

**NORTHERN GRAPHITE CORPORATION**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**For the Three and Nine Month Periods Ended September 30, 2018**  
(Information as at November 26, 2018 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, 2018 and 2017. Management's discussion and analysis ("MD&A") was prepared by Company management and approved by the Board of Directors on November 26, 2018.

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, 2018 and 2017 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, 2017 and 2016 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").

## **Nature of Operations**

The Company's principal focus is the potential development of the Bissett Creek Project located in the County of Renfrew, Ontario. This deposit is somewhat unique in that it contains a very high percentage of large and extra large flake graphite which will command premium pricing. 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, increased demand from traditional steel markets, rapidly growing demand from the relatively new lithium ion battery ("LiB") market, and potential supply problems with Chinese production have created renewed interest in graphite projects worldwide.

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 2,500 tonne per day (tpd) processing plant at Bissett Creek. A technical report prepared in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") was filed on SEDAR in August, 2012. The Ontario Ministry of Northern Development and Mines ("MNDM") accepted filing of the Company's amended mine closure plan ("MCP") which is based on the FS.

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 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 then updated the Expansion PEA (the

“Expansion PEA Update”) to also assess the economics of building a two million tonne per annum (“Mtpa”) processing plant at the outset rather than expanding to 2 Mtpa after three years of operation.

The Company is currently updating the economics for the Phase 1 development scenario outlined in the FS and FS Update as there have been beneficial improvements in exchange rates and oil and natural gas prices since the time that the technical reports were prepared. Additionally, graphite prices are marginally lower and labour and equipment costs need to be updated.

The Company is in a position to begin construction of a mine at Bissett Creek, subject to arranging the necessary full project financing and completing Species at Risk permitting. The Company intends to file a statement of material change with the MNDM to reflect modifications incorporated in the FS Update and as a result, the MNDM could require the Company to file an amendment to the mine closure plan. A number of operational permits and environmental authorizations are also required and are in the process of being obtained 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, Ontario.

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 were \$18,743 during the nine month period ended September 30, 2018 (year ended December 31, 2017 - \$24,810). The Company also held five unpatented mining claims, which are contiguous to Bissett Creek, and covered approximately 464 hectares. During February 2018, the MNDM completed the implementation of a new claims system in Ontario whereby all former claims were converted to units known as cells. This conversion resulted in the Company’s five claims converting to 52 cells with an increased area of approximately 1,159 hectares.

Royalties on Bissett Creek consist of an annual advance payment of \$27,000 to the three original prospectors that discovered the deposit which will be credited against a royalty of \$20 per ton of concentrate sold once the mine is operational, and a 2.5% net smelter royalty (“NSR”) on any other minerals derived from the Bissett Creek property.

Graphite prices began to increase in 2005 due to increased demand from traditional steel and automotive markets and peaked in 2012 in a range of US\$2,500 to US\$3,000 per tonne for large flake graphite and some shortages were reported. The subsequent slowdown in the Chinese economy combined with a lack of growth in economies in US/Japan/Europe caused prices to decrease over 50% from 2012 levels where they remained for a number of years. Prices recovered somewhat in the second half of 2017 due to an improvement in the steel market, continued growth in LiB and expandable graphite demand and supply problems in China caused by the enforcement of stricter environmental standards. Based on its review of industry sources, the Company believes prices are currently around US\$1,300 for large (+80 mesh) flake graphite while +50 mesh XL flake is selling for approximately US\$2,000 per tonne and +32 mesh XXL flake at US\$2,250 per tonne. Approximately 60% of production from Bissett Creek will be XXL and XL flake making it one of the highest margin deposits. These grades are mainly used in the expandable graphite market. The steel market is recovering, the expandable graphite and LiB markets continue to grow and Chinese production of larger flake sizes appears to be declining which bodes well for higher prices in the future. 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.

The Company also intends to produce and sell value added products such as expandable graphite, anode material for lithium ion batteries and high purity flake graphite which receive premium prices. Graphite is the anode material in lithium ion batteries and that market is rapidly growing due to their use in cell phones, cameras, laptops, power tools, etc. and more recently, hybrid and all electric vehicles and stationary power storage. This creates the potential for higher prices. No value added products are included in the economics in the FS or Expansion PEA or the updates thereto.

As at September 30, 2018, the Company had capitalized \$12,544,598 of exploration and evaluation expenditures relating to Bissett Creek. Over the next twelve months the Company intends to optimize and update the costs and economics in the FS and complete the majority of the remaining permitting. This work will place the Bissett Creek Project in a near construction ready position pending full project financing and detailed engineering.

## 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”). Metal price assumptions in the FS reflect the exceptionally high content of coarse flake graphite and the high purity of concentrates from the Bissett Creek deposit 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.Geol., 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 define these inferred mineral resources as indicated or measured mineral resources and it is uncertain if further exploration will result in upgrading them 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. 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 under securities regulations, 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 COG 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. Resources 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. Metallurgical testing is underway to confirm the results of earlier studies which indicated that the yield of +50 mesh flake could be increased to 70 per cent.

#### ***Sensitivity Analysis - FS Update Pre-Tax NPV and IRR***

	US\$2,100/t		US\$1,800/t		US\$1,500/t	
	NPV*	IRR	NPV*	IRR	NPV*	IRR
<b>Base Case</b>	\$201.1	25.7%	<b>\$129.9</b>	<b>19.8%</b>	\$58.7	13.6%
<b>Grade +10%</b>	\$250.6	29.7%	<b>\$172.3</b>	<b>23.4%</b>	\$93.9	16.8%
<b>Grade -10%</b>	\$151.6	21.6%	<b>\$87.6</b>	<b>16.2%</b>	\$23.6	10.3%
<b>Operating costs -10%</b>	\$218.8	27.1%	<b>\$147.6</b>	<b>21.3%</b>	\$76.5	15.2%
<b>Operating costs +10%</b>	\$183.4	24.2%	<b>\$112.2</b>	<b>18.3%</b>	\$41.0	11.9%
<b>Capex -10%</b>	\$212.3	28.4%	<b>\$141.2</b>	<b>22.0%</b>	\$70.0	15.3%
<b>Capex +10%</b>	\$189.8	23.4%	<b>\$118.7</b>	<b>18.0%</b>	\$47.5	12.2%
<b>*CDN\$ millions @ 8%</b>						

A number of significant, low risk opportunities exist to improve upon the FS Update including.

- There is scope to reduce capital costs through the purchase of used equipment and lease financing of the mining fleet and natural gas generators.
- The 2013 Preliminary Economic Assessment and the 2014 Expansion PEA Update indicate that the economics of building a processing plant with double the capacity of that used in the FS Update are more attractive.
- 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 an engineered wetland to treat any run off from the low grade stockpile and therefore no additional upfront financial assurance will be required to return to the pit, any potentially acid generating material that is stored on surface.
- The Company has carried out extensive purification testing and has developed a potentially commercial process to produce and sell high purity ( $\geq 99.95\%$  Cg) products. A pilot plant test is planned.

No revenues or costs associated with mine expansion or upgrading and purifying to sell into value added markets are included in the FS or the FS update.

### **Expansion Preliminary Economic Assessment**

The Company completed and filed a NI 43-101 Technical Report with respect to a Preliminary Economic Assessment on a Phase 2 expansion case for Bissett Creek. The Expansion PEA was undertaken to demonstrate the ability to double processing capacity (to 2 Mtpa) after three years of operation based only on the Measured and Indicated resources. The Expansion PEA was authored by Marc Leduc, P.Eng. and indicates that Bissett Creek has viable economics even at lower graphite price levels.

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. For the Expansion PEA Update, Ken Kuchling, P.Eng., Senior Mining Associate of P&E Mining Consultants Inc. (“P&E”) modified the Expansion PEA mine plan to commence production at the expanded 2.0 Mtpa production rate rather than ramping up in year three. Dan Peldiak, P.Eng., Principal Process Engineer, WorleyParsons Canada revised the capital and operating costs for the process plant. Andrew Bradfield, P.Eng., of P&E approved and authorized the disclosure of the technical information relating to the Expansion PEA Update. There is 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%

## Corporate Developments

In February 2018, the Company provided a sensitivity analysis on the preliminary economic assessment on the Bissett Creek Project using updated financial metrics. The PEA used a weighted average concentrate price of US\$1,800 per tonne and a Canadian-United States dollar exchange rate of 1.05, which reflected market conditions at the time, as well as an 8 percent discount rate. The Canadian-United States dollar exchange rate has subsequently increased to approximately 1.25 while the U.S. dollar graphite price has declined. The net effect is a 10 percent increase in the weighted average Canadian dollar price that the Company would realize for its concentrates. Based on this change only, the project has a pretax internal rate of return of 30.3 percent (25.4 percent after tax) and a pretax net present value of \$292.5 million (\$192.2 million after tax) using an 8 percent discount rate. Cash operating costs over the first 10 years of operation are estimated at US\$547 per tonne using current exchange rates. For the purpose of this update analysis, no change has been made to capital or operating cost estimates. The Company has engaged GMining Services Inc. to update costs and review other technical parameters with respect to the project and those results will be released when available. The PEA is based only on Measured and Indicated resources, which have not changed. *Mineral resources that are not mineral reserves do not have demonstrated economic viability.*

On February 28, 2018, the Company announced that Jay Chmelauskas resigned from the board of directors due to the increased demands of his other professional commitments.

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 16μ 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.

BGRIMM has commenced a second study to evaluate the Company’s LiB anode material (also called spherical graphite or “SPG”), with respect to purification, coating and electrochemical performance. Purification in particular is a key step in manufacturing SPG. The tests will enable the Company to benchmark the results against its own patent pending purification technology. The Company’s technology, jointly developed with Hatch Inc., potentially represents the first cost competitive, environmentally sustainable alternative to Chinese methods of manufacturing anode material for the rapidly growing electric vehicle and grid storage markets.

In May 2018, the Company announced that continuing metallurgical testing by SGS Lakefield (“SGS”) identified a potential opportunity to simplify the Bissett Creek process plant design that could lead to reduced capital and operating costs for the project. The ongoing test work is part of the Company’s plan to update the FS and is subject to further evaluation, testing and cost/benefit analysis. While this testing program has delayed progress of the FS update, it could lead to improved project economics.

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 late June, the Company announced the results of its annual general meeting of shareholders held on June 25, 2018. All resolutions were passed by a wide margin with almost 40 percent of the outstanding shares being voted. MNP LLP, Chartered Professional Accountants, was reappointed auditor of the Company; the Company’s stock option plan was approved; and Gregory Bowes, Donald Christie, Iain Scarr, Sethu Raman and Campbell Birge were appointed directors.

In October 2018, the Company announced that SGS Canada Inc. had initiated a comprehensive metallurgical test program on ore from the Bissett Creek project to confirm the results of previous studies which identified a number of promising opportunities to reduce capital and operating costs and further improve project economics. This work is being brought up to the standards required in a full feasibility study. The metallurgical program is expected to take approximately 16 weeks and is part of a high-level review of project economics being undertaken by G Mining Services Inc. prior to updating the Company's feasibility study.

### Selected Information

The following tables contain selected interim financial information for the three and nine month periods ended September 30, 2018 and 2017.

	Nine months ended September 30, 2018 \$	Nine months ended September 30, 2017 \$
<b>Statement of Operations and Comprehensive Loss Data</b>		
Total revenue	Nil	Nil
Total expenses	(913,197)	(621,857)
Loss and comprehensive loss	(873,801)	(613,645)
Loss per share – basic and diluted	(0.01)	(0.01)
<b>Statement of Financial Position Data</b>		
	<b>As at September 30, 2018</b>	<b>As at December 31, 2017</b>
Total assets	16,546,852	16,983,310
Total long-term debt	Nil	Nil
Total liabilities	475,281	441,379
Shareholders' equity:		
Share capital	25,223,773	25,033,021
Total shareholders' equity	16,071,571	16,541,931

### Results of Operations

	Three months ended September 30,		Nine months ended September 30,	
	2018 \$	2017 \$	2018 \$	2017 \$
<b>General and administrative expenses</b>				
Legal and audit	8,354	7,354	26,339	35,726
Office, management and director fees	109,766	96,095	371,514	312,161
Promotion and investor relations	21,685	68,903	176,588	132,116
Regulatory and transfer agent	10,736	10,423	62,833	59,203
Share-based payments	7,990	-	249,879	54,573
Depreciation	8,769	8,686	26,044	28,078
<b>Loss from operations</b>	(167,300)	(191,461)	(913,197)	(621,857)
Interest income	13,177	5,354	39,396	8,212
<b>Loss and comprehensive loss for the period</b>	(154,123)	(186,107)	(873,801)	(613,645)

During the nine month period ended September 30, 2018, total net loss was \$260,156 higher when compared to the same period during 2017. Significant factors resulting in higher costs included: Office, management and director fees were \$59,353 higher partly relating to fees charged by the Company's new CFO during the first nine months of 2018 and due to higher consulting fees relating to corporate activity. Promotion and investor relations costs were \$44,472

higher during the first nine months of 2018 due to several new promotional activities being initiated during the period and to higher costs for trade show attendance including related travel. Corporate travel costs were also higher. During the nine month period ended September 30, 2018, the Company recognized \$249,879 in non-cash share-based expenses related to stock options representing an increase of \$195,306 compared to the same period in 2017. A grant of stock options to management and directors during January 2018 gave rise to the increased expense. Interest income was \$31,184 higher during the first nine months of 2018 when compared to 2017. Interest revenue was generated on higher cash balances on hand as a result of private placement financings completed during March and November of 2017.

For the three month period ended September 30, 2018, the Company recorded a loss and comprehensive loss of \$154,123, or \$0.00 per share, compared to \$186,107, or \$0.00 per share during Q3 2017. For the nine month period ended September 30, 2018, the Company recorded a loss and comprehensive loss of \$873,801, or \$0.01 per share, compared to \$613,645, or \$0.01 per share during 2017.

A total of \$626,693 in expenditures were capitalized to the Company's exploration and evaluation assets during the nine month period ended September 30, 2018 (nine months ended September 30, 2017 - \$284,595). Engineering costs were \$17,018. Environmental and mine permitting costs were \$252,706 relating to on going environmental data collection and permitting work. Feasibility study related costs were \$147,512 and related to work on the feasibility study update and metallurgical tests being conducted by SGS. Metallurgical expenditures were \$83,404 related primarily to BGRIMM anode material test work. Product sales and marketing analysis costs were \$61,369. Site and royalty costs were \$64,684.

### **Liquidity and Capital Resources**

As at September 30, 2018 the Company held cash of \$2,863,604 (December 31, 2017 - \$3,969,921) and had working capital of \$2,846,574 (December 31, 2017 - \$3,917,583). During the nine month period ended September 30, 2018, the Company spent net cash of \$681,332 with respect to operating activities; realized cash proceeds of \$153,562 from the exercise of compensation options; and, invested cash of \$578,547 in exploration and evaluation costs for the Bissett Creek Project.

The Company has a long-term reclamation deposit with the Ministry of Finance for the Province of Ontario of \$819,243. As at September 30, 2018, the Company has recorded a provision of \$328,532 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. Given the continuation of weak capital markets in the resource sector, there exists a material uncertainty as to the Company's ability to raise additional funds on favourable terms. 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**

During the first quarter of 2018, the Company realized cash proceeds of \$153,562 with respect to the exercise of 438,750 compensation options.

On March 24, 2017, the Company completed a non-brokered private placement and issued 8,333,333 units at a price of \$0.30 per unit for gross proceeds of \$2,500,000. Each unit was comprised of one common share and one half of one common share purchase warrant. Each whole warrant entitles the holder to purchase one common share of the Company at an exercise price of \$0.40 per share until March 24, 2019. In connection with the private placement, the Company

paid fees totalling \$136,500 to the agents, and issued to the agents 455,000 compensation options. Each compensation option entitled the holder to purchase one common share at an exercise price of \$0.35 per share until March 24, 2018.

On November 22, 2017, the Company completed a non-brokered private placement and issued 4,582,644 units at a price of \$0.45 per unit for gross proceeds of \$2,062,190. Each unit was comprised of one common share and one half of one common share purchase warrant. Each whole warrant entitles the holder to purchase one common share of the Company at an exercise price of \$0.60 per share until November 22, 2020. In connection with the private placement, the Company paid fees totaling \$131,119 to the agents, and issued to the agents 291,370 compensation options. Each compensation option entitles the holder to purchase one common share at an exercise price of \$0.60 per share until November 22, 2019.

The Company intends to use the net proceeds from the private placements to finalize operational permitting necessary for the construction and operation of a mine at the Bissett Creek Property, to optimize and update the 2013 FS Update, to conduct a pilot plant test of the Company's proprietary purification process, and for general working capital.

### **Contractual Obligations**

As at September 30, 2018 and December 31, 2017 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, 2018, the Company expensed management fees to 6905498 Canada Inc., a management company owned and controlled by the Company's Chief Financial Officer, of \$46,541 (nine months ended September 30, 2017 – \$nil). During the nine month period ended September 30, 2018, salary to the Company's Chief Executive Officer was \$187,500 (nine months ended September 30, 2017 – \$187,500). During the nine month period ended September 30, 2018, the Company expensed directors' fees of \$47,500 (nine months ended September 30, 2017 – \$45,000). During the nine month period ended September 30, 2018, the Company expensed share-based compensation for stock options granted to key management personnel and directors of \$249,879 (nine months ended September 30, 2017 – \$54,573).

#### *Other related party transactions*

During the period from January to May of 2017, the Company expensed office rental payments of \$6,250 provided to a public company whose former CEO and director was also a director of the Company.

### **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.

### **Changes in Accounting Policies**

#### **Recent and future accounting standards**

Certain pronouncements were issued by the International Accounting Standards Board ("IASB") or the International Financial Reporting Interpretations Committee ("IFRIC") that are mandatory for accounting periods after December 31, 2017. Pronouncements that are not applicable or do not have a significant impact to the Company have been excluded from the discussion below.

IFRS 9, Financial Instruments (effective January 1, 2018) introduced new requirements for the classification and measurement of financial assets and replaced IAS 39. IFRS 9 uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing the multiple classification options available in IAS 39. The Company adopted the new standard effective January 1, 2018. The adoption of IFRS 9 had no impact on the Company's results of operations, financial position, and disclosures.

IFRS 15, Revenue from Contracts with Customers provides a single principle-based framework to be applied to all contracts with customers. IFRS 15 replaces the previous revenue standard IAS 18, Revenue, and the related Interpretations on revenue recognition. The standard scopes out contracts that are considered to be lease contracts, insurance contracts and financial instruments. The new standard is a control-based model as compared to the existing revenue standard which is primarily focused on risks and rewards. Under the new standard, revenue is recognized when a customer obtains control of a good or service. Transfer of control occurs when the customer has the ability to direct the use of and obtain the benefits of the good or service. This standard was effective for reporting periods beginning on or after January 1, 2018. The adoption of IFRS 15 had no impact on the Company's results of operations, financial position, and disclosures.

IFRS 16, Leases, was issued by the IASB in January 2016. The new standard brings most leases on balance sheet for lessees under a single model, eliminating the distinction between operating and finance leases. Lessor accounting however remains largely unchanged and the distinction between operating and finance leases is retained. This standard is effective for annual reporting periods beginning on or after January 1, 2019. Early adoption is permitted if IFRS 15 has also been adopted. The Company's current evaluation indicates that there will be no impact of adoption of IFRS 16 on its financial statements based on the Company's present activities.

### **Critical Accounting Estimates and Judgements**

The preparation of the 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; and
- (iv) 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 financial statements.

### ***Going Concern***

The Company is an exploration stage company that incurred a net loss of \$873,801 for the nine month period ended September 30, 2018 (Year ended December 31, 2017 – \$897,177) and has accumulated a deficit of \$12,506,867 since the inception of the Company. As at September 30, 2018, the Company had working capital of \$2,846,574 (December 31, 2017 – \$3,917,583). 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. During the year ended December 31, 2017, the Company raised gross proceeds of \$4,562,190 through private placements of shares and warrants. 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 endeavours.

The 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.

Given the continuation of weak capital markets in the resource sector, there exists a material uncertainty as to the Company's ability to raise additional funds on favourable terms. The Company's 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 securing additional financing. The Company's financial statements do not include any adjustments that might result from negative outcomes with respect to these uncertainties.

### ***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 5 of the 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***

All financial instruments are required to be measured at fair value on initial recognition. Measurement in subsequent periods depends upon whether the financial instrument is classified as fair value through profit or loss (“FVTPL”), available-for-sale assets, held-to-maturity investments, loans and receivables, or other liabilities measured at amortized cost (“Other Financial Liabilities”). Financial instruments classified as FVTPL are measured at fair value with unrealized gains and losses recognized in the statement of operations. Available-for-sale asset financial instruments are measured at fair value with unrealized gains and losses recognized in other comprehensive income. Financial assets classified as held-to-maturity investments, loans and receivables and Other Financial Liabilities, are measured at amortized cost. Transaction costs in respect of financial assets and liabilities which are FVTPL are recognized in profit or loss immediately. Transaction costs in respect of Other Financial Liabilities are included in the initial fair value measurement of the financial instrument.

The Company may enter into derivative contracts or, financial instruments and non-financial contracts containing embedded derivatives. Embedded derivatives are required to be accounted for separately at fair value as derivatives when the risks and characteristics of the embedded derivatives are not closely related to those of their host contract, and the host contract is not carried at fair value.

## Disclosure of Outstanding Share Data

Information with respect to outstanding common shares, warrants and compensation options and stock options as at November 26, 2018, September 30, 2018 and December 31, 2017 is as follows:

	November 26, 2018	September 30, 2018	December 31, 2017
Common shares	65,112,756	65,112,756	64,674,006
Warrants and compensation options	6,200,488	6,491,858	6,930,608
Stock options	4,000,000	4,000,000	3,575,000
Fully diluted shares outstanding	75,313,244	75,604,614	75,179,614

During February and March of 2018, a total of 438,750 compensation options were exercised for proceeds to the Company of \$153,562. On January 12, 2018, the Company granted stock options to officers and directors to purchase a total of 800,000 common shares at an exercise price of \$0.50 per share for five years. Of this total, 650,000 stock options vested immediately while 150,000 stock options vest over a period of 18 months. During May 2018, 375,000 stock options were forfeited. On November 22, 2018, a total of 291,370 compensation options expired.

## 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; and
- No earning or dividend record and no anticipation of paying dividends in the foreseeable future.

For a more detailed discussion of the above risk factors, refer to the Company's Annual Information Form filed for the year ended December 31, 2017.

### **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).