

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL POSITION AND RESULTS OF OPERATIONS

## FOR THE YEAR ENDED DECEMBER 31, 2014

The following management's discussion and analysis ("MD&A") of the financial position and results of the operations of Northern Graphite Corporation ("Northern" or the "Company") constitutes management's review of the factors that affected the Company's financial and operating performance for the year ended December 31, 2014 compared to the year ended December 31, 2013. The MD&A is dated and has been prepared with information available as of March 30, 2015.

The MD&A should be read in conjunction with the Company's financial statements for the year ended December 31, 2014 and related notes (the "Financial Statements"). The Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS").

*The 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 cautionary language at the end of the MD&A and readers are advised to refer to it when reading any forward-looking statements.*

The MD&A is prepared in conformity with National Instrument 51-102F1 and has been approved by the Board of Directors prior to its release.

### Introduction

The Company was incorporated on February 25, 2002 under the *Business Corporations Act* (Ontario) under the name Industrial Minerals Canada Inc. The Company's name was changed to Northern Graphite Corporation on March 1, 2010. The Company was incorporated to develop and hold title to the Bissett Creek graphite project.

The Company was a wholly-owned subsidiary of Mindesta Inc. ("Mindesta") until early in 2010. As the result of a number of financing and debt settlement transactions by the Company, Mindesta's interest in Northern was reduced and on January 25, 2012, Mindesta distributed most of the shares of Northern that it owned, to Mindesta shareholders. Mindesta no longer owns any shares of Northern.

### Nature of Operations

The Company's sole focus is the potential development of the Bissett Creek graphite project located in the County of Renfrew, Province of Ontario (the "Bissett Creek Project"). The Company has no other properties or rights to acquire other properties. The Company has completed a full bankable feasibility study ("FS") for the Bissett Creek Project which confirms the technical and financial viability of constructing and operating an open pit mine and 2,900 tpd processing plant. A National Instrument 43-101 technical report based on the FS has been filed on SEDAR. In 2013 the Company completed a 61 hole, 3,425 meter drilling program, released a new resource estimate based on results of the drill program and updated the economics in the previously released FS to incorporate the new and larger resource estimate, some modifications to the capital and operating cost assumptions, and lower graphite prices. On December 9th, 2013, the Company filed a NI 43-101 Technical Report on Sedar with respect to a Preliminary Economic Assessment (the "2013 PEA") on an expansion case for its Bissett Creek project. The 2013 PEA was undertaken to demonstrate the ability to meet expected future growth in graphite demand by doubling production from the Bissett Creek deposit after three years of operation, based on measured and indicated resources only. The Company subsequently updated the 2013 PEA to provide an assessment of the economics of building a process plant with twice the capacity of the plant contemplated in the Company's FS at the outset rather than after three years.

The Company filed a mine closure plan ("MCP") with the Ministry of Northern Development and Mines ("MNDM") in 2004 and was authorized to begin production based on a dry recovery process but a commercial operation was never established due to technical problems and financial difficulties. In 2012 the Company filed an amended MCP

to increase the size of the potential operation and to use a conventional flotation recovery process as outlined in the FS. In August, 2013, the MNDM accepted the Company's MCP for filing.

The Company is now in a position to begin construction of a mine on the Bissett Creek Project, subject to the availability of financing and obtaining various operation permits and species at risk permitting.

### The Bissett Creek Project

The Company holds a 100% interest in the Bissett Creek Project, which contains a large flake graphite deposit, and is located approximately 15 km from the Trans-Canada Highway (Highway 17) between the towns of Deep River and Mattawa, Ontario. The Bissett Creek Project 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 Project consists of two mining leases and five unpatented claims. A 565 hectare mining lease (Ontario Mining Lease number 106693) has had its renewal reviewed and the Company has received notification that it has met the necessary requirements for renewal. The Company has been informed that this lease renewal has been requisitioned for issuance and registration, there are no further review processes pending, and it is expected that the new expiry date will be in 2035. The Company also holds a 1,938 hectare mining lease which expires on June 30, 2034 (Ontario Mining Lease number 109335) and five unpatented claims totalling approximately 464 hectares.

Royalties on the Bissett Creek Project 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.

The Bissett Creek Project was extensively explored in the 1980's and over 8,400 metres of drilling was completed. A full feasibility study, including the calculation of a proven and probable reserve, was completed but the Bissett Creek Project was not developed due to a subsequent decline in graphite prices. This feasibility study and reserve estimate pre-date NI 43-101 standards and therefore, are non-compliant and cannot be relied upon. The price of graphite has increased since 2005 due to the ongoing industrialization of emerging economies which has led to increased demand in traditional steel and automotive markets. Prices peaked in 2012 in a range of US\$2,500 to \$3,000/tonne when some shortages were reported. The subsequent slowdown in the Chinese economy combined with a lack of growth in the US/Japan/Europe economies has caused prices to fall back approximately 50% from the 2012 levels. They are currently in the US\$1,200 to \$1,300/tonne range for large flake, high purity graphite. Prices are still double their previous lows and prices for large and extra large flake have held up better. Lithium-ion batteries, fuel cells, vanadium redox batteries and new nuclear technologies are all large users of graphite and have the potential to create substantial additional demand in the future. *Industrial Minerals* magazine polls users every week and publishes a price range for the most popular grades.

#### Current Graphite Prices by Grade (US\$/tonne – CIF Europe), March 19, 2015

	Low	High
Synthetic graphite 99.95%C	\$7,000	\$20,000
Large flake (+80 mesh) 94-97%C	\$1,200	\$1,300
Large flake (+80 mesh) 90%C	\$950	\$1,050
Medium flake (-100 to -80 mesh) 94-97%C	\$1,050	\$1,150
Medium flake (-100 to -80 mesh) 90%C	\$850	\$950
Fine flake (-100 mesh) 94-97%C	\$900	\$950
Fine flake (-100 mesh) 90%C	\$750	\$800
Amorphous powder (80-85%C)	\$430	\$480

Source: *Industrial Minerals* magazine

## Mineral Resources

In September, 2011 The Company announced a significant increase in estimated resources based on the results from a 51 hole, 2,927 meter drilling program. The 2011 mineral resource estimate was prepared by François Thibert, M.Sc. P. Geo. from SGS, independent Qualified Person under NI 43-101, using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves, Definitions and Guidelines.

On May 7, 2013, the Company announced a new resource estimate for the Bissett Creek graphite project based on results from a 2012 61 hole, 3,782 meter drill program. This drill program successfully upgraded a significant portion of inferred resources to the measured and indicated categories.

### Bissett Creek Resource Estimate, May 6, 2013

Cutoff	Measured + Indicated Resources			Inferred Resources		
	Tonnage	Cg%	In Situ Graphite (t)	Tonnage	Cg%	In Situ Graphite (t)
1.02	69,791,000	1.74	1,213,000	24,038,000	1.65	396,000
1.50	37,565,000	2.14	803,000	11,971,000	2.02	242,000
1.75	23,439,000	2.45	574,000	6,274,000	2.39	150,000
2.00	15,902,000	2.73	435,000	3,564,000	2.79	100,000

- Notes:
- Resource shell was based on Measured, Indicated and Inferred material, tonnages rounded to the nearest thousand
  - Graphite price used is US\$1,800 per tonne with an exchange rate of \$1Cdn=\$1 US
  - Dilution and ore loss are considered to be zero
  - Feasibility Study costs and information have been used for Resource Shell generation:
 

Overburden Mining Cost	\$1.85	per tonne material
Waste Mining Cost	\$3.24	per tonne material
Ore Mining Cost	\$4.15	per tonne ore
Process Cost	\$9.61	per tonne ore
General and Administrative	\$3.41	per tonne ore
Recovery	95%	
Royalty	\$20	per tonne of concentrate
  - No mining restrictions relating to permitting were applied
  - Pit slopes of 45 degrees in rock and 30 degrees in overburden
  - Cutoff of 1.02% Cg

Mineral resources are 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 Mining Consultants and Qualified Persons under NI 43-101 who are independent of the Company, prepared and authorized the release of the mineral resource estimates presented herein.

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.

The quantity and grade of reported inferred mineral resources in this estimation 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.

## Exploration and Development

As at December 31, 2014, the Company had capitalized \$10,869,049 of exploration and evaluation expenditures relating to the Bissett Creek Project. Over the next 12 months the Company expects to spend approximately \$200,000

to complete the mine permitting work relating to construction and operations. On January 18<sup>th</sup>, 2013, the Company announced that it had awarded a \$3.5 million contract for the detailed engineering and design of the Bissett Creek Project which is part of the capital cost in the FS. The Company has suspended detailed engineering work based on cash resources and market conditions. Approximately one third of the work has been completed.

*Preliminary Economic Assessment*

SGS Canada Inc (“SGS”) produced a NI 43-101 compliant technical report on the Bissett Creek Project entitled “Technical Report Preliminary Economic Assessment on the Bissett Creek Graphite Property of Industrial Minerals, Inc. & Northern Graphite Corporation” dated July 16, 2010 and revised February 2, 2011. The Technical Report was prepared by Gilbert Rousseau P.Eng and Claude Duplessis P.Eng of SGS, each of whom is an independent Qualified Person pursuant to National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (“NI 43-101”). The Technical Report is available under the Company’s profile at [www.sedar.com](http://www.sedar.com).

*Feasibility Study*

The Company completed a bankable feasibility study (“FS”) for the Bissett Creek Project and filed it on SEDAR on August 27, 2012. The FS was prepared by GMining Services Inc. and included contributions from SGS Canada Inc. (Lakefield–metallurgy and Geostat-resource modelling), Knight Piesold Ltd. (environmental, permitting, tailings management and road infrastructure) and Met-Chem Canada Inc. (process engineering). The FS confirmed the technical and financial viability of constructing and operating an open pit mine and 2,300 tpd processing plant on the Bissett Creek property.

The Company revised the mine plan in the FS based on the new 2013 resource model and on September 23, 2013, announced updated FS economics (“FS Update”). The FS Update incorporated the new and larger resource estimate, some modifications to the capital and operating cost assumptions, and lower graphite prices. The update was prepared by AGP Mining Consultants (“AGP”).

The 2013 FS Update indicates a pre-tax internal rate of return (“IRR”) of 19.8% (17.3% after tax) and a pre-tax net present value (“NPV”) of \$129.9 million (\$89.3 million after tax) in the base case which uses a weighted average price of US\$1,800/tonne for the concentrates that will be produced. This represents a substantial improvement in project economics over the FS which had a 15.6% pre-tax IRR at a price of US \$2,100/t. The project has significant leverage to higher prices as the pre tax IRR increases from 19.8% to 25.7% and the pre-tax NPV from \$129.9 million to \$201.1 million at a price of US \$2,100/t.

**Summary of Updated Feasibility Study Economics**

	<b>2013 FS Update (base case)</b>	<b>2012 FS</b>
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/t	\$968/t
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	0.95	1.00
<b>Graphite prices (US\$ per tonne)</b>	<b>\$1,800</b>	<b>\$2,100</b>
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.

*(a) Project Description*

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. The capacity of the plant has been increased slightly to 2,670tpd in the updated FS economics from 2,300tpd (based on 92% availability) and the update assumes that compressed natural gas (“CNG”) will be trucked from the main Trans Canada line, approximately 15 kms away, rather than brought in by pipeline. These changes had minimal effect on estimated capital costs. 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. The CNG will fuel five 1.0 MW-generators to produce electrical power and waste heat from the generators will be used to dry the concentrate. This will result in low overall energy costs.

*(b) Resources and Reserves*

Probable mining reserves for the Bissett Creek deposit were established based on measured and indicated resources of 69.8 million tonnes (“Mt”) grading 1.74% graphitic carbon (“Cg”) based on a 1.02% Cg cutoff. The resource estimate was prepared by AGP who established a breakeven cut-off grade (“COG”) and ran optimized Whittle pits on the measured and indicated resources based on a number of parameters including those outlined in summary above. 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 ore 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. Also, resources have not yet been closed off by drilling and therefore further expansions are possible.

The mine plan was also designed to supply blasted rock and glacial till for tailings dam construction during pre-production and to allow for sulphide and non-sulphide waste disposal in mined out areas by year five. Sulphide tailings may also be stored in the mined out pit starting in year eight. Contact dilution was estimated at 1% overall. Due to the gradational nature of the deposit, contact block grades were queried and utilized in individual block dilution calculations. A one metre dilution skin was assumed between waste and ore with negligible grade dilution except along the base of the deposit. The resulting global dilution was determined to be 1%. Backhoe support will be utilized to minimize dilution along this and other contacts.

*(c) Metallurgy*

SGS-Lakefield has completed the full suite of metallurgical tests on the Bissett Creek deposit including lab and bench scale work, a bulk sample/pilot plant test, and variability testing to determine if recoveries and flake size distribution are consistent across the deposit. A similar program was also carried out in the 1980’s as part of a previous feasibility study (non NI 43-101 compliant) with consistent results.

The FS is largely based on pilot plant results from the processing of slightly weathered material that does not respond as well to flotation as unweathered rock. The locked cycle tests, which were performed on fresh drill core, were better in terms of recoveries, concentrate grades and flake size distribution which represents potential upside in the project. The FS assumes recoveries of 92.7% in the first year of operation, 93.7% in year two and 94.7% over the balance of the project. Recoveries in the eight locked-cycle test averaged 97.2% and ranged from 95.2% to 99.1%. The updated FS assumes recoveries of 94.7% for the entire project.

The FS assumed an average concentrate grade of 94.5% Cg compared to 94.9% Cg in the locked-cycle tests. However, the locked cycle tests generated average grades of 98.1%, 97.0% and 95.1% for the important +32 (XXL), +50 (XL) and +80 (L) mesh size fractions respectively. Based on pilot plant results, the FS assumes that production will consist of 18% +32 mesh at 95.1% Cg, 31% +50 mesh at 95.1% Cg, 28.2% +80 mesh at 94.5% Cg, 5% +100 mesh at 97.3% Cg, 7% +150 mesh at 98% Cg and 11% -150 mesh at 92.7% Cg.

Flake graphite is sold based on 80% meeting the required specification. Therefore, smaller flake sizes can be blended into larger as long as the carbon content is maintained. The -100 flake concentrate produced by Bissett Creek is at least 94% Cg and therefore 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, 97-98% Cg. Because of the latter, the price for the +50 mesh concentrates was estimated at US\$2,100/t. Prices of US\$1,400/t were used for the 35% of production that will be +80 mesh, 95%+Cg and US\$1,200/t has been used for the 5% that will be +100 mesh, 95-97% Cg. Therefore, the weighted average price that would be realized by Bissett Creek concentrates in the current market is estimated at US\$1,800/t in the FS Update.

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 2013 FS Update. However, any potentially acid generating material that is stored on surface and not in the pit will require a financial assurance to ensure that in a shut down situation it is returned to the mined out parts of the pit.

*(d) Production*

In the FS Update, an average of 20,800 tonnes of graphite concentrate at 94.5% Cg is expected to be produced yearly over the course of 28 years compared to an average of 15,900 tonnes in the FS. The increase was mainly due to higher grades and slightly higher throughput.

*(e) Operating Costs*

Cash mine operating costs were estimated to average \$795 per tonne of concentrate in the FS Update (compared to \$968/t in the FS) over the mine life. The decline in operating costs is mainly due to a switch from contract to owner mining, increased grades and throughput, and shorter haul distances in the new mine plan.

*(f) Capital Costs*

In the FS Update, the capital cost to construct the processing plant, power plant and all associated mine infrastructure is estimated at \$101.6 million including a \$9.3 million contingency, compared to \$102.9 million in the FS including contingency. Increased capital costs of approximately \$6.5 for mining equipment due to the switch from contractor to owner mining were largely offset by the removal of costs for detailed engineering which is approximately one third complete (\$4.5 million), modifications to the SAG mill drive and discharge (\$1.3 million), switching to a mobile crusher (\$1.0 million) and removal of a redundant mill circuit (\$750k).

The Company is required to deposit a financial assurance of \$2.3 million with the Province of Ontario (\$799,200 is already deposited) to guarantee its obligations with respect to the Mine Closure Plan, compared to the \$3.57 million estimate used in the FS. An additional \$800,000 must be deposited prior to placing any footings in the ground for construction of structures such as buildings and dams and \$729,088 must be deposited prior to the commencement of commercial production. The Company will be discussing additional financial assurance requirements relating to the new mine plan with government ministries and has included an additional potential provision of \$2.5 million over four years in the FS Update.

(g) Sensitivities (pre-tax) 2013 FS Update

**Sensitivity Analysis - September 23, 2013 Update:**

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

***Significant Project Opportunities***

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

- There is scope to reduce capital costs through the purchase of used equipment, lease financing of the mining fleet and natural gas generators, and additional permitting of lower cost tailings options.
- The 2013 Preliminary Economic Assessment and the PEA Update show that the economics of building a processing plant with double the capacity as that used in the 2013 FS Update are very attractive. Due to the flat lying nature of the deposit, production can be expanding without a significant increase in the stripping ratio or capital and operating costs and can take advantage of lower grade material currently planned to be stockpiled in the mined out pit.
- 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 2013 FS Update. However, any potentially acid generating material that is stored on surface and not in the pit will require a financial assurance to ensure that in a shut down situation it is returned to the mined out parts of the pit.
- The Company has carried out extensive purification testing over the last two years and is developing a commercial process to produce and sell high purity (99.95% Cg+) products.
- The Company has successfully upgraded Bissett Creek concentrate for use in Lithium ion batteries. Testing to define the capital and operating costs of constructing an upgrading facility is underway.

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 Case Preliminary Economic Assessment***

The Company completed and filed a NI 43-101 Technical Report on Sedar with respect to a Preliminary Economic Assessment on an expansion case for its Bissett Creek project (the "2013 PEA"). The 2013 PEA was undertaken to demonstrate the ability to meet expected future growth in graphite demand by substantially increasing production from the Bissett Creek deposit based on measured and indicated resources only. The 2013 PEA built on the FS completed in August, 2012 and the expanded resource model and updated 2013 FS economics subsequently completed by AGP. The 2013 PEA was authored by Marc Leduc P. Eng.

The 2013 PEA estimates the economics of doubling mill throughput after three years of operation and indicates that Bissett Creek has very attractive economics even at or below current depressed graphite price levels. The 2013 PEA notes that the deposit was extensively investigated in the 1980s and this work was essentially redone over the last three years with consistent results and brought up to NI 43-101 standards. In addition, resources have been infill drilled and significantly expanded.

In 2014 the Company updated the 2013 PEA (the “2013 PEA Update”) to assess the economics of building a 2Mtpa processing plant at the outset rather than increasing from 1Mtpa to 2Mtpa after three years of operation as contemplated in the 2013 PEA. The larger process plant was evaluated due to recent developments in the lithium ion battery industry.

**Summary of PEA Results:**

	<b>2013 FS Update</b>	<b>2013 PEA</b>	<b>2013 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	44,200 <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/t	\$695/t	\$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	0.95	0.95	0.95

\*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 based on the 24 million tonne probably reserve grading 2.20% Cg (as estimated in the FS) 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. All grades are diluted. *Mineral resources that are not mineral reserves do not have demonstrated economic viability.*

<sup>2</sup> first 10 years

	<b>2013 FS Update</b>	<b>2013 PEA</b>			<b>2013 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%

The 2013 PEA assumed that the processing plant is expanded after three years of operation, except for the crusher which has excess capacity, and that the capacity of the plant is effectively doubled from 2,670 to 5,340 tpd. Corresponding adjustments were made to the power plant, mine fleet and tailings storage facilities and other

infrastructure to account for the increased throughput. The 2013 PEA used the same mine plan as the 2013 FS Update but accelerates the mining of the high grade ore and processes all of the LGS thereafter. Due to the flat lying nature of the deposit, it is estimated that production can be expanded without any additional stripping or pushback of the pit walls. The initial capital cost estimate to construct the processing plant, power plant and all associated mine infrastructure remains at \$101.6 million including a \$9.3 million contingency. Under the 2013 PEA, an additional \$45.2 million in capital has been added in year three and sustaining capital over the mine life was increased by \$15.7M for additional mining equipment, tailings facilities and other infrastructure

Development capital costs in the 2013 PEA Update have been estimated at \$134.1 million (including a 10% contingency) for an operation that will produce an average of approximately 44,200 tonnes of graphite concentrate annually over the first 10 full years of operation. Almost 90% of production will consist of large and extra large flake and battery grade graphite. There are also 27.3 million tonnes of Measured and Indicated resources and 24 million tonnes of Inferred resources that are not part of the mine plan and the deposit is still open such that further drilling may support further production expansions.

For the 2013 PEA Update, P&E Mining Consultants Inc. ("P&E") reviewed the 2013 PEA mine plan and modified it to commence production at the expanded 2.0 Mtpa production rate in Year 1 rather than ramping up in Year 3 and to more aggressively backfill the open pit with waste. WorleyParsons Canada updated the capital and operating costs for the process plant which represents a portion of the total capital and operating costs for the project. Consistent with industry practice, the estimates have been prepared with an engineering accuracy of +15/- 20%.

#### **Qualified Persons**

Pierre Desautels, P.Geo., Principal Resource Geologist, and Gordon Zurowski, P.Eng., Principal Mining Engineer, both of AGP Mining Consultants and Qualified Persons under NI 43-101 who are independent of the Company, prepared the mineral resource estimates in the PEA. Gordon Zurowski, P.Eng., prepared the reserve estimate and the updated Feasibility Study economics. Marc Leduc, P.Eng., who is independent of the Company, prepared the PEA and approved and authorized the release of the information contained therein.

Ken Kuchling, P.Eng., Senior Mining Associate of P&E Mining Consultants Inc. prepared the revised mine plan for the 2014 PEA update. Dan Peldiak, P.Eng., Principal Process Engineer WorleyParsons Canada prepared the revised capital and operating costs for the process plant. Andrew Bradfield, P.Eng., of P&E, who is independent of the Company, approved and authorized the disclosure of the technical information relating to the 2014 PEA Update. Readers should refer to the NI 43-101 technical reports relating to the FS and the 2013 PEA for further details with respect to the Bissett Creek Project.

#### **Corporate Developments**

On March 19, 2014, the Company announced that it had developed and successfully tested a proprietary process for coating spherical graphite ("SPG") which is necessary before it can be used as an anode material in lithium ion batteries. SPG is manufactured from the flake graphite concentrate produced by graphite mines. Prices range from \$3,500 per tonne uncoated to over \$10,000 per tonne for coated SPG.

On August 12, 2014, the Company announced that initial testing, using production scale equipment, had confirmed that large flake graphite from the Bissett Creek deposit has a spherical graphite yield of 50%. The Company expects that the yield will increase with further optimization. SPG is the anode material used in lithium ion batteries and industry yields are understood to be generally 33% (or less). Losses in the SPG manufacturing process are one of the industry's biggest costs and low yields potentially render a great deal of graphite unsuitable for this use.

On November 10, 2014, the Company announced that in partnership with Coulometrics LLC, it had opened a lithium ion battery ("LiB") research and testing facility. The Company indicated that the facility will focus on developing and testing improved natural graphite based anode materials for LiBs with the goal of improving battery performance, reducing costs and reducing the environmental impact of anode manufacturing. The Company noted that the facility will be available on normal commercial terms to any company, including Northern's competitors.

On January 22, 2015, the Company announced that concentrates from its Bissett Creek deposit have been successfully upgraded to the highest nuclear grade classification level using the Company's proprietary purification process.

On January 27, 2015, the Company announced that it had appointed Endeavour Financial Limited (Cayman) as its exclusive advisor with respect to negotiating and structuring strategic partnerships and offtake agreements, and raising debt financing, for the Bissett Creek project.

On March 2, 2015, the Corporation announced that independent testing has confirmed that flake graphite concentrates from the Corporation's deposit meet or exceed quality requirements for all major end markets and in particular, refractories and expandable graphite. Testing was carried out by NGS Naturgraphit GmbH.

### Selected Information

The selected financial information set out below is based on and derived from the Financial Statements which have been prepared in accordance with IFRS.

	Year ended December 31, 2014 \$	Year ended December 31, 2013 \$
<b>Statement of Operations and Comprehensive Loss Data</b>		
Total Revenue	Nil	Nil
Total Expenses	1,103,291	1,564,863
Net Income/(Loss)	(990,734)	(1,493,512)
Net Income/(Loss) per Share – basic and diluted	(0.02)	(0.03)
<b>Statement of Financial Position Data</b>		
	<b>As at December 31, 2014</b>	<b>As at December 31, 2013</b>
Total Assets	13,982,527	14,818,863
Total Long-Term Debt	Nil	Nil
Total Liabilities	656,268	602,160
Shareholders' Equity:		
Share Capital	20,364,805	20,317,304
Equity	13,326,259	14,216,503

### Results of Operations

	Years ended December 31	
	2014	2013
	\$	\$
<b>General and administrative expenses</b>		
Management and consulting fees	516,553	836,860
Legal and audit	88,181	96,959
Office and miscellaneous	353,037	561,050
Share-based payments	75,490	(69)
Depreciation	69,096	68,104
Foreign exchange (gain) loss	934	1,959
	1,103,291	1,564,863
<b>Loss from operations</b>	(1,103,291)	(1,564,863)
Finance cost	-	-
Interest income	31,892	71,351
Gain on debt settlement	80,665	-
Loss on sale of assets	-	-
<b>Income before taxes</b>	(990,734)	(1,493,512)
Tax expense	-	-
<b>Loss and comprehensive loss for the period</b>	(990,734)	(1,493,512)

Management and consulting fees decreased from \$836,860 in 2013 to \$516,553 in 2014 as a result of a reduction in the number of senior management, no bonuses being awarded to management, and reductions in the amount of total time required by consultants. Office and miscellaneous expenses decreased from \$561,050 in 2013 to \$353,037 in

2014 as a result of decreased expenditures related to public company costs and investor relations activity compared to the prior year. The Company's share-based payments increased from \$(69) in 2013 to \$75,490 in 2014 as a result of the Company awarding options to consultants in 2014. Depreciation expenses increased slightly to \$69,096 in 2014 from \$68,104 last year primarily due to an asset addition. legacy payables which the Company has assessed as non-active and not requiring payment were reversed, and resulted in a gain on debt settlement of \$80,665 (2013 \$nil).

For the year ended December 31, 2014, the Company recorded a loss and comprehensive loss of \$990,734, or \$0.02 per share, compared to a net loss of \$1,493,512, or \$0.03 per share in 2013, as a result of lower management and consulting fees and lower office and miscellaneous expenses which were partially offset by an increase in the Company's share-based payments. The loss and comprehensive loss in 2014 included non-cash charges for share-based payments and depreciation totalling \$144,586, compared to \$68,035 in 2013. In the year ended December 31, 2014, the Company expensed share-based compensation for stock options granted to key management personnel of \$nil (2013 - \$23,184). In 2013, this expense was offset by a \$23,253 adjustment to the estimate for forfeitures of unvested options. The decrease in non-cash charges was the result of lower share-based payments.

Expenses capitalized to the Company's exploration and evaluation assets during the year ended December 31, 2014 decreased to \$859,831 compared to \$2,865,401 in 2013. Environmental and mine permitting expenses decreased from \$538,469 to \$409,662 as activity levels declined following approval of the MCP. Metallurgical expenses decreased from \$425,961 to \$176,642 as work continued on spherical graphite testing in 2014 but not to the same level as in the prior year. Feasibility study expenses increased from a credit of \$60,582 to an expense of \$45,164. Feasibility activity expenses in 2014 totalled \$54,700 and were partially offset by the Company having received \$9,536 from its 2012 scientific research and experimental development program claims ("SR&ED"). In 2013, there was a credit of \$65,607 against feasibility expenses from the 2011 SR&ED claim. Feasibility activities decreased in 2014 from 2013 as the 2013 FS Update was completed in 2013. In 2014, spending on drilling decreased to \$43,290 from \$209,139 in the same period last year as the Company completed its last drill program during the first quarter of 2013. Spending on detailed engineering was nil in 2014 versus \$1,247,695 in the same period last year as the Company suspended this activity at the end of 2013. Spending on engineering totalled \$78,399 in 2014 versus \$156,360 in 2013 as the Company incurred engineering expenses on the 2013 FS Update and 2013 PEA in 2013 which were greater than the expenditures on the 2014 PEA Update. Other expenses capitalized to the Company's exploration and evaluation assets included site and royalty expenses, which totalled \$37,360 compared to \$99,210 in 2013 as on-site activities by the Company's consultants decreased. Geotechnical expenditures were \$69,315 in 2014, versus \$278,260, less a credit of \$28,152 related to SR&ED in 2013. Geotechnical activities decreased in 2014 with the completion of the resource estimate in 2013. There was no surveying and geophysics activity in 2014 or 2013. As a result, surveying and geophysics had a credit balance of \$960 in 2013, reflecting a \$960 SR&ED credit related to expenditures in a prior year.

### Summary of Quarterly Results

The summary of quarterly results has been prepared in accordance with IFRS.

<b>Year ended</b>		<b>Interest Income</b>	<b>Total Loss</b>	<b>Income (Loss) Per share</b>
<b>Dec 31</b>	<b>Quarter</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
2014	4	8,748	(142,374)	(0.00)
	3	6,128	(160,343)	(0.00)
	2	8,608	(406,782)	(0.01)
	1	8,408	(293,215)	(0.01)
2013	4	13,307	(351,887)	(0.01)
	3	15,877	(300,776)	(0.01)
	2	19,872	(398,134)	(0.01)
	1	22,294	(442,715)	(0.01)

The Company, as an exploration stage company, experiences a degree of variability in its quarterly results. The Company's expenses are not related to the regular and continuous activities that take place when a mine is in

production. The Company has generally been incurring a progressively smaller loss per quarter throughout 2013 and 2014 as expenditures by the Company have decreased. In the second quarter of 2014, the Company awarded stock options which contributed \$75,490 to the increase in loss & comprehensive loss for this quarter.

### **Liquidity and Capital Resources**

As at December 31, 2014, the Company had \$331,607 in accounts payable and accrued liabilities, compared to accounts payable and accrued liabilities of \$280,079 as at December 31, 2013 due to the timing of supplier invoicing. The Company had cash of \$1,800,901 as at December 31, 2014 compared to \$3,358,399 as at December 31, 2013. The decrease in cash was primarily the result of the expenditures by the Company on exploration and evaluation and management and consulting fees.

The Company's working capital has decreased from \$3,224,752 at December 31, 2013 to \$1,536,519 primarily as a result of continued exploration and evaluation expenditures as well as management and consulting fees. As at December 31, 2014 the Company had \$1,868,126 in cash, receivables, and prepaid expenses, compared to \$3,504,831 as at December 31, 2013.

The Company closed its IPO on April 18, 2011 which consisted of the sale of 8,000,000 common shares at a price of \$0.50 per share for gross proceeds of \$4,000,000, and obtained a listing on the TSX Venture Exchange effective April 20, 2011. From the IPO to the end of 2012, 9,610,836 warrants have been exercised resulting in proceeds to the Company of \$3,240,404.

On March 16, 2012, the Company completed a private placement of 6,206,377 common shares at a price of \$1.70 for gross proceeds of \$10,550,841. In connection with the offering, the Company paid finders' fees totaling \$121,517, and issued to the agents 71,480 common share purchase warrants entitling the holder to purchase one common share at a price of \$2.00 until March 16, 2013 which expired unexercised.

In 2013, the Company increased its long-term reclamation deposit with the Ministry of Finance for the Province of Ontario to the amount of \$799,200 from \$319,590. The MCP requires the Company to deposit \$800,000 prior to placing any footings in the ground for construction of structures such as buildings and dams and \$729,088 prior to the commencement of commercial production. The Company will be discussing additional financial assurance requirements relating to the new mine plan with government ministries. The deposit accrues interest and represents a financial guarantee to the Province of Ontario that the Company will effect the proper reclamation and closure of the Bissett Creek site when activities are terminated pursuant to a Mine Development and Closure Plan that was filed with, and accepted by, the MNM in accordance with the *Mining Act* (Ontario), including the standards, procedures and requirements of the Mining Code of Ontario. The Company is responsible for any reclamation costs in excess of the deposit.

### **Contractual Obligations**

As at December 31, 2014, the Company had no contractual obligations (commitments as at December 31, 2013 – \$Nil) which related to costs associated with work at the Bissett Creek Property. Purchase obligations represent agreements to purchase goods or services that are enforceable and legally binding on the Company

### **Off Balance Sheet**

#### **Arrangements**

The Company does not have any off balance sheet arrangements.

### **Transactions with Related Parties**

#### *Major Shareholder*

The Company has no major shareholder

### **Key Management Compensation**

In the year ended December 31, 2014, the Company expensed management fees to companies owned and controlled by key management personnel of \$nil (2013 – \$157,500) and expensed salary to key management personnel of \$430,000 (2013 – \$430,000). In the year ended December 31, 2014 and 2013, the Company provided short-term employee benefits totaling \$18,480 (2013 - \$23,323) to key management personnel. In the year ended December 31, 2013, the Company expensed share-based compensation for stock options granted to key management personnel of \$nil (2013 - \$23,184). In 2013, this expense was offset by a \$23,253 adjustment to the estimate for forfeitures of unvested options. As a result, the Company recorded a credit balance of \$69 in share-based compensation expense for the year ended December 31, 2013. In the year ended December 31, 2014, the Company provided bonus payments of \$nil (2013 - \$48,000) to key personnel.

### **Other Related Party Transactions**

During the year ended December 31, 2014, the Company expensed office rental payments of \$23,700 (2013 – \$22,680) to a public company whose CEO and a Director is also a Director of Northern.

### **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 pronouncements issued*

Certain pronouncements were issued by the IASB or the International Financial Reporting Interpretations Committee (“IFRIC”) that are mandatory for accounting periods after December 31, 2014. Pronouncements that are not applicable or do not have a significant impact to the Company have been excluded from the discussion below.

- IFRS 2 – Share Based Payments (amendment);
- IFRS 9 - Financial Instruments;
- IAS 24 – Related Party Disclosures (amendment).

The amendments to IFRS 2, issued by the International Accounting Standards Board (IASB) in December 2013, incorporated into Part I of the CPA Canada Handbook – Accounting by the Accounting Standards Board (AcSB) in March 2014, clarify the definition of “vesting conditions” and “market conditions”, and separately define a “performance condition” and a “service condition”. A performance condition requires the counterparty to complete a specified period of service and to meet a specified performance target during the service period. A service condition solely requires the counterparty to complete a specified period of service. The amendments are effective for share-based payment transactions for which the grant date is on or after July 1, 2014. The Company does not expect the implementation to have a significant impact on the Company’s results of operations, financial position and disclosures.

The IASB has issued a new standard, IFRS 9, Financial Instruments (“IFRS 9”), which will ultimately replace IAS 39, “Financial Instruments: Recognition and Measurement” (“IAS 39”). The replacement of IAS 39 is a multi-phase project with the objective of improving and simplifying the reporting for financial instruments and the issuance of IFRS 9 is part of the first phase of this project. IFRS 9 uses a single approach to determine whether a financial asset or liability is measured at amortized cost or fair value, replacing the multiple rules in IAS 39. For financial assets, the approach in IFRS 9 is based on how an entity manages its financial instruments in the context of its business model and the contractual cash flow characteristics of the financial assets. IFRS 9 requires a single impairment method to be used, replacing multiple impairment methods in IAS 39. For financial liabilities measured at fair value, fair value changes due to changes in an entity’s credit risk are presented in other comprehensive income. Companies may early adopt IFRS 9 however there is no mandatory application date. The Company does not expect the implementation to have a significant impact on the Company’s results of operations, financial position and disclosures.

The amendments to IAS 24, issued by the International Accounting Standards Board (IASB) in December 2013, incorporated into Part I of the CPA Canada Handbook – Accounting by the Accounting Standards Board (AcSB) in

March 2014, clarify that a management entity, or any member of a group of which it is a part, that provides key management services to a reporting entity, or its parent, is a related party of the reporting entity. The amendments also require an entity to disclose amounts incurred for key management personnel services provided by a separate management entity. This replaces the more detailed disclosure by category required for other key management personnel compensation. The amendments will only affect disclosure and are effective for annual periods beginning on or after July 1, 2014. The Company does not expect the implementation to have a significant impact on the Company's results of operations, financial position and disclosures.

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

The preparation of the Financial Statements requires 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, and they are continually being evaluated based on new facts and experience. Actual results may differ from these 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 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
- (vi) the calculation of share-based compensation and 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 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;
- (v) the classification of expenditures as exploration and evaluation assets; and
- (vi) 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 critical assumption made by management of the Company is that the Company will continue to operate as a going concern.

The Company is an exploration stage company that incurred a net loss of \$990,734 for the year ended December 31, 2014 (2013 - \$1,493,512) and has an accumulated deficit of \$9,697,450 since the inception of the Company. As at December 31, 2014, working capital was \$1,536,519 and 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 Project. The Company completed a private placement with proceeds of \$10,550,841 during the first quarter of 2012, and an IPO with proceeds of \$4,000,000 during the second quarter of 2011. However, substantial additional capital is required to ultimately build a mine and processing plant on the Bissett Creek Project and to enable the Company to 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 endeavors. These factors indicate the existence of a material uncertainty which may cast significant doubt about the ability of the Company to continue as a going concern.

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.

The Company's management believes that it will continue to be able to generate sufficient funds from public or private debt or equity financings for the Company to continue to operate. 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 balance sheet 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 share option plan (the "Plan") described in Note 7 of the 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 net income (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 income (loss) with a corresponding adjustment to contributed surplus.

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

The Company has an obligation to reclaim its mining property after the minerals have been mined from the site, 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 profit or 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, 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 at December 31, 2014.

### **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 Instruments 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 (as at March 30, 2015):**

#### ***Common Shares***

Authorized: Unlimited number of common shares.

Outstanding: 49,181,281 common shares.

## **Trends**

There are significant uncertainties regarding the prices of industrial minerals and in 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 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;
- Competition;
- The possibility of conflicts of interest for the Company's directors and/or officers;
- Competitive conditions;
- Title to property;
- Aboriginal 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 in 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, 2014.

## **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; 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**

Mehmet F. Taner, Ph.D., P.Geo., a Consulting Geologist who is independent of the Company, 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 the MD&A.

#### **Additional Information**

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