

# NORTHERN GRAPHITE CORPORATION

## MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Three and Nine Month Periods Ended September 30, 2021

(Information as at November 29, 2021 unless otherwise noted)

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The following provides management's discussion and analysis of results of operations and financial condition of Northern Graphite Corporation ("Northern" or the "Company") for the three and nine month periods ended September 30, 2021 and 2020. Management's discussion and analysis ("MD&A") was prepared by Company management and approved by the Board of Directors on November 29, 2021.

This MD&A should be read in conjunction with the Company's condensed interim financial statements for the three and nine month periods ended September 30, 2021 and 2020 which have been prepared in accordance with International Financial Reporting Standards ("IFRS") for interim financial statements and also with the Company's audited annual financial statements for the years ended December 31, 2020 and 2019 which have been prepared in accordance with IFRS for annual financial statements. All figures are presented in Canadian dollars unless otherwise indicated. The MD&A is prepared in conformity with National Instrument 51-102F1.

*This MD&A contains forward-looking statements. Statements regarding the adequacy of cash resources to carry out the Bissett Creek Project and programs related thereto, in addition to the need for future financing, are forward-looking statements. All forward-looking statements, including those not specifically identified herein, are made subject to the cautionary language at the end of this MD&A and readers are advised to refer to it when reading any forward-looking statements.*

### Introduction

The Company was incorporated on February 25, 2002 under the *Business Corporations Act* (Ontario) to develop and hold title to the Bissett Creek graphite project ("Bissett Creek" or the "Bissett Creek Project"). On June 7, 2021, the Company entered into an option agreement to earn up to an 80% interest in the South Okak nickel-copper-cobalt project, located 80 kilometres southeast of Voisey's Bay, Labrador in order to diversify into other battery minerals.

### Nature of Operations

The Company's principal focus is the potential development of the Bissett Creek Project located in the County of Renfrew, Ontario. Bissett Creek was extensively explored and evaluated in the 1980's but was not developed as graphite prices subsequently declined due to an excess of supply from China. More recently, rapidly growing demand from the lithium ion battery ("LiB") market and concern over world dependence on Chinese production have created growing interest in graphite projects. Bissett Creek contains one of, if not the, highest percentages of large and extra large flake graphite of any worldwide deposit. These sizes command premium pricing.

Northern completed a Full Feasibility Study in July, 2012 (the "FS") which confirmed the technical and financial viability of constructing and operating an open pit mine and processing plant at Bissett Creek. A technical report was prepared in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and filed on SEDAR in August, 2012. The FS was optimized and updated in September, 2013 (the "FS Update") following an additional 61 hole, 3,425 metre drill program, the release of a new and larger resource estimate and revision of the mine plan based on the new resource model. The FS Update also incorporated some modifications to capital and operating cost assumptions and lower graphite prices.

The Company plans to develop the Bissett Creek Project in two phases. The production scenario outlined in the FS and FS Update represents Phase 1 and is a conservative approach that consists of building a smaller project with a reasonable capital cost and a realistic production volume relative to the size of the current graphite market. In Phase 2, production will be doubled to meet the expected growth in graphite demand arising from the LiB and electric vehicle ("EV") markets. The Company has completed a preliminary economic assessment on a Phase 2 expansion case (the "Expansion PEA") and filed a technical report prepared in accordance with NI 43-101 on SEDAR in December, 2013. This is the current technical report on the Bissett Creek Project. The Expansion PEA assumes production will be doubled after three years of operation based on Measured and Indicated resources only. The Company also updated the Expansion PEA (the "Expansion PEA Update") to assess the economics of building a two million tonne per annum ("Mtpa") processing plant at the outset rather than expanding after three years of operation.

Because of the passage of time since completion of the various technical reports, the Company reviewed the economics of the Phase 1 development scenario during 2018 and 2019 in order to evaluate the effect of some modifications to the flow sheet as well as changes in commodity prices, exchange rates, equipment and labor costs, and other project inputs. The Company also evaluated the effect of increasing the proposed production rate of 20,000 tonnes of concentrate per annum by at least 20 percent. The results of this analysis were released as a sensitivity analysis on the Expansion PEA and indicate that the Bissett Creek Project still has an attractive net present value (“NPV”) and internal rate of return (“IRR”) as cost inflation and lower graphite prices have largely been offset by very favorable movements in the CDN/US dollar exchange rate and savings from simplification of the flowsheet.

A metallurgical test program was recently completed at SGS Lakefield (“SGS”) to confirm graphite recoveries, concentrate purity and flake size yield under the new flow sheet. It indicated that the new flowsheet will increase average concentrate purities from 94.5 to 97 percent with little change in recoveries and a small improvement in large flake yields. Due to the premium paid for higher purity concentrates, the net effect will be an increase in estimated concentrate sales prices. As these results do not represent a material change, the Company does not intend to prepare and file a new NI 43-101 report at the present time. The Company believes that the extensive technical studies completed on the Bissett Creek Project over many years may allow it to proceed directly to detailed engineering, which will include an engineered cost estimate, once financing has been arranged and a construction decision made.

In 2012, the Company filed a revised Mine Closure Plan (“MCP”) which was accepted by the Ontario Ministry of Energy, Northern Development and Mines (“ENDM”). The MCP authorizes Northern to build and operate the mine and requires the Company to deposit \$2,329,008 with the Province of Ontario prior to the commencement of commercial production. This represents the estimated amount required to restore the Bissett Creek property to its original environmental state after the mine has been constructed and operations cease. A deposit of \$845,462, including accrued interest, has already been made. Because of operational changes made to improve the economics of the Bissett Creek Project, and to the passage of time, the Company is required to file an amendment to the MCP which will include a re-estimation of reclamation costs and the amount of the associated deposit. The Company must also obtain various other permits and authorizations from a number of government agencies. These are in process and are expected to be received in the normal course prior to the commencement of mining operations.

### **The Bissett Creek Project**

The Company holds a 100% interest in the Bissett Creek Project, which is located approximately 15 km from the Trans-Canada Highway (Highway 17) between the towns of Deep River and Mattawa, Ontario. Bissett Creek is located in the United Townships of Head, Clara and Maria, in the County of Renfrew, Province of Ontario, approximately 300 km northeast of Toronto and 200 km west of Ottawa.

The Bissett Creek property consists of Ontario mining lease number 109550 (covering 565 hectares) which expires on August 31, 2035, and Ontario mining lease number 109335 (covering 1,938 hectares) which expires on June 30, 2034 (the “Mining Leases”). Property taxes and annual rental payments with respect to the Mining Leases are payable to the Minister of Finance and totaled \$27,749 in 2020. The Company also held five unpatented mining claims, contiguous to the Mining Leases, which have been converted into 52 cells covering approximately 1,159 hectares under Ontario’s Mining Lands Administration System.

A royalty of \$20 per ton of concentrate sold must be paid to the families of the original discoverers of the deposit once the mine is operational plus a 2.5% net smelter royalty (“NSR”) on any other minerals derived from the Bissett Creek property. An annual advance payment of \$27,000 must be made and will be credited against future payments when the mine commences production.

On July 15, 2020, the Company sold a 1% gross revenue royalty (“GRR”) on the Bissett Creek Property to Electric Royalties Ltd. (“ERL”) for \$500,000 in cash and two million common shares of ERL valued at \$440,340 at the time of closing (of which half were subject to a 12 month hold period and half are still subject to an 18 month hold period) (the “Consideration Shares”). Under the terms of the agreement, ERL also has a two-year option to acquire an additional half of one percent GRR by paying \$750,000, of which 25 percent can be paid in ERL shares. The Company will have the option to buy back half of one percent of the initial GRR at any time after 12 months by returning the Consideration Shares or paying \$1.5 million in cash.

Prices for graphite have largely remained at low levels for a number of years as demand growth from the LiB/EV markets has been slower than expected and there remains a surplus of production capacity in China. Based on its review of industry sources, the Company believes that current prices are approximately US\$ 1,400 per tonne for large (+80 mesh) flake graphite while +50 mesh XL flake is selling for approximately US\$1,750 per tonne and +32 mesh XXL flake at US\$2,250 per tonne. These prices are based on the standard industry purity of 94% Cg. Bissett Creek concentrates are expected to average 97% Cg which will attract premium pricing. Over 60% of production from Bissett Creek will be XXL and XL flake making it the world's highest margin deposit according to a study by Benchmark Mineral Intelligence. These grades are mainly used in the expandable graphite market. The expandable graphite and LiB markets continue to grow and Chinese production of larger flake sizes is declining which bodes well for higher large flake prices in the future.

Prices for small flake concentrate, which is mainly used in the manufacture of LiBs, continue to be depressed due to surplus production capacity in China and a large, new mine in Africa. However, many industry forecasts are predicting a large supply deficit due to expected growth in the EV/battery markets which would cause prices for all flake sizes to rise.

Based on information from a number of industry sources, the Company believes that it could achieve an average selling price in the order of US\$1,750 per tonne in the current market. These sources tend to poll high volume end users and intermediaries. The Company considers their prices to be conservative and expects to achieve higher levels by selling directly to small volume end users and into specialty markets.

The Bissett Creek Project is unique among its North American peers in that it has a reasonable capital cost, an initial production rate that is realistic relative to the size of the current market (and which can be expanded as demand grows), and the highest percentage of large/XL flake. Northern's strategy differs from most of its peers in that the large/XL flake nature of Bissett Creek enables the Company to initially focus on high margin and value-added industrial markets, mainly in the US and Europe. This includes micronized graphite, expandable graphite and high purity flake graphite which receive premium prices. The Company will expand into the LiB market when economics improve. Unlike many graphite deposits, essentially all Bissett Creek production will be "battery grade". No value added products are included in the economics in the FS, Expansion PEA or the updates and sensitivity analyses relating thereto.

As at September 30, 2021, the Company had capitalized \$12,878,542 of exploration and evaluation expenditures relating to Bissett Creek with the proceeds of \$940,340 from the ERL royalty sale netted against capitalized project costs during the year ended December 31, 2020. During 2021, the Company will continue completing the balance of the remaining permitting for the Bissett Creek Project and is essentially in a position to make a construction decision subject to arranging the necessary financing.

## **Mineral Resources**

Based on a 1.02% graphitic carbon ("Cg") cut-off, the Bissett Creek deposit has estimated Measured and Indicated resources of 69.8 million tonnes grading 1.74% Cg (1.2 million tonnes of in situ graphite) and Inferred resources of 24.0 million tonnes grading 1.65% Cg (0.4 million tonnes of in situ graphite) (the "2013 Resource Estimate"). The Bissett Creek deposit has an exceptionally high content of high purity, coarse flake graphite which are very important factors that must be considered along with tonnage and grade.

Mineral resources were estimated in conformance with the CIM Mineral Resource definitions referred to in NI 43-101 Standards of Disclosure for Mineral Projects. Pierre Desautels, P.Geo., Principal Resource Geologist, and Gordon Zurowski, P.Eng., Principal Mining Engineer, both of AGP and Qualified Persons under NI 43-101 who are independent of the Company, prepared the mineral resource estimate.

*Mineral resources that are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues including changing costs, recoveries and mineral prices.*

*The quantity and grade of reported inferred mineral resources are uncertain in nature and there has been insufficient exploration drilling to categorize inferred mineral resources as indicated or measured mineral resources and it is uncertain if further exploration will result in them being upgraded to indicated or measured mineral resources.*

## Feasibility Study

The Company completed the FS for the Bissett Creek Project in 2012. The FS was prepared by G Mining Services Inc. and confirmed the technical and financial viability of constructing and operating an open pit mine and 2,500 tpd processing plant at Bissett Creek which is considered as Phase 1 of the ultimate development plan. In 2013, the Company revised the mine plan in the FS based on the 2013 Resource Estimate and updated the FS economics. The FS Update also incorporated some modifications to capital and operating cost assumptions and lower graphite prices. The FS Update was prepared by AGP and as it did not constitute a material change, a new NI 43-101 report was not filed.

### Summary of Updated Feasibility Study Economics

	2013 FS Update (base case)	2012 FS
Probable reserves (million tonnes)	28.3Mt*	19.0Mt
Feed Grade (% graphitic carbon)	2.06%*	1.89%
Waste to ore ratio (excl. low grade stockpile)	0.79	0.50
Processing rate (tonnes per day - 92% availability)	2,670	2,300
Mine life*	28 years	23 years
Mill recovery	94.7%	92.7-94.7%
Average annual production	20,800t	15,900t
Capital cost (\$ millions - including 10% contingency)	\$101.6M	\$102.9M
Cash operating costs (\$/tonne of concentrate) *	\$795	\$968
Mining costs (\$/tonne of ore)	\$5.63	\$5.79
Processing costs (\$/tonne of ore)	\$8.44	\$9.60
General and administrative costs (\$/tonne of ore)	\$2.50	\$2.94
CDN/US dollar exchange rate	1.05	1.00
<b>Graphite prices (US\$ per tonne)</b>	\$1,800	\$2,100
Pre tax NPV @8% (CDN\$ millions)	\$129.9	\$71.7
Pre tax IRR (%)	19.8%	15.6%
After tax NPV @8% (CDN\$ millions)	\$89.3	\$46.9
After tax IRR (%)	17.3%	13.7%

\*Includes 24 million tonnes ("Mt") grading 2.20% Cg and 4.0 Mt grading 1.26% Cg of low grade stockpile ("LGS") to be processed at the end of the mine life. An additional 12.5 Mt LGS grading 1.26% Cg is stored in the pit and is available for processing through a future expansion or at the end of the mine life. The waste to ore ratio is 0.24 if the low grade stockpile is processed. All grades are diluted.

The proposed development of the Bissett Creek graphite deposit consists of a shallow open pit mine and a processing plant with conventional crushing, grinding and flotation circuits followed by concentrate drying and screening. Power for the plant will be generated on site using compressed natural gas ("CNG") that will be delivered by truck from the main Trans Canada line, 15 km away. The processing plant includes a sulphide flotation circuit to remove enough sulphides to make approximately 97% of the tailings benign. All sulphide and non-sulphide generating waste rock will be backfilled into mined out areas of the pit after five years of operation, and all sulphide tailings after eight years, resulting in low final closure costs.

Probable mining reserves for the Bissett Creek deposit were established based on, and are a subset of, the 2013 Resource Estimate. The final mine plan only contemplated a 25 to 30 year operation and resulted in Probable Reserves of 28.3 Mt of ore grading 2.06% Cg based on a cut-off grade of 0.96% Cg. Probable Reserves include 24.3 Mt grading 2.20% Cg that will be processed first and 4.0 Mt grading 1.26% Cg from a low grade stockpile ("LGS") that will be processed at the end of the mine life. In order to increase head grades in the initial years of production while maintaining a reasonable stripping ratio, Measured and Indicated resources grading between 0.96% Cg and 1.5% Cg will be stockpiled, largely within the mined out areas of the pit. The total LGS will be 16.5 Mt grading 1.26% Cg and will provide a great deal of flexibility in future operations as it will be available for processing at a later date, either through an expanded facility or at the end of the mine life. It also represents a low cost source of feed that could be processed during periods of depressed prices.

There are an additional 27.3 million tonnes of Measured and Indicated resources grading 1.62% Cg which are not included in the mine plan and 24 million tonnes of Inferred resources grading 1.65% Cg which are treated as waste. Resource limits have not yet been fully defined and resources may be expanded in the future with additional drilling.

Flake graphite is sold based on 80% meeting the required size specification. Therefore, smaller flake sizes can be blended into larger as long as the carbon content is maintained. The -100 mesh small flake concentrate that will be produced from Bissett Creek is suitable for this purpose. After blending, the FS Update assumes 60% of Bissett Creek production will be +50 mesh and a third of this material is actually +32 mesh, 35% of production will be +80 mesh, and 5% will be +100 mesh.

Additional testing has determined that waste rock and the low grade stockpile will not become acid generating for a substantial period of time and therefore a lined pad is not required as contemplated in the FS Update. Also, the Company intends to build a wetland to treat any run off from the low grade stockpile and therefore no additional operating costs or upfront financial assurance will be required to return to the pit, any potentially acid generating material that is stored on surface.

### **Expansion Preliminary Economic Assessment**

The Company completed and filed a NI 43-101 Technical Report with respect to a Preliminary Economic Assessment which includes both the Phase 1 development and a Phase 2 expansion of the Bissett Creek Project. Further expansions are possible based on Measured and Indicated resources only. The Expansion PEA, which is the current NI 43-101 Technical Report with respect to the Bissett Creek Project, was undertaken to demonstrate the ability to double processing capacity (to 2 Mtpa) after three years of operation based only on Measured and Indicated resources. The Expansion PEA indicates that Bissett Creek has viable economics even at lower graphite prices.

In 2014, the Company updated the Expansion PEA (the “Expansion PEA Update”) in order to assess the economics of building a two Mtpa processing plant at the outset rather than increasing from one Mtpa to two Mtpa after three years of operation. There was no requirement for a new NI 43-101 report relating to the Expansion PEA Update as the changes were not material. A press release was issued and filed on SEDAR and includes detailed cash flows relating to the Expansion PEA Update.

Both the Expansion PEA and the Expansion PEA Update show improved economics over the FS Update because production is essentially being doubled while capital costs increase by less than 50%. The 2014 Expansion PEA Update is the most robust plan because it is more efficient to build one large mill rather than building a second parallel circuit after three years. However, a project this size has the potential to adversely affect prices, especially considering the volume of XL and XXL flake sizes that will be produced. The Company would only contemplate the expanded capacity scenarios if it can secure a strategic partner and or suitable offtake agreements.

*Comparison of the study results*

	<b>2013 FS Update</b>	<b>2013 Expansion PEA</b>	<b>2014 Expansion PEA Update</b>
Reserves/resources (million tonnes)*	28.3*	39.4*	40.5 <sup>1</sup>
Feed Grade (% graphitic carbon)	2.06%*	1.85%*	1.83% <sup>1</sup>
Waste to ore ratio	0.79	0.24	0.25
Processing rate (tonnes per day - 92% availability)	2,670	2,670-5,340	5,480
Mine life (years)	28	22	21
Mill recovery	94.7%	94.7%	94.7%
Average annual production	20,800t	33,183t	44,200t <sup>2</sup>
Initial capital cost (\$ millions - including 10% contingency)	\$101.6M	\$101.6M	\$134.1
Expansion capital	NA	\$45.2M	NA
Sustaining capital	\$43.0	\$58.7M	\$55.1
Cash operating costs (\$/tonne of concentrate)	\$795	\$695	\$736
Mining costs (\$/tonne of ore)	\$5.63	\$4.05	\$3.74
Processing costs (\$/tonne of ore)	\$8.44	\$7.35	\$7.78
General and administrative costs (\$/tonne of ore)	\$2.50	\$1.45	\$1.45
CDN/US dollar exchange rate	1.05	1.05	1.05

\*The probable reserve in the FS update consists of 24 million tonnes (“Mt”) grading 2.20% Cg and 4.0 Mt of low grade stockpile (“LGS”) grading 1.26% Cg. The PEA accelerates the processing of the probable reserve and processes an additional 11.1 million tonnes of measured and indicated resources from the LGS at the end of the mine life. All grades are diluted.

<sup>1</sup> Potentially economically extractable resources are based on the 24 million tonne probable reserve grading 2.20% Cg (as estimated in the FS Update) being processed first followed by the processing of 16.1 million tonnes of Measured and Indicated resources grading 1.26 % Cg from a low grade stockpile. *Mineral resources that are not mineral reserves do not have demonstrated economic viability.*

<sup>2</sup> first 10 years

*Economic Summaries of the Expansion Scenarios*

	<b>2013 FS Update</b>	<b>2013 Expansion PEA</b>			<b>2014 Expansion PEA Update</b>		
		<b>(base case)</b>			<b>(base case)</b>		
<b>Graphite prices (US\$ per tonne)</b>	\$1,800	\$2,100	<b>\$1,800</b>	\$1,500	\$2,100	<b>\$1,800</b>	\$1,500
Pre tax NPV @8% (CDN\$ millions)	\$129.9	\$335.6	<b>\$231.0</b>	\$126.6	\$380.9	<b>\$264.7</b>	\$148.4
Pre tax IRR (%)	19.8%	33.0%	<b>26.3%</b>	18.8%	40.7%	<b>31.7%</b>	22.2%
After tax NPV@8% (CDN\$ millions)	\$89.3	\$221.9	<b>\$150.0</b>	\$77.3	\$257.9	<b>\$178.9</b>	\$99.0
After tax IRR (%)	17.3%	27.7%	<b>22.0%</b>	15.7%	33.9%	<b>26.7%</b>	18.9%

## Current Project Economics

During 2018 and into 2019 the Company engaged G Mining Services to carry out a review of the economics of the Bissett Creek Project given the passage of time since the FS Update and Expansion PEA were completed. The review evaluated the effect of some modifications to the flow sheet as well as changes in commodity prices, exchange rates, equipment and labor costs, and other project inputs. The review estimated that the capital cost of Phase 1 has increased by approximately five percent. Operating costs are expected to be up to 20 percent higher than original estimates.

For the purposes of quantifying the potential effects of G Mining's review, the Company released the following sensitivity analysis with respect to the current NI 43-101 PEA Report. The sensitivity analysis is based on a five percent increase in capital and a 20 percent increase in operating costs, current exchange rates and commodity prices, and no change in resources or the mine plan.

	NI 43-101 PEA	Sensitivity Analysis
CDN/US dollar exchange rate	1.05	1.30
Graphite price (US\$/t)	\$1,800	\$1,750
Graphite price (CDN\$/t)	\$1,890	\$2,276
Initial capital cost (CDN\$ millions)	\$101.6	\$106.6
Initial capital cost (US\$ millions)	\$96.8	\$82.0
Expansion capital (CDN\$ millions)	\$45.2	\$47.5
Sustaining capital (CDN\$ millions)	\$58.7	\$61.5
Total capital costs (CDN\$ millions)	\$205.5	\$215.6
Average annual production (tonnes)*	38,400	38,400
Total cash operating costs (CDN\$ millions)	\$507.2	\$608.7
Cash operating costs (CDN\$/tonne)	\$695	\$834
Cash operating costs (US\$/tonne)	\$662	\$642
Pre-tax NPV (@8% - CDN\$ millions)	\$231.0	\$304.9
After -tax NPV (@8% - CDN\$ millions)	\$150.0	\$198.2
Pre-tax IRR (%)	26.3%	30.1%
After-tax IRR (%)	22.0%	25.0%

\* Average over first 15 years

*The PEA is based on Measured and Indicated resources only. Mineral resources that are not mineral reserves do not have demonstrated economic viability. The PEA is preliminary in nature and there is no certainty that the results of the preliminary economic assessment will be realized.*

G Mining subsequently completed an analysis which indicated that increasing annual concentrate production by at least 20 percent can be achieved with a relatively modest six percent increase in capital costs for the first phase of development. Higher production would also reduce unit operating costs and is expected to have a very positive effect on the Bissett Creek Project's NPV and IRR. Accordingly, the Company intends to integrate an initial production rate of approximately 25,000 tonnes per year into its development plans.

A metallurgical test program carried out at SGS Lakefield has validated changes designed to simplify the flow sheet for the Bissett Creek Project and to reduce capital and operating costs. Testing indicated that the new flowsheet will increase average concentrate purities from 94.5 to 97 percent with little change in recoveries and a small increase in large flake yields.

## South Okak project

On June 7, 2021, the Company entered into an option agreement to earn up to an 80% interest in the South Okak nickel-copper-cobalt project, located 80 kilometres southeast of Voisey's Bay, Labrador. The South Okak area produced some of the best nickel-copper-cobalt drill intervals outside of Voisey's Bay during the 1990s exploration rush. The initial

6,350-hectare South Okak property has been consolidated into one exploration licence for the first time and covers the most-prospective ground. Following entry into the option agreement, an additional 249 claims were staked to bring the total landholdings to 503 claims covering 12,575 hectares.

Substantial historical data are available, and advances in geophysical data processing, including 3-D modelling, and a much-better understanding of the Voisey's Bay geological controls have already resulted in the identification of a number of highly prospective targets. The South Okak property is located along the main structural break that hosts the high-grade Voisey's Bay deposits, which are contained within a large, lower-grade disseminated halo. Previous exploration in the South Okak area also resulted in the discovery of several areas containing significant intervals of disseminated low-grade nickel-copper-cobalt mineralization, but their significance was not fully appreciated. The Company believes that these areas need a second look now that the Voisey's Bay model is better understood. Numerous untested geophysical anomalies exist within the claims and provide the Company with immediate exploration targets. Northern has commenced detailed data compilation and 3-D modelling of the historical high-resolution airborne geophysical and drill hole data to identify the highest-priority targets.

In preparation for the 2021 field program which commenced during August 2021, satellite-based ASTER imaging (advanced spaceborne thermal emission and reflectance radiometer) and structural interpretation studies were commissioned. The information provided by these studies is being combined with three-dimensional (3-D) magnetic inversions of airborne data to better define several of the highest-priority targets and to identify new targets.

Under the term of the option agreement for the South Okak project, the Company has a first option to earn a 49% interest in the project by incurring exploration expenditures and making cash and/or share payments as follows: (i) payment of \$50,000 in cash and the issuance of 500,000 common shares following the June 7, 2021 effective date of the option agreement (paid during June 2021); (ii) incurring cumulative exploration expenditures of \$250,000 prior to March 1, 2022 and \$500,000 in cumulative expenditures prior to March 1, 2023; (iii) payment of \$75,000 in cash, plus \$200,000 in cash or common shares, at the Company's option, by June 7, 2023; and, (iv) incurring cumulative exploration expenditures of \$1 million prior to March 1, 2024.

Following the first option, the Company has a second option to increase its interest in the project from 49% to 80% as follows: (i) payment of \$75,000 in cash, plus \$200,000 in cash or common shares, at the Company's option, by June 7, 2024; and, (ii) incurring cumulative exploration expenditures of \$1,500,000 prior to March 1, 2025. Following completion of the second option earn-in, the optionors will be carried to production on their 20% interest.

## **Corporate Developments**

In April 2018, the Company announced that additional testing had confirmed that lithium ion battery ("LiB") anode material made from concentrates from its Bissett Creek deposit meets or exceeds current commercial specifications. The test work was carried out by the Beijing General Research Institute of Mining and Metallurgy ("BGRIMM"), a Chinese state-owned metallurgical research and development company. Test results indicate that the crystallinity, yield and specific surface area (5.652 m<sup>2</sup>/g for 16 $\mu$  material) of the Bissett Creek material were all better than industry standards. A yield of 50 percent was achieved on a batch basis and can potentially be increased to 70 percent with a continuous, commercial process. The tap density was 1 g/cm<sup>3</sup> which is comparable to existing products.

In June 2018, the Company announced it had signed a memorandum of understanding with a European commodity trading company to sell 100 percent of the projected output from the Bissett Creek graphite project in China. The parties intend to enter into a binding agreement when a number of conditions have been met, including the arrangement of project financing. The Company's partner will be identified at that time as per its request.

Customers of the trading company have tested graphite from a number of different sources outside China and have found that Northern's graphite is of the highest quality and fits best with market requirements. Chinese production of extra-large (plus 50 mesh) and extra-extra-large (plus 32 mesh) flake graphite is declining while demand is growing, particularly in the expandable graphite market.

In July, 2020 the Company sold a one percent gross revenue royalty ("GRR") on its Bissett Creek Project to Electric Royalties Ltd. ("ERL"). Proceeds from the sale comprised \$500,000 in cash and two million common shares of ERL (of which half are subject to a 12 month hold period and half to an 18 month hold period) (the "Consideration Shares").

Under the terms of the agreement, ERL also has a two-year option to acquire an additional half of one percent GRR by paying \$750,000, of which 25 percent can be paid in ERL shares. The Company will have the option to buy back half of one percent of the initial GRR at any time after 12 months by returning the Consideration Shares or paying \$1.5 million in cash. Bissett Creek is a high margin project and the sale of a small royalty has very little effect on its economics.

In July, 2020, the Company announced the grant of stock options to purchase a total of 1,600,000 shares of the Company at a price of \$0.20 per share. A total of 1,500,000 of these stock options are exercisable for a five-year period while 100,000 are exercisable for a two-year period. Effective July 1, 2020, due to uncertainties with respect to the economy and financial and graphite markets, including the unknown long-term effects of COVID-19, the Company's Board of Directors deferred receiving directors' fees and the CEO deferred taking \$120,000 of his annual salary until conditions improve. Following the Company's financing and proceeds from warrant exercises, these deferred amounts were paid during March and April of 2021.

On February 12, 2021, the Company closed a non-brokered private placement financing raising gross proceeds of \$2,992,640 with the sale of units at a price of \$0.28 per unit. Each unit was comprised of one common share and one-half share purchase warrant with each whole warrant entitling the holder to purchase one common share at a price of \$0.45 per share for a period of two years from the closing date of the placement. A total of 5,344,000 warrants were issued with an expiry date of February 12, 2023. Cash finder fees of \$153,888 were paid in connection with the placement.

On February 22, 2021, the Company announced that metallurgical testing continues to confirm the high percentage of valuable, large flake concentrates that will be produced from its Bissett Creek deposit. Recent tests have averaged 22 percent plus-32 mesh (XXL) flake and 46 percent plus-48 mesh (XL) flake. Cumulatively, 95 percent of concentrates produced are expected to be greater than 80 mesh, which is the cut-off for large flake. All figures are believed to be the highest large flake yields reported from any worldwide graphite project.

On March 2, 2021, the Company announced that it has engaged ProGraphite GmbH to test, characterize and optimize the Company's graphite concentrates for use in advanced applications such as lithium-ion batteries, fuel cells and flow batteries as well as in traditional markets. ProGraphite is located in Germany and is one of the world's leading graphite research and development laboratories with over several decades of professional expertise and experience. ProGraphite will carry out a number of tests to assist the Company in maximizing the revenue potential of its concentrates by optimizing them and targeting the most appropriate value-added applications. The first phase of testing was announced on April 24, 2021 in which ProGraphite concluded that graphite from the Bisset Creek deposit has an almost unique combination of high carbon content and extremely coarse particle size distribution. These grades are in high demand, availability is relatively low and prices are the highest of any standard graphite concentrate types. ProGraphite indicated that the greatest potential for Bissett Creek graphite is in the fast-growing expandable graphite market, especially with respect to its use in the manufacture of bipolar plates for hydrogen fuel cells.

On August 16, 2021 a second phase of testing carried out on graphite concentrates from Bissett Creek was announced. This testing demonstrated that the concentrates can be easily purified using either acid-based or alkaline-based processes for use in the manufacture of lithium-ion battery anode material (BAM). The results of this second phase of testing were excellent and comparable with the performance of thermal purification as iron (Fe), zinc (Zn), chromium (Cr), aluminum (Al) and silicon (Si) levels were far below the typical limits required for BAM. The first step in producing BAM is micronizing and rounding mine concentrate. It has already been demonstrated that Bissett Creek concentrates produce a high yield of BAM precursor with a relatively steep particle size distribution and high tap density. The latter is a function of the concentrate's high bulk density, a requirement for high-quality BAM. Not all graphite deposits have these characteristics nor does the nature of their mineralogy/impurities enable them to be economically purified to battery standards. The latest tests, along with previous work, indicate that Bissett Creek concentrates can be readily purified with acid, alkaline, thermal or chlorination methods.

During February and March 2021, a total of 3,020,000 warrants were exercised resulting in proceeds to the Company of \$1,208,000.

On April 16, 2021, the Company announced the grant of stock options to officers and directors for a total of 2,800,000 shares of the Company at a price of \$0.50 per share with an expiry date of April 15, 2026. A significant portion of the

options granted replaced 2,200,000 stock options exercisable at \$0.50 that expired on April 27, 2021 at the end of their five year term.

On April 28, 2021, the Company announced it had retained Frank Wheatley to act as a special adviser to the board and management on various corporate, strategic and financial initiatives that are under way to move the Bissett Creek project forward. Mr. Wheatley is a senior executive with more than 35 years of international business, financial and legal experience with Canadian public mining companies operating globally in precious metals, base metals and industrial metals. He has been a chief executive officer, senior executive and/or board member of a number of development and operating companies, including Talison Lithium, Eldorado Gold and Gabriel Resources. He is currently on the board of Endeavor Mining Corp. Mr. Wheatley holds a bachelor of laws and a bachelor of commerce, both from the University of British Columbia. Mr. Wheatley has been granted stock options to purchase 250,000 common shares at a price of \$0.50 per share with an expiry date of April 25, 2024.

On October 5, 2021, the Company announced it had completed the 2021 exploration field season at its South Okak project in Labrador. The 2021 program was very successful in improving the Company's understanding of structural controls relating to existing targets and in identifying new targets. Over 200 rock samples were collected throughout the property and over 40 kilometres of high-resolution magnetometer data were acquired over two high-priority areas. Results will be released when assays are received and all the data have been processed and compiled.

On November 11, 2021, the Company announced a third phase of testing on graphite concentrates from Bissett Creek by ProGraphite in Germany. Testing showed that the Company's anode material can be charged to high values which remain stable with high Coulomb efficiency under various discharge conditions. ProGraphite concluded that Bissett Creek anode material is very well suited for the manufacture of high-capacity, durable, long-life lithium-ion batteries.

Test results demonstrated that Bissett Creek BAM can be charged to lithiation values above 362 mAh/g (milliampere hours per gram) which shows that the capacity of the batteries will be excellent. The delithiation (discharging) performance was also excellent as the batteries delivered stable, high values with a very high Coulomb efficiency under various test conditions. Bissett Creek BAM also proved to be very robust. Even after charging/discharging several times at 10C (i.e. complete charging in only six minutes) and after many cycles, the Coulomb efficiency remained at a very high, constant level indicating almost no degradation of the anode material. This performance is better than many commercial natural or synthetic grades.

During the first quarter of 2020, there was a global outbreak of COVID-19 (coronavirus), which has had a significant impact on businesses through the restrictions put in place by the Canadian, provincial and municipal governments regarding travel, business operations and isolation/quarantine orders. At this time, the ultimate extent and impact the COVID-19 outbreak may have on the Company remains unclear as this will depend on future developments that are highly uncertain and that cannot be predicted with confidence. These uncertainties arise from the extensive geographic spread of the disease, and the inability to predict the duration of the outbreak or reoccurrence of outbreaks, including the duration of travel restrictions, business closures or disruptions, and quarantine/isolation measures that are currently, or may be put, in place by Canada and other countries to fight the virus. While the full extent of the impact is unknown, COVID-19 may hinder the Company's ability to raise financing to build the Bissett Creek Project due to uncertain capital markets, reduced customer demand, supply chain disruptions, increased government regulations and other unanticipated factors, all of which may also negatively impact the Company's business and financial condition.

## Selected Information

The following table contains selected interim financial information for the nine month periods ended September 30, 2021 and 2020.

	Nine months ended September 30, 2021 \$	Nine months ended September 30, 2020 \$
<b>Statement of Loss and Comprehensive Loss Data</b>		
Total revenue	Nil	Nil
Total expenses	(2,328,172)	(281,772)
Loss and comprehensive loss	(1,833,535)	(272,444)
Loss per share – basic and diluted	(0.02)	(0.00)
<b>Statement of Financial Position Data</b>		
	As at September 30, 2021 \$	As at December 31, 2020 \$
Total assets	18,764,189	15,222,682
Total long-term debt	Nil	Nil
Total liabilities	836,821	553,664
Shareholders' equity:		
Share capital	28,732,620	25,098,662
Total shareholders' equity	17,927,368	14,669,018

## Results of Operations

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
	\$	\$	\$	\$
<b>General and administrative expenses</b>				
Legal and audit	58,584	29,111	85,462	45,849
Office, management and director fees	141,679	85,379	385,610	250,005
Promotion and investor relations	66,059	24,570	221,303	87,801
Regulatory and transfer agent	11,466	33,200	40,374	52,839
Project generation and evaluation	458,090	-	731,680	-
Share-based payments	15,900	202,125	840,121	202,125
Depreciation	7,874	8,768	23,622	26,306
<b>Loss from operations</b>	(759,652)	(383,153)	(2,328,172)	(664,925)
Interest income	5,726	631	15,252	9,959
Gain (loss) on marketable securities	7,300	(180,000)	479,385	(180,000)
<b>Loss and comprehensive loss for the period</b>	(746,626)	(562,522)	(1,833,535)	(834,966)

Legal and audit costs were \$29,473 higher during the third quarter of 2021 when compared to the third quarter of 2020 due to higher legal fees incurred related to strategic corporate initiatives. Office, management and director fees were \$56,300 higher during the third quarter of 2021 when compared to Q3 2020 primarily due to increased consulting costs related to strategic corporate initiatives. Promotion and investor relations expenses were \$41,489 higher during the third quarter of 2021 when compared to Q3 2020 relating to new investor relations, marketing and social media campaigns initiated during 2021. The Company incurred \$458,090 in project generation and evaluation costs during the third quarter of 2021 relating to the assessment of potential new investment opportunities. No similar costs were incurred during Q3 2020. During Q3 2021 the Company recognized \$15,900 in non-cash share-based expense related

to stock options granted during February 2021 which are vesting over a one year period. Share-based payment expense of \$202,125 was recorded during Q3 2020 and related to a grant of stock options on July 22, 2020.

Interest income was \$5,095 higher during Q3 2021 versus Q3 2020 due to higher average cash balances. An unrealized gain of \$7,300 was recorded on the 2,000,000 common shares of ERL held by the Company as these marketable securities are recorded at fair value at the end of each reporting period.

For the three month period ended September 30, 2021 the Company recorded a loss and comprehensive loss of \$746,626 or \$0.01 per share, compared to a loss of \$562,522, or \$0.01 per share during Q3 2020.

A total of \$704,887 (nine months ended September 30, 2020 – \$123,671) in expenditures were capitalized to the Company's exploration and evaluation assets during the nine month period ended September 30, 2021. For the Bissett Creek Property, environmental and mine permitting costs were \$113,810 and related to on-going work; engineering costs were \$27,330; metallurgical costs were \$56,198 and included tests conducted by SGS and ProGraphite; and, site and royalty costs were \$57,358. For the South Okak project expenditures totaled \$450,191 including an initial cash option payment of \$50,000; the issue of 500,000 common shares valued at \$250,000; claim staking costs of \$16,185; geology costs of \$120,464; and, geophysical costs of \$13,542.

### **Liquidity and Capital Resources**

As at September 30, 2021 the Company held cash of \$3,569,504 (December 31, 2020 – \$1,211,575) and had working capital of \$4,026,775 (December 31, 2020 – \$1,291,225). During the nine month period ended September 30, 2021, the Company utilized net cash of \$1,274,222 with respect to operating activities, invested cash of \$369,613 in exploration and evaluation costs for the Bissett Creek Project and the South Okak project and realized total net proceeds of \$4,001,764 from financing activities.

The Company has a long-term reclamation deposit with the Ministry of Finance for the Province of Ontario of \$845,462. As at September 30, 2021, the Company has recorded a provision of \$351,100 representing the estimated liability for the current cost of reclamation for the Bissett Creek site.

Substantial additional capital is required to ultimately build a mine and processing plant at the Bissett Creek Project and to enable the Company to enter production and continue its operations. There is a high degree of risk and many inherent uncertainties in the mining industry and there is no assurance management will be successful in its endeavours.

The Company's financial statements have been prepared on a going concern basis, which assumes that the Company will be able to continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business. Company management believes that it can continue to finance operating expenses over the next twelve months with funds on hand. The Company's discretionary activities have considerable scope for flexibility in terms of the amount and timing of expenditures. The Company will thoroughly assess all such activities before undertaking them in advance of additional financing being secured.

### **Financing activity**

On February 12, 2021, the Company closed a non-brokered private placement financing raising gross proceeds of \$2,992,640 with the sale of units at a price of \$0.28 per unit. Each unit was comprised of one common share and one-half share purchase warrant with each whole warrant entitling the holder to purchase one common share at a price of \$0.45 per share for a period of two years from the closing date of the placement. Also, 3,020,000 warrants that were due to expire on March 24, 2021 were exercised at a price of \$0.40 per share resulting in cash proceeds to the Company of \$1,208,000.

On July 15, 2020, the Company closed the sale of a 1% gross revenue royalty on its Bissett Creek Property to Electric Royalties Ltd. Cash proceeds of \$500,000 and ERL common shares valued at \$440,340 were received upon closing.

### **Contractual Obligations**

As at September 30, 2021 and December 31, 2020, the Company had no contractual obligations or commitments for capital or operating leases, purchase obligations or other long-term commitments.

## **Off-Balance Sheet Arrangements**

The Company has not entered into any off-balance sheet arrangements such as guarantee contracts, contingent interests in assets transferred to unconsolidated entities, derivative instrument obligations, or with respect to any obligations under a variable interest entity arrangement.

## **Transactions with Related Parties**

### **Key management compensation**

During the nine month period ended September 30, 2021, the Company expensed management fees to a company owned and controlled by key management personnel of \$44,213 (nine months ended September 30, 2020 – \$32,974) and salary and compensation to key management personnel of \$135,000 (nine months ended September 30, 2020 – \$135,000). During the nine month period ended September 30, 2021, the Company expensed directors' fees of \$45,000 (nine months ended September 30, 2020 – \$45,000). During the nine month period ended September 30, 2021, the Company expensed share-based compensation for stock options granted to key management personnel and directors of \$738,600 (nine months ended September 30, 2020 – \$192,500).

## **Proposed Transactions**

The Company continually reviews potential merger, acquisition, investment and other joint venture transactions that could enhance shareholder value. At the current time, there are no reportable proposed transactions.

## **Critical Accounting Estimates and Judgements**

The preparation of the interim financial statements requires Company management to make estimates, assumptions, and judgements about the future that affect the amounts recorded in the financial statements. These estimates, assumptions, and judgements are based on the Company's experience and management's expectations about future events that are believed to be reasonable under the circumstances. They are continually being re-evaluated based on new facts and experience. Actual results may differ from estimates, assumptions and judgements. The effect of a change in an accounting estimate is recognized prospectively in the period of change and future periods if the change impacts both periods.

Significant estimates used in the preparation of the Company's financial statements include, but are not limited to:

- (i) asset carrying values and impairment charges;
- (ii) the economic recoverability of exploration expenditures incurred and the probability of future economic benefits from development expenditures incurred;
- (iii) the expected costs of asset retirement obligations;
- (iv) the valuation of marketable securities that have contractual trading restrictions that limit marketability; and
- (v) the calculation of share-based compensation and the valuation of warrants which includes the assumptions used in the Black-Scholes option pricing model including volatility, estimated forfeiture rates and expected time until exercise.

Significant judgements used in the preparation of the Company's financial statements include, but are not limited to:

- (i) those relating to the assessment of the Company's ability to continue as a going concern;
- (ii) the useful lives and related depreciation of property and equipment;
- (iii) the identification of separately identifiable components in property and equipment where their respective cost is significant in comparison to the total cost;
- (iv) the classification of expenditures as exploration and evaluation assets; and
- (v) the recognition of deferred tax.

## **Critical Accounting Policies**

The Company believes the following critical accounting policies affect its more significant judgments and estimates used in the preparation of its interim financial statements.

### ***Going Concern***

The Company is an exploration stage company that generated a loss of \$1,833,535 for the nine month period ended September 30, 2021 (Year ended December 31, 2020 – loss of \$868,131) and has accumulated a deficit of \$14,748,933 since the inception of the Company. As at September 30, 2021, the Company had working capital of \$4,026,775 (December 31, 2020 – \$1,291,225). The Company's ability to continue as a going concern is dependent upon its ability to raise additional capital to continue the development of the Bissett Creek Property and exploration on other property interests. Substantial additional capital is required to ultimately build a mine and processing plant on the Bissett Creek Property. There is a high degree of risk and many inherent uncertainties in the mining industry and there is no assurance management will be successful in its endeavors.

The interim financial statements have been prepared on a going concern basis, which assumes that the Company will be able to continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business. The Company's management believes that it can continue to finance operating expenses over the next twelve months with funds on hand. The Company's discretionary activities have considerable scope for flexibility in terms of the amount and timing of expenditures. The Company will thoroughly assess all such activities before undertaking them. The Company's interim financial statements do not include any adjustments that might result from negative outcomes with respect to these uncertainties.

### ***Marketable securities***

When the fair values of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using other valuation techniques. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions relating to these factors could affect the reported fair value of financial instruments.

### ***Impairment of Long-Lived Assets***

At each statement of financial position date, the Company assesses whether there is any indication that any long-lived assets or finite life tangible assets are impaired. The Company monitors the recoverability of long-lived assets based on factors such as current market value, future asset utilization, business climate and future undiscounted cash flows expected to result from the use of the assets. An impairment is recognized if the recoverable amount, determined as the higher of an asset's fair value less cost to sell and the discounted future cash flows generated from use and eventual disposal of an asset, is less than its carrying value. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Mining properties and exploration and evaluation assets are also assessed for impairment upon the transfer of exploration and evaluation assets to development assets regardless of whether facts and circumstances indicate that the carrying amount of the exploration and evaluation assets is in excess of their recoverable amount.

### ***Mining properties and exploration and evaluation expenditures***

Mining properties correspond to acquired interests in mining exploration permits/claims/leases which include the rights to explore, mine, extract and sell all minerals from such permits/claims/leases. All pre-exploration costs, i.e. costs incurred prior to obtaining the legal right to undertake exploration and evaluation activities on an area of interest, are expensed as incurred. Once the legal right to explore has been acquired, exploration and evaluation expenditures are capitalized in respect of each identifiable area of interest until the technical feasibility and commercial viability of extracting a mineral resource are demonstrated.

General and administration expenditures relating to exploration are capitalized where they can be directly attributed to the site undergoing exploration and evaluation.

Exploration and evaluation assets are carried at historical cost, less any impairment losses recognized.

When technical feasibility and commercial viability of extracting a mineral resource are demonstrated for an area of interest, the Company stops capitalizing exploration and evaluation costs for that area, tests recognized exploration and evaluation assets for impairment, and reclassifies any unimpaired exploration and evaluation assets either as tangible or intangible mine development assets according to the nature of the assets.

### ***Share-based compensation***

The Company has a stock option plan (the "Plan") as described in note 6 of its interim financial statements. The Company measures the compensation cost of stock options issued under the Plan using the fair-value method as determined using the Black-Scholes option pricing model. Compensation costs are measured at the grant date based on the fair value of the award and are recognized over the vesting period in share-based payment expense in the statement of comprehensive loss with a corresponding increase to contributed surplus. Upon exercise, common shares are issued from treasury and the amount reflected in contributed surplus is credited to share capital, as adjusted for any consideration paid.

The Black-Scholes option pricing model incorporates highly subjective assumptions, including volatility, estimated forfeiture rates and expected time until exercise, which affect the calculated values. At the end of each reporting period, the Company reviews the option pricing model and updates model inputs for any changes for the purposes of determining the fair value of new grants and reflects the impact of changes to non-market input estimates for previous grants in net loss with a corresponding adjustment to contributed surplus.

### ***Restoration and site closure provision***

The Company has an obligation to reclaim the Bissett Creek Project after the end of mining operations and has estimated the costs necessary to comply with existing reclamation standards. The fair value of an asset retirement obligation is recorded in the period in which it is incurred. When the liability is initially recorded, the cost is capitalized by increasing the carrying amount of the related long-lived asset. Over time, the liability is adjusted to reflect the passage of time (accretion expense) and for changes in estimated future cash flows. Accretion expense is charged to the statement of comprehensive loss, while adjustments related to changes in estimated cash flows are recorded as increases or decreases in the carrying value of the asset. The capitalized cost is amortized over the useful life of the related asset. Upon settlement of the liability, a gain or loss is recorded if the actual costs incurred are different from the liability recorded.

### ***Income Taxes***

The Company uses the asset and liability method of accounting for income taxes. Under this method, deferred tax is determined based on differences between the financial statement carrying values of existing assets and liabilities and their respective income tax bases (temporary differences), and losses carried forward. Deferred tax is measured using the enacted tax rates, or substantially enacted tax rates, which will be in effect when the temporary differences are likely to reverse. The effect on deferred tax of a change in tax rates is included in operations in the period in which the change is enacted. The amount of deferred tax recognized is limited to the amount of the benefit that is probable.

Deferred tax and the recognition and measurement of uncertain tax positions are subject to various assumptions and management judgement. Actual results may differ from these estimates. In circumstances where the applicable tax laws and regulations are either unclear or subject to ongoing varying interpretations, it is reasonably possible that changes in these estimates could occur that materially affect the amounts of deferred tax recorded.

### ***Financial instruments***

Financial instruments are measured on initial recognition at fair value, plus, in the case of financial instruments other than those classified as fair value through profit or loss ("FVTPL"), directly attributable transaction costs. Financial instruments are recognized when the Company becomes a party to the contracts that give rise to them and are classified as: amortized cost; fair value through profit or loss; or, fair value through other comprehensive income, as appropriate. The Company considers whether a contract contains an embedded derivative when the it first becomes a party to it. The embedded derivatives are separated from the host contract if the host contract is not measured at FVTPL and when the economic characteristics and risks are not closely related to those of the host contract. Reassessment only occurs if there is a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required.

## Disclosure of Outstanding Share Data

Information with respect to outstanding common shares, warrants and stock options as at November 29, 2021, September 30, 2021 and December 31, 2020 is as follows:

	November 29, 2021	September 30, 2021	December 31, 2020
Common shares	81,368,422	79,320,756	65,112,756
Warrants	5,095,500	7,635,321	6,200,487
Stock options	5,800,000	5,800,000	4,750,000
Fully diluted shares outstanding	92,263,922	92,756,077	76,063,243

During April 2021, a total of 2,200,000 stock options exercisable at \$0.50 per share expired. During April 2021, the Company granted a total of 3,050,000 stock options exercisable at \$0.50 per share. Of this total 2,800,000 stock options expire April 15, 2026 and 250,000 stock options expire April 25, 2024.

During November 2021 to date, a total of 2,047,666 warrants were exercised resulting in cash proceeds to the Company of \$1,191,325. Additionally, a balance of 492,155 warrants expired on November 22, 2021.

## Trends

There are significant uncertainties regarding the prices of industrial minerals and the availability of equity financing for the purposes of mineral exploration and development. For instance, the prices of industrial minerals, including graphite, have fluctuated widely in recent years and it is expected that wide fluctuations may continue. Management of the Company is not aware of any trend, commitment, event or uncertainty both presently known or reasonably expected by the Company to have a material adverse effect on the Company's business, financial condition or results of operations other than the normal speculative nature of the natural resource industry and the risks disclosed below under the heading "Risk Factors".

## **Risk Factors**

An investment in the Company's common shares is speculative and subject to risks and uncertainties. The occurrence of any one or more of these risks or uncertainties could have a material adverse effect on the value of any investment in the Company and the business, prospects, financial position, financial condition or operating results of the Company. The risk factors noted below, in no specific order, are not an exhaustive list of all risk factors associated with an investment in the Company's common shares or in connection with the operations of the Company.

- Exploration stage company developing one single asset;
- The highly speculative nature of mineral exploration and development;
- No history of mineral development and production;
- Mining operations and no insurance coverage on the inherent risks of such operations;
- Limited operating history and financial resources;
- Governmental and environmental regulation, permits and compliance;
- The reliability of results of prior exploration work;
- Reliance on management and experts;
- Reliability of proprietary technologies;
- Intellectual property protection;
- Competition and the over supply of graphite from other operations;
- Risk to infrastructure;
- The possibility of conflicts of interest for the Company's directors and/or officers;
- The possibility of cost overruns, delays and construction risk;
- Competitive conditions;

- Title to property;
- First Nation land claims;
- Environmental risks and hazards;
- Cost of land reclamation;
- Commodity prices;
- Price volatility and lack of active market;
- Litigation;
- No earning or dividend record and no anticipation of paying dividends in the foreseeable future; and
- Global COVID-19 pandemic.

For a more detailed discussion of the above risk factors, refer to the Company's Annual Information Form filed on SEDAR for the year ended December 31, 2020.

### **Cautionary Statement Regarding Forward-Looking Statements**

This MD&A contains "forward-looking statements" which reflect management's expectations regarding the Company's future growth, results of operations, performance and business prospects and opportunities. Such forward-looking statements may include, but are not limited to, statements with respect to the future financial or operating performance of the Company and its projects, the future price of graphite or other metal prices, the estimation of Mineral Resources, the timing and amount of estimated future production, costs of production, capital, operating and exploration expenditures, costs and timing of the development of new deposits, costs and timing of future exploration, requirements for additional capital, government regulation of mining operations, environmental risks, reclamation expenses, title disputes or claims, limitations of insurance coverage and the timing and possible outcome of regulatory matters. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or variations (including negative variations) of such words and phrases, or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others: general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; fluctuations in currency exchange rates; changes in project parameters as plans continue to be refined; changes in labor costs or other costs of production; future prices of graphite or other industrial mineral prices; potential over supply of graphite from other operations; possible variations of mineral grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accidents, labor disputes and other risks of the mining industry, including but not limited to environmental hazards, cave-ins, pit-wall failures, flooding, rock bursts and other acts of God or unfavorable operating conditions and losses; delays in obtaining governmental approvals or financing or in the completion of development or construction activities; actual results of reclamation activities, and the factors discussed in the section entitled "Risk Factors" in this MD&A. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward-looking statements contained herein are made as of the date of this MD&A and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as may be required by applicable securities laws. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

### **Qualified Person**

Gregory Bowes B.Sc., MBA, P.Geo., is the Company's Qualified Person as that term is defined within National Instrument 43-101 and has reviewed and approved the technical content of this MD&A.

**Additional Information** relating to the Company is available on SEDAR at [www.sedar.com](http://www.sedar.com).