Annual Information Form

For the year ended December 31, 2021

Dated as of April 22, 2022

South Star Battery Metals Corp.

www.southstarbatterymetals.com

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PRELIMINARY NOTES

Date of Information

Unless otherwise indicated, all information contained in this Annual Information Form ("**AIF**") of South Star Battery Metals Corp. (formerly South Star Mining Corp.) (the "**Company**") is as of December 31, 2021.

Technical Information

Where appropriate, certain information contained in this AIF or in a document incorporated or deemed to be incorporated by reference herein updates information from the Santa Cruz Graphite Report. Any updates to the scientific or technical information derived from the Santa Cruz Graphite Report and any other scientific or technical information contained in this AIF or in a document incorporated or deemed to be incorporated by reference herein was approved by Richard Pearce, P.E, a "qualified person" for the purposes of NI 43-101 and the President and the CEO of the Company.

Forward-looking Information

Certain statements contained in this AIF, and in certain documents incorporated by reference herein, contain "forward-looking statements" within the meaning of applicable securities legislation.
Forward-looking statements may include, but are not limited to, statements with respect to:

- financial and other projections, future plans, objectives, performance, revenues, growth, profits or operating expense;
- the effect of the novel coronavirus ("COVID-19") outbreak on the ability of the Company to carry on business;
- the use of available funds;
- the future price of commodities;
- the estimation of mineral resources and the realization of mineral resource estimates;
- the timing and amount of estimated future production, costs of production, capital expenditures;
- costs and timing of the development of new deposits;
- success of exploration activities;
- permitting time lines;
- currency fluctuations;
- government regulation of mining operations;
- environmental risks;
- unanticipated reclamation expenses;
- title disputes or claims;
- limitations on insurance coverage;
- the completion of financings and future listings and regulatory approvals;
- requirements for additional capital and future financing options;
- plans to identify, pursue, negotiate and/or complete strategic acquisitions; and
- future plans, objectives or economic performance, or the assumption underlying any of the foregoing, and other expectations of the Company.

In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "project", "estimates", "forecasts", "intends", "anticipates" or "believes", or variations (including negative variations) of such words and phrases or statements that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved.

Such forward-looking statements, made as of the date hereof, reflect the Company’s current views with respect to future events and are based on information currently available to the Company and are subject to and involve certain known and unknown risks, uncertainties, assumptions 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 in or implied by the forward looking statements.

Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results may vary materially from those described herein as intended, planned, anticipated, believed, estimated or expected. These risks, uncertainties, assumptions and other factors should be considered carefully, and prospective investors and readers should not place undue reliance on the forward-looking statements.

Forward-looking statements are based upon a number of estimates and assumptions that, while considered reasonable by the Company at this time, are inherently subject to significant business, economic and competitive uncertainties and contingencies that may cause the Company’s actual financial results, performance, or achievements to be materially different from those expressed or implied herein. Some of the material factors or assumptions used to develop forward-looking statements include, without limitation, the Company’s budget and anticipated costs; ability to carry on exploration and development activities; ability to raise additional capital to proceed with exploration and development plans; ability to obtain all necessary regulatory approvals, permits and licenses for planned activities under governmental and other applicable regulatory regimes; expectations regarding tax rates, currency exchange rates, and interest rates; ability to comply with current and future environmental, safety and other regulatory requirements and to obtain and maintain required regulatory approvals; and operations are not significantly disrupted as a result of pandemics, social or political activism, breakdown, natural disasters, governmental or political actions, litigation or arbitration proceedings, equipment or infrastructure failure, labour shortages, transportation disruptions or accidents, or other development or exploration risks. Material factors or assumptions that were applied in drawing a conclusion or making an estimate set out in the forward-looking statements include the factors identified throughout this AIF and in particular, the “*Risk Factors*” section of this AIF.

Any forward-looking statement speaks only as of the date on which such statement is made, and the Company undertakes no obligation to update any forward-looking statement or information or statements to reflect information, events, results, circumstances or otherwise after the date on which such statement is made or to reflect the occurrence of unanticipated events, except as required by law including securities laws. New factors emerge from time to time, and it is not possible for management to predict all of such factors and to assess in advance the impact of each such fact on the Company’s business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements or information

Cautionary Note to U.S. Investors Concerning Resource Estimates

Resource estimates reported herein are made in accordance with definitions adopted by the Canadian Institute of Mining, Metallurgy and Petroleum and incorporated into National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (“**NI 43-101**”). Estimates of graphite resources were prepared by or under the supervision of the qualified persons who are identified in this document and other public filings. The Company reports its reserves and resources in accordance with NI 43-101, as required by Canadian securities regulatory authorities. These standards differ significantly from the requirements set forth in Subpart 1300 of Regulation S-K and former Industry Guide 7 under the Securities Exchange Act of 1934 (as amended) as interpreted by the Staff of the US Securities and Exchange Commission.

Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards. Mineral resources are not mineral reserves and do not have demonstrated economic viability, but do have reasonable prospects for economic extraction. Measured and indicated mineral resources are sufficiently well defined to allow geological and grade continuity to be reasonably assumed and permit the application of technical and economic parameters in assessing the economic viability of the resources. Inferred resources are estimated on limited information that is not sufficient to verify geological and grade continuity or to allow technical and economic parameters to be applied. Inferred resources are too speculative geologically to have economic considerations applied to enable them to be categorized as mineral reserves. There is no certainty that mineral resources will be upgraded to mineral reserves through continued exploration.

Currency

All dollar amounts in this AIF are expressed in Canadian dollars unless otherwise indicated.

GLOSSARY OF TERMS

For ease of reference, the following factors for converting metric measurements into imperial equivalents are as follows:

Metric Units	Multiply By	Imperial Units
Hectares	2.471	= acres
Meters	3.281	= feet
Kilometers	0.621	= miles (5,280 feet)
Grams	0.032	= ounces (troy)
Tonnes	1.102	= tons (short) (2,000 lbs)

Abbreviations

In this AIF, the abbreviations set forth below have the following meanings:

$	Canadian dollar	kg	kilogram
°	degrees	kg/t	kilograms per tonne
%	percent	km^2	square kilometer
Cg	graphitic carbon	m	meter
ft	feet	m^2	square meter
US$	United States dollar	ppb	parts per billion

In this AIF, the following terms have the meanings set forth herein:

"**AIF**" means this annual information form of the Company for the year ended December 31, 2021;

"**ANM**" means Agência Nacional de Mineração, the Brazilian mining regulatory body.

"**Audit Committee**" means the Company's audit committee of the Board of Directors;

"**BCBCA**" means the *Business Corporations Act* (British Columbia), as amended and supplemented from time to time;

"**BGC**" means Brasil Graphite Corp., a wholly owned subsidiary of the Company;

"**BGLtda**" means Brasil Grafite Mineração Ltda., a wholly owned subsidiary of the Company (formerly BGSA – see below);

"BGSA" means Brasil Grafite S.A.. BGSA was transformed from a S.A. Brazilian corporate structure to a Ltda. and was renamed to Brasil Grafite Mineração Ltda.**;**

"**Board of Directors**" means the board of directors of the Company;

"**CEO**" means the Chief Executive Officer of the Company;

"**CFO**" means the Chief Financial Officer of the Company;

"**Company**" or "**South Star**" means South Star Battery Metals Corp.;

"**Common Shares**" means the common shares without par value in the capital of the Company;

"**mineral reserve**" means the economically mineable part of a measured and/or indicated mineral resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors;

"**mineral resources**" means a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral resources are sub-divided, in order of increasing geological confidence, into inferred, indicated and measured categories;

"**mineralization**" means in exploration, a reference to a notable concentration of metals and their associated mineral compounds, or a specific mineral, within a body of rock;

"**NI 43-101**" means National Instrument 43-101 *Standards of Disclosure for Mineral Projects*;

"**NI 52-110**" means National Instrument 52-110 *Audit Committees*;

"**Santa Cruz Graphite Project**" means a property consisting of 13 mineral claims located in Bahia, Brazil, as further described in *Description of the Business – Santa Cruz Graphite Project*;

"**Santa Cruz Graphite Report**" means the technical report entitled "NI 43-101 Technical Report, Updated Resources and Reserves Assessment and Pre-Feasibility Study, Santa Cruz Graphite Project, Bahia, Brazil" dated March 18, 2020 with an effective date of January 31, 2020 prepared by Luiz Eduardo Pignatari on the Santa Cruz Graphite Project;

"**SEDAR**" means the System for Electronic Document Analysis and Retrieval; and

"**TSX-V**" means the TSX Venture Exchange.

CORPORATE STRUCTURE

Name, Address and Incorporation

The Company was incorporated on November 8, 1984 under the BCBCA under the name "Auckland Explorations Ltd." The Company's name was changed to "Coromandel Resources Ltd." on February 15, 1996, to International Coromandel Resources Ltd. on May 5, 2000, to Sonora Gold Corp. on August 17, 2004, to Metalquest Minerals Inc. on October 17, 2007, to Canada Gold Corporation on September 1, 2009, to Stem 7 Capital Inc. on July 9, 2013, to South Star Mining Corp. on December 21, 2017 and to South Star Battery Metals Corp. on May 26, 2021.

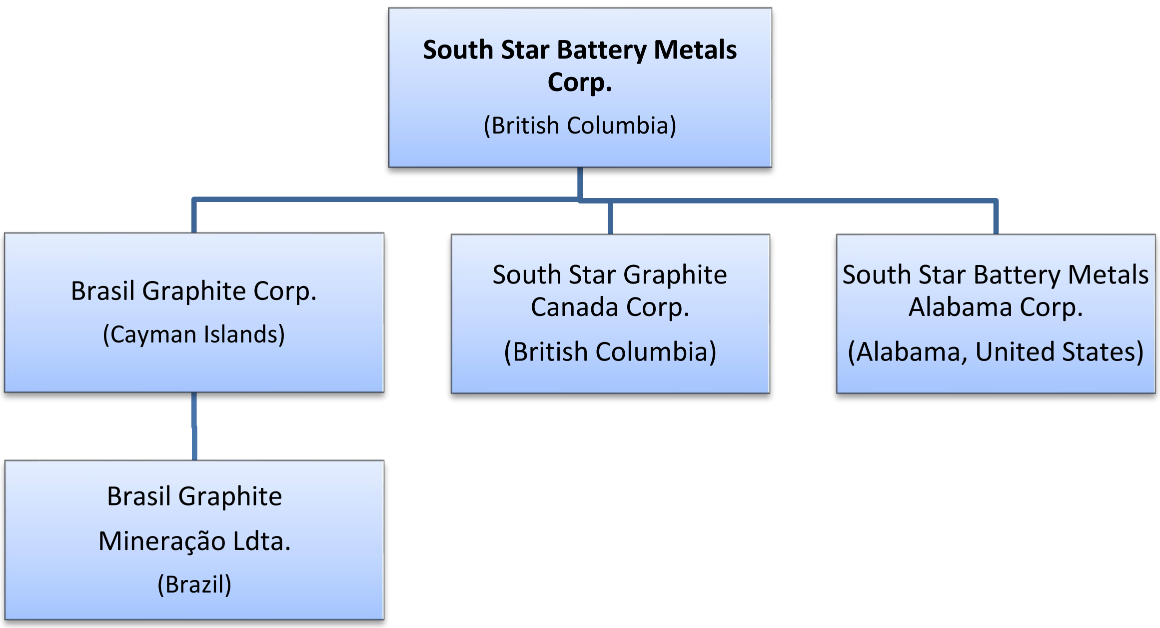
The Company is a reporting issuer in the provinces of British Columbia and Alberta, and its Common Shares are listed for trading on the TSX-V under the symbol "STS" and on the OTCBB under the symbol "STSBF".

The principal offices of the Company are located at Suite 1507 – 1030 West Georgia Street, Vancouver, BC V6E 2Y3. The Company's registered and records office is located at Suite 1200 – 750 West Pender Street, Vancouver, British Columbia, V6C 2T8.

The Company has four wholly-owned subsidiaries:

- Brasil Graphite Corp. ("**BGC**"), a private company incorporated pursuant to the laws of the Cayman Islands;
- South Star Graphite Canada Corp. ("**SSGC**"), a private company incorporated pursuant to the laws of British Columbia, Canada;
- South Star Battery Metals Alabama Corp. ("**SS Alabama**"), a private company incorporated pursuant to the laws of Alabama, United States of America; and
- Brasil Grafite Mineração Ltda. ("**BGLtda**"), a private company incorporated under the laws of Brazil.

The Company owns 100% of the issued and outstanding shares of BGC and BGC owns 100% of the issued and outstanding shares of BGLtda.



GENERAL DEVELOPMENT OF THE BUSINESS

Three Year History and Significant Acquisitions

The Company is a mineral exploration company focused on its Santa Cruz Graphite Project in the state of Bahia, Brazil. The Company acquired a 100% interest in the Santa Cruz Graphite Project on June 15, 2018. During the fiscal year prior to the acquisition of the Santa Cruz Graphite Project, the Company was an inactive shell company and its securities were listed for trading on the NEX Board of the TSX-V. On June 18, 2018, following the completion of the acquisition of the Santa Cruz Graphite Project and a concurrent financing, both described in more detail below, the Company was listed on the TSX-V as a Tier 2 resource issuer.

The Company has not completed any significant acquisitions since the acquisition of BGC and the Santa Cruz Graphite Project.

On February 28, 2019, the Company completed a non-brokered private placement of 4,050,000 units at a price of $0.10 per unit for aggregate gross proceeds of $405,000. Each Unit was comprised of one Common Share and one Common Share purchase warrant. Each warrant entitles the holder to acquire one additional Common Share at a price of $0.15 per share for a period of 2 years from the closing of the private placement. On February 25, 2021, the Company extended the expiry date of the warrants to April 28, 2021, subject to an acceleration clause.

On May 4, 2020, the Company completed an offering on a non-brokered private placement basis of senior unsecured convertible debentures of the Company (each a "**Debenture**") for total proceeds of $280,000. The Debenture matured 12 months from the issuance date and had an annual interest rate of 10% compounded monthly, with principal and interest payable on maturity. The principal amount of each Debenture was convertible into units at the option of the holder at a conversion price of $0.05 per unit. Each unit consisted of one Common Share and a one Common Share purchase warrant. Each warrant entitled the holder to acquire one additional Common Share at a price of $0.06 per share for a period of 3 years, subject to an acceleration clause. Any interest that accrued on the principal amount outstanding under the Debenture was also convertible into units, at the option of the Company, at a price per unit which equalled the greater of the market price on the date the accrued interest became payable or the volume weighted average trading price of the Company's common shares on the TSX-V for the 10 consecutive trading days preceding the date the accrued interest became payable. Each unit acquired on conversion of accrued interest was to have the same terms above. The principal amount of all of the debentures was subsequently converted into 5,600,000 units. Interest was repaid in cash.

On February 16, 2021, the Company completed a non-brokered private placement of 15,055,000 units at a price of $0.10 per unit for aggregate gross proceeds of $1,505,000. Each unit was comprised of one Common Share and one Common Share purchase warrant. Each warrant entitles the holder to acquire one additional Common Share at a price of $0.15 per share for a period of 3 years from the closing of the private placement, subject to an acceleration clause.

On February 23, 2021, the Company completed a non-brokered private placement of 9,524,951 units at a price of $0.105 per unit for aggregate gross proceeds of $1,000,120. Each unit was comprised of one Common Share and one Common Share purchase warrant. Each warrant entitles the holder to acquire one additional Common Share at a price of $0.15 per share for a period of 3 years from the closing of the private placement, subject to an acceleration clause.

On October 25, 2021, the Company completed a non-brokered private placement of 22,069,999 units at a price of $0.11 per unit for aggregate gross proceeds of $2,427,700. Each unit was comprised of one Common Share and one Common Share purchase warrant. Each warrant entitles the holder to acquire one additional Common Share at price of $0.15 per share for a period of 3 years from the closing of the private placement, subject to an acceleration clause.

During the year ended December 31, 2021, the Company entered into a binding earn-in and option agreement ("Ceylon Agreement") to earn up to a 75% interest in the Ceylon Graphite Project, which is located on the northeast end of the Alabama Graphite Belt and covers approximately 500 acres in Coosa County, Alabama, USA. The Ceylon Agreement calls for the Company to, on signing, undertake 3 years' worth of assessment work on the property with an annual minimum expenditure of $250,000 ($750,000 total) to earn a 75% in the Ceylon Graphite Project. The Company does not currently consider the Ceylon Graphite Project to be a material mineral property and no exploration work has been undertaken by the Company on the Ceylon Graphite Project to date.

Subsequent Events

On April 4, 2021, the Company entered into a Metals Purchase and Sale Agreement (the "**Stream Agreement**") with Sprott Resource Streaming and Royalty Corp. ("**SRSR**") for total cash consideration of up to US$28,000,000 as prepayment for graphite concentrates from the Santa Cruz Graphite Project. The Company will act as sales agent for SRSR on the percentage of production subject to the agreement. The Stream Agreement highlights are as follows:

- The Stream Agreement calls for a phase 1 stream payment from SRSR to the Company of a US$10,000,000 prepayment, proceeds of which are to be used to finance required phase 1 capital expenditures on a mine on the Santa Cruz Graphite Project. This will allow the Company to start construction on a mine in the next 45 to 60 days, with commercial production scheduled for Q2 of 2023.
- The Stream Agreement also calls for a phase 2 stream payment from SRSR to the Company of a minimum of US$9,000,000 and up to US$18,000,000 for partial financing of phase 2 capex (US$27,000,000) on the proposed mine, subject to SRSR phase 2 due diligence as well as update and approval from SRSR's investment committee.
- On execution of the Stream Agreement, SRSR provided the Company with a US$2,000,000 advance loan, with proceeds to be used for equipment down payments, land acquisition, contractor mobilization and engineering support services.
- The Company has the option to buy back 100 % of the phase 2 stream.
- The Stream Agreement provides for an automatic stepdown of 50 % of the phase 1 stream after sales and delivery of 75,000 tonnes of concentrate.
- The Stream Agreement provides for a post-stream life-of-mine EBITDA (earnings before interest, taxes, depreciation and amortization) margin of 51 % (phase 1 stream and 100 % phase 2 stream).

The Stream Agreement will provide the Company with full financing to move construction forward on phase 1 operations on the Santa Cruz Graphite Project, with commercial production planned for Q2 of 2023. Phase 1 proceeds will be used for development, construction and commissioning of the project, and achievement of 5,000-tonne-per-annum commercial production.

Phase 1 stream financing details are as follow:

- The phase 1 stream is applicable on sales and delivery of the first 6,000 tpa of graphite concentrates and 15 % of all graphite concentrates greater than 6,000 tpa.
- A US$2,000,000 advance loan with a six-month term was provided to the Company by SRSR, with proceeds to be used for major equipment down payments, land payments, contractor mobilizations and engineering support services. The loan will be repaid with proceeds from the phase 1 stream consideration. Payment is secured through the issuance of a secured promissory note dated April 2, 2022 issued by the Company to SRSR (the "**Promissory Note**") and various supporting documents, pursuant to which the Company has pledged all of the equity shares of SSGC and BGC to SRSR as collateral for the loan.
- The phase 1 stream calls for an upfront prepayment for US$10,000,000 of graphite concentrate for 21.875 % of the phase 1 stream production until a total sale and delivery of 75,000 tonnes of concentrate has been achieved, at which point the phase 1 stream will be reduced 50% to 10.9375%.
- SRSR will pay the Company 20 % of the per-tonne sales price for phase 1 stream production.
- The Company has granted SRSR a right of first refusal with respect to future potential grants of streams or royalties on the Santa Cruz Graphite Project related to graphite concentrates.

- As consideration for the phase 1 stream payment, the Company will issue SRSR warrants entitling SRSR to purchase 6,000,000 common shares of the Company for a period of three years at an exercise price that represents a 35-per-cent premium to the offering price of the Concurrent Equity Financing (as hereinafter defined).
- The Company has committed to raise a minimum of CDN$6,000,000 as a condition precedent to delivery by SRSR of the phase 1 stream payment (the "**Concurrent Equity Financing**"). Proceeds from the Concurrent Equity Financing will be used for exploration, development, corporate general and administrative expenses and general working capital requirements.
- Phase 1 closing is subject to standard closing conditions, satisfaction of conditions precedents and the approval of the TSX Venture Exchange.

The phase 2 stream provides for a stream payment of a minimum of US$9,000,000 and up to US$18,000,000 in cash, with the amount at the Company's election, for partial financing of phase 2 capital expenditures on the Santa Cruz Graphite Project. Phase 2 stream financing details are as follows:

- The phase 2 stream is applicable on sales and delivery of 85 % of all graphite concentrates greater than 6,000 tpa.
- The phase 2 stream calls for an upfront prepayment for up to US$18,000,000 of graphite concentrate for up to 20 % of the phase 2 stream production. The Company has, at its election, the option of a reduced phase 2 draw request of a minimum of US$9,000,000 with the phase 2 stream percentage reduced pro rata, provided there is viable alternative project financing available for the balance.
- SRSR will pay the Company 20 % of the per-tonne sales price for phase 2 stream production.
- The Company has, at its election, the option to buy back up to 100 % of the phase 2 stream based amount of the draw request and the multiplier in the table below.
- Phase 2 closing is subject to SRSR phase 2 due diligence and update and approval from SRSR's investment committee, standard closing conditions, completion of condition precedents, and the approval of the TSX-V.

Time Elapsed Since Phase 2 Closing Date	**Applicable Multiplier**
Up to and including the 12-month anniversary	1.4X
Following the 12-month anniversary, and up to and including the 24-month anniversary	1.5X
Following the 24-month anniversary, and up to and including the 36-month anniversary	1.6X
Following the 36-month anniversary, and up to and including the 48-month anniversary	1.7X

The obligations of the Company's affiliate,. SSGC, under the Promissory Note, the Stream Agreement and related documents have been guaranteed by the Company pursuant to a limited recourse guarantee, pursuant to which recourse against the Company is limited to certain collateral subject to the Initial Share Pledges (as defined below). The Company's (and its affiliates') obligations under the Promissory Note, the Stream Agreement and related documents are secured by a pledge by the Company of the shares of its direct wholly-owned subsidiaries, SSGC and BGC, in favour of Sprott (collectively, the "Initial Share Pledges"). The obligations under the Stream Agreement will be further guaranteed pursuant to a guarantee from each of

BGLtda, the indirect wholly-owned subsidiary of the Company that holds the Santa Cruz Graphite Project, and BGC, and further secured by a pledge of the shares of BGLtda and certain assets of BGLtda (including real property) relating to the Project.

DESCRIPTION OF THE BUSINESS

The Company is a Canadian battery metals project developer focused on the selective acquisition and development of near-term production projects in the Americas. The Company's material property and project is the Santa Cruz Graphite Project located in the state of Bahia, Brazil.

Material Mineral Properties

Santa Cruz Graphite Project

On March 18, 2020, the Company released a report entitled "NI 43-101 Technical Report, Updated Resources and Reserve Assessment and Pre-Feasibility Study, Santa Cruz Graphite Project, Bahia, Brazil (the "PFS"). The PFS has an effective date of January 31, 2020 and was prepared by Luiz Eduardo Pignatari, Qualified Person. The PFS can be found on the Company's SEDAR profile at www.sedar.com.

The following summary of the Santa Cruz Graphite Project is extracted from the Santa Cruz Graphite Report and modified to conform to this AIF. The conclusions, projections and estimates included in this description are subject to the qualifications, assumptions and exclusions set out in the PFS, except as such qualifications, assumptions and exclusions may be modified in this AIF. We recommend you read the PFS in its entirety to fully understand the project. You can download a copy of the PFS from our SEDAR profile.

BGLtda holds a 100% interest in the Santa Cruz Graphite Project comprised of 13 mineral rights near the town of Itabela, Bahia, Brazil, totaling approximately 13,000 hectares.

The summary section of the Santa Cruz Graphite Report is reproduced below. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described in the summary. Reference should be made to the full text of the Santa Cruz Graphite Report, which is incorporated by reference herein.

Property Description, Location and Access

The Santa Cruz Graphite Project is located near the town of Itabela in the southern part of the state of Bahia, Brazil. Access is via 90 km of paved federal highways from the International Airport of Porto Seguro, Bahia.

Basic services are available in Itabela (population 28,500), where the company field office is located, while medical services, hospitals, banks, commercial centers, schools and other services are available in the regional main population center of Eunápolis (population 100,200), located approximately 28 km to the north.

The Santa Cruz Graphite Project is comprised of 13 exploration licenses, all duly registered and in good standing with the Agência Nacional de Mineração (ANM), the Brazilian mining regulatory body.

History

Santa Cruz Graphite Project is a recent discovery with no known exploration work prior to 2012 or previous reports currently identified in the project claims area. The project lies within one of the most active graphite provinces in the world with over 80 years of continuous production with three operating mines: Pedra Azul, Minas Gerais state (~36,000 tpy), Salto da Divisa, Minas Gerais state (~18,000 tpy), and Maiquininque, Bahia state (~30,000 tpy) along with several development projects and exploration targets.

Geological Setting, Mineralization and Deposit Types

The Santa Cruz Graphite Project is in the Araçuaí Orogen, in the central eastern portion of Brazil, which partially covers the states of Bahia, Minas Gerais and Espírito Santo. This Orogen is located on the southern border of the São Francisco Craton and the belt has a long history with many subductions and several developments. Its history begins around 880 My, in the Macaúbas basin.

The Santa Cruz Graphite Project origin can be classified as sedimentary. During late Precambrian age, pelites and carbon were deposited at the same time. Later in early Cambrian age, orogenic movements transformed these sediments to high grade metamorphic rocks, and these movements transformed the carbon to graphite (Kinzigite Complex).

The Santa Cruz Graphite Project is placed in Unit 3 of the Kinzigitic Complex with rock assemblages rich in graphitic gneiss and quartzite intercalations, layers and lenses of graphitic gneiss. These are of economic importance because they host some of the most important producing assets of large flake graphite in the Americas.

Mineralization was shifted by a regional fault and is controlled by the presence of soft materials along the shear zone associated with this fault. These soft zones contain many folds that are rich in high grade, large flake graphite deposits. In general, the deposit has a strike following this regional fault and dips from vertical to 65° northeast.

Structural domain varies throughout the Araçuaí Orogen, with the Santa Cruz Graphite Project being in the eastern region of the Unit, where higher metamorphism with strong deformation is present and partial melting (anatexis) is observed. It`s possible that the eastern region of the Unit with the higher grades of metamorphism and significant foliation have led to larger flake deposits, when compared to other deposits located further west in the Unit.

Mineralization appears in the soft zones with partial anataxis, following a general NW strike regionally although with small variation to EW in localized area such as São Rubens. In the previous campaign the Santa Cruz geologists identified at least three different mineralized targets: São Manuel; São Ruben West, which extents towards south and north (proven with the holes 55-SCP-RC-029, 55-SCP-RC-030, 55-SCP-DDH-008; 55-SCP-RC-031 and 55-SCP-SC-032); and São Rubens Central. Several other targets have been identified based on preliminary investigations and drilling results. It is usual to observe high dips (sub vertical to vertical) where high metamorphism and highly deformed granites are most likely responsible for the graphite concentration. In general, mineralization is structurally controlled by the shearing zone along the regional fault.

The main mineralized targets of São Manuel and São Rubens show a continuous strike of approximately 8 km in length, and in general, follow the soft material and structural control along the valley floor. Widths vary from 40 m to 200 m wide in areas where folding is accentuated. Mineralization is easily identified visually with the presence of jumbo, large and medium graphite flakes within the metamorphosed sedimentary rocks.

Exploration and Drilling

Santa Cruz Graphite Project is a recent discovery with no known exploration work prior to 2012 or previous reports currently identified in the Santa Cruz Graphite Project claims area. South Star has conducted detailed geological studies including, ground geophysical surveys, regional soils surveys, mapping and sampling and auger, diamond and reverse circulation drilling. The most recent exploration program occurred between October and December of 2018 and included 33 reverse circulation (RC) and 8 diamond drill holes (DDH), respectively totaling 1,285 m and 530 m in the São Manuel North (B1) and São Rubens West targets.

Hole locations were selected to better understand mineralization controls, define limits and expand the overall resource estimate.

Sampling, Analysis and Data Verification

The Company has a comprehensive drill sampling security and Quality Assurance/Quality Control (QA/QC) program in place to ensure a high degree of confidence in sample results. Sampling methods, sample preparation and QA/QC procedures meet industry standards. All samples collected at the Santa Cruz Graphite Project have been delivered to a certified laboratory at SGS Geosol in Belo Horizonte, Brazil or SGS Lakefield in Ontario, Canada. Once sample results are received, the company geologist inserts proper grade into each corresponding database sample, thus providing a complete description for each data point including X, Y and Z coordinates, lithologic description, sample type, target area and grade result.

Laboratory pulps were then returned to the company and have been stored in a secured facility either at the field office or storage facility.

The QA/QC program consisted of:

- 1 standard for every 100 (one hundred) samples in order to test laboratory accuracy
- 2 blanks for every 100 (one hundred) samples in order to test contamination potential
- 2 duplicates for every 100 (one hundred) samples in order to test for splitting procedures

In addition, the QP collected 51 twin samples in order to further check splitting, storage and laboratory efficiency, returning positive and similar results.

Reverse circulation holes had samples collected every meter, resulting in higher average sample of 15-30 kg. Quartering was performed in the field using a riffle splitter and later the samples were sent to SGS laboratory. For every 100 samples of drilling, 5 duplicate, 3 blanks and 2.5 standards were included.

Other samples including boxes of chip, panel and trench samples have also been collected, following similar sampling and storage procedures.

Mineral Processing and Metallurgical Testing

The principal objective for the metallurgical testing was to produce a final concentrate with Cg ≥ 93-95% using minimal grinding and, as much as practical, to preserve the large and jumbo flake size. To date, several rounds of metallurgical testing have been performed for Santa Cruz´s ore confirming its amenability to simple processing, using proven and straightforward milling and flotation circuits.

Five separate test work rounds have been performed beginning with bench scale tests and ultimately to completion of a bulk sample of over 31,000 kg being tested through a pilot plant. Test work included:

• **Lyntek & RDi (Lakewood, CO – USA)**: Bench scale test work performed in 2013 aimed at providing testing viability and initial estimates of concentrating Santa Cruz´s ore

• **CDTN (Belo Horizonte, MG – Brazil)**: Bench scale test work performed in 2013 for PEA level engineering process work

• **Fundação Gorceix (Ouro Preto, MG – Brazil)**: Bench scale and pilot plant test work performed in 2014 and 2015 involving large volume feasibility level engineering aimed at providing trade off analysis (reagents, retention times, grinding cycles and media), optimizations and flow sheet for Santa Cruz.

• **Processamento & Caracterização Mineral (Ouro Preto, MG – Brazil)**: Bench scale and bulk sample testing were completed in 2018 aimed at updating 2014/2015 pilot plant testing, including trade off analysis (reagents, types of screens, retention times, grinding cycles and media), optimizations and final definition of flow sheet for Santa Cruz Project. One of the main goals of the program was to update the flow sheet to include filtered tails and simplify permitting and licensing requirements. More than 60 samples were tested, and the mass and water balance were finalized for Phase 1 (5,000tpy) and Phase 2 (25,000tpy) operations.

• **URBIX (Mesa, AZ – US)**: Detailed purification and expandability testing program performed to characterize and optimize the Santa Cruz concentrate for high end uses, including battery metals applications. The scope of work includes pre-purification and post purification analysis using the URBIX purification process (size and shape, impurity and mineralogy composition, classification of feed stock, classification of purified graphite and expandability testing.

• **US Lab (IL – US)**[1]: Detailed thermal purification and expandability testing programs for a variety of value-add applications including producing purified, micronized graphite, dispersions, powders, fire retardants, foils, as well as uncoated and coated spherical purified graphite (SPG) for use in lithium-ion batteries (“LiB”) and electric vehicles. CR2016 LiB coin cells were constructed using with cSPG from Santa Cruz and successful long cycle testing was performed to ensure excellent performance characteristics for LiB applications. In addition, successful 4-Point resistivity testing was completed to evaluate for use in conductivity enhancement materials for alkaline battery applications.

[1] *The United States laboratory (“US Lab”) specializes in advanced graphite materials and value-add testing for battery and non-battery applications. The US Lab company name has not been published for the purposes of preserving a commercial advantage of South Star Battery Metals in the marketplace.*

Mineral Resource and Mineral Reserve Estimates

In late 2018, the Company completed an exploration program that included 37 reverse circulation holes (1,349 meters) and 8 diamond drill holes (542 meters) focused on the São Manuel North (B1) and São Rubens West zones. In August of 2019, the Company released a NI 43-101 Resource Update with an effective date of June 30, 2019 as detailed in the below table.

Santa Cruz Graphite Mineral Resources Summary,
after São Manuel North (B1) and São Rubens West Updates

Mineral Resource Estimate	Tonnage	Cg	In-situ Graphite
	(t)	(%)	(t)
Measured	3,947,550	2.40	95
Indicated	10,955,570	2.25	247
Total M & I	**14,903,100**	**2.29**	**341**
Inferred	7,911,450	2.32	184

Resource Notes:

1) Mineral Resources are as defined by the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves.
2) Mineral Resources are estimated using ordinary kriging method and a three-dimensional block model using a cut-off grade of 0.75% and 1% Cg, depending on the modeled zones.
3) Numbers have been rounded.
4) Mineral Resources that are not Mineral Reserves do not have economic viability.
5) Inferred Mineral Resource in this estimate are exclusive of the Measured and Indicated Resources.
6) Inferred Mineral Resource have a lower level of confidence than that applied to an Indicated Mineral Resource. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.

The mineral reserve for the Santa Cruz Graphite Project includes three main ore bodies: São Manuel North, São Manuel South and São Rubens West. Proven and Probable Reserves, are summarized in following table:

Mineral Reserve Estimate	Tonnage	Cg	In-situ Graphite
	(t)	(%)	(t)
Proven	3,989,635	2.49	99,340
Probable	8,318,795	2.35	195,490
Total P&P	12,308,500	2.40	295,400

Reserves Notes:

1) Mineral Reserves are as defined by the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves.
2) Mineral Reserves are based on Mineral Resources (Published on July 8th, 2019) estimated using ordinary kriging method and a three-dimensional block model using a cutoff grade of 0.75% and 1% Cg, depending on the modeled zones.
3) Numbers have been rounded.
4) Mineral Reserves have incorporated cut-off, pricing, costs, recovery & FX.

Mining Operations

Current resources lie within altered, oxidized material that can be excavated without blasting. The mining method selected for the Santa Cruz Graphite Project is conventional open pit with excavator, dozer and haul trucks. Life of mine strip ratio is favorable, at 1.6 tonnes of waste for each tonne of rock mined. Operations for the Life of Mine (LOM) have been divided into following two phases:

• Phase 1 Pilot Plant Operations (5,000 tpy of concentrate); &
• Phase 2 Operations (25,000 tpy of concentrate).

A contracted fleet has been considered for Phase 1 & 2 operation.

This report will discuss dilution, costing and pricing assumptions, pit geometries and geotechnics, pit sequencing, grade control and operational assumptions in the next chapters.

Processing and Recovery Operations

The results of the tests show high quality graphite with recoveries of 82% achieved via simple grind + flotation circuits, indicating no major difficulties in concentrating to 94- 95% Cg.

Based on the results of the pilot plant tests, a process flow circuit consisting of material homogenization, segregation, grinding, conditioning, flotation, drying and packaging was developed. Filtered tails testing was successfully completed and incorporated into the flow circuit and allows improved water recirculation while also eliminating the requirements for traditional pulp tailings storage facility.

The tailings filter cake will be co-disposed in the waste rock facility.

Infrastructure, Permitting and Compliance Activities

The town of Itabela, which is located less than 5 km from the Santa Cruz Graphite Project, will serve as the base of operations. The deepwater port of Ilhéus is located approximately 270 km to the north via paved federal highways and provides favorable access to Brazilian and international markets.

Phase 1 & 2 Project infrastructure includes:

• Off-site and on-site access roads, including haul roads
• Workshops & warehouse;
• Fuel storage;
• Waste storage facility (WSF) and overburden dump;
• Open Pit;
• Run-of-mine (ROM) stockpile;
• Process facilities;
• Power supply and distribution system;
• Water supply (Wells) and distribution system;
• Drainage structures and sediment control facilities;
• Sewage collection and management facility;
• Solids waste collection facility;
• Administration structures; &
• Communications.

Filtered tailings with co-disposition of the tailings filter cake and waste in the WSF will replace a traditional tailings storage facility and minimize new water requirements. The majority of the process water will be recirculated.

The Phase 1 mining operations are fully licensed and permitted with:

1.) Environmental operating permit (Nº. 028/2020) approved by the Environmental Department of the Municipality of Itabela, which is good for 4 years from date of issue and expires on October 10, 2024.
2.) Trial mining license from the National Mining Agency (ANM) issued for 3 years and expires on December 31, 2023.

Both environmental and trial mining license can be renewed for the same period as originally licensed.

Capital and Operating Costs

Capital Expenditures (CAPEX) were estimated for the Santa Cruz Graphite Project, including the following major items:

• Initial Capital Expenditure – direct costs, indirect costs and contingency.
• Sustaining – expenditure with mine roads development and others; and
• Mine closure – mainly expenditure associated progressive reclamation and with good environmental practice.

Capex estimation accuracy is "pre-feasibility level", so based on conceptual projects and designs, informal quotes of main equipment and structures and indices-based estimations.

Capex data (basic) sources were the following:

• Mining operations will be contracted, limiting required investments in mining equipment
• Pre-stripping cost is based on earth moving volume and waste removal unitary cost estimate
• Plant equipment
• Plant construction cost
• Waste and tailings deposit area preparation cost
• All other Capex costs were estimated based on DTM's database on similar projects and industry cost estimation indices
• All values were estimated in Brazilian currency (BRL), and then converted to American dollars (USD) at a rate of BRL 3.95 per USD
• Working capital was estimated as 6 months of operational expenses

PFS Life of Mine Estimated Capital Expenditures

Capex Plant – thousand USD	Sector	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12
Equipment	Equipment	3,719		14,091										
	Civil*	476		1,392										
	Buildings	56		706										
	Roads	48		154										
	Earthmoving	109		320										
Implementation	Semi Permanent Struct	269		786										
	Steel Plant Structures	421		1,231										
	Ore bin	73		214										
	Feeders	40		117										
	Conveyors	126		368										
	Hydraulics	76		444										
	Civil + Mech Assembl	471		1,377										
EPCM	Electric Assembl	81		236										
	EPCM	433		1,586										
	Project Design	0		616										
Owner's Cost (Construction Phase)		261		0										
Contingencies		640		3,546										
Total		**7,298**		**27,184**										
Sustaining Capital (mine)														
Projects (Geotechnics, Engineering, Water Resources)		25	25	25	25	25	25	25	25	25	25	25	25	25
Civil Infrastructure		25	25	25	25	25	25	25	25	25	25	25	25	25
Total – Mine		**51**	**51**	**51**	**51**	**51**	**51**	**51**	**51**	**51**	**51**	**51**	**51**	**51**
Other Investments (mine)														
Geology		0	89	89	89	89	89	89	89	89	89	89	89	89
Infill Drilling		0	100	100	100	100	100	100	100	100	100	100	100	100
Communities		0	25	25	25	25	25	25	25	25	25	25	25	25
Environmental & Licensing		300	300	100	100	100	100	100	100	100	100	100	100	100
Mine Closure		0	51	51	51	51	51	51	51	51	51	51	51	2,443
Total – Other Investments		**300**	**564**	**364**	**364**	**364**	**364**	**364**	**364**	**364**	**364**	**364**	**364**	**2,757**
Grand total		**7,649**	**615**	**27,598**	**415**	**415**	**415**	**415**	**415**	**415**	**415**	**415**	**415**	**2,807**

PFS - Life of Mine Estimated Operating Expenses

(thousand USD) G&A	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12
Salaries	329	329	493	493	493	493	493	493	493	493	493	493
Small cars rental	11	11	27	27	27	27	27	27	27	27	27	27
Offices (Containers)	26	26	0	0	0	0	0	0	0	0	0	0
General Expenses	282	282	635	635	635	635	635	635	635	635	635	191
Total – G&A	**648**	**648**	**1,155**	**1,155**	**1,155**	**1,155**	**1,155**	**1,155**	**1,155**	**1,155**	**1,155**	**710**
Mining, Waste and Tailings												
Contracted – Ore + Waste	801	701	1,484	2,022	2,629	2,861	2,725	3,581	3,966	4,646	5,120	1,390
Contracted – Tailings	147	147	249	388	421	428	471	496	463	557	561	178
Mine Management Salaries	165	165	258	258	258	258	258	258	258	258	258	258
Total – Mining	**1,113**	**1,013**	**1,992**	**2,669**	**3,309**	**3,546**	**3,454**	**4,335**	**4,687**	**5,461**	**5,939**	**1,826**
Plant	**Yr 1**	**Yr 2**	**Yr 3**	**Yr 4**	**Yr 5**	**Yr 6**	**Yr 7**	**Yr 8**	**Yr 9**	**Yr 10**	**Yr 11**	**Yr 12**
Salaries	498	498	936	936	936	936	936	936	936	936	936	936
Power Consumption	255	255	783	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275
Consumables	131	131	350	478	488	490	504	511	501	501	502	69
Maintenance and Spare Parts	193	193	342	556	556	556	556	556	556	556	556	167
Natural Gas	43	43	131	212	212	212	212	212	212	212	212	64
Wheel loader	70	70	75	75	75	75	75	75	75	75	75	23
Contingencies/Other	119	119	262	353	354	355	356	357	356	356	356	253
Total – Plant	**1,309**	**1,309**	**2,879**	**3,887**	**3,898**	**3,900**	**3,915**	**3,923**	**3,912**	**3,912**	**3,913**	**2,787**
Grand total	**3,070**	**2,970**	**6,026**	**7,711**	**8,362**	**8,602**	**8,524**	**9,414**	**9,754**	**10,528**	**11,008**	**5,323**

Conclusions and Recommendations

As part of the PFS, detailed engineering for Phase 1 operations were completed, including quotes for all major equipment and assemblies. The Santa Cruz Graphite Project shows robust results, that contain substantial results that support continuing advanced mining studies and advancement to investment decisions. In addition, further upside potential exists to increase resources and grade, with mineralized material that has excellent characteristics that can demand superior prices within the marketplace. Important deposit characteristics are highlighted below:

• Located in one of the highest quality, prospective graphite regions in the world with over 80 years of continuous production;
• Shallow, friable material that can be mined without explosives and minimal crushing;
• Excellent recoveries and concentration properties using simple, proven technology;
• Large percentage of high quality, large flake graphite in deposit;
• Favorable logistics and infrastructure;
• Potential commercial production within 12 months of concluding financing;
• Large, quality geologic targets identified to expand resource and improve overall average grade.

Graphite is a growing global marketplace with increased demand for high quality product being developed at a rapid pace. The Santa Cruz Graphite Project has a combination of unique competitive advantages that make it a highly attractive asset, capable of producing premium quality graphite concentrate with a low capital intensity and 1st quartile operational costs (comparable to Chinese production).

Financial highlights include:

• Phase 1 Average Production of 5,000 tpy of 95% Cg Concentrate in Years 1 & 2
• Phase 2 Ramping up from 13,500 tpy of 95% Cg Concentrate in Year 3 to an average production of 25,000 tpy in years 4-11
• Average Basket Price of Products of US$1,287/t
• Open-pit mining with strip ratio of 1.6 Life of Mine (LOM)
• 12-Year LOM
• Exchange Rate of R$3.95 to US$1.00
• Post-Tax NPV5% of US$81.2M and internal rate of return of 35%
• US$129M Post-tax Cash Flow LOM
• Payback Period of 4 years (start of construction)
• CAPEX & OPEX Parameters for Each Phase are listed below:

Parameter	Phase 1 (US$)	Phase 2 (US$)	Phase 1 & 2 (US$)
CAPEX	7.3M	27.2M	34.5
OPEX ($/t Concentrate)	604	386	396

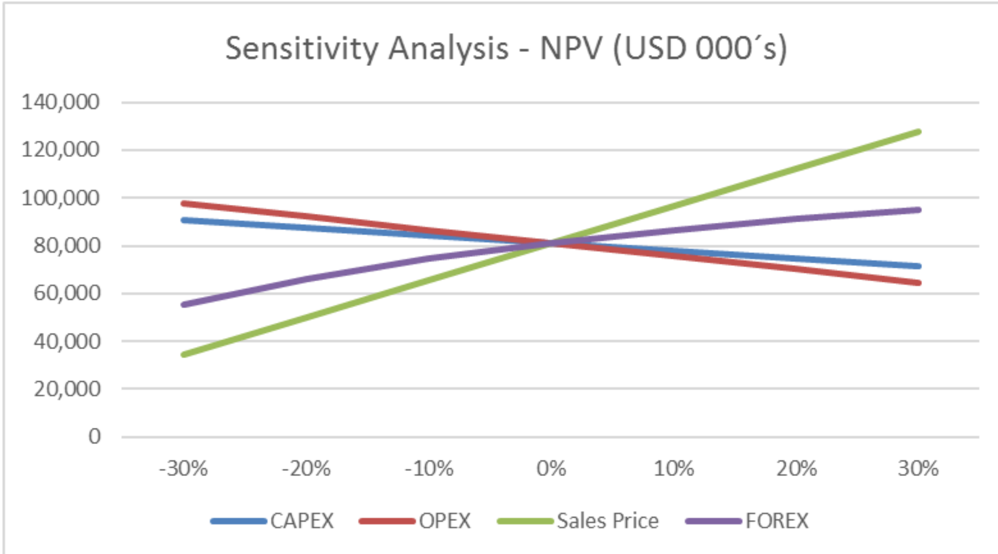
PFS Estimated Cash Flow by Year

			Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12
	Unit	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
Mined Ore	'MM tonnes	11.31		0.17	0.17	0.69	1.07	1.16	1.18	1.29	1.36	1.27	1.27	1.28	0.40
Waste	'MM tonnes	17.87		0.27	0.27	0.48	0.77	1.23	1.43	1.34	2.06	2.49	3.10	3.53	0.91
Ore grade	%Cg	2.37		3.51	3.51	2.60	2.71	2.50	2.47	2.24	2.13	2.28	2.28	2.26	1.54
Mill recovery	%	81.84		81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
Concs produc / sold	**'000 tonnes**	**230.7**		**5.0**	**5.0**	**15.4**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**5.3**
Concentrate grade	%Cg	95.0		95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
Concentrate price	**000 USD/t**			**1.29**	**1.29**	**1.29**	**1.29**	**1.29**	**1.29**	**1.29**	**1.29**	**1.29**	**1.29**	**1.29**	**1.29**
+ 30 Mesh	USD/t	618		51	51	51	51	51	51	51	51	51	51	51	51
+ 50 - 30 Mesh	USD/t	4,942		412	412	412	412	412	412	412	412	412	412	412	412
+80 - 50 Mesh	USD/t	4,170		347	347	347	347	347	347	347	347	347	347	347	347
+100 - 80 Mesh	USD/t	2,625		219	219	219	219	219	219	219	219	219	219	219	219
< 100 Mesh	USD/t	3,089		257	257	257	257	257	257	257	257	257	257	257	257
Total Revenue	**US$ million**	**296.9**		**6.4**	**6.4**	**19.8**	**32.2**	**32.2**	**32.2**	**32.2**	**32.2**	**32.2**	**32.2**	**32.2**	**6.9**
CFEM tax	US$ 000	-5,939		-129	-129	-395	-644	-644	-644	-644	-644	-644	-644	-644	-138
Landowner	US$ 000	-2,969		-64	-64	-198	-322	-322	-322	-322	-322	-322	-322	-322	-69
Net revenue	**US$ million**	**288.0**		**6.2**	**6.2**	**19.2**	**31.2**	**31.2**	**31.2**	**31.2**	**31.2**	**31.2**	**31.2**	**31.2**	**6.7**
Operating Costs	US$ million	-91.3		-3.1	-3.0	-6.0	-7.7	-8.4	-8.6	-8.5	-9.4	-9.8	-10.5	-11.0	-5.3
Mining Costs	US$ million	-39.3		-1.1	-1.0	-2.0	-2.7	-3.3	-3.5	-3.5	-4.3	-4.7	-5.5	-5.9	-1.8
Processing Costs	US$ million	-39.5		-1.3	-1.3	-2.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-2.8
G&A Costs	US$ million	-12.4		-0.6	-0.6	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-0.7
EBITDA	**US$ million**	**196.7**		**3.2**	**3.3**	**13.2**	**23.5**	**22.8**	**22.6**	**22.7**	**21.8**	**21.5**	**20.7**	**20.2**	**1.4**
EBITDA Margin	**%**	**47%**		**34%**	**36%**	**52%**	**60%**	**58%**	**57%**	**57%**	**54%**	**52%**	**50%**	**48%**	**11%**
Total Capex	**US$ million**	**-42.4**	**-7.6**	**-0.6**	**-27.6**	**-0.4**	**-0.4**	**-0.4**	**-0.4**	**-0.4**	**-0.4**	**-0.4**	**-0.4**	**-0.4**	**-2.8**
Capex	US$ million	-34.5	-7.3	0.0	-27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustaining Capital	US$ million	-7.9	-0.4	-0.6	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-2.8
Depreciations	US$ million	-38.4	-1.5	-1.6	-7.1	-7.2	-7.2	-5.7	-5.7	-0.3	-0.3	-0.4	-0.4	-0.4	-0.7
Earnings before taxes	**US$ million**	**158.4**	**-1.5**	**1.6**	**-3.8**	**6.0**	**16.3**	**17.1**	**16.9**	**22.4**	**21.5**	**21.1**	**20.3**	**19.8**	**0.7**
Tax - Social Contrib	US$ million	-14.7	0.0	-0.1	0.0	-0.5	-1.5	-1.5	-1.5	-2.0	-1.9	-1.9	-1.8	-1.8	-0.1
Tax - Income Tax	US$ million	-10.5	0.0	-0.4	0.0	-0.4	-1.0	-1.1	-1.1	-1.4	-1.3	-1.3	-1.3	-1.2	0.0
Working Capital	US$ million	0.0	0.0	-3.2	-0.5	-1.6	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	26.9
Cash Flow	**US$ million**	**129.1**	**-7.6**	**-1.2**	**-24.9**	**10.2**	**17.9**	**17.1**	**16.9**	**16.2**	**15.4**	**15.1**	**14.5**	**14.1**	**25.3**
Cummul. Cash Flow	**US$ million**	**129.1**	**-7.6**	**-8.8**	**-33.7**	**-23.5**	**-5.6**	**11.5**	**28.5**	**44.6**	**60.1**	**75.2**	**89.7**	**103.8**	**129.1**

	(%/yr)	**5%**	**6%**	**7%**	**8%**
Net Present Value	**US$ million**	**81.2**	**74.1**	**67.6**	**61.7**

Internal Rate of Return	**%**	**35%**
Payback	**Year**	**4.3**

Sensitivity Analysis for NPV using CAPEX, OPEX, Sales Price and FX



Detailed design documents have been prepared for the Phase 1 pilot plant as part of the PFS. A detailed 12-month construction and commissioning schedule has been prepared.

Exploration, Development, and Production

In order to advance the Santa Cruz Graphite Project to the next level of study, a recommended work program is presented in the following sections.

<u>Geology and Mineral Resource & Reserves Estimate</u>

- Additional 2,000 – 3,000 meters of drilling (RC& DDH), with deep holes to reach fresh rock lithology to add and upgrade resources and reserves. In the current Resources estimate there are only inferred resources from this lithology.
- Additional 1,000 to 2,000 meters of drilling (RC& DDH) in satellite targets;
- Further auger drilling for exploration potential;
- Investigate further use of geophysics;
- Geologic mapping and preliminary investigations of satellite targets within the proposed mine footprint;
- Additional 1,000 meters of infill drilling to support Pilot Plant Operations; and
- Update Resource and Reserve estimates.

Total budget estimate for this work is US$750,00 – 800,000.

<u>Mine Design and Sequencing</u>

- Collect and perform basic geotechnical characterization of the pit ore, host rock and waste materials and waste and tailings co-disposal WSF and foundation conditions;
- Install piezometers and begin to collect periodic data on variations in groundwater levels over seasons;
- Complete preliminary investigations into pit dewatering characteristics, hydrogeologic modeling and surface water diversion plans;
- Complete condemnation drilling for all proposed facilities; and
- Develop more detailed mining cost estimate based on proposed mine plan and sequencing schedule after drilling program.

Total budget estimate for this work is US$200,000 – 300,000.

Mineral Processing and Metallurgy

• Collect and perform further density analysis with representative samples from throughout the entire ore body and waste;
• Collect and perform basic geotechnical characterization for foundation design;
• Complete condemnation drilling for all proposed facilities; and
• Perform value engineering on the Phase 1 pilot plant detailed design.

Total budget estimate for this work is US$200,000 – 300,000.

Civil and Infrastructure

• Collect and perform basic geotechnical characterization for foundation design;
• Complete condemnation drilling for all proposed facilities; and
• Perform value engineering on the Phase 1 pilot plant detailed design.

Total budget estimate for this work is US$250,000 – 350,000.

Markets

• Investigate potential joint venture and R&D partners for investigating advanced graphite uses; and
• Perform more detailed price and supply/demand analysis in Brazilian market place.

Total budget estimate for this work is US$40,000 – 50,000.

Environmental and Permitting

• Continue to monitor trial mining license
• Implement required condition precedents for the simplified environmental license;
• Develop preliminary environmental monitoring program and complete EIARIMA study so that the integrated LP+LI+LO license can be applied for;
• Trade off analysis for strategic landowners acquisitions.

Total budget estimate for this work is US$300,000 – 350,000.

Specialized Skill and Knowledge

All aspects of the Company's business require specialized skills and knowledge. Such skills and knowledge include the areas of geology, drilling, logistical planning, geophysics, metallurgy and mineral processing, implementation of exploration programs and accounting. Management is composed of individuals who have extensive expertise in the mineral exploration industry and exploration finance and are complemented by the Board of Directors. See "*Directors and Officers*".

Competitive Conditions

The exploration and mining business is a competitive business. The Company competes with numerous other companies and individuals in the search for and the acquisition of attractive mineral properties. The ability of the Company to acquire further properties will depend not only on its ability to operate and develop its properties but also on its ability to select and acquire suitable properties or prospects for development or mineral exploration.

Business Cycles

The mineral exploration and development business is subject to mineral price cycles. The marketability of minerals and mineral concentrates is also affected by worldwide economic cycles.

Environmental Protection

All phases of the Company's operations are subject to environmental regulation in the jurisdiction in which it operates. These regulations govern exploration, development, tenure, production, taxes, labour standards, occupational health, waste disposal, protection and remediation of the environment, reclamation, mine safety, toxic substances and other matters. These regulations mandate, among other things, the maintenance of air and water quality standards and land reclamation. They also set forth limitations on the general handling, transportation, storage and disposal of solid and hazardous waste. Environmental legislation is evolving in a manner which will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. The costs of compliance with changes in government regulations have the potential to reduce the profitability of future operations. Environmental protection requirements did not have a material effect on the capital expenditures, earnings or competitive position of the Company during the 2021 financial year and are not expected to have a material effect during the 2022 financial year.

Employees

As at December 31, 2021, the Company has 12 full time employees in Brazil and various consultants and advisors. The number of employees varies significantly depending on the scope of exploration work occurring. The operations of the Company are managed by its directors and officers. The Company engages geological, metallurgical, and engineering consultants from time to time as required to assist in evaluating its interests and recommending and conducting work programs.

Foreign Operations

The Company's primary asset is the Santa Cruz Graphite Project, which is located in the state of Bahia, Brazil.

Reorganizations

Other than the acquisition of BGC and the Santa Cruz Graphite Project, and the related concurrent financing, neither the Company nor any of its subsidiaries have been subject to any material reorganization during the three most recently completed financial years and no material reorganization is being contemplated for the 2022 financial year.

Bankruptcy and Similar Procedures

Neither the Company nor any of its subsidiaries has, within the three most recently completed financial years or during the current financial year:

(a) had any bankruptcy, receivership or similar proceedings brought against them; or

(b) initiated any voluntary bankruptcy, receivership or similar proceedings.

No such proceedings are proposed or anticipated.

RISK FACTORS

The securities of the Company should be considered a highly speculative investment and investors should carefully consider all of the information disclosed in this AIF and the Company's profile on the SEDAR website at www.sedar.com prior to making an investment in our securities. In addition to the other information presented in this AIF, the following risk factors should be given special consideration when evaluating an investment in any of our securities.

There is no assurance that risk management steps taken will avoid future loss due to the occurrence of the risks described below (or incorporated by reference herein) or other unforeseen risks. If any of the risks described below actually occur, then the Company's business, financial condition and operating results could be adversely affected.

The risks and uncertainties described or incorporated by reference herein are not the only ones the Company faces. Additional risks and uncertainties, including those that the Company is unaware of or that are currently deemed immaterial, may also adversely affect the Company and its business. Investors should consult with their professional advisors to assess any investment in the Company.

Market Disruption and Geopolitical Risks

Market disruption can be caused by economic, financial or political events and factors, including but not limited to, international wars or conflicts (including Russia's military invasion of Ukraine), geopolitical developments (including trading and tariff arrangements, sanctions and cybersecurity attacks), instability in regions such as Asia, Eastern Europe and the Middle East, terrorism, natural disasters and public health epidemics (including the outbreak of COVID-19 globally).

The extent and duration of such events and resulting market disruptions cannot be predicted, but could be substantial and could magnify the impact of other risks to the Company. These and other similar events could adversely affect the U.S. and foreign financial markets and lead to increased market volatility, reduced liquidity in the securities markets, significant negative impacts on issuers and the markets for certain securities and commodities and/or government intervention. They may also cause short- or long-term economic uncertainties in the United States and worldwide. Further, due to closures of certain markets and restrictions on trading certain securities, the value of securities of the Company could be significantly impacted, which could lead to such securities being valued at zero.

Negative Operating Cash Flow

The Company reported negative operating cash flow for the financial year ended December 31, 2021. As a result of the expenses to be incurred by the Company in connection with its business objectives for the development of the Santa Cruz Graphite Project, the Company anticipates that negative operating cash flows will continue for the foreseeable future. Accordingly, the Company will require substantial additional capital in order to fund its future exploration and development activities for its Santa Cruz Graphite Project. Funding has been arranged through the Streaming Agreement with SRSR to fund phase 1 and phase 2 of the Company's mine construction on the Santa Cruz Graphite Project. To date, however, the Company has only received a US$2,000,000 loan advanced pursuant to the terms of the Streaming Agreement and the Promissory Note. Payment of phase 1 and phase 2 proceeds by SRSR is subject to certain additional conditions, including the completion of the Concurrent Equity Financing, as more particularly set out under the heading "Subsequent Events". There is no guarantee that these conditions will be met or that the Company will receive the phase 1 and phase 2 proceeds from SRSR. There is no guarantee that alternative funding sources for mine construction will be available if the Company does not receive the proceeds under the Streaming Agreement. Any failure to obtain additional financing or failure to achieve profitability and positive operating cash flows will have a material adverse effect on its financial condition and results of operations.

Additional Financing

The continued development of the Company will require additional financing. There is no guarantee that the Company will be able to achieve its current business strategy. The Company intends to fund its business objectives by way of additional offerings of equity and/or debt financing as well as through anticipated positive cash flow from operations in the future. The failure to raise or procure such additional funds or the failure to achieve positive cash flow could result in the delay or indefinite postponement of current business objectives. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, will be on terms acceptable to the Company. If additional funds are raised by offering equity securities, existing shareholders could suffer significant dilution. The Company will require additional financing to fund its operations until positive cash flow is achieved.

As noted above under the heading "Negative Operating Cash Flow", funding has been arranged through the Streaming Agreement to fund mine construction on the Santa Cruz Graphite Project, but there is no guarantee that conditions applicable to delivery of proceeds under the Streaming Agreement will be met or that the Company will receive the proceeds from SRSR. There is no guarantee that alternative funding sources for mine construction will be available if the Company does not receive the proceeds under the Streaming Agreement.

COVID-19 Outbreak

The outbreak of the novel coronavirus (COVID-19) pandemic and government actions to address it may have a material adverse effect on the Company's business, financial conditions and results of operation, all of which could be rapid and unexpected. In response to the COVID-19 pandemic, the Company continues to monitor the situation and adapt to evolving regulatory mandates, health recommendations and policies.

The COVID-19 pandemic continues to evolve rapidly and, as a result, it is difficult to accurately assess its continued magnitude, outcome and duration. The COVID-19 pandemic could negatively impact the Company's operations and result in government regulation that may adversely impact its business. COVID-19 may also represent a serious threat to the Company maintaining a skilled workforce and could be a healthcare challenge for the Company and its partners. Additional cybersecurity risks also exist due to personnel working remotely. The duration of the COVID-19 outbreak and the resultant government response actions, business closures and business disruptions, can all have an impact on the Company's operations and access to capital. There can be no assurance that the Company will not be impacted by adverse consequences that may be brought about by the COVID-19 pandemic on global financial markets which may reduce share prices and financial liquidity and thereby limit the capital available to the Company.

The extent to which the coronavirus impacts the Company's business will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the coronavirus and the actions to contain the coronavirus or treat its impact, among others. Moreover, the actual and threatened spread of the coronavirus globally could also have a material adverse effect on the regional economies in which the Company intends to operate, continue to negatively impact stock markets, adversely impact the Company's ability to raise capital, and cause continued interest rate volatility. Any of these developments, and others, could have a material adverse effect on the Company's business.

The outbreak of the novel coronavirus (COVID-19) may cause disruptions to the Company's business and operational plans. These disruptions may include disruptions resulting from: (i) shortages of employees; (ii) unavailability of contractors and subcontractors; (iii) interruption of supplies from third parties upon which the Company relies; (iv) restrictions that governments impose to address the COVID-19 outbreak; and (v) restrictions that the Company and its contractors and subcontractors impose to ensure the safety of employees and others. Further, it is presently not possible to predict the extent or durations of these disruptions. These disruptions may have a material adverse effect on the Company's business, financial condition and results of operations. Such adverse effect could be rapid and unexpected. These disruptions may impact the Company's ability to carry out its business plans for 2022 in accordance with the section entitled "Use of Proceeds" in this Prospectus.

Foreign Operations Risks

Political and related legal and economic uncertainty may exist in the countries where the Company operates or may operate in the future. The Company's mineral exploration, development and mining activities may be adversely affected by political instability and changes to government regulation relating to the mining industry. Inherent risks with conducting foreign operations include, but are not limited to: renegotiation, cancellation or forced modification of existing contracts; expropriation or nationalization of property; changes in laws or policies or increasing legal and regulatory requirements of particular countries including those relating to taxation, royalties, imports, exports, duties, currency, or other claims by government entities, including retroactive claims and/or changes in the administration of laws, policies and practices; uncertain political and economic environments; war, terrorism, sabotage and civil disturbances; delays in obtaining or the inability to obtain or maintain necessary governmental permits or to operate in accordance with such permits or regulatory requirements; currency fluctuations; import and export regulations, including restrictions on the export of graphite or other minerals; limitations on the repatriation of earnings; and increased financing costs.

We operate in Brazil and have projects in Brazil and the United States. We cannot guarantee that changes will not be made in the government or laws of the jurisdictions in which the Company's operations are located or changes in the regulatory environment for mining companies in general or companies not domiciled in these countries, which could adversely and materially affect the Company.

Government Regulations, Consents and Approvals

Exploration, development and mining activities are subject to laws and regulations governing health and work safety, employment standards, environmental matters, mine development, prospecting, mineral production, exports, taxes, labour standards, reclamation obligations and other matters. It is possible that future changes in applicable laws, regulations, agreements or changes in their enforcement or regulatory interpretation could result in changes in legal requirements or in the terms of permits and agreements applicable to the Company or its properties which could have a material adverse impact on the Company's operations and exploration programs and future development projects.

Where required, obtaining necessary permits and licenses can be a complex, time consuming process and there can be no assurance that required permits will be obtainable on acceptable terms, in a timely manner or at all. The costs and delays associated with obtaining permits and complying with these permits and applicable laws and regulations could stop or materially delay or restrict the Company from proceeding with the development of an exploration project or the operation or further development of a mine. Any failure to comply with applicable laws and regulations or permits, even if inadvertent, could result in interruption or closure of exploration, development or mining operations or material fines, penalties or other liabilities, which could have an adverse effect on the business, financial condition or results of operation of the Company.

Currency Risk

Fluctuations in currency exchange rates may significantly impact the Company's earnings and cash flows. For example, the appreciation of the Brazilian real against the US dollar would increase the cost of exploration, development and operation of the Company's mineral properties located in Brazil which could have a material adverse effect on the financial condition, results of operations or cash flow results of the Company.

Mineral Titles

Although the Company has legal ownership on key mining rights, there is no guarantee that title to such mineral property interests will not be contested or challenged. The Company's mineral property interests may be subject to prior unregistered agreements or transfers and ownership may be affected by undetected irregularities. Mining rights may be contested and, if such contest is successful, the development of the Company's assets and/or operations may be adversely affected.

Exploration and Development

Mineral exploration and development of mineral properties involves a high degree of risk, and few properties which are explored are ultimately developed into producing mines. There is no assurance that the Company's exploration and development activities will result in any discoveries of commercial bodies of minerals. The long-term profitability of the Company's operations will be in part directly related to the cost and success of its exploration programs, which may be affected by a number of factors. Unusual or unexpected formations, formation pressures, fires, power outages, labour disruptions, flooding, explosions, tailings impoundment failures, cave-ins, landslides and the inability to obtain adequate machinery, equipment or labour are some of the risks involved in mineral exploration and exploitation activities.

Substantial expenditures are required to establish mineral reserves and resources through drilling, to develop metallurgical processes to extract the resources and, in the case of new properties, to develop the extraction and processing facilities and infrastructure at any site chosen for mining. Although substantial benefits may be derived from the discovery of a major deposit, no assurance can be given that resources will be discovered in sufficient quantities to justify commercial operations or that the funds required for development can be obtained on a timely basis. The commercial viability of a mineral deposit once discovered is also dependent on a number of factors, some of which are the particular attributes of the deposit, such as size, grade and proximity to infrastructure, as well as metal prices. Most of the above factors are beyond the control of the Company. There can be no assurance that the Company's mineral exploration activities will be successful. In the event that such commercial viability is never attained, the Company may seek to transfer its property interests or otherwise realize value or may even be required to abandon its business and fail as a "going concern".

The operations of the Company may require licenses and permits from various governmental authorities to carry out exploration and development at its projects. Obtaining permits can be a complex and time-consuming process. There can be no assurances that the Company will be able to obtain all necessary licenses and permits that may be required to carry out exploration, development and mining operations at its projects, in a timely manner or at all. Failure to obtain such licenses and permits may adversely affect the Company's business as the Company would be unable to legally conduct its intended exploration work, which may result in it losing its interest in the subject property. Any failure to comply with permits and applicable laws and regulations, even if inadvertent, could result in the interruption or closure of operations or material fines, penalties or other liabilities. In addition, the requirements applicable to sustain existing permits and licenses may change or become more stringent over time and there is no assurance that the Company will have the resources or expertise to meet its obligations under such licenses and permits.

The Company's operations are subject to environmental regulations promulgated by government agencies from time to time. Environmental legislation provides for restrictions and prohibitions of spills, release or emission of various substances produced in association with certain mining industry operations, such as seepage from tailing disposal areas, which could result in environmental pollution. Failure to comply with such legislation may result in imposition of fines and penalties. In addition, certain types of operations require submissions to and approval of environmental impact assessments. Environmental legislation is evolving in a manner which means stricter standards and enforcement. These laws and regulations will require the Company to acquire permits and other authorizations for certain activities. There can be no assurance that the Company will be able to acquire such necessary permits or authorizations on a timely basis, if at all. Fines and penalties for non-compliance are also more stringent. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies and directors, officers and employees. The cost of compliance with changes in governmental regulations has a potential to reduce the profitability of operations. The Company intends to fully comply with all environmental regulations.

Permits & Licenses

The operations of the Company may require licenses and permits from various governmental authorities to carry out exploration and development at its projects. Obtaining permits can be a complex and time-consuming process. There can be no assurances that the Company will be able to obtain all necessary licenses and permits that may be required to carry out exploration, development and mining operations at its projects, in a timely manner or at all. Failure to obtain such licenses and permits may adversely affect the Company's business as the Company would be unable to legally conduct its intended exploration work, which may result in it losing its interest in the subject property. Any failure to comply with permits and applicable laws and regulations, even if inadvertent, could result in the interruption or closure of operations or material fines, penalties or other liabilities. In addition, the requirements applicable to sustain existing permits and licenses may change or become more stringent over time and there is no assurance that the Company will have the resources or expertise to meet its obligations under such licenses and permits.

Phase 1 operations of the Santa Cruz Project are fully permitted and licensed. In February 2022 the Final Exploration Reports for the 13 claims were approved by the ANM in February 2022, and the Company is in the process of applying for the full mining license for Phase 2 operations (25,000 tpy). This starts a 12-month window for the Company to submit an environmental impact report for each claim and request the full mining license. The Company can apply for a 12-month extension for each of the claims.

The environmental licensing process for Phase 2 operations will be similar to the Phase 1 licensing effort and basically update the current license for 25,000 tpy production. Over the course of its life of mine, the Company will have to obtain additional environmental permits to expand operations. The Company will have to apply for water rights relative to its land access. Environmental legislation is evolving in a manner that may, in the future, require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees.

Production

There would be significant risks associated with the commencement of mining operations at the Company's Santa Cruz Graphite Project. The Company does not have a history of producing graphite from the Santa Cruz Graphite Project and there is no guarantee that the Company will be able to develop a profitable mining operation on the Santa Cruz Graphite Project. Any production decision at the Santa Cruz Graphite Project is expected to be based on a feasibility study or similar economic study confirming the technical and economic viability of the project. Advancing the Santa Cruz Graphite Project to the production stage will involve additional capital and time. The Company is subject to risks associated with developing and establishing a mining operation on the Santa Cruz Graphite Project, including:

- the availability and cost of mining and processing equipment and other supplies;
- the timing and cost of the construction of mining and processing facilities;
- the availability and cost of hiring management and administrative personnel and skilled labour required to run a mining operation on the Santa Cruz Graphite Project;
- increases in projected costs due to differences in grade of mineralized material, metallurgical performance, revisions to mine plans or results from reprocessing heap material;
- increases in the costs of labour, fuel, electricity, and other materials and supplies;
- the availability of funds to finance construction and development activities;
- the ability to extract sufficient graphite from resources to support a profitable mining operation on the Santa Cruz Graphite Project;
- potential opposition from non-governmental organizations, local groups or local inhabitants that may delay or prevent development activities; and
- compliance with environmental and other governmental approval and permit requirements for the Santa Cruz Graphite Project.

It is common for mine development programs to experience unexpected problems and delays prior to commencement of commercial operations. In addition, the Company's management and workforce will need to be expanded, and sufficient housing and other support systems for the Company's workforce will have to be established. This could result in delays in the commencement of mineral production and increased costs of production. As a result, the Company may not be successful in establishing a mining operation or profitably producing graphite from the Santa Cruz Graphite Project.

Technical Estimates

Mineral resource estimates and the economic analysis contained in the Santa Cruz Graphite Report are based on interpretation and assumptions. Unless otherwise indicated, mineral resource figures and economic analysis presented or incorporated by reference in this AIF are based upon estimates made by independent consulting geologists.

Estimates can be imprecise and depend upon geological interpretation and statistical inferences drawn from drilling and sampling, which may prove to be unreliable. We cannot assure you that the estimates are accurate or that mineralized materials from the Santa Cruz Graphite Project can be mined or processed profitably.

Any material changes in mineral resource estimates and grades of resources will affect the economic viability of placing the Santa Cruz Graphite Project into production and the Santa Cruz Graphite Property's return on capital.

As the Company has not commenced actual production from the Santa Cruz Graphite Project, mineral resources may require adjustments or downward revisions. In addition, the grade of mineralized material ultimately mined, if any, may differ from that indicated by our Santa Cruz Graphite Project. Graphite recovered in small scale tests may not be duplicated on a production scale.

The mineral resource estimates contained in this AIF and the Santa Cruz Graphite Report have been determined and valued based on assumed future prices for graphite, cut-off grades and operating costs that may prove to be inaccurate. Extended declines in prices for graphite may render our estimates uneconomic and result in reduced reported mineralization or adversely affect our determinations of commercial viability. Any material reductions in estimates of mineralization, or of our ability to profitably extract graphite from our resources, could have a material adverse effect on our share price and the value of the Santa Cruz Graphite Project.

The economic analysis in the Santa Cruz Graphite Project is preliminary in nature and is based on the extraction of both indicated and inferred resources. Inferred resources are considered too speculative geologically to have economic considerations applied to them to establish mineral reserves. There is no certainty that any part of the Santa Cruz Graphite Project will be realized.

Title to Assets

Although the Company has or will receive title for any concessions in which it has or will acquire a material interest, there is no guarantee that title to such concessions will be not challenged. The Company can never be certain that it or its option partners will have valid title to its mineral properties. Mineral properties sometimes contain claims or transfer histories that examiners cannot verify, and transfers under foreign law are often complex. The Company may or may not carry title insurance on its properties. In some countries, the system for recording title to the rights to explore, develop and mine natural resources is such that a title provides only minimal comfort that the holder has title. Also, in many countries, claims have been made and new claims are being made by aboriginal peoples that call into question the rights granted by the governments of those countries. A successful claim that the Company does not have title to a property could cause the Company to lose its right to that property, perhaps without compensation for its prior expenditures relating to the property.

Surface Rights and Access

Although the Company acquires the rights to some or all of the minerals in the ground subject to the mineral tenures that it acquires, or has a right to acquire, in most cases it does not thereby acquire any rights to, or ownership of, the surface to the areas covered by its mineral tenures. In such cases, applicable mining laws usually provide for rights of access to the surface for the purpose of carrying on mining activities, however, the enforcement of such rights through the courts can be costly and time consuming. It is necessary to negotiate surface access or to purchase the surface rights if long- term access is required. There can be no guarantee that, despite having the right at law to access the surface and carry on mining activities, the Company will be able to negotiate satisfactory agreements with any such existing landowners/occupiers for such access or purchase of such surface rights, and therefore it may be unable to carry out planned mining activities. In addition, in circumstances where such access is denied, or no agreement can be reached, the Company may need to rely on the assistance of local officials or the courts in such jurisdiction the outcomes of which cannot be predicted with any certainty. The inability of the Company to secure surface access or purchase required surface rights could materially and adversely affect the timing, cost or overall ability of the Company to develop the Santa Cruz Graphite Project.

In February 2022, the Company negotiated its first land package acquisition on the Santa Cruz Graphite Project required for the Phase 1 operations. The acquisition agreement calls for a series of payments to be made over a period of two to three years. Title to the land package will transfer upon completion of the required payments, but the Company has access and complete use of the property for operations and exploration. The Company will engage in additional negotiations over the life of mine of the Santa Cruz Graphite Project which may or may not be successful.

Requirement for New Capital

As an exploration stage company without revenues from operations, the Company needs more capital than it currently has available to it. The Company has to raise, by way of debt or equity financing or other means, considerable funds to meet its capital needs. There is no assurance that sufficient funding will be available to the Company for further exploration and development of the Santa Cruz Graphite Project or the Company's other property interests or to fulfill the Company's obligations under applicable agreements. There can be no assurance that the Company will be able to obtain adequate financing in the future or that the terms of such financing will be favorable. Failure to obtain such additional financing could result in delay or indefinite postponement of further exploration and development of the Santa Cruz Graphite Project and the Company's other projects. It is possible such additional capital will be raised through the issuance of additional equity which will result in dilution to the Company's shareholders.

As noted above under the heading "Negative Operating Cash Flow", funding has been arranged through the Streaming Agreement to fund mine construction on the Santa Cruz Graphite Project, but there is no guarantee that conditions applicable to delivery of proceeds under the Streaming Agreement will be met or that the Company will receive the proceeds from SRSR. There is no guarantee that alternative funding sources for mine construction will be available if the Company does not receive the proceeds under the Streaming Agreement.

Dilution

The Company will require additional financing in the future. The Company may issue securities on less than favourable terms to raise sufficient capital to fund its business plan. Any transaction involving the issuance of equity securities or securities convertible into Common Shares would result in dilution, possibly substantial, to present and prospective holders of Common Shares.

Operating Hazards and Risks

Exploration for natural resources involves many risks which even a combination of experience, knowledge and careful evaluation may not be able to overcome. Operations in which the Company has a direct or indirect interest will be subject to all the hazards and risks normally incidental to exploration, development and production of resources, any of which could result in work stoppages, damage to persons or property and possible environmental damage. Although the Company has or may obtain liability insurance in an amount which it considers adequate, the nature of these risks is such that liabilities might exceed policy limits, the liabilities and hazards might not be insurable against, or the Company might not elect to insure itself against such liabilities due to high premium costs or other reasons, in which event the Company could incur significant costs that could have a material adverse effect upon its financial condition.

Fluctuating Commodity Prices

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

No Assurance of Profitability

The Company has no history of production, revenue or earnings and due to the nature of its business there can be no assurance that the Company will be profitable. The Company has not paid dividends on its shares since incorporation and does not anticipate doing so in the foreseeable future. Although the Company has identified mineral resources on the Santa Cruz Graphite Project (see "Material Mineral Properties – Santa Cruz Graphite Project - Mineral Resource and Mineral Reserve Estimates") and has made arrangements through the Streaming Agreement to fund mine development, the commercial viability of the deposit will depend on a number of factors including, by way of example, the size, grade, and other attributes of the mineral deposit, the proximity of the mineral deposit to infrastructure such processing facilities, roads, rail, power, and a point for shipping, government regulation, and market prices. Most of these factors will be beyond the Company's control, and any of them could increase costs and make extraction of any identified mineral deposit unprofitable.

Continued exploration of the Santa Cruz Graphite Project and the future development of the Santa Cruz Graphite Project if found to be economically feasible, will require significant funds. The only present source of funds available to the Company is through the sale of its equity shares, short-term, high-cost borrowing, the sale or optioning of a portion of its interest in the Santa Cruz Graphite Project or the negotiation of metal sale agreements such as the Streaming Agreement with SRSR. If the funds to be delivered under the Streaming Agreement are not forthcoming due to the Company's failure to meet the conditions necessary to obtain such funding (including completion of the Concurrent Equity Financing) or other factors beyond the Company's control, and funds through debt or equity financing or the sale or optioning of a portion of the Company's interest in the Santa Cruz Graphite Project are not available, there is no assurance that funds for further development of the Santa Cruz Graphite Project will be available on favorable terms, or at all. At present, it is impossible to determine precisely what amounts of additional funds, if any, may be required. Failure to raise such additional capital could put the continued viability of the Company at risk.

Development of Mineral Projects into Commercially Viable Mines

Development projects require significant expenditures during the development phase before production is possible. Development projects are subject to the completion of successful feasibility studies and environmental assessments, issuance of necessary governmental permits and availability of adequate financing. The economic feasibility of development projects is based on many factors such as: estimation of Mineral Reserves, anticipated metallurgical recoveries, environmental considerations and permitting, future mineral prices, and anticipated capital and operating costs of these projects. The Santa Cruz Graphite Project has no operating history upon which to base estimates of future production and cash operating costs. Particularly for development projects, estimates of proven and probable mineral reserves and cash operating costs are, to a large extent, based upon the interpretation of geologic data obtained from drill holes and other sampling techniques, and feasibility studies that derive estimates of cash operating costs based upon anticipated tonnage and grades of ore to be mined and processed, the configuration of the ore body, expected recovery rates from the ore, estimated operating costs, anticipated climatic conditions and other factors. As a result, it is possible that actual capital and operating costs and economic returns will differ significantly from those currently estimated for a project prior to production.

Any of the following events, among others, could affect the profitability or economic feasibility of the Company's development projects: unanticipated changes in grade and tonnes of ore to be mined and processed, unanticipated adverse geological conditions, unanticipated metallurgical recovery problems, incorrect data on which engineering assumptions are made, availability of labor, costs of processing and refining facilities, availability of economic sources of power, adequacy of water supply, availability of surface on which to locate processing and refining facilities, adequate access to the site, unanticipated transportation costs, government regulations (including regulations with respect to prices, royalties, duties, taxes, permitting, restrictions on production, quotas on exportation of minerals, environmental), fluctuations in mineral prices, accidents, labor actions and force-majeure events.

Dependence Principal Project

The Company is currently dependent on one principal mineral project, the Santa Cruz Graphite Project, which is a development stage project. The Santa Cruz Graphite Project may never develop into a commercially viable mine, which would have a materially adverse effect the Company's profitability, financial performance and results of operations.

Taxation

The Company has operations and conducts business in multiple jurisdictions and it is subject to the taxation laws of each such jurisdiction. These taxation laws are complicated and subject to change. The Company may also be subject to review, audit and assessment in the ordinary course. Any such changes in taxation law or reviews and assessments could result in higher taxes being payable or require payment of taxes due from previous years, which could adversely affect the Company's profitability. Taxes may also adversely affect the Company's ability to repatriate earnings and otherwise deploy its assets.

Environmental Factors

The Company's operations are subject to environmental regulations promulgated by government agencies from time to time. Environmental legislation provides for restrictions and prohibitions of spills, release or emission of various substances produced in association with certain mining industry operations, such as seepage from tailing disposal areas, which could result in environmental pollution. Failure to comply with such legislation may result in imposition of fines and penalties. In addition, certain types of operations require submissions to and approval of environmental impact assessments. Environmental legislation is evolving in a manner which means stricter standards and enforcement. These laws and regulations will require the Company to acquire permits and other authorizations for certain activities. There can be no assurance that the Company will be able to acquire such necessary permits or authorizations on a timely basis, if at all. Fines and penalties for non-compliance are also more stringent. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies and directors, officers and employees. The cost of compliance with changes in governmental regulations has a potential to reduce the profitability of operations. The Company intends to fully comply with all environmental regulations.

Reclamation Costs

Land reclamation requirements are generally imposed on mineral exploration companies (as well as companies with mining operations) in order to minimize long term effects of land disturbance, and the Company is subject to such requirements at its mineral properties. Decommissioning liabilities include requirements to control dispersion of potentially deleterious effluents and reasonably re-establish pre-disturbance land forms and vegetation.

In order to carry out reclamation obligations arising from exploration and potential development activities, the Company may be required to allocate financial resources that might otherwise be spent on further exploration and development programs. Reclamation costs are uncertain and planned expenditures may differ from the actual expenditures required. If the Company is required to carry out unanticipated reclamation work, its financial position could be adversely affected.

Competition

The resource industry is intensely competitive in all its phases, and the Company competes with many other companies possessing greater financial resources and technical facilities than it has. Competition could adversely affect the Company's ability to acquire suitable properties for exploration in the future.

Global Financial Conditions

Market events and conditions, including disruptions in the Canadian, United States and international credit markets and other financial systems, whether due to the COVID 19 pandemic, the current conflict in Ukraine or other factors, and the continued volatility of the Canadian, United States and global economic conditions, could, among other things, impede access to capital or increase the cost of capital, which would have an adverse effect on the Company's ability to fund its working capital and other capital requirements. Notwithstanding various actions by the United States and foreign governments, concerns about the general condition of the capital markets, financial instruments, banks, investment banks, insurers and other financial institutions continue to be volatile and unpredictable. In addition, general economic indicators have deteriorated, including low levels of consumer sentiment and limited economic growth on a global basis. These disruptions in the current credit and financial markets have had, and could continue to have a material adverse impact on a number of financial institutions and have limited access to capital and credit for many companies, particularly junior resource enterprises such as the Company. These disruptions could, among other things, make it more difficult for the Company to obtain, or increase its cost of obtaining, capital and financing for its operations. The Company's access to additional capital may not be available on terms acceptable to the Company or at all.

Options and Joint Ventures

The Company may, in the future be unable to meet its share of costs incurred under option, joint venture or shareholder agreements to which it is a party and the Company may have its interest in the properties subject to such agreements reduced as a result. If the Company does not raise the necessary capital to meet its obligations under current contractual obligations, then the Company may have to forfeit its interest in the properties or prospects earned or assumed under such contracts. Furthermore, if other parties to such agreements do not meet their share of such costs, the Company may be unable to finance the cost required to complete recommended programs.

Political and Economic Instability

The Company may acquire properties located in countries where mineral exploration activities may be affected by varying degrees of political instability and haphazard changes in government regulations such as tax laws, business laws and mining laws. Any changes in regulations or shifts in political conditions would be beyond the control of the Company and may adversely affect its business. Operations may be affected in varying degrees by government regulations with respect to restrictions on production, price control, export controls, income taxes, and expropriation of property, environmental legislation, and mine safety.

The Company may also be affected by possible economic instability. The risks include, but are not limited to, terrorism, military repression, extreme fluctuations in currency exchange rates and high rates of inflation. Changes in resource development or investment policies or shifts in political attitude in certain countries may adversely affect the Company's business. Operations may be affected in varying degrees by government regulations with respect to restrictions on production, price controls, export controls, income taxes, expropriation of property, maintenance of claims, environmental legislation, land use, land claims of local people, water use and mine safety. The effect of these factors cannot be accurately predicted.

Anti-Bribery Laws

The Canadian Corruption of Foreign Public Officials Act and the U.S. Foreign Corrupt Practices Act and anti-bribery laws in other jurisdictions, prohibit companies and their intermediaries from making improper payments for the purposes of obtaining or retaining business or other commercial advantage. The Company's policies mandate compliance with these anti-bribery laws, which often carry substantial penalties. The Company operates in jurisdictions that have experienced governmental and private sector corruption to some degree, and, in certain circumstances, strict compliance with anti-bribery laws may conflict with certain local customs and practices. There can be no assurances that the Company's internal control policies and procedures will always protect it from reckless or other inappropriate acts committed by the Company's affiliates, employees or agents. Violations of these laws, or allegations of such violations, could have a material adverse effect on the Company's business, financial position and results of operations.

Foreign Exchange Rate Risk

The Company reports its consolidated financial statements in Canadian dollars but its operations are currently in Brazil. Consequently, the financial results of the Company's operations as reported in Canadian dollars are subject to changes in the value of the Canadian dollar relative to the Brazilian Real. Exploration activities in Brazil are funded through the Company's Brazilian subsidiary and are recorded in Brazilian Real and translated into Canadian dollars on the consolidated financial statements date. As a result, the Company can be exposed to significant fluctuations in the exchange rate between the Brazilian Real and the Canadian dollar. The Company does not currently enter into any foreign exchange hedges to limit exposure to exchange rate fluctuations. The Board of Directors continually assesses the Company's strategy toward its foreign exchange rate risk, depending on market conditions.

Litigation Risk

The Company may be subject to claims (including class action claims and claims from government regulatory bodies) based on allegations of negligence, breach of statutory duty, breach of contract, public nuisance or private nuisance or otherwise in connection with its business or operations. Liability resulting from any such claim in the future may have a materially adverse effect on the Company's financial condition or operations.

Government Regulation

Any exploration, development or mining operations carried on by the Company will be subject to government legislation, policies and controls relating to prospecting, development, production, environmental and wildlife protection, mining taxes and labour standards. The Company cannot predict whether or not such legislation, policies or controls, as presently in effect, will remain so, and any changes therein (for example, significant new royalties or taxes), which are completely outside the control of the Company, may materially adversely affect the ability of the Company to continue its planned business within any such jurisdictions.

Management and Dependence on Key Personnel

The Company is dependent upon the personal efforts and commitment of its management, which is responsible for the development of future business. To the extent that management's services would be unavailable for any reason, a disruption to the operations of the Company could result, and other persons would be required to manage and operate the Company. The Company is dependent on a relatively small number of key officers, consultants and employees, the loss of any of whom could have an adverse effect on the Company. Failure to retain key individuals or to attract or retain additional key individuals with necessary skills could have a materially adverse impact upon the Company's success.

Limited Experience with Development-Stage Mining Operations

The Company has limited experience in placing resource properties into production, and its ability to do so will be dependent upon using the services of appropriately experienced personnel or entering into agreements with other major resource companies that can provide such expertise. There can be no assurance that the Company will have available to it the necessary expertise when and if it places the Santa Cruz Graphite Project into production. Mineral resources are not mineral reserves and there is no assurance that any mineral resources will ultimately be reclassified as proven or probable reserves. Mineral resources which are not mineral reserves have not demonstrated economic viability.

Conflicts of Interest

Certain of the directors and officers of the Company may also serve as directors, officers and/or advisors of and to other companies involved in natural resource mining, exploration and development. Consequently, there exists the possibility for such directors and officers to be in a position of conflict. The Company expects that any decision made by any of such directors and officers involving the Company will be made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of the Company and its shareholders, but there can be no assurance in this regard. In addition, each of the directors is required to declare and refrain from voting on any matter in which such directors may have a conflict of interest or which are governed by the procedures set forth in the *British Columbia Business Corporations Act* and any other applicable law.

DIVIDENDS AND DISTRIBUTIONS

The Company has paid no dividends since its inception. At the present time, the Company intends to retain any earnings for corporate purposes. The payment of dividends in the future will depend on the earnings and financial condition of the Company and on such other facts as the Board of Directors may consider appropriate. However, since the Company is currently in a development stage, it is unlikely that earnings, if any, will be available for the payment of dividends in the foreseeable future.

CAPITAL STRUCTURE

The authorized capital of the Company consists of an unlimited number of Common Shares without par value. As of December 31, 2021, there were 102,088,520 Common Shares issued and outstanding. As at the date of this AIF, there were 102,533,520 Common Shares issued and outstanding.

The holders of the Common Shares are entitled to notice of, to attend, and to vote at all meetings of the Company's shareholders. The holders of the Common Shares are entitled to receive dividends if, as and when declared by the directors, and rank pari passu with one another in any distribution of property or assets upon the liquidation, winding-up or other dissolution of the Company.

The Company's shares carry no pre-emptive rights, conversion or exchange rights, retraction, sinking fund or purchase fund provisions. There are no provisions requiring the holders of shares of the Company to contribute additional capital and no restrictions on the issuance of additional securities by the Company. There are no restrictions on the repurchase or redemption of shares by the Company except as otherwise set out herein and to the extent that any such repurchase or redemption would render the Company insolvent pursuant to the BCBCA.

As of December 31, 2021, the Company had 4,095,000 options to purchase Common Shares outstanding as follows:

Number Issued	Exercise Price	Expiry Date
900,000	$0.30	May 30, 2022
500,000	$0.45	August 13, 2023
90,000	$0.15	June 17, 2024
2,485,000	$0.055	August 4, 2025
120,000	$0.25	April 12, 2023

As of December 31, 2021, the Company had 50,554,090 warrants to purchase Common Shares of the Company outstanding as follows:

Number Issued	Exercise Price	Expiry Date
13,130,000	$0.15	February 16, 2024
9,315,091	$0.15	February 23, 2024
5,600,000	$0.06	May 4, 2024
22,363,999	$0.15	October 25, 2024

On February 16, 2021, the Company completed a non-brokered private placement of 15,055,000 units at a price of $0.10 per unit for aggregate gross proceeds of $1,505,000. Each Unit was comprised of one Common Share and one Common Share purchase warrant. Each warrant entitles the holder to acquire one additional Common Share at a price of $0.15 per share for a period of 3 years from the closing of the private placement, subject to an acceleration clause.

On February 23, 2021, the Company completed a non-brokered private placement of 9,524,951 units at a price of $0.105 per unit for aggregate gross proceeds of $1,000,120. Each Unit was comprised of one Common Share and one Common Share purchase warrant. Each warrant entitles the holder to acquire one additional Common Share at a price of $0.15 per share for a period of 3 years from the closing of the private placement, subject to an acceleration clause.

On October 25, 2021, the Company completed a non-brokered private placement of 22,069,999 units at a price of $0.11 per unit for aggregate gross proceeds of $2,427,700. Each unit was comprised of one Common Share and one Common Share purchase warrant. Each warrant entitles the holder to acquire one additional Common Share at price of $0.15 per share for a period of 3 years from the closing of the private placement, subject to an acceleration clause.

MARKET FOR SECURITIES

Trading Price and Volume

The Common Shares trade on the TSX-V under the symbol "STS" and on OTCBB under the symbol "STSBF". The following table shows the high, low and closing prices and total trading volume of the Common Shares on the TSX-V on a monthly basis for the financial year ended December 31, 2021:

Month	High	Low	Volume
December 2021	$0.34	$0.21	3,578,768
November 2021	$0.38	$0.20	26,466,502
October 2021	$0.22	$0.10	12,404,040
September 2021	$0.16	$0.12	2,773,161
August 2021	$0.18	$0.15	1,201,556
July 2021	$0.20	$0.14	3,514,761
June 2021	$0.24	$0.15	4,093,274
May 2021	$0.26	$0.19	2,528,187
April 2021	$0.22	$0.17	720,782
March 2021	$0.26	$0.19	2,713,240
February 2021	$0.31	$0.11	5,797,513
January 2021	$0.16	$0.05	2,534,473

Prior Sales

During the most recently completed financial year ended December 31, 2021, the Company issued the following securities that are outstanding but are not listed or quoted on a marketplace.

Date of Issue	Type of Securities	Number of Securities	Issue Price per Security
February 16, 2021	Units (1)	15,055,000	$0.10
February 23, 2021	Units (1)	9,524,951	$0.105
February 23, 2021	Units (2)	434,640	$0.105
April 12, 2021	Stock Options (3)	120,000	$0.25
May 4, 2021	Units (4)	5,600,000	$0.05
October 25, 2021	Units (1)	22,069,999	$0.11
October 25, 2021	Warrants (5)	294,000	$0.15

Notes:

(1) Units issued pursuant to a private placement where each unit consisted of one Common Share and one Common Share purchase warrant. Each warrant entitles the holder to purchase one Common Share at an exercise price of $0.15 for a period of 3 years, subject to an acceleration clause.

(2) Units issued as finder's units for a private placement. Each unit consisted of one Common Share and one Common Share purchase warrant. Each warrant entitles the holder to purchase one Common Share at an exercise price of $0.15 for a period of 3 years, subject to an acceleration clause.

(3) These stock options expire on April 12, 2023.
(4) Issued on the conversion of principal on convertible debentures issued in the year ended December 31, 2020. The principal amount was converted into units at the option of the holder. Each unit consisted of one Common Share and a one Common Share purchase warrant. Each warrant entitles the holder to acquire one additional Common Share at a price of $0.06 per share for a period of 3 years, subject to an acceleration clause.
(5) Warrants issued as finder's fees in connection with a private placement. Each warrant entitles the holder to purchase one Common Share at an exercise price of $0.15 per share for a period of 3 years, subject to an acceleration clause.

DIRECTORS AND OFFICERS

Name, Occupation and Security Holding

The following table sets out the names of the current directors and executive officers of the Company as of the date hereof, provinces or states and countries of residence, positions with the Company, principal occupations within the five preceding years, periods during which each director has served as a director and the number of Common Shares and percentage of the issued Common Shares beneficially owned, directly or indirectly, or subject to control or direction by that person.

The term of each of the current directors of the Company will expire at the next annual general meeting unless his office is earlier vacated in accordance with the Articles of the Company, or he becomes disqualified to act as a director.

Name, Position and Municipality of Residence	Principal Occupation for the Past Five Years (1)	Director/Executive Officer Since	Number and Percentage of Common Shares Beneficially Owned or Controlled (1)(2)
Eric Allison(2)(3)(4) Georgia, United States *Director*	Consultant and geologist	April 12, 2017	Nil -%
Richard Pearce Jr. Sao Paulo, Brazil *CEO and Director*	Engineer, economist & founding principal of Brasil Insight Capital and Frontera Minerals Group.	June 15, 2018	4,891,098 4.77%
Priscila Costa Lima(2) British Columbia, Canada *Director*	Senior finance and accounting professional with 20 years of experience in corporate finance, reporting and audit, and equity and debt financing in the mining and entertainment sectors. Currently serves as the CFO of Bron Media Corp.	September 16, 2021	Nil -%
Daniel Wilton(2)(3)(4) British Columbia, Canada *Director*	CEO and director of First Mining Gold Corp. Previously a Partner at Pacific Road Capital Management and a board member of Luna Gold Corp and Trek Mining Corp, both predecessor companies of Equinox Gold Corp..	December 6, 2018	4,075,000 -%

Name, Position and Municipality of Residence	Principal Occupation for the Past Five Years [(1)]	Director/Executive Officer Since	Number and Percentage of Common Shares Beneficially Owned or Controlled [(1)(2)]
Marc Leduc[(3)(4)] Colorado, USA *Director*	Mining engineer and geologist. COO of Kore Mining Ltd. Previously, Mr. Leduc was COO and then CEO of NewCastle Gold Ltd., President and CEO of Luna Gold Corp., Chief Operating Officer at Lydian International Limited and President and COO of Bear Creek Mining Corporation.	March 22, 2019	1,500,000 1.46%
Samantha Shorter British Columbia, Canada *Chief Financial Officer and Corporate Secretary*	Principal at Red Fern Consulting Ltd., serving as a financial professional.	September 22, 2021	305,000 0.30%

Notes:

(1) The information as to principal occupation, business or employment and Common Shares beneficially owned or controlled have been provided by the respective directors and officers. As a group the directors and executive officers beneficially own or control a total of 10,771,098 Common Shares, or 10.5% of the Common Shares of the Company.
(2) Member of the Audit Committee.
(3) Member of the Governance Committee.
(4) Member of the Compensation Committee.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

Except as disclosed below, to the knowledge of the Company, no director or executive officer of the Company, or a personal holding company of such person is, as at the date of this AIF, or has been, within 10 years before the date of this AIF, a director, chief executive officer or chief financial officer of any company that:

(a) was subject to an order that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer, or

(b) was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

For the purposes herein, “order” means

(a) a cease trade order;

(b) an order similar to a cease trade order; or

(c) an order that denied the relevant company access to any exemption under securities legislation,

that was in effect for a period of more than 30 consecutive days.

To the knowledge of the Company, no director or executive officer of the Company, or a shareholder holding a sufficient number of securities to affect materially the control of the Company, or a personal holding company of such person:

(a) is, as at the date of this AIF, or has been within the 10 years before the date of this AIF, a director or executive officer of any company that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets;

(b) has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder;

(c) has been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or

(d) has been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Samantha Shorter was the Chief Financial Officer of Medipure Holdings Inc., a CSE listed issuer, when it failed to file audited financial statements as well as associated MD&A and certifications for the financial year ended June 30, 2015. The British Columbia Securities Commission issued a cease trade order on November 4, 2015. Ms. Shorter resigned as CFO on November 16, 2015, and the Ontario Securities Commission issued a cease trade order on November 20, 2015. Both cease trade orders remain in place as of the date of this AIF though Medipure Holdings Inc. has since filed the outstanding financial statements.

Ms. Shorter is a director of Clear Gold Resources Inc., a NEX listed issuer. At the time Ms. Shorter joined the board of directors, Clear Gold Resources Inc. was subject to a cease trade order issued by the British Columbia Securities Commission on November 4, 2015 as a result of the failure to file audited financial statements as well as associated MD&A and certifications for the financial year ended June 30, 2015. A revocation order was issued on January 22, 2021 upon the filing of the outstanding financial statements.

Ms. Shorter was the Chief Financial Officer of Winchester Minerals and Gold Exploration Ltd., a TSX Venture Exchange listed issuer, when it failed to file audited financial statements as well as associated MD&A and certifications for the financial year ended December 30, 2014. The British Columbia Securities Commission issued a cease trade order on May 8, 2015. Ms. Shorter resigned as CFO in June 2015, and the Alberta Securities Commission issued a cease trade order on August 7, 2015. Both cease trade orders remain in place as of the date of this AIF.

Conflicts of Interest

The Company's directors and officers may serve as directors or officers of other companies or have significant shareholdings in other resource companies and, to the extent that such other companies may participate in ventures in which the Company may participate, the directors or officers of the Company may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. In the event that such a conflict of interest arises at a meeting of the Company's directors, a director who has such a conflict will abstain from voting for or against the approval of such participation or such terms.

From time to time, several companies may participate in the acquisition, exploration and development of natural resource properties thereby allowing for their participation in larger programs, permitting involvement in a greater number of programs and reducing financial exposure in respect of any one program. It may also occur that a particular company will assign all or a portion of its interest in a particular program to another of these companies due to the financial position of the company making the assignment. The directors of the Company are required to act honestly, in good faith and in the best interests of the Company. In determining whether or not the Company will participate in a particular program and the interest therein to be acquired by it, the directors will primarily consider the degree of risk to which the Company may be exposed and its financial position at that time.

The directors and officers of the Company are aware of the existence of laws governing the accountability of directors and officers for corporate opportunity and requiring disclosures by the directors and officers of conflicts of interest and the Company will rely upon such laws in respect of any directors' and officers' conflicts of interest or in respect of any breaches of duty by any of its directors and officers. All such conflicts will be disclosed by such directors or officers in accordance with the BCBCA and will govern themselves in respect thereof to the best of their ability in accordance with the obligations imposed upon them by law.

To the best of the Company's knowledge, and other than as disclosed above and elsewhere in this AIF, there are no known existing or potential conflicts of interest among the Company, its subsidiaries, directors and officers or other members of management of the Company or its subsidiaries as a result of their outside business interests.

Audit Committee Information

Pursuant to the provisions of the BCBCA and NI 52-110 of the Canadian Securities Administrators, the Company is required to have an Audit Committee and to disclose in its Annual Information Form certain information concerning the constitution of its audit committee and its relationship with the Company's independent auditor. The general function of the Audit Committee is to review the overall audit plan and the Company's system of internal controls, to review the results of the external audit, and to resolve any potential dispute with the Company's auditor

<u>Audit Committee Charter</u>

A copy of the charter of the Audit Committee is attached to this AIF as Schedule "A"**.**

<u>Composition of the Audit Committee</u>

The Company's current Audit Committee consists of Priscila Costa Lima (Chair), Daniel Wilton, , and Eric Allison. Each of the audit committee members are considered to be financially literate as defined by NI 52-110 in that each committee member has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can presumably be expected to be raised by the Company's financial statements.

The members of the Committee are elected by the Board of Directors at its first meeting following the annual shareholders' meeting. Unless a chair is elected by the full Board of Directors, the members of the Committee designate a chair by a majority vote of the full Committee membership.

NI 52-110 provides that a member of an audit committee is "independent" if the member has no direct or indirect material relationship with the Company, that could, in the view of the Board of Directors, reasonably interfere with the exercise of the member's independent judgment. All of the Company's current Audit Committee members are "independent" within the meaning of NI 52-110.

NI 52-110 provides that an individual is "financially literate" if he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements. All of the members of the Audit Committee are "financially literate" as that term is defined. The following sets out the Audit Committee members' education and experience that is relevant to the performance of his responsibilities as an audit committee member.

Relevant Education and Experience

Daniel Wilton - Mr. Wilton has 25 years of experience in M&A, corporate finance and principal investing in the mining sector. Mr. Wilton currently serves as CEO and Director of First Mining Gold Corp., a publicly listed gold developer, and prior to that role was a Partner at Pacific Road Capital Management, a mining-focused private equity investment firm. Mr. Wilton also served as Vice Chair of the Board of Directors and Chair of the Audit and Finance Committee of Providence Healthcare, one of the largest healthcare organizations in BC. Prior to joining Pacific Road, Mr. Wilton's previous roles included Managing Director and Head of the Global Mining and Metals Group at National Bank Financial Inc. and other corporate finance and M&A roles at global institutions based in London, Toronto and New York.

Priscila Costa Lima – Ms Costa Lima is a CPA, CMA with 20 years of experience in corporate finance, reporting and audit in the mining and entertainment sectors. She currently serves as CFO of Bron Media Corp. She was previously CFO of Marlin Gold Mining Ltd (formerly Oro Mining Ltd.).

Eric Allison – Mr. Allison is a geologist and business development consultant with over 38 years' experience in the natural resource industry and has worked for a number of major companies including Texaco, Suburban Propane Exploration, Amax Inc., Cyprus Amax Minerals, and Sempra Commodities. He has extensive experience in mergers, acquisitions and divestitures, and has served on the board of directors of several wholly owned subsidiaries of the above listed companies and managed an internal investment fund focused on equity and debt investments in junior mining companies. He also has several years' experience as an investment banker and research analyst specializing in TSX and ASX listed junior mining companies. He obtained his Bachelor of Science degree in geology from Brown University (1978) and Master of Science degree from the University of Georgia (1980).

Reliance on Certain Exemptions

Since the commencement of the Company's most recently completed financial year, the Company has not relied on the exemptions contained in the section 2.4 (De Minimis Non-audit Services), subsection 6.1.1(4) (Circumstance Affecting the Business or Operations of the Venture Issuer), subsection 6.1.1(5) (Events Outside Control of Member), subsection 6.1.1(6) (Death, Incapacity or Resignation), or under Part 8 (Exemption) of NI 52-110.

Audit Committee Oversight

Since the commencement of the Company's most recently completed financial year, the Audit Committee has not made any recommendations to nominate or compensate an external auditor that were not adopted by the Board of Directors.

Pre-Approval Policies and Procedures

The Audit Committee has not adopted any specific policies and procedures for the engagement of non-audit services. Subject to the requirements of NI 52-110, the engagement of non-audit services is considered by the Board of Directors, and where applicable the audit committee, on a case-by-case basis.

External Auditor Service Fees

The aggregate fees billed to the Company for the last two (2) fiscal years noted below to its auditor, are as follows:

Financial Year Ending December 31	Audit Fees(1)	Audit Related Fees(2)	Tax Fees(3)	All Other Fees(4)
2021	$28,500	$Nil	$1,750	$Nil
2020	$20,000	$Nil	$1,750	$Nil

Notes:

(1) "Audit fees" include aggregate fees billed by the Company's external auditor in each of the last two financial years noted above for audit fees.

(2) "Audit related fees" include the aggregate fees billed in each of the last two financial years noted above for assurance and related services by the Company's external auditor that are reasonably related to the performance of the audit or review of the Company's financial statements and are not reported under "Audit fees" above. The services provided include employee benefit audits, due diligence assistance, accounting consultations on proposed transactions, internal control reviews and audit or attest services not required by legislation or regulation.

(3) "Tax fees" include the aggregate fees billed in each of the last two financial years noted above for professional services rendered by the Company's external auditor for tax compliance, tax advice and tax planning. The services provided include tax planning and tax advice includes assistance with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from tax authorities.

(4) "All other fees" include the aggregate fees billed in each of the last two financial years noted above for products and services provided by the Company's external auditor, other than "Audit fees", "Audit related fees" and "Tax fees" above.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

The Company is not aware of any legal proceedings to which the Company is or was a party, or to which the Company's property is or was subject of, either during the financial year ended December 31, 2021, or as of the date hereof, nor is the Company aware that any such proceedings are contemplated.

There have been no penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during 2021.

There have been no other penalties or sanctions imposed by a court or regulatory body against the Company during 2021 that would likely be considered important to a reasonable investor in making an investment decision.

There have been no settlement agreements that the Company has entered into before a court relating to securities legislation or with a securities regulatory authority during 2021.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Except as disclosed in this AIF, no informed person (a director, officer or holder of 10% or more of the Company's issued and outstanding Common Shares) or any associate or affiliate of any informed person had any interest, direct or indirect, in any transaction that has materially affected or is reasonably expected to materially affect the Company or any of its subsidiaries, within the three most recently completed financial years or during the current financial year.

TRANSFER AGENT AND REGISTRAR

The Company's transfer agent and registrar for the Common Shares is Computershare Trust Company of Canada at its principal offices at 510 Burrard Street, 3rd Floor, Vancouver, British Columbia, V6C 3B9.

MATERIAL CONTRACTS

The following is a description of each material contract entered into by the Company since the beginning of the last financial year, or before the last financial year, if such material contract is still in effect:

1. Employment agreement with Richard Pearce

   The Company entered into a term sheet employment agreement dated May 30, 2019 with Richard Pearce pursuant to which the Company agreed to retain Mr. Pearce to act as the President and the CEO of the Company until June 9, 2021. In consideration his services, the Company agreed to (i) pay Mr. Pearce a base salary of US$15,000 per month, payable in Brazil R$ converted at monthly average FX, provided the Company's treasury does not fall below $100,000 cash; (ii) pay Mr. Pearce an annual cash bonus based on key performance indicators with a target range of 25% to 100% of his annual base salary, as recommended by the Company's Compensation Committee and approved by the Board of Directors; and (iii) issue a total of 1,500,000 stock options to Mr. Pearce during the term of the agreement with 25% vesting immediately and an additional 25% vesting every six months thereafter, at a strike price to be negotiated based on market price and exercisable for a term of five years from the date of grant. In the case of termination for cause, vested options will be exercisable within 90 days after termination. In the case of termination without cause, all unvested options will immediately vest and be exercisable within 12 months after termination, and the Company will pay Mr. Pearce an amount equal to 6 months base salary if the termination occurs within the first 12 months of the agreement or pay him 12 months base salary plus pro rata of his previous annual bonus if the termination occurs after 12 months. In the case of termination as a result of a change of control, all unvested options will immediately vest, and the Company will pay Mr. Pearce an amount equal to two times the number of months base salary if the change of control occurs within the first six months of the agreement or two times his base salary plus previous annual bonus if the change of control occurs after 12 months.

A copy of any material contract or report may be inspected during normal business hours at the Company's records office, Suite 1200 - 750 West Pender Street, Vancouver, British Columbia, V6C 2T8.

INTEREST OF EXPERTS

Names of Experts

The following experts have prepared or certified a report, valuation, statement or opinion described or included in a filing, or referred to in a filing, made under National Instrument 51-102 *Continuous Disclosure Obligations* by the Company during, or relating to, the year ended December 31, 2021, whose profession or business gives authority to the report, valuation, statement or opinion made by such expert.

Luiz Eduardo Pignatari prepared the "NI 43-101 Technical Report, Updated Resources and Reserves Assessment and Pre-Feasibility Study, Santa Cruz Graphite Project, Bahia, Brazil" dated March 18, 2020 with an effective date of January 31, 2020.

Manning Elliott LLP audited the financial statements of the Company for its financial year ended December 31, 2021. Manning Elliott LLP is independent within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of British Columbia.

Interests of Experts

To the knowledge of the Company based on information provided by the experts, none of the experts named above, at the time of preparing the applicable report, valuation, statement or opinion, held or has received or will receive any registered or beneficial interests, direct or indirect, in any securities or other property of the Company or of one of the Company's associates or affiliates in connection with the preparation or certification of any report, valuation, statement or opinion prepared by such person.

ADDITIONAL INFORMATION

Additional information relating to the Company may be found on SEDAR at www.sedar.com.

Additional financial information is provided in the Company's audited financial statements and MD&A for the year ended December 31, 2021.

These documents may be obtained upon request from the Company's head office, or may be viewed on the Company's website (www.southstarbatterymetals.com) or on the SEDAR website (www.sedar.com).

Schedule A

AUDIT COMMITTEE CHARTER

PURPOSE OF THE COMMITTEE

The purpose of the Audit Committee (the "**Committee**") of the Board of Directors (the "**Board**") of the Company is to provide an open avenue of communication between management, the Company's independent auditor and the Board and to assist the Board in its oversight of:

• the integrity, adequacy and timeliness of the Company's financial reporting and disclosure practices;
• the Company's compliance with legal and regulatory requirements related to financial reporting; and
• the independence and performance of the Company's independent auditor.

The Committee shall also perform any other activities consistent with this Charter, the Company's articles and governing laws as the Committee or Board deems necessary or appropriate.

The Committee shall consist of at least three directors. Members of the Committee shall be appointed by the Board and may be removed by the Board in its discretion. The members of the Committee shall elect a Chairman from among their number. A majority of the members of the Committee must not be officers or employees of the Company or of an affiliate of the Company. The quorum for a meeting of the Committee is a majority of the members who are not officers or employees of the Company or of an affiliate of the Company. With the exception of the foregoing quorum requirement, the Committee may determine its own procedures.

The Committee's role is one of oversight. Management is responsible for preparing the Company's financial statements and other financial information and for the fair presentation of the information set forth in the financial statements in accordance with generally accepted accounting principles ("**GAAP**"). Management is also responsible for establishing internal controls and procedures and for maintaining the appropriate accounting and financial reporting principles and policies designed to assure compliance with accounting standards and all applicable laws and regulations.

The independent auditor's responsibility is to audit the Company's financial statements and provide its opinion, based on its audit conducted in accordance with generally accepted auditing standards, that the financial statements present fairly, in all material respects, the financial position, results of operations and cash flows of the Company in accordance with GAAP.

The Committee is responsible for recommending to the Board the independent auditor to be nominated for the purpose of auditing the Company's financial statements, preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, and for reviewing and recommending the compensation of the independent auditor. The Committee is also directly responsible for the evaluation of and oversight of the work of the independent auditor. The independent auditor shall report directly to the Committee.

AUTHORITY AND RESPONSIBILITIES

In addition to the foregoing, in performing its oversight responsibilities the Committee shall:

1. Monitor the adequacy of this Charter and recommend any proposed changes to the Board.

2. Review the appointments of the Company's Chief Financial Officer and any other key financial executives involved in the financial reporting process.

3. Review with management and the independent auditor the adequacy and effectiveness of the Company's accounting and financial controls and the adequacy and timeliness of its financial reporting processes.

4. Review with management and the independent auditor the annual financial statements and related documents and review with management the unaudited quarterly financial statements and related documents, prior to filing or distribution, including matters required to be reviewed under applicable legal or regulatory requirements.

5. Where appropriate and prior to release, review with management any news releases that disclose annual or interim financial results or contain other significant financial information that has not previously been released to the public.

6. Review the Company's financial reporting and accounting standards and principles and significant changes in such standards or principles or in their application, including key accounting decisions affecting the financial statements, alternatives thereto and the rationale for decisions made.

7. Review the quality and appropriateness of the accounting policies and the clarity of financial information and disclosure practices adopted by the Company, including consideration of the independent auditor's judgment about the quality and appropriateness of the Company's accounting policies. This review may include discussions with the independent auditor without the presence of management.

8. Review with management and the independent auditor significant related party transactions and potential conflicts of interest.

9. Pre-approve all non-audit services to be provided to the Company by the independent auditor.

10. Monitor the independence of the independent auditor by reviewing all relationships between the independent auditor and the Company and all non-audit work performed for the Company by the independent auditor.

11. Establish and review the Company's procedures for the:

    - receipt, retention and treatment of complaints regarding accounting, financial disclosure, internal controls or auditing matters; and
    - confidential, anonymous submission by employees regarding questionable accounting, auditing and financial reporting and disclosure matters.

12. Conduct or authorize investigations into any matters that the Committee believes is within the scope of its responsibilities. The Committee has the authority to retain independent counsel, accountants or other advisors to assist it, as it considers necessary, to carry out its duties, and to set and pay the compensation of such advisors at the expense of the Company.

13. Perform such other functions and exercise such other powers as are prescribed from time to time for the audit committee of a reporting company in Parts 2 and 4 of Multilateral Instrument 52-110 of the Canadian Securities Administrators, the *Business Corporations Act* (British Columbia) and the articles of the Company.