUIREMENTS**

- (a) No Option will be granted and issued unless the grant and issuance of such Option shall comply with all relevant provisions of applicable United States federal and state securities laws, including the availability of an exemption from registration for the issuance and sale of such Shares. The Corporation has no obligation to undertake registration under any United States federal or state laws of Options or the Shares issuable upon the exercise of Options.

- (b) As a condition to the exercise of an Option, the Board may require the Optionee to make representations and warranties in writing at the time of such exercise in order to establish, to the satisfaction of the Corporation and its legal counsel, that the Shares to be issued on such exercise may legally be issued in compliance with all applicable United States federal and state securities laws. If required by applicable United States federal and state securities laws, a stop-transfer order against such Shares shall be placed on the share ledger books and records of the Corporation, and a legend indicating that the Shares may not be pledged, sold or otherwise transferred unless an opinion of counsel is provided stating that such transfer is not in violation of any applicable law or regulation, shall be stamped on the certificates representing such shares. The Board also may require such other documentation as they, in their sole discretion, may from time to time determine to be necessary to comply with United States federal and state securities laws.
- (c) The Option Certificate in respect of the grant of any Options to persons who are U.S. Persons, as that term is defined in Rule 902 of Regulation S, will include the following statement:  
  
*This Option has not been registered under any U.S. federal or state law and may not be exercised except pursuant to an effective registration statement under the United States Securities Act of 1933, as amended, and all applicable U.S. state securities laws, or pursuant to available exemptions from such registration requirements. In addition, shares issued on exercise of this Option by a U.S. resident will bear a U.S. form of restrictive legend and may not be resold except in compliance with such legend.*
- (d) No Option granted under the Plan will constitute an Incentive Stock Option as described in Section 422 of the Internal Revenue Code of 1986, as amended.

#### **15. MISCELLANEOUS**

If there is a discrepancy between the resolution of the Board authorizing the grant of an Option and the Option Certificate, then the board resolution will supersede the Option Certificate and the Option will be as described in the resolution of the Board.

#### **16. SHAREHOLDER APPROVAL**

This Plan is subject to the approval of the shareholders of the Corporation yearly at each annual general meeting of the Corporation.

## SCHEDULE "A"

LION COPPER AND GOLD CORP.  
(the "Corporation")STOCK OPTION CERTIFICATE  
PURSUANT TO THE 2022 STOCK OPTION PLAN

This stock option certificate (this "**Option Certificate**") is issued pursuant to the provisions of the Corporation's 2022 Stock Option Plan as amended or replaced from time to time (the "**Plan**") and evidences that \_\_\_\_\_ (the "**Optionee**") is the holder of an option to purchase up to \_\_\_\_\_ Shares in the Corporation at a purchase price of \$\_\_\_\_\_ per Share.

The Grant Date of this Option is \_\_\_\_\_.

The Expiry Date is \_\_\_\_\_, 20\_\_\_\_.

This Option vests on the following terms:

\_\_\_\_\_ (insert N/A if no vesting terms)

Other Restrictions:

1. This Option Certificate and the Option evidenced hereby will expire and terminate on the date which is the earlier of the Expiry Date and the date set out in section 7(a)(ii) of the Plan.
2. Subject to early expiry as described in paragraph 1 above and any vesting conditions, this Option may be exercised from the Grant Date until 4:00 p.m. local time in Vancouver, British Columbia on the Expiry Date, by delivering to the Corporation an Exercise Notice in the form attached as Schedule "B" to the Plan, together with this Option Certificate and a money wire, certified cheque or bank draft payable to LION COPPER AND GOLD CORP. in an amount equal to the total Option Price of the Shares in respect of which this Option is being exercised; provided that the Optionee will have satisfied the conditions precedent, if any, to the exercise of the Option set out in the Plan.
3. This Option Certificate and the Option evidenced hereby is not assignable, transferable or negotiable except in accordance with the provisions of the Plan. This Option Certificate is issued for convenience only and in the case of any dispute with regard to any matter in respect hereof, the provisions of the Plan and records of the Corporation will prevail. The Corporation and the Optionee hereby attorn to the jurisdiction of the Courts of British Columbia.
4. The exercise of this Option is subject to the terms and restrictions set out in the Plan. Terms have the meaning as set out in the Plan.
5. By accepting and not returning this Option Certificate within five (5) days of receiving it, the Optionee expressly consents to the disclosure by the Corporation of personal and other information regarding the Optionee to any governmental or other regulatory body (including the TSX Venture Exchange (the "**Exchange**") or such other self-regulatory body or stock exchange having jurisdiction over the Corporation). In addition, the Optionee consents to the collection, use and disclosure of personal or other information by such governmental or other regulatory body (including the Exchange or such other self-regulatory body or stock exchange having jurisdiction over the Corporation) for such purposes as may be identified by such governmental or other regulatory body, from time to time.

6. **[INSERT FOR U.S. OPTIONEES:** This Option has not been registered under any U.S. federal or state law and may not be exercised except pursuant to an effective registration statement under the United States Securities Act of 1933, as amended, and all applicable U.S. state securities laws, or pursuant to available exemptions from such registration requirements. In addition, shares issued on exercise of this Option by a U.S. resident will bear a U.S. form of restrictive legend and may not be resold except in compliance with such legend.]

Dated this \_\_\_\_\_ day of \_\_\_\_\_.

**LION COPPER AND GOLD CORP.**

Per:

\_\_\_\_\_  
Authorized Signatory

## SCHEDULE "B"

## LION COPPER AND GOLD CORP.

## EXERCISE NOTICE

To: The Board of Directors - Stock Option Plan  
**LION COPPER AND GOLD CORP. (the "Corporation")**

The undersigned hereby irrevocably gives notice, pursuant to the Corporation's 2022 Stock Option Plan, of the exercise of the Option to acquire and hereby subscribes for (cross out inapplicable item):

- (a) all of the Shares; or  
 (b) \_\_\_\_\_ of the Shares;

which are the subject of the Option Certificate held by the undersigned evidencing the undersigned's Option to purchase said Shares.

Calculation of total Option Price:

- (i) number of Shares to be acquired \_\_\_\_\_ Shares  
 (ii) multiplied by the Option Price per Share: \$ \_\_\_\_\_  
**TOTAL OPTION PRICE**, enclosed herewith: \$ \_\_\_\_\_

1. The undersigned hereby:

- (a) tenders herewith a certified cheque, bank draft or wire transfer (circle one) in the amount of \$ \_\_\_\_\_ payable to the Corporation in an amount equal to the total Option Price of the aforesaid Shares, as calculated above, and directs the Corporation to issue the share certificate evidencing said Shares in the name of the undersigned to be mailed to the undersigned at the following address; or  
 (b) directs the Corporation to deliver the share certificate evidencing said Shares to the undersigned's agent in trust for the undersigned at the address listed below against receipt of a check payable to the Corporation in an amount equal to the total Option Price of the aforesaid Shares, as calculated above.

\_\_\_\_\_  
 \_\_\_\_\_

2. **U.S. Purchaser Certification.** The undersigned hereby represents, warrants and certifies to the Corporation that at the time of exercise (PLEASE CHECK [✓] ONE OF THE FOLLOWING):

- A. ☐ The undersigned holder: (i) at the time of exercise of these Options **is not** in the United States; (ii) **is not** a "U.S. person" as defined in Regulation S under the United States *Securities Act of 1933*, as amended (the "**1933 Act**") and **is not** exercising these Options on behalf of a "U.S. person"; and (iii) **did not** execute or deliver this Exercise Form in the United States.

**OR**

- B. ☐ The undersigned holder: (i) at the time of exercise of these Options is in the United States; (ii) is a "U.S. person" as defined in Regulation S under the 1933 Act or is exercising these Options on behalf of a "U.S. person"; or (iii) executed or delivered this Exercise Form in the United States.

The undersigned understands that if the box in item (B) above is initialled, then the undersigned hereby confirms and acknowledges that:

- (a) the undersigned, at the time of exercise of the Options, has an exemption available from registration under the 1933 Act, and under applicable state securities in order to permit the Corporation to issue Shares underlying the Options to the undersigned;
- (b) upon exercise of the Options, the Corporation has no obligation to issue the underlying Shares to the undersigned unless an exemption from registration under the 1933 Act, and under applicable state securities laws is available as determined by the Corporation (in its sole discretion);
- (c) the Corporation may require the undersigned to make further representations and warranties (in writing) or provide such other documentation or legal opinions in order to establish, to the satisfaction of the Corporation (in its sole discretion), that the Shares to be issued on such exercise may legally be issued in compliance with all applicable United States federal and state securities laws.
- (d) the Direct Registration System statement(s) or certificate(s) representing the Shares issued upon exercise of the Options will bear a legend restricting transfer without registration under the 1933 Act, and applicable state securities laws unless an exemption from registration is available, in such form:

**"THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "U.S. SECURITIES ACT"). THE HOLDER HEREOF, BY ACQUIRING SUCH SECURITIES, AGREES FOR THE BENEFIT OF LION COPPER AND GOLD CORP. (THE "COMPANY") THAT SUCH SECURITIES MAY BE OFFERED, SOLD OR OTHERWISE TRANSFERRED ONLY (A) TO THE COMPANY; (B) OUTSIDE THE UNITED STATES IN COMPLIANCE WITH RULE 904 OF REGULATION S UNDER THE U.S. SECURITIES ACT; OR (C) IN ACCORDANCE WITH ANY OTHER REGISTRATION EXEMPTION EVIDENCED BY AN OPINION OF COUNSEL OF RECOGNIZED STANDING AND ACCEPTABLE TO THE COMPANY AND THE TRANSFER AGENT, AVAILABLE UNDER THE U.S. SECURITIES ACT AND APPLICABLE STATE LAWS. DELIVERY OF THIS CERTIFICATE MAY NOT CONSTITUTE "GOOD DELIVERY" IN SETTLEMENT OF TRANSACTIONS ON STOCK EXCHANGES IN CANADA OR ELSEWHERE.**

**A NEW CERTIFICATE BEARING NO LEGEND, DELIVERY OF WHICH WILL CONSTITUTE "GOOD DELIVERY", MAY BE OBTAINED FROM THE COMPANY'S TRANSFER AGENT UPON DELIVERY OF THIS CERTIFICATE AND A DULY EXECUTED DECLARATION, IN A FORM SATISFACTORY TO THE TRANSFER AGENT AND THE COMPANY, TO THE EFFECT THAT THE SALE OF THE SECURITIES REPRESENTED HEREBY IS BEING MADE IN COMPLIANCE WITH RULE 904 OF SEC REGULATION S UNDER THE U.S. SECURITIES ACT AND APPLICABLE FOREIGN LAW."**

- (e) it has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of purchasing the Shares;
- (f) it is receiving the Shares for its own account for investment purposes only and not with a view to resale or distribution and, in particular, it has no intention to distribute either directly or indirectly any of the Shares in the United States; provided, however, that the undersigned may sell or otherwise dispose of any of the Shares pursuant to registration thereof pursuant to the 1933 Act and any applicable state securities laws or under an exemption from such registration requirements;
- (g) it has had access to such financial and other information as it deems necessary in connection with its decision to exercise the Options and purchase the Shares;

- (h) it is not purchasing the Shares as a result of any general solicitation or general advertising, including advertisements, articles, notices or other communications published in any newspaper, magazine or similar media or broadcast over radio, television, or any seminar or meeting whose attendees have been invited by general solicitation or general advertising; and
- (i) the Corporation will rely upon its confirmations, acknowledgements and agreements set forth herein, and the undersigned agrees to notify the Corporation promptly in writing if any of its representations or warranties herein ceases to be accurate or complete.

DATED the \_\_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Signature of Optionee

\_\_\_\_\_  
Name of Witness (please print)

\_\_\_\_\_  
Name of Optionee (please print)



**LION COPPER AND GOLD CORP.**  
(Formerly Quaterra Resources Inc.)

**AMENDED 2021 RESTRICTED SHARE UNIT PLAN**

**1. PLAN DEFINITIONS AND INTERPRETATIONS**

1.1 For the purposes of this Plan, unless such word or term is otherwise defined herein or the context in which such word or term is used herein otherwise requires, the following words and terms with the initial letter or letters thereof capitalized shall have the following meanings:

- (a) "**Act**" means the *Business Corporations Act* (British Columbia), or its successor, as amended, from time to time;
- (b) "**Affiliate**" means any corporation that is an affiliate of the Company as defined in National Instrument 45-106 - *Prospectus and Registration Exemptions*, as may be amended from time to time;
- (c) "**Associate**" where used to indicate a relationship with any person or company, is as defined in the *Securities Act* (British Columbia), as may be amended from time to time;
- (d) "**Board**" means the Board of Directors of the Company;
- (e) "**Change of Control**" means the occurrence of any one or more of the following events:
  - (i) a consolidation, merger, amalgamation, arrangement or other reorganization or acquisition involving the Company or any of its Affiliates and another corporation or other entity, as a result of which the holders of Voting Securities prior to the completion of the transaction hold less than 50% of the Voting Securities of the successor corporation after completion of the transaction;
  - (ii) the sale, lease, exchange or other disposition, in a single transaction or a series of related transactions, of all or substantially all of the assets, rights or properties of the Company and its subsidiaries on a consolidated basis to any other person or entity, other than transactions among the Company and its subsidiaries;
  - (iii) a resolution is adopted to wind-up, dissolve or liquidate the Company;
  - (iv) any person, entity or group of persons or entities acting jointly or in concert (an "Acquiror") acquires, or acquires control (including, without limitation, the right to vote or direct the voting) of, Voting Securities of the Company which, when added to the Voting Securities owned of record or beneficially by the Acquiror or which the Acquiror controls, would entitle the Acquiror and/or Associates and/or Affiliates of the Acquiror, to cast or to direct the casting of 50% or more of the votes attached to all of the Company's outstanding Voting Securities which may be cast to elect directors of the Company or the successor corporation (regardless of whether a meeting has been called to elect directors); or
  - (v) as a result of or in connection with: (A) a contested election of directors; or (B) a consolidation, merger, amalgamation, arrangement or other reorganization or acquisitions involving the Company or any of its Affiliates and another corporation or other entity (a "Transaction"), fewer than 50% of the directors of the Company or the successor corporation are persons who were directors of the Company immediately prior to the Transaction.

For the purposes of the foregoing definition of Change of Control, "Voting Securities" means Common Shares and any other shares entitled to vote for the election of directors and, for the purposes of calculating the number of securities of the Company owned or controlled by the Acquiror, it shall include any security, whether or not issued by the Company, which are not shares entitled to vote for the election of directors but are convertible into or exchangeable for shares which are entitled to vote for the election of directors including any options or rights to purchase such shares or securities.

- (f) **"Common Shares"** means the common shares in the capital of the Company, as adjusted in accordance with the provisions of Section 5 of this Plan;
- (g) **"Company"** means Lion Copper and Gold Corp., a corporation existing under the Act, and includes any successor corporation thereof;
- (h) **"Deferred Payment Date"** for a Participant means the date to which the Participant has elected to defer redemption of his or her Restricted Share Units pursuant to Section 3.12;
- (i) **"Director"** means a member of the Board from time to time;
- (j) **"Eligible Consultants"** means an individual, other than an Eligible Employee, that (i) is engaged to provide, on a *bona fide* basis, consulting, technical, management or other services to the Company or any Affiliate under a written contract between the Company and the individual or corporation of which the individual consultant is an employee, (ii) in the reasonable opinion of the Company, spends or will spend a significant amount of time and attention on the affairs and business of the Company, and (iii) does not provide services in connection with the offer or sale of securities in a capital-raising transaction and do not directly or indirectly promote or maintain a market for the Company's securities, or is not an "Investor Relations Service Provider" as defined in the policies of the TSXV;
- (k) **"Eligible Employees"** means employees of the Company or any Affiliate including officers of the Company or any Affiliate and is not an Investor Relations Service Provider;
- (l) **"Grant Date"** means the date that the Restricted Share Unit is granted to a Participant under the Plan, as evidenced by the Restricted Share Unit grant letter;
- (m) **"Insider"** means: (i) an insider as defined in the *Securities Act* (British Columbia), as may be amended from time to time, other than a person who is an Insider solely by virtue of being a director or senior officer of an Affiliate; and (ii) an Associate of any person who is an insider by virtue of (i);
- (n) **"Market Value"** means, with respect to a Common Share on any date, the weighted average price of the Common Shares on the TSXV for the five days on which Common Shares were traded immediately preceding that date. If the Common Shares are not trading on the TSXV, then the Market Value shall be determined based on the trading price on such stock exchange or over-the-counter market on which the Common Shares are listed and posted for trading as may be selected for such purpose by the Board. In the event that the Common Shares are not listed and posted for trading on any stock exchange or over-the-counter market, the Market Value shall be the fair market value of such Common Shares as determined by the Board in its sole discretion;
- (o) **"Participant"** means each Director, Eligible Employee and Eligible Consultant to whom Restricted Share Units are granted hereunder;
- (p) **"Person"** means any individual, partnership, corporation, company, association, trust, joint venture, limited liability company, unincorporated organization, entity or division, or any government, governmental department or agency or political subdivision thereof;
- (q) **"Plan"** means this Amended 2021 Restricted Share Unit Plan, as same may be amended from time to time;

- (r) **"Redemption Date"** means the date on which a Participant's Restricted Share Unit vests;
  - (s) **"Restricted Share Unit"** means a unit credited by means of an entry on the books of the Company to a Participant, representing the right to receive on the Redemption Date one previously unissued Common Share for each Restricted Share Unit;
  - (t) **"Restricted Share Unit Award"** means an award of Restricted Share Units under the Plan to a Participant;
  - (u) **"Retirement"** means the Participant ceasing to be an Eligible Employee after attaining a stipulated age in accordance with the normal retirement policy or earlier with the Company's consent;
  - (v) **"Securities Laws"** means securities legislation, securities regulation and securities rules, as amended, and the policies, notices, instruments and blanket orders in force from time to time that are applicable to the Company;
  - (w) **"Security Based Compensation Arrangement"** has the meaning ascribed thereto in Section 613 (or any successor thereto) of the TSX Company Manual (as the same may be amended from time to time), and includes, without limitation: (i) stock option plans for the benefit of employees, Insiders, service providers or any one of such groups; (ii) individual stock options granted to employees, service providers or Insiders if not granted pursuant to a plan previously approved by the Company's security holders; (iii) stock purchase plans where the Company provides financial assistance or where the Company matches the whole or a portion of the securities being purchased; (iv) stock appreciation rights involving issuances of securities from treasury; (v) any other compensation or incentive mechanism involving the issuance or potential issuances of securities of the Company; and (vi) security purchases from treasury by an employee, Insider or service provider which is financially assisted by the Company by any means whatsoever;
  - (x) **"Termination"** means: (i) in the case of an Eligible Employee, the termination of the employment of the Eligible Employee with or without cause by the Company or an Affiliate or the cessation of employment of the Eligible Employee with the Company or an Affiliate, as a result of resignation or otherwise, other than the Retirement of the Eligible Employee; (ii) in the case of a Director, the resignation, removal of or failure to re-elect the Director as a director of the Company or an Affiliate; and (iii) in the case of an Eligible Consultant, the termination of the services of the Eligible Consultant by the Company or any Affiliate or the Eligible Consultant;
  - (y) **"TSXV"** means the TSX Venture Exchange; and
  - (z) **"year"** means a calendar year unless otherwise specified.
- 1.2 **Headings.** The headings of all Sections, and paragraphs in the Plan are inserted for convenience of reference only and shall not affect the construction or interpretation of the Plan.
- 1.3 **References to this Restricted Share Unit Plan.** The words "herein", "hereby", "hereunder", "hereof" and similar expressions mean or refer to the Plan as a whole and not to any particular Section, paragraph or other part hereof.
- 1.4 **Canadian Funds.** Unless otherwise specifically provided, all references to dollar amounts in the Plan are references to lawful money of Canada.

## 2. PURPOSE AND ADMINISTRATION OF THE RESTRICTED SHARE UNIT PLAN

- 2.1 **Purpose of the Restricted Share Unit Plan.** The Plan provides for the payment for services rendered by a Participant in the form of the issuance of Common Shares to Participants for the purpose of advancing the interests of the Company and its Affiliates through the motivation, attraction and retention of Directors, Eligible Employees and Eligible Consultants and to secure for the Company and the shareholders of the Company the benefits inherent in the ownership of Common Shares by Directors, Eligible Employees and Eligible Consultants, it being generally recognized that restricted share plans aid in attracting, retaining and encouraging employees due to the opportunity offered to them to acquire a proprietary interest in the Company.
- 2.2 **Administration of the Restricted Share Unit Plan.** The Plan shall be administered by the Board and the Board shall have full authority to administer the Plan including the authority to interpret and construe any provision of the Plan and to adopt, amend and rescind such rules and regulations for administering the Plan as the Board may deem necessary in order to comply with the requirements of the Plan. All actions taken and all interpretations and determinations made by the Board in good faith shall be final and conclusive and shall be binding on the Participants and the Company. No member of the Board shall be personally liable for any action taken or determination or interpretation made in good faith in connection with the Plan and all members of the Board shall, in addition to their rights as directors of the Company, be fully protected, indemnified and held harmless by the Company with respect to any such action taken or determination or interpretation made in good faith. The appropriate officers of the Company are hereby authorized and empowered to do all things and execute and deliver all instruments, undertakings and applications and writings as they, in their absolute discretion, consider necessary for the implementation of the Plan and of the rules and regulations established for administering the Plan. All costs incurred in connection with the Plan shall be for the account of the Company.
- 2.3 **Record Keeping.** The Company shall maintain a register in which shall be recorded:
- (a) the name and address of each Participant;
  - (b) the number of Restricted Share Units granted to each Participant;
  - (c) the number of Restricted Shares issued to each Participant; and
  - (d) all other relevant information, including, without limitation, all conditions set forth in a Restricted Share Unit grant letter, substantially in the form set out in Schedule 1 to this Plan.
- 2.4 **Determination of Participants and Participation.** The Board shall from time to time determine the Participants to whom Restricted Share Units shall be granted and the provisions and restrictions with respect to such grant, all such determinations to be made in accordance with the terms and conditions of the Plan, and the Board may take into consideration the present and potential contributions of and the services rendered by the particular Participant to the success of the Company and any other factors which the Board deems appropriate and relevant.
- 2.5 **Maximum Number of Common Shares:**
- (a) The aggregate maximum number of Common Shares available for issuance from treasury under this Plan, subject to adjustment pursuant to Section 5.7, shall not exceed 30,330,661 Common Shares, or such lesser number as may be required in connection with the approval of the TSXV, or such greater number as may be approved from time to time by the Company's disinterested shareholders.
  - (b) The maximum number of Restricted Share Units issuable to any one Participant in the aggregate in any 12 month period under this Plan and any other Security Based Compensation Arrangements of the Company is 5% of the total number of outstanding Common Shares at the proposed Grant Date.

- (c) The maximum number of Common Shares issuable to Insiders as a group, at any time, pursuant to this Plan and any other Security Based Compensation Arrangements of the Company, is 10% of the total number of Common Shares then outstanding. The maximum number of Common Shares issuable to Insiders as a group, within any one year period, pursuant to this Plan and any other Security Based Compensation Arrangements of the Company is 10% of the total number of Common Shares then outstanding. For purposes of this Section 2.5, the number of Common Shares then outstanding shall mean the number of Common Shares outstanding on a non-diluted basis immediately prior to the proposed grant of the applicable Restricted Share Unit.
- (d) The maximum number of Common Shares issuable to Eligible Consultants, within any one year period, pursuant to this Plan and any other Security Based Compensation Arrangements of the Company, is 2% of the total number of Common Shares then outstanding. For purposes of this Section 2.5, the number of Common Shares then outstanding shall mean the number of Common Shares outstanding on a non-diluted basis immediately prior to the proposed grant of the applicable Restricted Share Unit.

### 3. RESTRICTED SHARE UNITS

- 3.1 **Restricted Share Unit Plan.** The Plan is hereby established for Directors, Eligible Employees and Eligible Consultants. The Plan shall be subject to the approval of the shareholders of the Company to be given by resolution passed at a meeting of the shareholders of the Company and acceptance by the TSXV or any regulatory authority or stock exchange having jurisdiction over the securities of the Company.
- 3.2 **Restricted Share Unit Grant Letter.** The Board shall determine criteria for the grant of Restricted Share Units to Directors, Eligible Employees and Eligible Consultants. Each grant of a Restricted Share Unit under the Plan shall be evidenced by a Restricted Share Unit grant letter to the Participant from the Company. Such Restricted Share Unit grant letter shall be subject to all applicable terms and conditions of the Plan and may include any other terms and conditions which are not inconsistent with the Plan and which the Board deems appropriate for inclusion in a Restricted Share Unit grant letter. The provisions of the various Restricted Share Unit grant letters issued under the Plan need not be identical.
- 3.3 **Vesting Period.** Except as otherwise provided in a Restricted Share Unit grant letter or any other provision of this Plan, the vesting period of all Restricted Share Units granted pursuant to Section 3.4 of this Plan will be determined by the Board and may not be less than one year (except as permitted pursuant to TSXV policies or otherwise approved by the TSXV) or exceed three years. At the sole discretion of the Board, at the time of grant, in lieu of or in addition to vesting based on time lapsed from the Grant Date, vesting of the Restricted Share Units may be made subject to performance conditions to be achieved by the Company or a class of Participants or by a particular Participant on an individual basis. The extent and nature of such performance conditions will be determined by the Board and, without limiting the generality of the foregoing, may include terms or conditions relating to:
  - (a) the return to holders of Common Shares, with or without reference to other comparable companies;
  - (b) the financial performance or results of the Company or a Subsidiary;
  - (c) the achievement of milestones relating to a specific project the Participant is involved in on behalf of the Company; or
  - (d) any other terms and conditions the Board may in its discretion determine with respect to vesting;
- 3.4 **Grant of Restricted Share Units.** A Restricted Share Unit Award granted to a particular Participant in a year will be for services rendered by the Participant. The number of Restricted Share Units awarded will be credited to the Participant's account, effective as of the Grant Date.

- 3.5 **Payment of Dividends.** In the event that a dividend (other than a stock dividend) is declared and paid by the Company on Common Shares, the Board may elect to credit each Participant with additional Restricted Share Units. In such case, the number of additional Restricted Share Units will be equal to the aggregate amount of dividends that would have been paid to the Participant if the Restricted Share Units in the Participant's account had been Common Shares divided by the Market Value of a Common Share on the date on which dividends were paid by the Company.

The additional Restricted Share Units awarded to a Participant under this Section 3.5 of this Plan will vest on the Redemption Date in respect of the particular Restricted Share Unit to which the additional Restricted Share Units relate.

- 3.6 **Vesting.** A Restricted Share Unit granted to a Participant will entitle the Participant, subject to the Participant's satisfaction of any conditions, restrictions, vesting period, performance conditions or limitations imposed under the Plan or set out in the Restricted Share Unit grant letter, and subject to sections 3.8 and 4.1, to receive one previously unissued Common Share for each Restricted Share Unit on the date when the Restricted Share Unit is fully vested.

Subject to the foregoing, in the event of:

- (a) the death of a Participant, all unvested Restricted Share Units credited to the Participant will vest on the date of the Participant's death. The Common Shares underlying the Restricted Share Units credited to the Participant's account shall be issued to the Participant's estate as soon as practicable thereafter;
  - (b) the total disability of a Participant, all unvested Restricted Share Units credited to the Participant will vest on the date on which the Participant is determined to be totally disabled, and the Common Shares underlying such Restricted Share Units credited to the Participant's account shall be issued to the Participant as soon as practicable thereafter;
  - (c) Subject to (i) the terms of any Restricted Share Unit grant letter, (ii) any provisions with respect to vesting of Restricted Share Units in a Participant's employment agreement with the Company, (iii) the Board's discretion to accelerate vesting under Section 3.11, and (iv) the Board's discretion to waive termination of a Restricted Share Unit under this section, in the event of the Retirement or Termination of a Participant, any unvested Restricted Share Units held by the Participant shall immediately terminate and be of no further force and effect, provided that the Board has the absolute discretion to waive such termination. Common Shares underlying vested Restricted Share Units credited to the Participant's account shall be issued to the Participant as soon as practicable thereafter; and
  - (d) a Change of Control, all Restricted Share Units outstanding shall immediately vest on the date of such Change of Control notwithstanding any stated vesting period or performance condition. In any event, upon a Change of Control, Participants shall not be treated any more favourably than shareholders of the Company with respect to the consideration that the Participants would be entitled to receive for the Common Shares underlying the Restricted Share Units.
- 3.7 **Redemption - Fully Paid Common Shares to the Participant.** Subject to Sections 3.8 and 4.1, the Company will satisfy its obligation, on the redemption of the Restricted Share Units with the issue of previously unissued Common Shares. The Restricted Share Units will be redeemed by the Company on the Redemption Date (or the Deferred Payment Date where the Participant has elected to defer redemption pursuant to Section 3.12) unless otherwise provided in the grant letter.
- 3.8 **Redemption in Cash.** At the election of the Board, in its sole discretion, in lieu of delivering Common Shares to the Participant pursuant to Section 3.7, the Company may satisfy its obligation on the redemption of the Restricted Share Units by delivering to the Participant a lump sum cash payment, net of any applicable withholding taxes or other amounts pursuant to section 4.1, equal to the number of vested Restricted Share Units credited to his or her Participant account as of the relevant Redemption Date multiplied by the Market Value of one Common Share on such Redemption Date. If the Participant is a member of the Board, the Participant shall abstain from participating in or voting on any determination as to whether he or she will receive a cash payment pursuant to this Section 3.8.

- 3.9 **No Adjustment.** For greater certainty, no amount will be paid to, or in respect of, a Participant under the Plan or pursuant to any other arrangement, and no additional Restricted Share Units will be granted to a Participant to compensate the Participant for any downward fluctuations in the Market Value of a Common Share nor will any other form of benefit be conferred upon, or in respect of, a Participant for such a purpose.
- 3.10 **Blackout Periods.** In the event the Redemption Date (or the Deferred Payment Date where the Participant has elected to defer redemption pursuant to Section 3.12) determined in accordance with the terms of this Plan occurs within a period of time imposed by the Company, pursuant to the Company's policies, upon certain designated persons during which those persons may not trade in any securities of the Company (a "**Black-Out Period**") or which vest within five business days after a Black-Out Period ends (not including a Black-Out Period imposed due to a cease trade order), the Redemption Date (or the Deferred Payment Date where the Participant has elected to defer redemption pursuant to Section 3.12) of the Restricted Share Units shall be ten business days from the date any Black-Out Period ends.
- 3.11 **Acceleration of Redemption Date.** Notwithstanding anything else herein contained, the Company may, in its discretion, at any time permit the acceleration of the Redemption Date in respect of any Restricted Share Unit, all in the manner and on the terms as may be authorized by the Board.
- 3.12 **Deferred Payment Date.** Participants who are residents of Canada for the purposes of the *Income Tax Act* (Canada) and not subject to the provisions of the *Internal Revenue Code* (United States) may elect to defer redemption of their Restricted Share Units until a Deferred Payment Date. Any other Participants may not elect a Deferred Payment Date. Participants who elect to set a Deferred Payment Date must give the Company written notice of the Deferred Payment Date not later than sixty (60) days prior to the relevant Redemption Date. For certainty, Participants shall not be permitted to give any such notice after the day which is sixty (60) days prior to the relevant Redemption Date and a notice once given may not be changed or revoked.

#### 4. WITHHOLDING TAXES

- 4.1 **Withholding Taxes.** The Company or its Affiliates may take such steps as are considered necessary or appropriate for the withholding of any taxes or other amounts which the Company or its Affiliate are required by any law or regulation of any governmental authority whatsoever to withhold in connection with any issuance or delivery of Common Shares made under this Plan including, without limiting the generality of the foregoing, the withholding of all or any portion of any issuance or delivery of Common Shares to be made to the Participant, until such time as a Participant has paid the Company or its Affiliates any amount which the Company and its Affiliates are required to withhold with respect to such taxes or other amounts. For greater certainty, immediately upon the issuance of any Common Shares in satisfaction of a Restricted Share Unit, the Company shall be entitled to sell on behalf and for the account of a Participant a given number of Common Shares sufficient to cover any applicable withholding taxes and other amounts to be withheld by the Company in connection with the Participant's vested Restricted Share Units.

#### 5. GENERAL

- 5.1 **Effective Time of Restricted Share Unit Plan.** The Plan shall be effective on September 20, 2021. The Plan shall remain in effect until it is terminated by the Board.
- 5.2 **Participants in the United States.** The Company may, without amending the Plan, modify the terms of Restricted Share Units granted to Participants who provide services to the Company from outside of Canada in order to comply with the applicable laws of such jurisdictions. In addition, the terms of the Restricted Share Units granted to Participants subject to taxation in the United States will be subject to and will be determined by taking into consideration the terms stated in Appendix A that is attached to the Plan.

- 5.3 **Amendment of Restricted Share Unit Plan.** The Board may discontinue the Plan at any time without first obtaining shareholder approval, provided that, without the consent of a Participant, such discontinuance may not in any manner adversely affect the Participant's rights under any Restricted Share Unit granted under the Plan.

The Board may, subject to receipt of requisite regulatory and disinterested shareholder approval, make the following amendments to the Plan:

- (a) increase the number of Restricted Share Units which may be issued pursuant to the Plan;
- (b) change the definition of "Participant" under the Plan which would have the potential of narrowing, broadening or increasing insider participation;
- (c) reduce the range of amendments requiring shareholder approval contemplated in this Section 5.3;
- (d) make amendments that may lead to significant or unreasonable dilution to the Company's outstanding securities, or that may provide additional benefits to Participants at the expense of the Company or its shareholders;
- (e) change insider participation limits which would result in shareholder approval being required on a disinterested basis; or
- (f) make amendments to Section 5.4 of the Plan that would permit Restricted Share Units, or any other right or interest of a Participant under the Plan, to be assigned or transferred, other than for normal estate settlement purposes.

The Board may, subject to receipt of requisite regulatory approval (where required), but not subject to shareholder approval, in its sole discretion make all other amendments to the Plan that are not of the type contemplated above, including, without limitation:

- (a) amendments of a housekeeping nature;
- (b) the addition or a change to the vesting provisions of a Restricted Share Unit or the Plan;
- (c) a change to the termination provisions of a Restricted Share Unit or the Plan;
- (d) amendments to reflect changes to applicable securities laws; and
- (e) amendments to ensure that the Restricted Share Units granted under the Plan will comply with any provisions respecting income tax and other laws in force in any country or jurisdiction of which a Participant to whom a Restricted Share Unit has been granted may from time to time be a resident, citizen or otherwise subject to tax therein.

- 5.4 **Non-Assignable.** Except pursuant to a will or by the laws of descent and distribution, no Restricted Share Unit and no other right or interest of a Participant is assignable or transferable.
- 5.5 **Rights as a Shareholder.** No holder of any Restricted Share Units shall have any rights as a shareholder of the Company until such time as Common Shares are issued in satisfaction of the Participant's Restricted Share Units. Subject to Sections 3.5 and 5.8, no holder of any Restricted Share Units shall be entitled to receive, and no adjustment shall be made for, any dividends, distributions or any other rights declared for shareholders of the Company for which the record date is prior to the date on which Common Shares are issued in satisfaction of the Participant's Restricted Share Units.
- 5.6 **No Contract of Employment.** Nothing contained in the Plan shall confer or be deemed to confer upon any Participant the right to continue in the employment of, or to provide services to, the Company or its Affiliates nor interfere or be deemed to interfere in any way with any right of the Company or its Affiliates to discharge any Participant at any time for any reason whatsoever, with or without cause. Participation in the Plan by a Participant shall be voluntary.



5.7 **Adjustment in Number of Common Shares Subject to the Restricted Share Unit Plan.** In the event there is any change in the Common Shares, whether by reason of a stock dividend, consolidation, subdivision, reclassification or otherwise, an appropriate adjustment shall be made by the Board in:

- (a) the number of Common Shares available under the Plan; and
- (b) the number of Common Shares subject to or underlying any Restricted Share Units.

If the foregoing adjustment shall result in a fractional Common Share, the fraction shall be disregarded. All such adjustments shall be conclusive, final and binding for all purposes of the Plan.

5.8 **Securities Exchange Take-over Bid.** In the event that the Company becomes the subject of a take-over bid (within the meaning of the *Securities Act* (British Columbia) pursuant to which 100% of the issued and outstanding Common Shares are acquired by the offeror either directly or as a result of the compulsory acquisition provisions of the incorporating statute and where consideration is paid in whole or in part in equity securities of the offeror, the Board may send notice to all holders of Restricted Share Units requiring them to exchange their Restricted Share Units, provided that:

- (a) the offeror delivers with such notice an irrevocable and unconditional offer to grant replacement restricted share unit rights to the holders of Restricted Share Units on the equity securities offered as consideration by the offeror; and
- (b) the Board has determined, in good faith, that such replacement restricted share unit rights have the same economic value as the Restricted Share Units being exchanged.

5.9 **No Representation or Warranty.** The Company makes no representation or warranty as to the future market value of any Common Shares issued in accordance with the provisions of the Plan.

5.10 **Compliance with Applicable Law.** If any provision of the Plan contravenes any law or any order, policy, by-law or regulation of any regulatory body having jurisdiction, then such provision shall be deemed to be amended to the extent necessary to bring such provision into compliance therewith. For greater certainty, the Plan is also subject to TSXV Corporate Finance Manual Policy 4.4 - *Incentive Stock Options*, or any successor policy.

5.11 **Interpretation.** This Plan shall be governed by and construed in accordance with the laws of the Province of British Columbia.

**Appendix A**

This special appendix sets forth special provisions of the Plan that apply to Participants ("US Grantees") subject to Section 409A of the United States Internal Revenue Code of 1986, as amended (the "**Code**").

**1. Compliance with Section 409A**

- (a) *In General* - Notwithstanding any provision of the Plan to the contrary, it is intended that with respect to any US Grantee, such US Grantee's participation in the Plan shall be in a manner which does not subject the US Grantee's interests in the Plan to accelerated or additional tax under Section 409A. If any grant to a US Grantee or payment hereunder could cause the application of accelerated or additional tax under Section 409A, such grant or payment shall be deferred if and to the extent deferral will make such grant or payment compliant with Section 409A; otherwise such grant or payment shall be restructured, to the extent possible, in a manner determined by the Board that does not cause such an accelerated or additional tax. For purposes of Section 409A, each payment or amount due under this Plan shall be considered a separate payment.
- (b) *Change of Control* - For US Grantees, "**Change of Control**" means an event as defined in Section 409A(2)(A)(v) of the Code.
- (c) *Disability* - For US Grantees, "Disability" means a disability within the meaning of Section 409A(a)(2)(C) of the Code.
- (d) *Payments in General* - Notwithstanding anything to the contrary, the US Grantees shall not have a right to designate the taxable year of any payment under the Plan.

**2. Amendment of Appendix**

The Board retains the power and authority to amend or modify this Appendix to the extent the Board in its sole discretion deems necessary or advisable to comply with any guidance issued under Section 409A. Such amendments may be made without approval of the shareholders of the Company or the approval of any individual Participant.

## SCHEDULE 1

[U.S. legend if applicable]

FORM OF GRANT LETTER  
RESTRICTED SHARE UNIT PLAN

This Grant Letter is entered into between Lion Copper and Gold Corp. (the "**Company**") and the Participant named below pursuant to the Amended 2021 Restricted Share Unit Plan of the Company (the "**Plan**") and confirms that:

1. on \_\_\_\_\_, 20\_\_ (the "**Award Date**");
2. \_\_\_\_\_ (the "**Participant**");
3. was granted \_\_\_\_\_ non-assignable restricted share units (the "**Award**"); and
4. the Award shall vest as follows or on such earlier date as provided under the Plan:  
  
\_\_\_\_\_  
\_\_\_\_\_
5. The Company will redeem the restricted share units at the time of vesting or \_\_\_\_\_ [insert other redemption provisions].
6. **By signing this Grant Letter, the Participant:**
  - (i) acknowledges that he or she has read and understands the Plan, that he or she will abide by its terms and conditions, and that the Award is subject to the terms of the Plan;
  - (ii) agrees that an RSU does not carry any voting rights;
  - (iii) recognizes that (A) during the period between granting of an Award and the Vesting Date of the Award (or settlement thereof), the value of an RSU may be subject to a number of factors and the Corporation accepts no responsibility for any fluctuations in the value of the Award, and (B) there is no assurance as to when, if at all, a Change of Control will occur and therefore if or when the Award will vest;
  - (iv) acknowledges that the Company assumes no responsibility as regards to the tax consequences that participation in the Plan will have for the Participant and the Participant is urged to consult his or her own tax advisor in such regard; and

- (v) acknowledges that he or she is solely liable for any taxes or penalties which may be payable to Canada Revenue Agency under the *Income Tax Act* (Canada) or any other taxing authority in respect of the grant of an Award and the delivery of common shares pursuant to an Award is contingent upon satisfaction of applicable withholding requirements and applicable taxes may be withheld from any such payment in settlement of an Award.

**IN WITNESS WHEREOF** the Company and the Participant have executed this Grant Letter as of \_\_\_\_\_, 20\_\_.

**LION COPPER AND GOLD CORP.**

By: \_\_\_\_\_

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Witness

## SECOND AMENDMENT TO EMPLOYMENT AGREEMENT

THIS SECOND AMENDING AGREEMENT (this "**Agreement**") is made effective this 1st day of November, 2022.

### BETWEEN:

**LION COPPER AND GOLD CORP.** (formerly Quaterra Resources Inc.), a body corporate incorporated pursuant to the laws of British Columbia and having an office at Suite 1200 - 750 West Pender Street, Vancouver, British Columbia, Canada, V6C 2T8 ("**Lion CG**")

**QUATERRA ALASKA, INC.**, a body corporate incorporated pursuant to the laws of Alaska and having an office at Suite 304, 101 W Benson Blvd, Anchorage, Alaska, 99503, USA ("**QTA Alaska**")

(collectively, the "**Companies**")

### AND:

**CHARLES TRAVIS NAUGLE**, individual, of 23768 Shooting Star Dr., Golden, Colorado, 80401, USA

(the "**Employee**")

### WHEREAS:

- A. The Companies and the Employee entered into an employment agreement dated May 1, 2021 as amended September 15, 2021, a copy of which is attached as Schedule "A" hereto (the "**Employment Agreement**"), pursuant to which the Companies agreed to hire and engage the Employee as Lion CG's Chief Executive Officer as well as a QTA Alaska officer and the Employee agreed to serve the Companies in such capacities subject to the terms and conditions contained therein.
- B. The parties now wish to further amend the Employment Agreement as set forth herein.

NOW THEREFORE THIS AGREEMENT WITNESSES THAT in consideration for the sum of \$1.00 and the premises and the mutual covenants, representations and warranties given by each of the parties to the other, the receipt and sufficiency of which is hereby expressly acknowledged, the parties do hereby agree as follows:

1. **Definitions and Interpretation.** Unless otherwise defined herein or the context requires otherwise, all capitalized terms in this Agreement shall have the meanings assigned to those terms in the Employment Agreement.

2. **Amendment to Employment Agreement.**

- (i) The Employment Agreement is hereby amended by deleting and replacing section 8 with the following:

"Subject to the terms of this paragraph, QTA Alaska shall pay the Employee, by way of remuneration, an annual salary of two hundred and fifty thousand dollars (US\$250,000) effective September 15, 2021 (the "**Annual Salary**"), of which approximately 52% of the Annual Salary will be paid in shares of Falcon Butte Minerals Corp. (the "**Falcon Butte Shares**"). The deemed price of the Falcon Butte Shares will be equal to the fair market value of the Falcon Butte Shares ("**FMV**") at the time the Company transfers such shares to the Employee. The payment schedule for the Falcon Butte Shares will be in arrears, as follows: (i) as at November 1, 2022, US\$32,500 of the Annual Salary shall be converted to Falcon Butte Shares; and (ii) as at February 1, 2023, US\$32,500 of the Annual Salary shall be converted to Falcon Butte Shares. The payment terms for the Falcon Butte Shares are applicable for six months beginning on November 1, 2022 and these payment terms can be extended on a quarterly basis thereafter by mutual consent of the parties. For the purposes of the foregoing, the FMV will be the greater of \$0.28 and the last cash issuance price per Falcon Butte Share (pursuant to a bona fide financing) as at the time of payment.

Upon the expiration of one year following the date of this Agreement and each year thereafter during the term of this Agreement, the Board shall review the Employee's salary with a view to increase, giving consideration to the financial position of the Companies and the scope of their activities.

The Employee will be entitled to receive an annual grant of options under the Stock Option Plan of each of the Companies. The number of options will be determined at the discretion of the Board. The exercise price per common share of the Company will be equal to the Market Price (as defined in the TSXV policies) of the Company's common shares as at the Annual Review Date, subject to a minimum exercise price per share of C\$0.05."

3. **Full Force and Effect.** Except as expressly provided herein, the provisions of the Employment Agreement shall remain in full force and effect.
4. **Governing Laws.** This Agreement will be governed by and interpreted in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein. The Companies and the Employee hereby attorn to the exclusive jurisdiction of the courts of British Columbia.
5. **Independent Legal Advice.** The Employee fully understands and accepts the contents, terms and effect of this Agreement and has had a reasonable opportunity to obtain independent legal advice before signing it.
6. **Enurement.** This Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective successors, permitted assigns, heirs, administrators and legal representatives.
7. **Counterparts.** This Agreement may be executed in any number of counterparts and delivered by electronic transmission, each of which shall be deemed to be original and all of which taken together shall be deemed to constitute one and the same instrument.

*[signature page follows]*

IN WITNESS WHEREOF, this Agreement has been executed and delivered as of the date first above written, by the duly authorized representatives of the parties hereto.

**LION COPPER AND GOLD CORP.**

Per: "Stephen Goodman"  
Authorized Signatory

**QUATERRA ALASKA, INC.**

Per: "Stephen Goodman"  
Authorized Signatory

**EMPLOYEE**

"Charles Travis Naugle"  
**CHARLES TRAVIS NAUGLE**

A-1

**SCHEDULE "A"**

**Employment Agreement**

*[Attached]*



## EMPLOYMENT AGREEMENT

DATED effective the 1<sup>st</sup> day of May, 2021 and amended September 15, 2021. BETWEEN:

QUATERRA RESOURCES INC., a body corporate incorporated pursuant to the laws of British Columbia and having an office at Suite 1200 - 750 West Pender Street, Vancouver, British Columbia, Canada, V6C 2T8 ("Quaterra")

QUATERRA ALASKA, INC., a body corporate incorporated pursuant to the laws of Alaska and having an office at Suite 304, 101 W Benson Blvd, Anchorage, Alaska 99503 USA ("QTA Alaska")

(collectively, the "Companies")

AND:

CHARLES TRAVIS NAUGLE, individual, of 23768 Shooting Star Dr., Golden, Colorado 80401 USA

(the "Employee")

WHEREAS:

- A. The Companies are involved in the business of acquiring, exploring and developing natural resource properties;
- B. The Employee has North American and international expertise and experience in the business carried on by the Companies and is the Chief Executive Officer ("CEO") of Quaterra and an officer of QTA Alaska, a subsidiary of Quaterra; and
- C. The Companies wish to acquire the services of the Employee and the Employee is agreeable to serve the Companies upon the terms of this Agreement.

NOW, THEREFORE, THIS AGREEMENT WITNESSES that in consideration of the premises and the mutual covenants and agreements hereinafter set forth, IT IS AGREED as follows:

- 1. The Companies hire and engage the Employee as Quaterra's CEO as well as QTA Alaska's officer for a term ending three years from the date of May 1, 2021, unless extended or terminated earlier as hereinafter provided.
- 2. The Employee will provide the following services:
  - a) Formulating and implementing a strategic plan that guides the direction of the Company's business;
  - b) Managing the Company and its components and ensuring they function properly, including identifying and solving problems that may prevent their smooth and efficient operation;

- c) Seeking, investigating and implementing under direction of the Board of Directors (the "Board") opportunities for growth of the Company's business including property acquisitions and dispositions, M&A activity, joint ventures and partnerships;
  - d) Negotiating joint ventures, partnership agreements and other operational and financial arrangements;
  - e) Together with the President, identifying and implementing opportunities for increased operating efficiency and cost cutting;
  - f) Working with the President and CFO to monitor and improve financial performance including budgets, operations, financial statements and cash flow management;
  - g) Working with the President to coordinate the Company's financial reporting and disclosure requirements, including news releases, quarterly financial statements and MD&A's;
  - h) Working with the President to monitor and ensure compliance with security regulations governing publicly-traded companies;
  - i) Working with the President and CFO on public and private financings, including negotiating and working with investment bankers, brokerage firms and legal advisors;
  - j) Building the Company's profile in the financial and investment communities, including developing the Company's story and communicating it to retail and institutional investors, mining analysts and the media; and
  - k) Negotiate services with financial service providers such as investment banks with the President related to capital raising, and marketing tours
3. During the term of this Agreement, the Employee shall diligently and faithfully devote the time, effort and ability to the Companies' affairs and business necessary to perform his duties under this Agreement.
4. The Employee's duties shall be as set out in Paragraph 2 hereof. The Employee shall conduct the operations of the Companies in an efficient, trustworthy and businesslike manner to the advantage and benefit of the Companies.
5. Except as provided in Paragraph 6, during the term of his employment the Employee shall not, without prior written consent, directly or indirectly engage in any business activity or enterprise that would result in a conflict of interest between the Employee's duties to the Companies and the Employee's duties to any other person.
6. The Companies are aware that the Employee has now, may acquire and will continue to have a variety of types of engagements with or interests in other companies and properties, and the Companies recognize that these companies and properties will require a certain portion of the Employee's time. The Companies agree that the Employee may continue to devote time to such outside engagements and interests, provided that such engagements and interests do not conflict with, in any way, the ability of the Employee to perform his duties under this Agreement.
7. The Employee shall not, either before or after the termination of this Agreement, disclose to any person, nor make use of himself, any non-public information or trade secrets relating to the Companies, their business, policies, methods, scientific data or information which he shall have acquired in any manner ("Confidential Information"). The Employee agrees that disclosure by him of such Confidential Information may result in irreparable injury and damage to the Companies, which will not be adequately compensable in money damages, that the Companies will have no adequate remedy at law therefor, and that the Companies shall have the right, and may, without objection from the Employee, obtain such preliminary, temporary or permanent mandatory or restraining injunctions, orders or decrees as may be necessary to protect the Companies against, or on account of any breach by the Employee of the provisions of this paragraph. Nothing herein shall be construed as preventing the Companies from pursuing any other remedies available to them for such breach or threatened breach, including the recovery of damages from the Employee. Notwithstanding the above, any disclosure of Confidential Information which occurs in the course of the Employee's reasonable provision of services to the Companies, or which is required pursuant to any applicable law or the order of a court or any regulatory body, shall not be considered a breach of the confidentiality obligations in this Paragraph 7.

8. QTA Alaska shall pay the Employee, by way of remuneration, an annual salary of two hundred and fifty thousand (US\$250,000) effective September 15, 2021, payable in equal semi-monthly installments on the fifteenth and last day of each month. Should the fifteenth or last day of any month not be a business day, the semi-monthly installment of the Employee's salary otherwise due on such date shall be paid to the Employee on the immediately preceding business day. Upon the expiration of one year following the date of this Agreement and each year thereafter during the term of this Agreement, the Board shall review the Employee's salary with a view to increase, giving consideration to the financial position of the Companies and the scope of their activities.

The Board, in its sole discretion following consultation with the Employee, will establish strategic objectives (the "Annual Objectives") for the Employee for each period commencing on December 15 in the first year of employment, and thereafter for each annual period ending December 15 (an "Annual Review Period"). The Employee will be provided with written notice of the Annual Objectives at the time they are established by the Board. The Board (which shall include any committee of the Board) will conduct an annual review of the Employee to occur on a date in December of each year and on or before the expiry of the Annual Review Period (the "Annual Review Date").

The Employee will be entitled to receive an annual grant of options under the Stock Option Plan of each of the Companies on each Annual Review Date. The number of options will be determined by the Board based on a minimum of 50% and maximum of 150% of the base salary of the Employee for the Annual Review Period divided by the exercise price per common share of the Company. The exercise price per common share of the Company will be equal to the Market Price (as defined in the TSXV policies) of the Company's common shares as at the Annual Review Date, subject to a minimum exercise price per share of C\$0.05. The applicable percentage of annual base salary will be determined by the Board based on an assessment of the performance of the Employee in achieving the Annual Objectives for the relevant Annual Review Period.

If the Companies terminate the Employee's employment for any reason other than for Cause or death or disability, the Employee shall receive a payment equal to 75% of the annual grant of options under the Stock Option Plan of the Companies that was due to be paid on the next Annual Review Date following such date of termination.

9. The Employee shall be entitled to reimbursement for all travel expenses and other reasonable expenditures actually and properly incurred by him in connection with his provision of services hereunder. For all such expenses the Employee shall furnish to the Companies statements and vouchers as and when required by the Companies.

10. The Employee will be eligible to participate, in accordance with existing or future policies or procedures of Quaterra, in fringe benefit programs, including vacations, bonuses, sick leave, medical insurance, life insurance and stock option plans.

11. The Employee shall be entitled to vacation each year in accordance with the applicable policies of the Companies.

12. If the Employee shall become disabled or incapacitated to such an extent that he is unable to perform his regular duties, he shall be entitled to receive, during such disability or incapacitation, his full salary from the date thereof, payable monthly for two (2) months. The employment provisions of this Agreement may be terminated without notice at the option of the Companies should the Employee be unable, because of disability or incapacitation, to perform his duties hereunder for a period or periods aggregating more than two (2) months during any consecutive twelve months. Such termination shall not affect any payments which are due the Employee under the first sentence of this paragraph or any other provisions of this Agreement.

13. The Companies may discharge the Employee for Cause (as defined below). The Employee shall be entitled to two months' notice of such discharge. After such notice, the Companies may at their option, discontinue all or any portion of the Employee's duties, but shall continue his salary during the two-month notice period. After the effective date of such discharge, the Companies shall not be obligated any further hereunder, other than in respect of obligations accrued prior to such discharge. Such discharge shall not relieve the Employee of his obligations under Paragraph 7 nor prejudice any rights of the Companies hereunder. The Employee shall have the reciprocal right to give two months' notice of the termination of this Agreement. This paragraph is not applicable to termination of employment due to death, disability or incapacity. For the purposes of this section, Cause shall mean any willful act or omission by the Employee that would, pursuant to the laws of British Columbia, permit the Company to terminate the employment of the Employee without notice, provided that termination of the Employee's employment shall not be deemed to be for Cause unless and until the Company delivers to the Employee a copy of the resolution to that effect duly adopted by an affirmative vote of the Board.

- i) In the event that either of the Companies terminates the employment of the Employee other than for Cause, the Companies shall, upon such termination, pay severance compensation to the Employee equal to one times the Employee's Annual Compensation. The Employee's Annual Compensation shall be equal to 12 months of the monthly salary payable to the Employee immediately prior to the date of such termination or resignation. In such a case, the Employee will be provided a five year consulting agreement in line with those provided to former officers and directors of the company such that all options granted to the Employee remain in place per the terms of their grant.

The Employee shall not be required to mitigate the amount of any payments provided for under this Paragraph i) by seeking other employment or otherwise, nor shall the amount of any payment provided for in this Paragraph i) be reduced by any compensation earned by the Employee as the result of any employment by another employer before or after the date of termination.

14. In the event that either of the Companies completes a Change Of Control (as defined below) during the term of the this Agreement or within six months of the termination of this Agreement, upon the completion of such Change of Control, the Companies shall pay to the Employee a payment (the "Change of Control Payment") equal to three times the Employee's Annual Compensation, calculated as at the earlier of the date of the Change of Control or the last day of the Employee's employment. Additionally, upon a Change of Control, any unvested stock options or grants under other equity compensation plans held by the Employee shall immediately vest. In the event the Employee is terminated or resigns within six months following a Change of Control, provided the Employee has been paid the Change of Control Payment, no further payment to the Employee shall be required pursuant to Paragraph i).

A Change of Control shall be deemed to have occurred in any of the following circumstances:

- i) a combination (or a plan of arrangement in connection with any of the foregoing), other than solely involving the Companies and any one or more of their affiliates, with respect to which all or substantially all of the persons who were the beneficial owners of the common shares and other securities of the Company immediately prior to such consolidation, reorganization, amalgamation, merger, acquisition, business combination or plan of arrangement do not, following the completion of such consolidation, reorganization, amalgamation, merger, acquisition, business combination or plan of arrangement, beneficially own, directly or indirectly, more than 50% of the resulting voting rights (on a fully-diluted basis) of the Company or its successor;
- ii) the sale, exchange or other disposition to a person other than an affiliate of the Companies of all, or substantially all, of the Companies' assets or of the following specific assets - the MacArthur deposit;
- iii) the sale, exchange or other disposition of the MacArthur deposit to a person other than an affiliate of the Companies of over 50% of the asset
- iv) a resolution is adopted to wind-up, dissolve or liquidate either of the Companies;
- v) any person, entity or group of persons or entities acting jointly or in concert (an "Acquiror") acquires or acquires control (including, without limitation, the right to vote or direct the voting) of voting securities of either of the Companies which, when added to the voting securities owned of record or beneficially by the Acquiror or which the Acquiror has the right to vote or in respect of which the Acquiror has the right to direct the voting, would entitle the Acquiror and/or associates and/or affiliates of the Acquiror to cast or to direct the casting of 50% or more of the votes attached to all of either of the Companies' outstanding voting securities which may be cast to elect directors of either of the Companies or the successor corporation (regardless of whether a meeting has been called to elect directors); or
- vi) a change in the composition of the Board, which occurs at a meeting of directors or otherwise or at a meeting of the shareholders of Quaterra or upon the execution of a shareholders' resolution, such that individuals who are members of the Board immediately prior to such meeting or resolution cease to constitute a majority of the Board, without the Board, as constituted immediately prior to such meeting or resolution, having approved of such change.

15. The services to be performed by the Employee pursuant hereto are personal in character, and neither this Agreement nor any rights or benefits arising thereunder are assignable by the Employee without the prior written consent of the Companies.

16. The Company shall enter into an industry standard form of director and officer indemnification agreement with the Employee, and shall at all times maintain director and officer liability insurance in accordance with industry standard norms for public mining companies, with coverage of not less than \$5,000,000. The Company shall maintain directors and officers insurance that will specifically cover the Employee for one year in the event of termination.

17. If any provision, word or clause of this Agreement shall be held to be illegal, invalid or unenforceable for any reason, such illegality, invalidity or unenforceability shall not affect the remaining provisions which shall be fully severable, and this Agreement shall be construed and enforced without regard to such illegal, invalid or unenforceable provision.

18. This Agreement supersedes and replaces all pre-existing agreements between the parties hereto in respect of the subject matter hereof.

19. Any notice required or permitted to be given under this Agreement shall be delivered personally, or by courier to the address of the parties hereto set out on the first page hereof, and notice shall be deemed given on the date of delivery if during business hours on a business day, and or, if not during business hours on a business day, upon the next business day.

20. This Agreement shall be governed by and interpreted in accordance with the laws of the Province of British Columbia and the parties hereto hereby irrevocably attorn to the exclusive jurisdiction of the Courts of such Province.

21. This Agreement may be executed in any number of counterparts and exchanged electronically, each of which shall be deemed to be an original, and all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF the parties hereto have caused these presents to be executed as and from the day and year first above written.

*[Signature page follows.]*

QUATERRA RESOURCES INC.

Per: "Stephen Goodman"  
Authorized Signatory

QUATERRA ALASKA, INC.

Per: "Stephen Goodman"  
Authorized Signatory

"Charles Travis Naugle"  
CHARLES TRAVIS NAUGLE



## SECURITIES TRADING POLICY

### 1. PURPOSE OF THE POLICY

Canadian and United States securities laws prohibit "insider trading" and impose restrictions on the trading of shares or other securities issued by the Company while in possession of material undisclosed facts or changes relating to the Company. The purpose of this Policy is to raise the general level of awareness of the trading and confidentiality obligations of directors, officers and employees of the Company and others who may be in possession of, or may have access to, confidential, material information regarding the Company. The rules set out in this Policy are intended to ensure that persons having knowledge of material information not generally disclosed to the public do not take advantage of such information through trading in securities issued by the Company or in securities of other corporations whose price would be affected by such undisclosed material information. This Policy is also intended to ensure that the Company's directors, officers and employees act, and are perceived to act, in accordance with applicable laws and the highest standards of ethical and professional behaviour.

Definition of material information: material non-public information is any material information about a company that has not yet become publicly available. Information is "material" if a reasonable investor would likely consider it important in making a decision to buy, hold or sell securities. Any information that could reasonably be expected to affect the price of the securities of the Company is material. The information may be positive or negative. Financial information is frequently material even if it covers only a part of a fiscal period or less than all of a company's operations, since either of these might convey enough information about the company's consolidated results to be considered material information.

Material information about a company should be considered to be non-public unless it has been generally disclosed to the public in Canada and there is a certainty that it is publicly available. As a general rule, information will be considered public two full trading days after its broad dissemination by press release or other acceptable means of dissemination.

This Policy is not intended to provide an in-depth legal analysis of insider trading rules but rather to serve as a guideline for the purpose of limiting the possibility of illegal or inappropriate use of undisclosed confidential material information, facts or changes regarding the Company. The onus of complying with this Policy and the relevant insider trading and other securities legislation lies with each individual director, officer and employee of the Company and its subsidiaries, each of whom is expected to be familiar with this Policy and such legislation and to comply fully with them. Breaches of confidentiality and violations of insider trading and tipping laws carry severe consequences both for the Company and the individuals involved. Therefore, all employees, officers and directors of the Company must comply with the provisions and procedures of this Policy. An employee who violates this Policy may face disciplinary action up to and including termination of his or her employment. A breach of this Policy may also violate certain securities laws and result in criminal prosecution. This Policy also reinforces the Company's commitment to guard its confidential information. The ethical and business principles underlying this Policy may extend beyond even the stringent requirements of applicable securities laws.



## **2. APPLICATION OF THE POLICY**

This Policy applies to the directors, officers and employees of the Company or any of its insiders, affiliates (including subsidiaries) or associates, and to any other person who may be in possession of, or have access to, confidential, material information regarding the Company. For the purposes of this Policy, the term "employees" includes all permanent, contract, secondment and temporary agency employees who are on long-term assignments with the Company or any of its subsidiaries, as well as to consultants to the Company or any of its subsidiaries.

For purposes of this Policy and until the designation is changed by the Board of Directors of the Company, Stephen Goodman, CFO has been designated as the individual designated by the Board of Directors of the Company whom directors, officer, employees or insiders may contact to determine whether or not they may execute trades in the market (the "Information Officer") and can be contacted at [sgoodman@lioncgc.com](mailto:sgoodman@lioncgc.com).

## **3. TRADING PROCEDURES FOR DIRECTORS, OFFICERS AND EMPLOYEES**

In order to prevent insider trading and tipping violations, the following procedures must be followed by all directors, officers and employees of the Company or any of its insiders, affiliates (including subsidiaries) or associates:

(a) General Prohibition Against Using Material Information and Tipping: All directors, officers and employees of the Company who have knowledge of undisclosed material information relating to the Company or its business (sometimes referred to herein as "you" or "your") are expressly prohibited from disclosing material information and/or buying or selling, exercising options to buy or sell or tipping someone else to buy or sell (or not to buy or sell), securities of the Company unless and until such information has been publicly disclosed and disseminated. If this undisclosed material information relates to any other company with which the Company is negotiating or doing business, you may not trade in the securities of such other company on the basis of such information, nor may you communicate such information to others.

(b) Family Members: This prohibition applies to family members and others living in your household who gain access to or become aware of undisclosed material information relating to the Company. You are also responsible for their compliance with this Policy.

(c) Timing of Transactions: As a general rule, if you know of material information relating to the Company or its business, you should not engage in any transactions relating to securities of the Company (including the exercise of stock options) until at least the commencement of the second trading day after the material information is publicly disclosed by news release.

(d) Blackout Periods: Directors, officers and employees of the Company who have access to undisclosed material information relating to the Company or its business in the normal performance of their duties are subject to "blackout periods" during which they will be prohibited from trading in securities of the Company. For further information on "blackout periods", see section 3.4 of the Company's Communications Policy. All directors, officers and employees who are made aware of a "blackout period" are prohibited from communicating (tipping) internally or externally to anyone else that the Company is subject to a "blackout period". Exceptions to the prohibition against trading during "blackout periods" may only be made with the prior approval of the President of the Company or his designate after consultation with legal counsel.

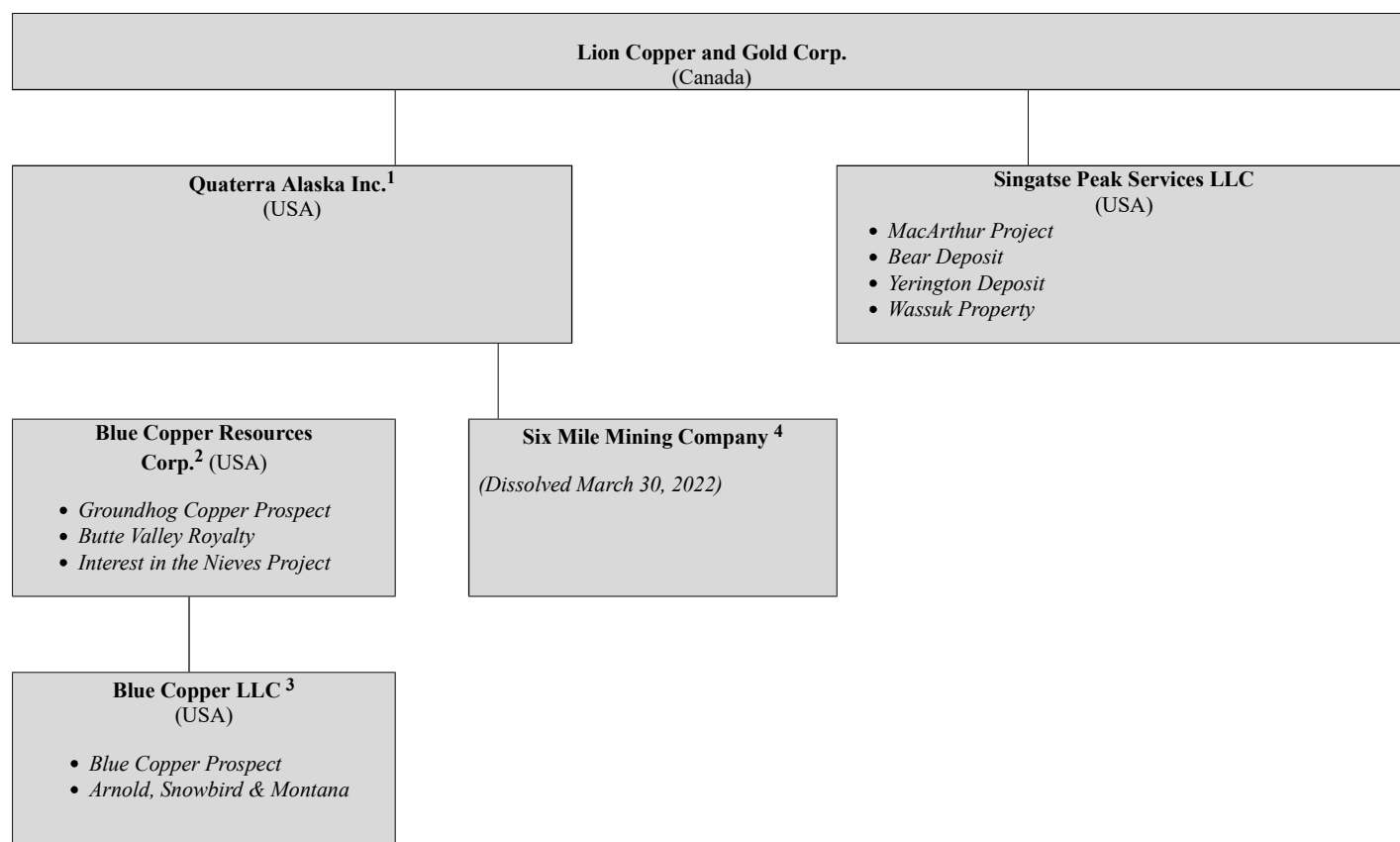
(e) All Insiders of the Company must obtain pre-approval prior to trading in the Company's securities, which includes the exercise of Stock Options. For purposes of this policy, an Insider is a reporting insider of the Company if the insider is:

- (i) The chief executive officer, the chief operating officer or the chief financial officer of the Company, of a significant shareholder of the Company or of a major subsidiary of the Company;
- (ii) A director of the Company, of a significant shareholder of the Company or of a major subsidiary of the Company;
- (iii) A person or company responsible for a principal business unit, division or function of the Company or of a major subsidiary of the Company;
- (iv) A significant shareholder of the Company;
- (v) A management company that provides significant management or administrative services to the Company or a major subsidiary of the Company, and every director, officer and significant shareholder of the management company;
- (vi) An individual performing functions similar to the functions performed by any of the positions described in paragraph (i) to (v);
- (vii) The Company itself, if it has purchased, redeemed or otherwise acquired a security of its own issue, for so long as it continues to hold that security;
- (viii) A person or a company designated or determined to be an insider under subsection 1.2(1);

(ix) Any other insider that:

- (I) in the ordinary course receives or has access to information as to material facts or material changes concerning the Company or a major subsidiary of the Company before the material facts or material changes are generally disclosed; and
- (II) directly or indirectly, exercises, or has the ability to exercise, significant power or influence over the business, operations, capital or development of the Company or of a major subsidiary of the Company.

# Exhibit 21.1 List of Subsidiaries



Note 1: Quaterra Alaska, Inc. is 100% owned by Lion Copper and Gold Corp. On April 5, 2022, the Company completed the assignment of the two option agreements for the Butte Valley Property to Falcon Butte Minerals Corp (formerly: 1301666 B.C. Ltd.) ("**Falcon Butte**"), a private British Columbia company established to acquire mineral resource properties.

Note 2: On December 13, 2022, Quaterra Alaska Inc., assigned and transferred 100% of its outstanding interest in Blue Copper LLC, which holds the Groundhog property, the Butte Valley Royalty, and an interest in the Nieves project, to Blue Copper Resources Corp. As consideration, on the date of transfer of assets to Blue Copper Resources Corp, Quaterra Alaska was issued 57,513,764 common shares of Blue Copper Resources Corp which represented 79.3% of all issued and outstanding shares at December 13, 2022 and December 31, 2022.

Note 3: On October 4, 2021, Blue Copper LLC was incorporated in the state of Montana, USA. Blue Copper LLC acquired and staked a district scale exploration and resource discovery opportunity (the "**Blue Copper Prospect**"), comprising more than 7,430 acres in Powell County and Lewis & Clark County in Montana, USA.

Note 4: On March 30, 2022, Six Mile Mining Company, a 100% wholly owned subsidiary of the Company, was dissolved and its assets were transferred to Quaterra Alaska Inc. which is a 100% wholly owned subsidiary of the Company.

**CERTIFICATION  
PURSUANT TO RULE 13a-14(a) OR 15d-14(a)  
OF THE U.S. SECURITIES EXCHANGE ACT OF 1934**

I, Charles Travis Naugle, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2022 of Lion Copper and Gold Corp.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2023

By: /s/ Charles Travis Naugle  
Charles Travis Naugle  
Principal Executive Officer

**CERTIFICATION**  
**PURSUANT TO RULE 13a-14(a) OR 15d-14(a)**  
**OF THE U.S. SECURITIES EXCHANGE ACT OF 1934**

I, Stephen Goodman, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2022 of Lion Copper and Gold Corp.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2023

By: /s/ Stephen Goodman  
Stephen Goodman  
Principal Financial Officer

EXHIBIT 32.1

**CERTIFICATION  
PURSUANT TO 18 U.S.C. SECTION 1350  
AND RULE 13a-14(b) OR RULE 15d-14(b)  
OF THE U.S. SECURITIES EXCHANGE ACT OF 1934**

In connection with the Annual Report of Lion Copper and Gold Corp. (the "Company") on Form 10-K for the year ended December 31, 2022 (the "Report"), the undersigned, in the capacity and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 31, 2023

/s/ Charles Travis Naugle

Charles Travis Naugle  
Principal Executive Officer



EXHIBIT 32.2

**CERTIFICATION  
PURSUANT TO 18 U.S.C. SECTION 1350  
AND RULE 13a-14(b) OR RULE 15d-14(b)  
OF THE U.S. SECURITIES EXCHANGE ACT OF 1934**

In connection with the Annual Report of Lion Copper and Gold Corp. (the "Company") on Form 10-K for the year ended December 31, 2022 (the "Report"), the undersigned, in the capacity and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 31, 2023

/s/ Stephen Goodman

\_\_\_\_\_  
Stephen Goodman  
Principal Financial Officer